Phase 1: Preliminary Risk Assessment

Site Address	**Rose and Crown, 8 Whitehorse Street, Baldock, SG7 6QN**
Report Date	**28 February 2019**
Report reference	**GSP-2019-1387-1 Final**
Site size	**0.061 hectares**
Grid reference	**524519,233924**

NW	▲ N	NE
◀W		E▶
SW	S ▼	SE

Aerial photograph date: 11 August 2017

Document Status

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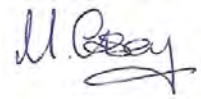
Author	Margaret Casey BSc MSc CIWM CEnv Environmental Consultant	
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Executive Summary

Report objective

Groundsure understands that the purpose of the commission is to meet the condition of a Planning Application. Groundsure has been informed that the Site will be refurbished to provide commercial and residential accommodation.

Site Setting

Site address: Rose and Crown, 8 Whitehorse Street, Baldock, SG7 6QN

Current use: Vacant

Surroundings: In the centre of the market town of Baldock surrounded by retail, commercial and residential land uses.

History: The public house building on the Site has existed since at least the late 1800s although anecdotal information indicates that the building was present since the 1700s. Also, several phases of development and clearance of structures in the southern part of the Site were shown in the mapping between 1880 and the 1960s.

Geology: Holywell Nodular Chalk Formation and New Pit Chalk Formation (undifferentiated)

Controlled Waters: Principal aquifer in a Source Protection Zone 2 and with a river 122m north. Groundsure understands that there is a sump in the cellar to ensure groundwater does not enter the premises.

Human Health: Future residents of the Site, construction workers and users of the nearby properties including adjacent residential dwellings.

Conclusions

This desk-based investigation did not identify any significant potentially contaminative land uses on the Site. However, given the previous commercial use and phases of development, the presence of artificially elevated contaminants within the underlying soils could not be completely discounted.

All external areas of the proposed development will comprise hardstanding and will reduce the possibility of future residents in the interacting the soils.

Groundsure considers there to be a low risk associated with proposed use of the Site and with the implementation of the recommended actions below would be considered suitable for use with respect to land contamination matters.

Recommendations

Review this assessment upon completion of the finalised design prior to submission of this report alongside the planning application.

Any below ground work, such as services maintenance should be completed with a suitable health and safety risk assessment and method statement. The sump in the cellar should be maintained to ensure groundwater does not enter the premises.

Hardstanding areas should be maintained and repaired when damaged and an appropriate drainage system should be included in the proposed development to prevent any incidents and/or spills (such as fuel spills in the car park) from impacting the groundwater.

Building materials should be used in accordance with Building Regulations Approved Document C: site preparation and resistance to contaminants and moisture (2010). UK Water Industry Research (UKWIR), 'Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites', Ref 10/WM/03/21, January 2011

2 Introduction

2.1 Background

Groundsure Ltd was instructed by Stuart Judd of Pickle Planning to complete a Phase 1: Preliminary Risk Assessment. The report is prepared in accordance with the Groundsure Ltd proposal (ref. GSP-2019-1387P, dated 13 February 2019) and Standard Terms and Conditions of Business for the use of the following entities:

- **Pickle Planning**

The study site (known as 'the Site') is Rose and Crown, 8 Whitehorse Street, Baldock, SG7 6QN. A location plan and site layout can be found in Appendix A.

2.2 Purpose of this report

Groundsure understands that the purpose of the commission is to inform the use of the Site freehold as collateral. Groundsure has been informed that the existing Grade II listed building on the Site will remain in place and be subject to refurbishment to include the addition of a commercial premises on the ground floor, with five self-contained apartments on the two upper floors of the building.

The aim of the review is to determine whether there is potential for land contamination to be present that would significantly constrain the use of the property described above or give rise to substantial environmental liability and to provide due diligence of operation to assess whether they are legally compliant with environmental requirements that could impact on ground condition.

The report does not consider the impact of redevelopment.

2.3 Scope of works

This Phase 1: Preliminary Risk Assessment comprises a review of readily available environmental, historical and planning records, any additional data supplied by the client and a site reconnaissance. Data, where copyright permits, is presented within the appendices of the report.

The risk assessment was based on a qualitative assessment of the Contaminant – Pathway – Receptor linkages that may exist at the Site because of past activities, in accordance with the Environment Agency's 'Model Procedures for the Management of Land Contamination, CLR 11' and BS10175:2011+A2:2017 Investigation of Potentially Contaminated Sites Code of Practice.

2.4 Data sources

Data sources include:

- Groundsure data reports (refs. GS-5824911 to GS-5824914);
- Site inspection dated 19 February 2019 with Jason Kitchener (Essential Water Services Ltd);
- Data found on the Local Authority planning website (accessed on 21 February 2019);
- Local Authority Environmental Health consultation; and
- Environment Agency consultation.

2.5 Report limitations

Groundsure does not accept any responsibility for use of the project outside the scope of the report detailed above. The report is based on the data detailed above and is not necessarily exhaustive.

This report excludes consideration of potential hazards arising from any activities at the Site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities. It has also been assumed that the conditions on Site at the time of the site reconnaissance are representative of general conditions. These are likely to change with time.

The advice and opinions presented in the report should be read and relied upon considering the terms of reference agreed with the Client. Furthermore, new information, improved practise and changes in legislation may change the conclusions presented here.

The report is confidential to the client and may be submitted to regulatory bodies where appropriate. Groundsure accepts no responsibility for loss or damage incurred because of reliance on this report outside its intended context or by third parties unless Groundsure has provided prior written agreement.

2.5.1 Site reconnaissance

Note that the site reconnaissance was non-intrusive and below ground services were not inspected.

During the site reconnaissance it was not possible to access the below ground cellar that extended below much of the ground floor of the building.

3 Risk Assessment Methodology

3.1 Qualitative Risk Ranking Criteria

An assessment of environmental risk associated with geo-environmental ground conditions is made in respect of the Environmental Protection Act 1990, the Water Resources Act 1991, the Environmental Damage Regulations 2015 and associated legislation, to provide a balanced and considered opinion of the property regarding the intended end use. Where applicable, recommendations are made in respect of further actions considered to be appropriate.

The report discusses the potential commercial implications of the identified risks with reference to the following risk assessment definitions (based on CIRIA C552):

3.1.1 Consequence

This is based on assessment of most likely outcome. All assessments have a degree of uncertainty.

Minor: *Site considered suitable for present use and environmental setting. Contamination may be present but unlikely to have unacceptable impact on key targets. No action needed while site remains in present use.*

- No permanent health effects
- Easily repairable damage to buildings

Mild Risk: *Site is considered suitable for present use and environmental setting. Contamination may be present but unlikely to have unacceptable impact on key targets. Action unlikely to be needed in present use.*

- Pollution of non-sensitive water resources
- Minor changes to crops, buildings, structures and services

Medium Risk: *Site may not be suitable for present use or environmental setting. Contamination may be present, and likely to have unacceptable impact on key targets. Action may be needed in the medium term.*

- Chronic damage to human health
- Pollution of controlled waters
- Significant change in ecosystem
- Minor repairable damage to property

Severe Risk: *Site probably or certainly unsuitable for present use or environmental setting. Contamination probably or certainly present and likely to have an unacceptable impact on key targets. Urgent action needed.*

- Short term (acute) risk to human health likely to result in significant harm
- Short term (acute) risk to a sensitive water resource
- Significant short-term risk to an ecosystem or organism forming part of an ecosystem
- Catastrophic damage to property

3.1.2 Likelihood

High Likelihood: There is a pollution linkage and an event either appears very likely in the short term or almost inevitable in the long term, or there is evidence at the receptor of harm or pollution.

Likely: There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.

Low Likelihood: There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such an event would take place, and is less likely in the shorter term.

Unlikely: There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term.

3.1.3 Risk Table

Likelihood	Consequence (hazard-pathway-target)			
	Severe	**Medium**	**Mild**	**Minor**
High	High	High	Moderate-High	Moderate
Likely	High	Moderate-High	Moderate	Low-Moderate
Low	Moderate-High	Moderate	Low-Moderate	Low
Unlikely	Moderate	Low-Moderate	Low	Low

4 Site Setting & Description

Site Address	Rose and Crown, 8 Whitehorse Street, Baldock, SG7 6QN
Area	0.061 hectares.
Site Location	Central Baldock, a small village approximately 1.0km to the east of Letchworth Garden City, Hertfordshire.
Current use	The Site is currently unused and is derelict. The property is locked and secure.
Proposed use	Mixed commercial and residential use.
Access/ Security	The building on the Site was a former public house and has a commercial frontage onto Whitehorse Street. The front door entrance and all windows on the ground floor have been covered with metal sheeting to prevent trespassing. There is a side access through an archway that leads to the former car park and beer garden to the rear of the property. The archway has double wooden doors to prevent access from Whitehorse Street, but these were permanently open allowing public access to the side of the property. A locked temporary fencing panel was present across the access that prevents trespassing into the former car park and beer garden area. The ground floor windows and doors across the ground floor of the property have metal sheeting across them with notices stating that the property is a 'Secure Empty Property'. The current access into the building was through a locked metal door along the southwestern side of the property.
Buildings	The building on Site is a Grade II listed former public house with two upper floors. Anecdotal information indicates that the building was present since the 1700s The structure is of brick and there have been additions to the original building over time. The building is attached along the north eastern boundary, with a road frontage and an archway along the south western part of the property that provides vehicular and pedestrian access to the south western side and rear (south east) of the property. Above the archway, the building is attached to property to the south west. The building is derelict and has been cleared of all furniture, fixtures and fittings associated with the former public house. The ground floor layout comprises a large open area at the front of the building (the former bar and seating area), with two large rooms at the rear of the property that were historically occupied by a kitchen and dining area.

	There is a cellar associated with the property that is accessed by a hatch in the floor towards the front of the property in the area previously occupied by the bar. The hatch accesses an old wooden ladder into the cellar that appeared to be a depth of 2m. A further hatch is located to the rear of the property that leads to a further underground space. This is understood to be a basement and is not linked to the cellar at the front of the property. There is also a cellar access in the footpath at the front of the property on Whitehorse Street that would have facilitated the delivery of beer barrels into the cellar without going into the property. The building has a tiled pitched roof over what would have been the original pub structure. To the rear of this is a two-storey addition with dormer windows in the pitched roof. A further extension comprises a three-storey building with further dormer windows in the pitched roof. There is also a single storey flat roof extension along the southwestern boundary that houses toilets associated with the former pub. Along the rear wall of the building, the brickwork indicates the presence of a further attached building that is no longer present.
Topography	The Site was generally level and is at a consistent elevation with adjacent areas. There is a slightly raised area in the south east corner of the Site that was previously used as a beer garden. The area comprises a kerb stone around the edge of the area and concrete paving slabs to form a level sitting area. A raised flower bed surrounds this area on the north east and south east boundaries.
Proportion of hardstanding	External areas include the access track along the south-western side of the building, and the former parking area and seating area at the rear of the property. The track and car parking area are surfaced with tarmacadam that is in a poor state of repair with cracking and pitting present across the general area. Within the south eastern corner of the Site, the external area is raised and surfaced with concrete paving stones. A brick structure was also present along with raised plant borders. The area was assumed to have been a beer garden with the brick structure used for outdoor cooking.
Proportion of vegetation	The Site has raised beds in the south-eastern part of the Site and there are numerous weeds and moss present on the weathered tarmacadam in the southwestern part of the Site.
Proportion of porous ground cover	The tarmacadam at the side and rear of the property has lost integrity due to wear and has become porous, allowing

		the growth of weeds. The area covers approximately 30% of the external area, or 10% of the total Site area.
Surface water features		No surface water features were identified on, or adjacent to, the Site.
Site drainage		There was no engineered surface water drainage identified within the external area and all rainfall is understood to flow to the northwest, discharging into the highway drainage system in Whitehorse Street. Rainwater from the buildings is directed via gutters to downpipes and into the municipal drainage system.
Services		The Site is provided with mains electricity, gas and water. The Site is also connected to the mains sewerage system. All services are currently disconnected.
Surroundings	**North**	Whitehorse Street with retail, commercial and residential properties.
	East	Retail and residential properties: a café, a tattoo shop, a charity shop and a Ladbrokes betting shop. Residential premises on upper level.
	South	Commercial and residential: warehouse type building beyond which is residential housing with gardens.
	West	Retail and residential properties: a restaurant, hairdressers and barbers. Residential premises on upper level.

Site location plans and a representation of the key site features are presented in Appendix A. Photographs taken during the recent site reconnaissance are shown in Appendix B.

5 Environmental Setting

5.1 Geology

5.1.1 Regional

The anticipated regional geological succession based on published mapping (1:50,000 scale British Geological Survey mapping (Sheet 221) and 1:10,000 scale BGS mapping) is summarised in the table below.

Geological Unit	Description*	Comment
Bedrock		
Holywell Nodular Chalk Formation and New Pit Chalk Formation (undifferentiated)	Chalk with flints	Turonian Age - Cenomanian Age
Notes: * Description is based on information within the BGS Lexicon of Named Rock Units and Groundsure Geological Pack (presented in Appendix D)		

There are no linear features (e.g. faults) in the vicinity of the Site.

There are no known coal mining areas within 1,000m of the Site.

5.1.2 Site specific

Several exploratory holes have been recorded by the BGS from 123m south east of the Site and 187m north west of the Site. The nearest borehole was excavated to depth and indicates the following:

- Ref. TL23SW67 (March 1968)
  - 123m to the south east;
  - Cable percussion advanced to 45.72m below ground level (bgl); and
  - Water resting level in Chalk 9.9m bgl.

This site specific geological information is summarised in the table the below.

Geological Unit	Typical Description	Top of strata (m bgl)	Thickness (m)
Made Ground	Made up ground.	Ground level	0.6
Chalk	Rubby Chalk (Middle Chalk)	0.6	7.32
Chalk	Hard Chalk (Lower Chalk)	7.92	15.24
Chalk	Chalk (Lower Chalk)	23.16	22.56

5.1.3 Radon

The Site does not fall within a Radon Affected Area, as less than 1% of properties are above the Action Level. No radon protective measures are required for new structures. However, the Site has below ground workspaces (basements, tunnels) and as such are at high risk from Radon accumulation.

Groundsure radon data may be viewed in Appendix D.

5.1.4 Mining & Subsidence

There are no coal mining areas within 1,000m of the Site.

The following table summarises the maximum assessed hazard of natural subsidence recorded within 50m of the Site.

Geotechnical Considerations	Maximum Hazard Rating
Shrink-Swell Hazard	Negligible
Landslide Hazard	Negligible
Soluble Rock Hazard	Negligible
Compressible Ground	Negligible
Collapsible Rocks	Very low
Running Sand Hazard	Negligible

The Site is identified as being at very low risk of natural ground subsidence as advised by the BGS, due to the presence of Chalk underlying the Site at depth.

The Groundsure geology data may be viewed in Appendix D.

5.2 Controlled Waters

5.2.1 Hydrogeology

Groundsure environmental data may be viewed in Appendix E.

Bedrock Aquifer (Holywell Nodular Chalk Formation and New Pit Chalk Formation (undifferentiated))	Principal (regional): High permeability layers providing a high level of water storage that may support water supply/river base flow on a strategic scale.
Aquifer Characteristics	Very high permeability with flow via fractures.
Groundwater Abstractions	Three abstractions are recorded within 2km of the Site. These are all located between 1,442m and 1,785m to the south of the Site and are used for public water supply by Affinity Water.
Source Protection Zones	Within a Source Protection Zone 2 - Outer Catchment.
Environment Agency WFD Classification	Management Catchment – Anglian GW Operational Catchment – Ouse Upper Bedford Chalk Overall Classification – Poor Linked protected areas – Nitrates Directive, Safeguard Zone and Drinking Water Protected Area.
Groundwater level and flow	Groundwater levels within the aquifer have been recorded at 9.9m bgl some 123m to the south of the Site. There is no evidence of groundwater flow direction.

5.2.2 Hydrology

Nearest Surface Water	An unnamed river is located 122m to the north of the Site within the Cam Ely Ouse and South Level.
Surface Water Abstractions	No surface water abstraction licences have been identified within 250m of the Site.
Environment Agency WFD Classification	River Basin District –Anglian Management Catchment – Ouse Upper and Bedford Operational Catchment – Ivel Water body – River Ivel Overall classification – Moderate Linked protected areas – Nitrates Directive

5.2.3 Flood Risk

Groundsure flood data may be viewed in Appendix F.

River and Coastal Flood Risk

	On Site	Within 50m
Environment Agency indicative Zone 2 and 3 floodplains	Not identified	Not identified
RoFRaS Flood Rating	Very Low	Very Low
Historic Flood Events	Not identified	Not identified
Flood Defences	Not identified	Not identified
Areas benefiting from Flood Defences	Not identified	Not identified
Areas benefiting from Flood Storage	Not identified	Not identified

Pluvial (Surface Water) Flood Risk

	On Site	Within 50m
JBA Pluvial Flood Risk	The Site is at low risk of flooding.	6m to the north and to the north east on Whitehorse street there is high to significant risk.

BGS Groundwater Flood Susceptibility

	Within 50m of Site
BGS Groundwater Flooding susceptibility	There is potential for groundwater flooding of property below ground level, relating to Clearwater* flooding.

	Within 50m of Site
BGS Confidence Rating for Groundwater Flooding Susceptibility Areas	High.

*Clearwater is flooding because of groundwater height rising from an unconfined aquifer

Flood Risks from Reservoirs and Canals

	On Site	Within 50m
JBA Reservoir Failure Risk	No	No

5.3 Environmentally Sensitive Sites

Groundsure has considered the surrounding natural environment using Groundsure environmental data, presented in Appendix E, and freely available Natural England data.

Ivel Springs, a local nature reserve, is located 326m north. A further nature reserve, Weston Hill, is located 1,012m south.

An area of designated ancient woodland is located 1,790m south east.

In addition, the Site has been identified to lie within a DEFRA designated Nitrate Vulnerable Zone (NVZ). This designation relates to the European Commission (EC) Nitrates Directive and requires farmers with land in NVZs to follow mandatory rules to reduce nitrate loss to controlled waters from agriculture. As such, this designation is not considered to have any significant implications on the Site in its current and proposed use.

London Area Greenbelt lies 326m north.

5.4 Culturally and Visually Sensitive Sites

Groundsure has considered archaeological matters using designated visually and culturally sensitive site data.

The Site is not identified to lie within one of the five designated areas of archaeological importance.

Other local archaeological designations may also exist.

5.5 Other Sensitive Receptors

Residential dwellings associated with adjacent properties have been identified on Site and additional dwellings are adjacent to the south east. No other potential receptors were identified.

6 Historical Setting

6.1 Historical Review

The following table provides an outline of the historical land use both on-Site and in the surrounding areas based on historical mapping and other data where available. These are not comprehensive as occasionally transient uses existed between map survey dates. A copy of the historical maps referred to below may be viewed in Appendix C.

Date	On Site Features	Off Site Features
1880-1884	The Site was occupied by the Rose and Crown Public House and includes buildings within the southern part of the Site.	The Site located within Baldock town and the layout of adjacent buildings was similar the current layout. An open area of ground is located to the south of the Site and breweries are located 100m south and 250m north. Malthouses are located 120m north east, 150m south west and 250m south east.
1898-1938	No significant changes identified.	A **graveyard** was identified 250m west.
1960-1967	The buildings in the southern part of the Site have been removed, with a small structure present along the south west boundary.	The **breweries** were no longer present. A **garage** was located 75m south east. A **depot** was located 120m north east and a **ceramic components factory** was located 120m north.
1975-1986	No significant changes identified.	A further **garage** was located 80m north east.
1993-1995	No significant changes identified.	The **depot** and **factory** to the north east and north were no longer present. Unclear if garages were still present.
2002-2014	The structure along the south west boundary is no longer present and the Site is as the current layout.	No significant changes identified.

6.2 Unexploded Ordnance

The UK has a history of military activity, including extensive military training sites, bombing during the First World War and sustained strategic bombing during the Second World War. A legacy of this military activity is the incidence of UXO encountered throughout Britain to this day, particularly during construction and redevelopment works.

6.3 Additional Information

It is understood that the building on the Site has been used as a public house and hotel since it was constructed in the 1700s. The actual date of construction is not known, although it does pre-date available mapping.

7 Potentially Contaminative Land Use

7.1 Permits, Authorisations, Licences and Records

Groundsure environmental data may be viewed in Appendix E.

7.1.1 On site records

Data held by Groundsure indicates that the Site has not been designated as Contaminated Land under Part 2A of the Environmental Protection Act.

There are no permits, authorisations or licences associated with the Site.

7.1.2 Off Site Records

The following records were identified within 250m (unless alternative buffer is noted).

	No.	Details
Permits, licences and authorisations		
Part A(2)/ Part B	3	A current permit for a Dry Cleaners is located 42m west. Two historical permits for vehicle respraying were located 234m and 238m north.
Current uses (within 100m)		
Local records	18	Variety of vehicle repair premises, construction supplies, electrical components, unspecified works, generic tanks and electrical features.

8 Site Reconnaissance

A walkover of the Site was carried out by a Groundsure representative on 19 February 2019 with Jason Kitchener (Essential Water Services Ltd). The general description is provided in Section 4.

Site location plans and a representation of the key site features are presented in Appendix A. Photographs taken during the recent site reconnaissance are shown in Appendix B.

8.1 Operational and Environmental Observations

Site Activities	The Site is currently unoccupied and non-operational. Groundsure understands that there is a sump in the cellar to ensure groundwater does not enter the premises.
Materials / Waste Stored	There are no raw materials on Site and no waste being generated.
Environmental Management	There is currently no environmental management system associated with the Site as it is unoccupied and disused.
Environmental observations – surroundings	The Site is located in a town centre, on a main road within the town. Although the neighbouring properties were not inspected, the activities being undertaken on the adjacent sites were observed from the Site. The Site is surrounded on all boundaries by retail or commercial premises with residential attached.
Additional Matters	The premises was understood to have had a number of bedsits located above the public house. As a result, the stairwell and much of the upstairs in the property had asbestos coating on walls. The asbestos is understood to have been removed completely from the building and a certificate confirming the removal has been provided to Groundsure.

8.2 Regulated Activities

There are no regulated activities associated with the Site.

9 Regulatory Consultations

9.1 Local Authority Environmental Protection Team

North Hertfordshire District Council has confirmed that that there are no records of any potentially contaminative activities at the Site.

The Council also confirmed that the Site was not registered as contaminated land and there was no intention to take any action regarding the Site pursuant to Part 2A of the Environmental Protection Act 1990.

The Council also further confirmed that there were no records of any site investigations, or remedial works undertaken at the Site or within the immediate neighbouring land, there have been no actions taken pursuant to the Environmental Damage Regulations and there are no records of pollution or contamination issues, or gas emissions at the Site. As a result, the Council confirmed that there was not known to be a land contamination reason why the subject property may not be considered suitable for redevelopment with a more sensitive land use, such as housing.

There are no private water supplies within a 500m radius of the Site and no records of landfilling activities, either currently or historically, on or within 250m of the Site.

The Council did receive a noise nuisance complaint in 2016 that was found not to be statutory noise nuisance.

New Look Dry Cleaners is located approximately 40m to the west of the Site and there have been no compliance issues with the Part B permit associated with the premises.

The full response from the Council is included in Appendix G.

9.2 Local Authority Planning Section

Groundsure did not consider it necessary to undertake consultations with the Local Authority Planning Department. However, Groundsure reviewed the planning information available on the North Hertfordshire District Council website.

Planning applications on the website all relate to the pending refurbishment of the premises. The Planning Condition relating to the requirement for a Phase I Preliminary Environmental Risk Assessment is on the website (Ref 18/00524/FP, Condition 3, dated 12 September 2018).

9.3 Petroleum Licensing Section

Groundsure did not consider it necessary to undertake consultations with the Petroleum Licensing Department.

9.4 Environment Agency

Groundsure did not consider it necessary to undertake consultations with the Environment Agency.

10 Conceptual Site Model

The qualitative assessment provides a conceptual model based on a source-pathway-receptor pollutant linkage risk assessment as detailed in the Environment Agency's Model Procedures for the Management of Land Contamination (CLR 11, 2004). If one of these elements is missing there can be no significant environmental risk according to the statutory definition of "Contaminated Land" under Part 2A of the Environmental Protection Act 1990. This is a test to demonstrate that no significant harm is occurring.

10.1 Overall Environmental Sensitivity

The sensitivity of a Site is a measure of its potential to be impacted should a contaminant be present.

Receptor	Environmental Sensitivity	Reason
Human Health		
Existing Site Users	Low-moderate	As the Site is vacant, limited to visitors, maintenance worker and trespassers.
Future Site Users	Moderate	Commercial and residential use with no soft landscaping within the Site
Construction Workers	Low	Limited excavation anticipated.
Surrounding Site Users	Low	Commercial and residential use
Controlled Waters		
Groundwater	High	The bedrock is a Principal aquifer and the Site is located within a Source Protection Zone 2.
Surface Water	Low	Nearest feature 122m north
Other		
Ecological	Negligible	The closest designated area is a Local Nature Reserve, Ivel Springs 326m north
Property	Low	Commercial and residential use, only services below ground.

10.2 Overview of potential current and historical sources of contamination and associated contaminants

The following identified potentially contaminative land uses may be a source of environmental hazard if linking pathways are found to be present.

10.2.1 On Site

Activity	Dates	Potential contaminants of concern
Commercial use and various phases of the development	Until c.2016	Building materials (e.g. asbestos containing materials) and fuel and oil hydrocarbons (e.g. heating oil).
Radon	Natural	As the property has a basement that may be in use it is designated at high risk from potential accumulation.

Receptor	Pathways	Risk	Justification/ Mitigation
On Site Sources: Commercial use and various phases of the development			
Future Site Users	Dermal contact; Soil ingestion; Dust ingestion/ inhalation Inhalation (ground gases)	Low	This non -intrusive qualitative assessment did not identify any significant potentially contaminative land uses on the Site. However, given the previous commercial use and phases of development, the presence of artificially elevated contaminants within the underlying soils could not be completely discounted. All external areas of the proposed development will comprise hardstanding and will restrict the possibility of future residents in the interacting the soils. ***Any below ground work, such as services maintenance should be completed with a suitable health and safety risk assessment and method statement. The sump in the cellar should be maintained to ensure groundwater does not enter the premises.*** ***Hardstanding areas should be maintained and repaired when damaged.*** ***Review this assessment upon completion of the finalised design.***
Future Site Users	Radon inhalation	High	As the Site has a basement it is designated at high risk of Radon accumulation, even though the wider area is considered to be at low risk. This recommendation relates to the Ionising Radiation Regulation 2017[1] ***Radon assessment is completed and, if necessary suitable, simple management measures should be installed and maintained.*** ***A ten-day short-term screening can be used as an indicator as to the level of risk. If the Site is identified as at risk, remedial measures are likely to be necessary as determined by a suitable specialist. If the short-term screening is inconclusive then a three-month assessment may be required.***

[1] http://www.hse.gov.uk/radiation/ionising/radon.htm#workplaces

Receptor	Pathways	Risk	Justification/ Mitigation
Surrounding Site Users	Migration via permeable geology and groundwater or by blown dust Dermal contact (water/ soils); Soil ingestion. Dust inhalation (wind migration)	Low	This non-intrusive qualitative assessment did not identify any significant potentially contaminative land uses on the Site. However, given the previous commercial use and phases of development, the presence of artificially elevated contaminants within the underlying soils could not be completely discounted. The proposed development does not include any significant excavations that could impact groundwater flow or increase the volume of infiltration into the groundwater. All external areas of the proposed development will comprise hardstanding reducing some potential infiltration of surface water (e.g. rain) into the groundwater. ***An appropriate drainage system should be included in the proposed development to prevent any incidents and/or spills (such as fuel spills in the car park) from impacting the groundwater.*** ***The sump in the cellar should be maintained to ensure groundwater does not enter the premises.*** ***Review this assessment upon completion of the finalised design.***
Groundwater	Horizontal and vertical migration	Low	
Construction Workers	Dermal contact; Soil ingestion; Dust ingestion/ inhalation	Low	This non-intrusive qualitative assessment did not identify any significant potentially contaminative land uses on the Site. However, given the previous commercial use and phases of development, the presence of artificially elevated contaminants within the underlying soils could not be completely discounted. **The potential for exposure should be considered as part of the Construction Design Management Regulations 2015 in the form of the Health and Safety Risk Assessment and implementation of a safe system of work during construction.**
Property	Direct contact (chemical attack) Ingress into services	Low	**Building materials should be used in accordance with Building Regulations Approved Document C: site preparation and resistance to contaminants and moisture (2010).** **UK Water Industry Research (UKWIR), 'Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites', Ref 10/WM/03/21, January 2011**

11 Conclusions & Recommendations

11.1 Overview

The Site 'Rose and Crown, 8 Whitehorse Street, Baldock, SG7 6QN' is a disused former public house and hotel due to undergo refurbishment to commercial/retail premises with residential on upper floors. This report has been commissioned to meet the requirement of a Planning Condition.

11.2 Conclusions

The Site is in the centre of Baldock, Hertfordshire. The public house building on the Site has existed since at least the late 1800s although anecdotal information indicates that the building was present since the 1700s. The ground floor has a bar area, kitchen and dining room, all of which are now disused and run down. The premises has a cellar across much of the building footprint that is accessed from within the building and also from the footpath adjacent to the property (Whitehorse Street). A further floor hatch is located further in the building that accesses a separate basement. Anecdotal information indicates that the residential upper floors of the premises was used for a number of bedsits that were privately rented.

The Site is within the town centre that historically housed a number of breweries and malthouses. The general area has not been used for any heavy industry or manufacturing other than a ceramics component factory from 1960s to 1990s located some distance to the north of the Site.

The historical use as a public house is unlikely to have been a significant potential contamination source. Also a number of phases of development and clearance of structures in the southern part of the Site were shown in the mapping between 1880 and the 1960s.

Currently there are no raw materials or fuel present on the Site and no waste streams are generated from the Site.

The Site is located in Source Protection Zone 2, directly over Chalk which represents a Principal aquifer in the area. Depth to groundwater could not be confirmed, though Groundsure was advised that there is a sump in the cellar to ensure groundwater does not enter the premises. The Site is in an area of low flooding risk although it is at risk of pluvial flooding and potentially susceptible to groundwater flooding below ground level. The absence of an engineered surface water drainage system externally area is likely to exacerbate this situation.

The immediate surroundings are of limited sensitivity, with the closest nature reserve located some 326m to the north.

This no -intrusive, qualitative, assessment did not identify any significant potentially contaminative land uses on the Site. However, given the previous commercial use and phases of development, the presence of artificially elevated contaminants within the underlying soils could not be completely discounted.

Due to the presence of a basement on site the accepted risk of radon accumulation is high, although in the wider area it is low.

All external areas of the proposed development will comprise hardstanding and will reduce the possibility of future residents in the interacting the soils

Although there is a potential for radon to accumulate a simple 10 day test will indicate whether further action is required and remedial measures are generally cost effective.

Groundsure considers there to be a low risk associated with proposed use of the Site and with the implementation of the recommended actions below would be considered suitable for use with respect to land contamination matters.

11.3 Recommendations

Action
Review this assessment upon completion of the finalised design prior to submission of this report alongside the planning application.
Complete a ten day radon assessment in the basement and identify whether radon protective measures are required.
Any below ground work, such as services maintenance should be completed with a suitable health and safety risk assessment and method statement. The sump in the cellar should be maintained to ensure groundwater does not enter the premises.
Hardstanding areas should be maintained and repaired when damaged.
An appropriate drainage system should be included in the proposed development to prevent any incidents and/or spills (such as fuel spills in the car park) from impacting the groundwater. The sump in the cellar should be maintained to ensure groundwater does not enter the premises.
Building materials should be used in accordance with Building Regulations Approved Document C: site preparation and resistance to contaminants and moisture (2010).
UK Water Industry Research (UKWIR), 'Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites', Ref 10/WM/03/21, January 2011

Groundsure Terms & Conditions

Groundsure Standard Terms and Conditions

1.Definitions
In these Conditions, the following words have the following meanings:
Consultancy Services: a report, including a verbal report, prepared by Groundsure for the Client and any other consultancy services that Groundsure may agree to provide to a Client.
Client: the party placing an Order.
Conditions: these conditions.
Contract: the contract between Groundsure and the Client which shall incorporate these Conditions and the Order.
End User: the person or entity for whose benefit the Client orders the Product. If the Client orders a Product for its own benefit, all references in these Conditions to the End User shall be deemed to be references to the Client.
Fees: the sums due for the Product**.**
Groundsure: Groundsure Limited, a company registered in England and Wales, registered number 03421028, registered office c/o Ascential Group Limited, The Prow, 1 Wilder Walk, London W1B 5AP.
Groundsure Insights Products: a report containing data, mapping or other imagery prepared by Groundsure under these Conditions and identified as an Insights report on the Website.
Groundsure Insights Data: data, mapping or other imagery prepared by Groundsure under these Conditions and identified as Insights data on the Website.
Groundsure Searches Products: a report containing data, mapping or other imagery prepared by Groundsure under these Conditions and identified as a searches report on the Website
IP Rights: any patent, copyright, design right, trade mark, moral right and know-how whether registered or not, or registrable and including applications for the same or any other rights of a similar nature anywhere in the world.
Order: an electronic, written or other order submitted by the Client for a Product, and in the case of Consultancy Services, agreed by Groundsure.
Product: Consultancy Services, Groundsure Insights Products, Groundsure Insights Data and/or Groundsure Searches Products.
Reseller: a reseller of the Products who is authorised by Groundsure to do so.
Site: the area of land in respect of which Groundsure provides the Product.
Terminal: a server, laptop, PC, tablet, workstation, portable computer, personal digital assistant, mobile phone or other electronic means of access to (including viewing) the Groundsure Insights Data, and which is internal or personal to the Client or an End User or both.
Third Party Conditions: conditions of and restrictions on use of Third Party Data in the Products set out here [link]; and conditions of and restrictions on use of Ordnance Survey data in Groundsure Insights Data set out here [link];
Third Party Data: data which belongs to a Third Party Provider and is used by Groundsure in the Products.
Third Party Provider: any third party who provides data to Groundsure, including but not limited to a third party that is the subject of Third Party Conditions.
Website: the Groundsure website.

2. Formation of Contract
2.1The terms of the Contract govern the supply of Products to the exclusion of all other terms and conditions of business, including any that the Client may provide, and any terms implied by law, custom or practice to the maximum extent permitted by law. These Conditions shall apply whether the Client purchase the Products directly from Groundsure or through a Reseller.
2.2 Quotations or proposals are valid for 30 days only.
2.3 Groundsure may vary these Conditions from time to time and Groundsure will post such amended Conditions on the Website. Any changes to the Conditions shall not affect any Orders received before such changes are posted save where a Third Party Provider requires such change to take place immediately.
2.4 If there is any inconsistency between the terms of an Order and these Conditions, these

Conditions shall prevail.

3. Orders

3.1 Groundsure Searches Products, Groundsure Insights Data and Groundsure Insights Products may be ordered from Groundsure by any means including email and through the Website, or through a Reseller. Consultancy Services may only be ordered directly with Groundsure and may not be ordered through the Website.
3.2 The Client shall not share or transfer its login credentials for the Website.
3.3 During the Order process on the Website the Client may select an additional delivery email for the Products. The Client is responsible for ensuring that the recipient of the additional email shall keep the terms of the Product confidential, save for disclosure to the End User and the parties named in Condition 6.2.
3.4 An Order is accepted when the Client is sent an email order confirmation.
3.5 If a Groundsure Insights Data Order is limited to a specified number of Terminals, the Client shall not permit any Terminal to access the Data in excess of on 1 (one) Terminal unless otherwise agreed with Groundsure. The Client shall monitor the access to Groundsure Insights Data through its Terminals to ensure compliance with this Condition 3.5 and have in place a reasonable mechanism or process that ensures that the number of Terminals accessing the Groundsure Insights Data can be promptly identified.
3.6 The Client agrees that Ordnance Survey content is protected by Crown copyright. The Client shall 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.
3.7 If the Client exceeds the permitted number of Terminals under Condition 3.5 or prints content in breach of Condition 3.6, the Client shall pay to Groundsure such costs and expenses as Groundsure incurs from Third Party Providers as a result.
3.8 Groundsure shall be entitled to make available to Ordnance Survey the Client's name, address and telephone number, and Ordnance Survey shall be permitted to use such details to contact the Client for the purposes of monitoring their dealings with Ordnance Survey data, and enforcing Ordnance Survey's rights against the Client.

4. **Products**

4.1 Groundsure shall use reasonable endeavours to meet any timetable for delivery of the Products, but time shall not be of the essence.
4.2 Groundsure is an executive member of the Council of Property Search Organisations and shall comply with the Property Codes Compliance Board Search Code. If the Client makes a complaint and Groundsure is unable to resolve it to the Client's satisfaction, the Client may refer the complaint to The Property Ombudsman scheme (web site www.tpos.co.uk, email: admin@tpos.co.uk). Groundsure will co-operate fully with the Ombudsman during an investigation and comply with the Ombudsman's final decision.
4.3 At the request of the Client, Groundsure shall use reasonable endeavours to recommend insurance in connection with any risk identified in the Product, but makes no warranty that such insurance shall be available from insurers and/or that it will be offered on reasonable terms. Any insurance purchased by the Client shall be subject to the terms of the policy issued by insurers. Groundsure does not act as an agent or broker for any insurance providers. The Client should take independent advice to ensure that the insurance policy requested or offered is suitable for its requirements.
4.4 The Client shall comply with all Third Party Conditions applicable to any Third Party Data in the Product and the Client acknowledges that a Third Party Provider shall be entitled to enforce the provisions of the Contract, including any Third Party Conditions, against the Client.
4.5 The Client acknowledges that Groundsure does not warrant the accuracy or completeness of Third Party Data nor that the Third Party Providers are the only sources that could be consulted to prepare the Product.

5. The Client's obligations

5.1 The Client shall comply with the terms of the Contract and use reasonable endeavours to bring the terms of the Contract to the attention of the End User.

5.2 Notwithstanding any recommendation or otherwise of Groundsure, the Client shall be solely responsible for ensuring that the Product is appropriate and suitable for its and/or the End User's needs.
5.3 The Client shall supply to Groundsure or the Reseller as the case may be accurate and complete information relating to the Site.
5.4 Within 2 working days of receipt of the Product, and in any event before circulation to any third party, the Client shall review the Product to ensure that the Product has been prepared for the correct location and description of the Site, and shall notify Groundsure of any errors in relation to the Site. Groundsure shall promptly amend such errors at no cost to the Client save where the error arises as a result of any information provided by the Client under Condition 5.3.
5.5 The Client shall promptly provide to Groundsure full details of any claim or complaint received by the Client concerning a Product (a "**Claim**"). The Client shall not incur any third party costs in relation to a Claim nor make any admission in respect of a Claim on behalf of Groundsure without the prior written consent of Groundsure. At the request of Groundsure, the Client shall give to Groundsure or its nominee the exclusive control of such Claim.

6. Reliance
6.1 The Products are intended for use by professional advisers who are experienced and skilled in the use and interpretation of environmental data and/or risk assessment opinions.
6.2 The following may rely on the Groundsure Searches Products and the Groundsure Insight Products: (i) the Client; (ii) the End User; (iii) the End User's professional advisers; (iv) any person providing funding to the End User in relation to the Site (whether directly or as part of a lending syndicate); (v) the first purchaser or first tenant of the Site; and (vi) the professional advisers and lenders of the first purchaser or tenant of the Site.
6.3 Only the Client, the End User and any parties expressly named in the Order are entitled to rely on the Consultancy Services.
6.4 Only the Client is entitled to rely on a Groundsure Insights Data, provided that the Client shall not be entitled to rely on Groundsure Insights Data 12 months after the date such Groundsure Insights Data is received.
6.5 Each of the parties entitled to rely on the Product as set out in this Condition 6 shall be entitled to enforce these Conditions as if they were named in the Contract, provided that (i) the Fee has been paid in full; (ii) the party relying on the Product accepts Conditions 8 and 10 and accepts that Groundsure shall be entitled to take action against the party for breach of these Conditions; and (iii) the party relying on the Product is not in breach of any of these Conditions.
6.6 Except where Groundsure expressly agrees otherwise, Groundsure makes no physical inspection of the Site. The Client acknowledges that certain land uses or features and/or the condition of a Site may be apparent only from a physical inspection.

7 Fees
7.1 For Products ordered directly with Groundsure, the Fees shall be calculated and paid as set out in (i) the Order process for Orders received through the Website; and (ii) the quote provided by Groundsure for all other Orders, together with all applicable value added tax. Disbursements shall also be due and payable in respect of any Consultancy Services. For products ordered through a Reseller, the Fee shall be agreed with the Reseller.
7.2 If the Client has an account with Groundsure, the Client shall pay all invoices in full without deduction, counterclaim or set off within 30 days of the date of the invoice. If the Client does not have an account with Groundsure, all sums are due to Groundsure before the Order can be accepted.
7.3 If the Client fails to pay an invoice by the due date, Groundsure shall be entitled to refuse to accept and/or process any further Orders and to charge interest and compensation on any overdue sums, accruing from the due date up to the date of actual payment in accordance with the Late Payment of Commercial Debts (Interest) Act 1998.

8. Use of the Products
8.1 No IP Rights in the Products (including in any Third Party Data) are assigned to the Client or an End User under the Contract. The Client acknowledges that the Third Party Data is

owned by the Third Party Provider and is subject to the Third Party Conditions.
8.2 Subject to receipt of all Fees, and the terms of the Contract, Groundsure grants to the Client a non-exclusive, non-transferable right to access, download and use the Products for its internal purposes and to grant a sub-licence of such right to the End User and any party wishing to rely on the Product under Condition 6.
8.3 The Client shall:
(i) not remove, suppress or modify any proprietary marking from the Product;
(ii) be entitled to use the Product in respect of the Site only; and the Product may not be used or relied on in respect of adjacent or nearby sites;
(iii) except to provide advice to any party entitled to rely on the Product under Condition 6, not create any product which is derived directly or indirectly from the Product nor combine the Product into any other information data or service, not reformat, modify, amend or add to the Product nor sell the Product; and
(iv) not use the Product or any part of it except as permitted under the Contract.

9. **Confidentiality**
9.1 Save where and to the extent that disclosure is expressly permitted under the terms of the Contract, the Client shall treat in confidence and use appropriate and adequate technical and security measures (including any that a Third Party Provider might require) to ensure that all information received from Groundsure in connection with the Contract is kept confidential. The Client shall not (i) disclose such information to any third party other than in accordance with the terms of the Contract; or (ii) use such information for a purpose other than the exercise of its rights and obligations under the Contract.
9.2 Condition 9.1 shall not restrict the Client from disclosing information to the extent required by law or a court of competent jurisdiction.
9.3 Condition 9.1 shall not apply to (i) information which the Client can prove was rightfully in its possession prior to disclosure; and (ii) information which is in the public domain (other than by a breach of the Contract or any other contract).

10. Liability
10.1 Subject to Condition 10.3, Groundsure shall exercise reasonable skill and care in the preparation of the Product and the Product shall comply with the description on the Website. All other warranties, conditions and other terms implied by statute or common law are excluded from the Contract, to the fullest extent permitted by law.
10.2 Subject to Conditions 5, 10.3 and 10.6, Groundsure shall be liable to the Client for any loss or damage caused by Groundsure's negligence in mapping the Client's plan of the Site on to Groundsure's system.
10.3 Subject to Condition 10.6, Groundsure shall not be liable for: (i) loss of profits; (ii) loss of business; (iii) loss or corruption of data or information; (iv) business interruption; (v) any kind of special, indirect, consequential loss or pure economic loss; (vi) loss or damage that arises as a result of the use of all or part of the Products in breach of the Contract; (vii) loss or damage arising as a result of any error, omission or inaccuracy in the Products where such error, omission or inaccuracy is caused by any data provided by the Client, any Third Party Data or any reasonable interpretation of the data provided by the Client or the Third Party Data; (viii) loss or damage caused by a delay or loss of use of the Website; and/or (ix) any advice, act or omission of the Client, the Reseller or any other third party, including funders, solicitors and the parties entitled to rely on the Product. The parties agree that the provisions of this Condition 10.3 are severable.
10.4 Subject to the other provisions of this Condition: (i) Groundsure's total liability to the Client for all claims or series of claims relating to Groundsure Insights Data whether in contract, negligence or otherwise for any damages, losses or expenses shall be limited to the Fee paid for the Groundsure Insights Data; and (ii) Groundsure's total liability for all other Products to all (and not to each) of the parties seeking to rely on a Product, whether in contract, negligence or otherwise for any damages, losses or expenses shall be limited to £10 million.
10.5 The Client acknowledges and agrees that neither the Client, the End User nor any other party entitled to rely on the Product shall have any claim or recourse against any Third Party Provider under the Contract.
10.6 Nothing in the Contract limits or excludes the liability of Groundsure for: (i) breach of

its obligations under section 12 of the Sale of Goods Act 1979 and/or section 2 of the Supply of Goods and Services Act 1982; (ii) death or personal injury resulting from negligence; or (iii) fraud or fraudulent misrepresentation.

11. Suspension or Termination

11.1 The Contract shall commence on acceptance of an Order in accordance with Condition 3.4 and shall terminate on the later of receipt of the Fee and completion of the parties' obligations under Condition 5.4, provided that Groundsure Insights Data is a subscription product for a term of 1 (one) year.

11.2 Groundsure shall be entitled to suspend the provision of the Product or terminate the Contract if: (i) the Client has not provided the information or assistance required to prepare the Product; (ii) the Client fails to pay any sum due to Groundsure or the Reseller as the case may be, within 30 days of the due date; (iii) the Reseller fails to pay the relevant fee for the Products provided to the Client; or (iv) the Client or the End User breaches any term of the Contract which is incapable of remedy or if remediable, is not remedied within five days of notice of the breach.

11.3 If the Client is a consumer (and not a business), the Client expressly acknowledges and agrees that: (i) the services for the supply of the Product commence immediately upon Groundsure's acceptance of the Order; and (ii) the Product is supplied to the Client's specification(s) and therefore there is no right to cancel the Order following acceptance. If the Client is a consumer, then notwithstanding any other provisions of the Contract, none of the Client's consumer statutory rights are affected.

11.4 Upon suspension or termination of the Contract the Client shall pay to Groundsure all and any Fees due to Groundsure.

11.5 On termination of the Contract, the provisions of the following Conditions shall continue to apply: Conditions 4.4, 4.5, 5.4, 5.5, 6, 7, 8, 9, 10, 11.4, 11.5 and 12, provided that Conditions 6 and 8 shall not continue to apply for: (i) the Client, the End User or any party named in Condition 6 if the Contract is terminated because the Fee for the Product has not been paid by the Client, or the Reseller fails to pay the relevant fee for the Products provided to the Client; and (ii) any party if that party is in breach of Condition 8.

12 General

12.1 No amendment or variation to the Contract shall be valid unless signed by an authorised representative of the parties.

12.2 No failure or delay on the part of Groundsure to exercise any right, power or provision under the Contract shall operate as a waiver.

12.3 Except as expressly provided in the Contract, no person other than Groundsure and the Client shall have any right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Contract.

12.4 Groundsure shall not be liable to the Client if the provision of the Product is delayed or prevented for reasons beyond Groundsure's control including any telecommunications, network or system failure.

12.5 Any notice shall be in writing and delivered by hand or sent by first class post or by email to the other party's address or email address. Deemed delivery shall be the day of delivery if delivered by hand, or email (unless that day is not a working day, then, deemed delivery shall be the next working day) and on the second working day after the day of posting if sent by first class post.

12.6 Each of the provisions of the Contract is severable and distinct from the others. If one or more provisions is becomes unenforceable, the enforceability of the remaining provisions shall not be affected.

12.7 The Client and Groundsure shall comply with its obligations under the Bribery Act 2010 and its own bribery policies. Each party shall promptly report to the other any request of demand for any undue financial or other advantage of any kind it receives in connection with the performance of the Contract.

12.8 The Client may not assign or otherwise transfer any of its rights or obligations under the Contract.

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

Appendix A

Figures



Groundsure
LOCATION INTELLIGENCE

Site Address:	Rose & Crown, 8 Whitehorse Street, Baldock, SG7 6QN
Project Reference:	GSP-2019-1387
Grid Reference:	524519,233924
Scale at A3:	1:50,000

Figure 1:	Small Scale Site Location
Verison:	A
Date:	25/02/2019

N
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S

Legend
- Site Location
- 5 Km Buffer

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W: www.groundsure.com

Sources: Esri, HERE, DeLorme, USGS, Intermap
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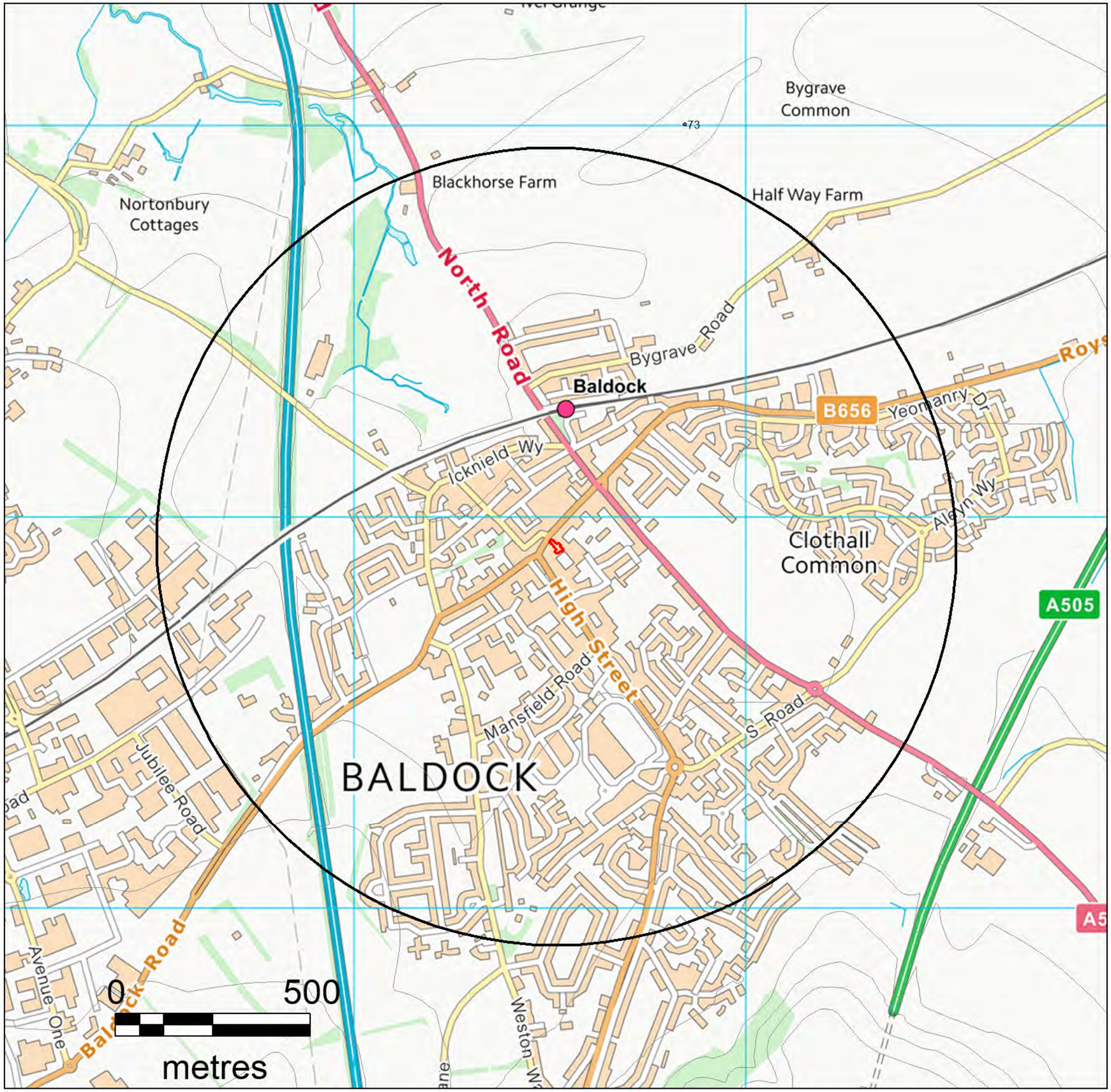

Groundsure
LOCATION INTELLIGENCE

Site Address:	Rose & Crown, 8 Whitehorse Street, Baldock, SG7 6QN
Project Reference:	GSP-2019-1387
Grid Reference:	524519,233924
Scale at A3:	1:10,000
Figure 2:	Large Scale Site Location
Verison:	A
Date:	25/02/2019

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Legend
- Site Boundary
- 1 Km Buffer
- 10m Contours
- Spot Height

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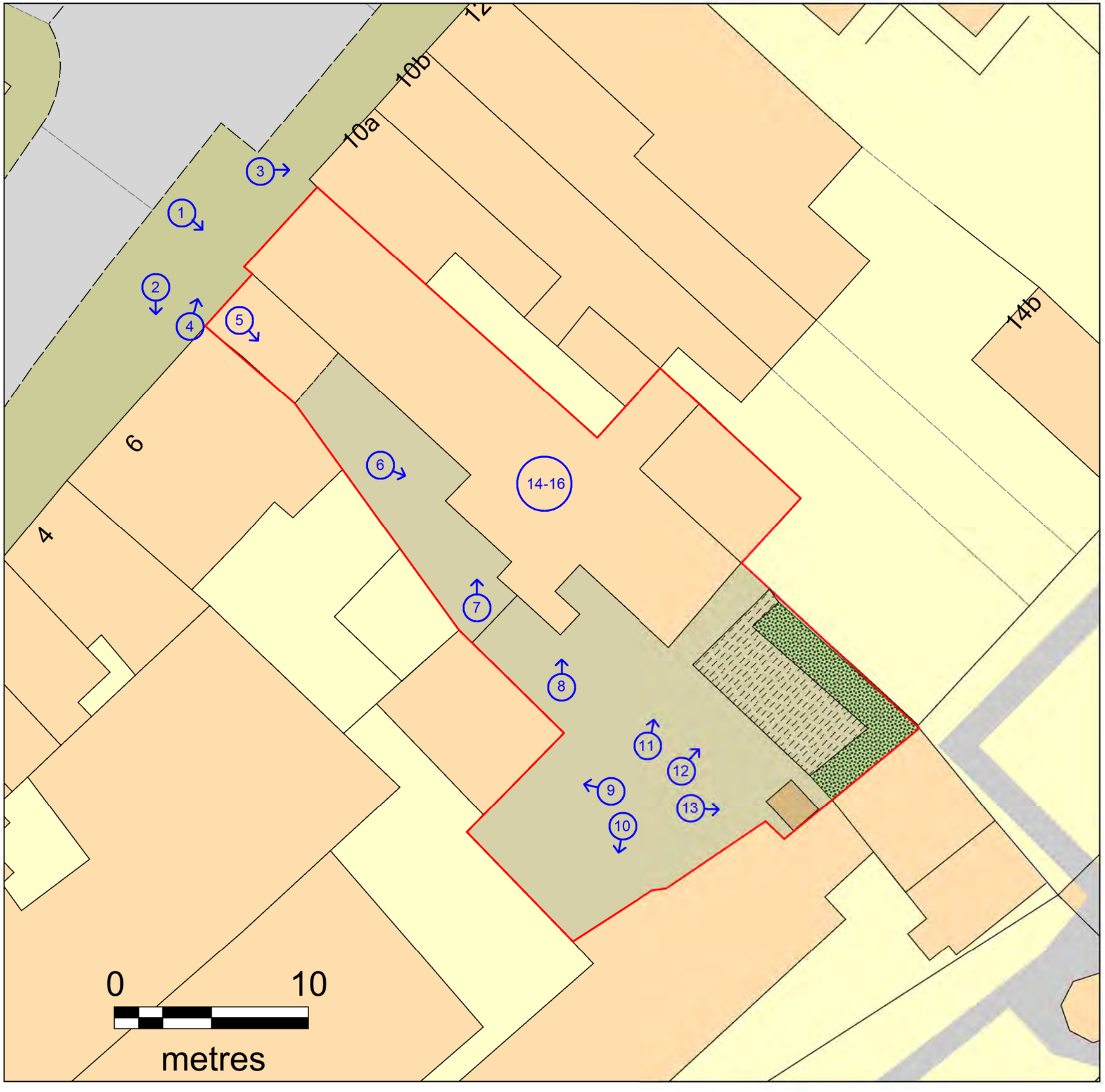

Groundsure
LOCATION INTELLIGENCE

Site Address:	Rose & Crown, 8 Whitehorse Street, Baldock, SG7 6QN
Project Reference:	GSP-2019-1387
Grid Reference:	524519,233924
Scale at A3:	1:200

Figure 3:	Key Features Plan
Verison:	A
Date:	25/02/2019

N
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S

MasterMap Legend

- Building
- Manmade Surface
- Multi Surface
- Natural Environment
- Natural Surface
- Road Or Track
- Structure
- Water

Site Legend

- Site boundary
- (1) View point
- Raised flower borders
- Raised area with concrete paving
- Outdoor cooking area

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Appendix B
Photographic Record



Photo 1: Site viewed from Whitehorse Street



Photo 2 Adjacent property to the south west

Job reference: GSP-2019-1387
Groundsure Site Inspection Photographs: 19 February 2019



Photo 3: Adjacent properties to the north east



Photo 4: Cellar entrance at the front of the property on Whitehorse Street

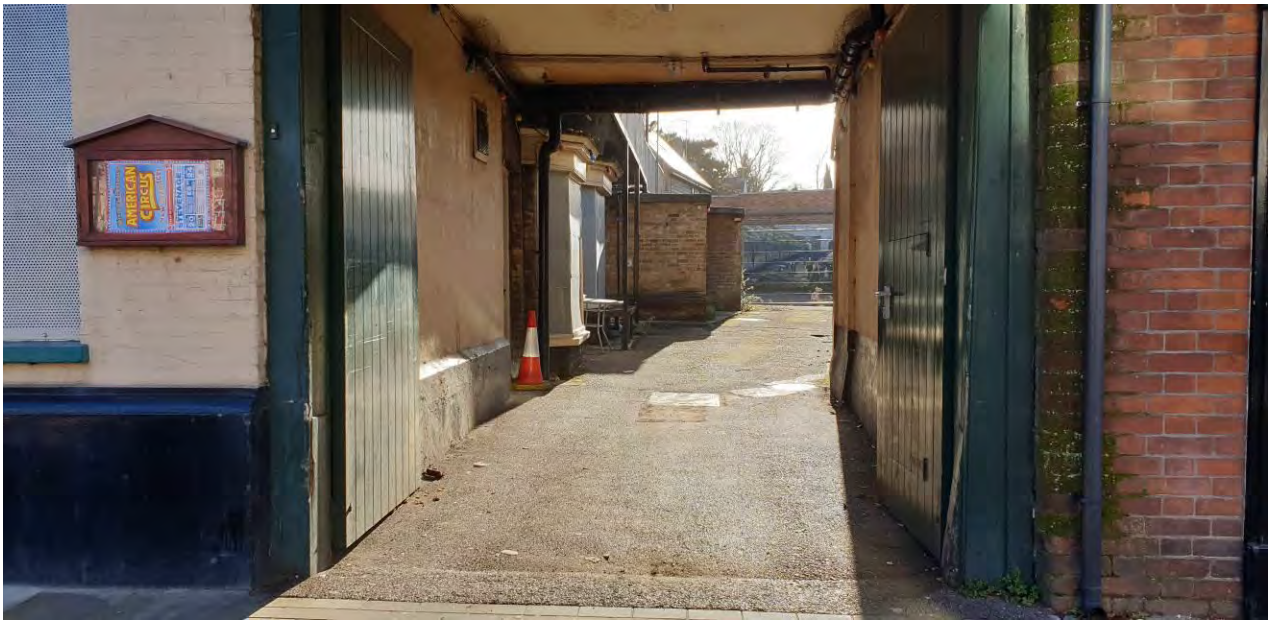


Photo 5: Entrance to the southwestern side of the Site from Whitehorse Street



Photo 6: Single storey extension along southwester side of building on Site



Photo 7: North western Site boundary with poor quality tarmacadam



Photo 8: Upper floor levels of building



Photo 9: Western boundary of Site



Photo 10: Southwestern corner of Site



Photo 11: Southwestern corner of building on Site



Photo 12: Northern edge of patio area in garden area to the rear of the building on Site



Photo 13: South-eastern corner of Site with raised patio area



Photo 14: Interior of building, with floor hatch of cellar visible on the right



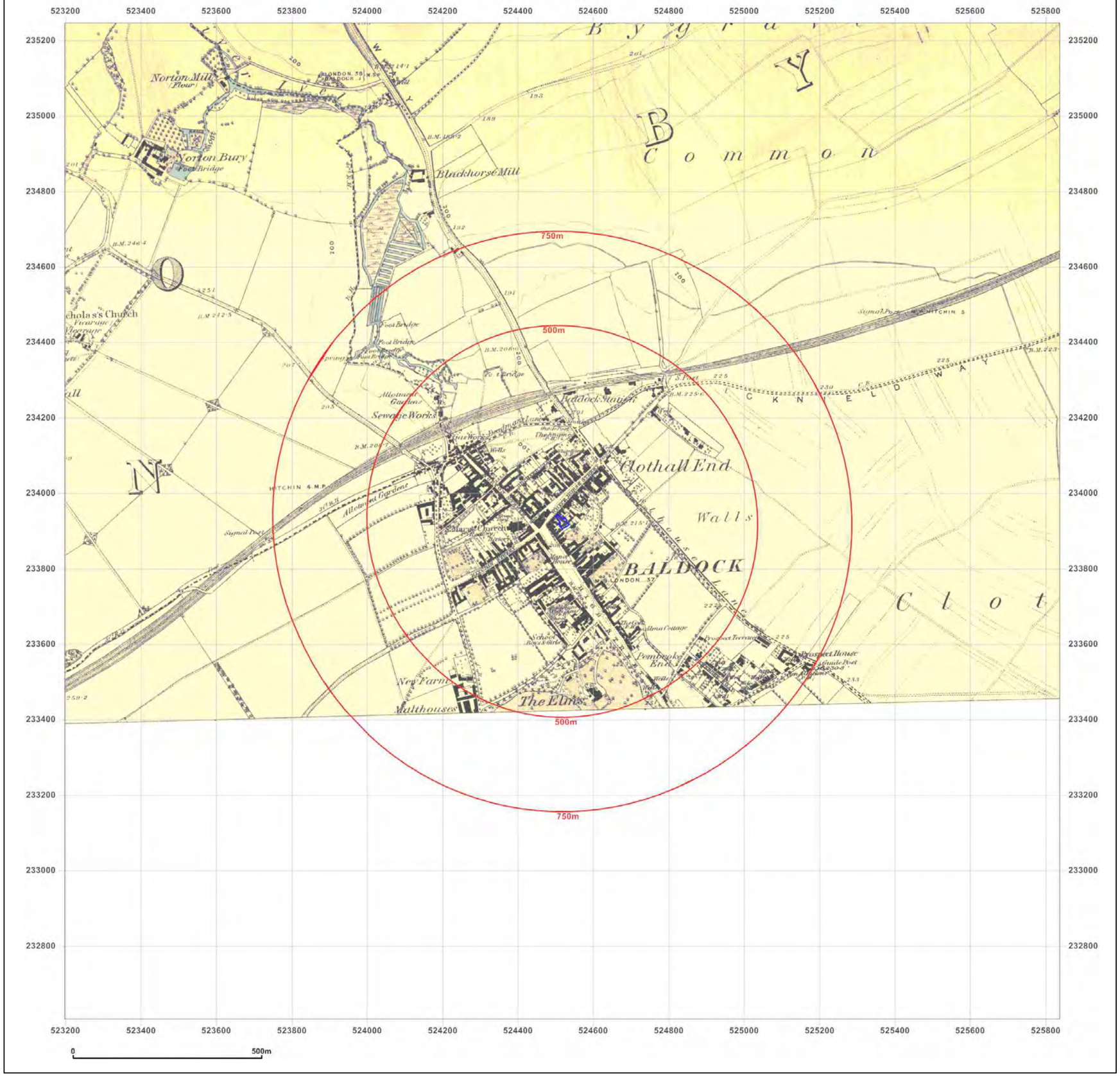
Photo 15: Central part of the ground floor of the building on Site



Photo 16: Decommissioned gas boiler and black staining from chimney/flue

Appendix C

Groundsure Historical Map Pack



Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1881**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
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Surveyed 1881
Revised 1881
Edition N/A
Copyright N/A
Levelled N/A

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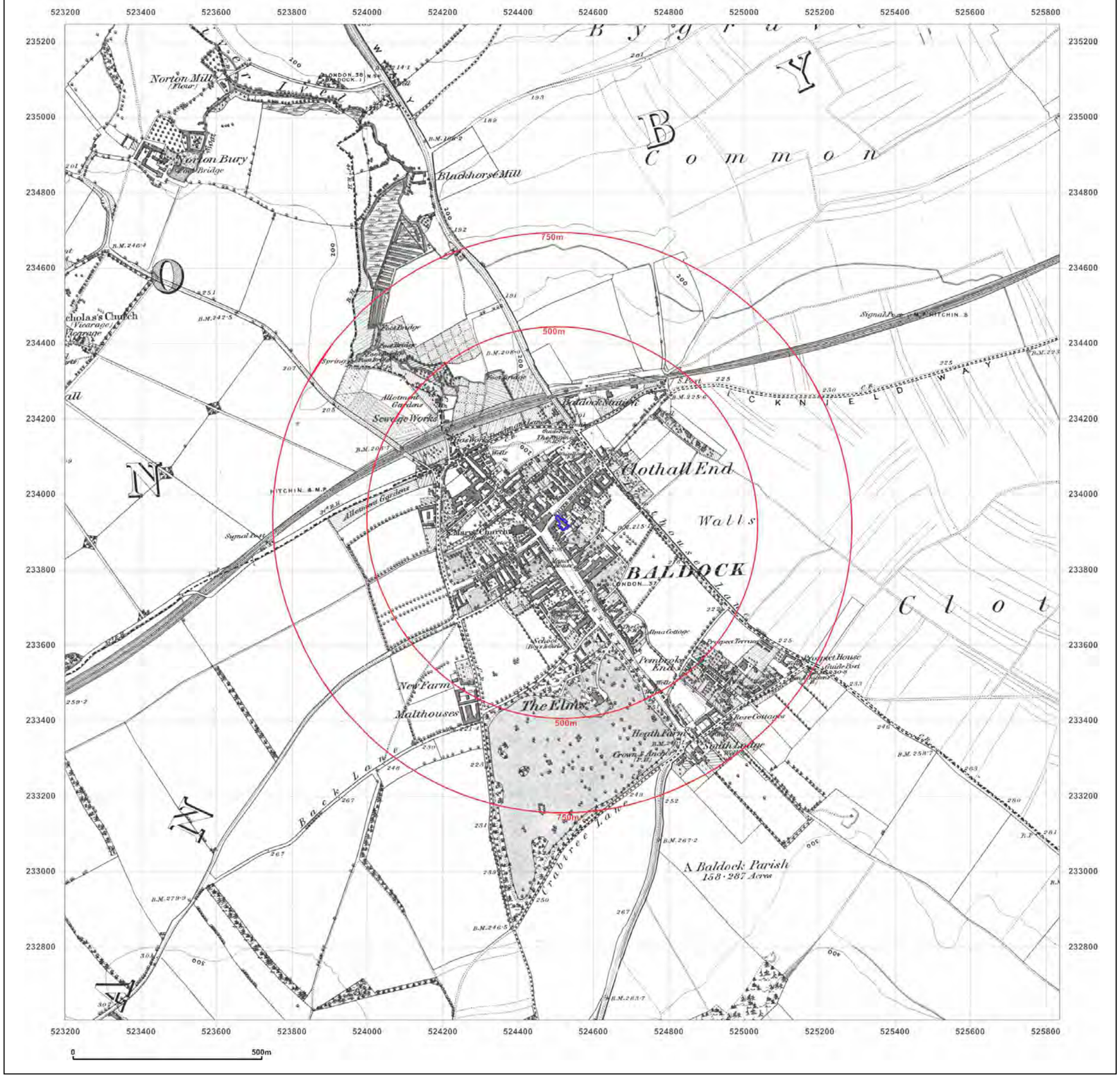
Production date: 15 February 2019

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1884**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
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Surveyed 1880
Revised N/A
Edition 1884
Copyright N/A
Levelled N/A

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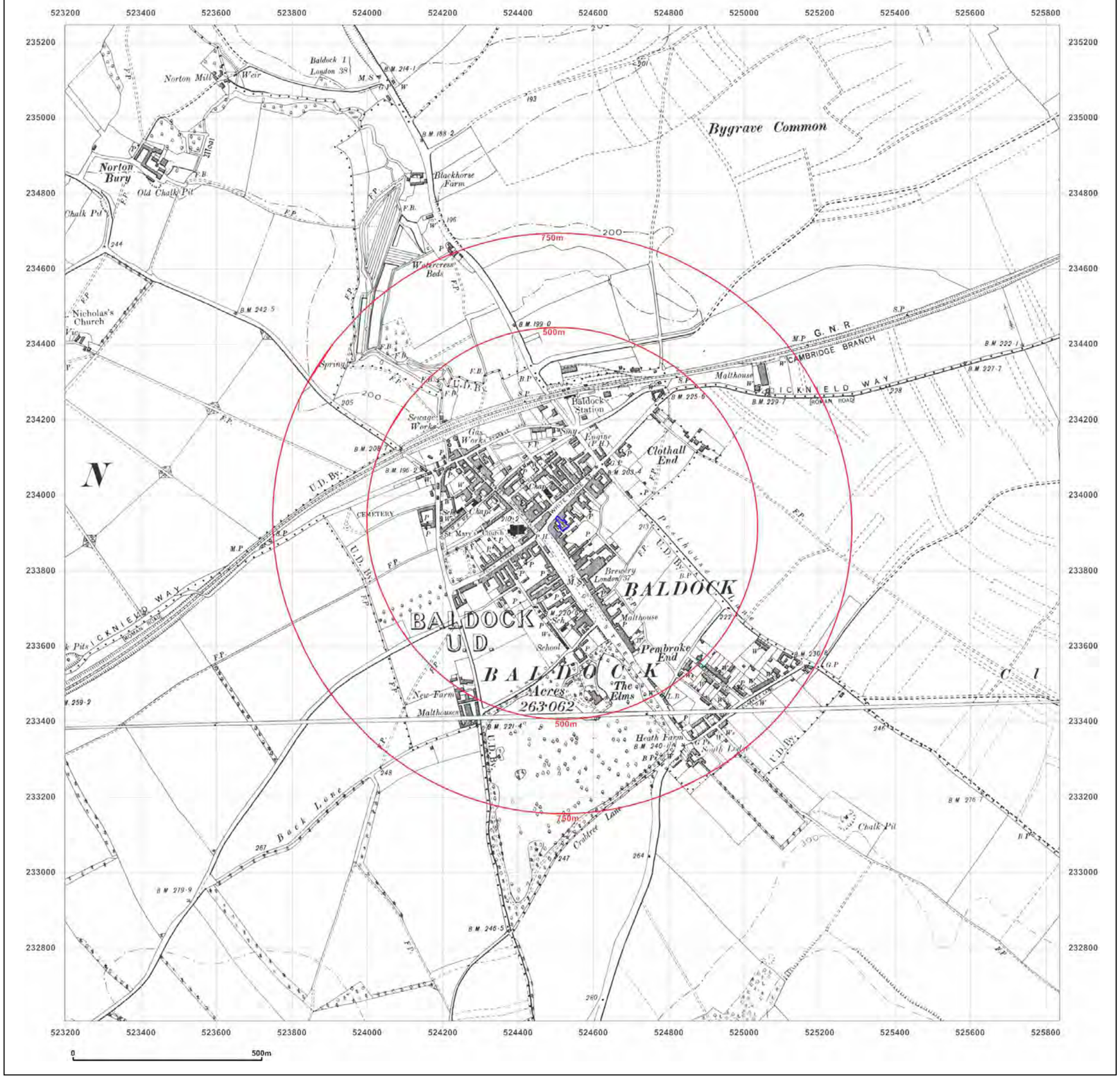
Production date: 15 February 2019

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1897-1899**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1879
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1880
Revised 1897
Edition N/A
Copyright N/A
Levelled N/A

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Production date: 15 February 2019

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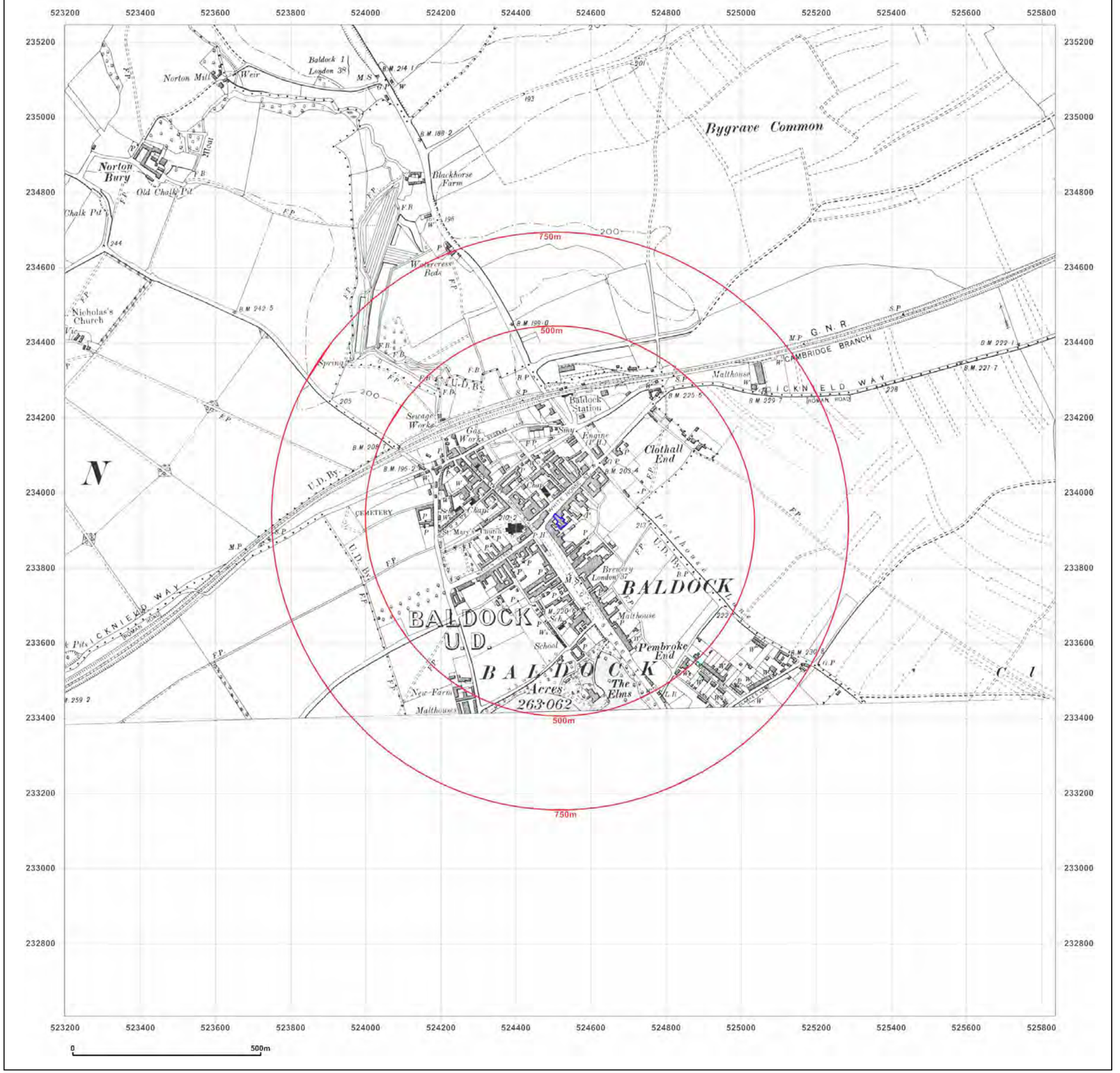

Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1900**

Scale: 1:10,560

Printed at: 1:10,560

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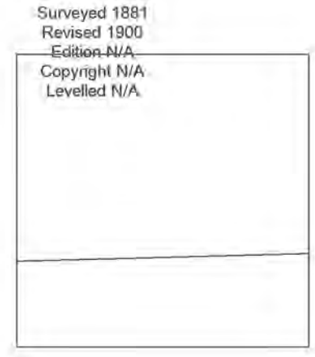

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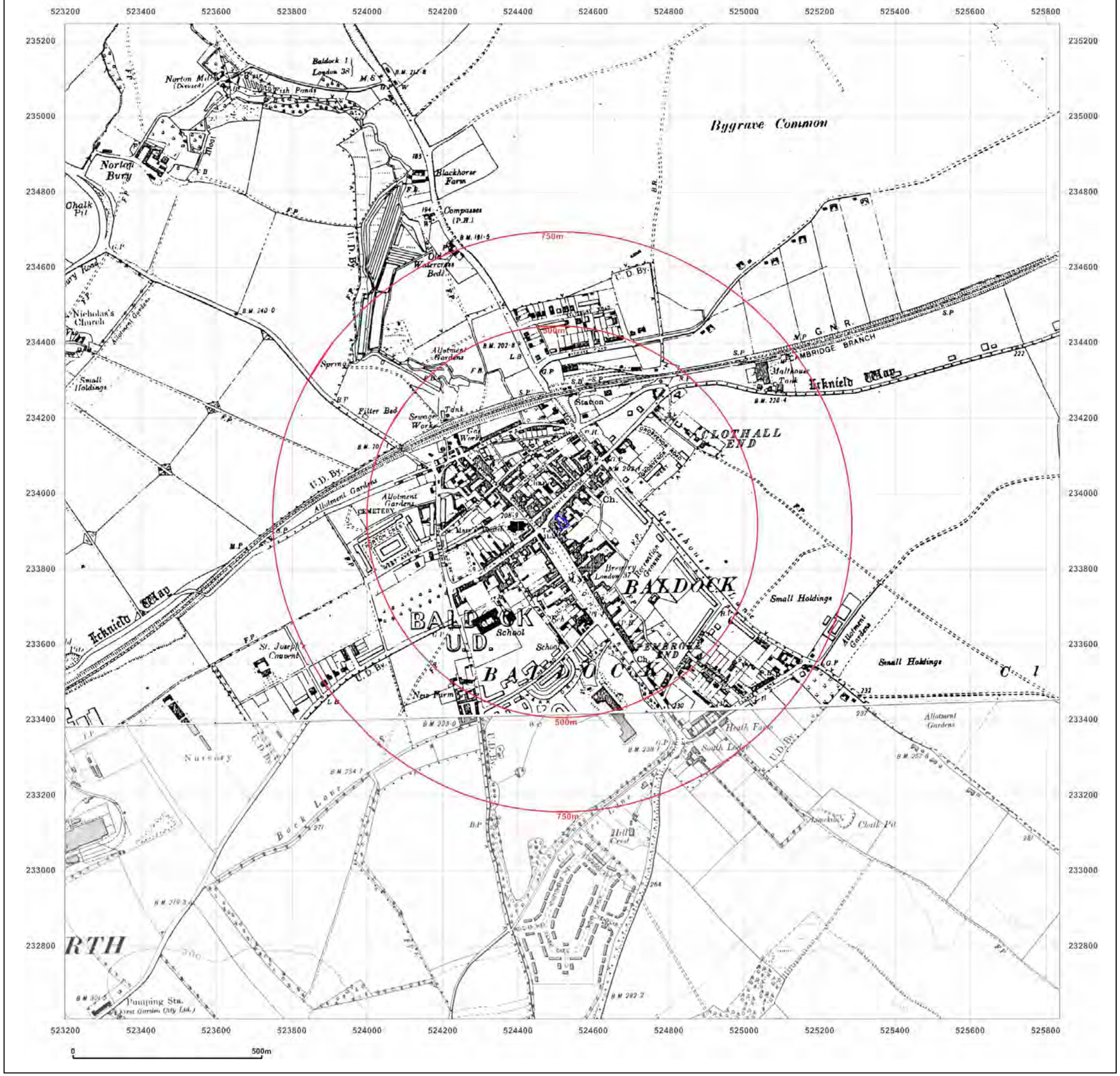

Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1920-1921**

Scale: 1:10,560

Printed at: 1:10,560

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

Surveyed 1879
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

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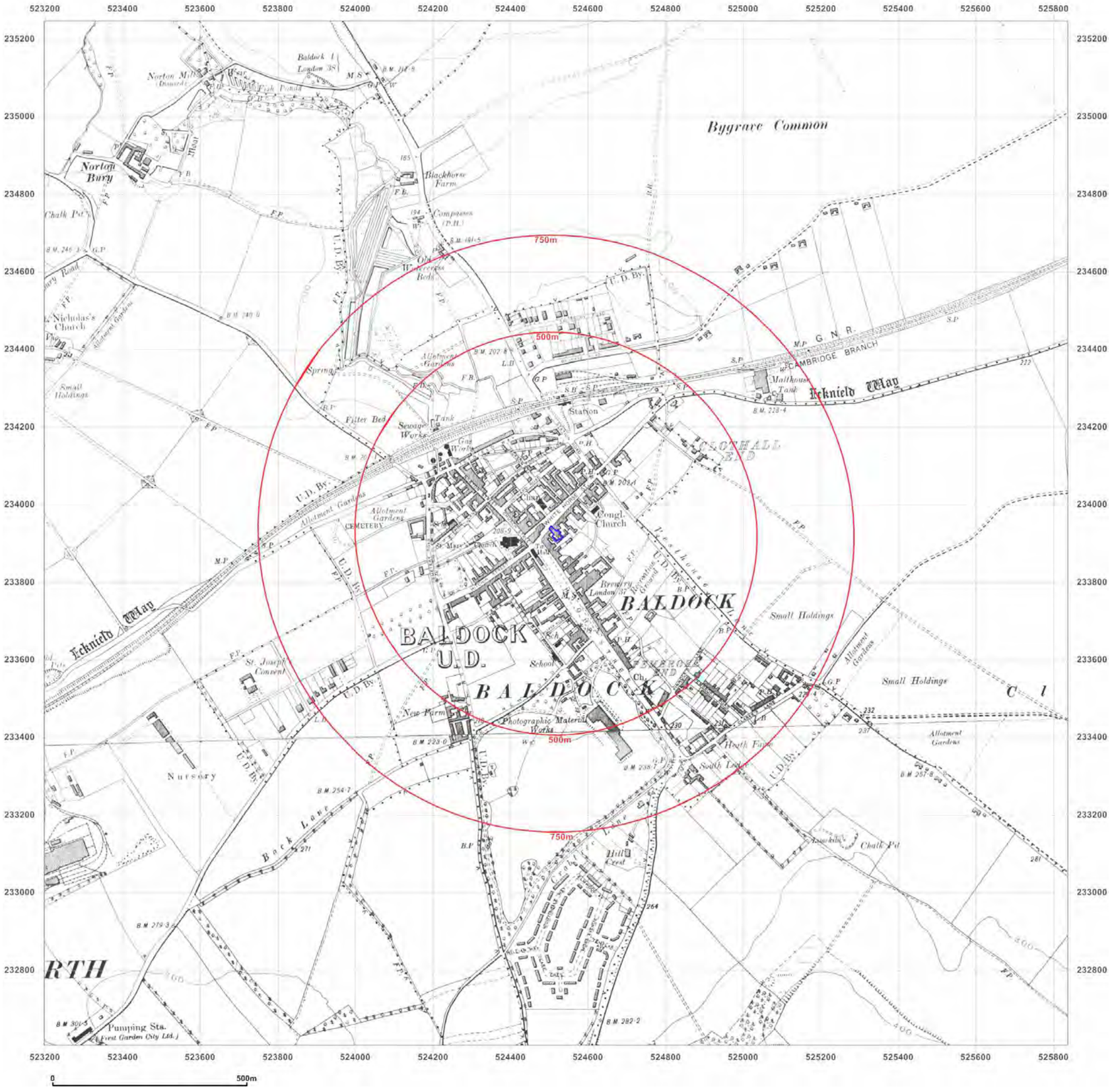

Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1921**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1881
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1879
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

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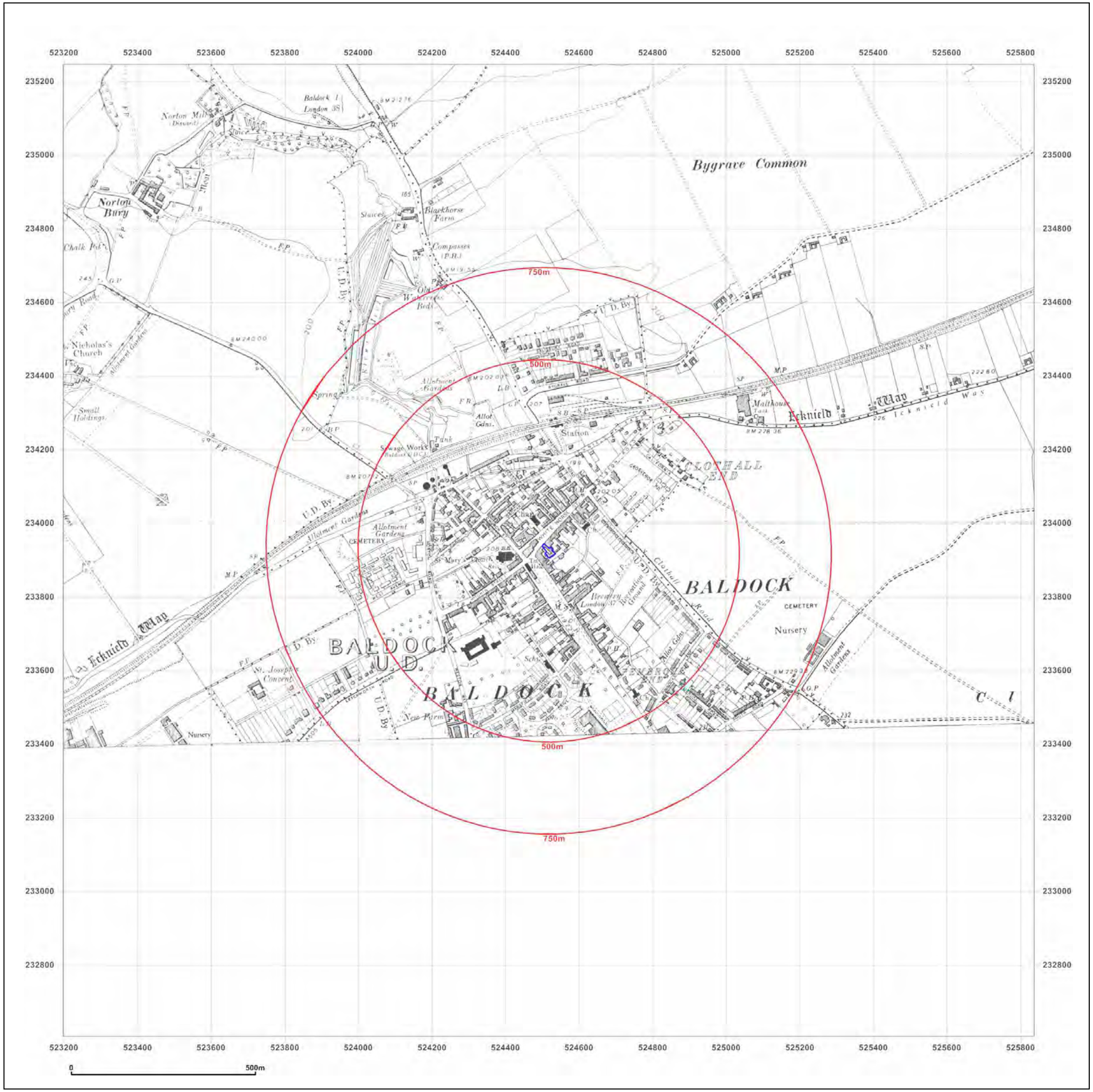

Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1937**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1881
Revised 1937
Edition N/A
Copyright N/A
Levelled N/A

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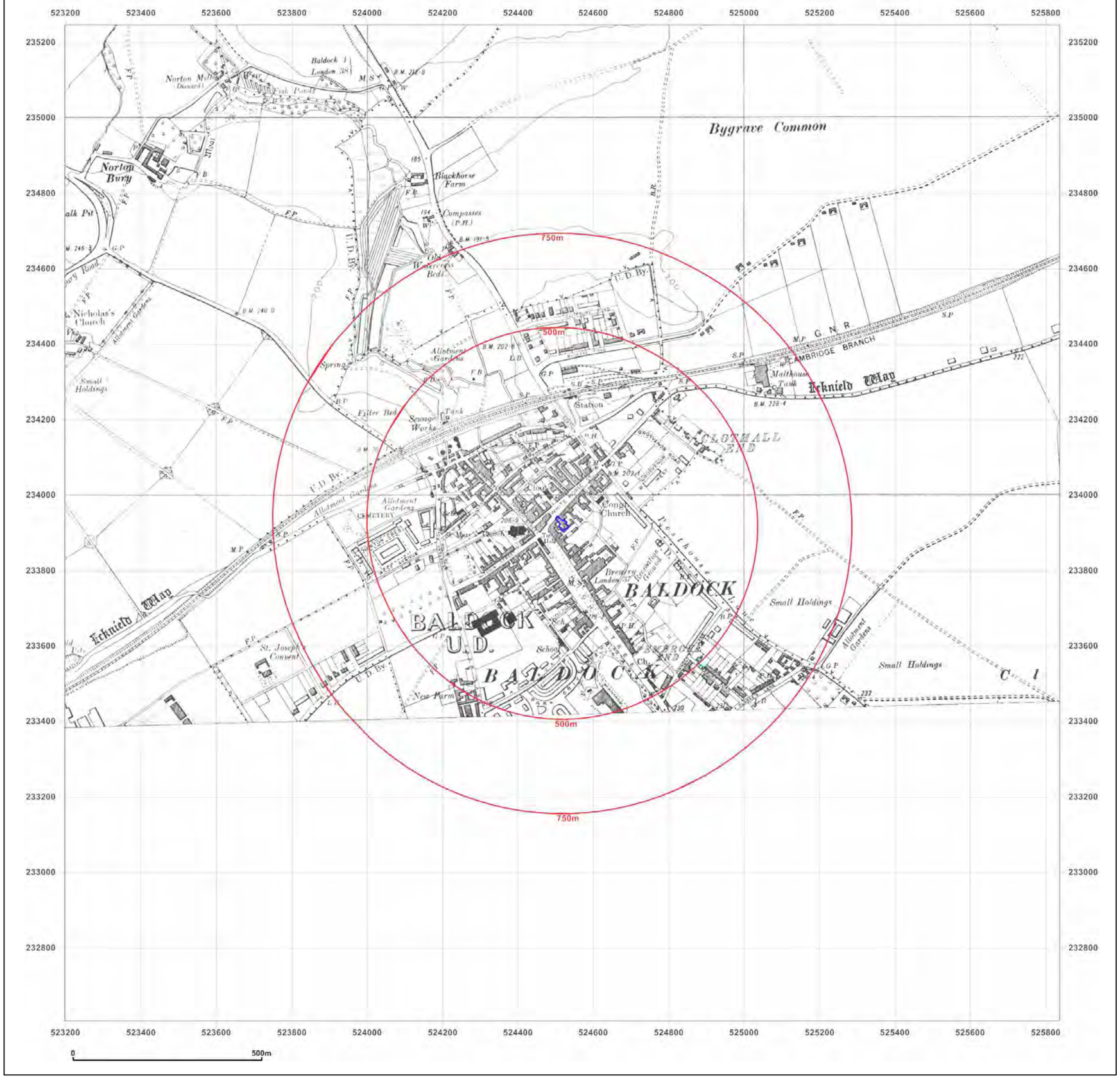

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1881
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

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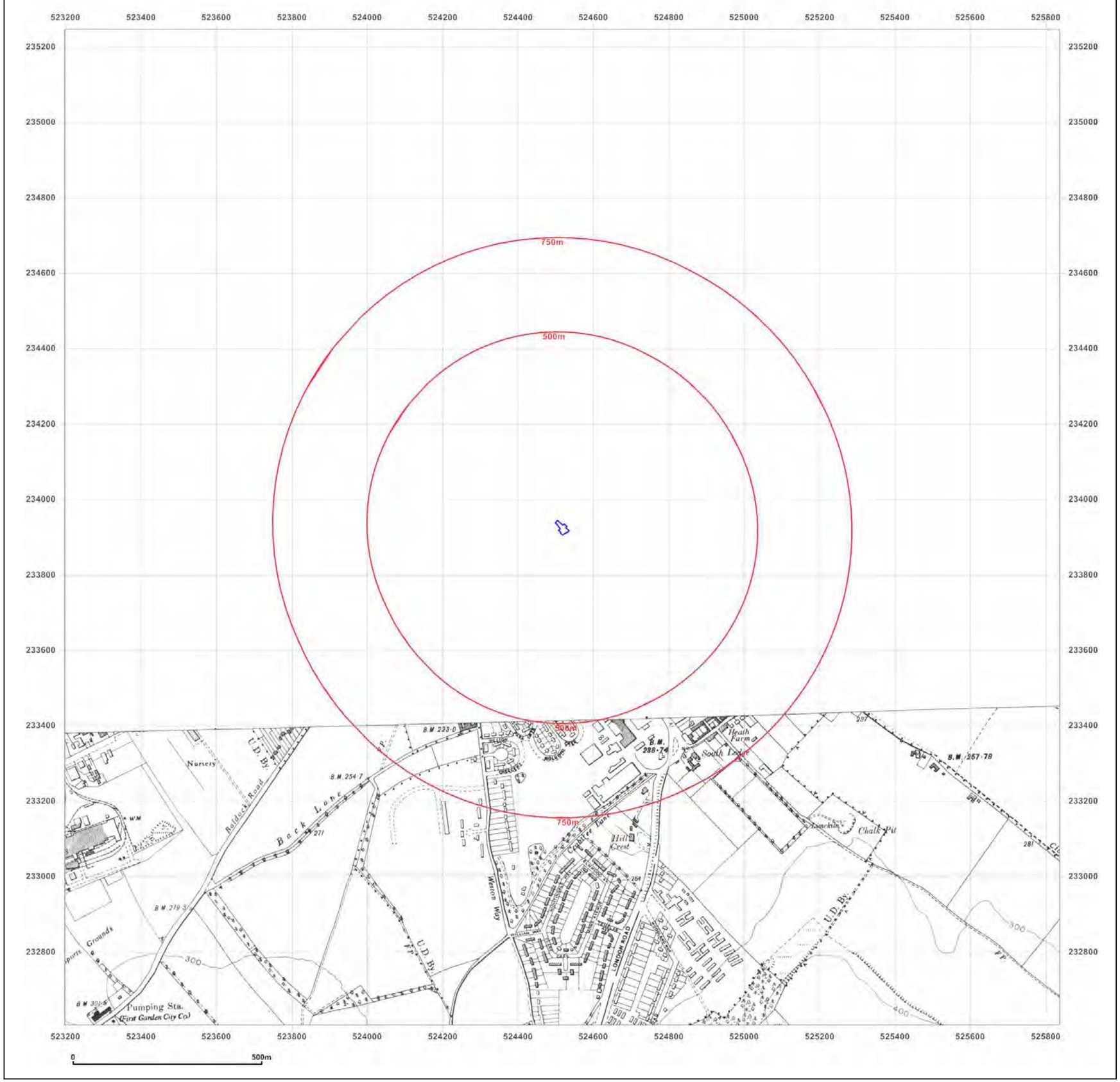

Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1947**

Scale: 1:10,560

Printed at: 1:10,560

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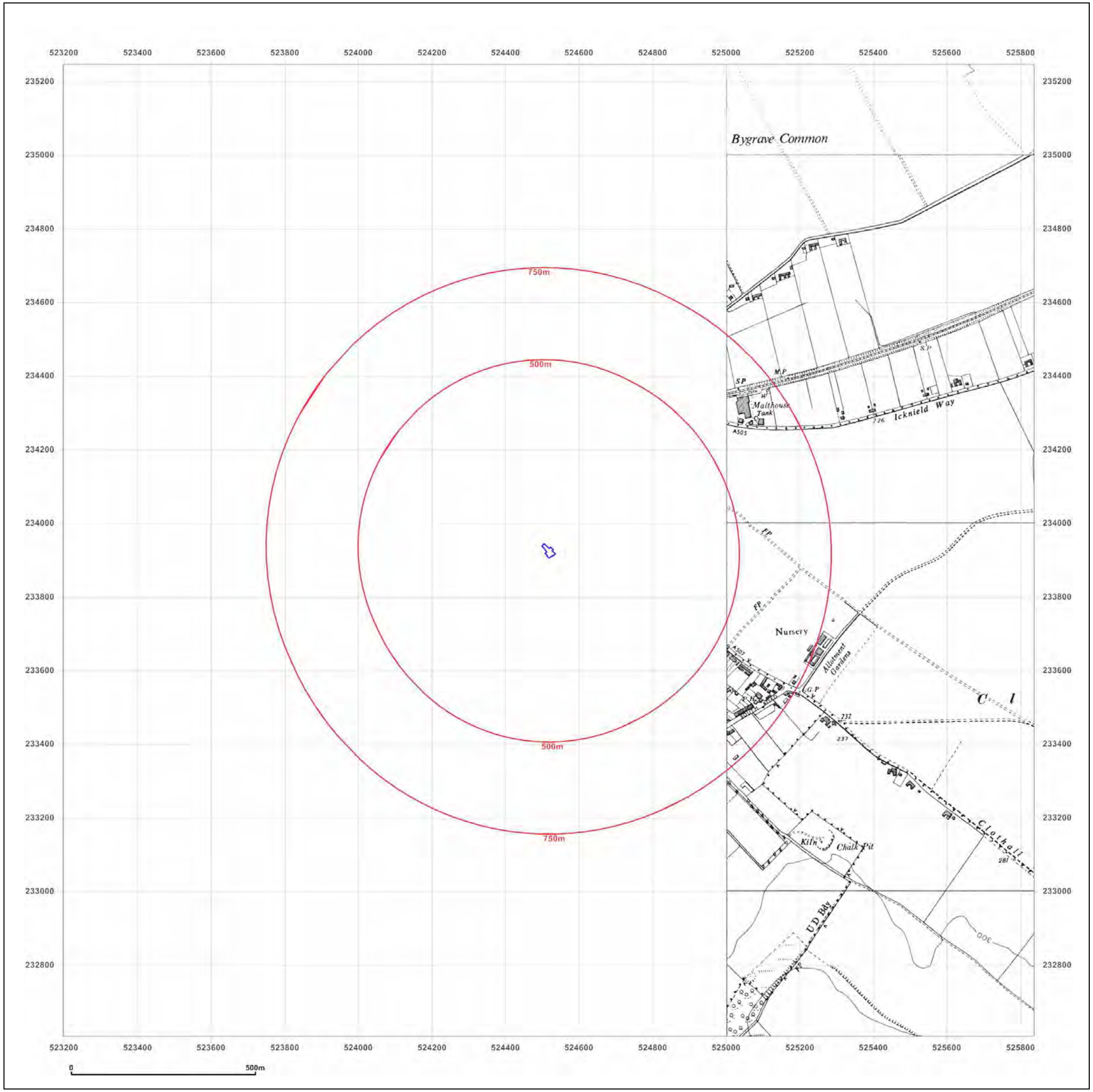

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: Provisional
Map date: **1951**
Scale: 1:10,560
Printed at: 1:10,560

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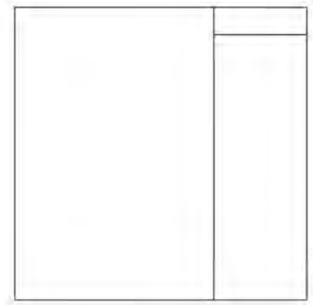

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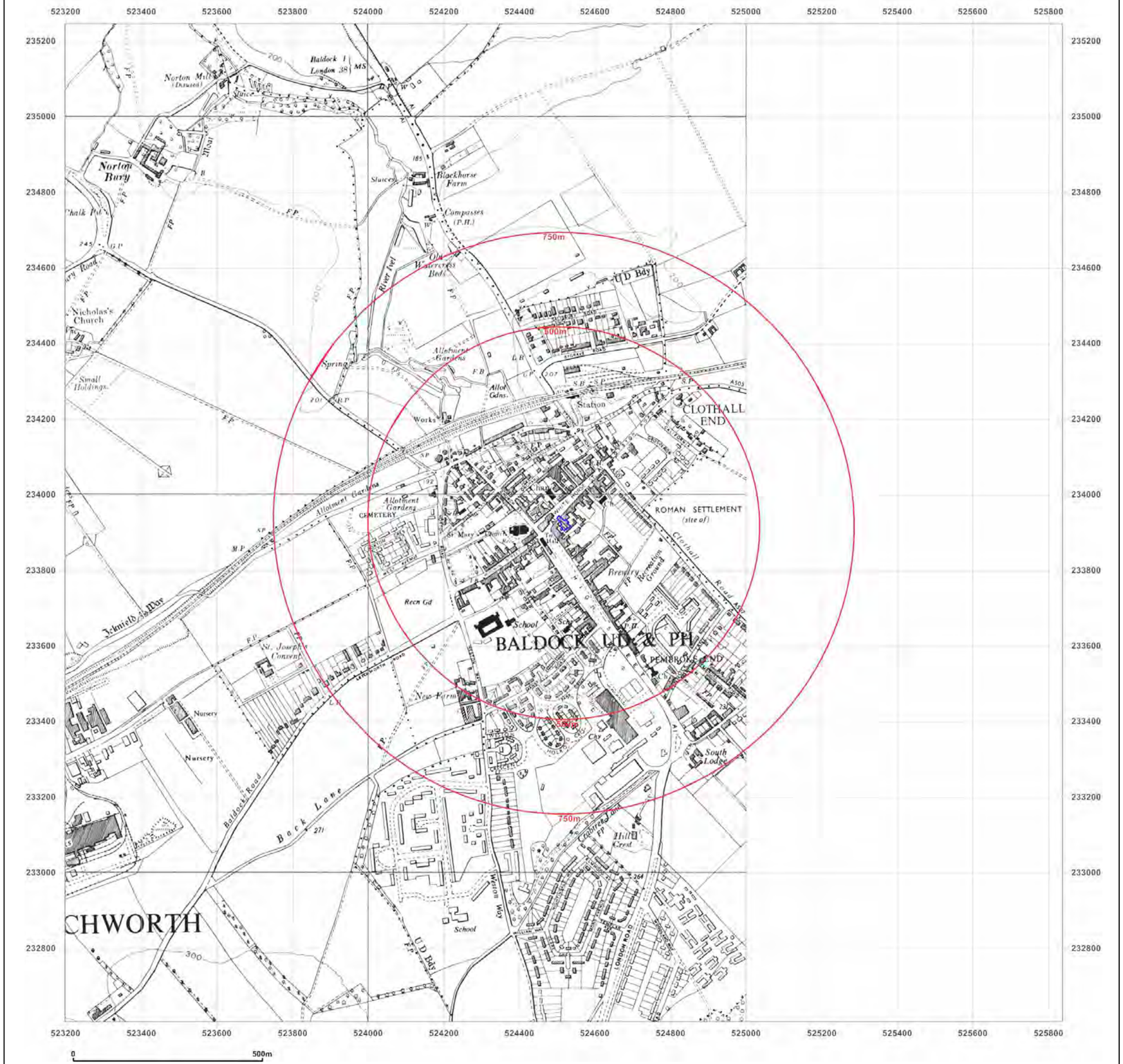

Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: Provisional

Map date: **1959-1960**

Scale: 1:10,560

Printed at: 1:10,560

N
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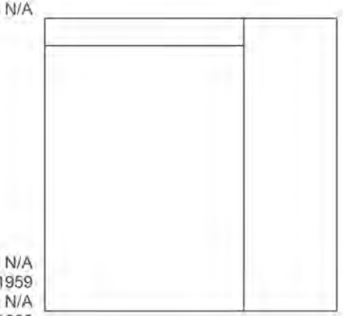
Surveyed N/A
Revised 1959
Edition N/A
Copyright N/A
Levelled N/A



Surveyed N/A
Revised 1959
Edition N/A
Copyright 1960
Levelled N/A

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Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **1984**

Scale: 1:10,000

Printed at: 1:10,000

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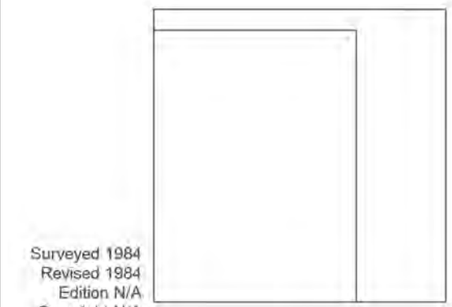

Surveyed 1984
Revised 1984
Edition N/A
Copyright N/A
Levelled N/A

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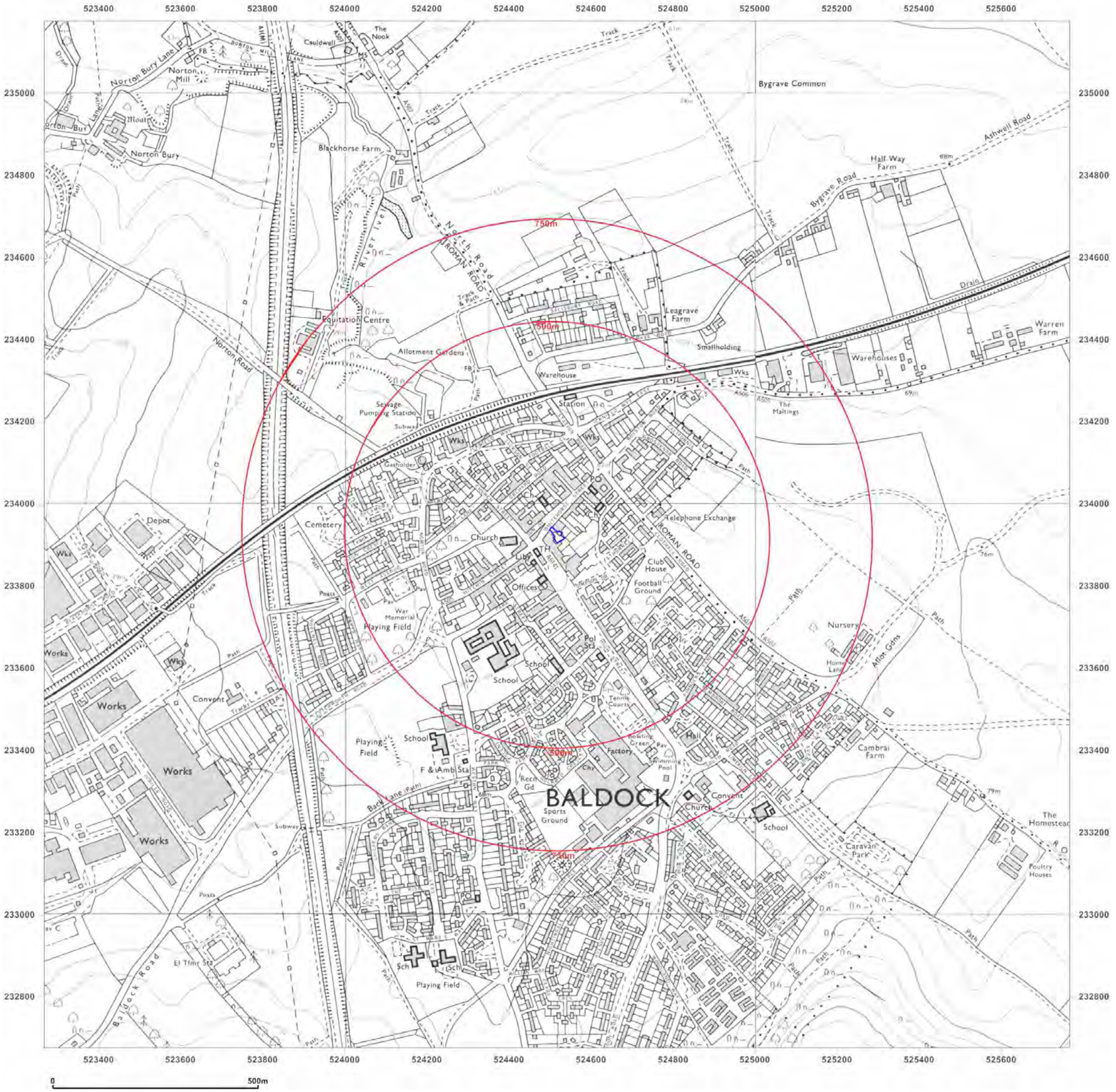

Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **1980-1985**

Scale: 1:10,000

Printed at: 1:10,000

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Surveyed 1983
Revised 1985
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1974
Revised 1982
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1975
Revised 1980
Edition N/A
Copyright 1980
Levelled 1979

Surveyed 1974
Revised 1981
Edition N/A
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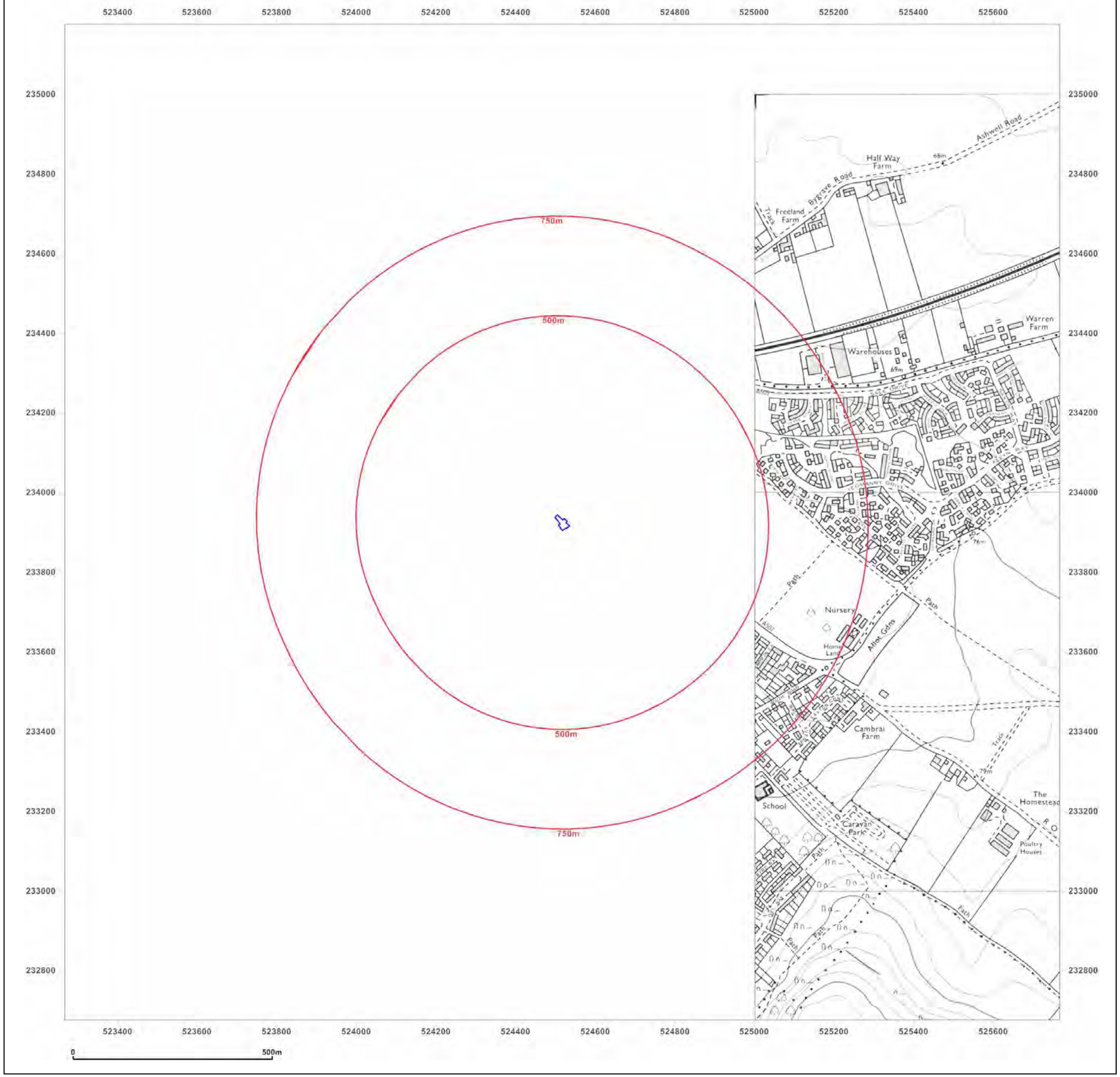

Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **1994**

Scale: 1:10,000

Printed at: 1:10,000

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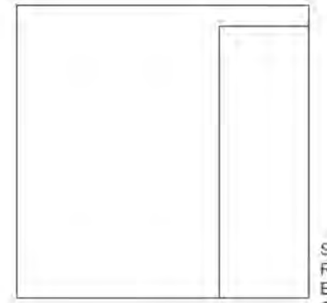

Surveyed 1974
Revised 1994
Edition N/A
Copyright N/A
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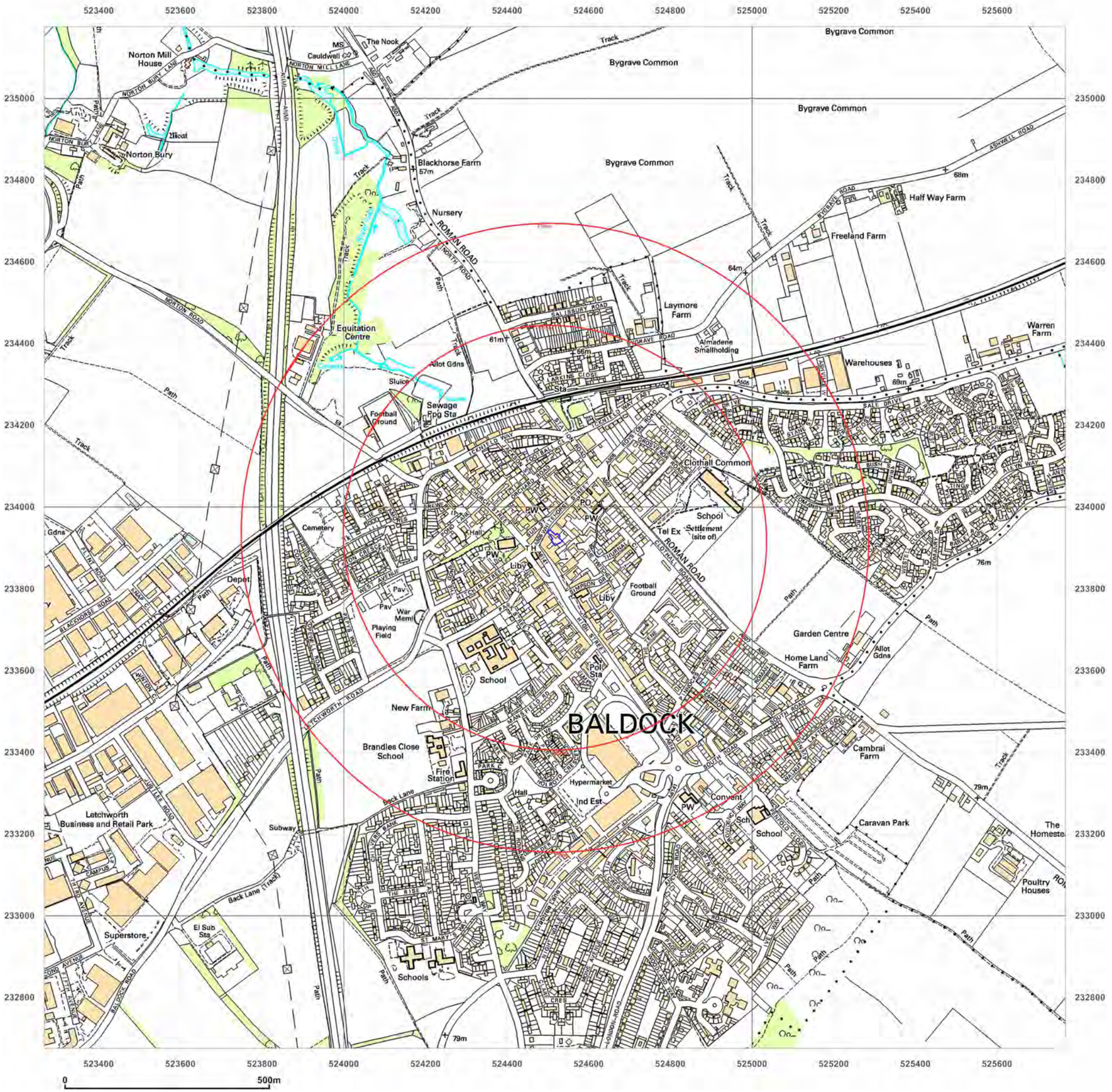
BALDOCK
Norton Mill House
Norton Bury
Blackhorse Farm
Nursery
Equitation Centre
Allot Gdns
Sewage Ppg Sta
Football Ground
Cemetery
Depot
Playing Field
War Meml
School
New Farm
Brandles Close School
Fire Station
Hypermarket
Ind Est
Latchworth Business and Retail Park
Superstore
El Sub Sta
Schools
Subway
Back Lane (Track)
Laymore Farm
Almadene Smallholding
Freeland Farm
Half Way Farm
Warehouses
Warren Farm
Clothall Common
School Settlement (site of)
Tel Ex
Garden Centre
Home Land Farm
Cambrai Farm
Caravan Park
Poultry Houses
Bygrave Common
Track
Path
ROMAN ROAD
NORTON ROAD
BYGRAVE ROAD
ASHWELL ROAD
TEMPLEDELL ROAD
TEMPLE DRIVE
SALISBURY ROAD
TECHNOLOGY DRIVE
TEMPLEFIELD ROAD
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Site Details:

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BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

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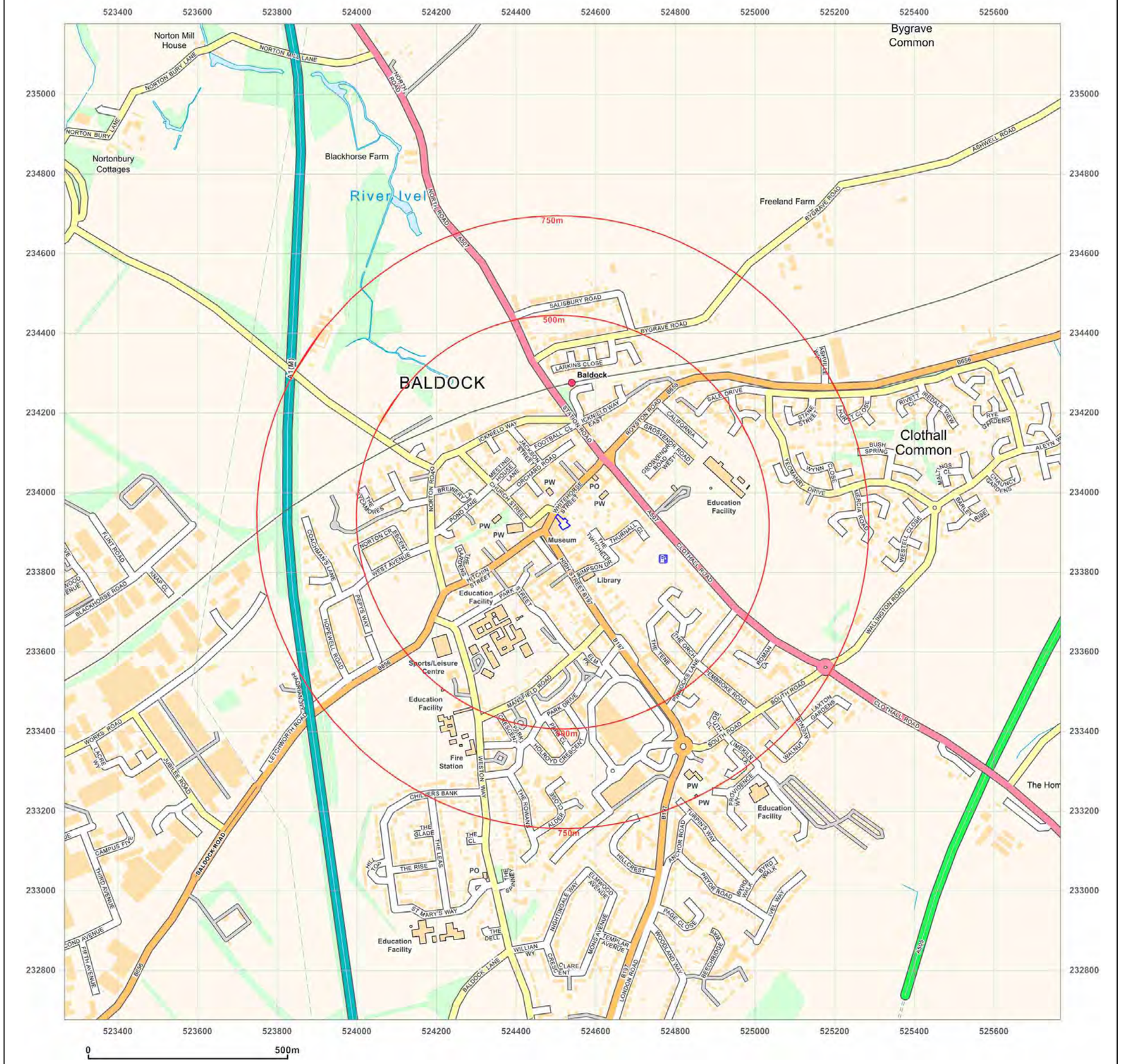

Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid
Map date: 2014
Scale: 1:10,000
Printed at: 1:10,000

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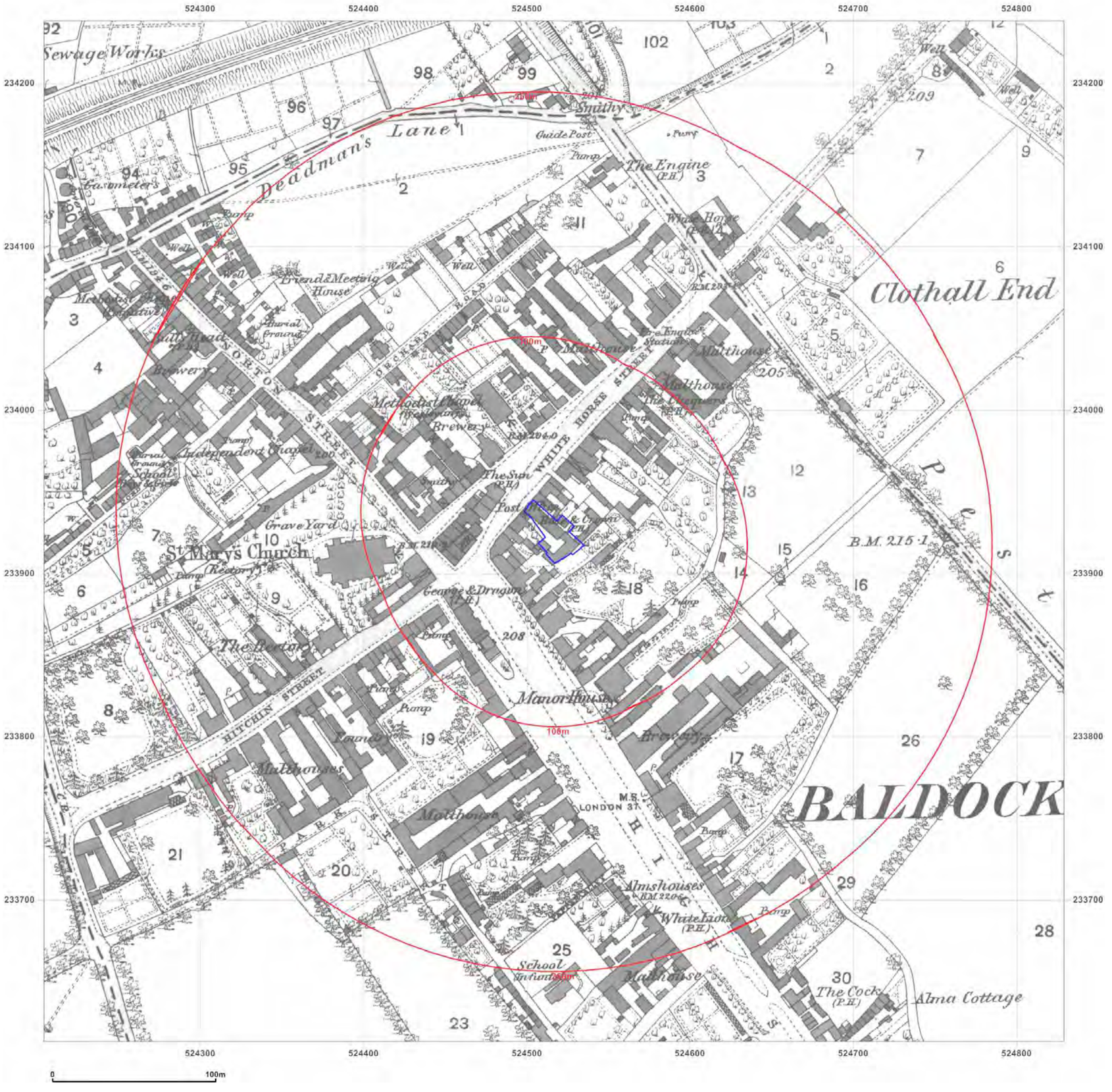

Groundsure INSIGHTS

Site Details:

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WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1880**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1880
Revised 1880
Edition N/A
Copyright N/A
Levelled N/A

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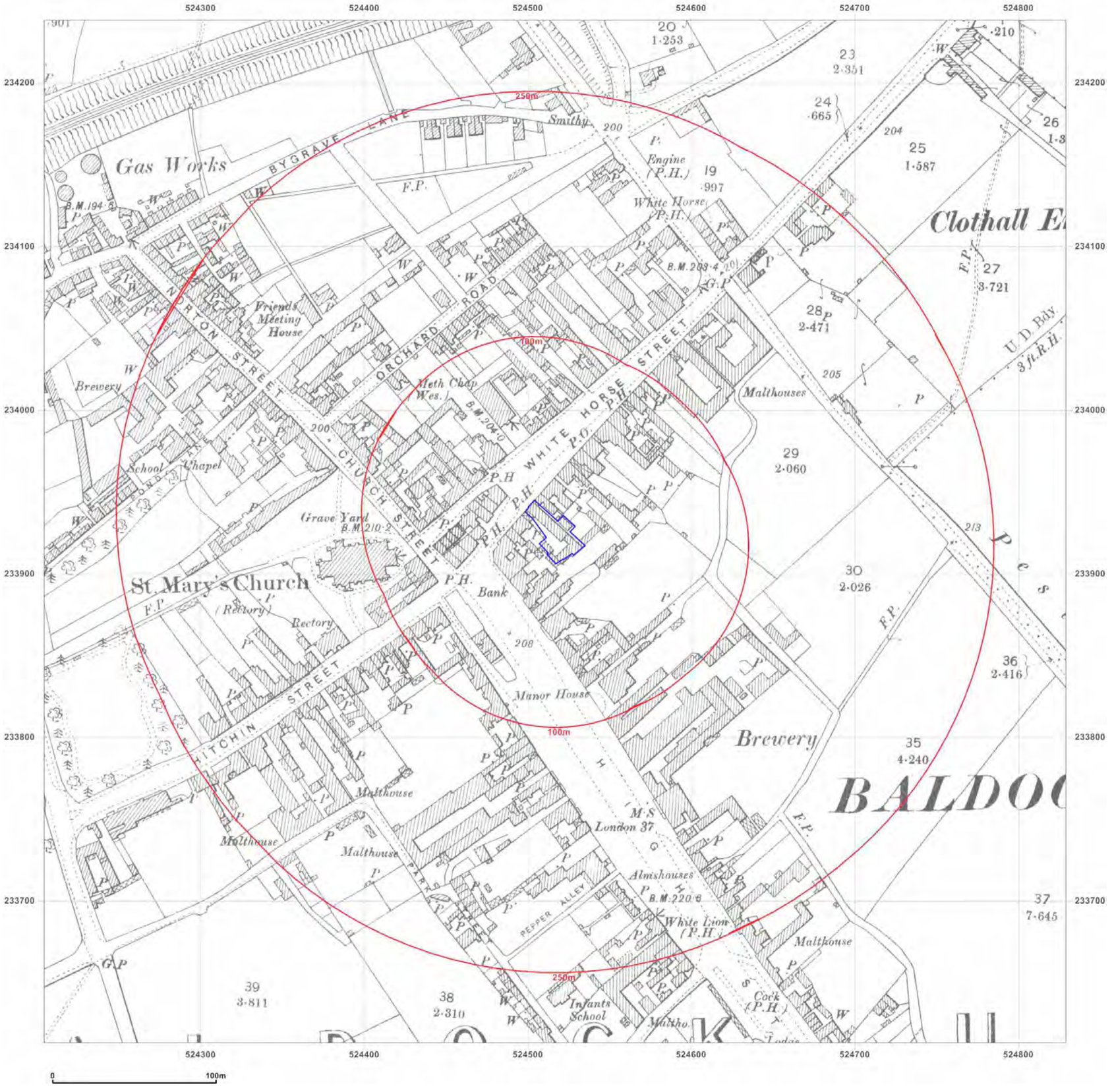

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Site Details:

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WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1898**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1898
Revised 1898
Edition N/A
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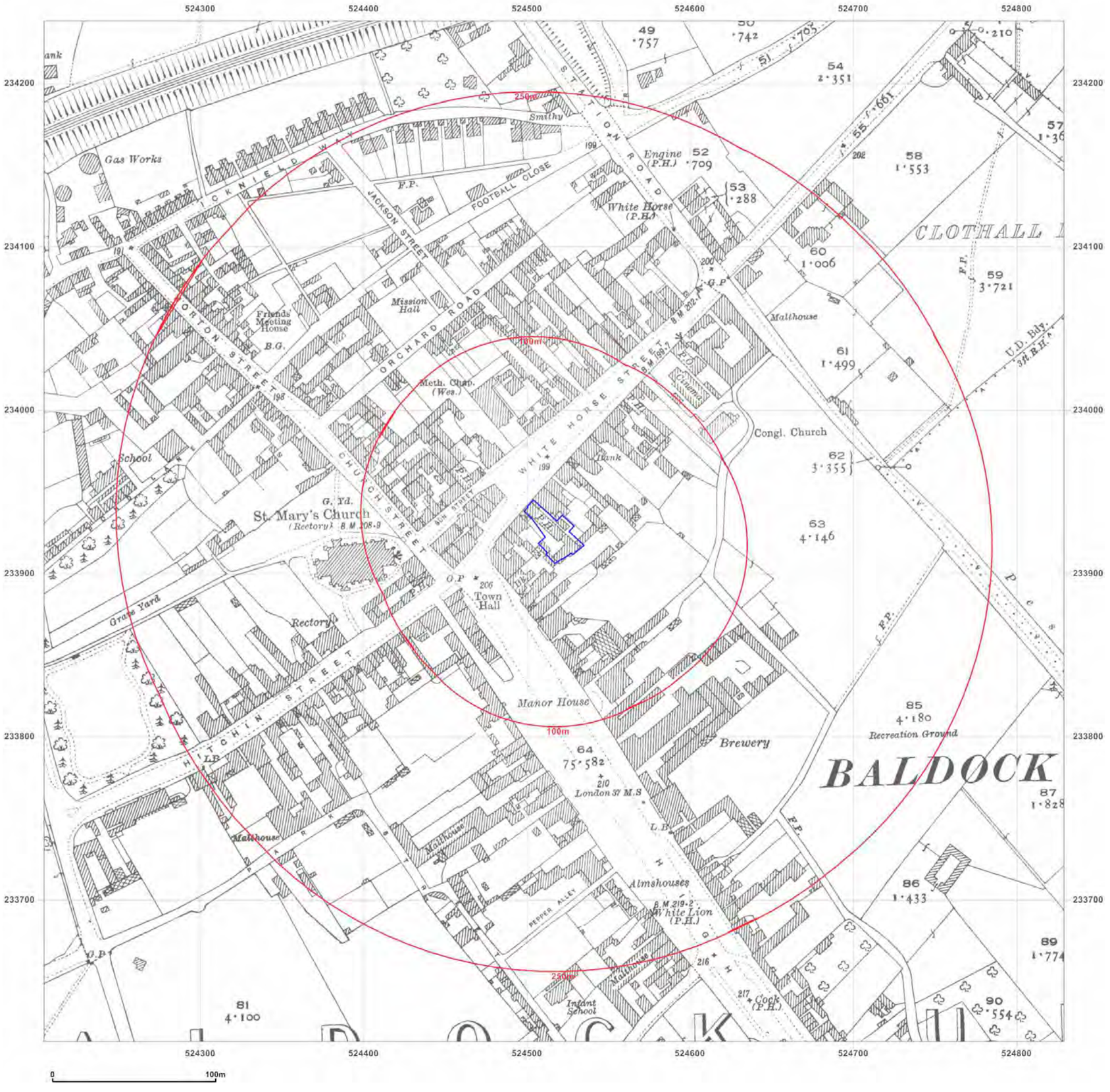
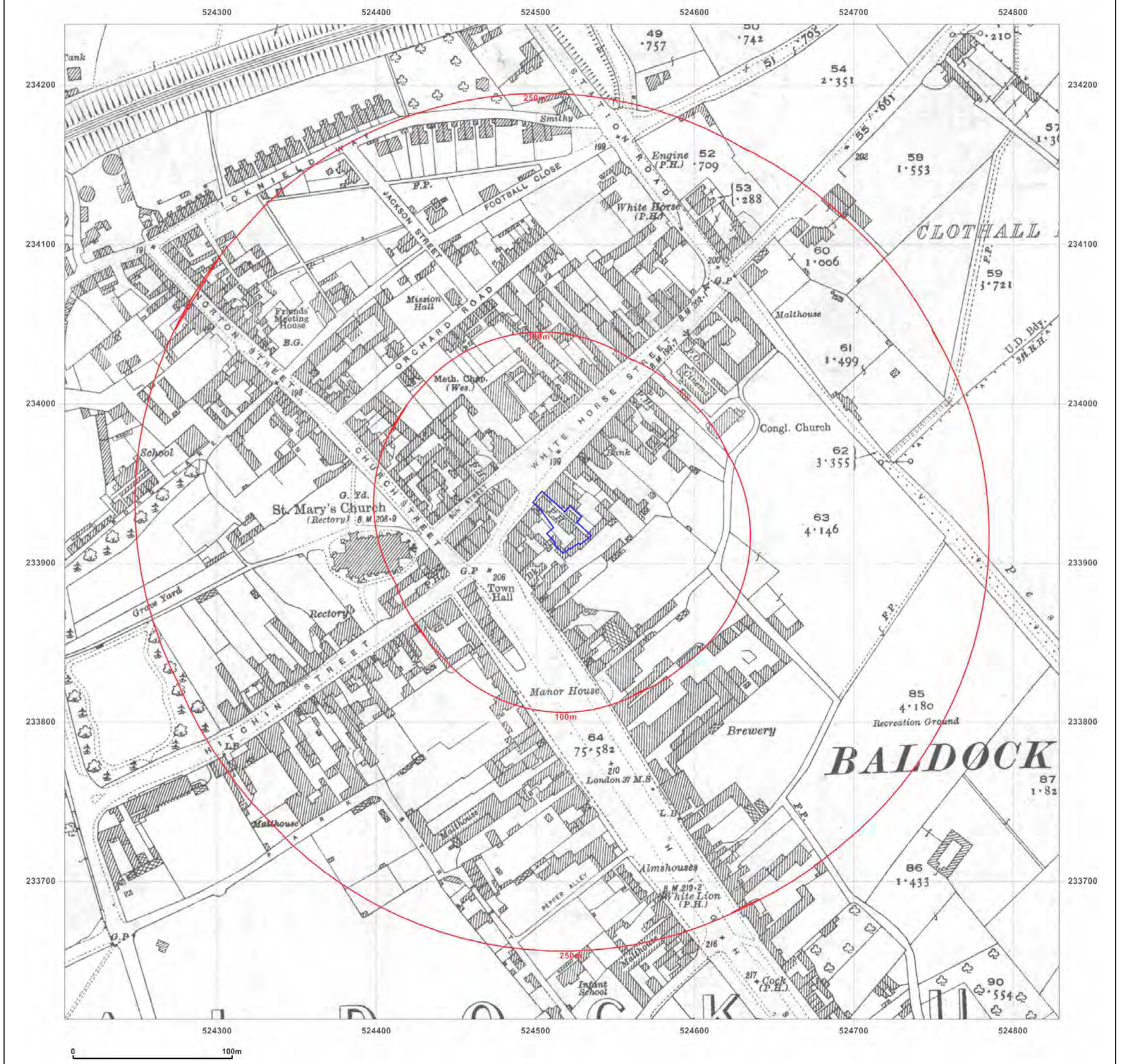

524300
524400
524500
524600
524700
524800
234200
234100
234000
233900
233800
233700
BALDOCK
St. Mary's Church
Gas Works
Engine (P.H.)
White Horse (P.H.)
Mission Hall
Friends Meeting House
Meth. Chap. (Wes.)
Congl. Church
Malthouse
Manor House
Brewery
Recreation Ground
Almshouses
White Lion (P.H.)
Cock (P.H.)
Town Hall
Rectory
Grave Yard
Infant School
Bank
Smithy
Malthouse
Malthouse
Malthouse



Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1932**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1932
Revised 1932
Edition N/A
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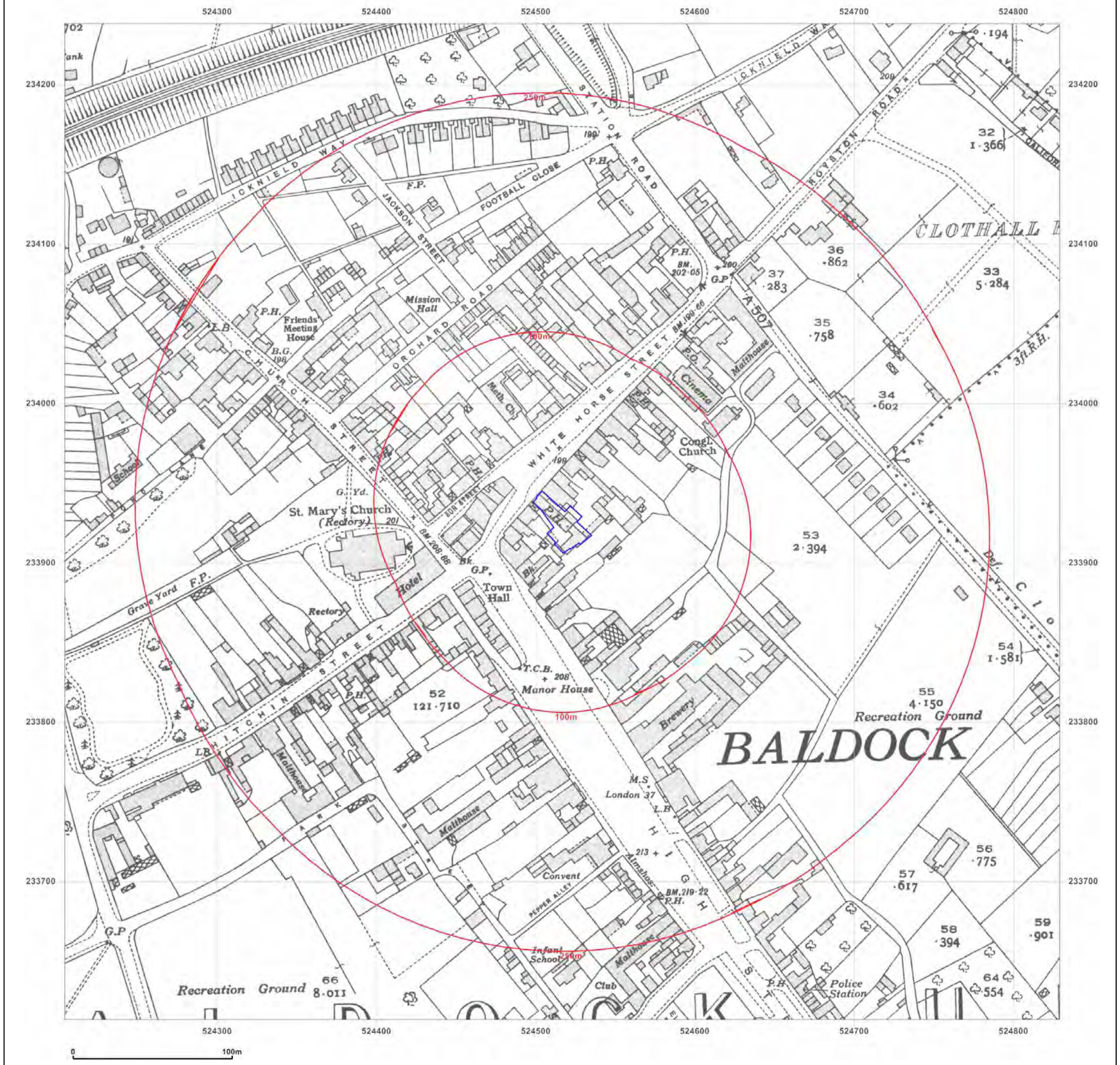

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Site Details:

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WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: County Series

Map date: **1937**

Scale: 1:2,500

Printed at: 1:2,500

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Revised 1937
Edition N/A
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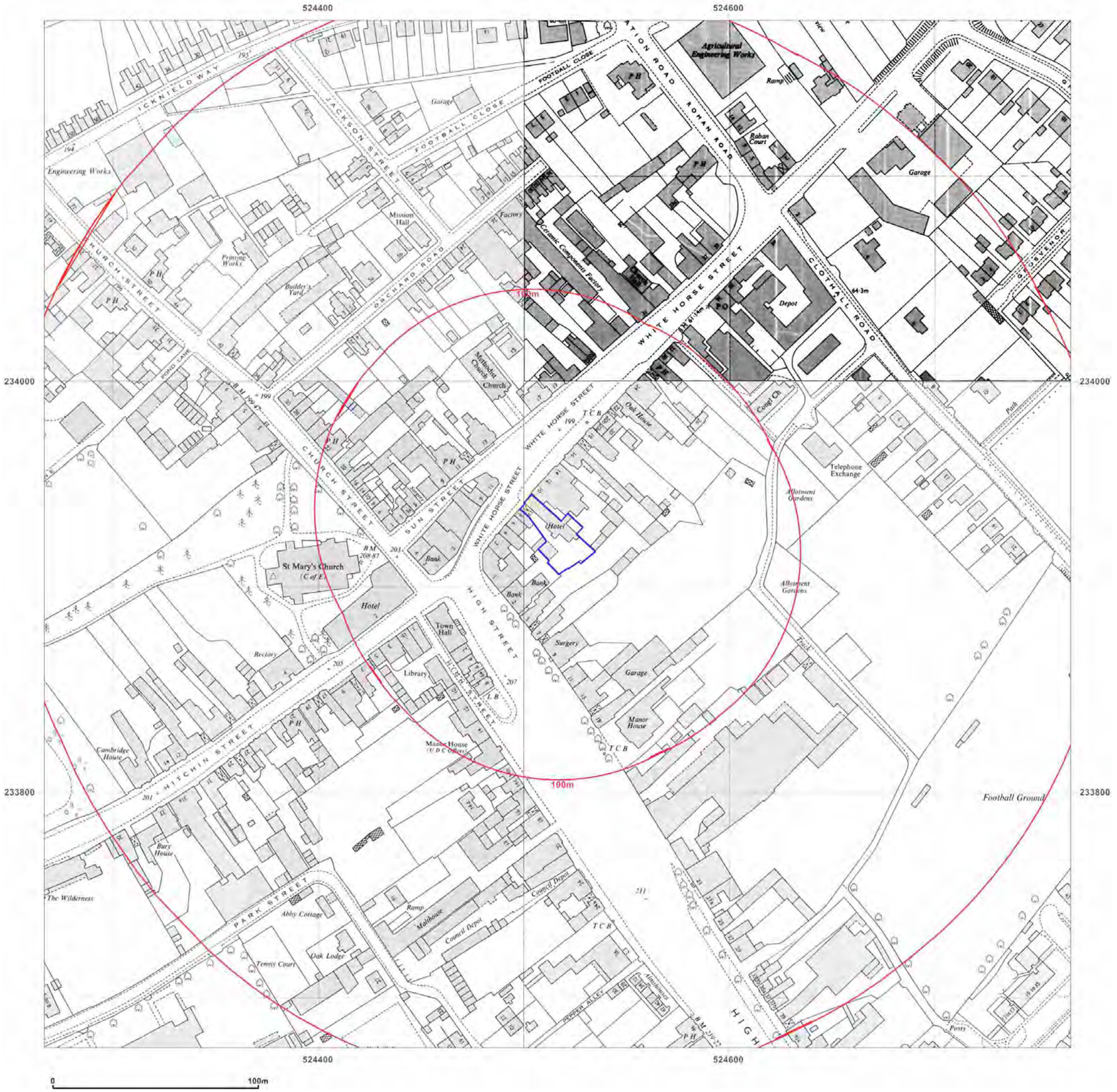

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Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **1962-1967**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed 1966
Revised 1966
Edition N/A
Copyright 1967
Levelled 1964

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

Surveyed 1966
Revised 1966
Edition N/A
Copyright 1967
Levelled 1957

Surveyed 1966
Revised 1966
Edition N/A
Copyright 1967
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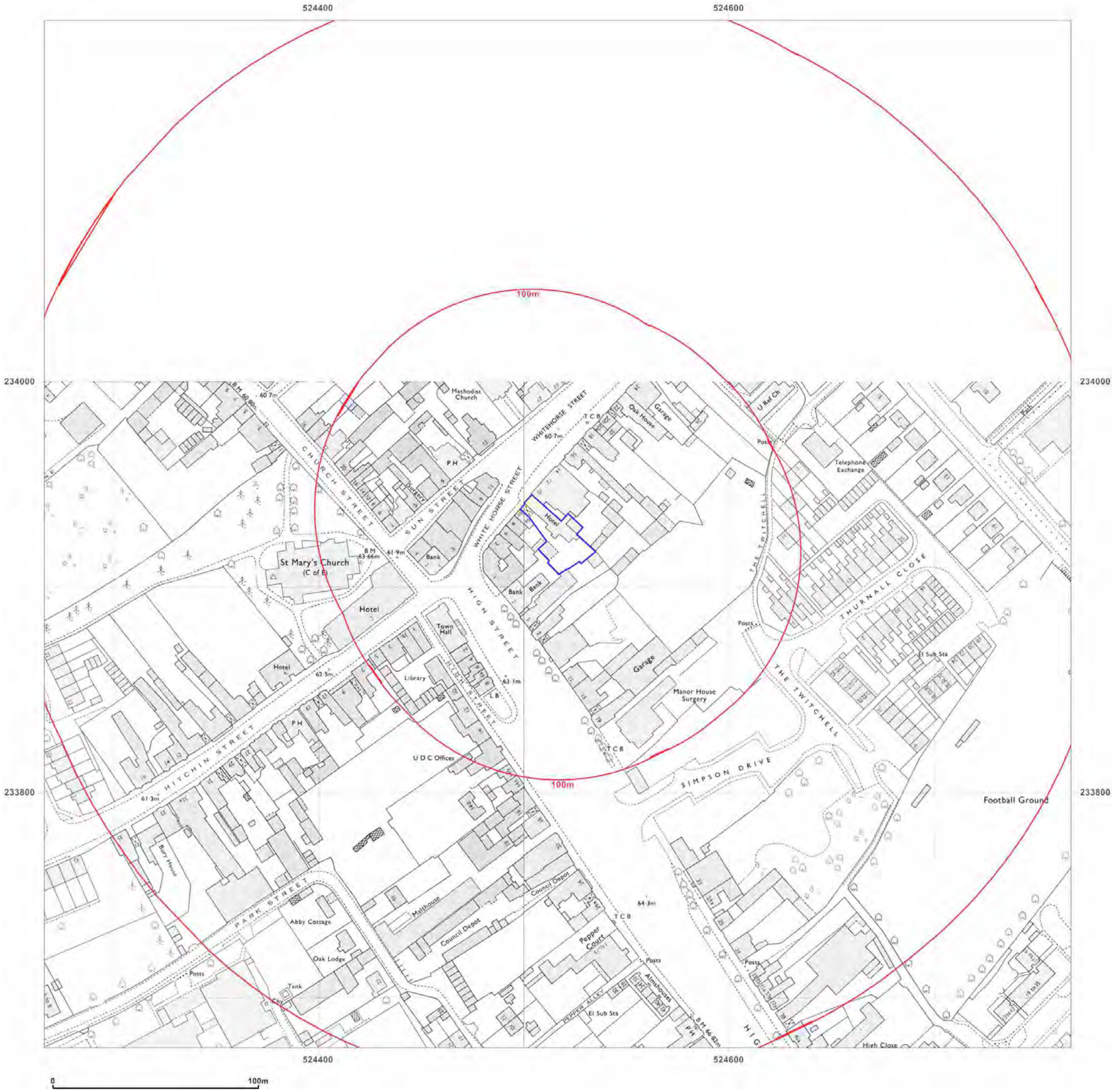

Groundsure INSIGHTS

Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **1974-1975**

Scale: 1:1,250

Printed at: 1:2,000

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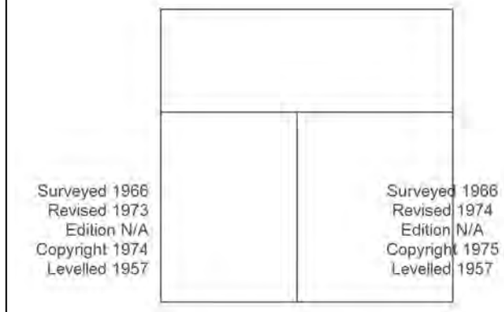

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BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **1984-1986**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed 1966 Revised 1984 Edition N/A Copyright 1986 Levelled 1976	Surveyed N/A Revised N/A Edition N/A Copyright 1984 Levelled 1964
Surveyed N/A Revised N/A Edition N/A Copyright 1985 Levelled N/A	Surveyed 1957 Revised 1986 Edition N/A Copyright 1986 Levelled 1957

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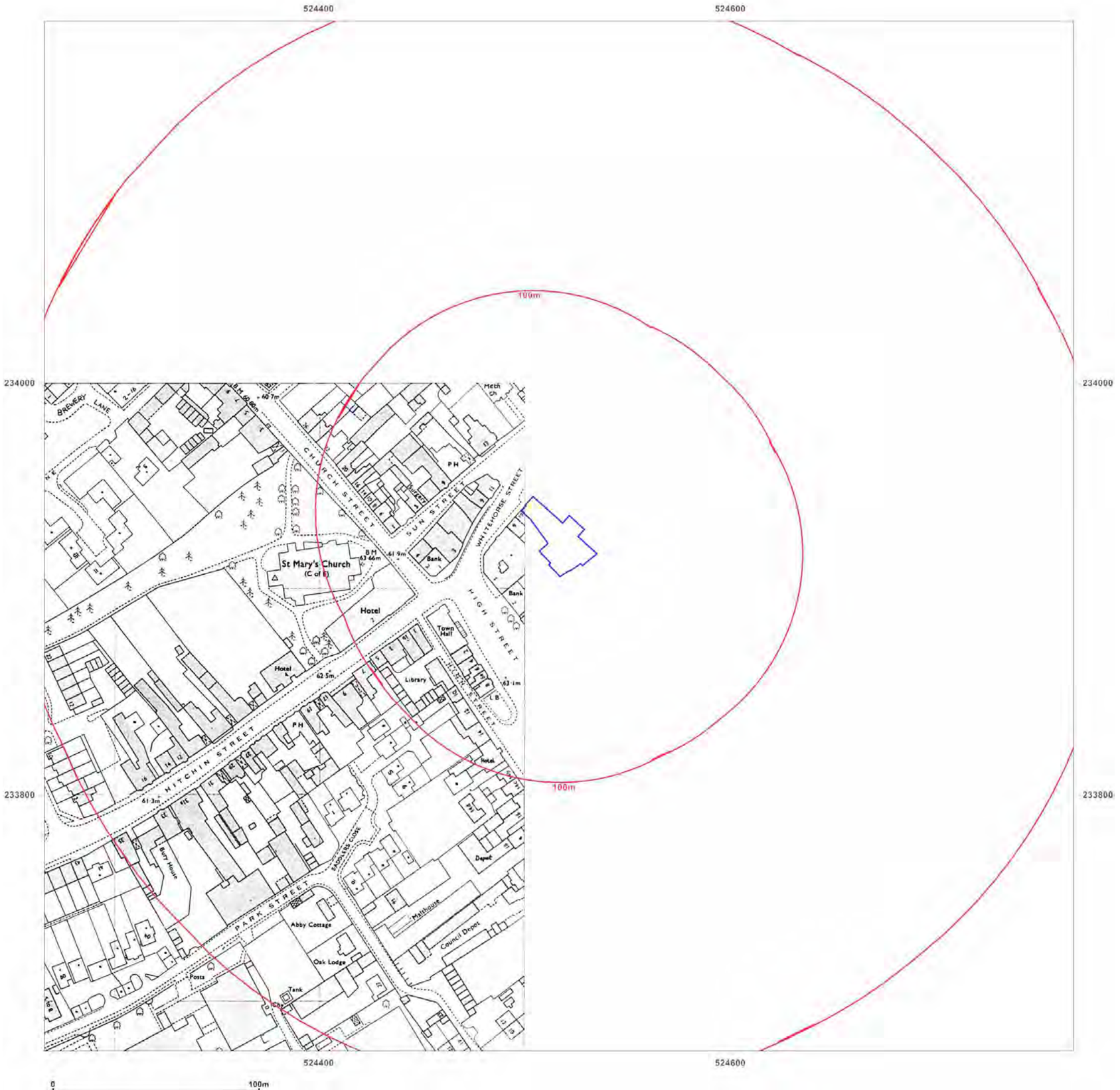

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Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **1986**

Scale: 1:1,250

Printed at: 1:2,000

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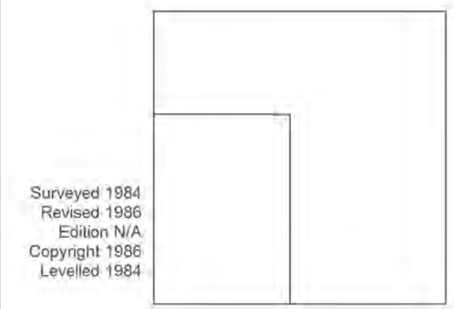

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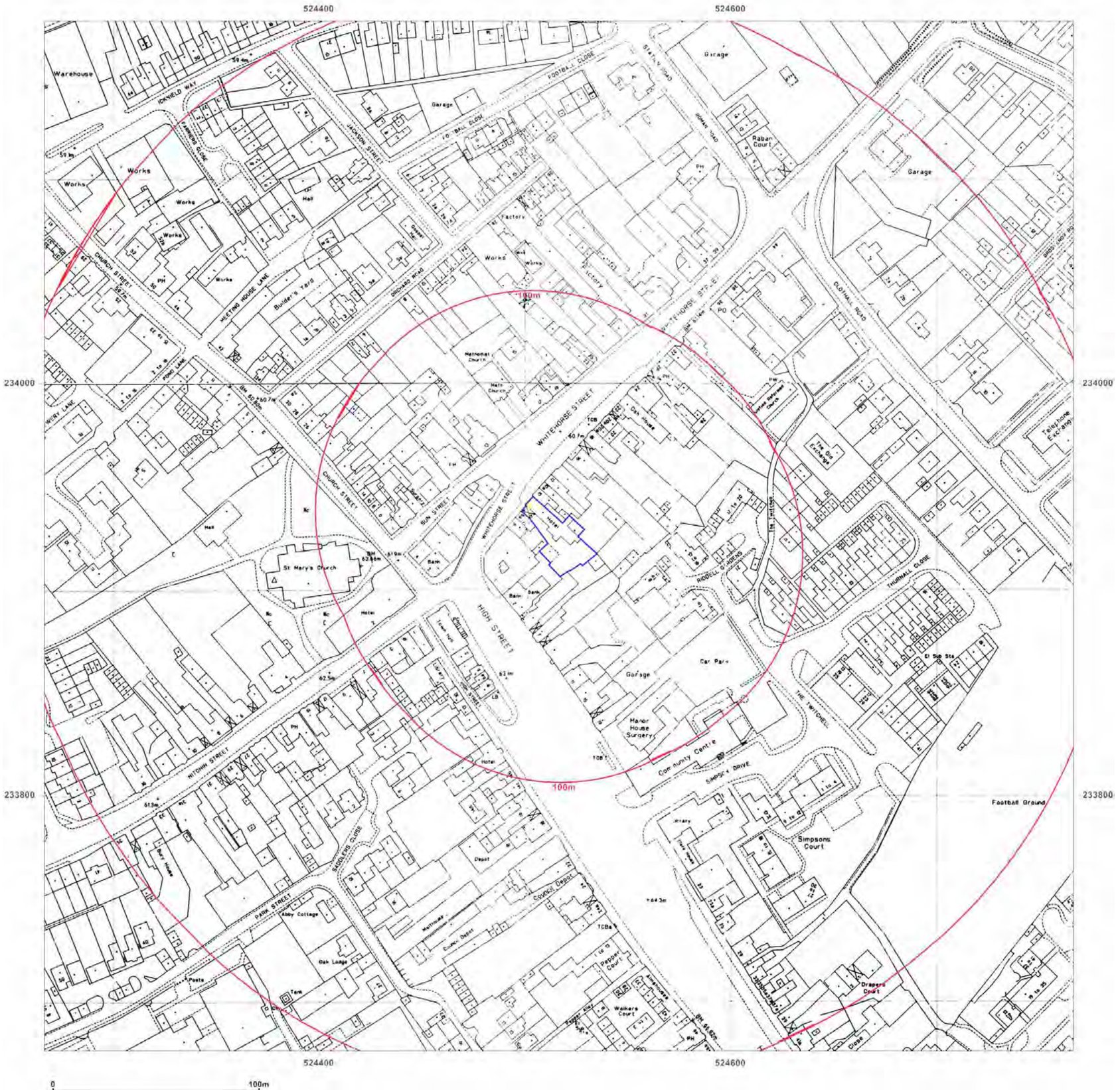

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Site Details:

ROSE & CROWN, 8,
WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **1993**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
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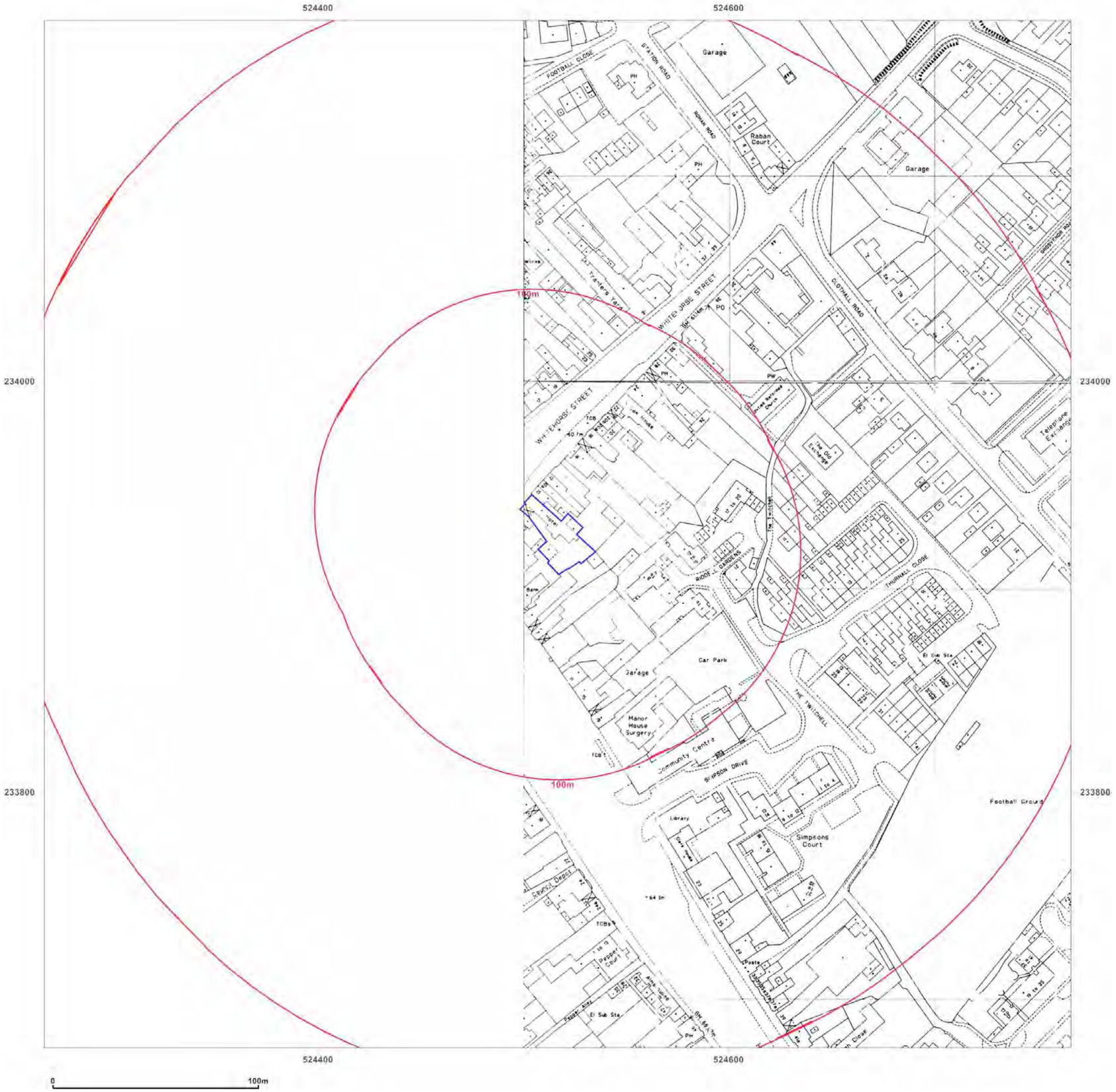

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Site Details:

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WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **1993-1994**

Scale: 1:1,250

Printed at: 1:2,000

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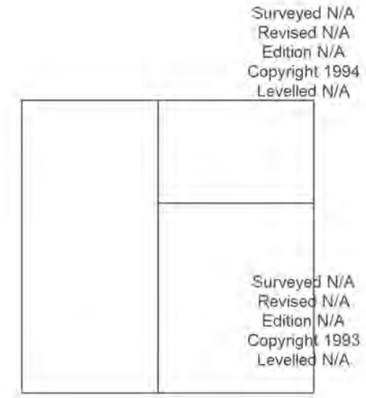

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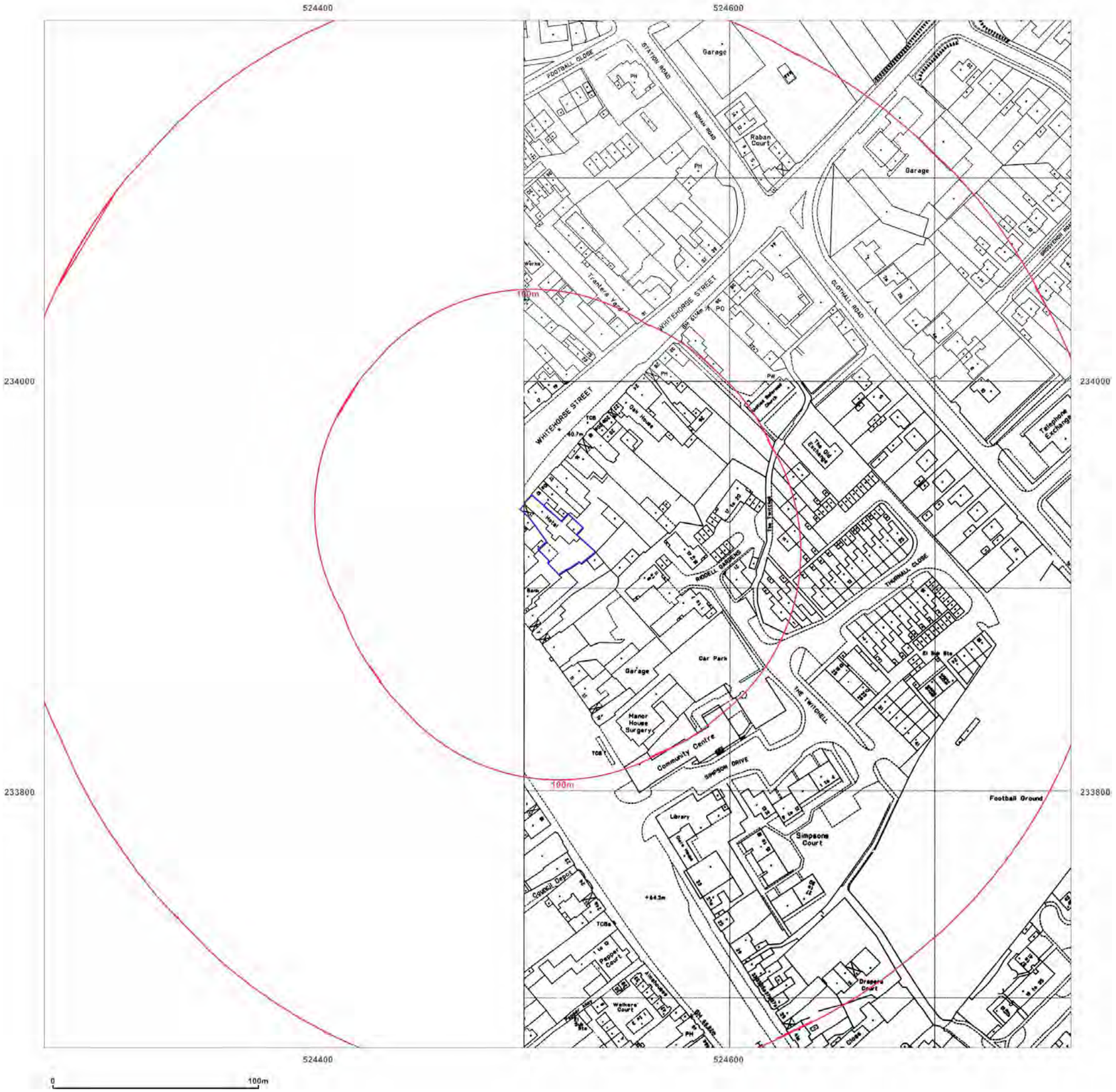

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Site Details:

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WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **1993-1994**

Scale: 1:1,250

Printed at: 1:2,000

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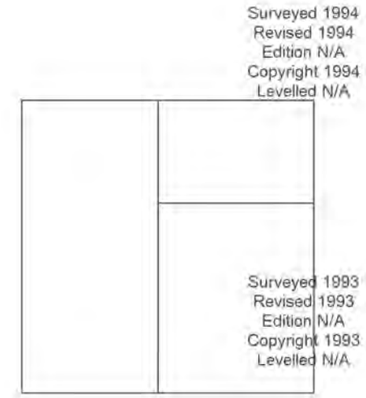

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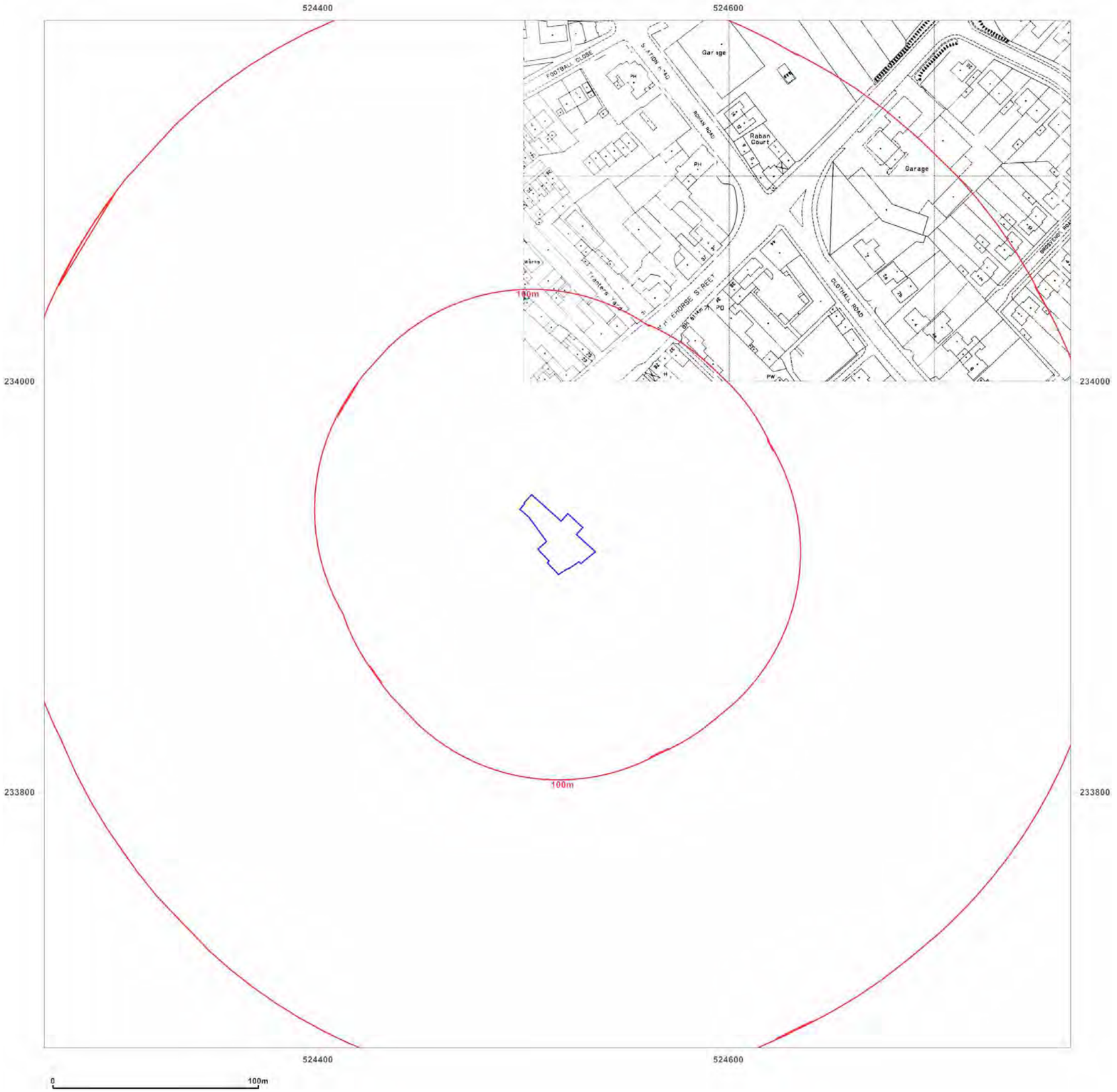

Groundsure INSIGHTS

Site Details:

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WHITEHORSE STREET,
BALDOCK, SG7 6QN

Client Ref: GSP-2019-1387
Report Ref: GS-5824914
Grid Ref: 524517, 233926

Map Name: National Grid

Map date: **1995**

Scale: 1:1,250

Printed at: 1:2,000

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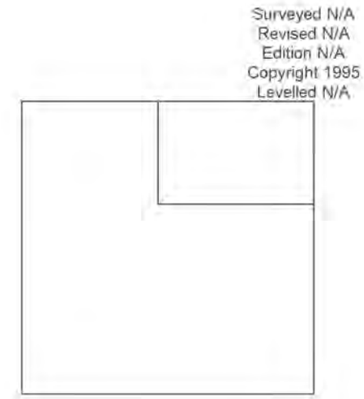

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Appendix D

Groundsure Geology Data

Groundsure
LOCATION INTELLIGENCE

Groundsure

SOVEREIGN HOUSE, CHURCH STREET,
BRIGHTON, BN1 1UJ

Groundsure Reference:	GS-5824913
Your Reference:	GSP-2019-1387
Report Date	15 Feb 2019
Report Delivery Method:	Email - pdf

Geo Insight

Address: ROSE & CROWN, 8, WHITEHORSE STREET, BALDOCK, SG7 6QN

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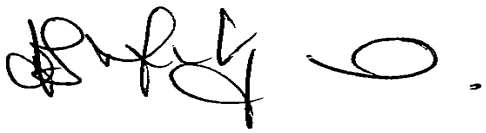
If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Geo Insight

Geo Insight

Address:	**ROSE & CROWN, 8, WHITEHORSE STREET, BALDOCK, SG7 6QN**
Date:	**15 Feb 2019**
Reference:	**GS-5824913**
Client:	**Groundsure**

NW N NE

W E



SW S SE

Aerial Photograph Capture date:	11-Aug-2017
Grid Reference:	524519,233924
Site Size:	0.0610ha

Groundsure
LOCATION INTELLIGENCE

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Overview of Findings

The Groundsure Geo Insight 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 and 1:10,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Non-coal 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 1:10,000 Scale		
1.1 Artificial Ground	1.1 Is there any Artificial Ground/ Made Ground present beneath the study site at 1:10,000 scale?	No
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site at 1:10,000 scale?*	No
	1.2.2 Are there any records of landslip within 500m of the study site boundary at 1:10,000 scale?	No
1.3 Bedrock, Solid Geology and linear features	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 of linear features within 500m of the study site boundary at 1:10,000 scale?	No

Section 2: Geology 1:50,000 Scale		
2.1 Artificial Ground	2.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	No
	2.1.2 Are there any records relating to permeability of artificial ground within the study site*boundary?	No
2.2 Superficial Geology and Landslips	2.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?*	No
	2.2.2 Are there any records of permeability of superficial ground within 500m of the study site?	No
	2.2.3 Are there any records of landslip within 500m of the study site boundary?	No
	2.2.4 Are there any records relating to permeability of landslips within the study site* boundary?	No

Section 2: Geology 1:50,000 Scale

2.3 Bedrock, Solid Geology and linear features	2.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	2.3.2 Are there any records relating to permeability of bedrock ground within the study site boundary?	Yes
	2.3.3 Are there any records of linear features within 500m of the study site boundary?	No

Section 3: Radon

3. Radon	3.1Is 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 not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
	3.2Radon Protection	No radon protective measures are necessary.

Section 4: Ground Workings	On-site	0-50m	51-250	251-500	501-1000
4.1 Historical Surface Ground Working Features from Small Scale Mapping	0	1	2	Not Searched	Not Searched
4.2 Historical Underground Workings from Small Scale Mapping	0	0	0	0	0
4.3 Current Ground Workings	0	0	0	0	0

Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.1 Historical Mining	0	0	0	0	0
5.2 Coal Mining	0	0	0	0	0
5.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
5.4 Non-Coal Mining*	1	0	0	1	0
5.5 Non–Coal Mining Cavities	0	0	0	0	0
5.5 Natural Cavities	0	0	0	0	0

Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.6 Brine Extraction	0	0	0	0	0
5.7 Gypsum Extraction	0	0	0	0	0
5.8 Tin Mining	0	0	0	0	0
5.9 Clay Mining	0	0	0	0	0

Section 6: Natural Ground Subsidence	On-site
6.1 Shrink-Swell Clay	Negligible
6.2 Landslides	Negligible
6.3 Ground Dissolution of Soluble Rocks	Negligible
6.4 Compressible Deposits	Negligible
6.5 Collapsible Deposits	Very Low
6.5 Running Sand	Negligible

Section 7: Borehole Records	On-site	0-50m	51-250
7 BGS Recorded Boreholes	0	0	8

Section 8: Estimated Background Soil Chemistry	On-site	0-50m	51-250
8 Records of Background Soil Chemistry	2	0	0

Section 9: Railways and Tunnels	On-site	0-50m	51-250	250-500
9.1 Tunnels	0	0	0	Not Searched
9.2 Historical Railway and Tunnel Features	0	0	0	Not Searched
9.3 Historical Railways	0	0	0	Not Searched
9.4 Active Railways	0	0	0	Not Searched
9.5 Railway Projects	0	0	0	0

1:10,000 Scale Availability



1_10,000 Availability Legend

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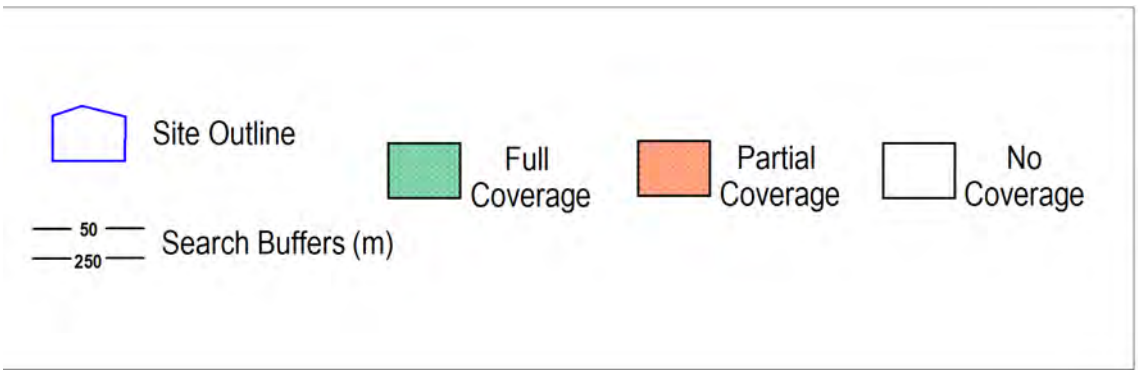


Availability of 1:10,000 Scale Geology Mapping

The following information represents the availability of the key components of the 1:10,000 scale geological data.

ID	Distance	Artificial Coverage	Superficial Coverage	Bedrock Coverage	Mass Movement Coverage
1	0.0	Some deposits are mapped	Full	Full	No coverage
2	465.0	Some deposits are mapped	Full	Full	No coverage
N3	1055.0	No deposits are mapped	No coverage	No coverage	No coverage

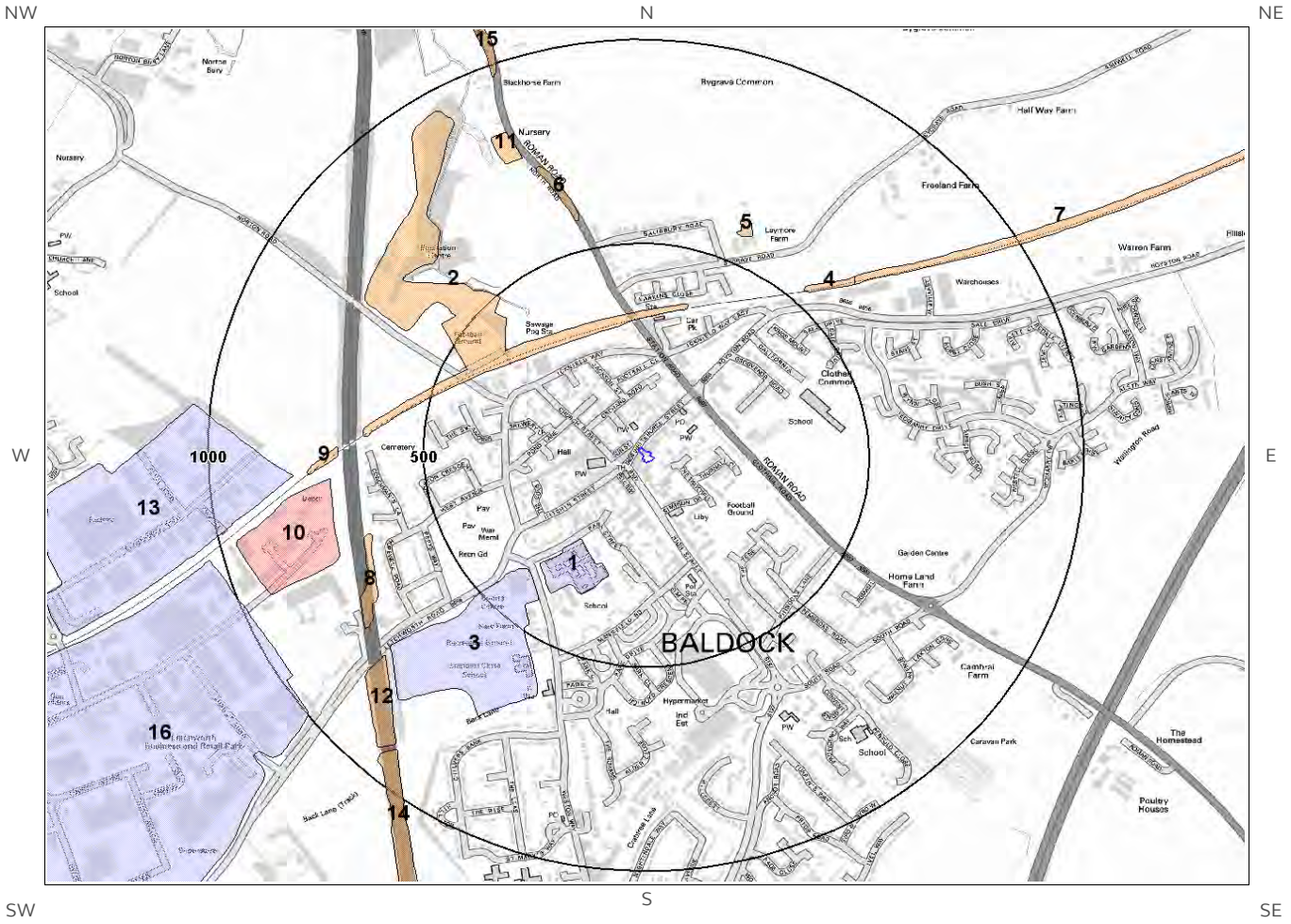
Guidance: The 1:10,000 scale geological interpretation is the most detailed generally available from BGS and is the scale at which most geological surveying is carried out in the field. The database is presented as four types of geology (artificial, mass movement, superficial and bedrock), although not all themes are mapped or available on every map sheet. Therefore a coverage layer showing the availability of the four themes is presented above.

The definitions of coverage are as follows:

Geology	Full Coverage	Partial Coverage	No Coverage
Bedrock	The whole tile has been mapped	Some but not all the tile has been mapped	No coverage
Superficial	The whole tile has been mapped	Some but not all of the tile has been mapped	No coverage
Artificial	Some deposits are mapped on this tile	-	No deposits are mapped
Mass Movement	Some deposits are mapped on this tile	-	No coverage

1 Geology (1:10,000 scale).

1.1 Artificial Ground map (1:10,000 scale)



Artificial Ground Legend

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Site Outline

500
1000
Search Buffers (m)

Made Ground (undivided)

Worked Ground (undivided)

Infilled Ground

Disturbed Ground (undivided)

Landscaped Ground (undivided)

Reclaimed Ground

1. Geology 1:10,000 scale

1.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

Are there any records of Artificial/ Made Ground within 500m of the study site boundary at 1:10,000 scale? Yes

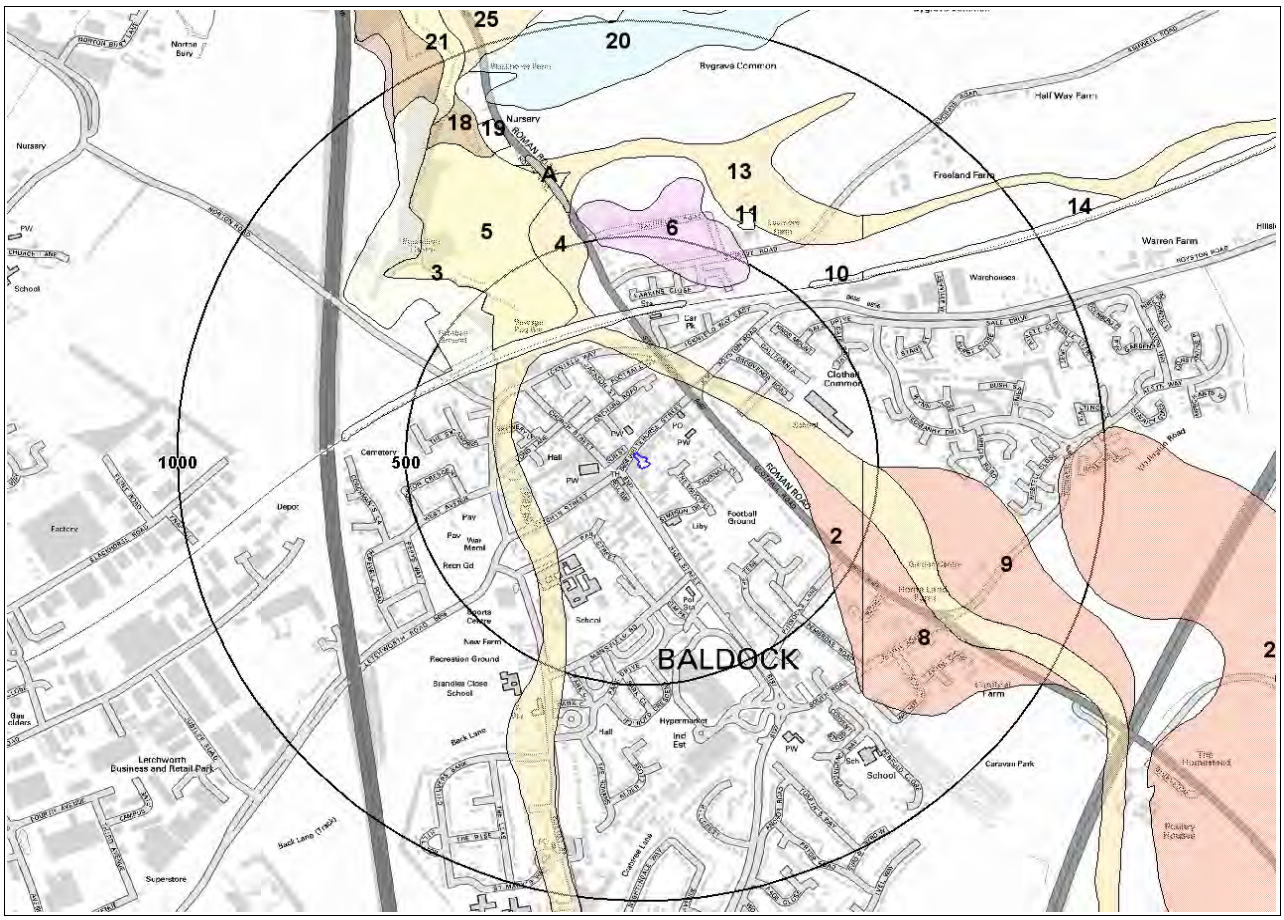
ID	Distance	Direction	LEX Code	Description	Rock Description
1	241.0	SW	LSGR-UKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
2	299.0	N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	380.0	SW	LSGR-UKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry

1.2 Superficial Deposits and Landslips map (1:10,000 scale)

NW N NE

W E

SW S SE



Artificial Ground Legend

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Site Outline

500
1000
Search Buffers (m)

1.2 Superficial Deposits and Landslips

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	189.0	N	DVY-XCZSV	Dry Valley Deposits - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
2	274.0	E	ALF-XSZ	Alluvial Fan Deposits - Sand And Silt	Sand And Silt
3	299.0	N	SUPNM-UKNOWN	Superficial Theme Not Mapped [for Digital Map Use Only] - Unknown/unclassified Entry	Unknown/unclassified Entry
4	327.0	N	DVY-XCZSV	Dry Valley Deposits - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
5	334.0	NW	ALV-CZ	Alluvium - Silty Clay	Clay, Silty
6	415.0	N	GFDMP-XSV	Glaciofluvial Deposits, Mid Pleistocene - Sand And Gravel	Sand And Gravel
7	465.0	E	DVY-XCZSV	Dry Valley Deposits - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
8	479.0	E	ALF-XSZ	Alluvial Fan Deposits - Sand And Silt	Sand And Silt
9	499.0	E	ALF-XSZ	Alluvial Fan Deposits - Sand And Silt	Sand And Silt

1.2.2 Landslip

Are there any records of Landslip within 500m of the study site boundary at 1:10,000 scale?

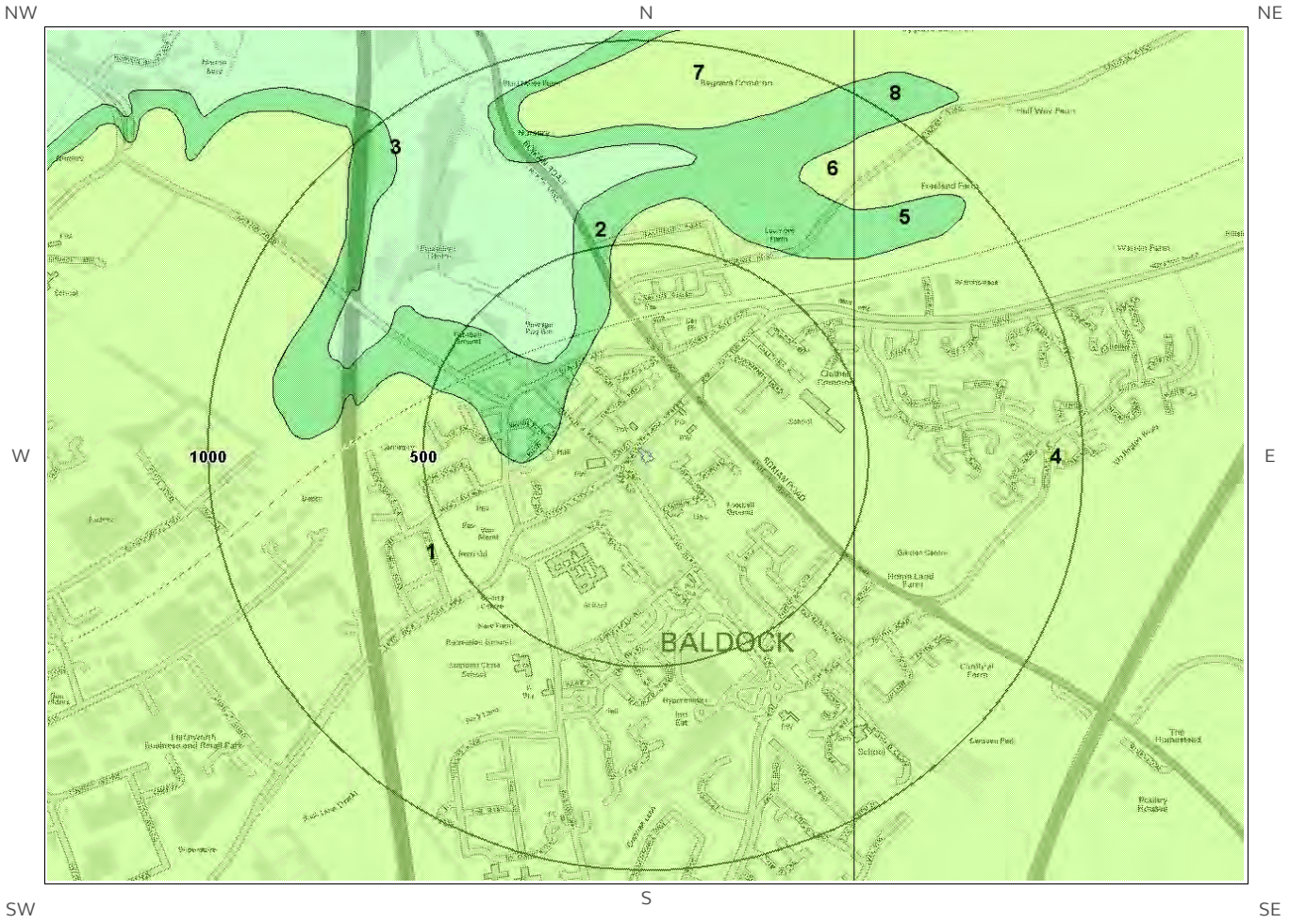
No

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 1:10,000 scale

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.

1.3 Bedrock and linear features map (1:10,000 scale)



Bedrock and linear features Legend

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Site Outline

500
1000
Search Buffers (m)

1.3 Bedrock and linear features

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary at 1:10,000 scale.

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
1	0.0	On Site	HNCK-CHLK	Holywell Nodular Chalk Formation And New Pit Chalk Formation (undifferentiated) - Chalk	Turonian Age - Cenomanian Age
2	193.0	W	MR-CHLK	Melbourn Rock Member - Chalk	Turonian Age - Cenomanian Age
3	292.0	NW	ZZCH-CHLK	Zig Zag Chalk Formation - Chalk	Cenomanian Age
4	465.0	E	HNCK-CHLK	Holywell Nodular Chalk Formation And New Pit Chalk Formation (undifferentiated) - Chalk	Turonian Age - Cenomanian Age

1.3.2 Linear features

Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale? No

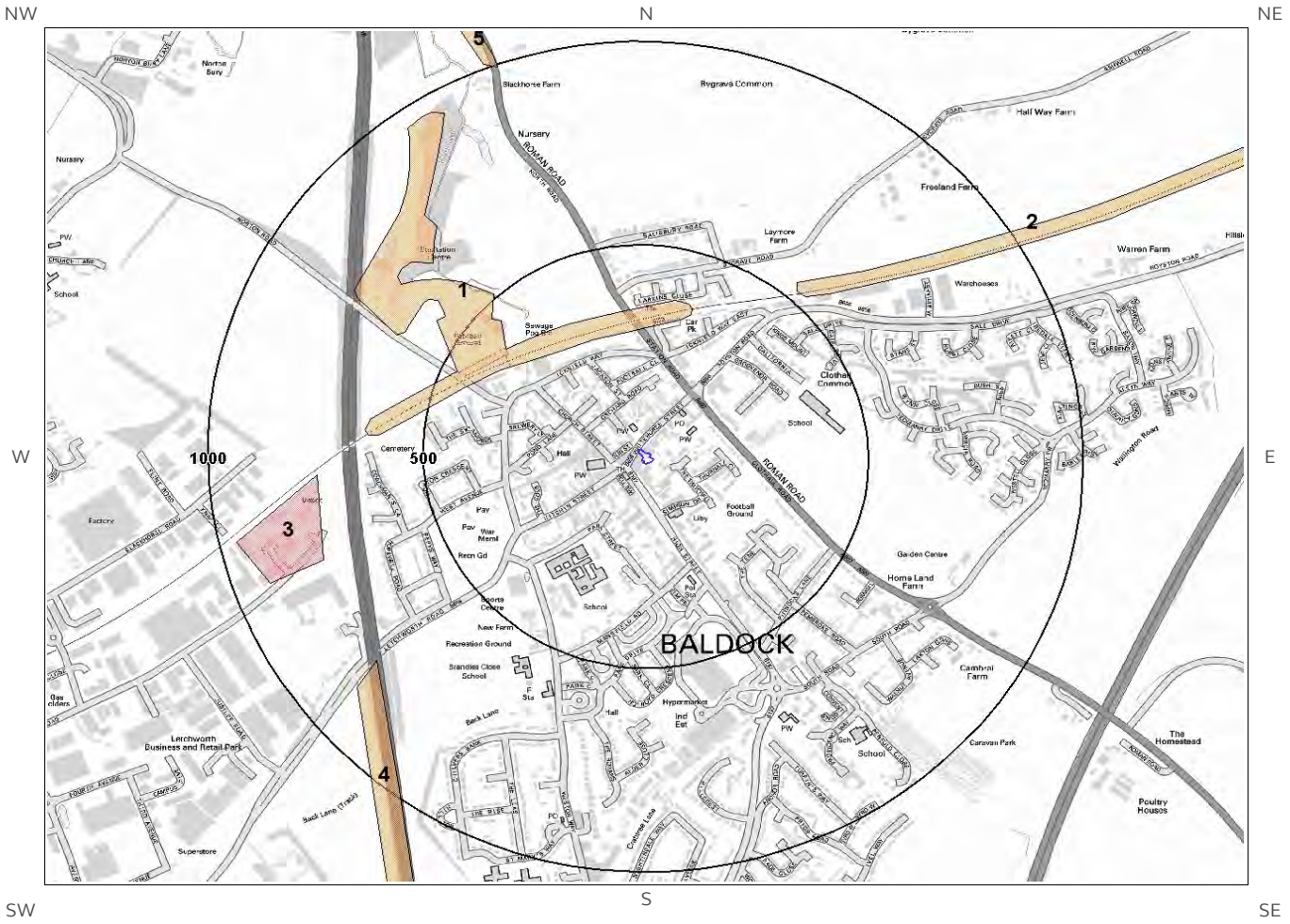
Database searched and no data found at this scale.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of great Britain at 1:10,000 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.

2 Geology 1:50,000 Scale

2.1 Artificial Ground map



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Site Outline

500
1000
Search Buffers (m)

Made Ground (undivided)

Worked Ground (undivided)

Infilled Ground

Disturbed Ground (undivided)

Landscaped Ground (undivided)

Reclaimed Ground

2. Geology 1:50,000 scale

2.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 221

2.1.1 Artificial/ Made Ground

Are there any records of Artificial/ Made Ground within 500m of the study site boundary? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	286.0	N	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

2.1.2 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.

2.2 Superficial Deposits and Landslips map (1:50,000 scale)

NW N NE

W E

SW S SE



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Site Outline

500
1000
Search Buffers (m)

2.2 Superficial Deposits and Landslips

2.2.1 Superficial Deposits/ Drift Geology

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

ID	Distance	Direction	LEX Code	Description	Rock Description
1	178.0	NE	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
2	254.0	E	ALF-XSZ	ALLUVIAL FAN DEPOSITS	SAND AND SILT
3	345.0	NW	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
4	418.0	N	GFDMP-XSV	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL

2.2.2 Permeability of Superficial Ground

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

Database searched and no data found.

2.2.3 Landslip

Are there any records of Landslip 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.

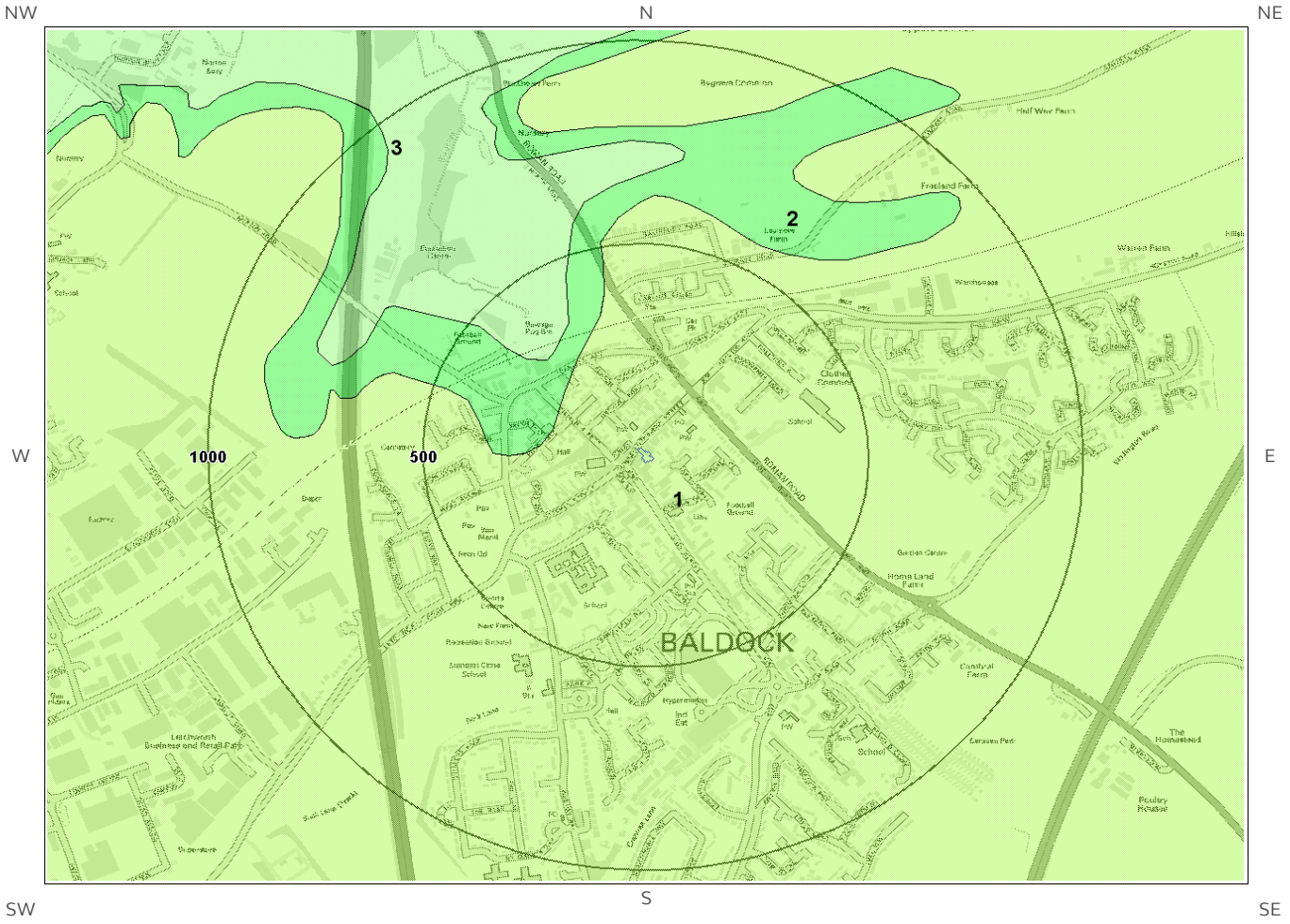
This Geology shows the main components as discrete layers, there are: Artificial/ Made Ground, Superficial/ Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

2.2.4 Landslip Permeability

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

Database searched and no data found.

2.3 Bedrock and linear features map (1:50,000 scale)



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Site Outline

500
1000
Search Buffers (m)

2.3 Bedrock, Solid Geology & linear features

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 221

2.3.1 Bedrock/Solid Geology

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

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
1	0.0	On Site	HNCK-CHLK	HOLYWELL NODULAR CHALK FORMATION AND NEW PIT CHALK FORMATION (UNDIFFERENTIATED) - CHALK	CENOMANIAN
2	204.0	W	MR-CHLK	MELBOURN ROCK MEMBER - CHALK	CENOMANIAN
3	305.0	NW	ZZCH-CHLK	ZIG ZAG CHALK FORMATION - CHALK	CENOMANIAN

2.3.2 Permeability of Bedrock Ground

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

Distance	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Fracture	Very High	Very High

2.3.3 Linear features

Are there any records of linear features 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 nation wide coverage.

3 Radon Data

3.1 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 not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

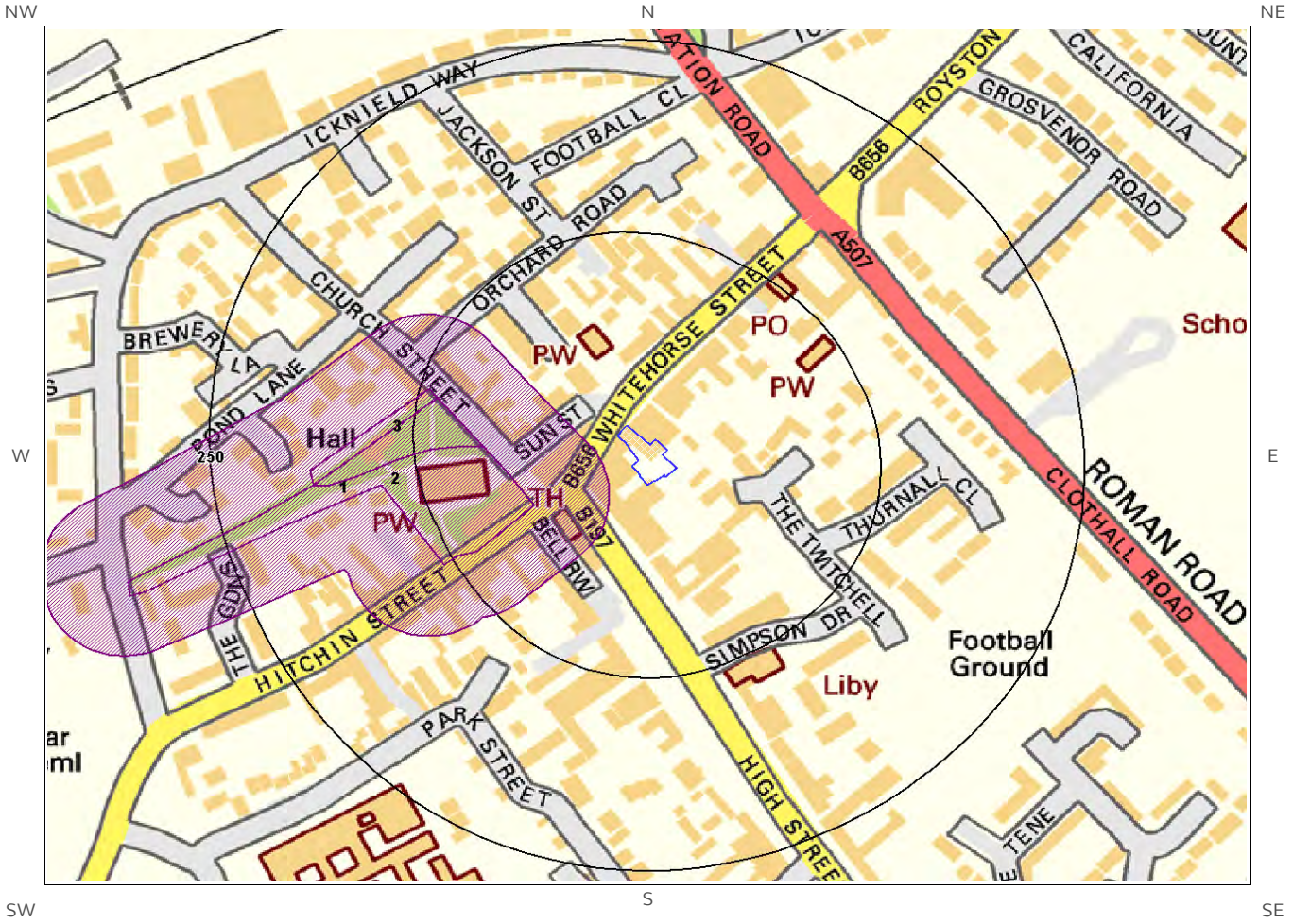
The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland,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

3.2 Radon Protection

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

---

4 Ground Workings map



Ground Workings Legend

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Site Outline

125
250
Search Buffers (m)

Historic Surface Ground Workings

Historic Underground Workings

Current Ground Workings

4 Ground Workings

4.1 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? Yes

ID	Distance (m)	Direction	NGR	Use	Date
1	16.0	W	524319 233906	Grave Yard	1881
2	65.0	SW	524323 233899	Grave Yard	1884
3	82.0	W	524363 233937	Grave Yard	1888

4.2 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.

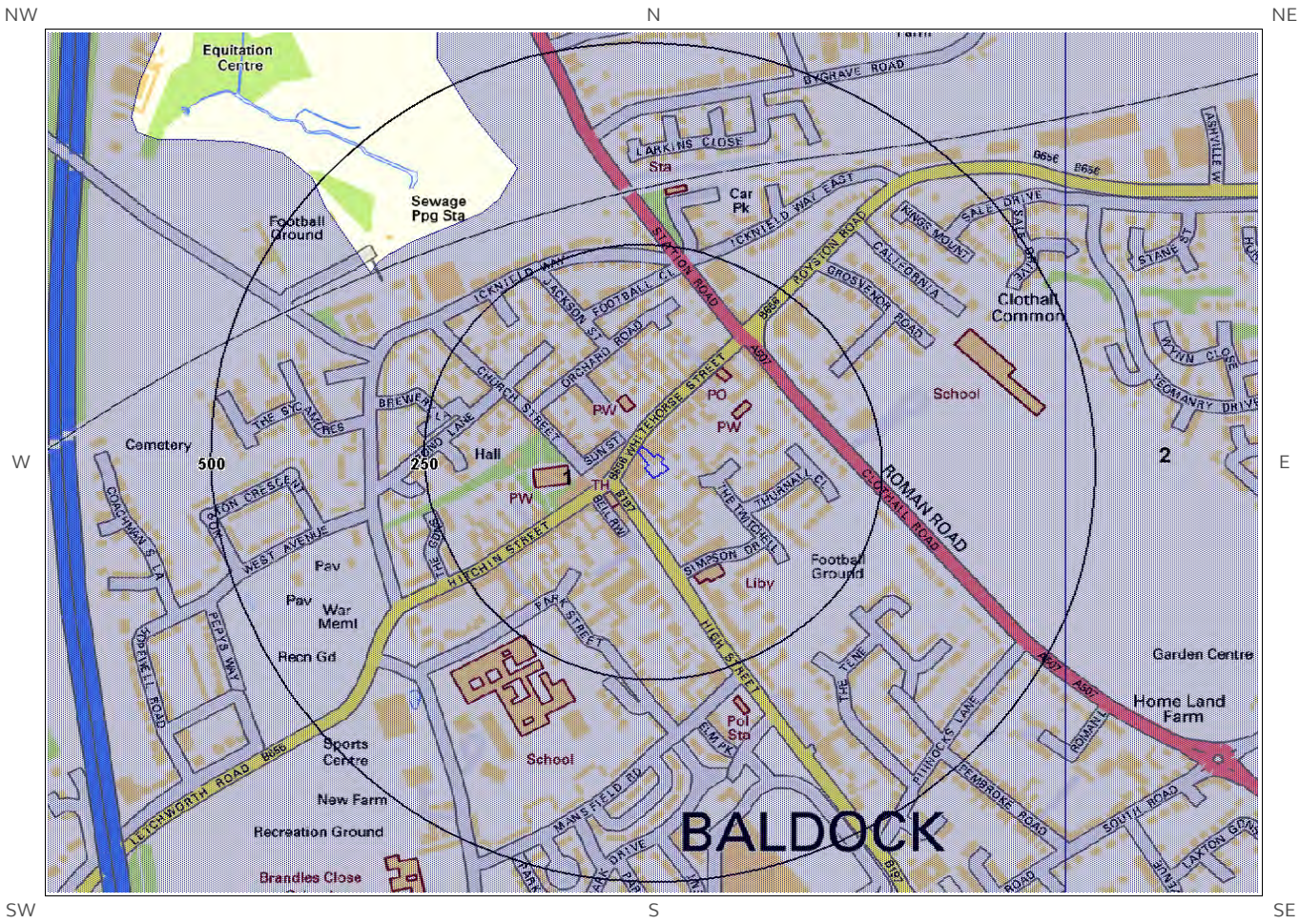
4.3 Current Ground Workings

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.

5 Mining, Extraction & Natural Cavities map



Mining, Extraction and Natural Cavities Legend

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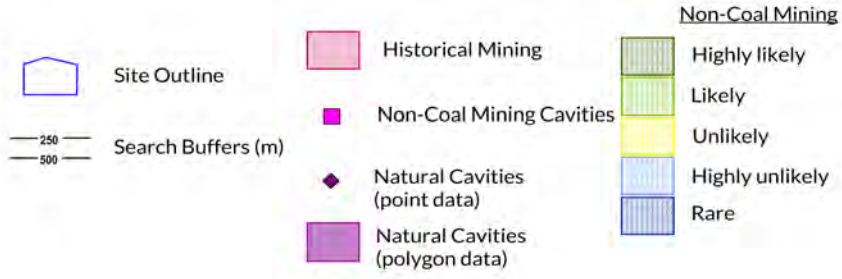


5 Mining, Extraction & Natural Cavities

5.1 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.

5.2 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.

5.3 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.

5.4 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	Not available	Chalk	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

ID	Distance (m)	Direction	Name	Commodity	Assessment of likelihood
2	465.0	E	Not available	Chalk	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

5.5 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.

5.6 Natural Cavities

This dataset provides information based on the Peter Brett Associates natural cavities database. The dataset is made up of points and polygons. Where polygons are used these represent an area in which it is expected the cavities could be found. It does not indicate that cavities are present everywhere within the polygon, and caution should be used in the interpretation of this data.

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

Database searched and no data found.

5.7 Brine Extraction

This data provides information from 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.

5.8 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.

5.9 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.

5.10 Clay Mining

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

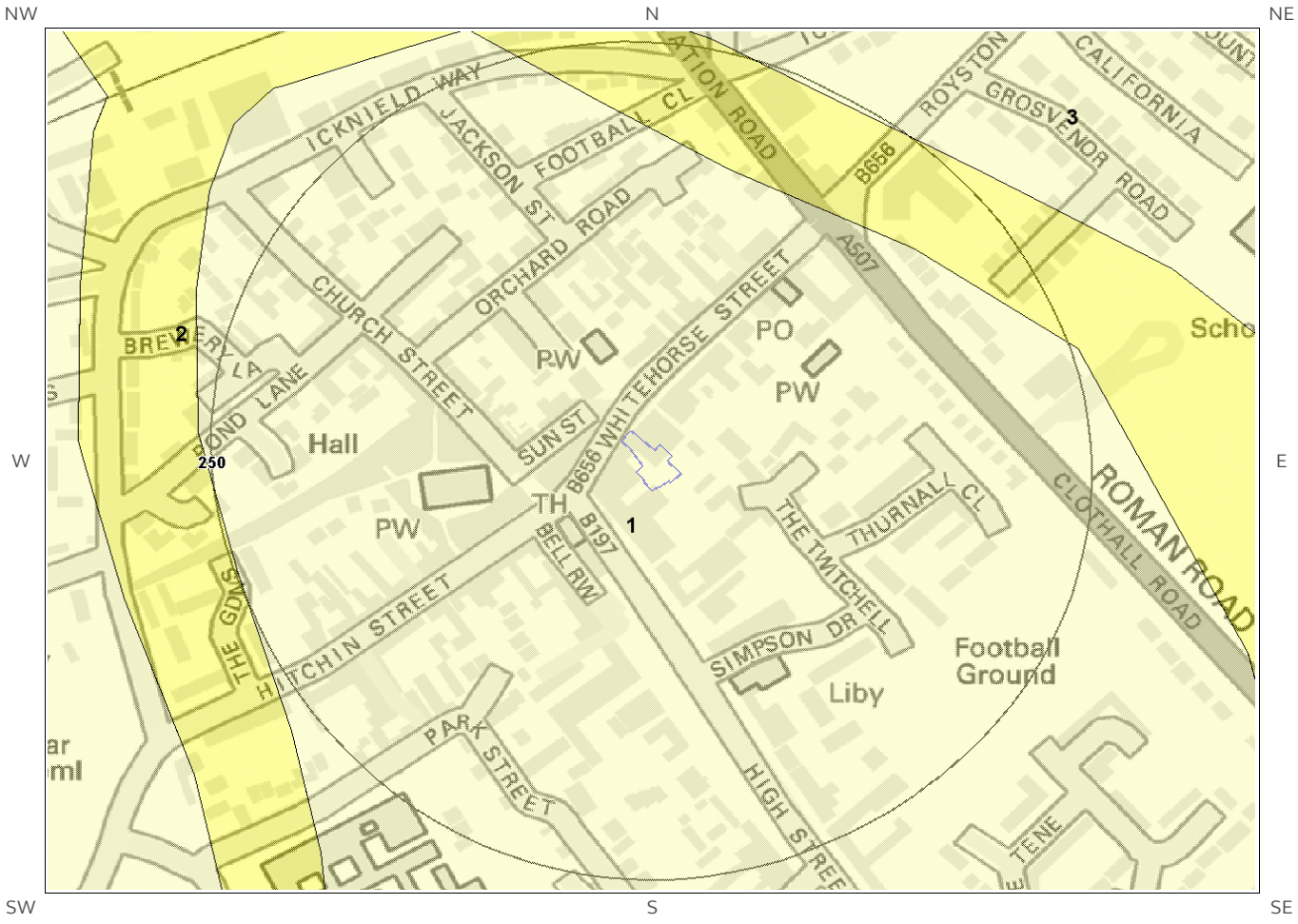
Are there any Clay Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

---

6 Natural Ground Subsidence

6.1 Shrink-Swell Clay map



Shrink Swell Clay Legend

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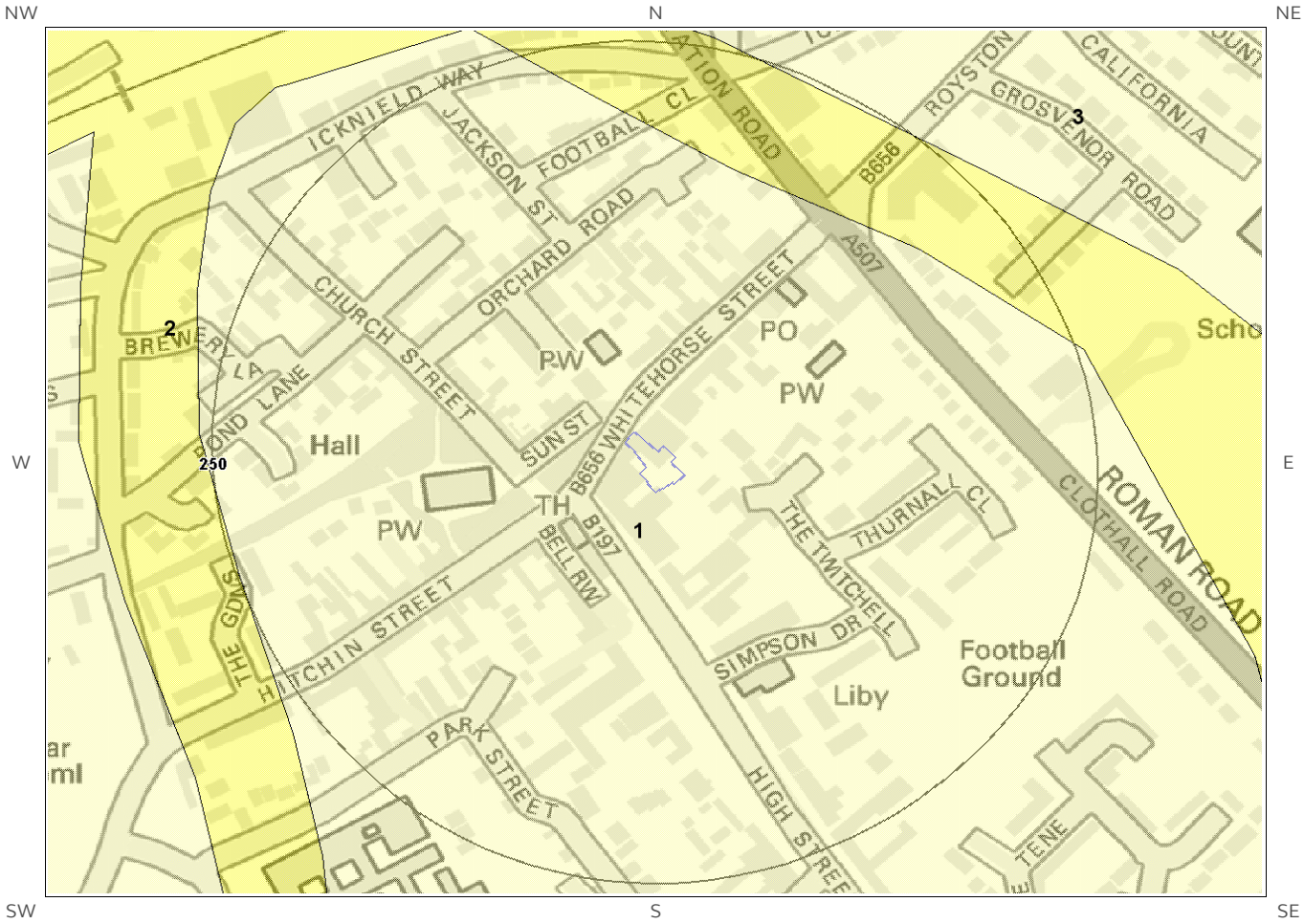
6.2 Landslides map



Landslides Legend

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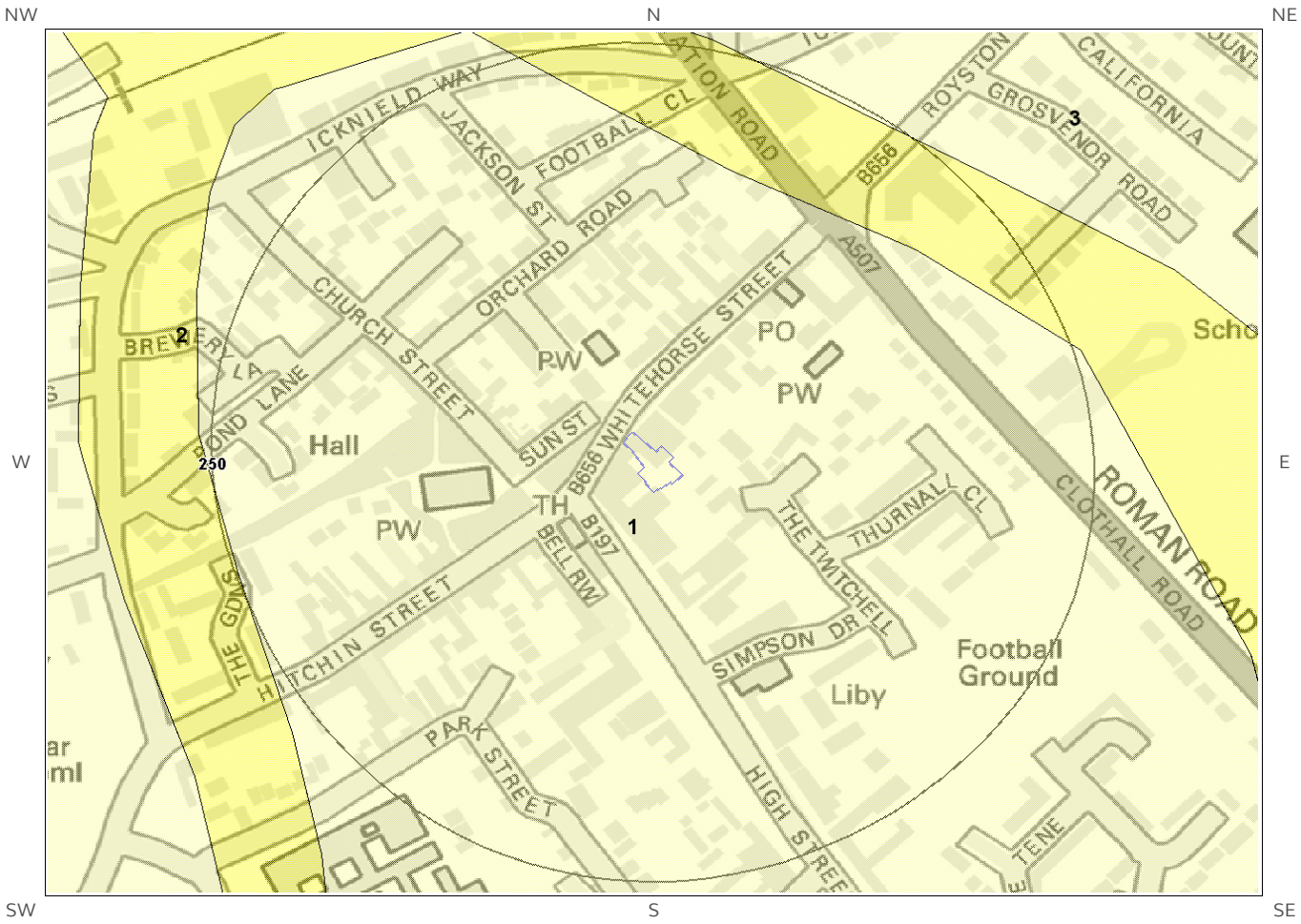
Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

6.3 Ground Dissolution of Soluble Rocks map



Ground Dissolution Soluble Rocks Legend

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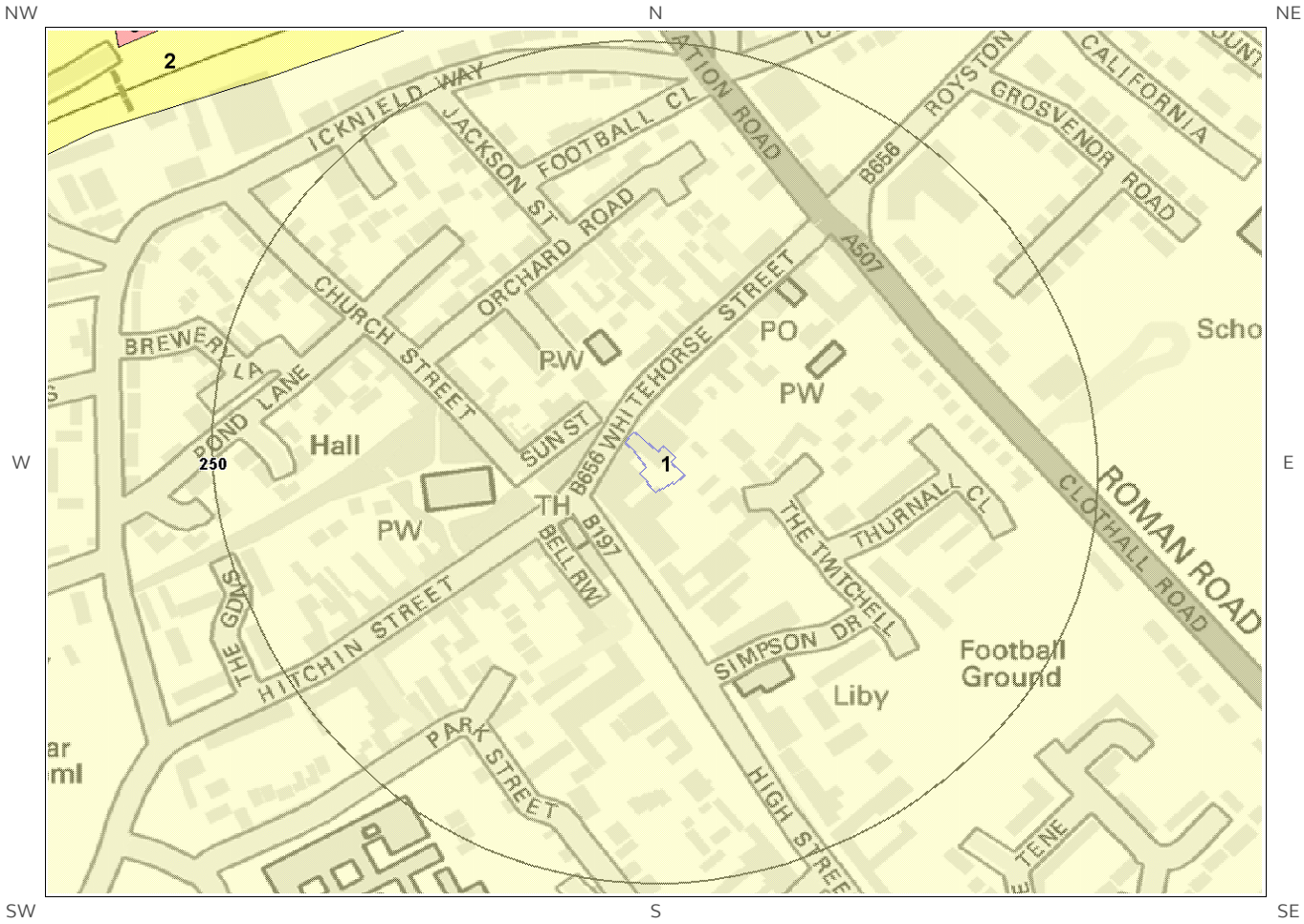
6.4 Compressible Deposits map



Compressible Deposits Legend

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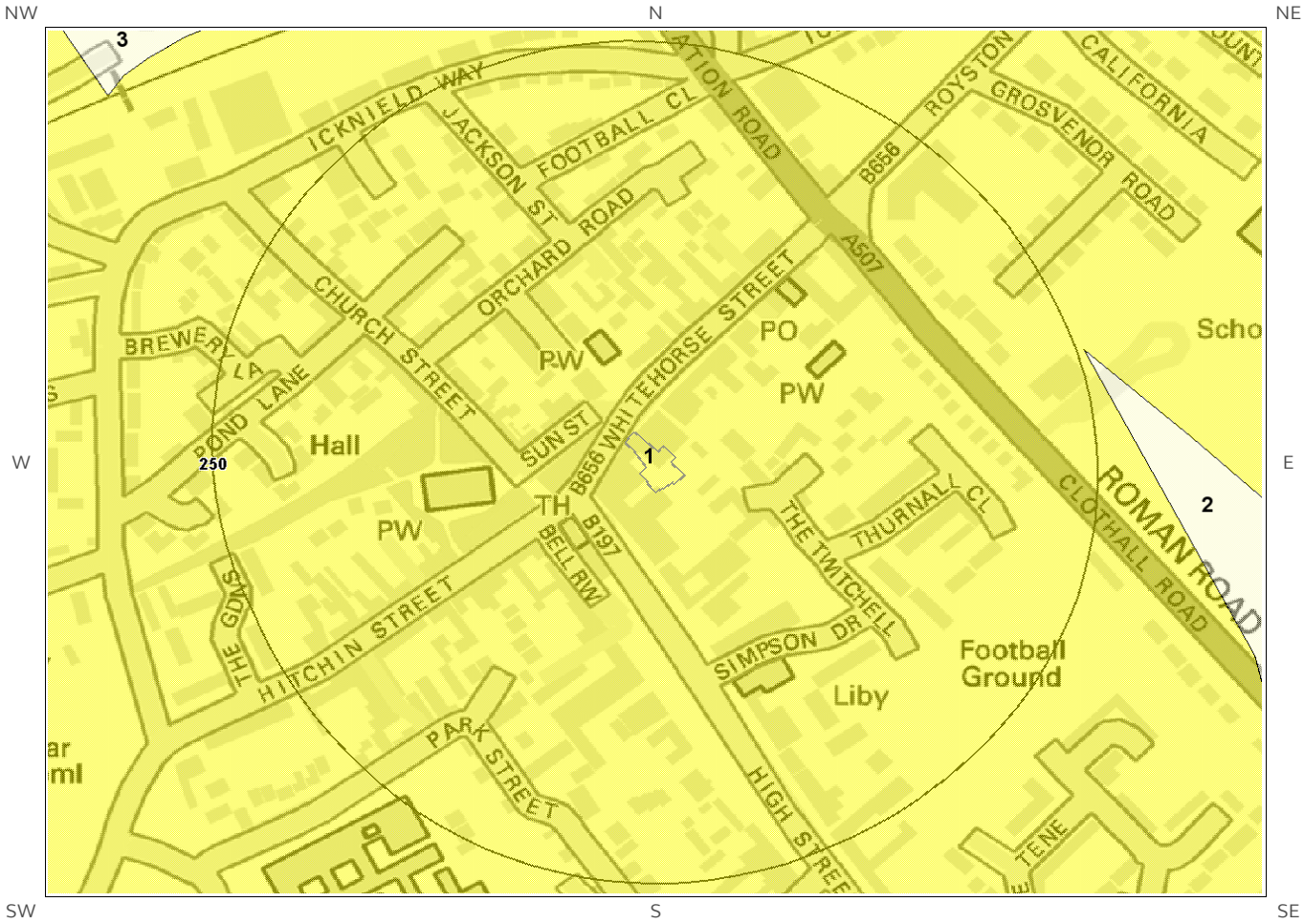
6.5 Collapsible Deposits map



Collapsible Deposits Legend

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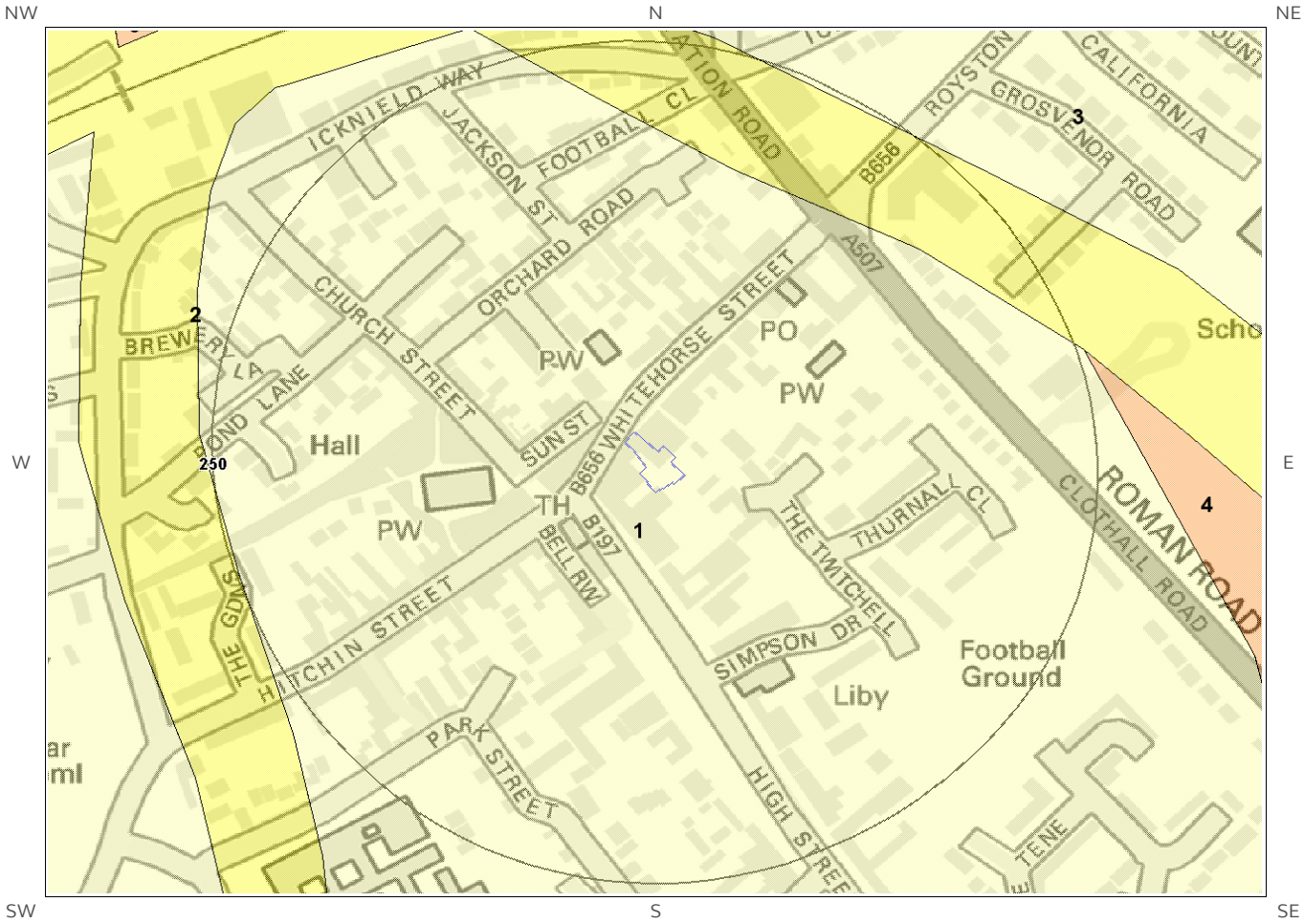
6.6 Running Sand map



Running Sand Legend

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Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

6 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

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

6.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for slope instability identified. 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.

6.3 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

6.4 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 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.

6.5 Collapsible Deposits

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

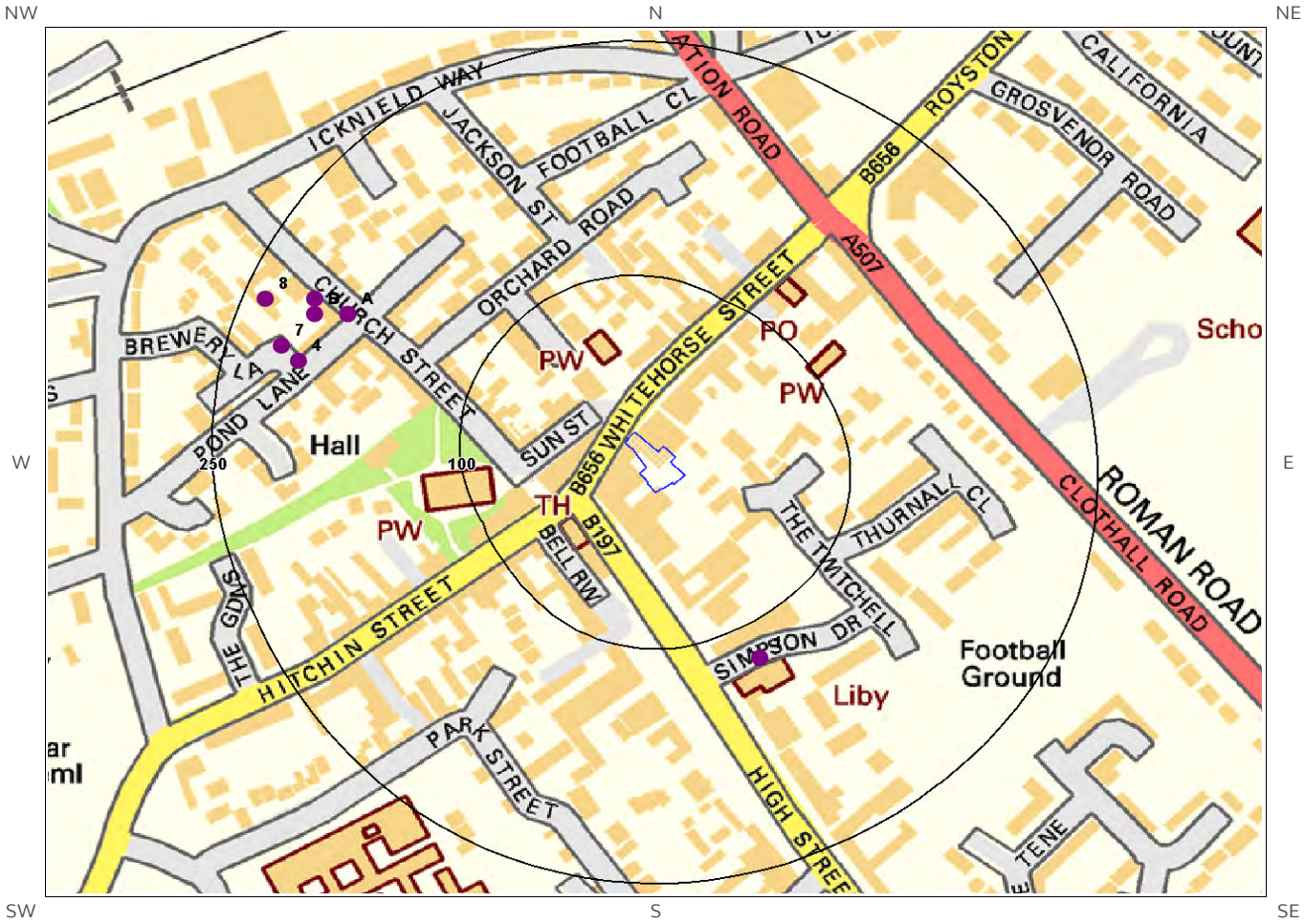
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible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

6.6 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	Negligible	No indicators for running sand identified. 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.

7 Borehole Records map



Borehole Records Legend

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Site Outline

Borehole Locations

125
250
Search Buffers (m)

7 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: 8

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	123.0	SE	524580 233800	TL23SW67	45.72	GREENE KING (BALDOCK)LTD., BALDOCK
2A	187.0	NW	524330 234020	TL23SW147	2.0	CHURCH STREET B
3A	187.0	NW	524330 234020	TL23SW145	1.0	CHURCH STREET 9
4	205.0	W	524300 233990	TL23SW143	0.0	CHURCH STREET 7
5B	205.0	NW	524310 234020	TL23SW141	2.0	CHURCH STREET 5
6B	209.0	NW	524310 234030	TL23SW146	2.0	CHURCH STREET A
7	217.0	W	524290 234000	TL23SW142	2.0	CHURCH STREET 6
8	237.0	NW	524280 234030	TL23SW139	0.0	CHURCH STREET 3

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/534702
#2A: scans.bgs.ac.uk/sobi_scans/boreholes/534782
#3A: scans.bgs.ac.uk/sobi_scans/boreholes/534780
#4: scans.bgs.ac.uk/sobi_scans/boreholes/534778
#5B: scans.bgs.ac.uk/sobi_scans/boreholes/534776
#6B: scans.bgs.ac.uk/sobi_scans/boreholes/534781
#7: scans.bgs.ac.uk/sobi_scans/boreholes/534777
#8: scans.bgs.ac.uk/sobi_scans/boreholes/534774

8 Estimated Background Soil Chemistry

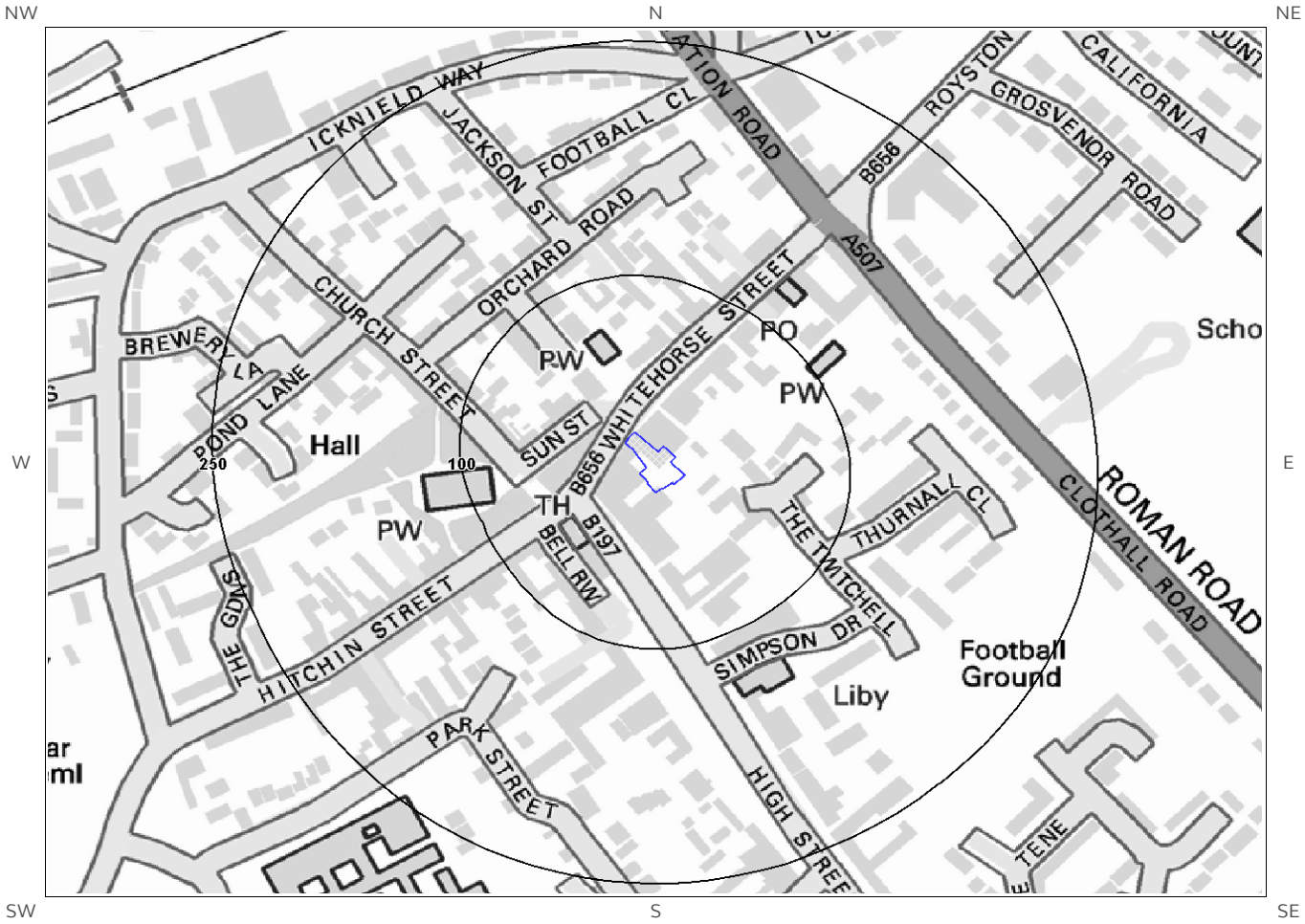
Records of background estimated soil chemistry within 250m of the study site boundary: 2

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

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 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.

9 Railways and Tunnels map



Railways and Tunnels Legend

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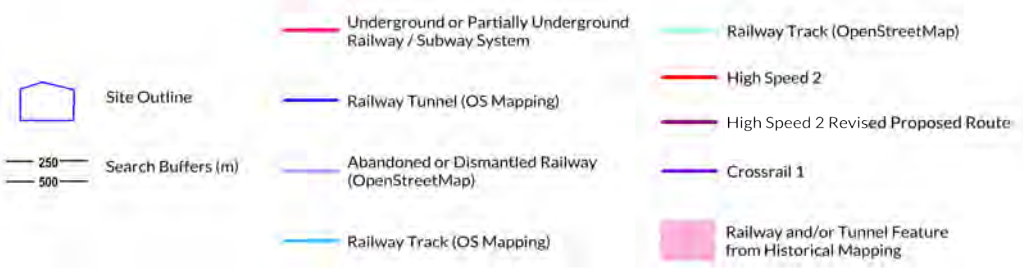

9 Railways and Tunnels

9.1 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.

9.2 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.

9.3 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.

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.

9.4 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.

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.

9.5 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.

Please note that this assessment takes account of both the original Phase 2b proposed route and the amended route proposed in 2016. As the Phase 2b route is still under consultation, Groundsure are providing information on both options until the final route is formally confirmed. Practitioners should take account of this uncertainty when advising clients.

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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
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DX 716176 Mansfield 5
www.coal.gov.uk

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Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:
https://www.groundsure.com/terms-and-conditions-feb11-2019

Appendix E

Groundsure Environmental Data

Groundsure

SOVEREIGN HOUSE, CHURCH STREET,
BRIGHTON, BN1 1UJ

Groundsure Reference:	GS-5824911
Your Reference:	GSP-2019-1387
Report Date	15 Feb 2019
Report Delivery Method:	Email - pdf

Enviro Insight

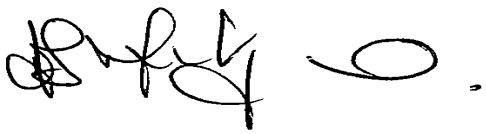
Address: ROSE & CROWN, 8, WHITEHORSE STREET, BALDOCK, SG7 6QN

Dear Sir/ Madam,

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

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

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Enviro Insight

Address:	**ROSE & CROWN, 8, WHITEHORSE STREET, BALDOCK, SG7 6QN**
Date:	**15 Feb 2019**
Reference:	**GS-5824911**
Client:	**Groundsure**

NW N NE

W E

SW S SE



Aerial Photograph Capture date:	11-Aug-2017
Grid Reference:	524519,233924
Site Size:	0.0610ha

Report Reference: GS-5824911
Client Reference: GSP-2019-1387

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Overview of Findings

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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	1	18	137
1.2 Additional Information – Historical Tank Database	0	0	3	18
1.3 Additional Information – Historical Energy Features Database	0	0	8	30
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	2	15	2
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	1	2	15

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	2
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	1	2	2
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	0	5
2.1.9 Records of Water Industry Referrals	0	0	0	1
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	4
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	0	0	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/Natural Resources Wales Licensed Waste Sites	0	0	0	0	4	0

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	0	18	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	0
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

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

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

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	3
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	3
6.6 Source Protection Zones (within 500m of the study site)	1	0	0	1	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	#250GWV#	#500GWV#	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

	0-500m					
	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	Yes	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	2	2	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	No	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Enviroment Agency Zone 2 floodplains within 250m of the study site	None identified
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low
7.4 Flood Defences within 250m of the study site	None identified
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified
7.6 Areas used for Flood Storage within 250m of the study site	None identified
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Potential below Surface
7.8 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	0	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	1
8.7 Records of Local Nature Reserves (LNR)	0	0	0	1	0	1
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites

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

Section 9: Natural Hazards

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

Section 10: Mining

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

Using this report

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

1. Historical Industrial Sites

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

2. Environmental Permits, Incidents and Registers

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

3. Landfills and Other Waste Sites

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

4. Current Land Uses

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

5. Geology

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

6. Hydrogeology and Hydrology

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

7. Flooding

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

8. Designated Environmentally Sensitive Sites

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

9. Natural Hazards

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

10. Mining

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

11. Contacts

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

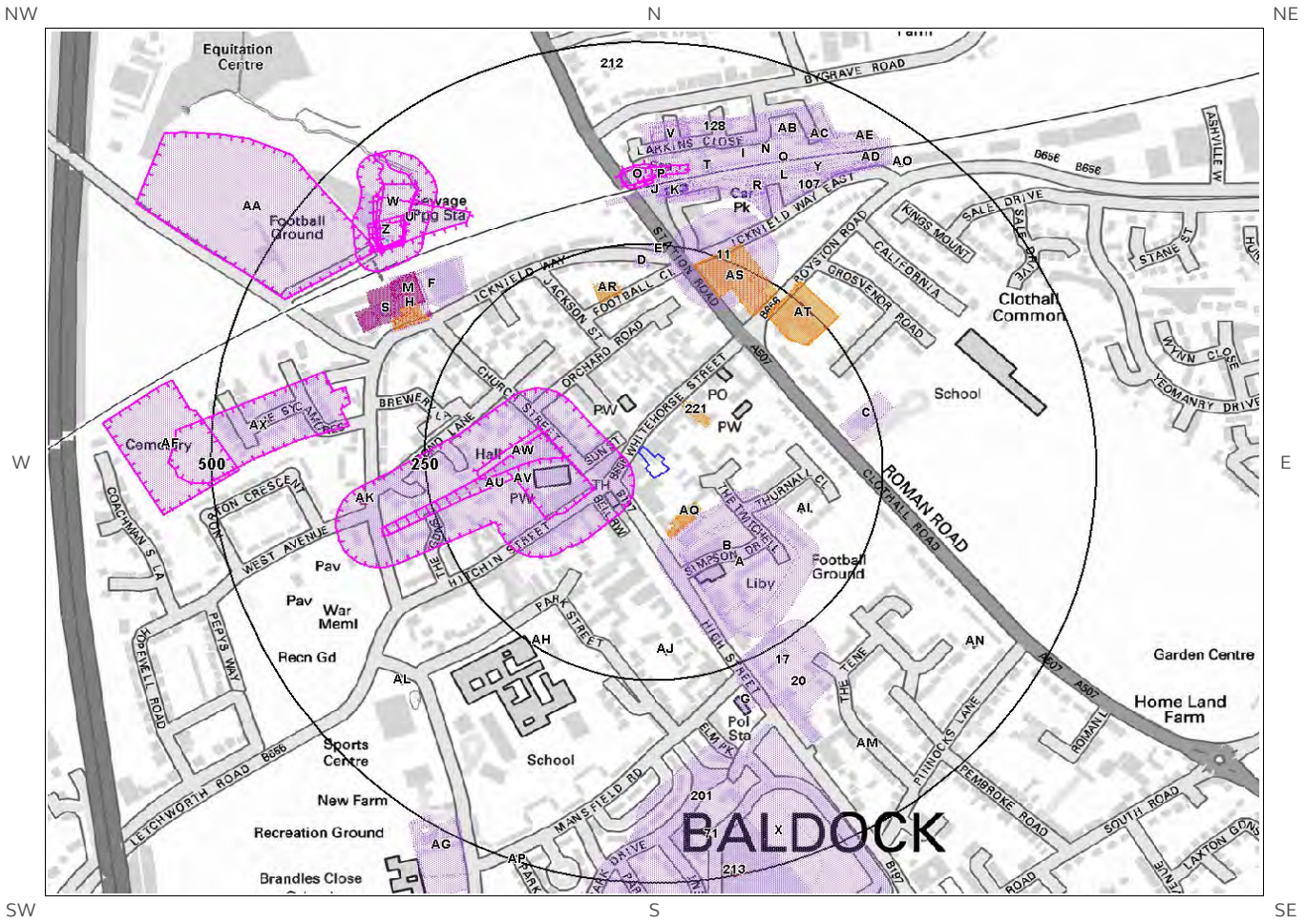
Note: Maps

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

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

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

1. Historical Land Use



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Site Outline

250
500
Search Buffers (m)

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

Industrial Land Use

Potentially Infilled Land

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

Energy Features

Petrol Stations

Historical military sites

Tanks

Garages

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: 156

ID	Distance [m]	Direction	Use	Date
1AU	16	W	Grave Yard	1881
2A	64	SE	Brewery	1900
3AV	65	SW	Grave Yard	1880
4A	67	SE	Brewery	1899
5A	72	SE	Brewery	1960
6AW	82	W	Grave Yard	1888
7A	86	SE	Brewery	1920
8B	90	SE	Brewery	1937
9B	90	SE	Brewery	1938
10B	90	SE	Brewery	1921
11	187	N	Engine	1899
12C	206	E	Telephone Exchange	1984
13C	206	E	Telephone Exchange	1978
14AS	207	NE	Unspecified Works	1978
15D	221	N	Smithy	1900
16D	223	N	Smithy	1899
17	230	SE	Malthouse	1900
18E	235	N	Smithy	1880
19E	239	N	Smithy	1881
20	255	SE	Malthouse	1899
21F	279	NW	Gas Works	1921
22F	282	NW	Unspecified Works	1978
23F	282	NW	Unspecified Works	1984
24G	285	S	Police Station	1984
25G	285	S	Police Station	1978
26H	293	NW	Gas Works	1880
27H	295	NW	Gas Works	1900
28H	295	NW	Gas Works	1920
29H	299	NW	Unspecified Commercial/Industrial	1937
30I	300	N	Railway Sidings	1960
31J	300	N	Railway Station	1920
32I	304	N	Railway Sidings	1937
33J	308	N	Railway Station	1938

34K	308	N	Railway Station	1921
35J	309	N	Railway Station	1900
36K	309	N	Railway Station	1984
37K	309	N	Railway Station	1978
38K	309	N	Railway Station	1960
39K	309	N	Railway Station	1899
40J	310	N	Railway Station	1880
41M	311	NW	Gas Works	1899
42J	312	N	Railway Station	1881
43J	313	N	Railway Station	1888
44K	314	N	Railway Station	1937
45L	315	N	Railway Land	1888
46L	315	N	Railway Sidings	1881
47I	315	N	Railway Sidings	1921
48I	315	N	Railway Sidings	1938
49N	317	N	Railway Sidings	1900
50M	318	NW	Gas Works	1881
51N	318	N	Railway Sidings	1899
52O	319	N	Cuttings	1921
53O	319	N	Cuttings	1938
54H	319	NW	Gas Works	1888
55Q	320	N	Railway Sidings	1880
56O	322	N	Cuttings	1899
57P	326	N	Railway Buildings	1900
58P	327	N	Railway Buildings	1960
59P	328	N	Cuttings	1880
60M	329	NW	Unspecified Tank	1921
61M	329	NW	Unspecified Tank	1938
62P	330	N	Railway Buildings	1899
63P	330	N	Railway Building	1937
64Q	331	N	Railway Sidings	1888
65H	332	NW	Gasometer	1880
66M	332	NW	Unspecified Tank	1937
67X	332	SE	Unspecified Commercial/Industrial	1960
68M	333	NW	Unspecified Tank	1921
69M	333	NW	Unspecified Tank	1938
70M	333	NW	Gasometer	1900
71	334	S	Photographic Material Factory	1921
72M	334	NW	Gasometer	1899
73R	334	N	Railway Building	1921
74R	334	N	Railway Building	1938
75H	335	NW	Unspecified Tanks	1900
76R	335	N	Railway Building	1900
77P	336	N	Railway Building	1937

78R	336	N	Railway Building	1978
79R	336	N	Railway Building	1960
80M	336	NW	Gasometers	1899
81R	336	NE	Railway Building	1880
82S	337	NW	Unspecified Tank	1960
83M	337	NW	Gasometers	1888
84M	338	NW	Gasometer	1881
85S	338	NW	Unspecified Tank	1938
86S	338	NW	Unspecified Tank	1921
87AX	339	W	Cemetery	1960
88S	339	NW	Unspecified Tank	1960
89R	340	N	Railway Building	1881
90R	340	N	Railway Building	1937
91S	340	NW	Gasometer	1920
92S	341	NW	Unspecified Tank	1937
93M	341	NW	Gasometer	1880
94L	343	N	Railway Sidings	1920
95S	343	NW	Unspecified Tank	1937
96S	344	NW	Gas Holder	1984
97S	344	NW	Gas Holder	1978
98U	346	NW	Sewage Works	1920
99T	346	N	Railway Building	1900
100I	347	N	Railway Sidings	1920
101T	347	N	Railway Building	1899
102M	347	NW	Gasometer	1881
103T	348	N	Railway Building	1880
104T	351	N	Railway Building	1881
105Q	353	N	Railway Sidings	1888
106U	355	NW	Sewage Works	1900
107	363	NE	Railway Building	1900
108V	374	N	Railway Building	1921
109V	374	N	Railway Building	1938
110V	374	N	Railway Building	1920
111V	375	N	Railway Building	1960
112V	375	N	Unspecified Warehouse	1978
113V	375	N	Railway Building	1900
114U	375	NW	Sewage Works	1880
115V	376	N	Railway Building	1899
116U	378	NW	Unspecified Works	1960
117U	378	NW	Sewage Pumping Station	1978
118V	379	N	Railway Building	1937
119Z	379	NW	Sewage Works	1881
120W	380	NW	Sewage Works	1899
121W	380	NW	Sewage Works	1937
122X	385	S	Unspecified Factory	1984
123X	385	S	Unspecified Factory	1978

124Y	388	NE	Railway Building	1880
125Y	390	NE	Railway Building	1881
126Z	391	NW	Unspecified Tank	1921
127Z	391	NW	Unspecified Tank	1938
128	391	N	Railway Building	1978
129Z	391	NW	Unspecified Tank	1920
130U	394	NW	Sewage Pumping Station	1984
131Z	395	NW	Unspecified Tank	1937
132AA	396	NW	Sewage Works	1921
133AA	396	NW	Sewage Works	1938
134AB	419	NE	Railway Building	1938
135AB	419	NE	Railway Building	1921
136AB	419	NE	Railway Building	1960
137AB	420	NE	Railway Building	1900
138AB	420	NE	Railway Building	1899
139AB	422	NE	Railway Building	1937
140AC	425	NE	Railway Building	1921
141AC	425	NE	Railway Building	1938
142AC	427	NE	Railway Building	1920
143AC	427	NE	Railway Building	1900
144AD	428	NE	Railway Buildings	1881
145AC	429	NE	Railway Building	1899
146AD	435	NE	Railway Building	1900
147AD	438	NE	Railway Building	1880
148AE	453	NE	Railway Building	1900
149AE	454	NE	Railway Building	1960
150AE	455	NE	Railway Building	1899
151AE	456	NE	Railway Building	1937
152AF	468	W	Cemetery	1984
153AF	468	W	Cemetery	1978
154AG	477	SW	Malthouses	1899
155AG	480	SW	Malthouses	1880
156AG	497	SW	Malthouses	1881

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: 21

ID	Distance (m)	Direction	Use	Date
157AH	242	SW	Unspecified Tank	1974
158AH	243	SW	Unspecified Tank	1986

159AH	243	SW	Unspecified Tank	1985
160H	301	NW	Gas Works	1922
161H	311	NW	Gas Works	1898
162H	319	NW	Gas Works	1880
163M	333	NW	Unspecified Tank	1937
164M	333	NW	Tanks	1932
165M	333	NW	Gasometers	1898
166M	333	NW	Gasometers	1922
167M	338	NW	Gasometers	1880
168S	343	NW	Unspecified Tank	1922
169S	343	NW	Unspecified Tank	1932
170S	344	NW	Tanks	1937
171S	345	NW	Gasholder	1967
172S	345	NW	Gasholder	1986
173M	346	NW	Unspecified Tank	1898
174Z	390	NW	Unspecified Tank	1986
175Z	396	NW	Unspecified Tank	1937
176Z	396	NW	Unspecified Tank	1922
177Z	396	NW	Unspecified Tank	1932

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: 38

ID	Distance (m)	Direction	Use	Date
178AI	162	E	Electricity Substation	1986
179AI	173	E	Electricity Substation	1975
180AI	173	E	Electricity Substation	1993
181AI	173	E	Electricity Substation	1996
182AJ	212	S	Electricity Substation	1996
183AJ	212	S	Electricity Substation	1993
184AJ	212	S	Electricity Substation	1986
185AJ	212	S	Electricity Substation	1975
186H	293	NW	Electricity Substation	1986
187S	301	NW	Gas Works	1922
188M	311	NW	Gas Works	1898
189S	319	NW	Gas Works	1880
190AK	323	W	Electricity Substation	1986
191AK	323	W	Electricity Substation	1985
192AK	324	W	Electricity Substation	1974
193S	331	NW	Gas Distribution Station	1986

194M	333	NW	Gasometers	1922
195M	333	NW	Gasometers	1898
196M	338	NW	Gasometers	1880
197S	345	NW	Gasholder	1986
198S	345	NW	Gasholder	1967
199AL	387	SW	Gas Governor	1985
200AL	387	SW	Gas Governor	1986
201	398	S	Electricity Substation	1996
202AM	411	SE	Electricity Substation	1996
203AM	411	SE	Electricity Substation	1993
204AN	415	SE	Electricity Substation	1986
205AN	415	SE	Electricity Substation	1996
206AN	415	SE	Electricity Substation	1993
207AN	415	SE	Electricity Substation	1975
208AO	453	NE	Electricity Substation	1995
209AO	453	NE	Electricity Substation	1996
210AO	453	NE	Electricity Substation	1994
211AO	454	NE	Electricity Substation	1984
212	467	N	Electricity Substation	1986
213	493	S	Electricity Substation	1986
214AP	498	S	Electricity Substation	1967
215AP	498	S	Electricity Substation	1975

1.4 Additional Information – Historical Petrol and Fuel Site Database

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

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

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

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

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 19

ID	Distance (m)	Direction	Use	Date
216AQ	50	SE	Garage	1975
217AQ	50	SE	Garage	1967
218AQ	51	SE	Garage	1993
219AQ	51	SE	Garage	1996

220AQ	51	SE	Garage	1986
221	62	NE	Garage	1975
222AR	183	N	Garage	1986
223AR	183	N	Garage	1967
224AS	203	NE	Garage	1994
225AS	203	NE	Garage	1995
226AS	203	NE	Garage	1996
227AS	204	NE	Agricultural Engineering Works	1967
228AT	208	NE	Garage	1995
229AT	208	NE	Garage	1994
230AT	208	NE	Garage	1996
231AT	208	NE	Garage	1984
232AT	209	NE	Garage	1967
233H	295	NW	Garage	1986
234H	311	NW	Garage	1967

1.6 Historical military sites

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

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

Database searched and no data found.

1.7 Potentially Infilled Land

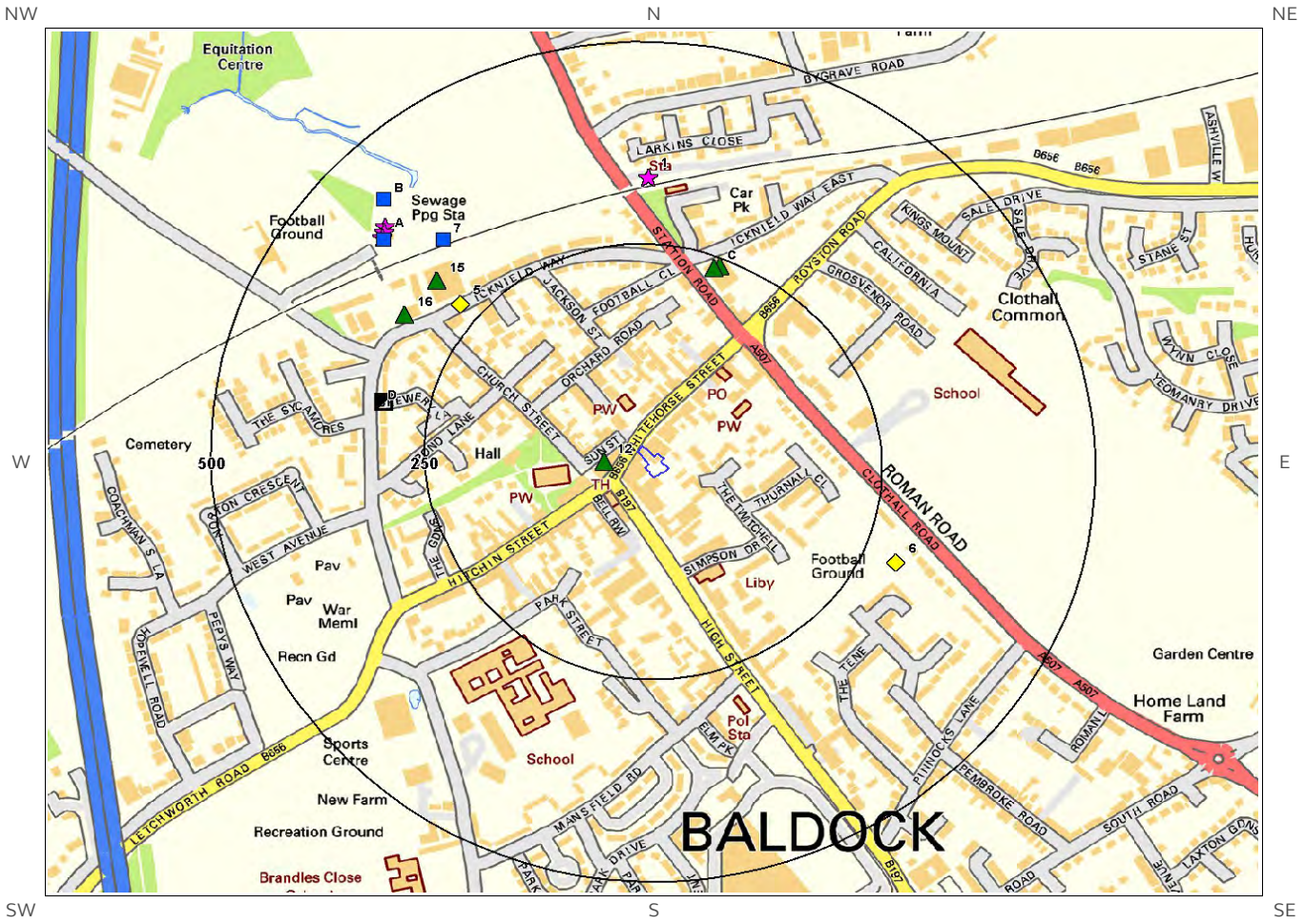
Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 18

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

ID	Distance(m)	Direction	Use	Date
235AU	16	W	Grave Yard	1881
236AV	65	SW	Grave Yard	1880
237AW	82	W	Grave Yard	1888
238O	319	N	Cuttings	1921
239O	319	N	Cuttings	1938
240O	322	N	Cuttings	1899
241P	328	N	Cuttings	1880
242AX	339	W	Cemetery	1960
243U	346	NW	Sewage Works	1920
244W	355	NW	Sewage Works	1900
245Z	375	NW	Sewage Works	1880

246Z	379	NW	Sewage Works	1881
247W	380	NW	Sewage Works	1899
248W	380	NW	Sewage Works	1937
249AA	396	NW	Sewage Works	1938
250AA	396	NW	Sewage Works	1921
251AF	468	W	Cemetery	1984
252AF	468	W	Cemetery	1978

2. Environmental Permits, Incidents and Registers Map



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Site Outline

250 / 500 Search Buffers (m)

Recorded Pollution Incident

Dangerous Substances (List 1)

Dangerous Substances (List 2)

Water Industry Referrals

Licenced Discharge Consents

Red List Discharge Consents

RAS 3 & 4 Authorisations

Part A(1) Authorised Processes and Historic IPC Authorisations

Part A(2) and Part B Authorised Processes

COMAH / NIHHS Sites

Sites Determined as Contaminated Land

Hazardous Substance Consents and Enforcements

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

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

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

0

Database searched and no data found.

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

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:

2

The following List 2 Dangerous Substance Inventory Site records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
5	276	NW	524290	Name: Lemin & Co (product Finishers)	Authorised Substances: pH

ID	Distance (m)	Direction	NGR	Details	
			234120	Ltd Status: Active Receiving Water: Na	
6	290	SE	524800 233800	Name: Tesco Store Status: Not Active Receiving Water: Na	Authorised Substances: pH

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

5

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

ID	Distance (m)	Direction	NGR	Details	
12	42	W	524459 233923	Address: New Look Dry Cleaners (formally Garment Care), 4 Sun Street, Baldock, Hertfordshire, SG7 6QA Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
13C	234	N	524588 234163	Address: Ensign Engineering, Station Road, Baldock, SG7 5BT Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
14C	238	N	524594 234165	Address: Nationwide Crash Repair Centres Ltd, Station Road, Baldock, Hertfordshire, SG7 5BT Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
15	315	NW	524262 234147	Address: Lemin & Co (Product Finishers) Ltd, Icknield House, 46 Icknield Way, Baldock, SG7 5AN Process: Coating Processes Status: Revoked Permit Type: Part B	Enforcement: Enforcement Notified Date of Enforcement: 19/06/1905 Comment: Enforcement Notice regarding odour beyond the process boundary. Resolved
16	320	NW	524225 234105	Address: LTG Motors Ltd, 74 Icknield Way, Baldock, SG7 5AN Process: Waste Oil Burner <0.4 MW Status: Revoked Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

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

5

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

ID	Distance (m)	Direction	NGR	Details	
7	346	NW	524270 234200	Address: NORTON ROAD SPS, BALDOCK Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: AW1NF3217 Permit Version: 1	Receiving Water: River Ivel Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 26/07/1989 Effective Date: 26-Jul-1989 Revocation Date: 29/08/2008
8A	396	NW	524200 234200	Address: BALDOCK PS EO, BALDOCK, HERTS, SG7 5BD Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: AW1NF836 Permit Version: 1	Receiving Water: River Ivel Status: SURRENDERED UNDER EPR 2010 Issue date: 10/10/1969 Effective Date: 10-Oct-1969 Revocation Date: 24/11/2017
9A	396	NW	524200 234200	Address: BALDOCK PS EO, BALDOCK, HERTS, SG7 5BD Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: AWCNF2121 Permit Version: 1	Receiving Water: Adj Ditch River Ivel Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 02/01/1990 Effective Date: 02-Jan-1990 Revocation Date: 30/06/1993
10B	430	NW	524200 234250	Address: BALDOCK PS, BALDOCK, HERTS, SG7 5BD Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: AWCLF10344 Permit Version: 1	Receiving Water: ONTO LAND Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 12/06/1992 Effective Date: 12-Jun-1992 Revocation Date: 21/12/2012
11B	430	NW	524200 234250	Address: BALDOCK PS, BALDOCK, HERTS, SG7 5BD Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: AWCLF10344 Permit Version: 2	Receiving Water: ONTO LAND Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 24/06/2010 Effective Date: 22-Dec-2012 Revocation Date: -

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

1

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

ID	Distance (m)	Direction	Address	Permission reference	Local Authority	First Date Received	Last Date Received	Status
18D	304	W	LEMIN AND CO (CAMBRIDGE) LTD, ICKNIELD HOUSE, ICKNIELD WAY, BALDOCK, HERTFORDSHIRE, SG7 5AN	AG3223	NORTH HERTFORDSHIRE DISTRICT COUNCIL	01-Jun-2001	01-Jan-2018	DEAD (APPLICATION)

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

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

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

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

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

4

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

ID	Distance (m)	Direction	NGR	Details	
1	332	N	524510 234277	Incident Date: 07-Jul-2001 Incident Identification: 14654 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

ID	Distance (m)	Direction	NGR	Details	
2A	400	NW	524198 234203	Incident Date: 04-Nov-2002 Incident Identification: 118761 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
3A	403	NW	524200 234210	Incident Date: 07-Oct-2003 Incident Identification: 194850 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
4A	406	NW	524202 234216	Incident Date: 05-Aug-2002 Incident Identification: 97740 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 4 (No Impact) 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:

0

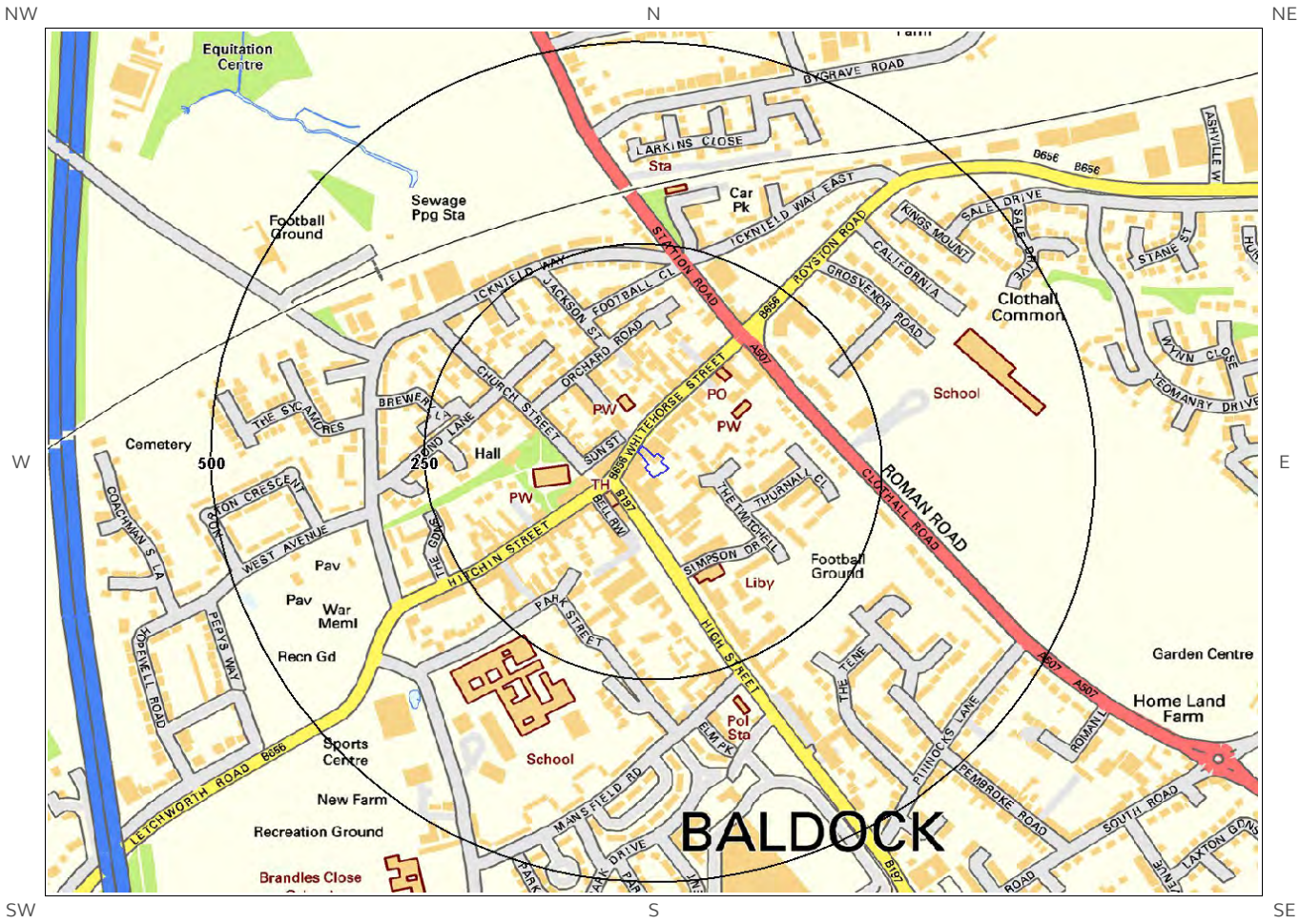
Database searched and no data found.

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

Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site 0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



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Site Outline

250
500
Search Buffers (m)

EA/NRW Active Landfill

EA/NRW Historic Landfill

BGS / DoE Survey Landfill

Historic and Planned Waste Sites

EA/NRW Licensed Waste Site

Local Authority/Historical Mapping Landfill Records

3. Landfill and Other Waste Sites

3.1 Landfill Sites

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

3.2 Other Waste Sites

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

0

Database searched and no data found.

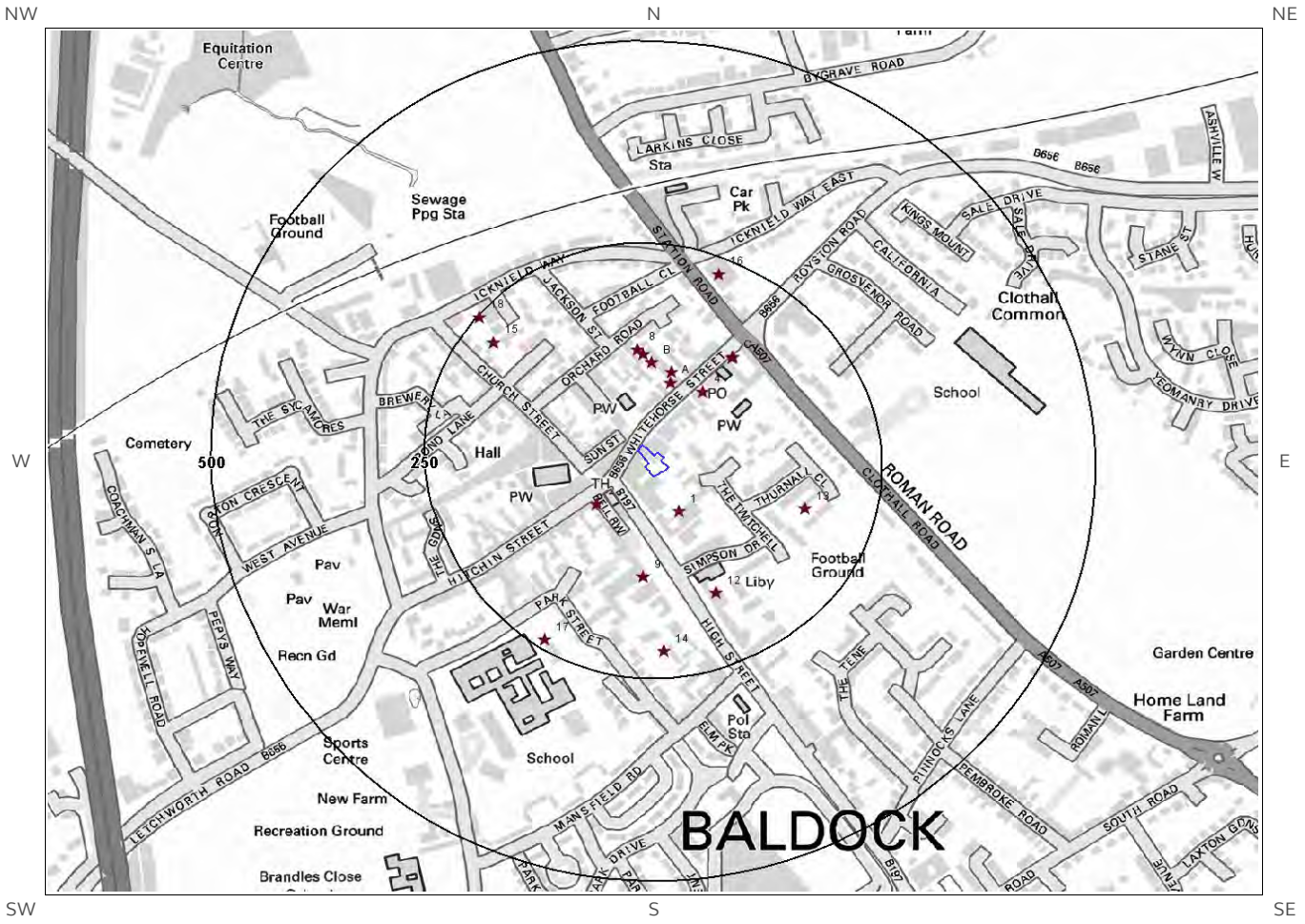
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

4

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	899	W	523600 233900	Site Address: Letchworth C A Site, Blackhorse Road, Letchworth, Hertfordshire, SG6 1HB Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HER002 EPR reference: EA/EPR/UP3591NF/A001 Operator: Hertfordshire County Council Waste Management licence No: 80194 Annual Tonnage: 25000.0	Issue Date: 01/04/1996 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Letchworth C A Site Correspondence Address: -
Not shown	899	W	523600 233900	Site Address: Letchworth C A Site, Blackhorse Road, Letchworth, Hertfordshire, SG6 1HB Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: AME053 EPR reference: EA/EPR/CB3202GW/T001 Operator: Amey Cespa (East) Limited Waste Management licence No: 80194 Annual Tonnage: 25000.0	Issue Date: 01/04/1996 Effective Date: 16/10/2014 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Letchworth H W R C Correspondence Address: -
Not shown	899	W	523600 233900	Site Address: Letchworth C A Site, Blackhorse Road, Letchworth, Herts, SG6 Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HER002 EPR reference: - Operator: Hertfordshire County Council Waste Management licence No: 80194 Annual Tonnage: 0.0	Issue Date: 01/04/1996 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Hertfordshire C C - Letchworth C A Site Correspondence Address: County Hall, Hertford, Hertfordshire, SG13 8DN
Not shown	899	W	523600 233900	Site Address: Letchworth C A Site, Blackhorse Road, Letchworth, Hertfordshire, SG6 1HB Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: AME053 EPR reference: EA/EPR/CB3202GW/V002 Operator: Amey Cespa (East) Ltd Waste Management licence No: 80194 Annual Tonnage: 25000.0	Issue Date: 01/04/1996 Effective Date: 16/10/2014 Modified: 21/01/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Letchworth H W R C Correspondence Address: -

4. Current Land Use Map



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Site Outline

Search Buffers (m)
250
500

Current Industrial Sites

Petrol & Fuel Sites

Electricity Transmission Cables

Gas Transmission Pipelines

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 18

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	51	S	Quenbys	524547 233864	13, High Street, Baldock, Hertfordshire, SG7 6AZ	Vehicle Repair, Testing and Servicing	Repair and Servicing
2	73	SW	Masons Domestic Appliances	524450 233873	1, Hitchin Street, Baldock, Hertfordshire, SG7 6AL	Electrical Equipment Repair and Servicing	Repair and Servicing
3A	85	NE	Baldock Hardware	524537 234023	27-29, Whitehorse Street, Baldock, Hertfordshire, SG7 6QF	General Construction Supplies	Industrial Products
4	93	NE	The Print Factory	524574 234012	32, Whitehorse Street, Baldock, Hertfordshire, SG7 6QQ	Published Goods	Industrial Products
5A	97	N	Electricity Sub Station	524538 234036	Hertfordshire, SG7	Electrical Features	Infrastructure and Facilities
6B	103	N	Primstone Electronics	524514 234048	27a, Whitehorse Street, Baldock, Hertfordshire, SG7 6QF	Electrical Components	Industrial Products
7B	113	N	Works	524504 234058	Hertfordshire, SG7	Unspecified Works Or Factories	Industrial Features
8	119	N	Wks	524498 234064	Hertfordshire, SG7	Unspecified Works Or Factories	Industrial Features
9	124	S	Brown & Gammons	524504 233783	18, High Street, Baldock, Hertfordshire, SG7 6AS	New Vehicles	Motoring
10C	147	NE	Indigo Scientific Ltd	524609 234054	42, Whitehorse Street, Baldock, Hertfordshire, SG7 6QQ	Measurement and Inspection Equipment	Industrial Products
11C	148	NE	Smcs Ltd	524610 234055	42, Whitehorse Street, Baldock, Hertfordshire, SG7 6QQ	Medical Equipment, Supplies and Pharmaceuticals	Industrial Products
12	161	SE	Displayplan	524590 233763	Clare House, High Street, Baldock, Hertfordshire, SG7 6BE	Office and Shop Equipment	Industrial Products
13	167	E	Electricity Sub Station	524694 233867	Hertfordshire, SG7	Electrical Features	Infrastructure and Facilities
14	216	S	Electricity Sub Station	524529 233691	Hertfordshire, SG7	Electrical Features	Infrastructure and Facilities
15	216	NW	Works	524329 234073	Hertfordshire, SG7	Unspecified Works Or Factories	Industrial Features
16	230	NE	Works	524593 234157	Hertfordshire, SG7	Unspecified Works Or Factories	Industrial Features
17	239	SW	Tank	524389 233705	Hertfordshire, SG7	Tanks (Generic)	Industrial Features

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
18	249	NW	Works	524312 234104	Hertfordshire, SG7	Unspecified Works Or Factories	Industrial Features

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: 0

Database searched and no data found.

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

Database searched and no data found.

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

5.3 Bedrock and Solid Geology

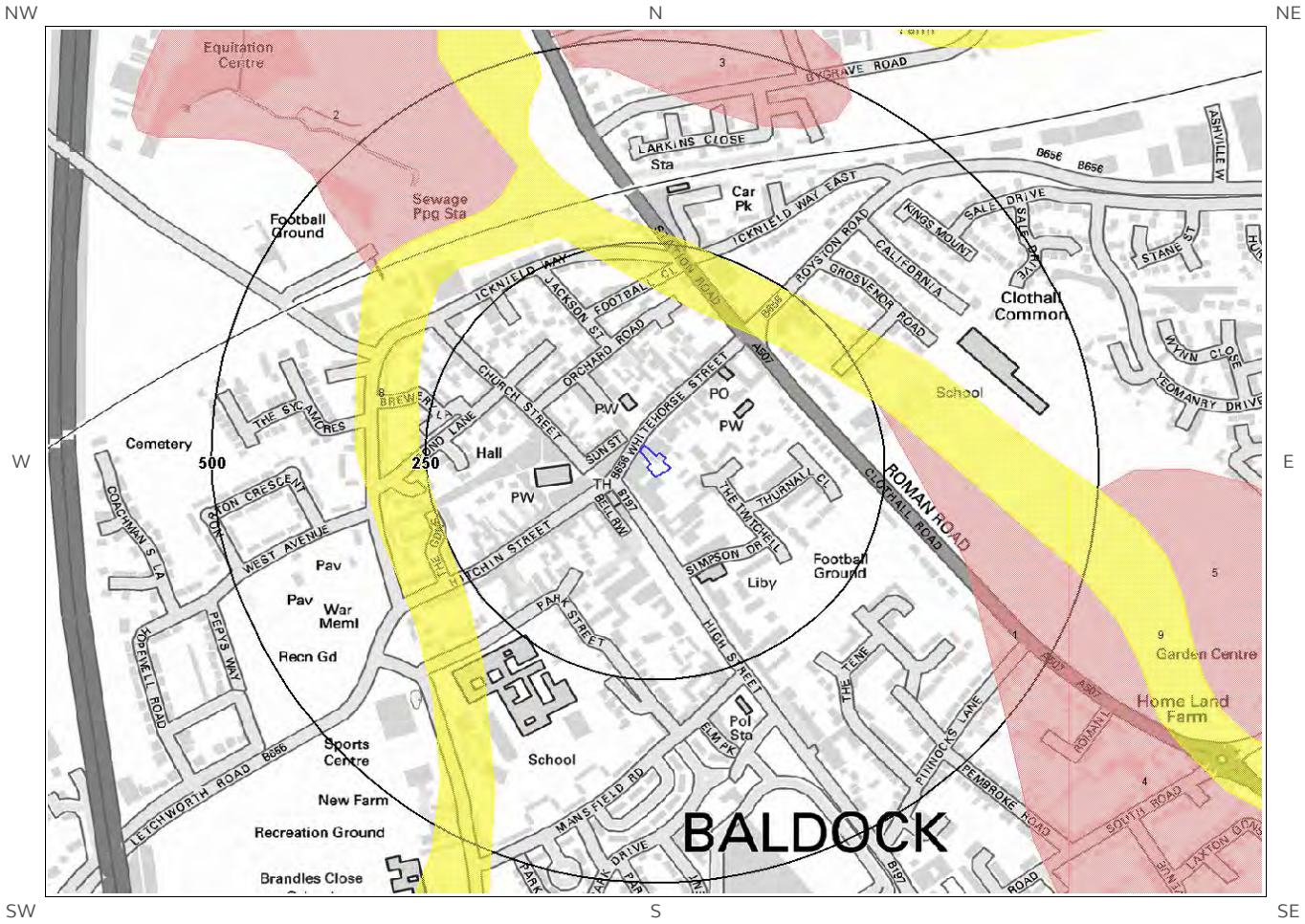
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
HNCK-CHLK	HOLYWELL NODULAR CHALK FORMATION AND NEW PIT CHALK FORMATION (UNDIFFERENTIATED)	CHALK

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

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology



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Site Outline

250 — 500 — Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

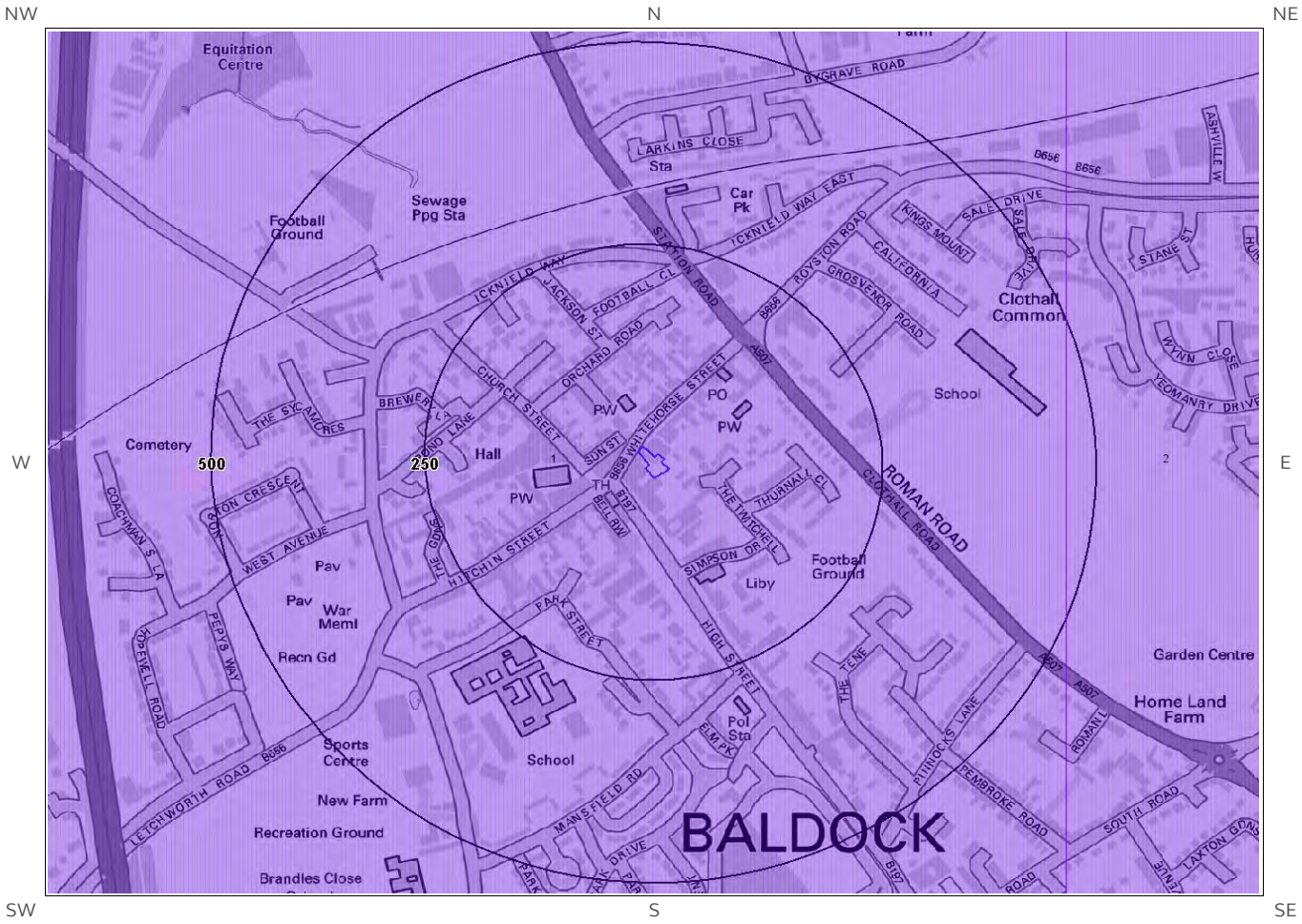
Secondary (B) Aquifer - Lower Permeability Layers

Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

6b. Aquifer Within Bedrock Geology and Abstraction Licences



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Site Outline

250 — 500 — Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

Secondary (B) Aquifer - Lower Permeability Layers

Groundwater Abstraction Licence

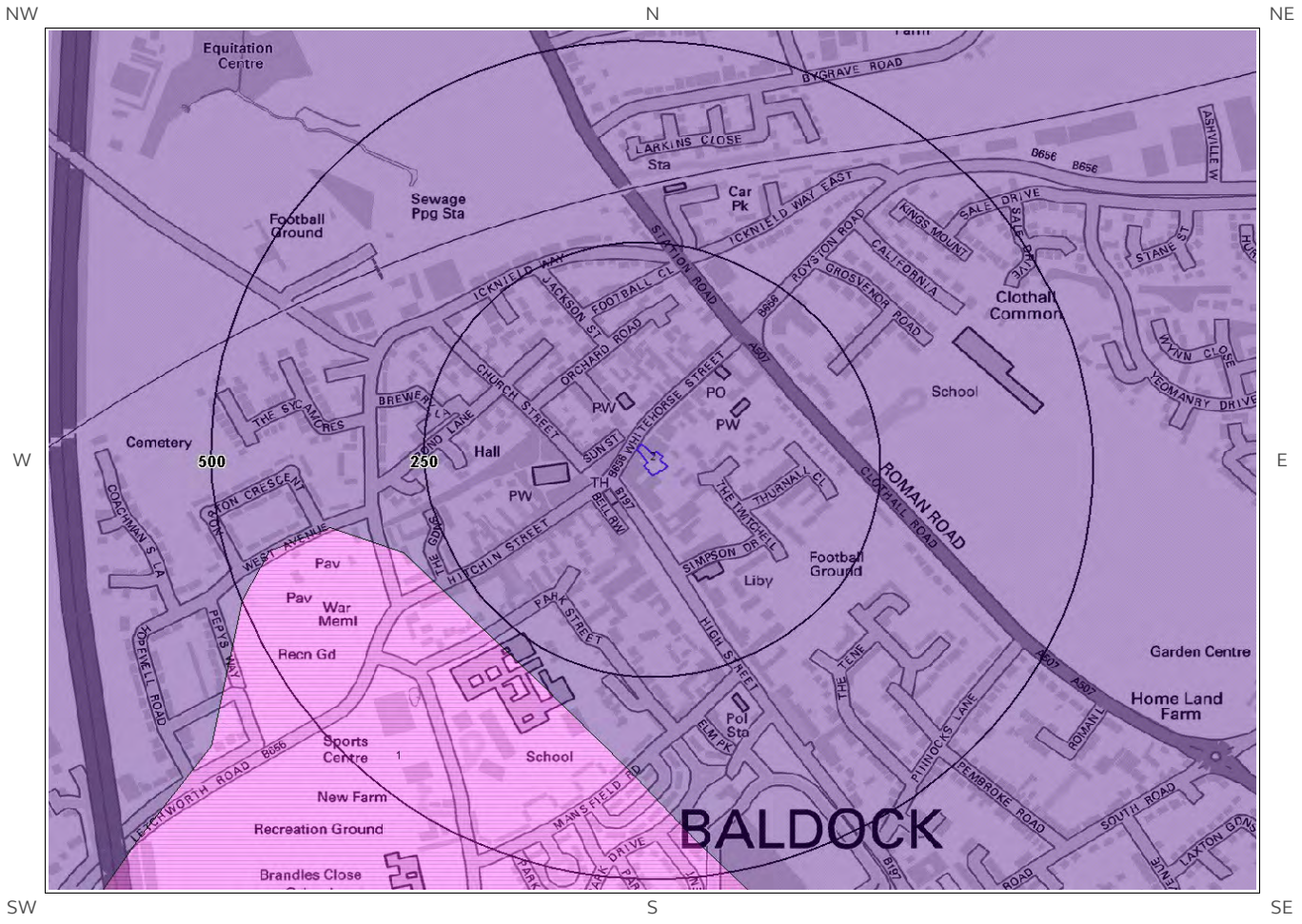
Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

Surface Water Abstraction Licence

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



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Site Outline

250 Search Buffers (m)
500

Source Protection Zone 1 - Inner Catchment

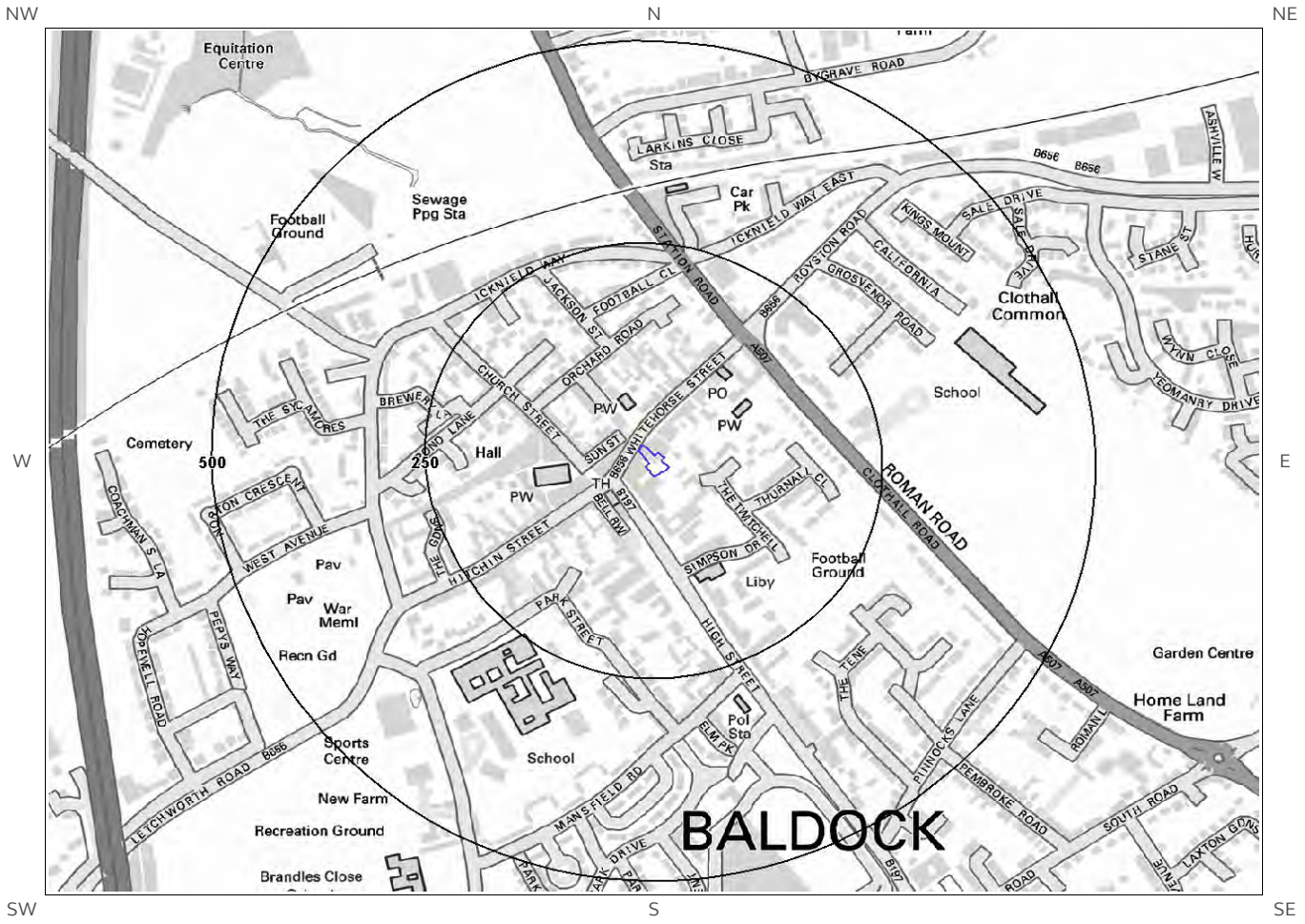
Source Protection Zone 2 - Outer Catchment

Source Protection Zone 3 - Total Catchment

Source Protection Zone 4 - Zone of Special Interest

Potable Water Abstraction Licence

6d. Hydrogeology – Source Protection Zones within confined aquifer



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Source Protection Zone 1 - Inner Catchment

Source Protection Zone 2C - Outer Catchment within Confined Aquifer

Source Protection Zone 3C - Total Catchment within Confined Aquifer

Site Outline

250 — 500 — Search Buffers (m)

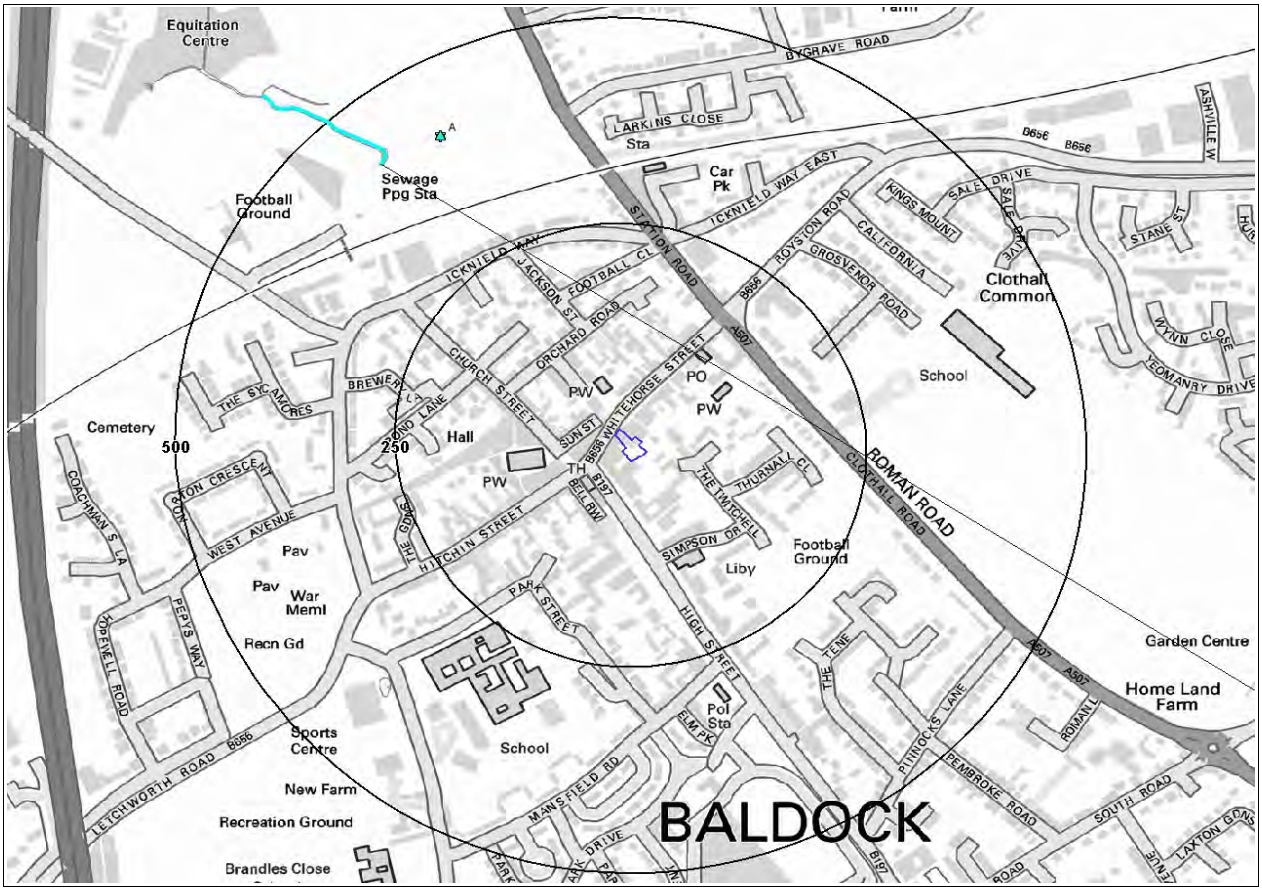
Potable Water Abstraction Licence

6e. Hydrology – Watercourse Network and River Quality

NW N NE

W E

SW S SE



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Site Outline

250 500 Search Buffers (m)

Tidal River

Inland River

Underground or Elevated Tidal River

Underground or Elevated Inland River

Foreshore

General Quality Assessment: Chemistry

Canal

Underground or Elevated Canal

Lock or Flight of Locks

Lake, Reservoir, or Marsh

Drain or Transfer

General Quality Assessment: Biology

6.Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

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

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

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

ID	Distance (m)	Direction	Designation	Description
8	178	NE	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
1	254	E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	345	NW	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	418	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
9	465	E	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	480	E	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

6.2 Aquifer within Bedrock Deposits

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

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

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

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	465	E	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site — Identified

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

ID	Distance (m)	Direction	NGR	Details	
Not shown	1442	S	524200 232500	Status: Active Licence No: 6/33/14/*G/0010 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOWRING,LETCHWORTH Data Type: Point Name: Affinity Water Limited	Annual Volume (m^3): 5.39167e+006 Max Daily Volume (m^3): 20457 Original Application No: - Original Start Date: 01/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 14/11/2012 Version End Date:
Not shown	1522	S	524300 232400	Status: Active Licence No: 6/33/14/*G/0010 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: FULLER,LETCHWORTH Data Type: Point Name: Affinity Water Limited	Annual Volume (m^3): 5.39167e+006 Max Daily Volume (m^3): 20457 Original Application No: - Original Start Date: 01/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 14/11/2012 Version End Date:
Not shown	1785	SW	523300 232600	Status: Active Licence No: 6/33/14/*G/0010 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BALDOCK ROAD,LETCHWORTH Data Type: Point Name: Affinity Water Limited	Annual Volume (m^3): 5.39167e+006 Max Daily Volume (m^3): 20457 Original Application No: - Original Start Date: 01/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 14/11/2012 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site — None identified

Database searched and no data found.

6.5 Potable Water Abstraction Licences

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

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

ID	Distance (m)	Direction	NGR	Details	
Not shown	1442	S	524200 232500	Status: Active Licence No: 6/33/14/*G/0010 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY	Annual Volume (m^3): 5.39167e+006 Max Daily Volume (m^3): 20457 Original Application No: - Original Start Date: 01/11/1966 Expiry Date: -

ID	Distance (m)	Direction	NGR	Details	
				Point: BOWRING,LETCHWORTH Data Type: Point Name: Affinity Water Limited	Issue No: 102 Version Start Date: Version End Date:
Not shown	1522	S	524300 232400	Status: Active Licence No: 6/33/14/*G/0010 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: FULLER,LETCHWORTH Data Type: Point Name: Affinity Water Limited	Annual Volume (m^3): 5.39167e+006 Max Daily Volume (m^3): 20457 Original Application No: - Original Start Date: 01/11/1966 Expiry Date: - Issue No: 102 Version Start Date: Version End Date:
Not shown	1785	SW	523300 232600	Status: Active Licence No: 6/33/14/*G/0010 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BALDOCK ROAD,LETCHWORTH Data Type: Point Name: Affinity Water Limited	Annual Volume (m^3): 5.39167e+006 Max Daily Volume (m^3): 20457 Original Application No: - Original Start Date: 01/11/1966 Expiry Date: - Issue No: 102 Version Start Date: Version End Date:

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site — Identified

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

ID	Distance (m)	Direction	Zone	Description
2	0	On Site	2	Outer catchment
1	275	SW	1	Inner catchment

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site — None identified

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

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

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

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Major Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
317	E	Major Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.
356	NW	Major Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.
403	NW	Major Aquifer/High Leaching Potential	H3	Coarse textured or moderately shallow soils which readily transmit non-adsorbed pollutants and liquid discharges but have some ability to attenuate adsorbed pollutants because of their clay or organic matter content.

6.9 River Quality

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

6.9.1 Biological Quality:

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

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

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
3A	409	NW	524300 234300	River Name: Ivel Reach: Baldock - Confl Hiz End/Start of Stretch: Start of Stretch NGR	B	B	B	A	A

6.9.2 Chemical Quality:

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

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

					Chemical Quality Grade				
ID	Distance (m)	Direction	NGR	River Quality Grade	2005	2006	2007	2008	2009
4A	409	NW	524300 234300	River Name: Ivel Reach: Baldock - Confl Hiz End/Start of Stretch: Start of Stretch NGR	B	B	A	A	A

6.10 Ordnance Survey MasterMap Water Network

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

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

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

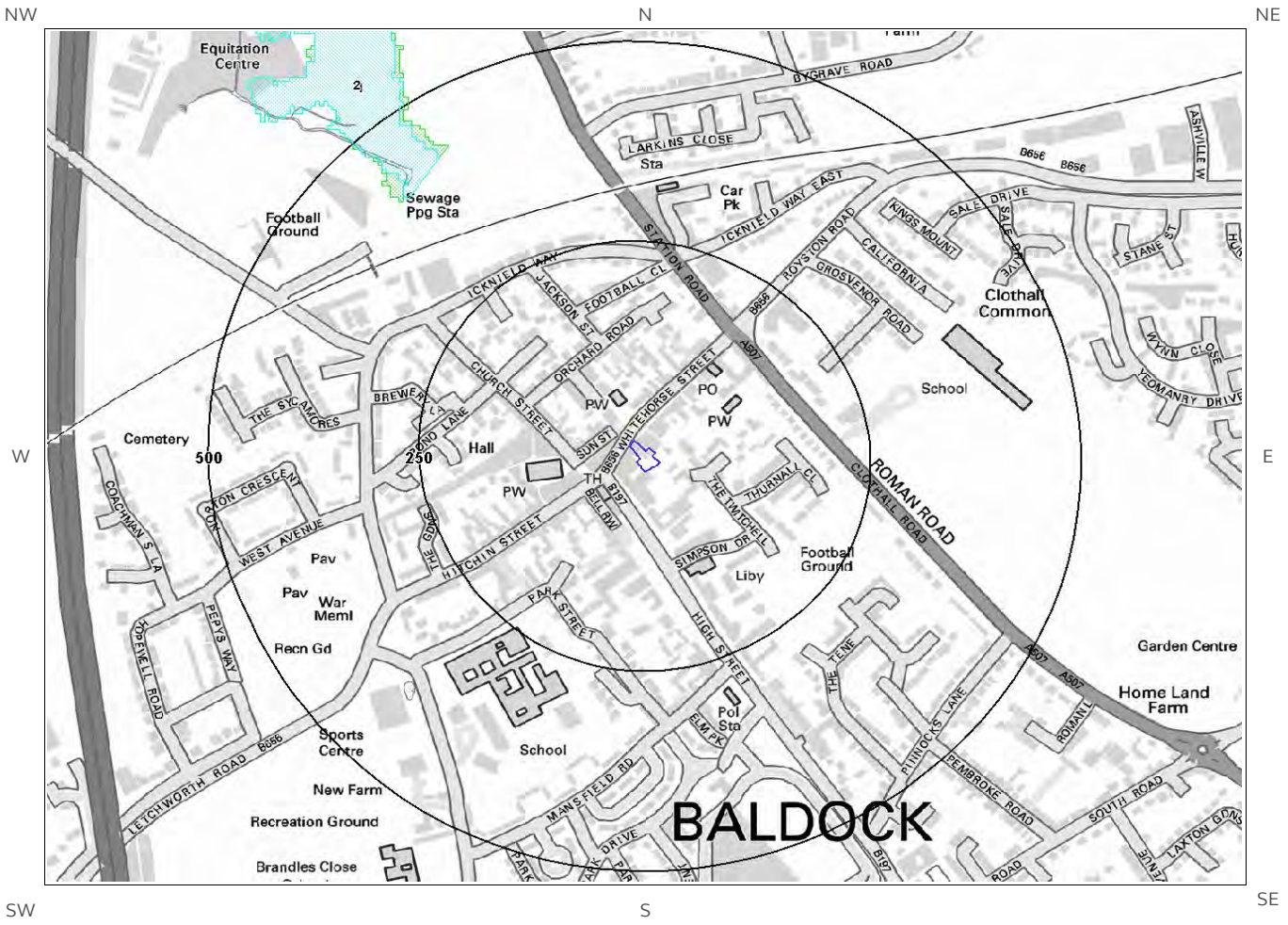
ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	122 NE	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Cam Ely Ouse and South Level Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	122 NE	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Cam Ely Ouse and South Level Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
2	420 NW	River Ivel	Inland river not influenced by normal tidal action.	Catchment Area: Cam Ely Ouse and South Level Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.3
Not shown	420 NW	River Ivel	Inland river not influenced by normal tidal action.	Catchment Area: Cam Ely Ouse and South Level Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.3

6.11 Surface Water Features

Surface water features within 250m of the study site	None identified

Database searched and no data found.

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



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Site Outline

100
250
Search Buffers (m)

Zone 2 Floodplain

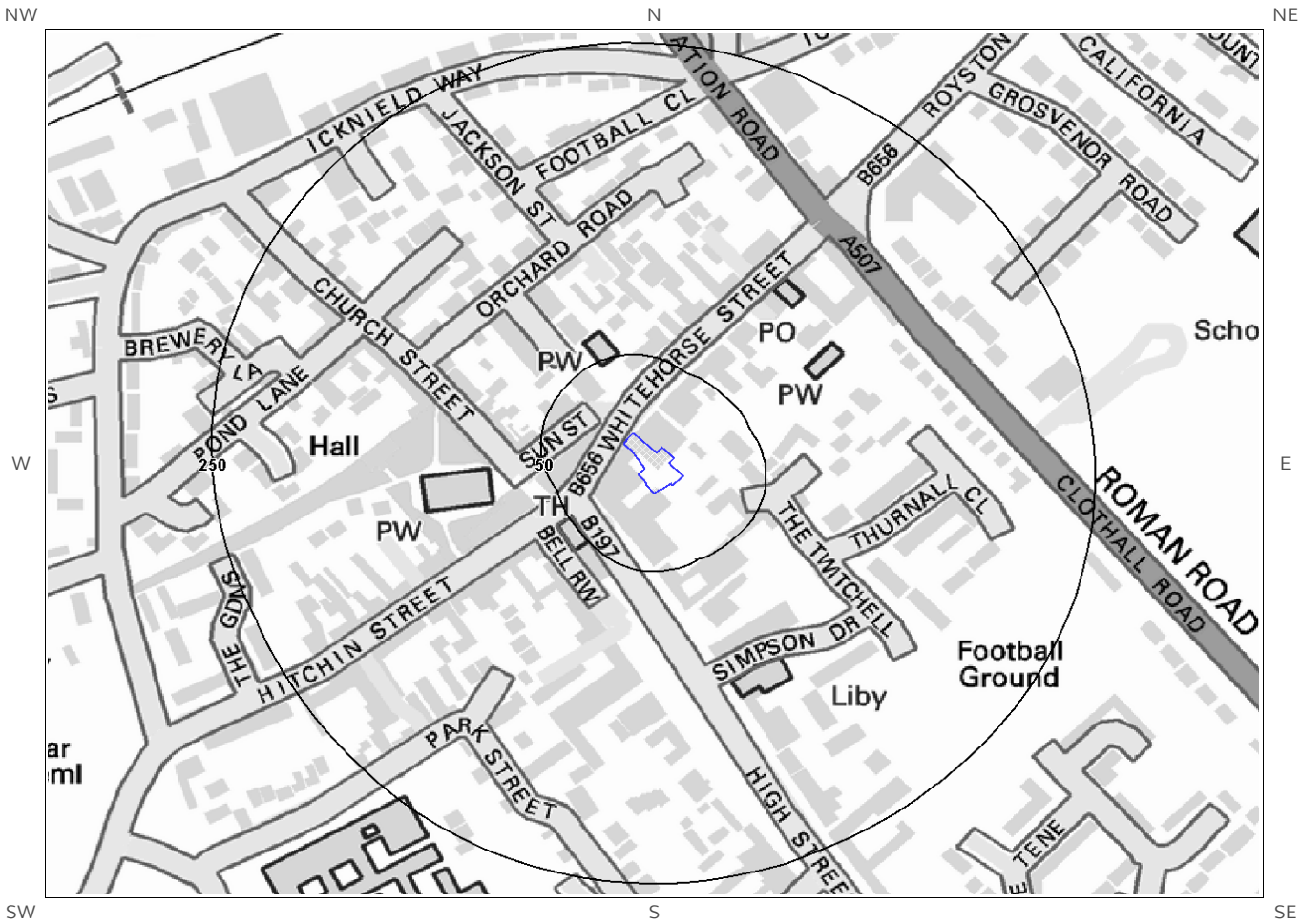
Zone 3 Floodplain

Flood Defences

Area used for Flood Storage

Area Benefiting from Flood Defences

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



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Site Outline

100 250 Search Buffers (m)

RoFRaS Rating

Very Low

Low

Medium

High

7 Flooding

7.1 River and Coastal Zone 2 Flooding

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

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

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

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

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

Database searched and no data found.

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

Highest risk of flooding onsite — Very Low

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

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

7.4 Flood Defences

Flood Defences within 250m of the study site — None identified

Database searched and no data found.

7.5 Areas benefiting from Flood Defences

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

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site	None identified

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site	Identified
Clearwater Flooding or Superficial Deposits Flooding	Clearwater Flooding

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

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

Potential below Surface

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

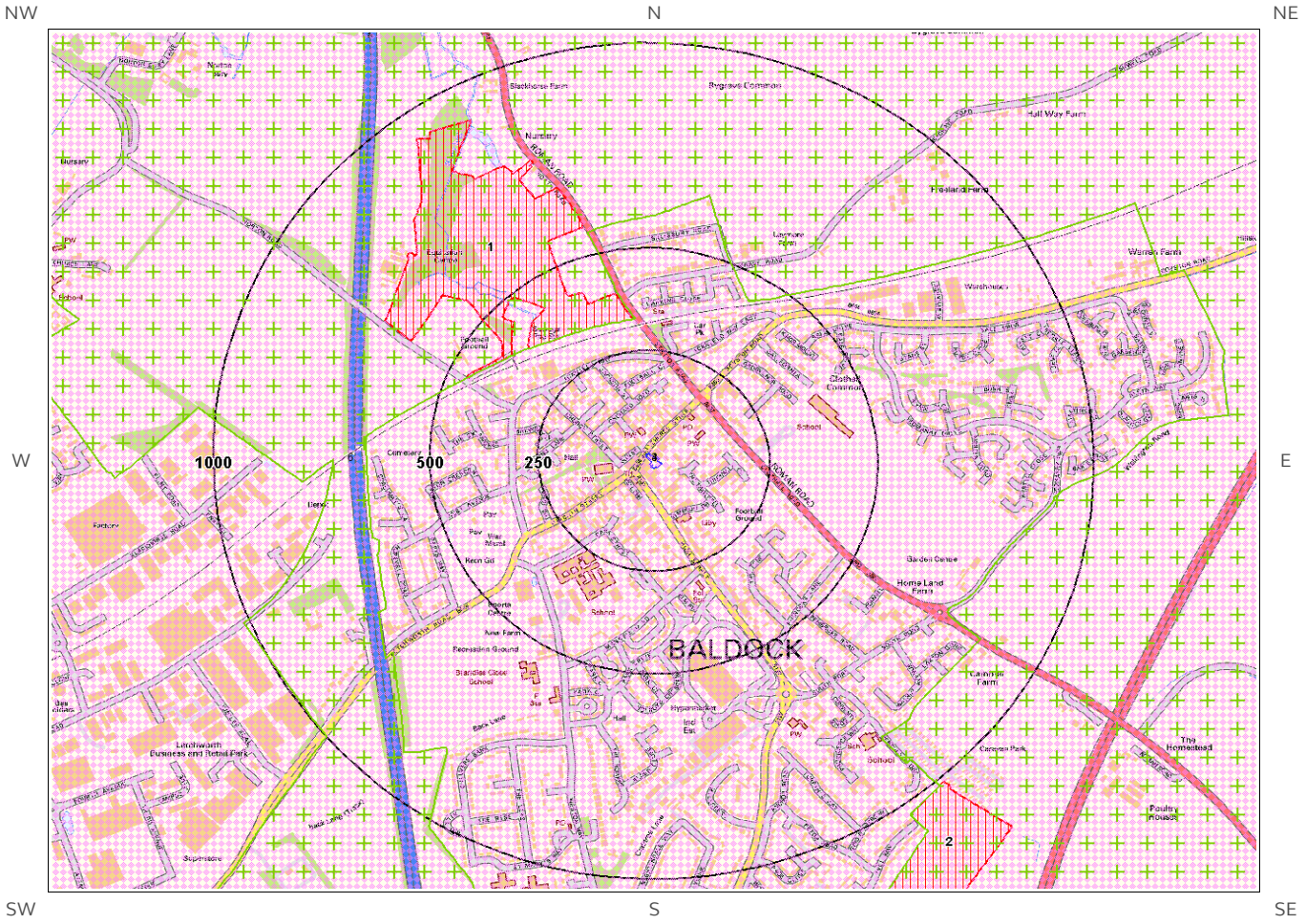
7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result	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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Site Outline

100
250
Search Buffers (m)

AONB
National Park
SSSI
Special Protection Areas
Nitrate Vulnerable Zones

Green Belt
Environmentally Sensitive Areas
Special Areas of Conservation
World Heritage Sites
Nitrate Sensitive Areas

Ancient Woodland
National Nature Reserve
Local Nature Reserves
Ramsar Sites

8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site	Identified

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

1

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	1790	SE	UNKNOWN	Ancient and Semi-Natural Woodland

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

2

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

ID	Distance (m)	Direction	LNR Name	Data Source
1	326	N	Ivel Springs	Natural England
2	1012	SE	Weston Hill	Natural England

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

2

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

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

1

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

ID	Distance	Direction	Green Belt Name	Local Authority Name
6	326	N	London Area Greenbelt	North Hertfordshire District

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

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

9.1.1 Shrink Swell

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

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

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

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site — Negligible

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

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

9.1.3 Soluble Rocks

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

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

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

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

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site — Negligible

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

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

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site — Very Low

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

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

9.1.6 Running Sand

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

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

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

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

9.2 Radon

9.2.1 Radon Affected Areas

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

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

9.2.2 Radon Protection

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

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site — None identified

Database searched and no data found.

10.2 Non-Coal Mining

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

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

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

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

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site — None identified
Guidance: No Guidance Required.

Contact Details

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

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

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Rotherham, S60 1BY
Tel: 03708 506 506
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Public information access office
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Email:**enquiries@phe.gov.uk**
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www.coal.gov.uk

Ordnance Survey
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SO16 0AS
Tel: 08456 050505

Local Authority
Authority: North Hertfordshire District Council
Phone: 01462 474000
Web: http://www.north-herts.gov.uk/
Address: Council Offices, Gernon Road, Letchworth Garden Ci,

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

Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.
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This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.

Standard Terms and Conditions

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

https://www.groundsure.com/terms-and-conditions-feb11-2019

Appendix F

Groundsure Flooding Data

Groundsure

SOVEREIGN HOUSE, CHURCH STREET,
BRIGHTON, BN1 1UJ

Groundsure Reference:	GS-5824912
Client Reference:	GSP-2019-1387
Report Date	15 Feb 2019
Report Delivery Method:	xml
Client Email:	projectwork-con@groundsure.com

Flood Insight

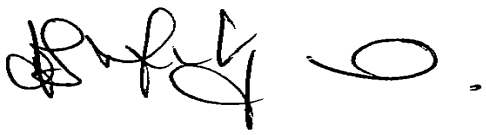
Address: ROSE & CROWN, 8, WHITEHORSE STREET, BALDOCK, SG7 6QN

Dear Sir/ Madam,

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

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

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Floodinsight

Flood Insight

Address:	**ROSE & CROWN, 8, WHITEHORSE STREET, BALDOCK, SG7 6QN**
Date:	**15 Feb 2019**
Reference:	**GS-5824912**
Client:	**Groundsure**

NW N NE

W E



SW S SE

Aerial Photograph Capture date:	11-Aug-2017
Grid Reference:	524519,233924
Site Size:	0.0610ha

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Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed.

Section 1: Environment Agency/Natural Resources Wales Flood Zones	
1.1 Are there any Enviroment Agency Zone 2 floodplains within 250m of the study site?	No
1.2 Are there any Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	No
1.3 Are there any Flood Defences within 250m of the study site?	No
1.4 Are there any areas benefiting from Flood Defences within 250m of the study site?	No
1.5 Are there any Proposed Flood Defences within 250m of the study site?	No
1.6 Are there any areas used for Flood Storage within 250m of the study site?	No

Section 2: Risk of Flooding from Rivers and the Sea (RoFRaS)	
2.1 What is the Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating for the study site?	Very Low

Section 3: Historic Flood Events	
3.1 Has the site been subject to past flooding as recorded by the Environment Agency/Natural Resources Wales?	No

Section 4: JBA Surface Water (Pluvial) Flood	
4.1 Is the site or any area within 50m at risk of Surface Water (Pluvial) Flooding?	Yes

Section 5: Surface Water Features	
5.1 Are there any surface water features within 250m of the study site?	No

Section 6: Groundwater Flooding	
6.1 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	Potential below Surface
6.2 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?	High

Section 7: BGS Geological Indicators of historic flooding	
7.1 Are there any geological indicators of historic flooding within 250m of the study site?	No

Section 8: JBA Reservoir and Canal Data	
8.1 Is the property located in an area identified as being at potential risk in the event of a reservoir failure?	No
8.2 Is the property located in an area identified as being at potential risk in the event of a canal break?	No

Additional Matters

Riparian ownership

If your land abuts a river, stream or ditch, you may have responsibility to maintain this watercourse, even if Title Deeds show the property boundary to be adjacent to the watercourse. This includes the responsibility for clearing debris and obstructions which may impede the free passage of water and fish, and also includes the responsibilities to accept flood flows through your land, even if these are caused by inadequate capacity downstream. There is no duty in common law for a landowner to improve the drainage capacity of a watercourse. Please contact Groundsure if you need further advice on riparian ownership issues relating to this property.

Sewerage Flooding

Extreme rainfall events may overwhelm sewerage systems and cause local flooding. The water and sewerage companies within the UK are required to maintain 'DG5 – At Risk Registers' which record properties that have flooded from sewers and/or are considered to be at risk of flooding from sewers in the future. If your property is on the 'At Risk' Register, this may be recorded within a standard CON29 Drainage and Water search.

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.

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.

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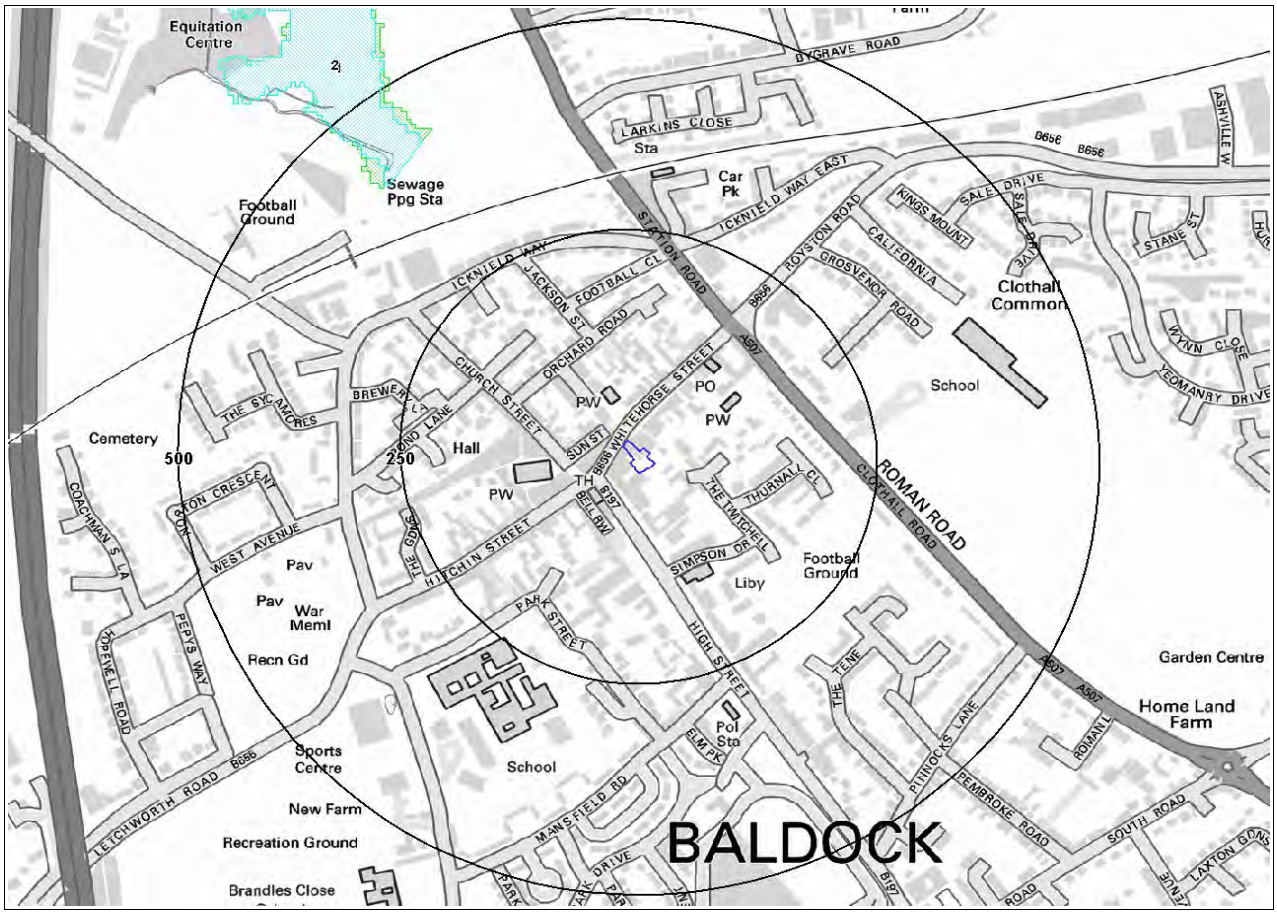
1. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)

NW N NE

W E

SW S SE



Environment Agency/Natural Resources Wales Flood Map for Planning Legend

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- Search Centre
- Search Buffers (m): 100, 250
- Zone 2 Floodplain
- Zone 3 Floodplain
- Flood Defences
- Area used for Flood Storage
- Proposed Flood Defence Scheme
- Area Benefiting from Flood Defences

Report Reference: GS-5824912
Client Reference: GSP-2019-1387

1. Environment Agency/Natural Resources Wales Flood Zones

1.1 River and Coastal Zone 2 Flooding

Is the site within 250m of an Environment Agency/Natural Resources Wales Zone 2 floodplain? No

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

Database searched and no data found.

1.2 River and Coastal Zone 3 Flooding

Is the site within 250m of an Environment Agency/Natural Resources Wales Zone 3 floodplain? No

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 1 – Flood Map for Planning.

Database searched and no data found.

1.3 River and Coastal Flood Defences

Are there any Flood Defences within 250m of the study site ? No

This search consists only of flood defences present in the dataset provided by the Environment Agency/Natural Resources Wales. Any relevant data is represented on Map 1 – Flood Map for Planning.

Database searched and no data found.

1.4 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site? No

Any relevant data is represented on Map 1 – Flood Map for Planning.

1.5 Areas of Proposed Flood Defences

Are there any Proposed Flood Defences within 250m of the study site? No

* This illustrates the number of households that move from 'very significant' or 'significant' to 'moderate' or 'low' probability of flood risk bands if the proposed flood scheme is to be implemented.

Any relevant data is represented on Map 1 – Flood Map for Planning.

Guidance: This search consists only of proposed flood defences present in the dataset provided by the Environment Agency/Natural Resources Wales. Please note that proposed flood defence schemes will not influence the current RoFRaS ratings for the site.

1.6 Areas used for Flood Storage

Are there any areas used for Flood Storage within 250m of the study site? No

Flood Storage Areas are considered part of the functional floodplain, and are areas where water has to flow or be stored in times of flood. Technical Guidance to the National Planning Policy Framework states that only water-compatible development and essential infrastructure should be permitted within flood storage areas, and existing development within this area should be relocated to an area with a lower risk of flooding. Any relevant data is represented on Map 1 – Flood Map for Planning.

Notes on Flood Zone Data:

This data relates solely to flooding from rivers or the sea. The Environment Agency/Natural Resources Wales estimate that over 2.5 million properties are at risk of flooding within England and Wales. River flooding occurs when a watercourse cannot cope with the water draining into it from the surrounding land. This can happen, for example, when heavy rain falls on an already waterlogged catchment. Coastal flooding results from a combination of high tides and stormy conditions. If low atmospheric pressure coincides with a high tide, a tidal surge may happen which can cause serious flooding.

The Groundsure Flood Insight Report comments upon whether a property lies in proximity to Environment Agency/Natural Resources Wales Zone 2 and Zone 3 floodplains. The Government's Technical Guidance to the National Planning Policy Framework explains how flood risk should be considered at all stages of the planning and development process in order to reduce future damage to property and potential loss of life. The Government looks to planning authorities to ensure that flood risk is properly taken into account in the planning of developments to reduce the risk of flooding and the damage which floods cause.

Flood Zones enable planning authorities to apply the sequential test (see Technical Guidance to the National Planning Policy Framework) for development proposals and prevent inappropriate development.

Technical Guidance to the National Planning Policy Framework defines the flood zones as: -

Zone 1 – little or no risk with an annual probability of flooding from rivers and the sea of less than 0.1%

Zone 2 – low to medium risk with an annual probability of flooding of 0.1-1.0% from rivers and 0.1-0.5% from the sea.

Zone 3 – high risk with an annual probability of flooding of 1.0% or greater from rivers, and 0.5% or greater from the sea.

Flood Zone 3b/Flood Storage Areas - very high risk with the site being used as part of the functional flood plain or as a Flood Storage Area.

The flood zones are the main constraint map underpinning decisions on development and flood risk.

Existing Flood Defences

Flood defences seek to reduce the risk of flooding and to safeguard life, protect property, sustain economic activity and the natural environment. Flood defences are designed to protect against flood events of a particular magnitude, expressed as risk in any one year. For example, defences in urban areas may be built to provide protection against flood events of a size which might occur on average once in one hundred years or less.

Proposed Flood Defences

This information is taken from the Environment Agency/Natural Resources Wales's database of Areas to Benefit from New and Reconditioned Flood Defences under the Medium Term Plan (MTP). The dataset contains funding allocation for the first financial year (from April). Funding for the following four financial years is not guaranteed, being only indicative, and will be reviewed annually. Projects within the Medium Term Plan qualify for inclusion in this dataset if:

- the investment leads to a change in the current standard of protection (change projects);
- the investment is a replacement or refurbishment in order to sustain the current standard of protection (sustain projects);
- the project has an initial construction budget of £100,000 or more; and
- the project is included within the first five years of the MTP

The data includes all the Environment Agency/Natural Resources Wales's projects over £100K that will change or sustain the standards of flood defence in England and Wales over the next 5 years. It also includes the equivalent schemes for all Local Authority and Internal Drainage Boards. The number of households and areas of land contributing to DEFRA's Outcome Measures (OM) are also attributed i.e. could benefit from major work on flood defences.

These data also contain Intermittence Flood Maintenance Programme that show the annual maintenance programme of work scheduled to be carried by the Environment Agency/Natural Resources Wales, Local Authority or Internal Drainage Board on flood defences. Data details routine maintenance as well as intermittent work that has been funded for the coming year. The data contains a start and end coordinate defining the relevant river section where work is planned.

Information Warning

Please note that the maps show the areas where investment is being made to reduce the flood and coastal erosion risk and are not detailed enough to account for individual addresses. Individual properties may not always face the same risk of flooding as the areas that surround them. Also, note that funding figures are indicative and any use or interpretation should account for future updates where annual values may change.

Every possible care is taken to ensure that the maps reflect all the data possessed by the Environment Agency/Natural Resources Wales and that they have applied their expert knowledge to create conclusions that are as reliable as possible. The Environment Agency/Natural Resources Wales consider that they have created the maps as well as they can and so should not be liable if the maps by their nature are not as accurate as might be desired or are misused or misunderstood, despite their warnings. For this reason, they are not able to promise that the maps will always be accurate or completely up to date.

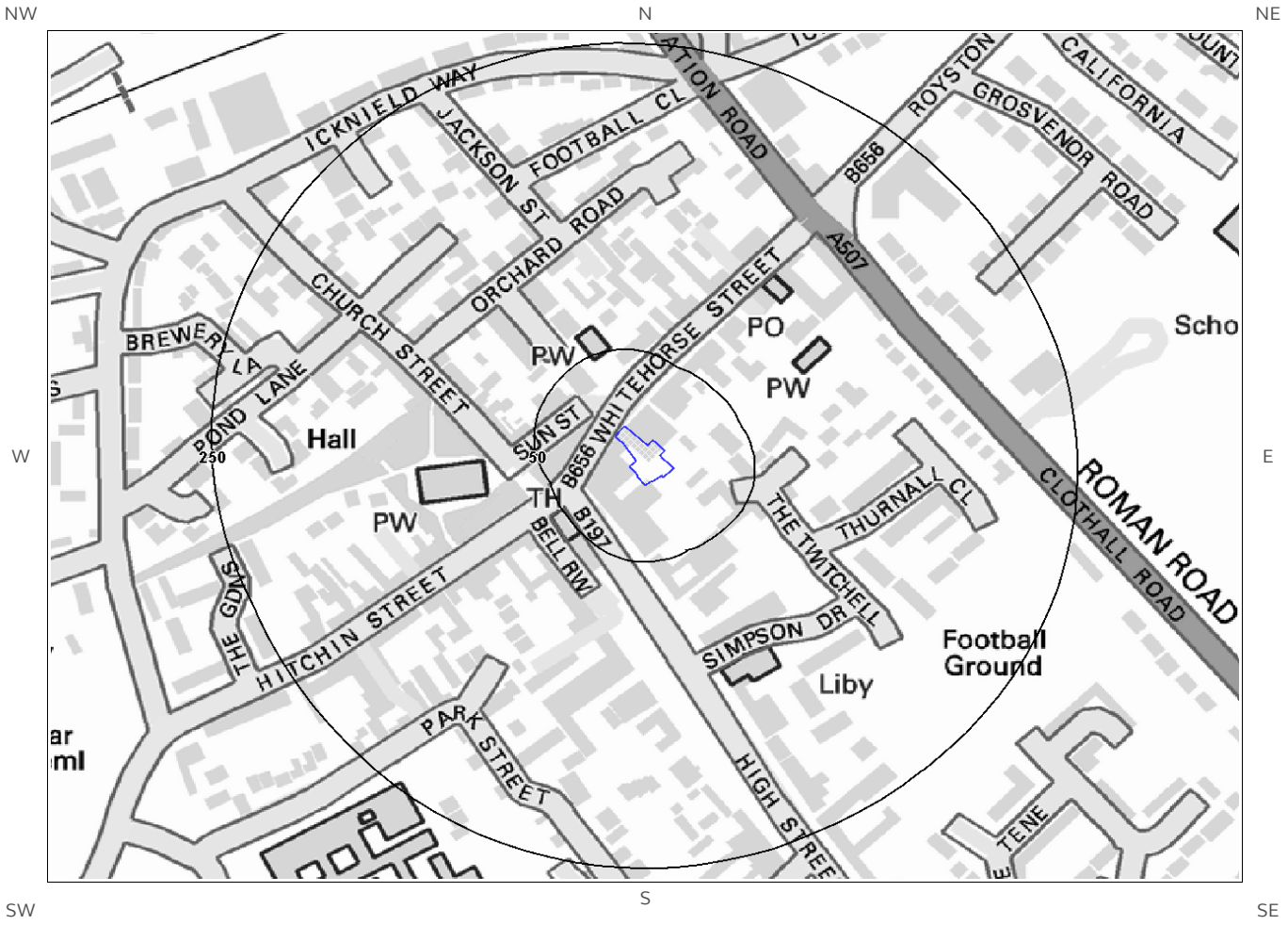
This site includes mapping data licensed from Ordnance Survey used for setting the Environment Agency/Natural Resources Wales's data in its geographical context. Ordnance Survey retains the copyright of this material and it can not be used for any other purpose.

Flood Storage Areas

Flood Storage Areas may also act as flood defences. A flood storage area may also be referred to as a balancing reservoir, storage basin or balancing pond. Its purpose is to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel. It may also delay the timing of a flood peak so that its volume is discharged over a longer time interval.

A flood storage area may take the form of a wet or dry reservoir. A wet reservoir is a water storage facility in which storage can be effected by allowing water levels to rise during flood times. A dry reservoir is typically adjacent to a river and comprises an enclosed area that accepts water only at peak times. These areas are also referred to as Zone 3b or 'the functional floodplain' and has a 5% or greater chance of flooding in any given year, or is designed to flood in the event of an extreme (0.1%) flood or another probability which may be agreed between the Local Planning Authority and the Environment Agency/Natural Resources Wales, including water conveyance routes. Development within Flood Storage Areas is severely restricted.

2. Environment Agency/Natural Resources Wales RoFRaS Flooding Map



Environment Agency/Natural Resources Wales RoFRaS Flooding legend

Site Outline

Search Buffers (m)

RoFRaS Rating

Very Low

Low

Medium

High

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

2.1 Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating (River and Coastal)

What is the highest risk of flooding onsite? Very Low

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

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

Notes on RoFRaS data:

This information is based on the very latest Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) data. This data has been created by dividing the flood plain into 50m squares, or smaller areas where a square if intersected by a river or coastline. These are called impact cells. The method then calculates the likelihood that the centre of each impact cell will start to flood using a number of different flood scenarios.

A number of insurance companies providing cover for flood risk use this data as the basis of their risk model, although they may also utilise additional information such as claims histories, which may further influence their decision. Where a high risk of flooding is identified flood risk insurance may be difficult to obtain without further work being undertaken. Property owners of sites within Low and Medium risk areas are still considered to be at risk of flooding and insurance premiums may be increased as a result. Owners of properties within Low, Medium and High risk areas are advised to sign up to the Environment Agency/Natural Resources Wales's Flood Warning scheme. The probability estimates for RoFRaS risk bands are as follows:

Very Low – the chance of flooding from rivers or the sea is considered to be less than 1 in 1000 (0.1%) in any given year.

Low – the chance of flooding from rivers or the sea is considered to be less than 1 in 100 (1%) but greater than or equal to 1 in 1000 (0.1%) in any given year.

Medium – the chance of flooding from rivers or the sea is considered to be less than 1 in 30 (3.3%) but greater than 1 in 100 (1%) in any given year.

High – the chance of flooding from rivers or the sea is considered to be greater than or equal to 1 in 30 (3.3%) in any given year.

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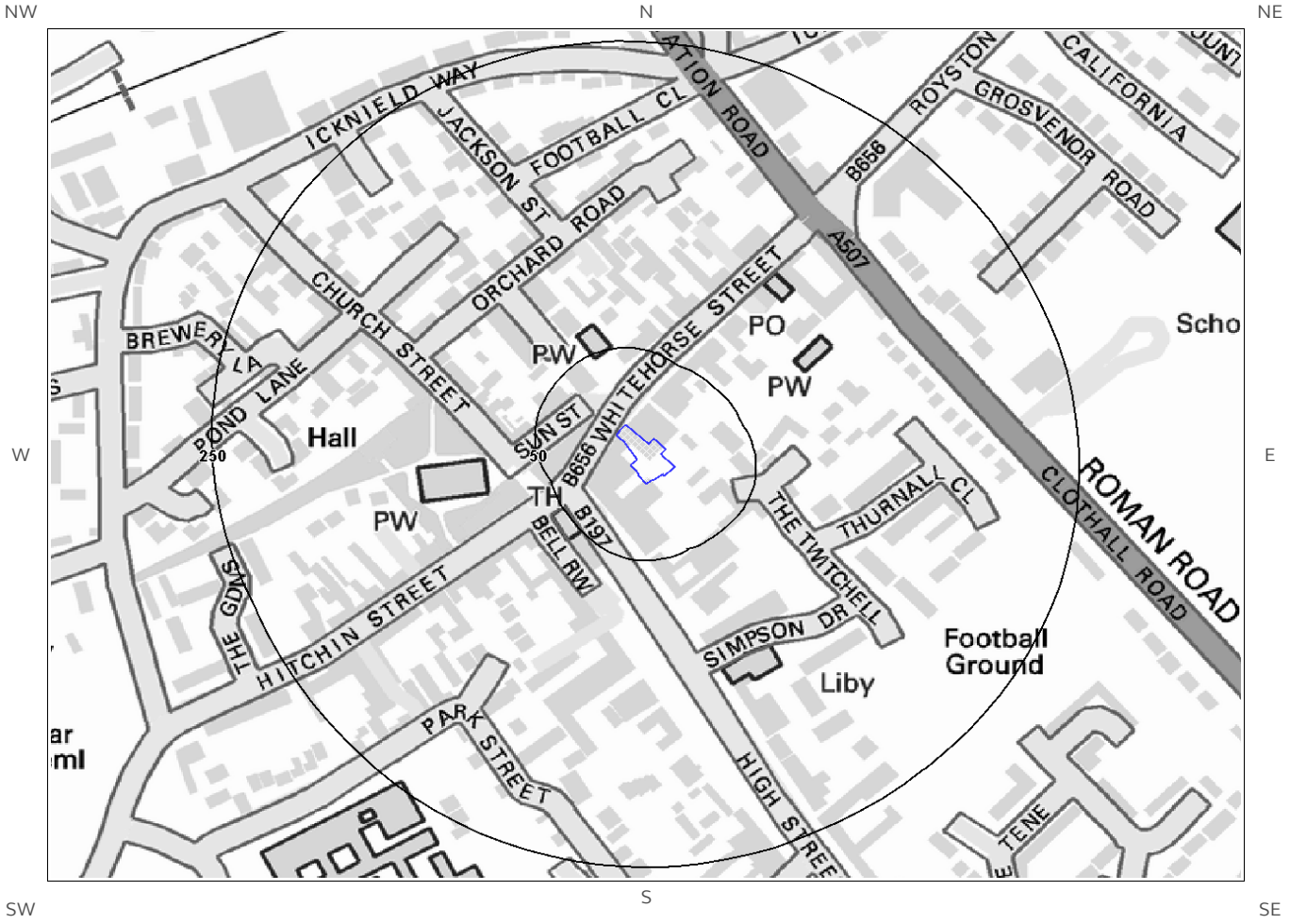
3. Environment Agency/Natural Resources Wales Historic Flooding Events Map



Environment Agency/Natural Resources Wales Historic Flooding Events legend

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Site Outline

125
250
Search Buffers (m)

Historic Flood Events

3. Environment Agency/Natural Resources Wales Historic Flooding Events

3.1 Historic Flood Outlines

Has the site or any area within 250m been subject to historic flooding as recorded by the Environment Agency/Natural Resources Wales? No

This database shows the individual footprint of every flood event recorded by the Environment Agency/Natural Resources Wales and previous bodies.

Any records found within the search radius are displayed on Map 3 – Historic Flooding Events.

Notes on Historic Flooding data:

Over 21,000 separate events are recorded within this database, dating back to 1947. This data is used to understand where flooding has occurred in the past and provides details as available. Absence of a historic flood event for an area does not mean that the area has never flooded, but only that the Environment Agency/Natural Resources Wales do not currently have records of flooding within the area. Equally, a record of a flood footprint in previous years does not mean that an area will flood again, and this information does not take account of flood management schemes and improved flood defences.

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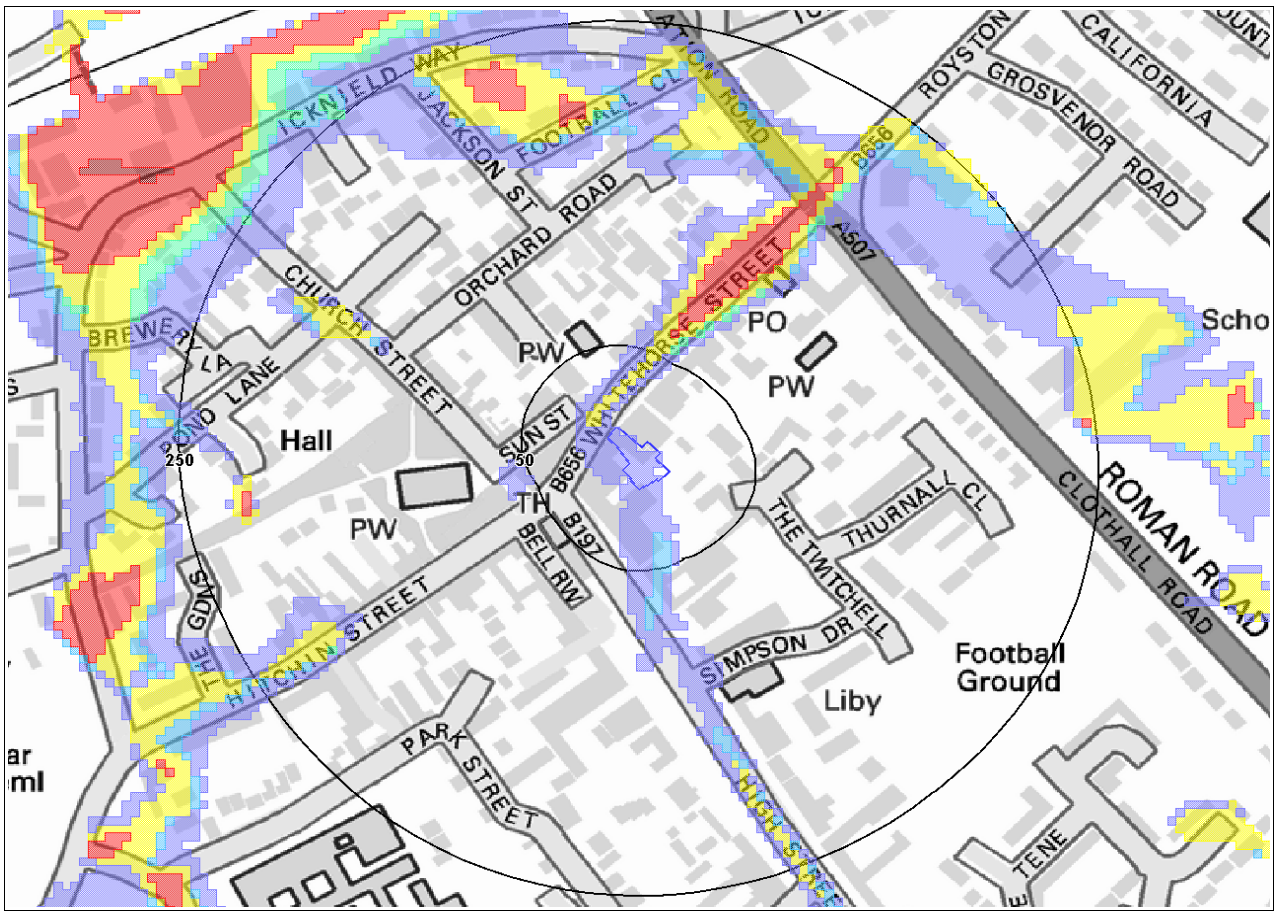
4. JBA Surface Water (Pluvial) Flood Map



JBA Surface Water (Pluvial) Flood Legend

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4. JBA Surface Water (Pluvial) Flooding

Surface Water (pluvial) flooding is defined as flooding caused by rainfall-generated overland flow before the runoff enters a watercourse or sewer. In such events, sewerage and drainage systems and surface watercourses may be entirely overwhelmed.

Surface Water (pluvial) flooding will usually be a result of extreme rainfall events, though may also occur when lesser amounts of rain falls on land which has low permeability and/or is already saturated, frozen or developed. In such cases overland flow and 'ponding' in topographical depressions may occur.

What is the risk of pluvial flooding at the study site? Low

Guidance: The site or an area in close proximity has been assessed to be at Low Risk of surface water (pluvial) flooding. This indicates that this area would be expected to be affected by surface water flooding in a 1 in 1000 year rainfall event to a depth of greater than 0.1m.

Flood data provided by JBA RISK MANAGEMENT LIMITED Copyright © JBA RISK MANAGEMENT LIMITED 2008-2019

The following pluvial (surface water) flood risk records within 50m of the study site are shown on the JBA Surface Water Flooding Map:

Distance	Direction	Risk
0.0	On Site	Low
6.0	NW	High
10.0	N	Low
15.0	N	Low
21.0	N	Low
27.0	NE	Low
27.0	S	Low to Moderate
34.0	NE	Low
36.0	SE	Low
49.0	SW	Low

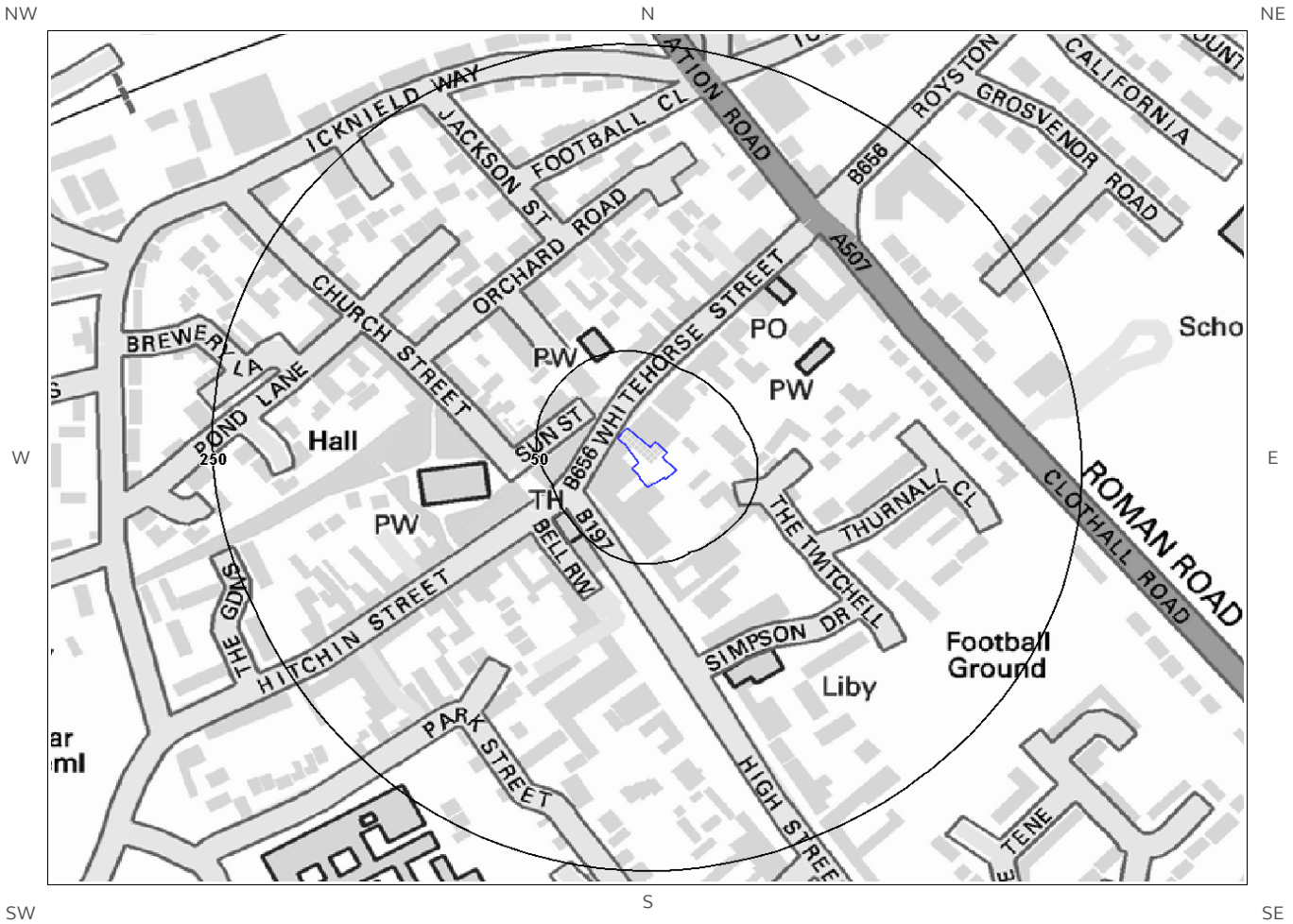
Notes on Surface water (Pluvial) Flooding data:

JBA Consulting surface water flood map identifies areas likely to flood following extreme rainfall events, i.e. land naturally vulnerable to surface water or "pluvial" flooding. This data set was produced by simulating 1 in 75 year, 1 in 200 year and 1 in 1000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though older ones may even flood in a 1 in 5 year rainstorm event.

The model provides the maximum depth of flooding in each 5m "cell" of topographical mapping coverage. The maps include 7 bands indicating areas of increasing natural vulnerability to surface water flooding. These are:-

- **Less than 0.1m in a 1 in 1000 year rainfall event** - Negligible
- **Greater than 0.1m in a 1 in 1000 year rainfall event** - Low
- **Between 0.1m and 0.3m in a 1 in 200 year rainfall event** – Low to Moderate
- **Between 0.3m and 1m in a 1 in 200 year rainfall event –** Moderate
- **Greater than 1m in a 1 in 200 year rainfall event** – Moderate to High
- **Between 0.1m and 0.3m in a 1 in 75 year rainfall event** – High
- **Between 0.3m to 1m in a 1 in 75 year rainfall event** - Significant
- **Greater than 1m in a 1 in 75 year rainfall event** – Highly Significant

5. Surface Water Features map



Surface Water Features legend

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Site Outline

Search Buffers (m)

Surface Water Feature (wider than 5m)

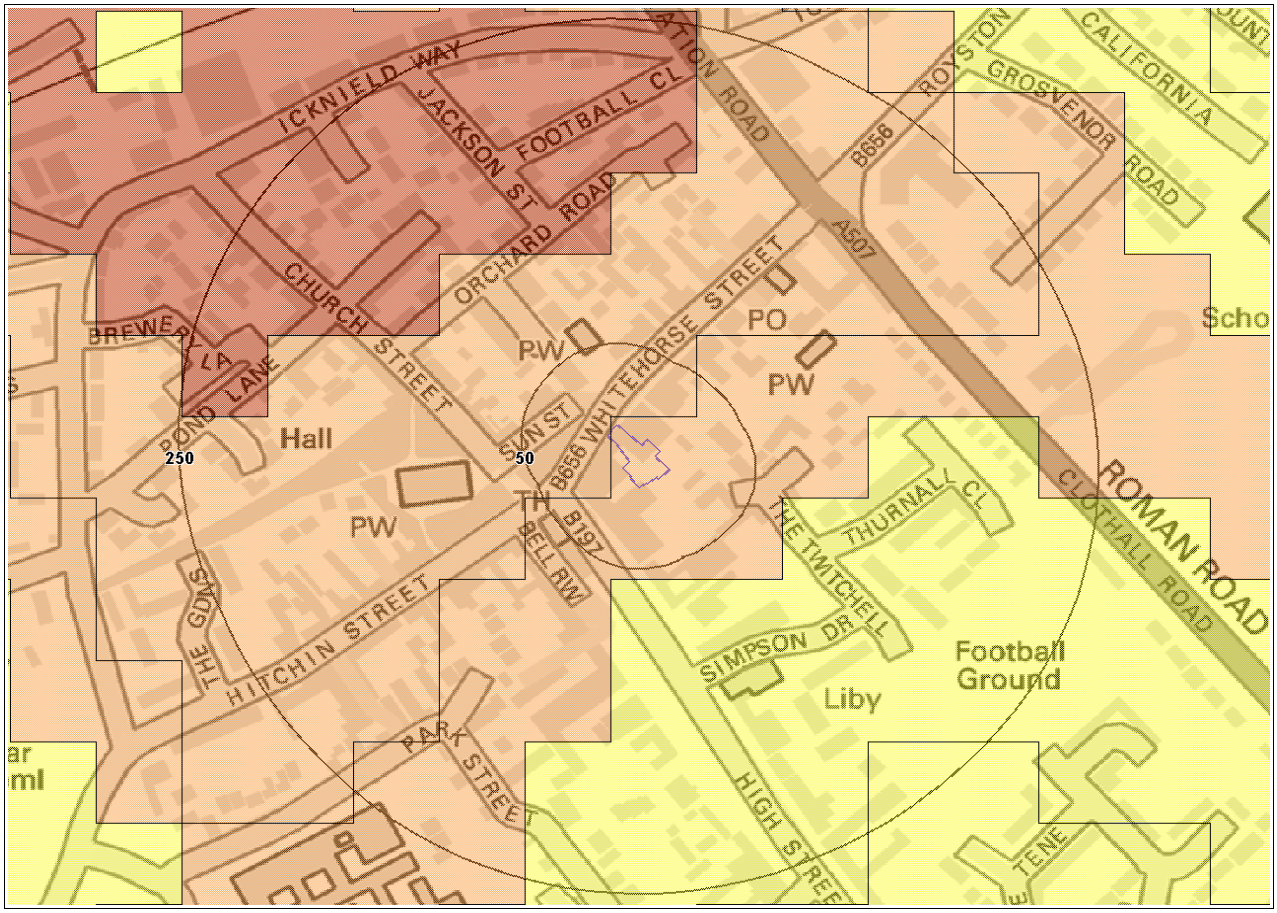
Surface Water Feature (narrower than 5m)

5. Surface Water Features

Are there any surface water features within 250m of the study site? No

Database searched and no data found.

6. BGS Groundwater Flooding Map



BGS Groundwater Flooding legend

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Site Outline

50
250
Search Buffers (m)

Limited potential for groundwater flooding to occur

Potential for groundwater flooding of property below ground level

Potential for groundwater flooding to occur at surface

6. Groundwater Flooding

6.1 Groundwater Flooding Susceptibility Areas

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

What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions? Potential for groundwater flooding of property below ground level

Does this relate to Clearwater Flooding or Superficial Deposits Flooding? Clearwater Flooding

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.

6.2 Groundwater Flooding Confidence Areas

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

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.

Notes on Groundwater Flooding data:

The BGS Susceptibility to Groundwater Flooding hazard dataset identifies areas where geological conditions could enable groundwater flooding to occur and where groundwater may come close to the ground surface.

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

The susceptibility data is suitable for use for regional or national planning purposes where the groundwater flooding information will be used along with a range of other relevant information to inform land-use planning decisions. It might also be used in conjunction with a large number of other factors, e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information, to establish relative, but not absolute, risk of groundwater flooding at a resolution of greater than a few hundred metres. The susceptibility data should not be used on its own to make planning decisions at any scale, and, in particular, should not be used to inform planning decisions at the site scale. The susceptibility data cannot be used on its own to indicate risk of groundwater flooding.

7. BGS Geological Indicators of Flooding

Are there any geological indicators of flooding within 250m of the study site? No

This dataset identifies the presence of superficial geological deposits which indicate that the site may be, or have been in the past, vulnerable to inland and/or coastal flooding. This assessment does not take account of any man-made factors such as flood protection schemes, and the data behind the report are purely geological.

Notes on BGS Geological Indicators of Flooding data:

The BGS Geological Indicators of Flooding (GIF) data set is a digital map based on the BGS Digital Geological Map of Great Britain at the 1:50,000 scale (DiGMapGB-50). It was produced by characterising Superficial (Drift) Deposits on DiGMapGB-50 in terms of their likely vulnerability to flooding, either from coastal or inland water flow. These Superficial Deposits are considered 'recent' in geological terms, most having been formed in the later parts of the Quaternary geological period (i.e. within the last few tens of thousands of years). Observations made during recent major inland and coastal flooding events have demonstrated that the erosion and deposition of these recent geological sediments have produced subtle topographical variations, resulting in landforms such as fluvial and coastal floodplains. The mapping of these landforms, in conjunction with the fluvial and/or coastal deposits that underlie them, has in turn determined the extent of previous coastal and inland flooding.

On this basis, the floodplains which are at greatest risk from flooding can be both visualised and defined by Superficial Deposits as depicted on geological maps. These include deposits such as river alluvium and lacustrine (lake) alluvium, as well as the First River Terrace or 'Floodplain terrace' (raised flat areas adjacent to or within floodplains, which represent the level of the floodplain prior to the most recent episode of down-cutting). Older and higher river terraces have been excluded as they lie outside the geologically defined floodplain. Areas at risk from coastal inundation are similarly characterised by a range of estuarine or marine deposits that include, for example, tidal flats.

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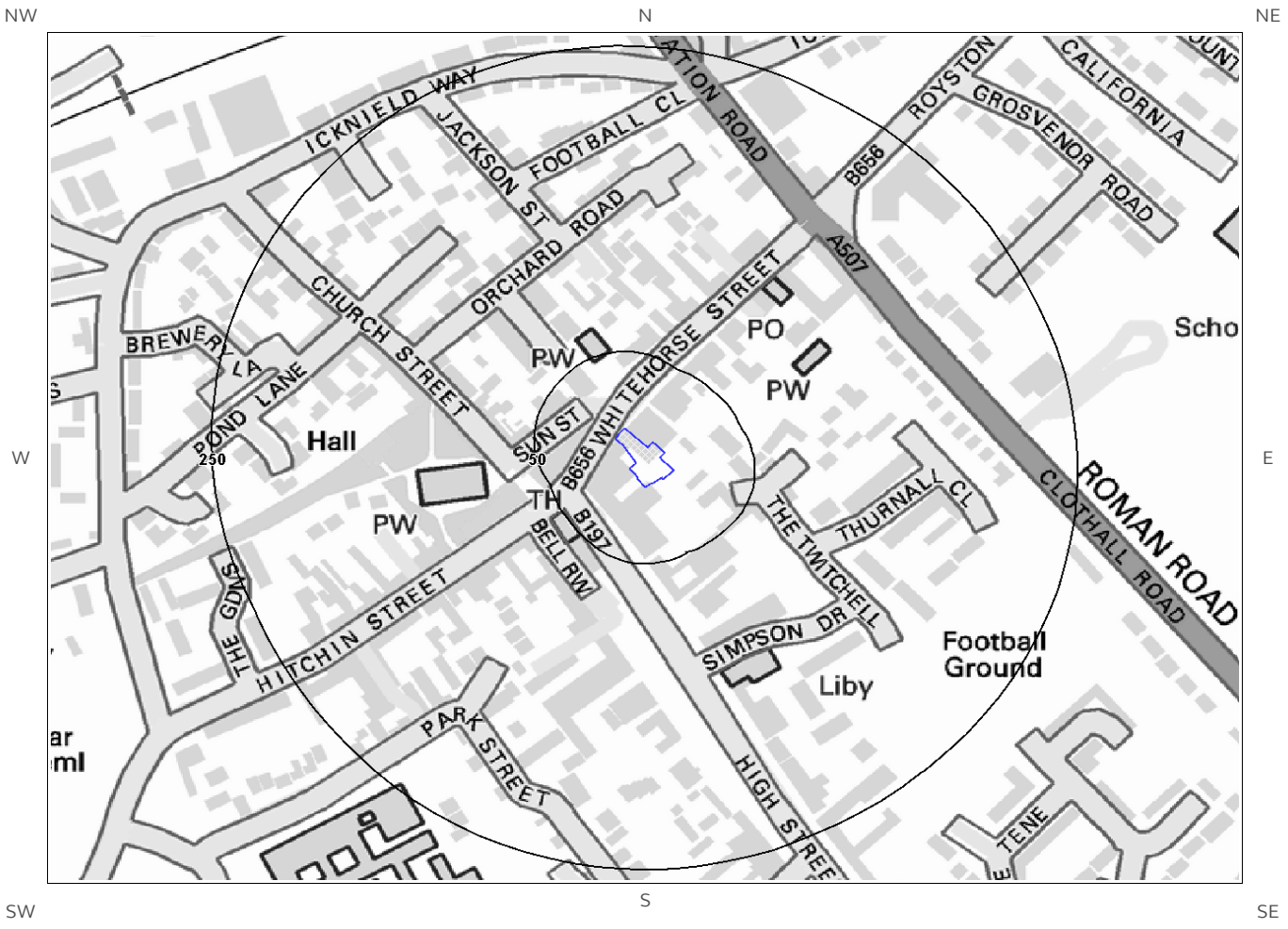
8. JBA Canal Break map



JBA Canal Break legend

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Ordnance Survey license 100035207.

Site Outline

50
250
Search Buffers (m)

Areas at risk from Canal Breach

8. JBA Reservoir and Canal Data

8.1 JBA Reservoir Failure Impact Modelling

Is the property located in an area identified as being at potential risk in the event of a reservoir failure? No

JBA consulting have modelled the flooding impact from 1,700 reservoirs in England and Wales, should there be a catastrophic failure of a reservoir wall or embankment. This data is not displayed on mapping.

Guidance: None required

Notes on Reservoir Failure Impact data:

This dataset identified areas that are most likely to flood following the sudden catastrophic failure of a reservoir and is provided by JBA Consulting. JBA has identified over 1,700 reservoirs that pose a risk to people and property. These maps identify properties that would flood in the unlikely event of the failure of the reservoir's dam or embankment. Empirical methods were used to predict the flow that would result from the failure which was then modelled onto high resolution Digital Terrain Models (DTM) using JBA's advanced 2D hydraulic modelling techniques. The model provides the maximum depth of flooding in each cell of the DTM.

8.2 JBA Canal Break Modelling

Is the property located within 500m of an area identified as being at potential risk in the event of a canal break? No

Database searched and no data found.

Notes on Canal Break modelling data

Canal failure mapping includes two types of failure:

- Breach of raised canal embankments - failure of the embankment due to weaknesses; these are typically caused by erosion or animal burrowing but can also arise from poor maintenance.
- Aqueduct failure - an aqueduct is where the canal passes over infrastructure such as roads, railways and subways, or over other canals and rivers. Failures of these are typically caused by the collapse of the underlying culvert.

A length of over 1,700km of canal covering England, Wales and Scotland was modelled. The canal modelling is restricted to the areas where LIDAR is available as the raised embankments are more defined in the LIDAR than in the Photogrammetry data. Each canal is categorised as part of the Merchant Shipping Notice (MSN 1776 (M)). The majority of the modelled canals are categorised as A, with a few exceptions, which fell under category B.

- Category A: narrow rivers and canals where the depth of water is generally less than 1.5m.
- Category B: wider rivers and canals where the depth of water is generally 1.5m or more and where the significant wave height could not be expected to exceed 0.6m at any time.
- Category C: tidal rivers and estuaries and large, deep lakes and lochs where the significant wave height could not be expected to exceed 1.2m at any time.
- Category D: tidal rivers and estuaries where the significant wave height could not be expected to exceed 2m at any time.

The canal map provides flood extent data only and show flooded areas with a depth greater than 0.1m.

Contact Details

Groundsure Helpline

Telephone: 08444 159 000
info@groundsure.com

British Geological Survey Enquiries

Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:**enquiries@bgs.ac.uk**
Web:**www.bgs.ac.uk**
BGS Geological Hazards Reports and general geological enquiries

Environment Agency

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

JBA Risk Management

South Barn
Broughton Hall
Skipton
BD23 3AE
Tel: 01756 799919

Ordnance Survey

Adanac Drive, Southampton
SO16 0AS

Tel: 08456 050505
Website: http://www.ordnancesurvey.co.uk/

Local Authority

Authority: North Hertfordshire District Council
Phone: 01462 474000
Web: http://www.north-herts.gov.uk/
Address: Council Offices, Gernon Road, Letchworth Garden Ci, Hertfordshire, SG6 3JF

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

Groundsure's Terms and Conditions can be viewed online at this link:
https://www.groundsure.com/terms-and-conditions-feb11-2019

Appendix G

Regulatory Authority Responses

NORTH HERTFORDSHIRE DISTRICT COUNCIL

Correspondence address:
North Hertfordshire District Council, PO Box 10613, Nottingham, NG6 6DW
Telephone: (01462) 474000
Text Phone: (01462) 474800
DX324201, Nottingham 59

19th February 2019

Thomas Parkinson	Our Ref:	CL2 CL/10687/19
Groundsure	Your Ref:	
Sovereign House,	Contact Officer:	David Carr
Church Street	Direct Line:	01462 474 263
Brighton, BN1 1UJ	Email:	david.carr@north-herts.gov.uk

Dear Thomas,

Re: CONTAMINATED LAND ENQUIRY – Rose and Crown Hotel, 8 Whitehorse Street, Baldock, SG7 6QN

Further to confirmation of your agreement to make a payment of £85.10 for a search of land contamination information relating to the above subject property I am writing to you with the findings of the research. The information provided has been compiled from the records held by the North Hertfordshire District Council Environmental Protection and Housing (EP) Team.

1) The current land use of the subject property is a disused hotel. There are no records of there having been any potentially contaminative activities at the subject property, which is understood to have been a public house since at least the late 1800s.

2) The Council has formulated a Contaminated Land Strategy to detail how it plans to meet its duty to inspect land in its area and identify contaminated land under Sections 78B and C of Part 2A of the Environmental Protection Act (EPA) 1990. The strategy is in the process of being implemented.

   The subject property is not currently registered as contaminated land pursuant to Part 2A of the EPA 1990 and there is currently no intention to take any action regarding the subject property pursuant to Part 2A of the Environmental Protection Act 1990. This is because there are no records available to the EP Team to suggest that the subject property has a land use history that is likely to have resulted in ground contamination.

   The North Hertfordshire District Council Contaminated Land Strategy can be viewed by searching for "contaminated land strategy" on www.north-herts.gov.uk.

3) There are no records of any site investigations or remedial works undertaken at the site or within the immediately neighbouring land.

4) In the event that the subject property is redeveloped for a more sensitive land use it would be expected that a Phase I Environmental Risk Assessment Report (desk study and site walk over) would be prepared to support such a redevelopment. Also, the possibility that subsequent stages of environmental risk assessment will be required, for example an intrusive site investigation and subsequent Phase II report, should not be ruled out.

   The following web-page outlines the expectations that NHDC has of developers who are planning the redevelopment of previously developed land.
   https://www.north-herts.gov.uk/home/environmental-health/pollution/contaminated-land/development-brownfield-sites-and-developments

5) There have been no actions taken pursuant to the Environmental Damage Regulations.

6) There is a record of a noise nuisance complaint about the subject property. The complaint was made in 2016 and was found not to be statutory noise nuisance.

7) There are no records of pollution or contamination issues, or gas emissions at the subject site. So there is not known to be a land contamination reason why the subject property may not be considered suitable for redevelopment with a more sensitive land use, such as housing. However, I would confirm that there is not a complete database of such information across the District, therefore an absence of information should not be taken as definitive proof of the absence of contamination.

8) There are no private water supplies on our Local Authority Private Water Supply Register within a 500m radius of the site.

9) New Look Dry Cleaners is located approximately 40m to the west of the subject property. There have been no compliance issues at this Part B premises and it is regularly inspected in line with Defra guidance.

10) There are no records of any landfilling activities either currently or historically on, or within 250m of, the subject site.

Without prejudice to the above I would confirm that if you are of the opinion that any past or present activity on the site may have caused contamination you should consider arranging a specialist site survey.

I trust that this information proves satisfactory, however, please get in contact with me on 01462 474263 if you have any questions.

Yours sincerely



David Carr
Environmental Protection Officer

Appendix H

Additional Information

AC&MS LTD
Asbestos Consultancy & Management Services

2742

Report Number: 20181220-GH1-C **Analyst:** Graham harris

SITE RISK ASSESSMENT SHEET

CLIENT	Leesafe Ltd
SITE ADDRESS	Rose & Crown Pub, 8 Whitehorse Street, Baldock, SG7 6QN

START DATE & TIME	20/12/2018 09-30				
NATURE OF WORK (Tick all that apply)	**BACKGROUND**	**CLEARANCE**	**REASSURANCE**	**PERSONAL**	**LEAKAGE**
		√			

This Assessment should be carried out in conjunction with AC&MS Ltd's generic risk assessments and the customer's site risk assessment.		
Has a site assessment already been completed during this visit?	Yes	If "**NO**", complete all Sections below
If "YES", have the risks changed?	No	If "**YES**", complete all Sections below

Are all trade specific tasks to be carried out adequately covered by AC&MS Ltd's generic risk assessments?
Please indicate by stating **Yes**, **No** or **N/A** in box. **Yes**
If answer is "NO" a separate risk assessment should be carried out by analyst prior to commencement of work.

RPE USED	**Full Face Powered Mask**	**Half Mask with P3 Filter**
	√	

Hazards Identified on Site	
Hazard Type	**Remedial Actions carried out**
N/A	**No risks outside the generic risk assessment**

Incidents that occurred: (If any)	

Job Specifics

Material Removed	AIB panels and AIB debris	**Must be completed**
Area Material Removed From	Removal of poor condition AIB panels below ground floor stair cupboard. Removal of AIB debris to second floor hallway.	**Must be completed**

SITE VISITORS DURING WORKS ***Signing this sheet is confirmation that you have read the RAMS***				
Name:	**Organisation:**	**Signature**	**Time on Site**	**Time off Site**

Analyst Signature:

AC&MS LTD
Asbestos Consultancy & Management Services

2742

Report Number: 20181220-GH1-C **Analyst:** Graham harris

Site Diary

All discussions & events that occur during attendance by AC&MS Ltd will be documented below:
09-30 Arrived on site spoke to the site supervisor and was shown around the site and areas for testing today
09-45 Two areas are to be tested today both areas are ready and stage 1 will be carried out on both enclosures
At the same time
10-00 Started stage 1 on enclosure 1 on the ground floor and enclosure 2 on the 1st and 2nd floor checking airlocks
Enclosure, plant, DCU and Waste/Transit routes, all operational clean and ready for visual inspection.
10-20 Completed stage 1 both enclosures passed.
10-25 Started stage 2 visual inspection of enclosure 1 on the ground floor under stairs, all notes for visual
Inspection on the certificate of reoccupation.
10-45 Completed stage 2 visual inspection enclosure 1 passed.
10-47 Started stage 3 air monitoring on enclosure 1 using pump SP9 and cowl GH1 running at 10 Lpm
10-55 Started stage 2 visual inspection on enclosure 2 on the 1st and 2nd floor, all notes for visual in the certificate
Of reoccupation.
11-17 Completed stage 2 visual inspection on enclosure 2 area passed.
11-18 Started stage 3 air monitoring on enclosure 2 using pumps SP10/SP10 and cowls GH2/GH3 both pumps
Running at 9 Lpm.
11-25 Started visual inspection of modular DCU MSS 007 all areas dry, dust and debris free with no waste bags
Present
11-30 DCU MSS 07 passed ready for air monitoring.
11-31 Started air monitoring on DCU MSS 07 using pump SP12 and cowl GH4 running at 8 Lpm.
11-40 Collected pump from enclosure 1 flow still running at 9 Lpm stopped pump and capped cowl and begun
Preparing slide
12-05 Read slide from enclosure 1 sample below the control limit <0.01 enclosure can now be removed.
12-10 Collected pumps from enclosure 2 flows on both pumps still running at 9 Lpm, stopped pumps and capped
Cowls
12-28 Read slides from enclosure 2 both samples below the control limit <0.01 enclosure 2 can now be removed.
12-30 Collected pump from DCU MSS 07 flow still running at 8 Lpm, stopped pump and capped cowl.
12-45 Read slide from DCU MM7 sample below control limit <0.01, DCU can now be dismantled.
13-20 Started stage 4 on enclosure 1 checking enclosure, airlocks, plant and waste have been removed, the
Waste/transit routes are clear of any obvious ACM's.
13-30 Stage 4 completed enclosure 1 passed area can now be reoccupied.
13-40 Started stage 4 on enclosure 2 checking enclosure, airlocks, plant and waste have been removed, the
Waste/transit routes are clear of and obvious ACM's
13-50 Stage 4 completed enclosure 2 passed area can now be reoccupied.
14-00 Left Site

Analyst Signature:

AC&MS LTD
Asbestos Consultancy & Management Services

2742

Report Number: 20181220-GH1-C **Analyst:** Graham Harris

Certificate of Reoccupation

Site Details:	Date: 20/12/2018	Start Time: 09-30
Asbestos removal contractors name and address	Leesafe Ltd, unit 15 International Business Park, Charfleets Road, Canvey Island, Essex, SS8 0SG	
Site address	Rose & Crown Pub, 8 Whitehorse Street, Baldock, SG7 6QN	
Location where work with Asbestos has taken place	Enclosure 1 on the ground floor under Stairs Staircase on CH	
Description of work undertaken	Removal of AIB Panels below Ground Floor of the property	

Has the contractor's supervisor confirmed that their inspection of the enclosure or work area is completed and satisfactory?	YES / ~~NO~~	Supervisors Signature	Analyst Signature

Stage 1 of 4 *Preliminary Check*

Plan of work checked and entire work area defined / agreed?	YES / ~~NO~~	COMMENTS: Demo works ongoing. General dust & debris in the surrounding areas from ongoing demo works. Stage 1 carried out on enclosure 1 & 2 at the same time as both areas ready and on the same waste/Transite route
Specified asbestos work completed?	YES / ~~NO~~	
Enclosure constructed to defined work area?	YES / ~~NO~~	
Is vision panel or CCTV present?	YES / ~~NO~~	
Airlocks intact and free of ACM waste / debris?	YES / ~~NO~~	
Air Extraction unit(s) fitted to enclosure and operating?	YES / ~~NO~~	
Hygiene facilities operating and clean?	YES / ~~NO~~	
Work area and surrounding areas free of ACM waste / debris?	YES / ~~NO~~	
Transit route free of ACM waste / debris?	YES / ~~NO~~	
Waste Route / Storage area free of ACM waste / debris?	YES / ~~NO~~	
STAGE 1 RESULT	**PASS / ~~FAIL~~**	Date & Time: 20/12/18 10-20

Assessment carried out by: Graham Harris Signature:

Stage 2 of 4 *Visual Inspection*

Have all waste bags, materials and unnecessary equipment been removed from airlock(s) / enclosure or work areas?	YES / ~~NO~~	COMMENTS: AIB panels removed. Plaster on walls very brittle all loose Pieces removed. Some paint residue on the floor
Have all visible traces of asbestos and other dust and debris been removed from airlock(s) / enclosure or work areas?	YES / ~~NO~~	
Has asbestos containing materials as specified in plan of work been encapsulated and / or removed?	YES / ~~NO~~	
Are ACM's remaining within the work area, but not part of the removal contract been suitably encapsulated?	~~YES~~ / ~~NO~~ / NA	

Visual Inspection Times:	Start Time :	10-25	Finish Time:	10-45	Duration:	20	mins
STAGE 2 RESULT		**PASS / ~~FAIL~~**	Date & Time:	20/12/18		10-45	

Inspection carried out by: Graham Harris Signature:

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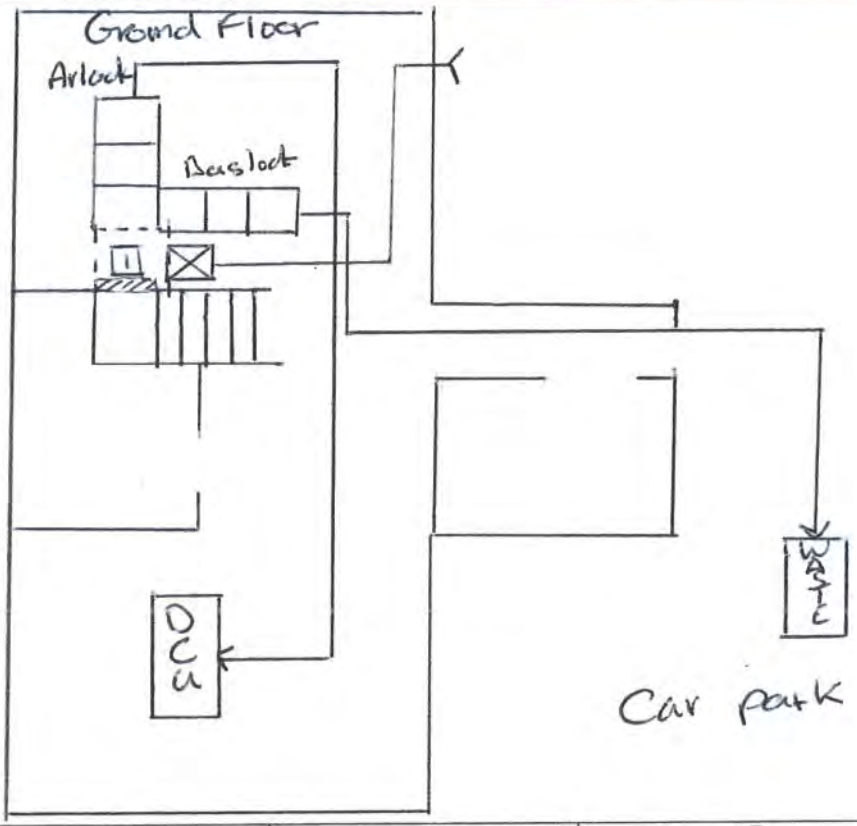
Report Number: 20181220-GH1-C **Analyst:** Graham Harris

Certificate of Reoccupation (continued)

Stage 3 of 4 *Clearance*

Plan of enclosure:



NB: Not to Scale

Dimensions of Enclosure:	Height - 2 m	Width - 1 m	Length - 2 m				
Approx. Floor Area of enclosure:	3 m^2	Approx. Volume of enclosure:	6 m^3				
KEY:	[1] = Pump N°	☒ = NPU	DCU = DCU	WASTE =Skip			
⟷ = Transit/Waste Route	/// = ACM Location	▭ = Airlock/ Baglock	N/A =Other (Specify)				

Visual inspection Satisfactory	YES / ~~NO~~	NPU off and capped	YES / ~~NO~~
Enclosure intact	YES / ~~NO~~	Dust / debris removed	YES / ~~NO~~
Interior of enclosure dry	YES / ~~NO~~	Original floor surface left uncovered	YES / ~~NO~~
Evidence of lockdown spray	YES / NO	Other (specify)..... N/A	~~YES~~ / ~~NO~~

Dust Disturbance (Brushing)	Duration: 1 min 30 mins
	In accordance with the HSG 248 current version.
AIR TEST RESULTS : PASSED / ~~FAILED~~	

THE ENCLOSURE OF WORK AREA CAN / ~~CANNOT~~ BE DISMANTLED

STAGE 3 RESULT	**PASS / ~~FAIL~~**	Date & Time:	20/12/18 12-05
Inspection carried out by: Graham Harris		Signature:	

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Report Number: 20181220-GH1-C **Analyst:** Graham Harris

Certificate of Reoccupation (continued)

Stage 4 of 4 *Reoccupation*		
Work area equipment and / or enclosure dismantled	YES / ~~NO~~	COMMENTS: Demo works ongoing. Covered dust & debris in surrounding area from ongoing demo works. WASTE/TRANSIT route clear at Stage 4.
Work area and surrounding areas free of ACM waste / debris	YES / ~~NO~~	
Transit route free of ACM waste / debris	YES / ~~NO~~	
Waste Route / Storage area free of ACM waste / debris	YES / ~~NO~~	
Have all ACM as detailed in plan of work been completely removed or encapsulated as required	YES / ~~NO~~	
STAGE 4 RESULT	**PASS / ~~FAIL~~**	Date & Time: 20/12/18 13-30

THE AREA CAN / ~~CANNOT~~ BE RETURNED TO NORMAL OCCUPATION

Inspection carried out by: Graham Harris Signature:

All stages of this four stage clearance process were undertaken in accordance to the HSG 248 The Analyst Guide & AC&MS Ltd's documented in-house procedures for Air Sampling, Fibre Counting & Four Stage Clearance Procedure 06.

REASSURANCE AIR TESTS	**~~PASS / FAIL~~ / NA**
Detail why required and where undertaken:	N/A

Reoccupation Certificate Issued By:	Graham Harris	Issue Date:	20/12/18
Name: Graham Harris		Contractors Name:	TOM STEWART
Title: Analyst		Title:	Supervisor
Signature:		Signature:	

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International Business Park
Charfleets Road
Caney Island
Essex
SS8 0SG

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Four Stage Clearance Photographs

Enclosure 1



Photo Description:	Enclosure/Airlocks



Photo Description:	Removed AIB panel



Photo Description:	Brittle Walls



Photo Description:	Removed Enclosure

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Report Number: 20181220-GH1-C **Analyst:** Graham Harris

Certificate of Reoccupation

Site Details:	Date: 20/12/2018	Start Time: 09-30
Asbestos removal contractors name and address	Leesafe Ltd, unit 15 International Business Park, Charfleets Road, Canvey Island, Essex, SS8 0SG	
Site address	Rose & Crown Pub, 8 Whitehorse Street, Baldock, SG7 6QN	
Location where work with Asbestos has taken place	Enclosure 2 on the 1st & 2nd floor	
Description of work undertaken	Removal of AIB debris from staircase and adjacent area on the 1st & 2nd floors	

Has the contractor's supervisor confirmed that their inspection of the enclosure or work area is completed and satisfactory?	YES / ~~NO~~	Supervisors Signature	Analyst Signature

Stage 1 of 4 *Preliminary Check*		
Plan of work checked and entire work area defined / agreed?	YES / ~~NO~~	COMMENTS: Demo Works ongoing General dust & debris in the surrounding areas from ongoing demo works. Stage 1 carried out on enclosure 1 & 2 at the same time as both areas ready and on the same waste/Transit routes
Specified asbestos work completed?	YES / ~~NO~~	
Enclosure constructed to defined work area?	YES / ~~NO~~	
Is vision panel or CCTV present?	YES / ~~NO~~	
Airlocks intact and free of ACM waste / debris?	YES / ~~NO~~	
Air Extraction unit(s) fitted to enclosure and operating?	YES / ~~NO~~	
Hygiene facilities operating and clean?	YES / ~~NO~~	
Work area and surrounding areas free of ACM waste / debris?	YES / ~~NO~~	
Transit route free of ACM waste / debris?	YES / ~~NO~~	
Waste Route / Storage area free of ACM waste / debris?	YES / ~~NO~~	
STAGE 1 RESULT	**PASS / ~~FAIL~~**	Date & Time: 20/12/18 10-20
Assessment carried out by: Graham Harris		Signature:

Stage 2 of 4 *Visual Inspection*		
Have all waste bags, materials and unnecessary equipment been removed from airlock(s) / enclosure or work areas?	YES / ~~NO~~	COMMENTS: AIB debris removal, wallpaper ripped all loose pieces removed Paint residue on the floor board and Staircase, walls in very poor condition.
Have all visible traces of asbestos and other dust and debris been removed from airlock(s) / enclosure or work areas?	YES / ~~NO~~	
Has asbestos containing materials as specified in plan of work been encapsulated and / or removed?	YES / ~~NO~~	
Are ACM's remaining within the work area, but not part of the removal contract been suitably encapsulated?	~~YES~~ / NO / NA	

Visual Inspection Times:	Start Time : 10-55	Finish Time: 11-17	Duration: 22 mins
STAGE 2 RESULT	**PASS / ~~FAIL~~**	Date & Time: 20/12/18 11-17	
Inspection carried out by: Graham Harris		Signature:	

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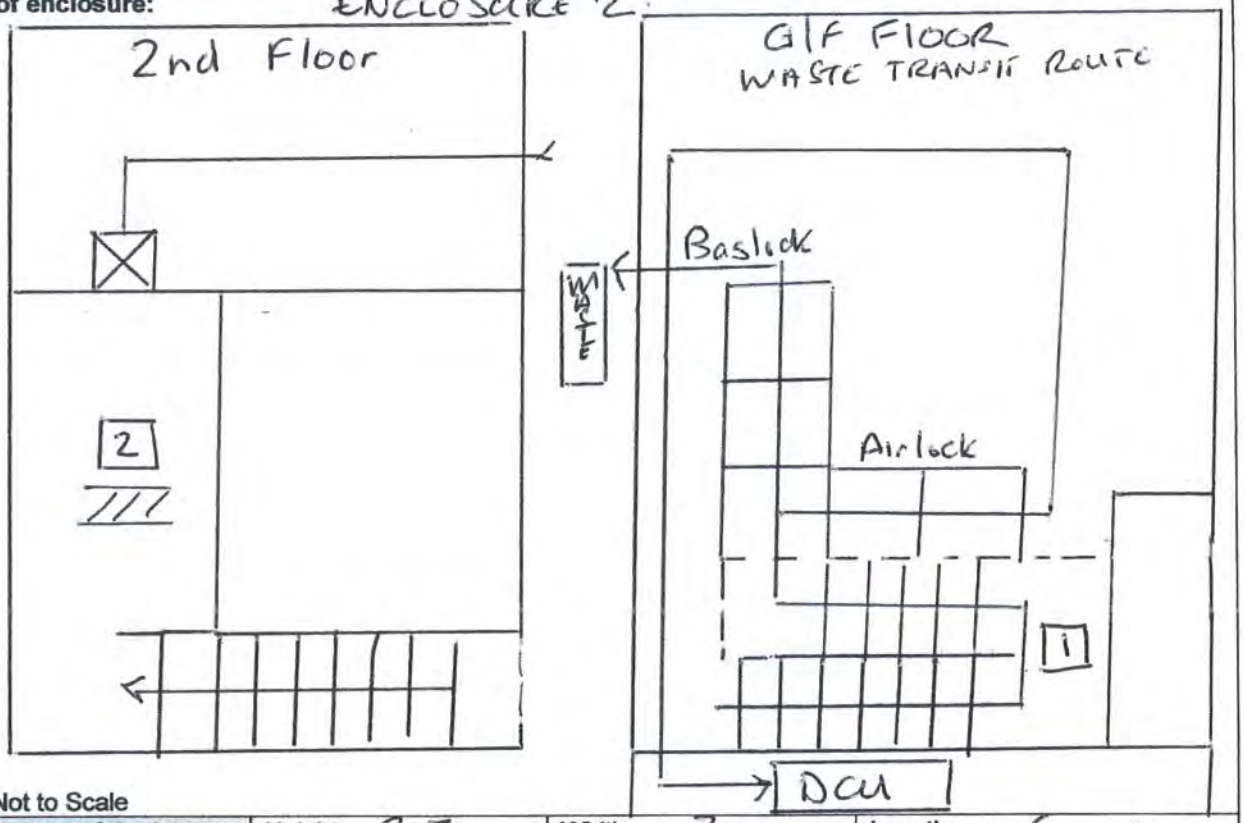
Report Number: 20181220-GH1-C **Analyst:** Graham Harris

Certificate of Reoccupation (continued)

Stage 3 of 4 *Clearance*

Plan of enclosure: ENCLOSURE 2



NB: Not to Scale

Dimensions of Enclosure:	Height - 2.4 m	Width - 3 m	Length - 6 m		
Approx. Floor Area of enclosure:	18 m²	Approx. Volume of enclosure:	43.2 m³		

KEY:	1 2 = Pump N°	= NPU	DCU = DCU	WASTE = Skip
= Transit/Waste Route	= ACM Location	= Airlock/ Baglock	N/A =Other (Specify)	

Visual inspection Satisfactory	YES / ~~NO~~	NPU off and capped	YES / ~~NO~~
Enclosure intact	YES / ~~NO~~	Dust / debris removed	YES / ~~NO~~
Interior of enclosure dry	YES / ~~NO~~	Original floor surface left uncovered	YES / ~~NO~~
Evidence of lockdown spray	~~YES~~ / NO	Other (specify).....	YES / ~~NO~~

Dust Disturbance (Brushing)	Duration: 3 mins
	In accordance with the HSG 248 current version.
AIR TEST RESULTS : PASSED / ~~FAILED~~	

THE ENCLOSURE OF WORK AREA CAN / ~~CANNOT~~ BE DISMANTLED

STAGE 3 RESULT	**PASS / ~~FAIL~~**	Date & Time:	20/12/18 12-35
Inspection carried out by: Graham Harris		Signature:	

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Report Number: 20181220-GH1-C **Analyst:** Graham Harris

Certificate of Reoccupation (continued)

Stage 4 of 4 *Reoccupation*		
Work area equipment and / or enclosure dismantled	YES / ~~NO~~	COMMENTS: Demo works ongoing. General dust & debris in the surrounding areas from ongoing demo works. waste/transit route clear at time of Stage 4
Work area and surrounding areas free of ACM waste / debris	YES / ~~NO~~	
Transit route free of ACM waste / debris	YES / ~~NO~~	
Waste Route / Storage area free of ACM waste / debris	YES / ~~NO~~	
Have all ACM as detailed in plan of work been completely removed or encapsulated as required	YES / ~~NO~~	
STAGE 4 RESULT	**PASS / ~~FAIL~~**	Date & Time: 20/12/18 17:50

THE AREA CAN / ~~CANNOT~~ BE RETURNED TO NORMAL OCCUPATION

Inspection carried out by: Graham Harris Signature:

All stages of this four stage clearance process were undertaken in accordance to the HSG 248 The Analyst Guide & AC&MS Ltd's documented in-house procedures for Air Sampling, Fibre Counting & Four Stage Clearance Procedure 06.

REASSURANCE AIR TESTS	**~~PASS / FAIL~~ / NA**
Detail why required and where undertaken:	N/A

Reoccupation Certificate Issued By:	Graham Harris	Issue Date:	20/12/18
Name: Graham Harris		Contractors Name: TOM STEWART	
Title: Analyst		Title: Supervisor	
Signature:		Signature:	

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Four Stage Clearance Photographs

Enclosure 2



Photo Description:	Enclosure/Airlocks

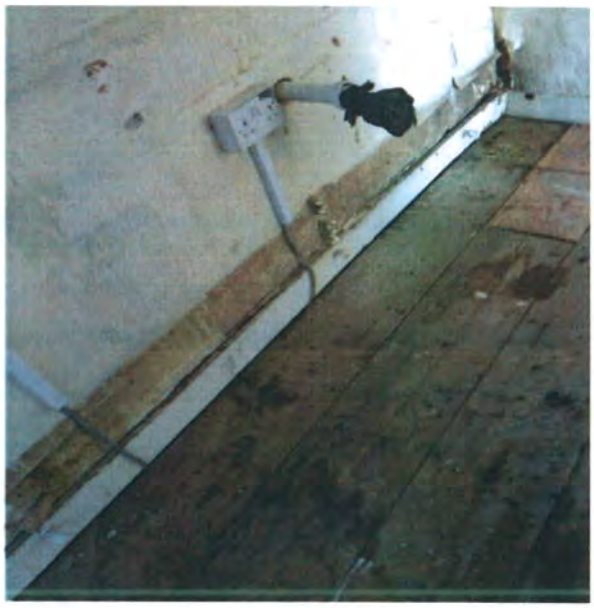

Photo Description:	Removed AIB debris



Photo Description:	Sealed Voids/enclosure



Photo Description:	Removed Airlocks/Enclosure

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Report Number: 20181220-GH1-C **Analyst:** Graham Harris

Airborne Fibre Sampling & Analysis Report

Client:	Leesafe Ltd		
Address:	Unit 15 International business Park, Charfleets Road, Canvey Island, Essex SS8 0SG		
Full site address:	Rose & Crown Pub, 8 Whitehorse Street, Baldock, SG7 6QN		
Sample analysed in: (base, satellite, mobile lab)	Mob Lab	Reg. No: (if mobile lab)	EX67 XNT

Time on Site:	09-30
Time off Site:	14-00
Total filters:	4
Confirmed by: (sign)	

MICROSCOPE USED	NPL TEST SLIDE NUMBER	BAND 5 VISIBLE	STAGE MICROMETER NUMBER	GRATICULE DIAMETER	TALLY COUNTERS	FLOW METER NUMBER	EXPOSED FILTER AREA	BAROMETER & THERMOMETER NUMBER	TIMER NUMBER	SITE TEMP		SITE PRESSURE	
MS6	7618	Yes	SM3	100	TC 5/6	F5	21	3	SW3	9	°C	1003	mbar

LOCATION (Refer to Plan)	SAMPLE NUMBER	START TIME	FINISH TIME	DURATION (Minutes)	PUMP NUMBER	COWL NUMBER	INITIAL FLOW (L/Min)	FINAL FLOW (L/Min)	MEAN FLOW (L/Min)	VOLUME (L)	NUMBER OF FIBRES	NUMBER OF FIELDS	ACTUAL CALC. F / ML	REPORTABLE F / ML	TYPE OF TEST
	FB												Field Blank		FB
1 G/Floor	GH1	10-47	11-41	54	SP9	GH1	9	9	9	486	3	200	0.001	<0.01	C
2 S/Floor	GH2	11-18	12-12	54	SP10	GH2	9	9	9	486	9	200	0.004	<0.01	C
3 S/Floor	GH3	11-18	12-12	54	SP11	GH3	9	9	9	486	12	200	0.005	<0.01	C

KEY: B = Background, C =Clearance, R = Reassurance, P = Personal, L = Leakage, FB = Field Blank

SAMPLED BY:	Graham Harris	SIGNATURE:	

This is to certify that the Sampling and Analysis has been carried out in accordance with the current version of the HSE's, HSG 248 "The Analyst Guide". Any deviations from these methods are shown in the comments section of the report. AC&MS Ltd does not, at any time, undertake the practice of fibre discrimination.

NOTE: UNCERTAINTY OF MEASUREMENT(*) The lower limit of accurate measurement (fibre level, f/ml) of the above method is stated in HSG248 as 0.01 f/ml. When sample volumes of 480 litres and 200 graticule fields are examined the result may be expressed as <0.01 f/ml. For sample volumes below 480 litres and graticule field counts below 200, the lower limit of accurate measurement will be higher.(Note: We have not inspected areas of the property / structure which are covered, unexposed or inaccessible and we are, therefore, unable to report that any such part of the property / structure is free from asbestos.

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CLEARANCE TEST REPORT FOR HYGIENE UNIT

Client:	Leesafe Ltd
Address:	Unit 15 International Business Park, Charfleets Road, Canvey Island, Essex, SS8 0SG
Full site address:	Rose & Crown Pub, 8 Whitehorse Street, Baldock, SG7 6QN

THOROUGH VISUAL INSPECTION

Was all debris, contaminated clothing & waste bags removed?	Yes	Duration of brush disturbance:	Yes
Was all surfaces free from debris and settled dust?	Yes	Is N.P.U. off & sealed:	Yes
Duration of visual inspection:	5 mins	Manufacturers Serial No:	MSS 7
Area / Volume of shower end and dirty end:	9 m^3	Was shower section clean & dry:	Yes

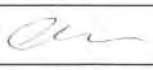
Sample analysed in: (base, satellite, mobile lab)	Mobile lab	Reg. No: (if mobile lab)	EX67 XNT

MICROSCOPE USED	NPL TEST SLIDE NUMBER	BAND 5 VISIBLE	STAGE MICROMETER NUMBER	GRATICULE DIAMETER	TALLY COUNTERS
MS6	7618	Yes	SM3	100	TC 5/6
FLOW METER NUMBER	**EXPOSED FILTER AREA**	**BAROMETER & THERMOMETER NUMBER**	**TIMER NUMBER**	**SITE TEMP**	**SITE PRESSURE**
F5	21	3	SW3	8	1003

LOCATION (Refer to Plan)	SAMPLE No.	PUMP No.	COWL No.	START TIME	FINISH TIME	FLOW RATE (L/min)	VOLUME (Litres)	No. of FIBRES	No. of FIELDS	ACTUAL CALC. F / ML	REPORTABLE F / ML
Shower	GH4	SP12	GH4	11-31	12-31	8	480	1	200	0.001	<0.01
D/end											

TYPE OF TEST	CLEARANCE		
Result:	**PASSED**	Date & Time:	20/12/2018 12-45

THE HYGIENE UNIT CAN BE REMOVED FROM SITE

Hygiene Unit Clearance Certificate Issued By:	Graham Harris
Issue Date:	20/12/2018
Name:	Graham Harris
Title:	Analyst
Signature:	

This is to certify that the Sampling and Analysis has been carried out in accordance with the current version of the HSE's HSG 248 & our in-house procedures.

AC&MS Ltd does not, at any time, undertake the practice of fibre discrimination.

NOTE: UNCERTAINTY OF MEASUREMENT
The lower limit of accurate measurement (fibre level, **f/ml**) of the above method is stated in **HSG248** as **0.01 fibres/ml**. When sample volumes of 480 litres or 200 graticule fields are examined the result may be expressed as <0.01 f/ml. For sample volumes below 480 litres and graticule field counts below 200, the lower limit of accurate measurement will be higher.
(Note: We have not inspected areas of the property / structure which are covered, unexposed or inaccessible)

Hazardous Waste Regulations 2005 AC&MS/012
Consignment note

Environment Agency

PRODUCER'S / HOLDER'S / CONSIGNOR'S COPY (Delete as appropriate)

PART A – Notification details

1. Consignment Note Code: LEESAF/0051 8

2. The waste described below is to be removed from:
ROSE & CROWN, 8 WHITEHORSE STREET, BALDOCK, HERTS, SG7 6QN

3. Premises Code (where applicable): LEESAF

4. The waste will be taken to:
FROST & WOODS, 14 SANDHURST, CANVEY ISLAND, SS8 0SA

5. The waste producer was (if different from 2):
LEESAF LTD
Unit 15, International Business Park, Charfleets Road,
Canvey Island, Essex SS8 0SG
Tel: 01268 729209 / 01268 729213
Email: admin@leesafe.co.uk

PART B – Description of the waste

1. The process giving rise to the waste was: ASBESTOS REMOVAL
2. SIC for the process giving rise to the waste: 45.25
3. Waste Details

Description of Waste	List of waste (EWC code)	Qty. (kg)	The chemical/biological components of the waste and their concentrations		Physical form	Hazard code(s)	Cont. size
			Component	Concentration (% or mg/kg)			
AIB	170601	320	AMOSITE	35%	SOLID	HP5/7	32
FLOOR TILES	170605	40	CHRYSOTILE	3%	SOLID	HP5/7	4
BITUMEN	170605		CHRYSOTILE	3%	SOLID	HP5/7	

Additional carriage information

EWC code	UN Identification number(s)	Proper shipping name(s)	UN class(es)	Packing groups	Special handling requirements
170601	UN 2212	AMPHIBOLE ASBESTOS	9	II	RPE / PPE
170605	UN 2590	CHRYSOTILE ASBESTOS	9	III	RPE / PPE
170605	UN 2590	CHRYSOTILE ASBESTOS	9	III	RPE / PPE

PART C – Carrier's Certificate

(If more than one carrier is used, please attach schedule for subsequent carriers. If schedule of carriers is attached, tick here ☐)

I certify that today I collected the consignment and that the details in A2,A4 & B3 are correct and I have been advised of any specific handling requirements.

Where this note comprises part of a multiple collection, the round number & collection number are: /

1. Carrier name: T. Stewart
On behalf of: LEESAFE LTD
Unit 15, International Business Park, Charfleets Road,
Canvey Island, Essex SS8 0SG
Tel: 01268 729209 / 01268 729213
Email: admin@leesafe.co.uk
2. Carrier Registration No.: CB/ZN5211YF
3. Vehicle registration: CN68 CJE

Signature:

Date: 21/12/18 Time: 0900

PART D – Consignor's Certificate

I certify that the information in A, B and C has been completed and is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) Regulations 2011.

1. Consignor name: T. Stewart
On behalf of: LEESAFE LTD
Unit 15, International Business Park, Charfleets Road,
Canvey Island, Essex SS8 0SG
Tel: 01268 729209 / 01268 729213
Email: admin@leesafe.co.uk

Signature:

Date: 21/12/18 Time: 1100

PART E – Consignee's Certificate

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)
170601	320	A	D15
170605	40	A	D15

1. I received this waste at the address given in 4A on: Date: 21/12/18 Time: 1150

2. Vehicle registration no.: CN68 CJE

Name: D MAHONEY
On behalf of (name, address, postcode, phone, fax and email):

3. Where waste is rejected please provide details:

I certify that waste permit/exempt waste operation no(s)
EPR/DB3304TZ
authorises the management of the waste described in B at the address given in A4.

Signature:

Date: 21/12/18 Time: 1150

Where the consignment forms part of a multiple collection, as identified in Part C, I certify that the total number of consignments forming the collection are: