A PHASE I DESK STUDY FOR A PROPOSED RESIDENTIAL DEVELOPMENT AT:

8 - 10 FAIR GREEN, GLEMSFORD, SUFFOLK

CLIENT:	**Entendior Limited**
AGENT:	**NWA Planning Limited**
REFERENCE:	**MSH/20.026/PhaseI**
DATE:	**24 January 2020**

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1. INTRODUCTON

A F Howland Associates Limited was instructed by Entendior Limited (the "Client") to carry out a Phase I Desk Study on land at 8 -10 Fair Green, Glemsford, Suffolk (Drawing 20.026/PhaseI/01). It is proposed to redevelop the site for residential end use.

This report presents archive historical and environmental information and gives details of a walkover survey undertaken to confirm the current condition of the site and surrounding area. An environmental database report was commissioned to provide background information and is included in Appendix B. The information is used to develop a preliminary conceptual model using the source-pathway-receptor principle and provides a qualitative risk assessment of land contamination.

The report has been carried out in general accordance with accepted best practice and methodologies (BSI, 2017) (DEFRA and EA, 2004) and was prepared for the sole and exclusive use of the Client and its advisors. Other parties using the contained information do so at their own risk and any duty of care to those parties is specifically excluded subject to copyright as detailed below.

2. SITE LOCATION

The site was located at 8 to 10 Fair Green, Glemsford; approximately 8 km north west of Sudbury. It was centred at National Grid reference 582873, 248347 and was at an elevation of approximately 70 m above Ordnance Datum (aOD).

3. GEOLOGY

Geological mapping (BGS, 2020) indicates the site to be underlain by a bedrock geology of the Lewes Nodular, Seaford, Newhaven and Culver Chalk Formations with overlying superficial deposits of the Lowestoft Formation.

The British Geological Survey archive of borehole records was searched but none were found nearby.

4. HYDROLOGY

The bedrock geology of Chalk is classified as a principal aquifer and the overlying Lowestoft Formation is designated secondary (undifferentiated layers) aquifer status and is of intermediate leaching potential. The site is located within zone 3 of a source protection zone but the nearest groundwater abstraction is over 900 m from the site. The pressure surface of the groundwater is considered to be at a level of approximately 40 m aOD or about 30 m from surface (Institute of Geological Sciences, 1981).

There are no surface water features on or adjacent to the site. There are no current surface water abstractions within 2 km of the site.

There are no potable water abstractions within 2 km of the site.

The site is not at risk from flooding from rivers or the sea and is in an area considered to have limited potential for groundwater flooding.

5. REVIEW OF HISTORICAL ARCHIVES

A review of historical maps and other archive sources has been undertaken to identify potentially contaminating land uses on site and in the surrounding area. The maps are provided in Appendix C and a summary is presented below. Potentially contaminative historical land uses are also listed within the environmental database report. In this instance there are no additional historical potentially contaminative land uses to those identified below within a distance that would influence the site.

During the late 19th century the site lay within a cluster of buildings centred around *Fair Green* and *Broadway*. At this time the site comprised three adjoining properties within a short row of five terraced houses. There were some outbuildings shown within the rear gardens and the rear garden to the end terrace appeared to be entirely occupied by buildings. In the early part of the 20th century little change to the site is seen on the mapping until the 1950s when the three terraced buildings were shown as one building with a large extension covering the rear gardens.

More recent map editions showed very little change to the site. Aerial images[1] dating from 2000 show the site to have a layout consistent with the present-day arrangement. The images showed a slightly different arrangement of structures on site to that seen on the most recent historical mapping. The aerial images showed the single storey extension at the rear as being extended along its western edge and a small outbuilding/structure mapped in the far south west corner of the site is not seen.

An internet search has revealed a couple of photographs of the site. The first dated 1916[2] shows the terrace on the right hand side of the image. The front gardens of which were enclosed by a low brick wall with metal railings. The end terrace had a sign up on the front of the building suggesting that it had a commercial or retail use. This was confirmed by a second, undated, photo[3] which showed the end terrace as having a bay fronted shop window with goods displayed, although it was not possible to determine the nature of these goods.

Adjacent to the site, the historical mapping showed little change throughout the 20th century to the north and east with *Broadway* in the north and the adjoining terraced cottage to the east. Land adjoining to the south was a field, then allotment gardens and finally residential. Land to the west was also in residential use although the original thatched cottage, as seen within the historical photographs, has since been demolished and replaced within modern housing.

Within the wider surrounding area and during the latter part of the 19th century, a foundry and silk factory lay about 100 m to the north east and 125 m to the north respectively. The foundry later became a timber yard and then an engineering works. The silk factory later became a horsehair factory. Both sites have since been redeveloped with housing. The 1957/58 map edition shows a motor vehicle repair garage approximately 180 m to the north west, the site of which has also been redeveloped but as retail premises.

6. HAZARDOUS GAS SOURCES

Building Research Establishment report BR211 (BRE, 2015) indicates that the site is not within an area where specific protection from radon gas is required.

[1] Google Earth
[2] http://www.foxearth.org.uk/glemsfordPictures/Glemsford%20Post%20Office%201916.jpg
[3] http://www.foxearth.org.uk/glemsfordPictures/GlemsfordVillage.jpg

There are no current or historical landfills listed within 1 km of the site nor are there any other waste sites within 500 m of the site.

The environmental database report identifies potentially infilled land approximately 180 m to the north east of the site. This is in reference to earthwork features within an area of open space set within the housing development of *Schoolfield.* There is no mapping evidence that this was an historic working or pit and it is presumed to be a landscape feature of the housing development. Part of this open space has since been built on with additional housing. This potentially 'infilled land' is not considered to be a source of ground gas. All other potentially infilled land is over 450 m from the site.

7. CURRENT LAND USES SURROUNDING THE SITE

There are five current industrial sites listed within 250 m of the site. The closest of which relates to an engineering firm located approximately 30 m away at a residential address. The other sites are electrical substations, sewage services and the site of the former silk mill.

8. WALKOVER SURVEY

A walkover survey was carried out on the 22 January 2020 to enable identification of the current land uses and other relevant details not otherwise identified from the archival information. The pertinent details are provided on drawing 20.026/PhaseI/02 in Appendix D.

The site was accessed from Broadway in the north. It comprised a two-storey brick-built building with a single storey brick and concrete block built extension to the side and rear. It had been most recently used as a convenience store with living accommodation above and storage/warehousing to the rear. The building was empty except for a large refrigerator within the storage area.

It was enclosed mainly by timber fencing and a brick wall along the western boundary, a concrete retaining feature and timber fencing along the southern boundary, the road in the north and adjoined by a residential property to the east. The building was constructed on a level platform but there was a general fall in ground level in the surrounding area from north to south.

Land to the front of the building was surfaced with asphalt. Wooden decking had been constructed over asphalt along the side of the building. In the far south west corner, a raised decking feature had been constructed upon some concrete blocks which were possibly the remains of the structure seen on the historical mapping. A small metal shed lay adjacent to the main building within north west corner of the site. The remainder of the site was occupied by the shop and storage area/warehouse which had concrete floor slabs.

There was no evidence of above or below ground fuel storage tanks. Nor any hazardous or non-hazardous chemical stores.

No potential asbestos containing materials (ACM) were seen during the walkover. An asbestos survey was undertaken by others in 2005 and reported no asbestos found (Ian Haugh Associates Limited, 2005).

9. DISCUSSION OF ENVIRONMENTAL ISSUES

It is proposed to redevelop the site for residential end use. It is understood that demolition of part of the building will take place to provide space for garden areas.

A review of historical mapping and other archives reveals that there have been buildings on site since at least the late 19th century. The existing building was formed from three adjoining terraced properties together with a mid-20th century single-storey extension across the former rear gardens. Historical use of the site was residential, but the end terrace has had a retail or commercial use since at least the early 20th century. It was most recently used a convenience store with adjoining storage area/warehouse and living accommodation above. Prior to the construction of the single-storey extension, various outbuildings were shown within the rear gardens of the three cottages and alongside the end terrace. The use of which is unknown.

There is no evidence that past use of the site has introduced significant contamination but general use of the site, with the various phases of buildings, may have introduced general contamination of the near surface soils.

No significant off-site potential sources of contamination, current or historical have been identified.

The site is underlain by superficial deposits classified as a secondary aquifer with soils of intermediate leaching potential whilst the underlying bedrock geology is a principal aquifer. The site lies within zone 3 of a source protection zone but there are no groundwater abstractions nearby nor are there any surface water features on site or nearby. The groundwater is considered sensitive and the surface water less so.

No significant sources of ground gas have been identified.

10. PRELIMINARY CONCEPTUAL MODEL

Following a review of the archival information and the walkover survey a Preliminary Conceptual Model was devised to determine the risk to appropriate targets from the potential contaminating activities assessed for the site.

The Preliminary Conceptual Model collates the evidence gained and establishes the potential linkages that may exist under the principle of "source-pathway-receptor". This is presented in Table 1 below.

A risk category[4] is determined for the potential linkages and an assessment made of risk and the significance of that risk from professional judgement. Where appropriate, further work is recommended to assess whether the potential linkages are realised.

[4] Risk assessment classification included as Appendix E

Source of Contamination	Pathway	Receptor	Probability and Reasoning	Consequence and Reasoning	Risk Classification
Potentially contaminated soils from historical and current use	Direct contact, inhalation, ingestion	Human end-users	**Likely** – potential for localised contamination from general use of the site	**Moderate** – human end-users and garden areas proposed	**Moderate Risk**
		Construction workers	**Likely–** potential contamination sources identified but unlikely to be significant enough to impact construction workers	**Mild –** short term exposure but can be controlled by use of PPE and suitable hygiene practices	**Low/Moderate Risk**
	Percolation and migration of leachate / mobile contaminants	Groundwater	**Low likelihood** – potential contamination sources identified but expected to be localised and not widespread	**Medium** – principal and secondary aquifers underlay the site. Site within zone 3 of source protection zone	**Low/Moderate Risk**
		Surface water		**Mild –** no nearby surface water features identified	**Low Risk**
	Direct Contact	Water supply pipes	**Unlikely** – contamination that could permeate plastic water supply pipes unlikely	**Medium –** human receptors	**Low Risk**
		Buried concrete	**Unlikely** – no evidence for significant aggressive chemicals	**Medium –** robust receptor	**Low Risk**
Potentially infilled land on and off site	Gas migration and accumulation in structures	Human end-users	**Unlikely** – no evidence of significant infilled ground on site. Potential off-site sources of ground gas are considered insignificant or ground gas migration unlikely	**Severe** - acute risk to potential end users	**Low/Moderate Risk[1]**
		Structures			**Low/Moderate Risk[1]**
Radon Gas		Human end-users	**Unlikely** – site outside of radon affected area	**Medium** - chronic risk to human end users	**Low Risk**

Notes: [1] a moderate/low risk has been determined based on the probability and consequence however, based on the lack of a ground gas source the risk is likely to be low or negligible.

Table 1 – Preliminary Conceptual Site Model

11. CONCLUSIONS AND RECOMMENDATIONS

1. A Phase I Desk Study was undertaken for the redevelopment of 8 – 10 Fair Green, Glemsford, Suffolk. A residential end use is proposed.
2. The site has most recently been used as a convenience store with living accommodation above. It is currently vacant. Past use of the site includes both residential and retail.
3. No significant sources of contamination have been identified with the current or past use of the site. However, past use of the site may have introduced localised general contamination.
4. Geological mapping indicates the site to be underlain by a bedrock geology of Chalk with overlying superficial deposits of the Lowestoft Formation.
5. The superficial deposits are classified as a secondary aquifer and are of intermediate leaching potential. The underlying bedrock geology is classified as a principal aquifer. The site lies within zone 3 of a source protection zone but there are no groundwater abstractions nearby nor are there any surface water features on site or nearby.
6. No significant sources of ground gas have been identified and a low or negligible risk from ground gas is concluded.
7. Human end-users have the potential to be exposed to contaminated soils within proposed garden areas. A moderate risk is concluded.
8. There is a low likelihood that significant mobile or leachable contamination is present that could pose a threat to the groundwater or surface water and a low to moderate or low risk is concluded respectively.
9. It is unlikely that contamination exists on site that would have the potential to permeate water supply pipes or be aggressive to concrete and a low risk is concluded.
10. An asbestos survey has been previously carried out at the site and reported no asbestos found.
11. It is recommended that soil sampling is carried out across the site, focusing on the proposed high exposure garden areas. An assessment for the presence of contamination that may pose a risk to end-users and controlled waters should be included.

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A F HOWLAND ASSOCIATES
24 January 2020

APPENDIX A: REFERENCES

BRE. 2015. BRE 211. Radon: Guidance on protective measures for new buildings. British Research Establishment. Bracknell.

BRITISH GEOLOGICAL SURVEY. 2020. http://mapapps.bgs.ac.uk/geologyofbritain/home.html.

BSI. 2017. BS 10175:2011+A2:2017. Code of practice for investigation of potentially contaminated Sites. British Standards Institution. London.

DEFRA AND THE ENVIRONMENT AGENCY. 2004. Model Procedures for the Management of Land Contamination. Contaminated Land Report 11. Environment Agency, Bristol.

IAN HAUGH AND ASSOCIATES LIMITED. 2005. Hazardous material (asbestos) survey and visual building survey report. Report reference IHA/Spar/ABS/06

INSTITUTE OF GEOLOGICAL SCIENCES. 1981. Hydrogeological Map of Southern East Anglia. 1:125,000 Scale. IGS, London.

APPENDIX B: ENVIRONMENTAL DATABASE REPORT

Reference GS-6562965

Enviro Insight

Address:	**8-10, FAIR GREEN, GLEMSFORD, CO10 7PH**
Date:	**20 Jan 2020**
Reference:	**GS-6562965**
Client:	**A F Howland Associates**

NW N NE

W E

SW S SE

Aerial Photograph Capture date:	09-Apr-2017
Grid Reference:	582873,248347
Site Size:	0.0360ha

Report Reference: GS-6562965
Client Reference: BJH_20_026

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Overview of Findings

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

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	0	15	14
1.2 Additional Information – Historical Tank Database	0	0	0	4
1.3 Additional Information – Historical Energy Features Database	0	0	5	8
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	4	3
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	0	2	10

Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	0
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	0	0
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	2	2
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	1	0

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

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

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

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	1	4
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	2	0	0
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	1	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	0	0	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

	0-500m					
	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	2	12	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Enviroment Agency Zone 2 floodplains within 250m of the study site	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	Limited potential
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	4
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	6
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	0
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	1	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	2
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards

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

Section 10: Mining

10.1 Coal mining areas within 75m of the study site	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.

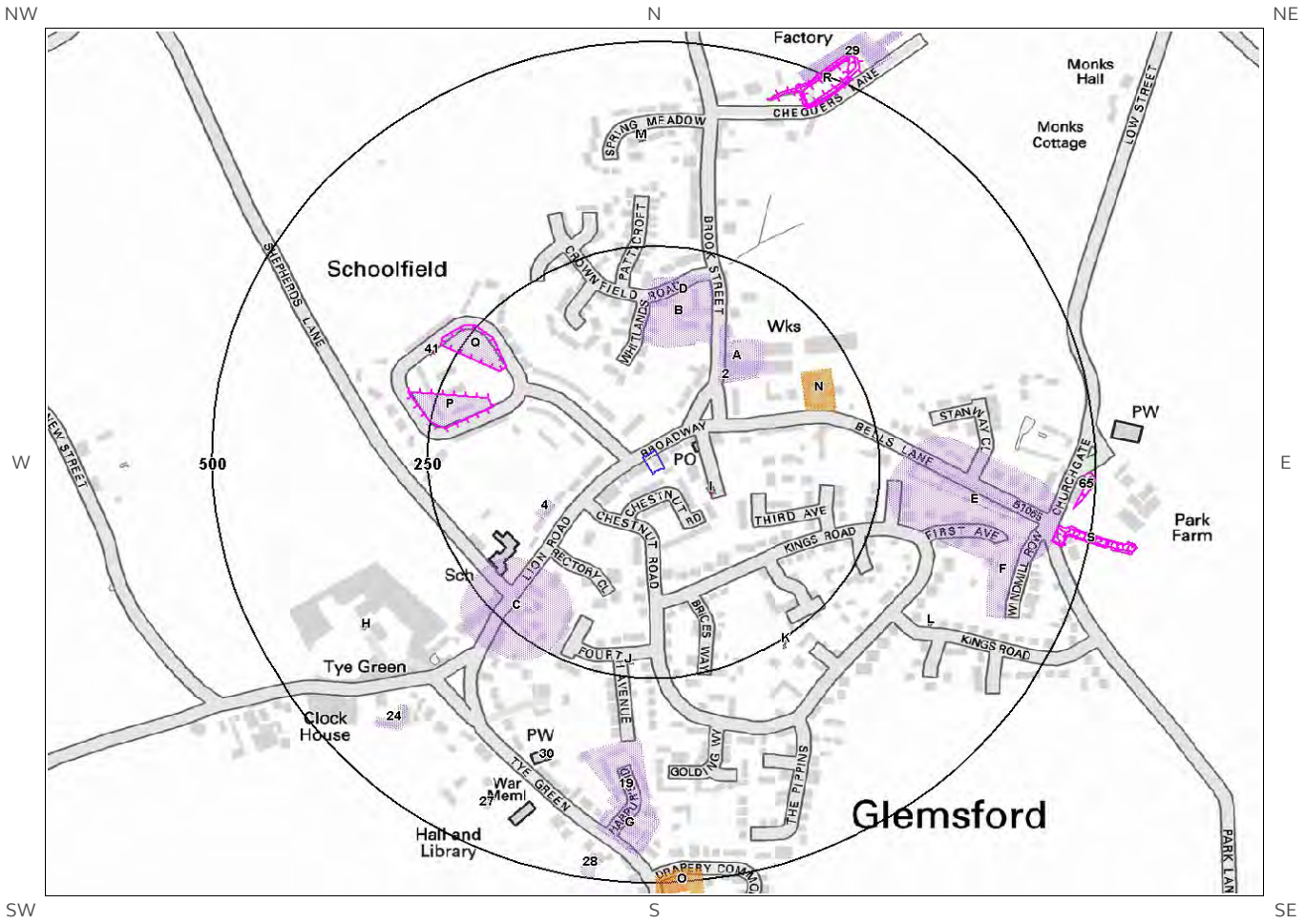
Note: Maps

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



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

Site Outline

Industrial Land Use

Potentially Infilled Land

250
500
Search Buffers (m)

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: 29

ID	Distance [m]	Direction	Use	Date
1A	110	NE	Timber Yard	1902
2	113	NE	Unspecified Foundry	1884
3A	117	NE	Unspecified Works	1967
4	117	SW	Police Station	1954
5B	126	N	Horse Hair Factory	1927
6B	126	N	Disused Silk Factory	1902
7B	126	N	Silk Factory	1884
8C	169	SW	Smithy	1902
9C	169	SW	Smithy	1884
10D	174	N	Unspecified Factory	1954
11D	174	N	Unspecified Commercial/Industrial	1967
12P	185	W	Unspecified Pit	1977
13Q	193	NW	Unspecified Heap	1977
14C	207	SW	Malthouse	1902
15C	207	SW	Malthouse	1884
16E	261	E	Unspecified Factory	1954
17E	282	E	Unspecified Factory	1967
18E	283	E	Unspecified Factory	1977
19	323	S	Unspecified Factory	1954
20G	394	S	Horse Hair Factory	1927
21F	396	E	Horse Hair Factory	1884
22F	396	E	Horse Hair Factory	1927
23F	396	E	Horse Hair Factory	1902
24	401	SW	Omnibus Depot	1967
25G	405	S	Silk Factory	1884
26G	405	S	Disused Silk Factory	1902
27	444	SW	Unspecified Tank	1954
28	467	S	Smithy	1902
29	481	N	Unspecified Factory	1977

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: 4

ID	Distance (m)	Direction	Use	Date
30	366	S	Unspecified Tank	1926
31H	380	SW	Unspecified Tank	1958
32H	381	SW	Unspecified Tank	1984
33H	382	SW	Unspecified Tank	1984

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: 13

ID	Distance (m)	Direction	Use	Date
34I	54	SE	Electricity Substation	1984
35I	56	SE	Electricity Substation	1972
36I	56	SE	Electricity Substation	1984
37J	229	S	Electricity Substation	1984
38J	229	S	Electricity Substation	1984
39K	252	SE	Electricity Substation	1982
40K	257	SE	Electricity Substation	1984
41	273	NW	Electricity Substation	1984
42L	359	SE	Electricity Substation	1984
43L	359	SE	Electricity Substation	1972
44M	378	N	Electricity Substation	1984
45M	378	N	Electricity Substation	1984
46M	378	N	Electricity Substation	1972

1.4 Additional Information – Historical Petrol and Fuel Site Database

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

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

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

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

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 7

ID	Distance (m)	Direction	Use	Date
47N	178	NE	Garage	1984
48N	178	NE	Garage	1957
49N	178	NE	Garage	1972
50N	181	NE	Garage	1982
51O	484	S	Garage	1958
52O	485	S	Garage	1990
53O	495	S	Garage	1993

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: 12

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

ID	Distance(m)	Direction	Use	Date
54P	185	W	Unspecified Pit	1977
55Q	193	NW	Unspecified Heap	1977
56R	450	N	Pond	1927
57R	450	N	Pond	1884
58R	450	N	Pond	1902
59R	455	N	Pond	1954
60R	456	NE	Pond	1967
61S	458	E	Ponds	1954
62S	459	E	Ponds	1884
63S	459	E	Ponds	1927
64S	459	E	Ponds	1902

65	476	E	Pond	1954

2. Environmental Permits, Incidents and Registers Map

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

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

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

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site: 0

Database searched and no data found.

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations: 0

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site: 0

Database searched and no data found.

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site: 0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site: 0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

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

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

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

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	195	SW	582733.0 248196.0	Incident Date: 26-Aug-2003 Incident Identification: 184884.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
2	198	NE	583056.0 248439.0	Incident Date: 31-May-2002 Incident Identification: 82235.0 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
3	326	NE	583045.0 248640.0	Incident Date: 18-Feb-2002 Incident Identification: 59136.0 Pollutant: Sewage Materials Pollutant Description: Storm Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
4	497	NE	583085.0 248813.0	Incident Date: 26-Sep-2001 Incident Identification: 33124.0 Pollutant: Organic Chemicals/Products Pollutant Description: Dyes and Inks	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

0

Database searched and no data found.

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

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

Database searched and no data found.

3. Landfill and Other Waste Sites Map

Site Outline

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.

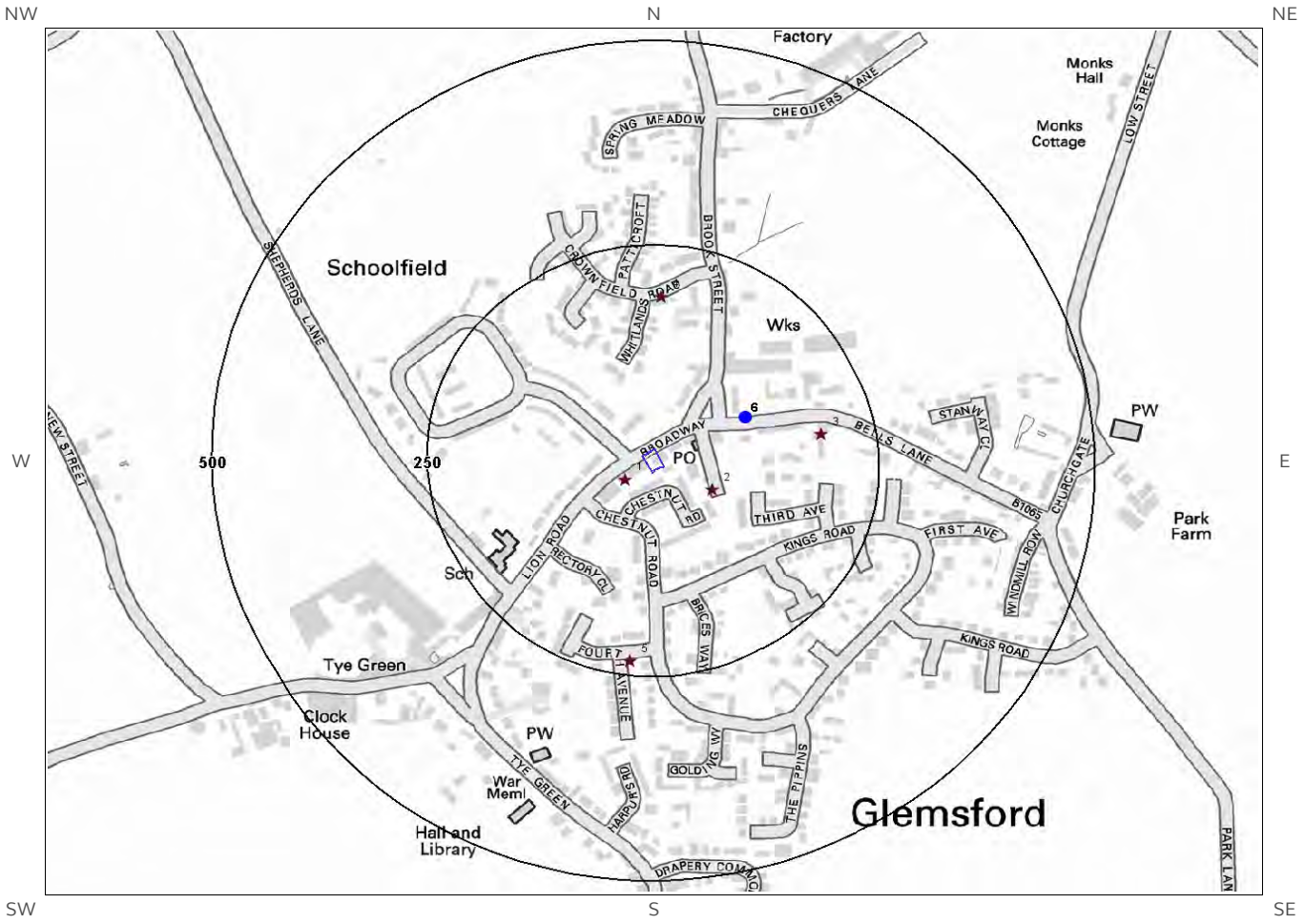
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

1

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

ID	Distance (m)	Direction	NGR	Details	
1	555	SW	582400 248040	Site Address: Unit 1, Clockhouse Estate, Cavendish Lane, Glemsford, Suffolk, CO10 7PZ Type: Clinical Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PRO001 EPR reference: EA/EPR/VP3095NH/S002 Operator: N A Barker & M G Barker Waste Management licence No: 70758 Annual Tonnage: 0.0	Issue Date: 06/01/1994 Effective Date: - Modified: - Surrendered Date: Feb 22 2008 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Property Care Group Correspondence Address: -

4. Current Land Use Map



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: 5

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	32	SW	H D Sourcing Ltd	582838 248326	2, Fair Green, Glemsford, Sudbury, Suffolk, CO10 7PH	Chemical Engineers	Engineering Services
2	62	SE	Electricity Sub Station	582939 248314	Suffolk, CO10	Electrical Features	Infrastructure and Facilities
3	186	E	Direct-tech Solutions	583065 248382	13, Bells Lane, Glemsford, Sudbury, Suffolk, CO10 7QA	Sewage Services	Personal, Consumer and Other Services
4	187	N	Silk Factory	582879 248550	Suffolk, CO10	Unspecified Works Or Factories	Industrial Features
5	232	S	Electricity Sub Station	582844 248104	Suffolk, CO10	Electrical Features	Infrastructure and Facilities

4.2 Petrol and Fuel Sites

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

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

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
6	112	NE	582978 248402	OBSOLETE	Bells Lane, Glemsford, Sudbury, Suffolk, CO10 7QA	Not Applicable	Obsolete

4.3 National Grid High Voltage Underground Electricity Transmission Cables

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

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

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

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

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

Database searched and no data found.

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5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

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

5.2 Superficial Ground and Drift Geology

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

Lex Code	Description	Rock Type
LOFT-DMTN	LOWESTOFT FORMATION	DIAMICTON

5.3 Bedrock and Solid Geology

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

Lex Code	Description	Rock Type
LCCK-CHLK	LEWES NODULAR CHALK FORMATION, SEAFORD CHALK FORMATION, NEWHAVEN CHALK FORMATION AND CULVER 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

Site Outline

250
500
Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

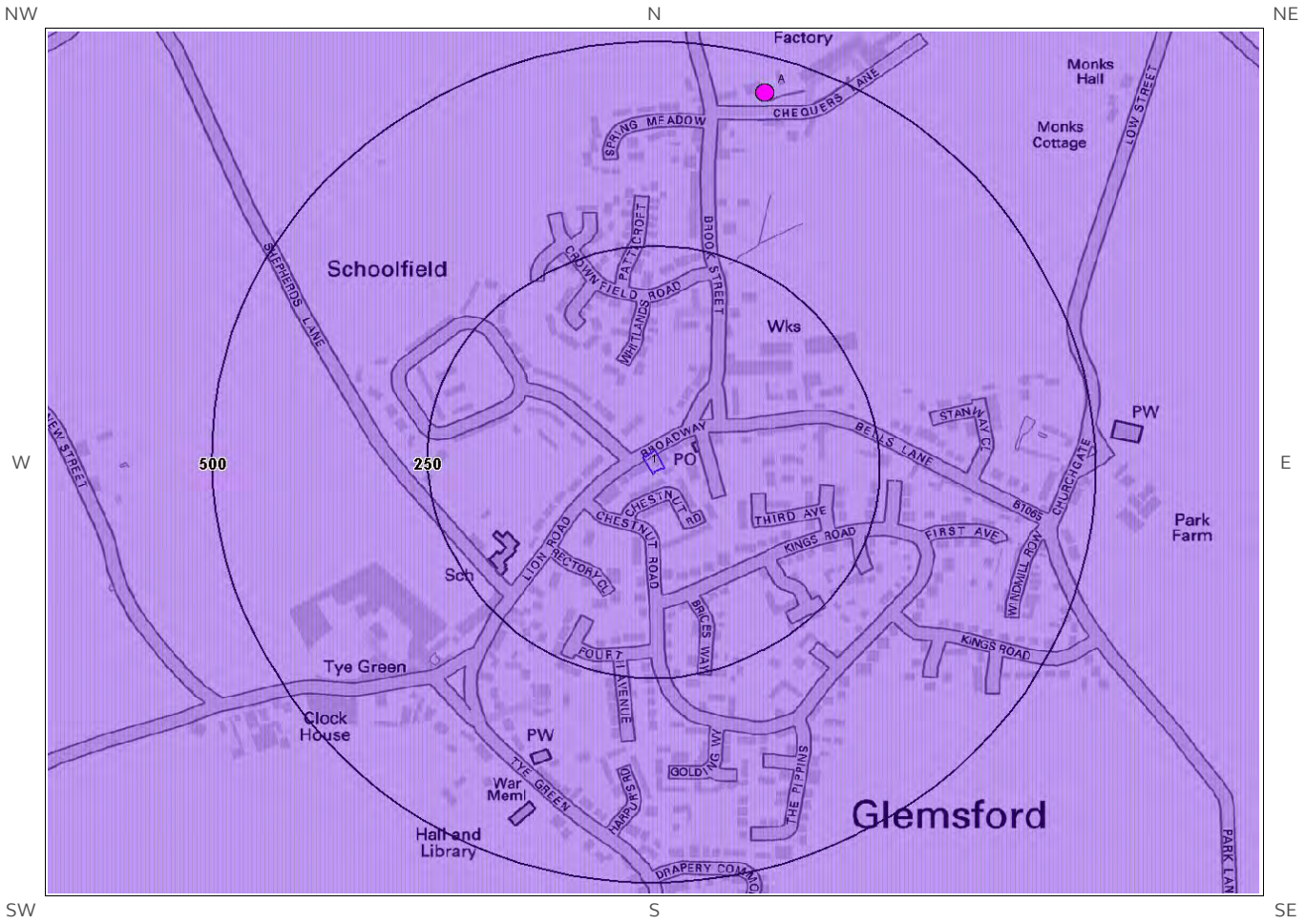
Secondary (B) Aquifer - Lower Permeability Layers

Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

6b. Aquifer Within Bedrock Geology and Abstraction Licences



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

Site Outline

250
500
Search Buffers (m)

Source Protection Zone 1 - Inner Catchment

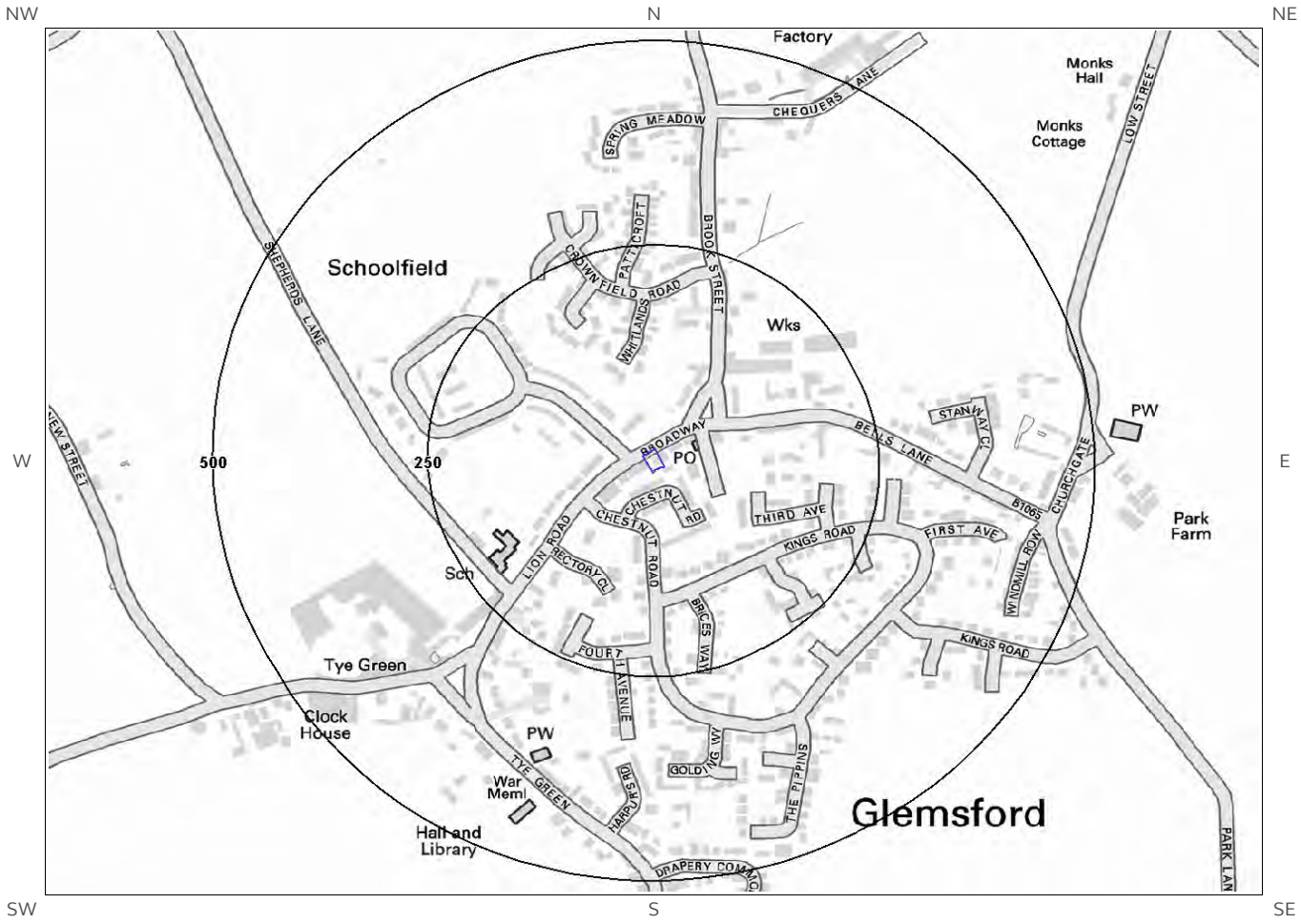
Source Protection Zone 2 - Outer Catchment

Source Protection Zone 3 - Total Catchment

Source Protection Zone 4 - Zone of Special Interest

Potable Water Abstraction Licence

6d. Hydrogeology – Source Protection Zones within confined aquifer



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)

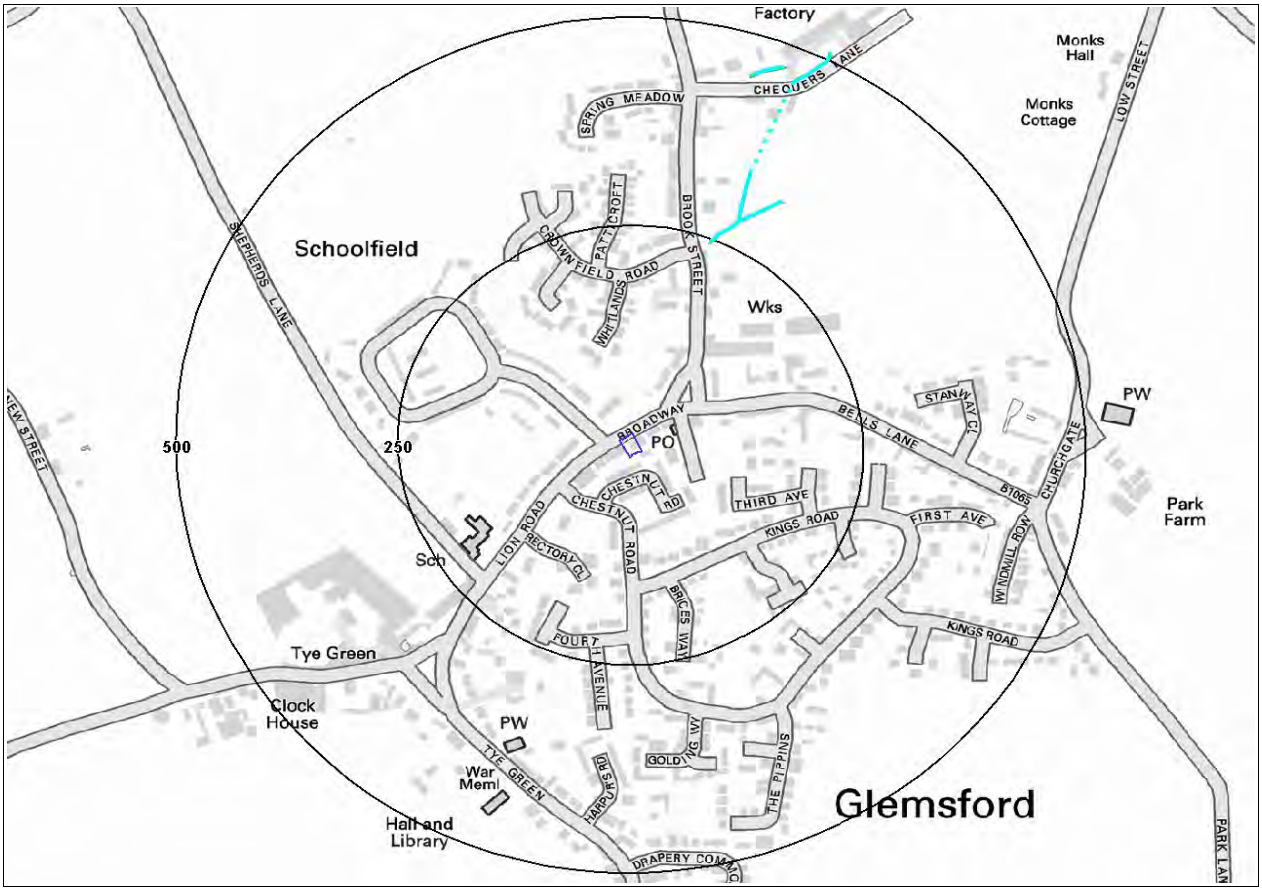
Potable Water Abstraction Licence

6e. Hydrology – Watercourse Network and River Quality

NW N NE

W E

SW S SE



Site Outline

250 Search Buffers (m)
500

Watercourse type

- Tidal River
- Inland River
- Canal
- Lock or Flight of Locks
- Lake, Reservoir, or Marsh
- Foreshore
- Drain or Transfer

Watercourse level

- On ground surface
- Underground or Elevated
- Level unknown

- General Quality Assessment: Biology
- General Quality Assessment: Chemistry

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
7	0	On Site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
1	262	W	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	333	NE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
5	418	NW	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-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

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	906	NE	583400 249100	Status: Active Licence No: 8/36/11/*G/0066 Details: Transfer Between Sources (Pre Water Act 2003) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: GLEMSFORD SEWAGE TREATMENT WKS Data Type: Point Name: ENVIRONMENT AGENCY	Annual Volume (m^3): 2,918,360 Max Daily Volume (m^3): 3 Original Application No: - Original Start Date: 01/09/1986 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1991 Version End Date:
Not shown	1460	W	581400 248300	Status: Historical Licence No: 8/36/11/*G/0043 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: DUCKS HALL, CAVENDISH. Data Type: Point Name: TRUCKETTS HALL FARM (BOXTED) LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1992 Version End Date:
Not shown	1700	NE	583600 249900	Status: Historical Licence No: 8/36/12/*G/0019 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: COOPWELL FARM, BOXTED Data Type: Point Name: ROBERTS	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/12/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1991 Version End Date:
Not shown	1971	W	581000 247700	Status: Historical Licence No: 8/36/11/*G/0044 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE DUCKS HALL, CAVENDISH Data Type: Point Name: TRUCKETTS HALL FARM (BOXTED) LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1992 Version End Date:
Not shown	1971	W	581000 247700	Status: Historical Licence No: 8/36/11/*G/0044 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE DUCKS HALL, CAVENDISH Data Type: Point Name: TRUCKETTS HALL FARM (BOXTED) LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1992 Version End Date:

6.4 Surface Water Abstraction Licences

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

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

ID	Distance (m)	Direction	NGR	Details	
7A	455	N	583000 248800	Status: Historical Licence No: 8/36/12/*S/0014 Details: General Washing/Process Washing Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER GLEM AT GLEMSFORD SILK MILLS Data Type: Point Name: GLEMSFORD SILK MILLS LTD	Annual Volume (m^3): 11,365 Max Daily Volume (m^3): 45 Application No: - Original Start Date: 01/11/1967 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date:
8A	455	N	583000 248800	Status: Historical Licence No: 8/36/12/*S/0014 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: GLEMSFORD SILK MILLS Data Type: Point Name: GLEMSFORD SILK MILLS LTD	Annual Volume (m^3): 11,365 Max Daily Volume (m^3): 45 Application No: - Original Start Date: 01/11/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1967 Version End Date:

6.5 Potable Water Abstraction Licences

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

Database searched and no data found.

6.6 Source Protection Zones

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

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

ID	Distance (m)	Direction	Zone	Description
1	0	On Site	3	Total catchment

6.7 Source Protection Zones within Confined Aquifer

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

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

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

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

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

6.9 River Quality

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

6.9.1 Biological Quality:

Database searched and no data found.

6.9.2 Chemical Quality:

Database searched and no data found.

6.10 Ordnance Survey MasterMap Water Network

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

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	246 N	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	246 N	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
2	278 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	278 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	281 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	281 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
7	281 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	281 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	341 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
Not shown	341 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	449 N	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.5
Not shown	449 N	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.5
7	456 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
Not shown	456 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4

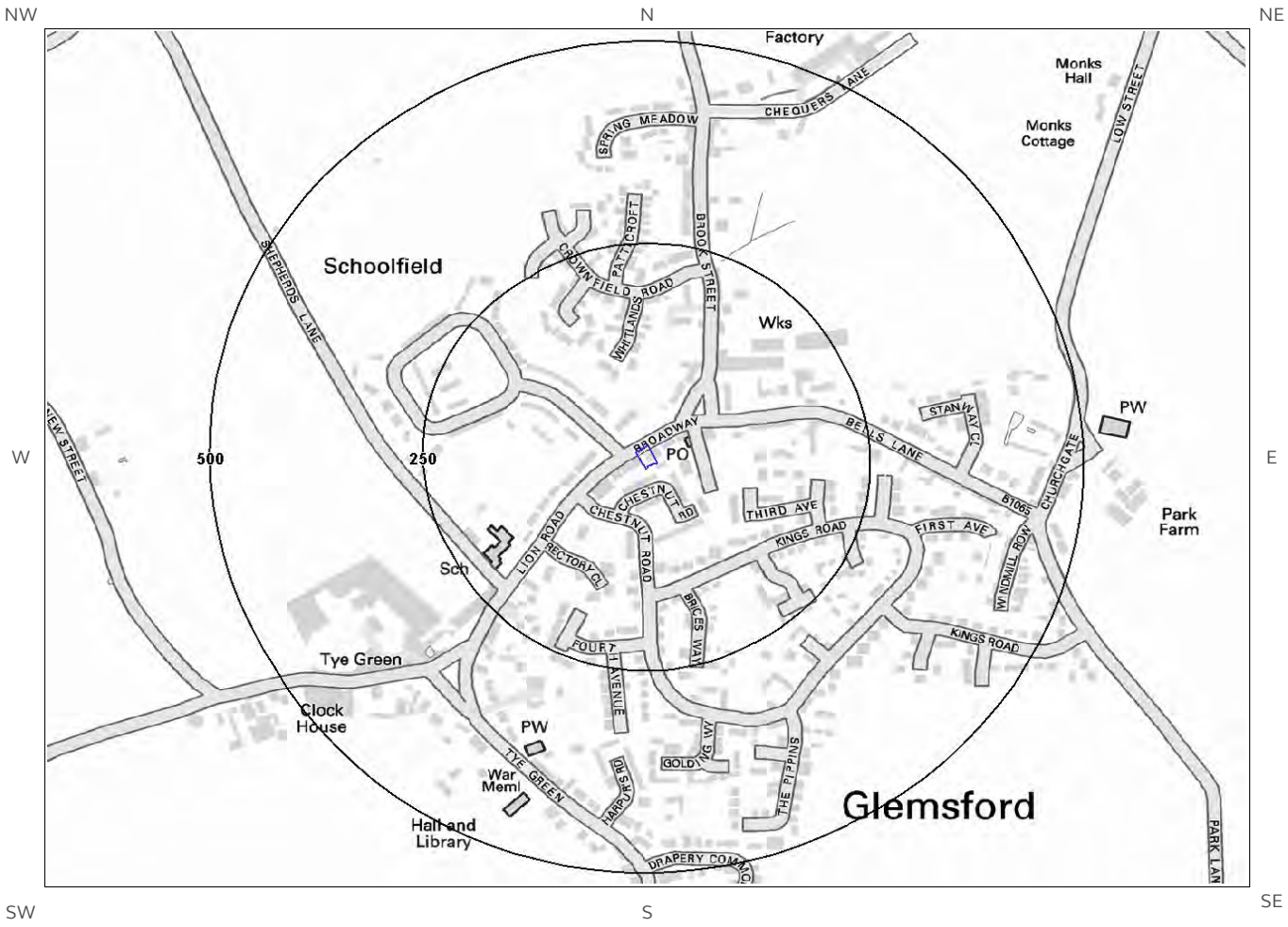
6.11 Surface Water Features

Surface water features within 250m of the study site Identified

The following surface water records are not represented on mapping:

Distance (m)	Direction
244	N

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



Site Outline

100
250
Search Buffers (m)

Zone 2 Floodplain

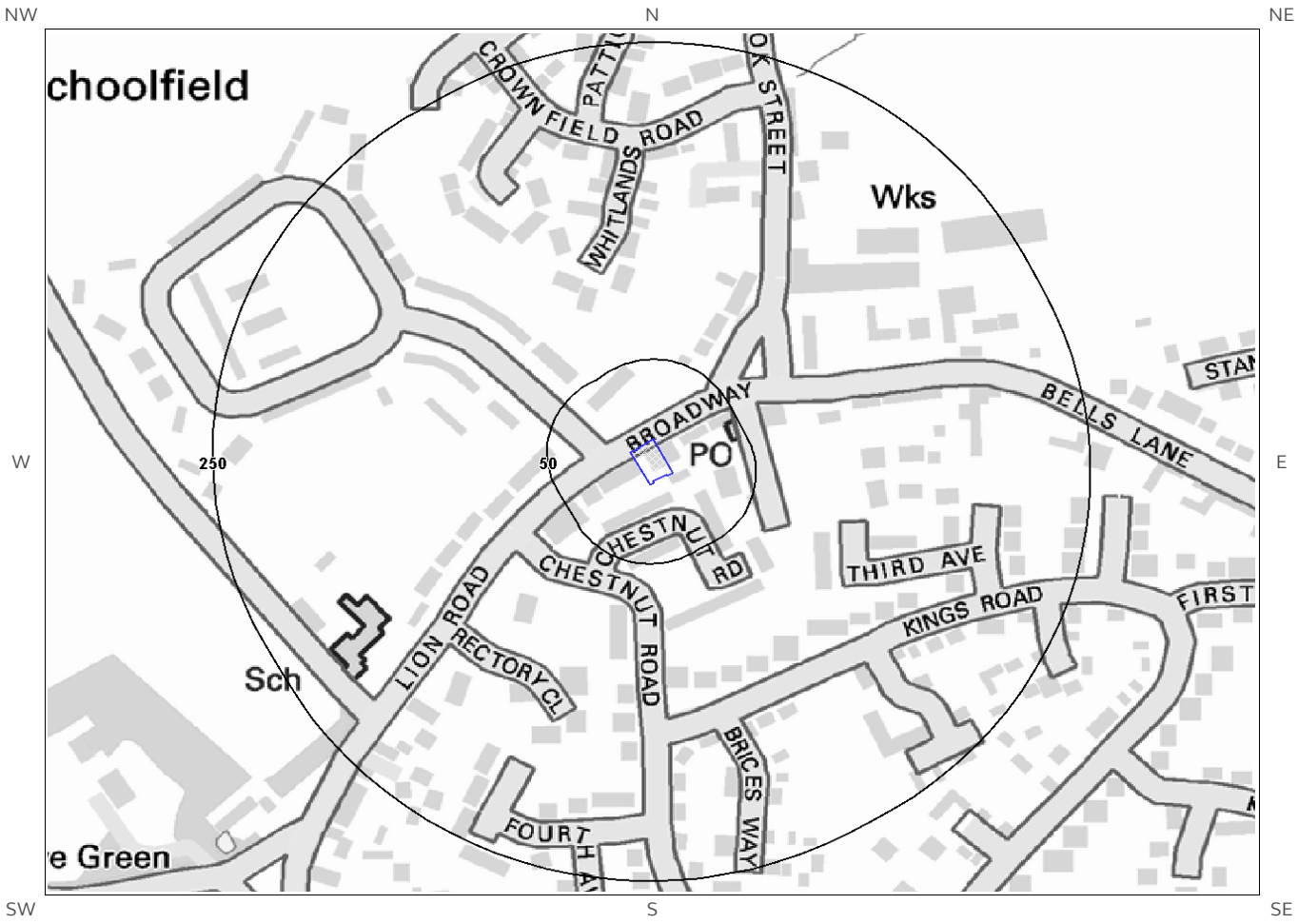
Zone 3 Floodplain

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



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

Limited potential

Where limited potential for groundwater flooding to occur is indicated, this means that although given the geological conditions there may be a groundwater flooding hazard, unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area, you need take no further action in relation to groundwater flooding hazard.

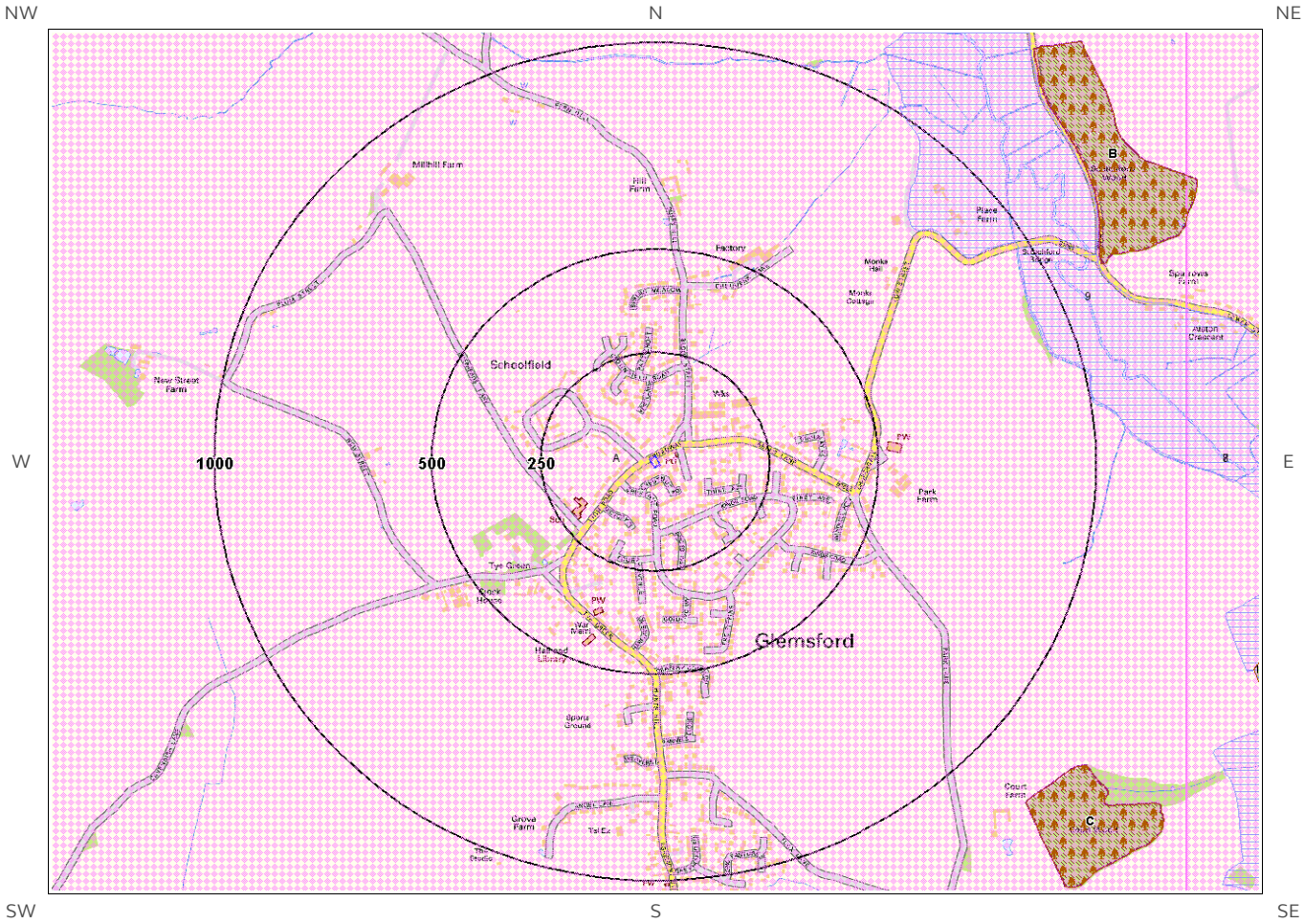
7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result	High

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

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

8. Designated Environmentally Sensitive Sites Map



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:

4

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

ID	Distance (m)	Direction	SSSI Name	Data Source
1B	1124	NE	Kentwell Woods	Natural England
2C	1171	SE	Kentwell Woods	Natural England
Not shown	1615	E	Kentwell Woods	Natural England
Not shown	1849	S	Glemsford Pits	Natural England

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

6

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
10B	1124	NE	SCOTCH FORD WOOD	Ancient & Semi-Natural Woodland
11C	1171	SE	Unknown	Ancient & Semi-Natural Woodland
12	1449	E	LUMPIT WOOD	Ancient & Semi-Natural Woodland
Not shown	1615	E	Unknown	Ancient & Semi-Natural Woodland
Not shown	1847	N	Unknown	Ancient & Semi-Natural Woodland
Not shown	1867	N	Unknown	Ancient & Semi-Natural Woodland

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

1

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

ID	Distance (m)	Direction	ESA Name	Data Source
9	808	NE	Suffolk River Valleys	Natural England

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

4

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

ID	Distance (m)	Direction	NVZ Name	Data Source
5A	0	On Site	Existing	DEFRA
6A	0	On Site	Existing	DEFRA
7	1208	E	Existing	DEFRA
8	1208	E	Existing	DEFRA

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

0

Database searched and no data found.

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

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

9.1.1 Shrink Swell

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

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

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

9.1.2 Landslides

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

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

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

9.1.3 Soluble Rocks

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

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

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

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

9.1.4 Compressible Ground

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

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

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

9.1.5 Collapsible Rocks

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

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

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

9.1.6 Running Sand

Maximum Running Sand*[*] hazard rating identified on the study site — Very Low

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

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

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

9.2 Radon

9.2.1 Radon Affected Areas

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

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

9.2.2 Radon Protection

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

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site — 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**
BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk

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

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

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

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

Local Authority
Authority: Babergh District Council
Phone: 01473 826 622
Web: http://www.babergh.gov.uk
Address: Endeavour House, 8 Russell Road, Suffolk, IP1 2BX

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

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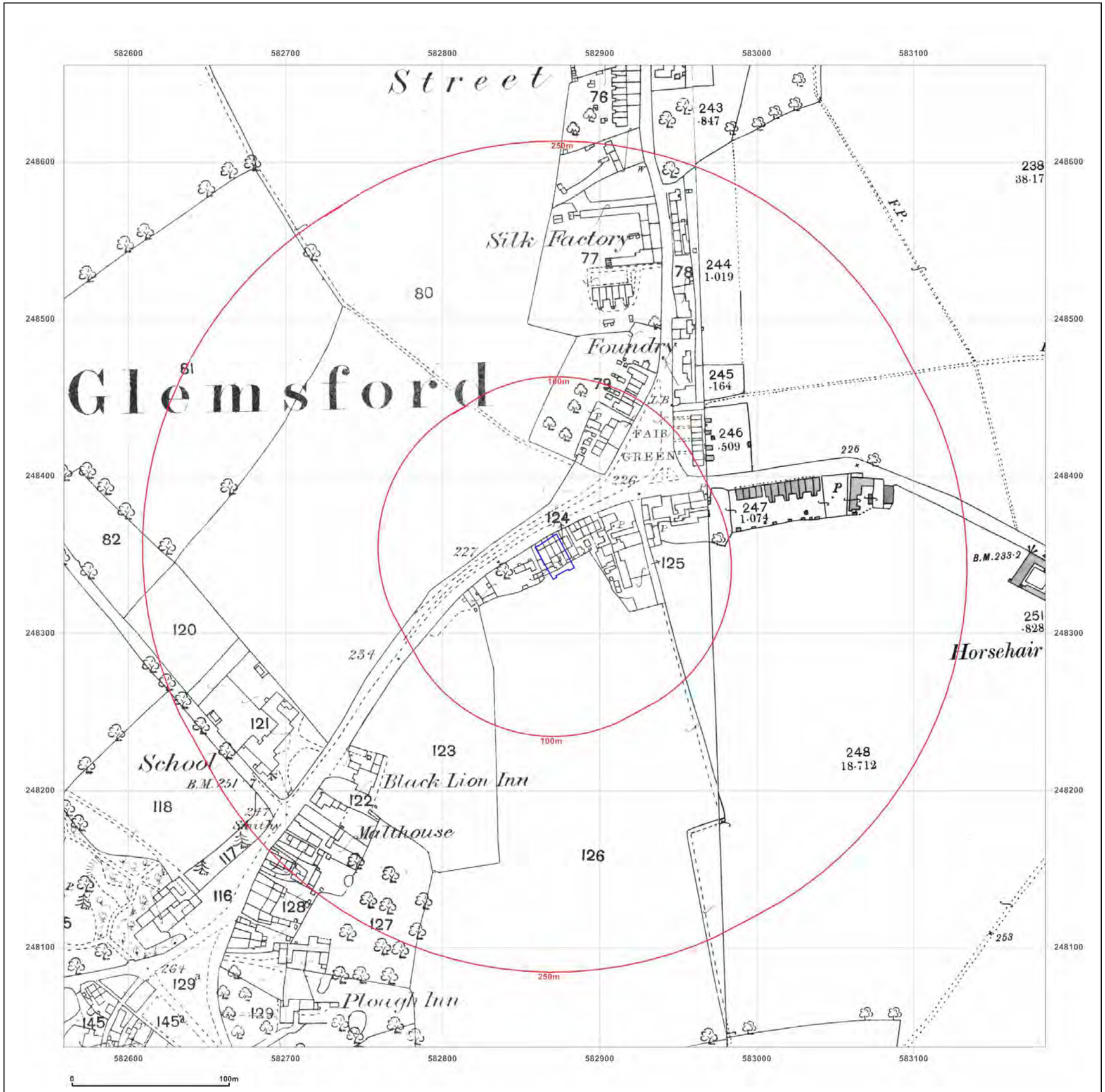
APPENDIX C: HISTORICAL MAPPING



Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: County Series
Map date: **1883-1884**
Scale: 1:2,500
Printed at: 1:2,500

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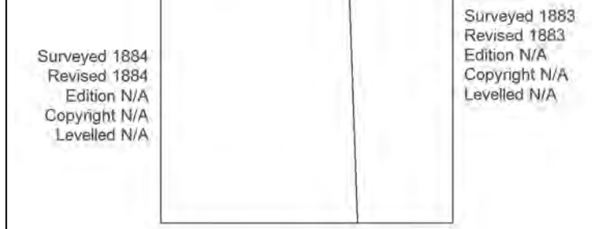

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Map legend available at:
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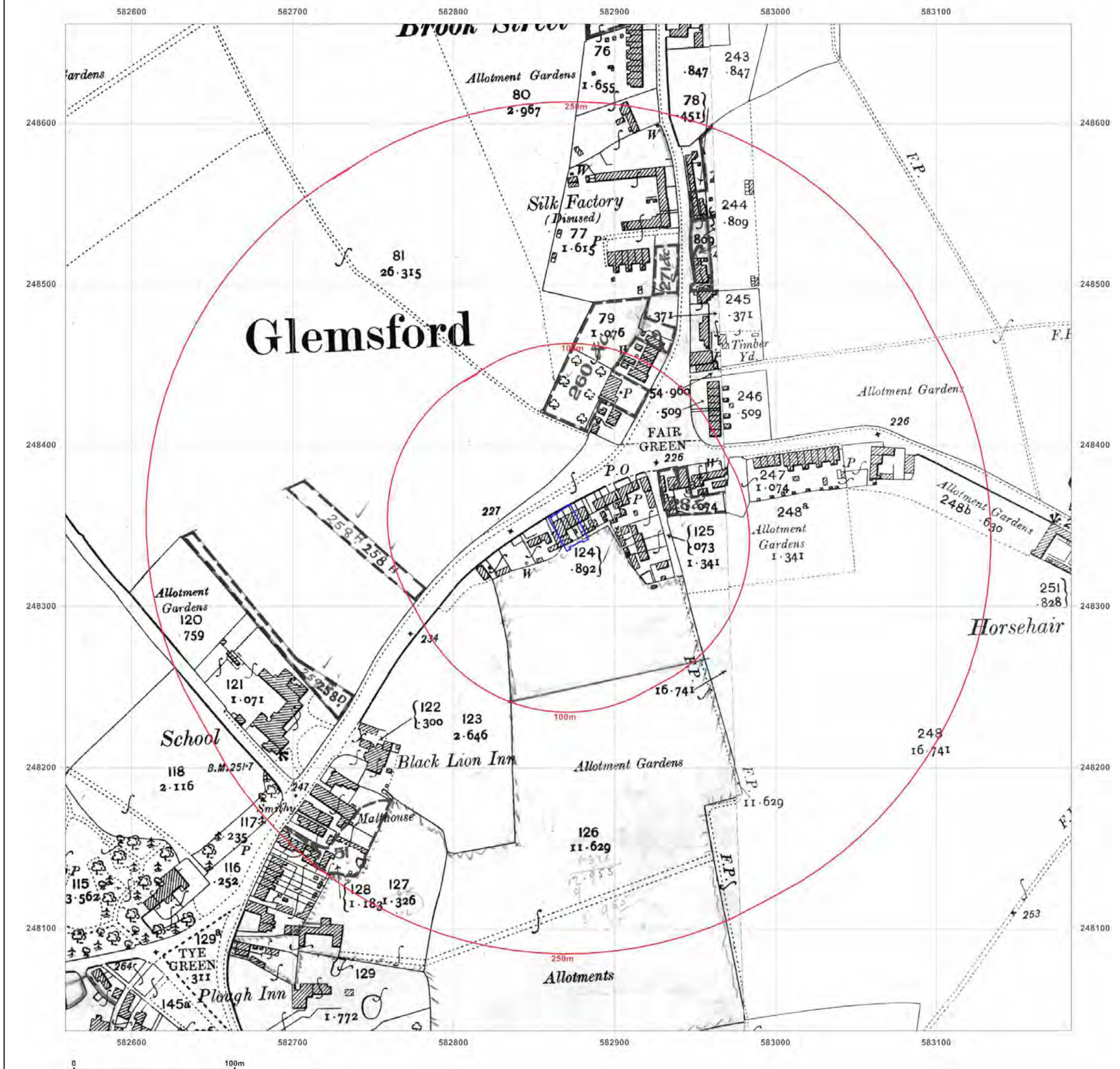

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: County Series

Map date: 1902

Scale: 1:2,500

Printed at: 1:2,500

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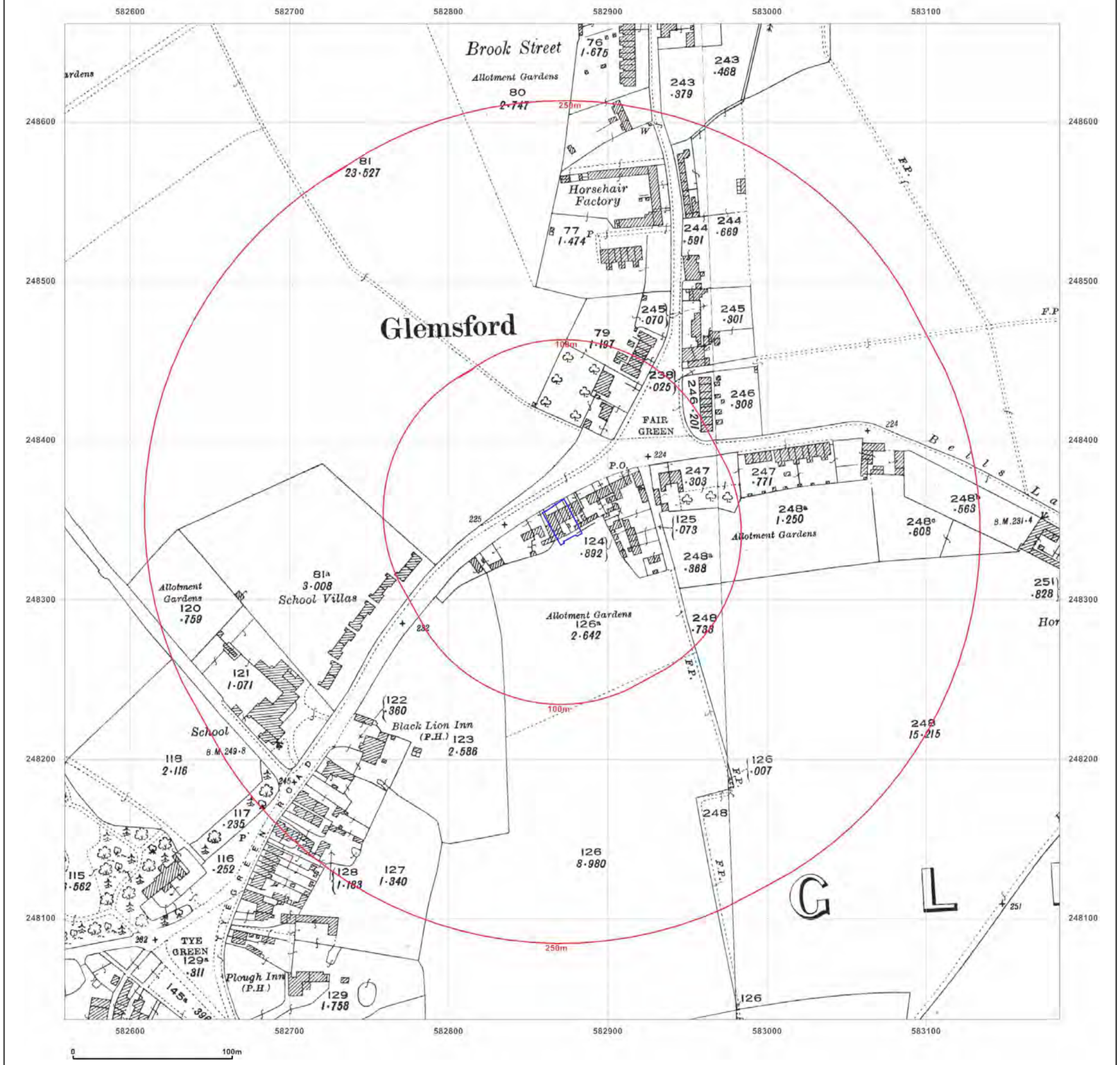

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Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: County Series

Map date: **1926**

Scale: 1:2,500

Printed at: 1:2,500

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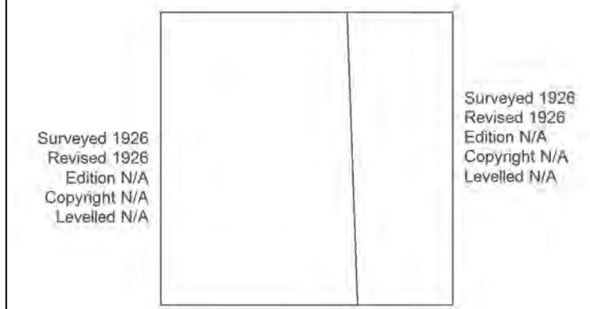

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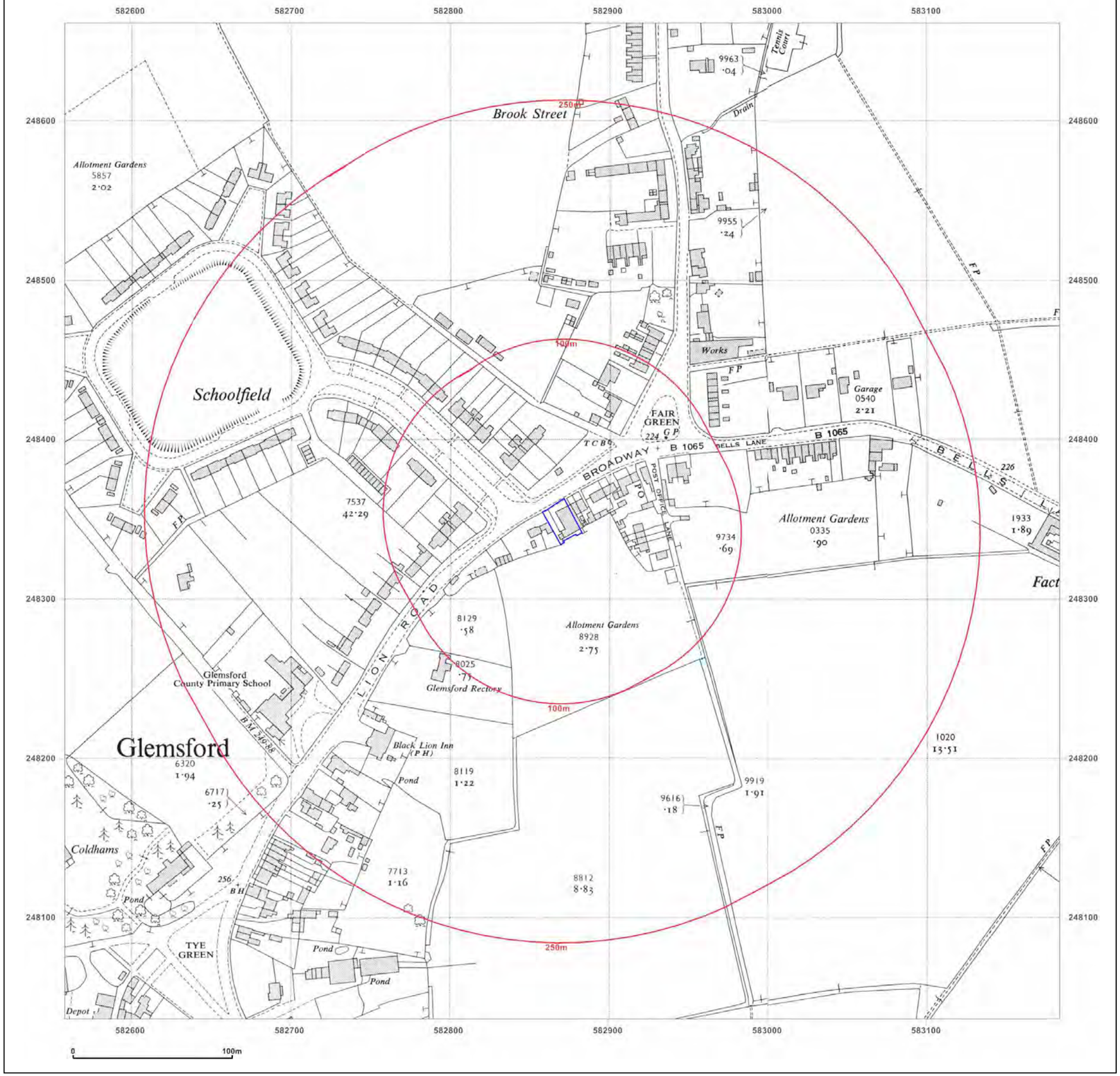

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Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: National Grid

Map date: **1957-1958**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1958	Surveyed 1957
Revised 1958	Revised 1957
Edition N/A	Edition N/A
Copyright N/A	Copyright N/A
Levelled N/A	Levelled 1950

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Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: National Grid

Map date: **1972**

Scale: 1:2,500

Printed at: 1:2,500

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

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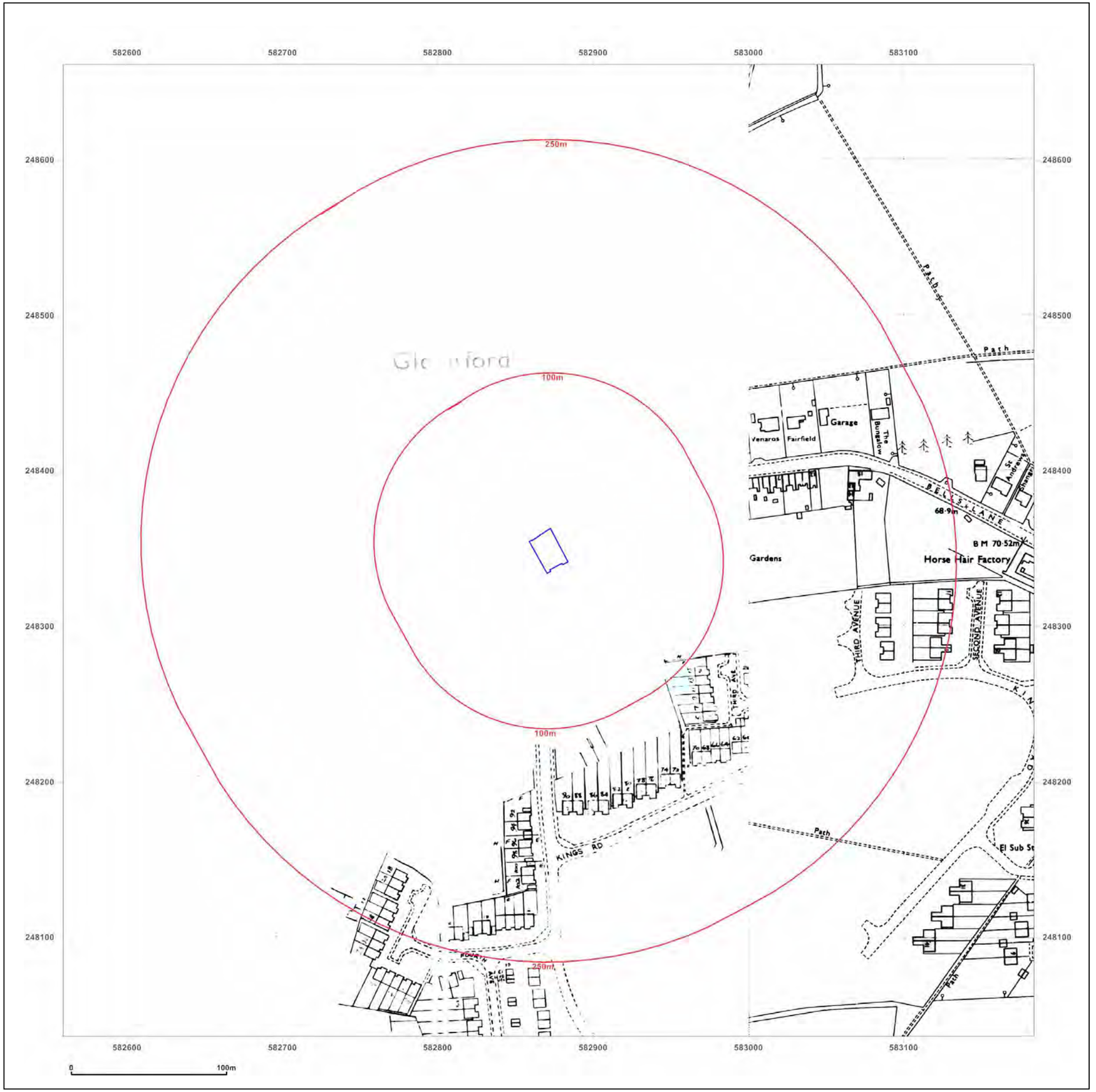

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: National Grid

Map date: **1973-1977**

Scale: 1:2,500

Printed at: 1:2,500

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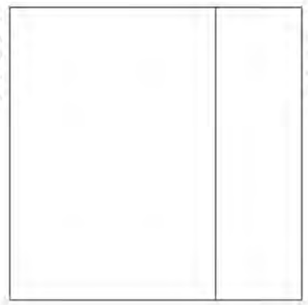
Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A



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Revised N/A
Edition N/A
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Levelled N/A

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Site Details:

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Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: National Grid

Map date: **1984**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1984
Revised 1984
Edition N/A
Copyright 1985
Levelled 1972

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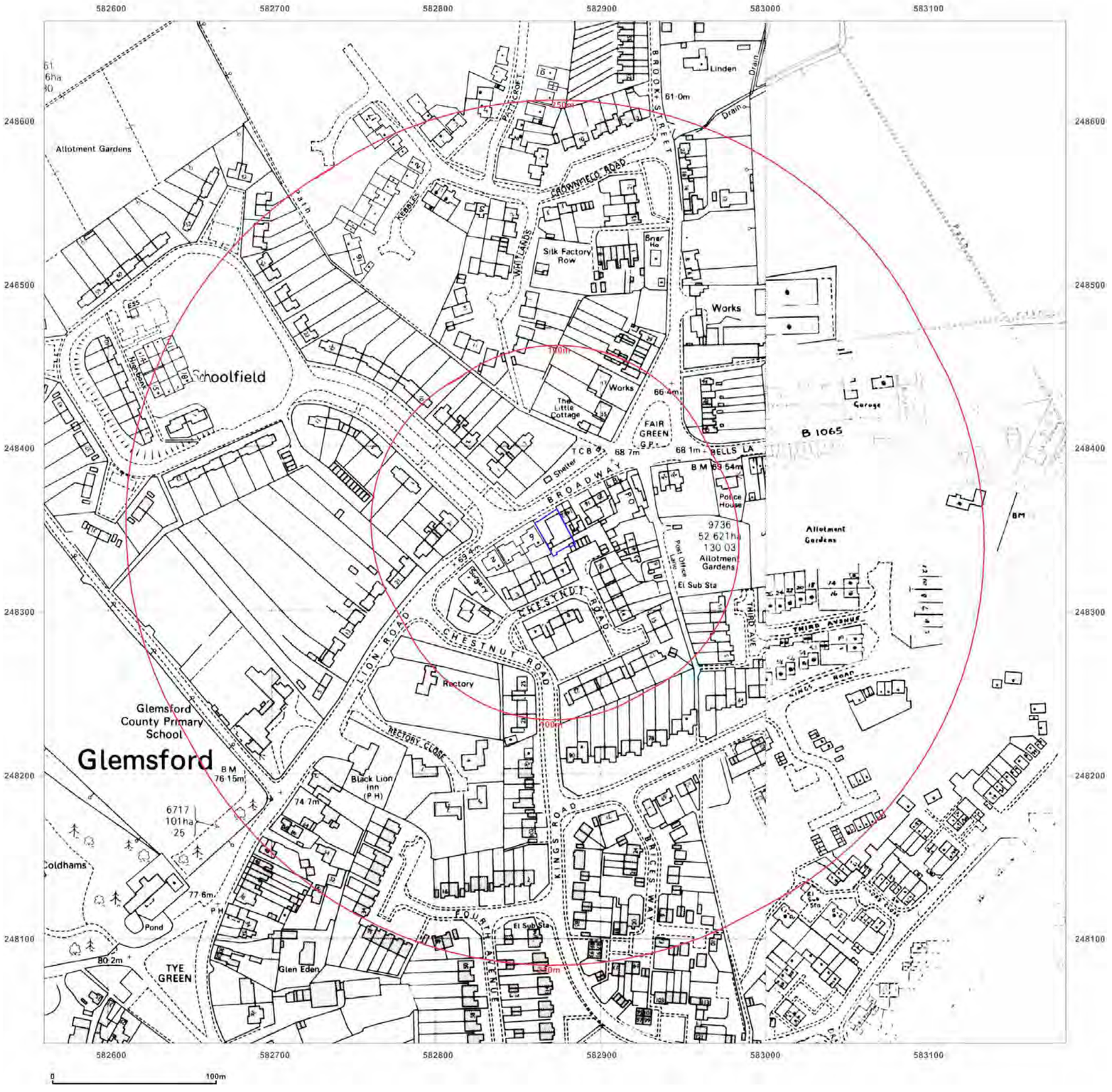

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: National Grid

Map date: **1982-1984**

Scale: 1:2,500

Printed at: 1:2,500

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Revised 1984
Edition N/A
Copyright N/A
Levelled 1972

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1982
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Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: National Grid

Map date: **1993**

Scale: 1:2,500

Printed at: 1:2,500

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

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Revised N/A
Edition N/A
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Site Details:

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GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

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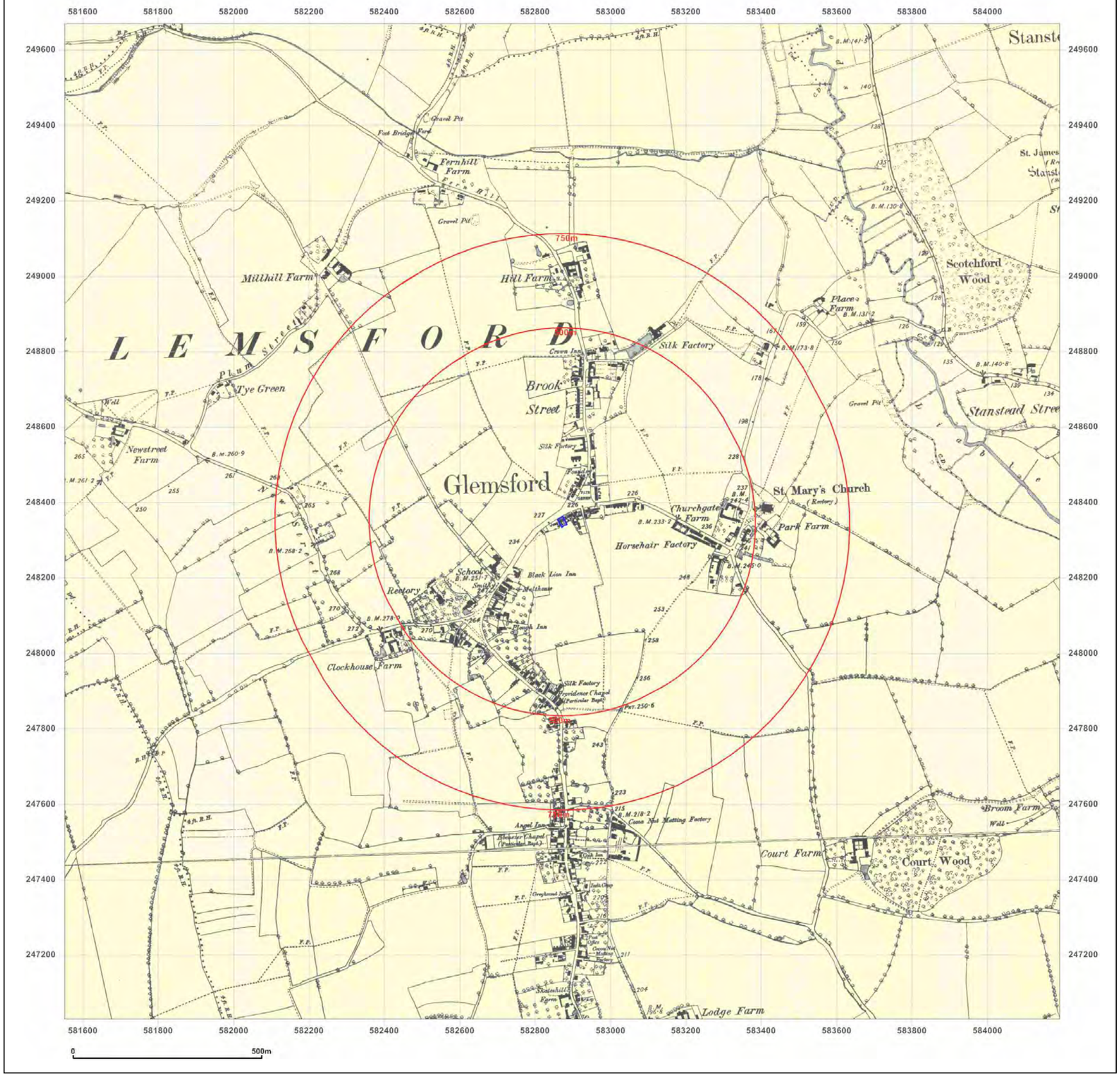

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: County Series

Map date: **1884-1885**

Scale: 1:10,560

Printed at: 1:10,560

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Revised 1884
Edition N/A
Copyright N/A
Levelled N/A

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

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Map legend available at:
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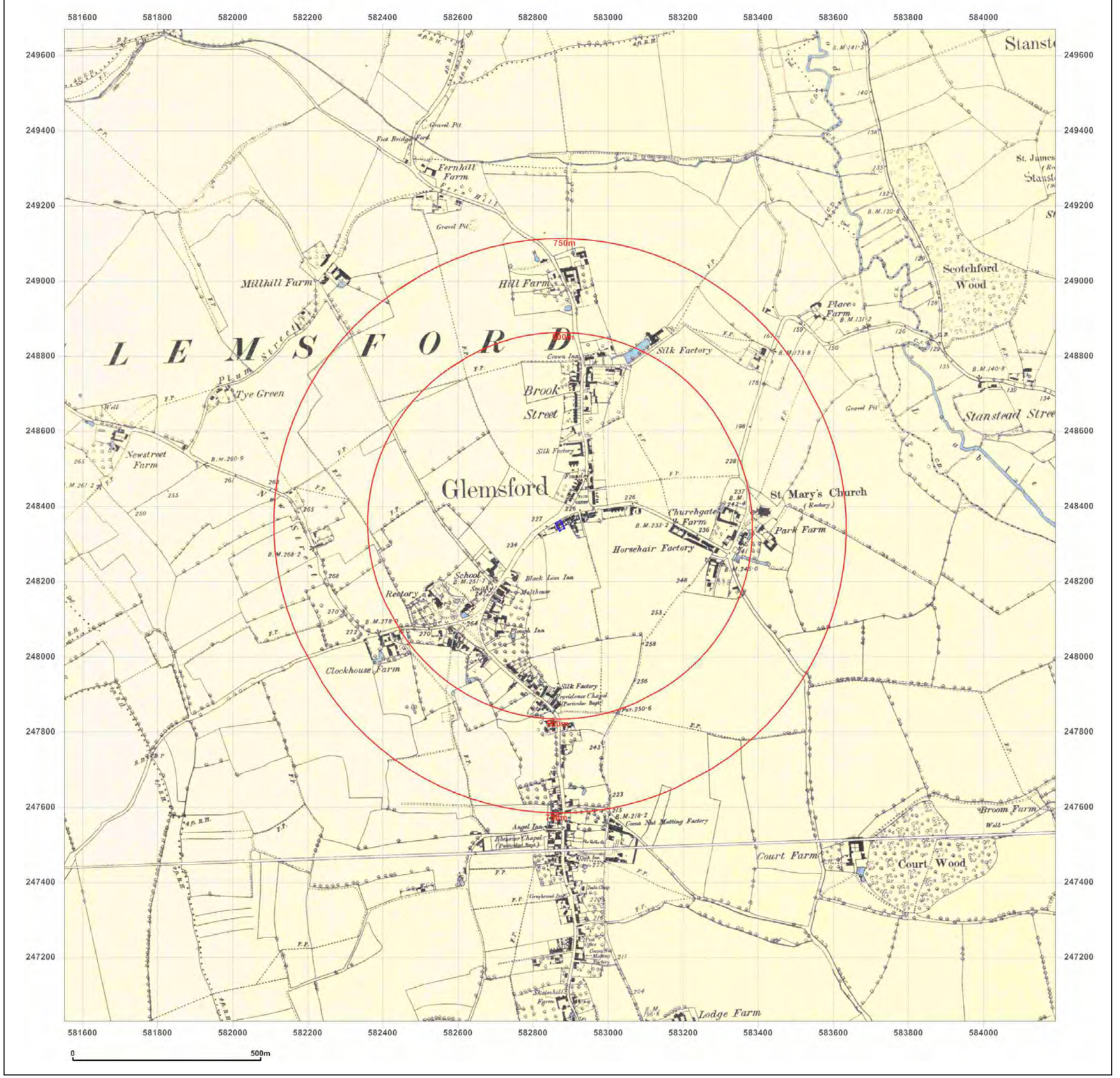

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: County Series

Map date: **1888**

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 N/A
Revised N/A
Edition N/A
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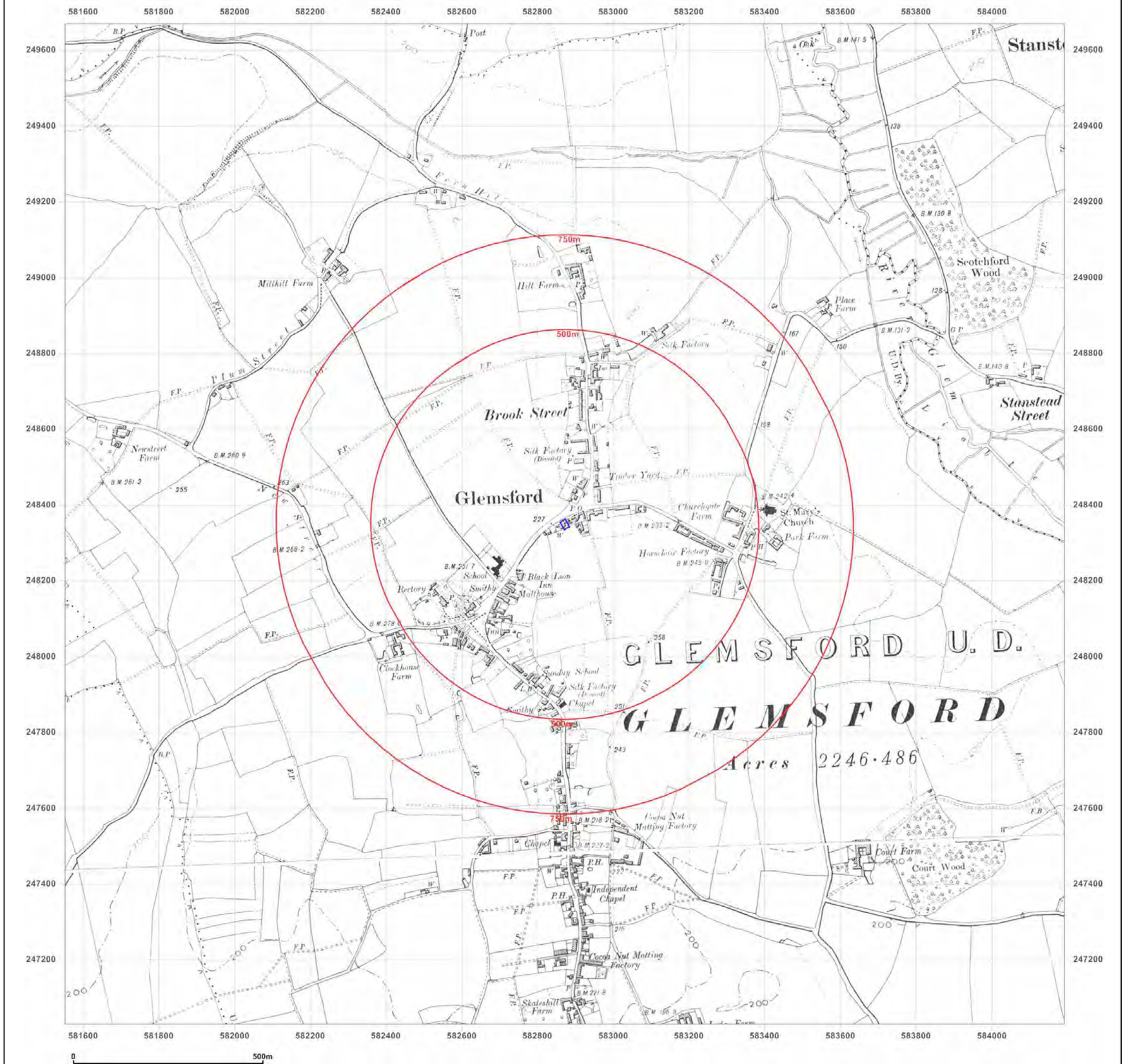

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: County Series

Map date: **1902-1905**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1884
Revised 1902
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1905
Edition N/A
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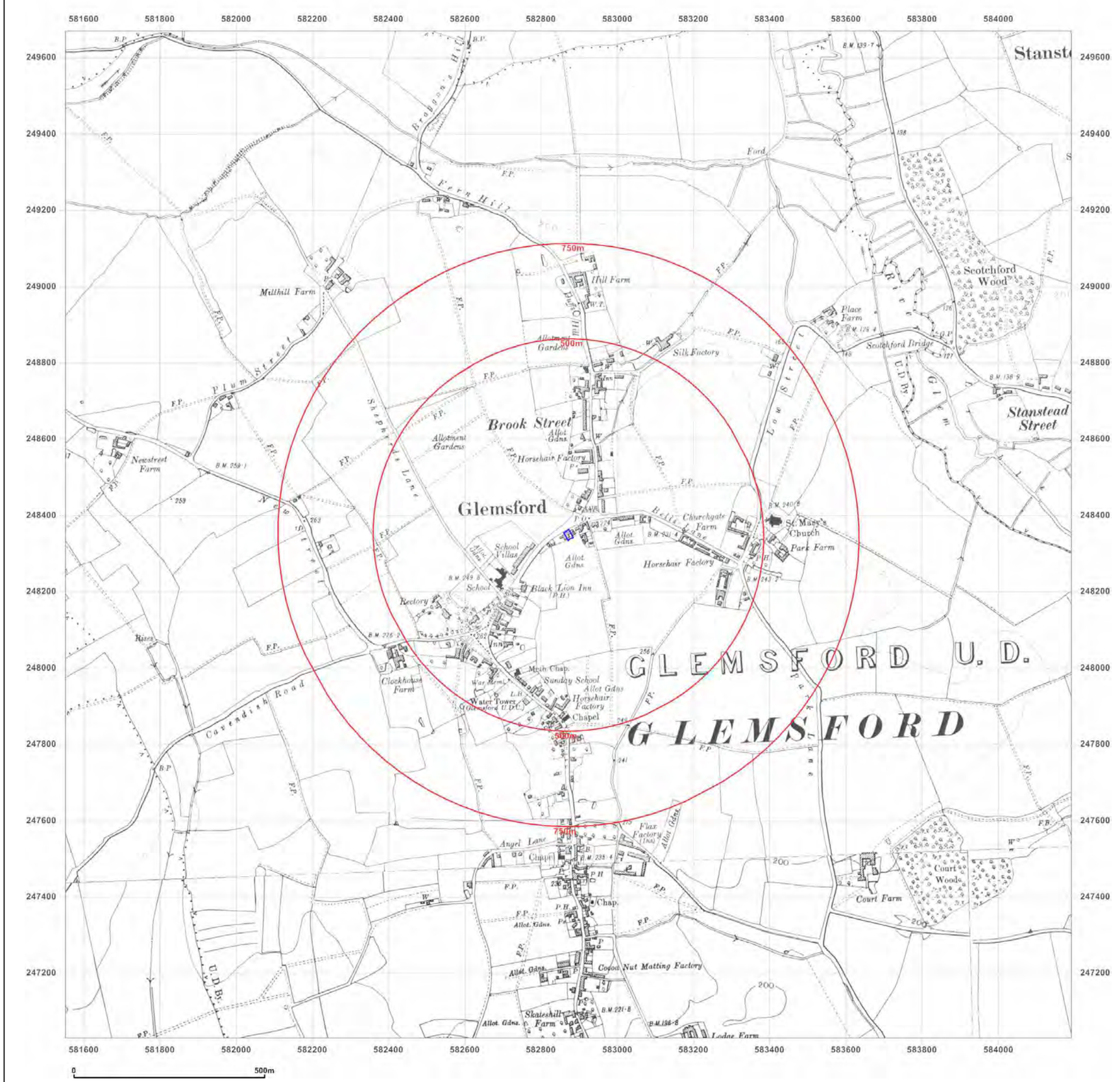

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: County Series

Map date: **1925-1927**

Scale: 1:10,560

Printed at: 1:10,560

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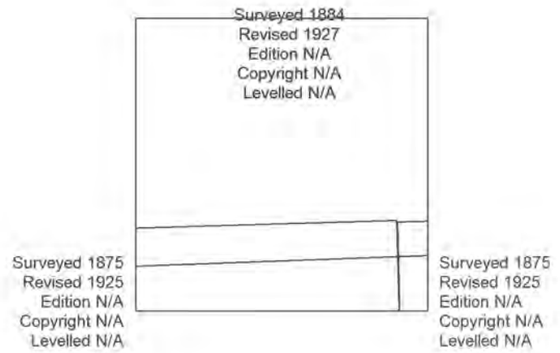

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Production date: 20 January 2020

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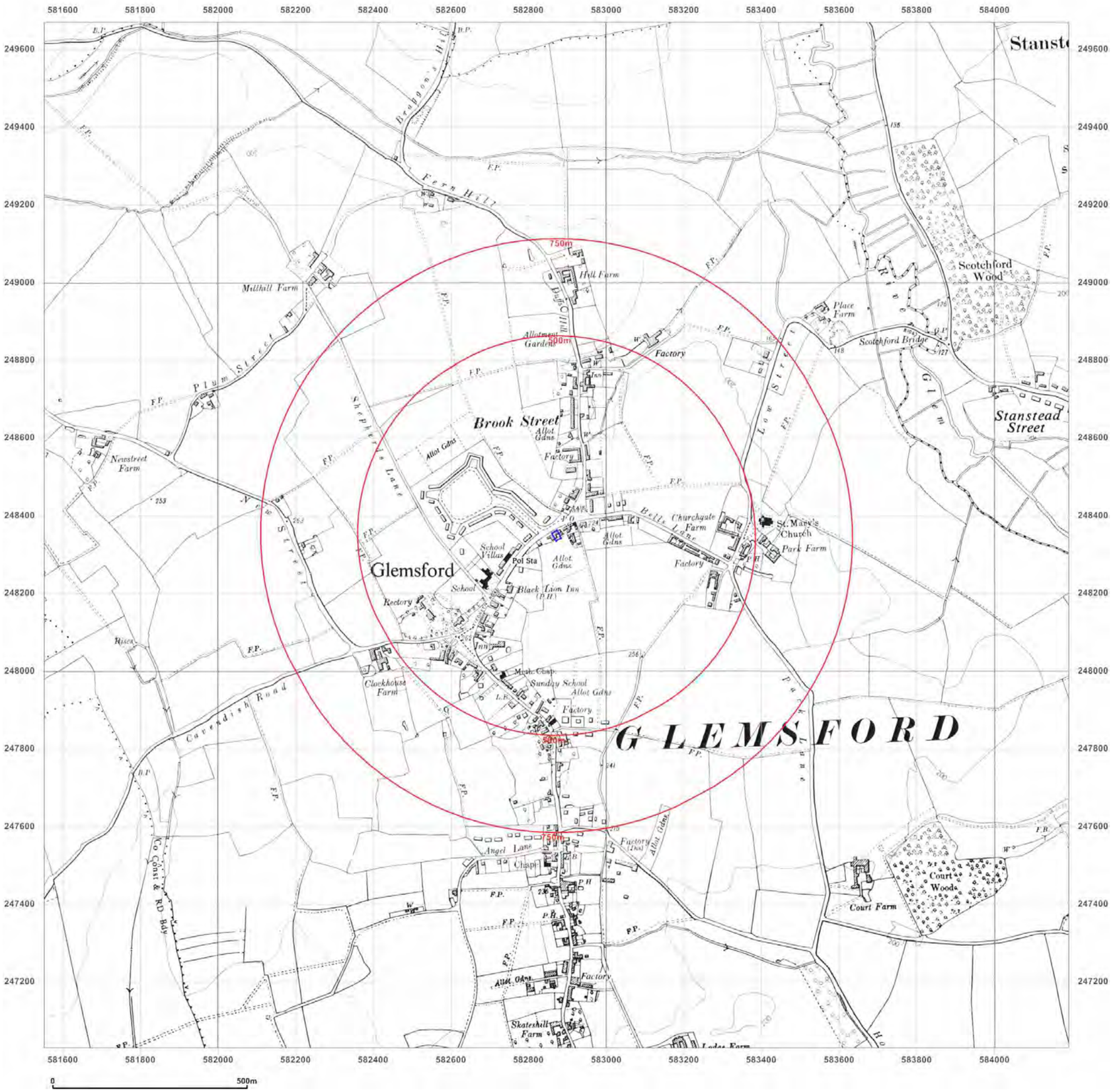

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: Provisional
Map date: **1954**
Scale: 1:10,560
Printed at: 1:10,560

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Surveyed 1954
Revised 1954
Edition N/A
Copyright N/A
Levelled N/A

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Production date: 20 January 2020

Map legend available at:
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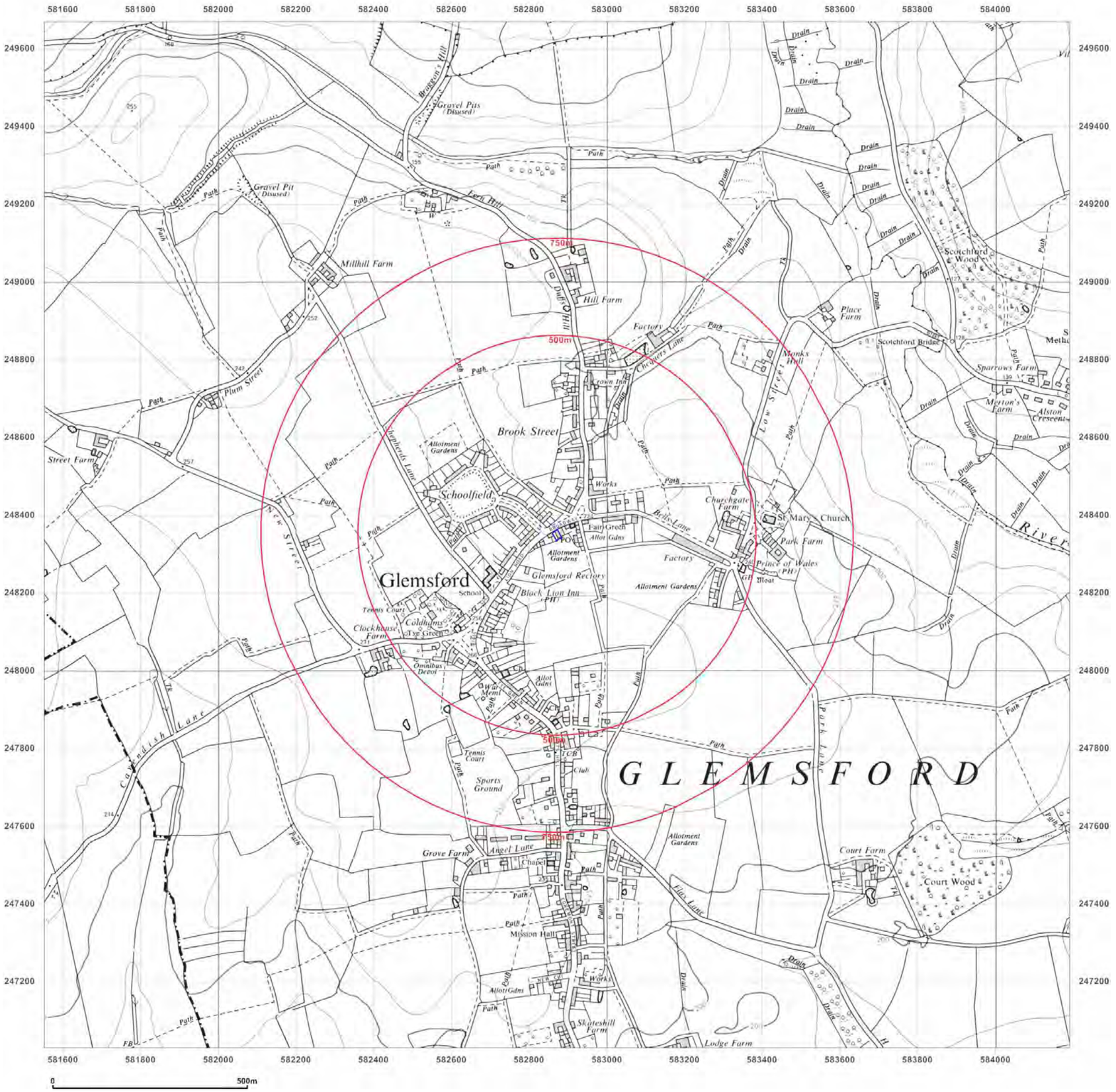

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: Provisional

Map date: **1967**

Scale: 1:10,560

Printed at: 1:10,560

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

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Production date: 20 January 2020

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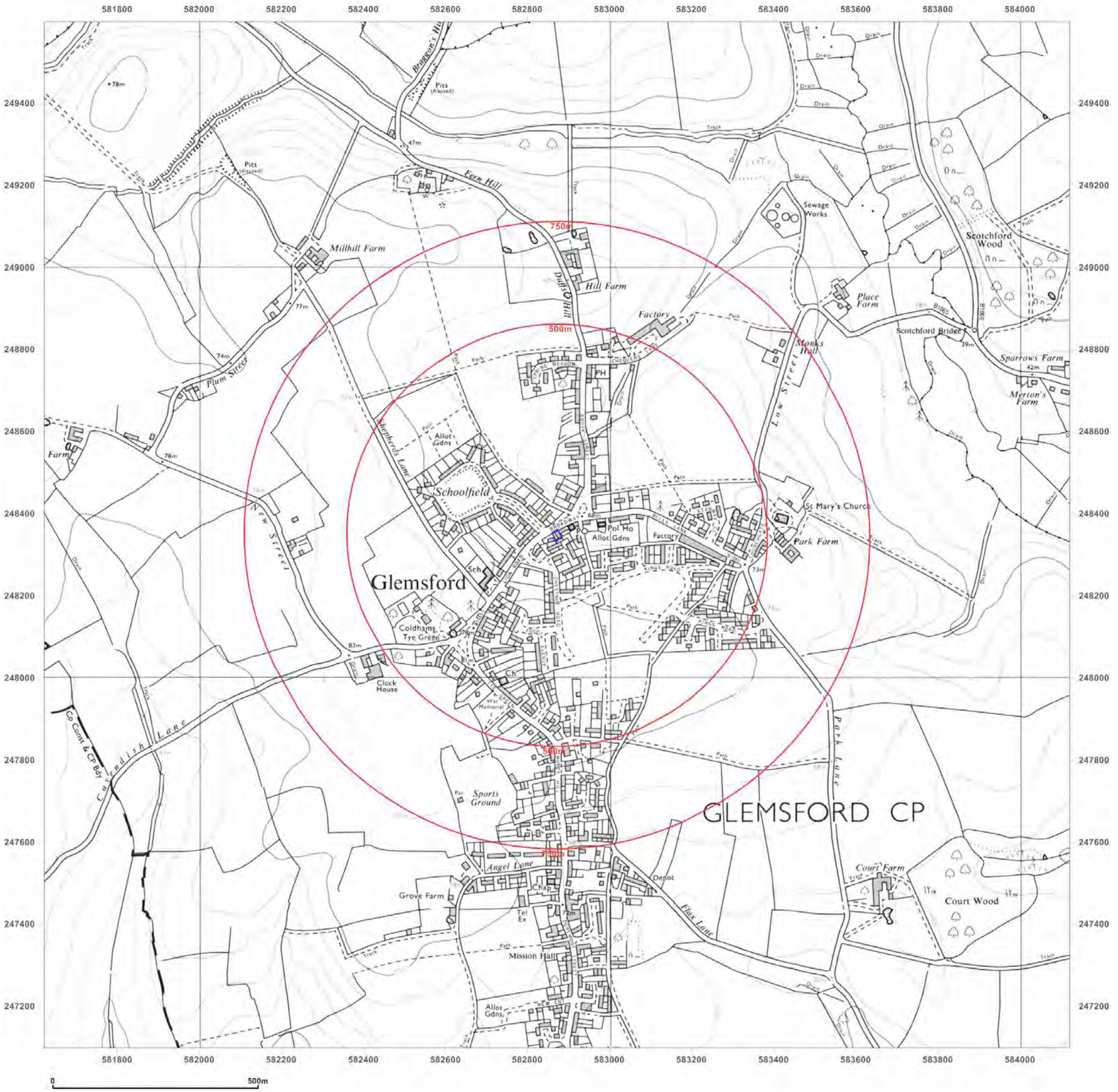

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: National Grid

Map date: **1978**

Scale: 1:10,000

Printed at: 1:10,000

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Surveyed 1973
Revised 1978
Edition N/A
Copyright 1978
Levelled 1973

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Production date: 20 January 2020

Map legend available at:
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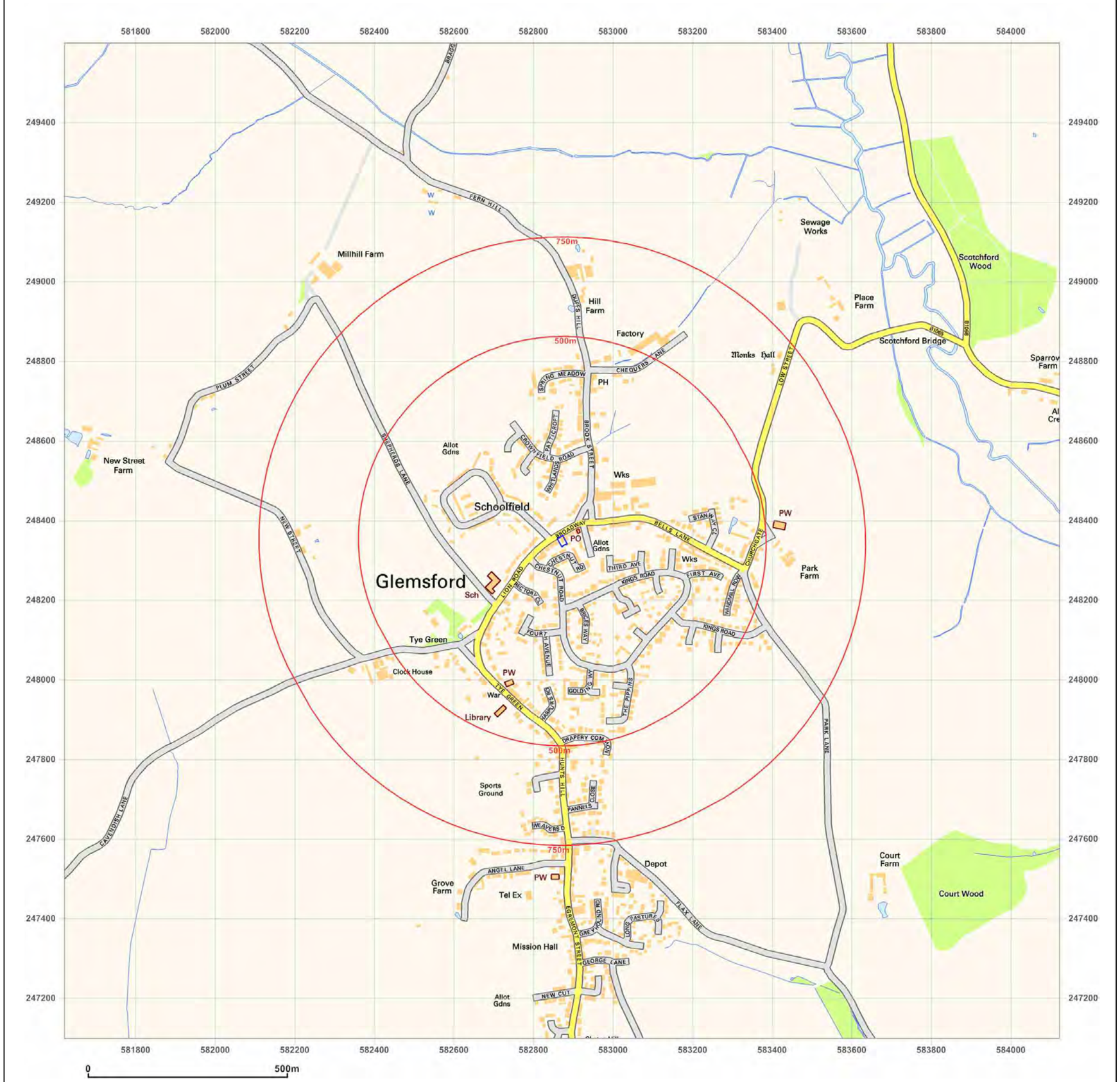

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

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Production date: 20 January 2020

Map legend available at:
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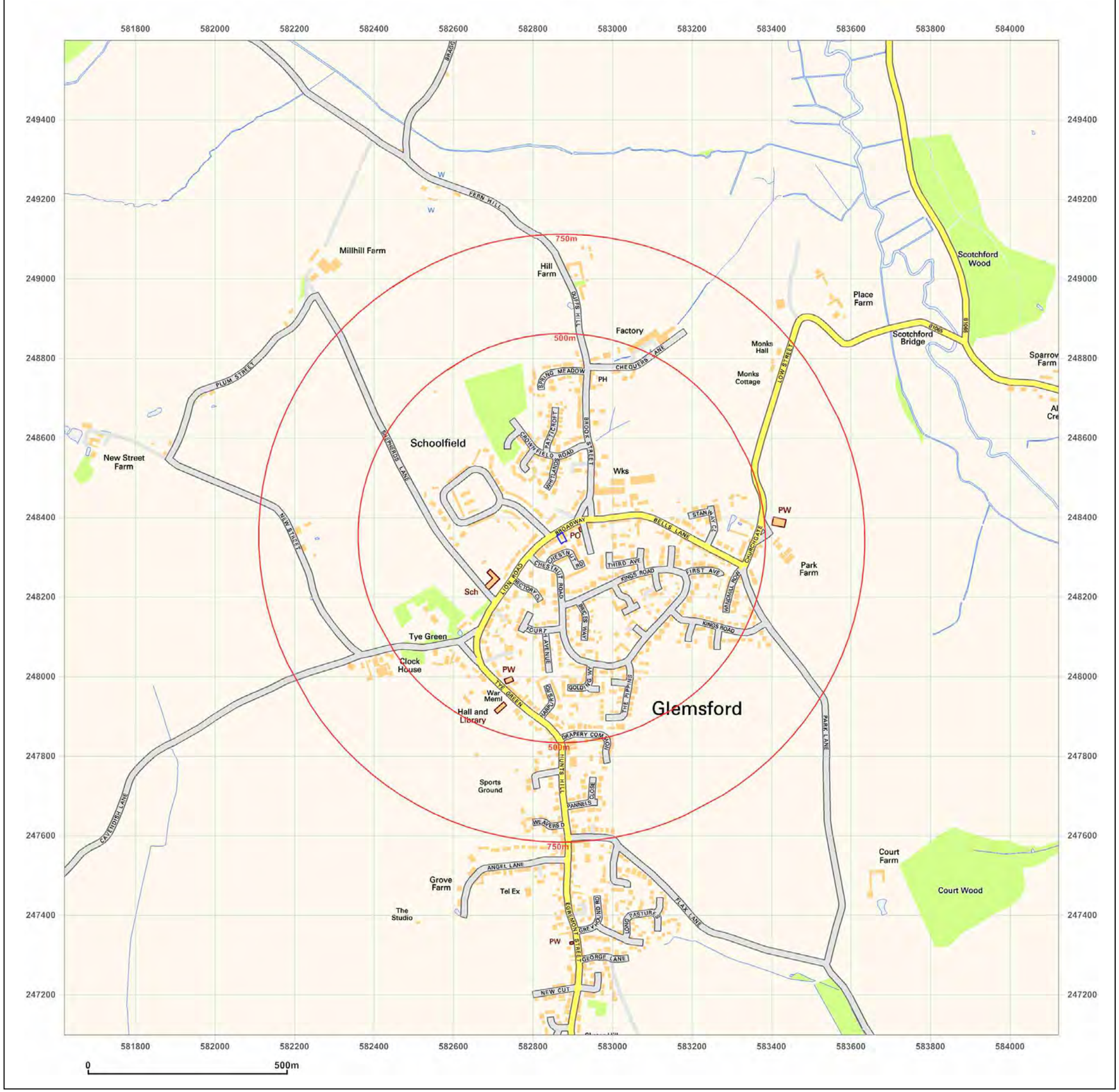

Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: National Grid
Map date: **2010**
Scale: 1:10,000
Printed at: 1:10,000

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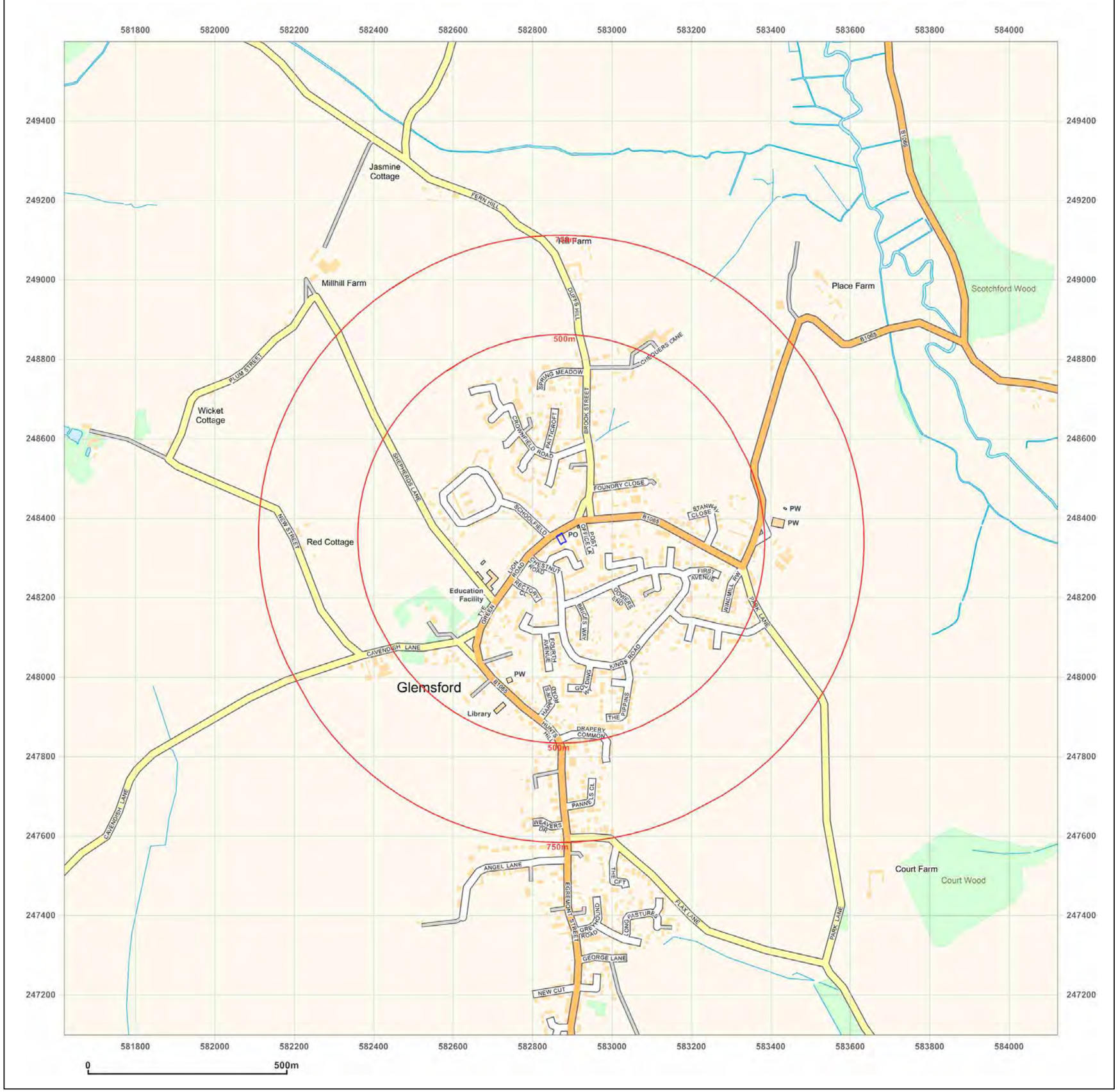
Production date: 20 January 2020

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



Groundsure INSIGHTS

Site Details:

8-10, FAIR GREEN,
GLEMSFORD, CO10 7PH

Client Ref: BJH_20_026
Report Ref: GS-6562966
Grid Ref: 582871, 248349

Map Name: National Grid

Map date: **2020**

Scale: 1:10,000

Printed at: 1:10,000

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Production date: 20 January 2020

Map legend available at:
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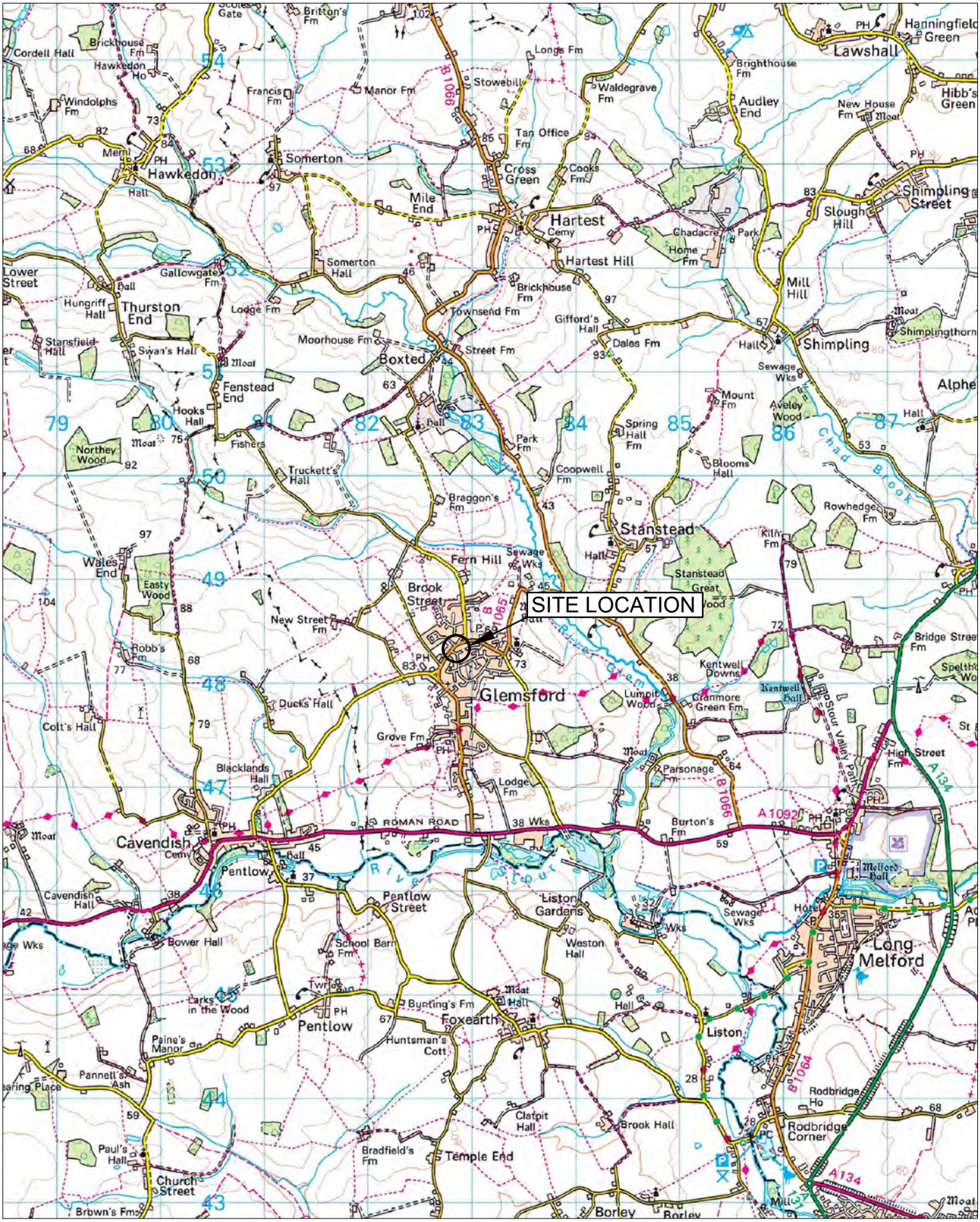
APPENDIX D: DRAWINGS

Drawing 20.026/PhaseI/01	Site Location Plan
Drawing 20.026/PhaseI/02	Relevant Feature Plan



North

Circle indicates approximate location of site

Scale 1: 50,000 @ A4

A F Howland Associates
Geotechnical Engineers

Site: 8-10 Fair Green, Glemsford

SITE LOCATION PLAN

Client : Entendior Limited

Date : January 2020 **Dwg :** 20.026/Phasel/01

A F Howland Associates
Geotechnical Engineers

Drawing 20.026/PhaseI/02
Relevant Feature Plan

Photo 1 – view across front of building

Photo 2 – along western edge

Photo 3 – view across rear of building

Photo 4 – view along southern boundary

Photo 5 – shop interior

Photo 6 – shop interior

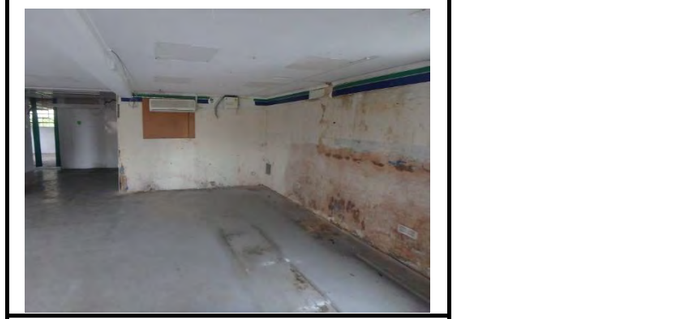


Photo 7 – warehouse/storage area

A F Howland Associates
Geotechnical Engineers

A F Howland Associates Ltd.
The Old Exchange
Newmarket Road
Cringleford
Norwich
NR4 6UF
Tel: 01603 250754
Website: www.howland.co.uk Email: admin@howland.co.uk

Client:	Entendior Limited
Site:	8 – 10 Fair Green, Glemsford
Job No.:	20.026
Drawing Title:	Relevant Feature Plan
Drawing No.:	20.026/PhaseI/02
Date:	January 2020

APPENDIX E: RISK ASSESSMENT CLASSIFICATION

Classification	Definition	Examples
High Likelihood	There is a pollution linkage and an event which would either appear very likely in the short term and almost inevitable over the long term, or, there is evidence at the receptor of harm or pollution.	Free product visible on surface of sensitive water body or in the soil. On site or adjacent gassing 'landfill site'.
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 is not inevitable, but possible in the short term and likely over the long term.	Potentially contaminative land use i.e. 'Brownfield' site, fuel storage depot, factory, petrol station etc. Sensitive receptors to be introduced as part of site redevelopment. Potentially infilled land identified on site or off-site with credible migration pathway.
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 event would take place, and is less likely in the shorter term.	Potential source of contamination identified i.e. historical land use as allotments or domestic above ground fuel storage tanks, areas of burning garden waste. Possible off-site infilled land.
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.	No significant potential sources of contamination identified e.g. 'Greenfield' site. No potential sources of ground gas.

TABLE E1: CLASSIFICATION OF PROBABILITY

Classification	Definition	Examples
Severe	**Short term (acute) risk to human health.** Short term risk of pollution of sensitive water resource. Catastrophic damage to buildings/property. A short term risk to a particular ecosystem.	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Credible source of ground gas.
Medium	**Chronic damage to Human Health.** **Pollution of sensitive water resources.** A significant change in a particular ecosystem, or organism forming part of such ecosystem.	Concentrations of a contaminant from site exceeds the generic, or site specific assessment criteria. Leaching of contaminants from a site to a Secondary or Principal aquifer.
Mild	**Pollution of non-sensitive water resources.** Significant damage to buildings/structures and crops ("significant harm" as defined in the Circular on Contaminated Land, DETR, 2000). Damage to sensitive buildings/structures or the environment.	Concentrations of a contaminant do not exceed the generic, or site specific assessment criteria. Pollution of non-classified groundwater. Damage to building rendering it unsafe to occupy (e.g. foundation damage resulting in instability).
Minor	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as Personal Protective Equipment, etc).	The presence of contaminants at such concentrations that protective equipment is required during site works. The loss of plants in a landscaping scheme.

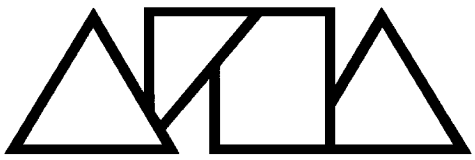
TABLE E2: CLASSIFICATION OF CONSEQUENCE

Classification	Definition
Very High Risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard or there is evidence that severe harm is occurring. The risk, if realised, is likely to result in a substantial liability. **Urgent investigation and remediation will be required.**
High Risk	Harm or chronic damage is likely to arise to a designated receptor from an identified hazard. **Investigation is required and remediation is likely to be required** to ensure the site is suitable for a proposed use.
Moderate Risk	It is possible that harm or chronic damage could arise to a designated receptor from an identified hazard. However, it is relatively unlikely that any such harm would be severe. **Investigation and remediation are likely to be required** to ensure the site is suitable for a proposed use.
Low/Moderate Risk	It is possible that harm or chronic damage could arise to a designated receptor from an identified hazard. **Investigation is likely to be required.** However, circumstances are such that investigation may prove the consequence to be mild and the site suitable for use without remediation.
Low Risk	It is possible that harm could arise to a designated receptor from an identified hazard but it is likely that this harm, if realised, would at worst be mild. **Investigation is unlikely to be required.**
Very Low Risk	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe. **Investigation is not required.**

TABLE E3: DESCRIPTION OF RISK

		CONSEQUENCE			
		Severe	**Medium**	**Mild**	**Minor**
PROBABILITY	**High likelihood**	**Very High**	**High**	**Moderate**	**Low/Moderate**
	Likely	**High**	**Moderate**	**Low/Moderate**	**Low**
	Low likelihood	**Moderate**	**Low/Moderate**	**Low**	**Very Low**
	Unlikely	**Low/Moderate**	**Low**	**Very Low**	**Very Low**

TABLE E4: DETERMINATION OF RISK



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