Elemental GI Ltd

REPORT: PHASE 1 GEO-ENVIRONMENTAL ASSESSMENT (PRELIMINARY RISK ASSESSMENT) FOR SITE TO EAST OF GREGORY AVENUE, BREASTON

CLIENT: PEVERIL HOMES LTD

Project No: E24151
Ref No: E24151/1/0

Date: Oct. 2025
Rev: -

info@elementalgi.com
www.elementalgi.com

Registered in England No. 13391634

PHASE I GEO-ENVIRONMENTAL ASSESSMENT AND PRELIMINARY RISK ASSESSMENT: SITE TO EAST OF GREGORY AVENUE, BREASTON

CONTENTS

SEMI-TECHNICAL SUMMARY

The reader is referred to the terms and conditions which accompany this report, and which are presented at the end of this document. Please refer to the terms and conditions shown at the end of this report for an important list of exclusions / assumptions etc. Most importantly, the reliance upon / use of this report (in part or in full, including all text, drawings, logs, associated correspondence etc.) is prohibited unless all invoices relating to it are settled in full within the period specified on such invoices.

This semi-technical summary provides a brief overview of the main conditions which have been noted on site. These features / factors (alongside others) are explained fully in the following report and the following should therefore not be referred to in isolation. **No reliance should be placed on this summary until the whole report has been read in full**, including all appendices, drawings and notes / terms / conditions. Liability cannot be accepted for any misuse / misunderstandings etc. that arise where portions of this report are used without context or in isolation.

Ground Conditions	A ground investigation will be needed to confirm the ground conditions, but at this stage the site looks like it should be underlain by remnant features of the former school, associated made ground and then by variable cohesive and granular soils. Bands of superficial deposits are recorded on site and the underlying geology contains both cohesive and granular materials. Variable ground conditions may be expected across the site at this stage. Traditional / shallow foundations may be feasible for low-rise residential structures in most areas at the site (pending confirmation through an appropriate ground investigation) although alternative foundations may be needed if significant unsuitable (e.g. soft / loose) soils and / or deep made ground is present at the site.
Contamination	A boiler room and a tank are suspected to have been present on site associated with the former school (demolished in the 1990s) and a Council Depot was present adjacent to the site to the south-west. The former school may have included boiler rooms, storage areas and other similar features which may be considered as potentially contaminating activities. An investigation of ground across the site (based on representative and targeted sampling) is therefore recommended to confirm ground quality in relation to a proposed residential end-use. The 'landscaped ground' recorded on BGS mapping is considered likely to relate to topographical modifications associated with the school. These may be considered as a potential ground gas source.
Other Issues	Tarmac and other hardstanding is present in places in northern and central areas. It is recommended that this is assessed appropriately with regards to off-site disposal to minimise associated costs. Careful characterisation and segregation of these materials is recommended. The retention and re-use of some materials on site (e.g. crushed / screened concrete) may be prudent pending confirmation of their quality / suitability and appropriate licenses / exemptions etc.
Recommendations	▪ Completion of a full Phase II geo-environmental intrusive site investigation to determine specific recommendations for future work (subject to advice from specialist design engineers etc.); ▪ Assessment of soils on site to confirm their feasibility for drainage testing (i.e. 'soakaways'); and ▪ Discussion with the Council to confirm their approval for our investigation strategy.

Unless stated / agreed otherwise it is the responsibility of the Client to submit this report (and related documents) to the regulators, warranty providers etc.

1.0 INTRODUCTION

1.1 Report Status

Elemental GI Ltd were appointed by Peveril Homes Ltd (hereafter referred to as 'the Client') to undertake a Phase I Geo-Environmental Assessment / Preliminary Risk Assessment for the Site to the East of Gregory Avenue, Breaston (hereafter referred to as 'the site'). This report has been prepared in accordance with our notes concerning the terms and conditions of these works and of our engagement, which are presented at the end of this report. Please refer to these terms and conditions for an important list of definitions, exclusions / assumptions etc.

This report has been prepared on the understanding that the site is to undergo redevelopment to support residential housing. We have been supplied with a copy of the proposed layout (Ref. B075234-TTE-00-ZZ-DR-H-0001 Rev. P02 dated Oct. 2025), and extracts of this plan are presented in the Proposed Site Layout Plan (Drawing 001) in Appendix I.

Should the development proposals alter, then the recommendations in this report may be subject to change. Whilst it may be utilised by others for reference purposes at the Client's discretion, it has not been prepared for any other purposes (e.g. waste classification etc.) and therefore additional works may be required by third parties dependent upon their own requirements / works.

No reliance should be placed on this document until the whole report has been read in full and confirmed through an appropriate investigation, including all appendices, drawings and notes / terms / conditions. Liability cannot be accepted for any misuse / misunderstandings etc. that arise where portions of this report are used without context or in isolation. Users of any / all of our reports, letters etc. must always ensure that they are reading the latest version / revision before undertaking any works and / or making any assessments, designs, decisions or related ventures. Please stop and check that this is the latest version for this site / project before proceeding any further.

1.2 Previous Reports

Elemental GI Ltd have not been made aware of any previous environmental / geotechnical reports by the Client.

2.0 SITE SETTING

2.1 Location

The address and location of the subject site are shown in Table 2.0 below:

Table 2.0: Site Location and Dimensions

Site Address	Site East of Gregory Avenue, Breaston
National Grid Ref.	44534, 333560
Area (Approx.)	3.56 ha
Access	Site can be accessed through locked metal gates off Gregory Avenue

2.2 Description

The following general observations have been made concerning the site and surrounding areas:

2.2.1 Site

- The site currently supports an area of ground which supported a former school. The northern areas of the site contain evidence of former paths, roads, pavements and floor slabs, and southern areas are currently covered in overgrown open ground. These areas are described in greater detail below;
- The site is currently accessed through locked metals gates which adjoin Gregory Avenue, which are near to the site's north-western corner;

- An electricity substation is present to the south of the main access point, adjacent to the western site boundary. Signs on the doors of this substation indicate that it contains asbestos and it was identified as 'Weston Mare School Breaston' on a separate sign;
- The access route (through the gates) leads onto the site via a tarmac-covered strip which is assumed to be the site's former vehicular access route. This 'splits' northwards, eastwards and southwards as it enters site. It leads eastwards into the central area of the site and leads northwards into a suspected small former car parking area. This suspected car parking area is tarmac-covered and evidence of 'parking bay' painted lines are still evident in places. The southwards path heads directly south and runs parallel to the western site boundary before turning eastwards, appearing to have provided an access route to western and southern areas of the site. Kerbs are present alongside the majority of these routes;
- Ditches are present along parts of the western and northern boundaries, all of which were 'dry' at the time of our site visit;
- Some metal pipes are present immediately north-east of the access gate which are considered likely to be disconnected gas supply pipes (or similar);
- The nearby northern / north-western area of the site supports an overgrown concrete, tiled-floor and tarmac covered areas which appear to be related to the former school buildings which are suspected to have been demolished 'to slab level'. 3 No. large concrete blocks (possible former bases / pads) are present in this area alongside 'open' manhole / inspection chambers and a rectangular shaped depression / excavation (possible former service / utility culvert / chamber). Some trees and other vegetation are present sporadically throughout this area of the site;
- This area (i.e. the areas which appear to be related to the former school buildings) extends into the central area of the site. It was noted that it forms a generally consistent topographical level, but that levels 'drop' as it meets the adjacent open / overgrown areas to the south, manifesting as slopes or sudden drops. Levels were also noted to 'rise' to meet the adjacent area to the east (i.e. the north-eastern areas of the site);
- Semi-mature and mature trees are present in some central areas of the site, and are also present along most site boundaries. Areas of 'rough ground' are present in the north-east of this area which appear to have been recently disturbed / spread, including mixed vegetation debris (i.e. parts of branches) and other similar materials including rare anthropogenic materials such as brick and plastic fragments. Small areas of similar 'rough ground' are also present sporadically in other areas of the site, mainly alongside slopes / level changes and in some areas between the former school and adjacent open / overgrown areas to the south;
- A disused footbridge is present on the site's northern boundary, leading off-site northwards into an adjacent open field. A ditch is present either side of this feature, which is connected / allowed to 'flow' beneath it with a concrete-set pipe;

- The north-eastern area of the site supports a relatively 'flat' area of ground which is covered in tarmac. This area has evidence of markings from former sports 'courts' (e.g. netball / football play areas). Ground adjacent to the eastern area of this part of the site was noted to be topographically 'higher' than ground levels, with ground adjacent to the southern area of this part of the site being 'lower', possibly suggesting the formation of development platforms in this area of the site historically;
- Small stockpiles of mixed materials (including predominantly soils with mixed building materials and some general 'rubbish' such as roofing materials, metal bars, wooden pallets etc.) are present in the north-eastern area of the site. A separate stockpile of vegetation is present towards the centre of the site. Some of these were being removed from site for disposal at the time of our site visit;
- A wire and wooden-post fence defines / splits the northern areas (i.e. areas which appear to be related to the former school buildings / sports courts) from the southern areas. It is accessed through a large metal gate which has been installed in the north-western corner of the 'southern area';
- The southern areas mostly support open ground which is covered in grass and other vegetation. It was noted that some vegetation had been removed, but it was also noted that eastern parts of this area of the site were not similarly 'cleared'. It is understood that this may be related to the presence of badgers in this area of the site;
- The site appears to exhibit an overall slight downward slope from north-to-south.

The description of the site provided above is taken following a relatively brief visit and should not be taken as a full and thorough description of all of the site's features, some of which may also have been obscured during our visit in inaccessible areas, hidden by vegetation etc.

2.2.2 Surrounding Area

- The site is set within a mixed residential and agricultural area;
- Land to the north and east of the site supports open agricultural fields;
- Land to the south and west of the site supports residential houses. A treatment / care centre is also present adjacent to the site's southern boundary; and
- Land in the wider area surrounding the site supports a similar mix of residential and agricultural land uses. A small industrial estate (Bridgefield Industrial Units) and medical practice are present c. 60m south and south-west of the site.

3.0 ENVIRONMENTAL DATABASE AND GEOLOGICAL SETTING

3.1 Geology, Hydrogeology and Mining

Table 3.1 presents the geological information reviewed for the site, which has been obtained from publicly available records and / or site-specific environmental database reports.

Table 3.1: Geological and Hydrogeological Information

Category	Entries and Notes*
Hydrogeology & Hydrology	The drift deposits recorded beneath the site (where present) are classified as a 'Secondary A Aquifer'. The bedrock geology recorded beneath the site is classified as a 'Secondary B Aquifer'. No entries relating to abstractions are recorded within a 250m radius of the site. 2 No. entries relating to potable abstractions are recorded within a 2000m radius of the site. The closest is recorded 1078m south-west of the site relating to a potable water supply. No Environment Agency source protection zones are recorded within a 1000m radius of the site. 19 No. entries relating to water networks are recorded within a 250m radius of site relating, including 1 No. entry on site. The entry on site is shown to relate to a watercourse on the western boundary. Remaining entries are shown to the north, south and west relating to similar small unnamed ditches. 5 No. entries relating to surface water features are recorded within a 250m radius of site relating to inland rivers. The closest entry relates to Golden Brook 200m east of the site. Records relating to the site's flood risk are presented within the Environmental Database Report which is in Appendix IV. This report should not be used for flood risk assessment purposes.
Underlying Ground / Geology	A record of artificial ground is recorded across the northern areas of the site relating to a large section of 'Landscaped Ground'. Entries relating to 'Made Ground' are recorded 79m south and 138m south of the site and an entry relating to 'Infilled Ground' is recorded 174m south-west. Further entries are also recorded including 'Worked Ground' 225m south-west. Drift deposits are recorded beneath the site on 1:10,000 scale mapping. This comprises a wide band of Alluvium (Clay, Silt, Sand and Gravel) which runs through the centre of the site, passing beneath the mid-point of the northern boundary and subsequently through the south-western corner. The Allenton Terrace Deposits (Sand and Gravel) are also recorded on site in the far north-western corner and along parts of the eastern and south-eastern areas. The BGS records alluvium to generally comprise "*…unconsolidated detrital material deposited by a river, stream or other body of running water as a sorted or semi-sorted sediment in the bed of the stream or on its floodplain or delta, or as a cone or fan at the base of a mountain slope. Synonym: alluvial deposits. Normally soft to firm consolidated, compressible silty clay, but can contain layers of silt, sand, peat and basal gravel. A stronger, desiccated surface zone may be present.*". It records the Allenton Terrace Deposits to generally comprise "*Sand and gravel, with possible lenses of silt, clay or peat.*", The solid geology beneath the site on 1:10,000 scale mapping is recorded as Gunthorpe Member, Mudstone. This is generally recorded to comprise "*Mudstone, red-brown, with subordinate dolomitic siltstone and fine-grained sandstone, greenish grey, common gypsum veins and nodules.*".

	Designers (including Structural Engineers) should make reference to appropriate design documents with respect to potentially aggressive ground conditions from natural sources including (but not limited to) BRE Special Digest 1:2005 'Concrete in Aggressive Ground'. This document indicates that the solid geology beneath the site may contain elements and / or compounds which require higher concrete design classes or further analysis. Initial testing must be undertaken as part of any future investigation(s) that are undertaken, and specialist advice must always be sought in relation to potentially aggressive ground conditions relating to concrete prior to construction. 1 No. entries relating to geological faults are recorded within a 250m radius of the site on 1:10,000 scale mapping. This is recorded 63m north-east of the site.
Natural Ground Stability Hazards	The site has been classified as having a moderate hazard rating for compressible ground subsidence hazards (appears to relate to band of alluvium). The site has been classified as having a low hazard rating for running sand ground subsidence hazards. The site has been classified as having a very low hazard rating for shrink / swell clay, collapsible and landslide ground subsidence hazards. The site has been classified as having a negligible / 'no' hazard rating for ground dissolution of soluble rock ground subsidence hazards. Higher risk ratings for some of the above-listed hazards may be recorded nearby. Please see Environmental Database Report for full information.
Mining, Ground Workings and Natural Cavities	No natural cavity entries are recorded within a 250m radius of the site. No 'BritPit' entries are recorded within a 250m radius of the site. 3 No. surface ground workings entries are recorded within a 250m radius of site relating to entries 176m west and 179m south-west (unspecified pits and unspecified ground workings). An entry relating to a historic mineral planning area is recorded 205m south for a sand and gravel 'surface mineral working'. No other coal mining or non-coal mining extraction or brine extraction areas are recorded within 250m of the site.
Background Chemistry	Background chemistry for the site does not highlight any significantly elevated natural contaminants in relation to human health, although concentrations of lead are noted to be close to (or equal to) the likely screening value.

* This table has been prepared using information from the site-specific environmental report which is included in Appendix IV. Please refer to this for full information on the above.

3.2 Environmental Database Information

An environmental database report has been procured for the site. Elemental GI Ltd have reviewed this report and have summarised the entries below which are considered likely to warrant further consideration as potential sources within the site-specific CSM (conceptual site model). In general all entries within a 250m radius of the site's boundary have been considered and assessed as part of this review.

We will have omitted entries in the table below where they are not considered to be feasible sources due to varying factors, which often includes their age, size and distance from site.

Table 3.2: Environmental Data

Category	Entries and Notes*
Historical Land Uses	21 No. entries are identified within a 250m radius of the site. 1 No. of these is recorded on-site relating to a Council Depot (NB this was positioned off-site to the south-west). Remaining entries off-site include an unspecified works and industrial estate (56m south), a valve house (136m south-west), railway sidings (152m south) and unspecified pits and ground workings (from 176m south-west and west). A historic tank is recorded on site (dated 1982). Associated mapping positions this to the south-east of the main access point / due east of the substation.
Waste and Landfill	No records of waste entries identified within a 250m radius of the site with the exception of a scrap metal yard 163m south-west and a waste treatment facility 226m north-east. An exemption relating to the de-naturing of controlled drugs is also recorded 31m south.
Current Industrial Land Uses	11 No. entries for recent industrial land uses are identified within a 250m radius of the site. This includes a textile / fabric company (86m south), an industrial estate (110m south) and a pump house 133m south-west. The remaining entries relate to construction suppliers, industrial engineers, electricity substations, telecommunication masts and hauliers. No entries relating to petrol stations are identified within a 250m radius of the site. 2 No. discharge consents are identified within a 250m radius of the site. This includes a miscellaneous discharge 35m south-west (revoked 2000) and another miscellaneous discharge 240m south-east. No pollution incidents are identified within a 250m radius of the site.
Sensitive Land Uses	The site is recorded to be set within a 'green belt' area and a SSSI impact risk zone.

* This table has been prepared using the main information from the site-specific environmental report which is included in Appendix IV, and is not intended to be comprehensive / exhaustive. Please refer to the site-specific environmental report for full information on the above.

3.3 Radon and Ground Gas

The site is in an area where less than 1% of homes are estimated to be at or above the Action Level. Therefore, radon protective measures are not likely to be required, subject to regulatory and warranty provider approval. This classification; alongside any 'local requirements / preferences' should be verified with these parties by the Client prior to construction.

At this stage the following potential sources of ground gas have been identified:

- Potential made ground associated with the BGS recorded 'landscaped ground'. These may have been topographical / construction modifications using unknown materials;
- Relatively small numerous historic excavations are recorded within a 250m radius of the site. These may have been backfilled with unknown / gas-generating materials.

4.0 SITE HISTORY

Historical maps dating back to 1881 have been obtained for the site, and are presented in Appendix V. The main features on site and in surrounding land areas have been reviewed and are summarised in in Tables 4.1a and 4.1b below.

Table 4.1a: Summary of Site History On-Site

OS Map Date Range(s)	Principal Features On-Site
1881 - 1921	• The site is shown to support 2 No. fields in its southern and western areas, with parts of 2 No. fields extending onto site to cover remaining central and eastern areas. A ditch is shown along parts of the northern and western boundaries. Trees are also present along parts of the northern, southern and western boundaries.
1921 - 1963	• The 2 No. fields which extended onto site to cover the central and eastern areas are now combined into one single field. • In 1937 a small structure is shown in the site's south-eastern corner (possibly associated with adjacent houses).
1963 - 1977	• A 'Secondary School' (Weston Mere County Secondary School) is now shown on site. The southern areas of the site support a large playing field which extends around along the eastern boundary towards the north-eastern corner of the site. • Tennis courts are also shown in the north-eastern area. • North-western areas are shown to support a single irregularly shaped school building. This is surrounded by a series of footpaths. Trees are shown along some of these areas. • 2 No. small unlabeled structures are shown in the north-western corner (possibly bicycle storage sheds or similar). • An area in the east of the site is shown to be fenced-off from the remainder of the site, possibly associated with the adjacent properties.
1982 - 1994	• Mapping from 1982 shows the school to have been extended with additional buildings to the east of the main school structure. The tennis courts have also been extended eastwards to meet the site boundary, and several athletic / sports features are shown in the playing fields to the south of the tennis courts. The fenced-off area is now shown to be part of the site, with fencing etc. no longer shown. • (*Records from other sources indicate that the School was permanently closed in 1990 and demolished in c. 1992*).
1994 - Present	• Mapping from 1994 appears to show the school to be disused and partially demolished. Structures are no longer shown although the 'outline' of the tennis courts and footpaths etc. remains visible.

Table 4.1b: Summary of Site History Off-Site

OS Map Date Range(s)	Principal Features Surrounding the Site
1881 - 1937	• The site is shown to be surrounded by fields. Footpaths / tracks and tree-lined field boundaries are common in all directions. • A road (unnamed) is present immediately south of the site. • An orchard is present adjacent to part of the site's eastern boundary. • Residential structures are present south and south-east of the site from c. 50m, and a railway is present south-west from c. 155m. • Ground 175m south-west appears to have been excavated. • From 1914 a small residential structure is also recorded adjacent to the site's south-eastern corner.
1937 - 1955	• A large new residential housing estate is shown south of the site beyond the road, extending to the east and west.
1955 - 1969	• From 1955 housing is also shown adjacent to the west of the site. An unlabeled structure (later identified as a Council Depot) is shown adjacent to the site's south-western corner. • In 1963 some small unidentified structures (possible sheds) are sown to the south-east of the site, and a 'works' building is shown 125m south-west.
1969 – Present.	• From 1969 a Scrap Metal Yard and Precast Concrete Works are shown from 125m south-west. • Mapping from 1982 shows the Council Depot to have been slightly extended.

Elemental GI Ltd have summarised the main features of the site and surrounding land within the table above, including features which may need to be considered with regards to future development. However, reference should be made to the historic maps presented within Appendix V for full information. It must be noted that this historic mapping is unlikely to present an exhaustive record of the site's development history, and considerable periods of time may have elapsed between successive Ordnance Survey map editions. It is therefore possible that some features / activities may have gone unrecorded.

5.0 PHASE I GROUND MODEL

5.1 Expected Ground Conditions

The site is recorded to be underlain by Alluvium (Clay, Silt, Sand and Gravel) which runs through the centre of the site, passing beneath the mid-point of the northern boundary and subsequently through the south-western corner, and by Allenton Terrace Deposits (Sand and Gravel) which are recorded in smaller areas. The solid geology is recorded as the Gunthorpe member (Mudstone). The drift deposits recorded beneath the site (where present) are classified as a 'Secondary A Aquifer'. The bedrock geology recorded beneath the site is classified as a 'Secondary B Aquifer'. No entries relating to abstractions are recorded within a 250m radius of the site. We would therefore expect the site to be underlain by made ground associated with the former school (particularly across central / northern areas) and then by natural soils comprising residual clays, and water / groundwater may be expected during site works (subject to seasonal variations).

Elemental GI Ltd have reviewed the nearest BGS borehole log (BGS Ref. SK43SE561). This is positioned c. 135m south-east of the site and shows made ground overlying clayey gravelly sand (possibly a residual soil of subordinate sandstone within the Gunthorpe Formation Mudstone). It is noted with emphasis that these records do not confirm the expected ground profile suggested above, indicating that variable ground conditions may be encountered on the subject site.

Mining / Stability

The site has been classified as having a moderate hazard rating for compressible ground subsidence hazards (appears to relate to band of alluvium).

The site has been classified as having a low hazard rating for running sand ground subsidence hazards.

The site has been classified as having a very low hazard rating for shrink / swell clay, collapsible and landslide ground subsidence hazards.

The site has been classified as having a negligible / 'no' hazard rating for ground dissolution of soluble rock ground subsidence hazards.

No coal or other mining issues have been identified at this stage in accordance with the enclosed Environmental Data Report.

5.2 Human Health and Ground Gas Conceptual Site Model (CSM)

The site was developed from open fields to support a school in the late 1950s, with extensions shown to the school buildings in the 1980s. It was closed and subsequently demolished in the 1990s.A substation is present in the west of the site, and evidence of former structures and

topographical modifications is present across most of the central and northern areas of the site. Remaining southern areas support open former playing fields. A tank is recorded on site within environmental database reports. Historic mapping also shows a chimney adjacent to the northern part of the school buildings, possible indicating a former boiler room (or similar).

In accordance with our standard risk assessment methodology (presented at the end of this report), the following sources, pathways and receptors have been identified at the subject site at this stage:

Table 5.1: Preliminary Human Health CSM

Potential On-Site Sources	**Pathways**	**Receptors**	**Risk Rating[#]**
Former School: Boiler Room (TPH, SVOC/VOC, Asbestos)	• Migration in Soils • Groundwater • Vapour Migration • Direct Contact • Plant Uptake • Leaching • Ground Gas Migration	• End Users • Groundwater • Structures • Controlled Waters	LOW / MODERATE (Likely to be Localised)
Former School: Tank, Substation (TPH, PCBs)	• Migration in Soils • Groundwater • Vapour Migration • Direct Contact	• End Users • Groundwater • Structures • Controlled Waters	LOW / MODERATE (Likely to be Localised)
Former School: Construction / Topographical Modifications (General Contamination e.g. Heavy Metals, Asbestos)	• Migration in Soils • Groundwater • Vapour Migration • Direct Contact • Plant Uptake • Leaching • Ground Gas Migration	• End Users • Groundwater • Structures	LOW / MODERATE
Rough Ground (General Contamination e.g. Heavy Metals, Asbestos)	• Migration in Soils • Groundwater • Vapour Migration • Direct Contact • Plant Uptake • Leaching • Ground Gas Migration	• End Users • Groundwater • Structures	LOW / MODERATE (Likely to be Localised)
Potential Off-Site Sources			
Historic 'Ground Workings' 176m West and 179m South-West (Ground Gas)	• Ground Gas Migration	• End Users • Structures	LOW (Small Size and Relatively Far Distance Likely to Significantly Mitigate Risks)
Historic Council Depot Adjacent South-West (Ground Gas, TPH, VOC/SVOC)	• Migration in Soils • Groundwater • Vapour Migration • Ground Gas Migration	• End Users • Groundwater • Structures	LOW / MODERATE
Various Industrial Activities (From 86m South) (Ground Gas, TPH, VOC/SVOC)	• Migration in Soils • Groundwater	• End Users • Groundwater • Structures	VERY LOW (Small Size and Relatively Far Distance Likely to Significantly Mitigate Risks)

[#] Risk ratings are described in Table A1 within the 'Standard Risk Assessment – Considerations and Methodology' section at the end of this report.

5.2.1 Potential Pollutant Linkages

For a potential pollutant linkage to be present, feasible potential sources, pathways and receptors must be present or possible. With reference to the proposed residential end use, feasible potential pollutant linkages have been identified at the site as outlined in table 5.1 above. Investigation works are therefore considered necessary to confirm if these are ongoing (or possible in future) so that appropriate remedial recommendations may be established.

Based on the site information reviewed to date, no feasible potential pollutant linkages have been identified at / around the site. Subject to the approval of the appropriate regulators further works may therefore not be necessary at this stage although it is recommended that a general assessment of the site's ground conditions should be undertaken for general liability / assessment purposes.

5.2.2 Ground Gas Summary

As summarised in table 5.1 above, potential sources of ground gas have been identified off-site. This comprises potential made ground associated with the BGS recorded 'landscaped ground' on site (may have been topographical / construction modifications using unknown materials) and relatively small numerous historic excavations which are recorded within a 250m radius of the site.

Following a review of the site's geological setting, the following potential *pathways* have been identified for additional consideration:

- Superficial deposits are shown to include sands and gravels, which may permit the free lateral migration of ground gas in the local area;
- Given the site's previous land uses it is considered highly likely that previous utility / services may travel beneath and around the site, which may form a preferential pathway for ground gas migration.

With regards to the proposed end-use at the site (as described in Section 1.0), residential / end-users and the structures within which they will work / live have been considered as the main potential receptors at the site in relation to ground gas.

From the above it has been provisionally concluded that feasible sources, pathways and receptors may exist at / around the site. This provisional pollutant linkage has been considered alongside the following potential mitigating factors:

- The 'landscaped ground' associated with the former school is likely to have been placed in the mid- to late 1950s. This indicates that it has been in place for around

65 years which is considered likely to have reduced / depleted its gas generation potential;

- The off-site historic excavations were relatively small and are at a likely distance which will significantly reduce risks from ground gas, if present; and
- Residual clay soils are considered likely to be present in most areas locally which are likely to present significant barriers to the free migration of ground gas.

At this stage it is considered that feasible risks from ground gas should be investigated through the completion of monitoring as part of future ground investigation works.

5.3 Controlled Waters CSM

The drift deposits recorded beneath the site (where present) are classified as a 'Secondary A Aquifer'. The bedrock geology recorded beneath the site is classified as a 'Secondary B Aquifer'.

No entries relating to abstractions are recorded within a 250m radius of the site and no Environment Agency source protection zones are recorded within a 1000m radius of the site.

Ditches are present along some site boundaries and Golden Brook is present c. 200m east of the site.

The site appears to be situated within an area of low sensitivity in relation to controlled waters. It is therefore recommended that the findings of any future site investigation works should be considered on this basis, and a revised assessment of the site's controlled waters CSM should be undertaken thereafter. It is considered that targeted investigations beneath / around the historic tank, substation and suspected historic boiler room areas should also be undertaken in accordance with the CSM described in this sub-section.

5.4 Model Status and Uncertainty

The potential significant linkages discussed in this section are based on available data reviewed to date.

6.0 RECOMMENDATIONS

A review of the available site information (as discussed herein) has been undertaken to inform the following conclusions and recommendations. However, this report should be submitted to the appropriate regulators (and other stakeholders, as necessary) by the Client prior to the start of any irrecoverable works associated with the site.

6.1 Foundations

Foundation recommendations cannot be made prior to investigation works, although it is provisionally suggested that traditional foundations may be suitable at the site for low-rise residential housing, subject to intrusive investigation. However, alternative foundations may be needed if significant soft / loose soils and / or deep made ground is present at the site. Bands of superficial deposits are shown to be present in a swathe through the site and encroaching locally across some boundaries. Off-site BGS logs also show unexpected ground conditions and the potential for variable soil / ground conditions on site is therefore considered to be relatively high at this stage.

The underlying natural soils should be inspected and analysed to confirm foundation requirements including (but not limited to) their volume change potential and sulphate classification. Cohesive soils may be present on / near the site and trees / hedges have also been observed. It is therefore recommended that the properties of these soils (where present) are confirmed so that construction parameters / designs may be adjusted accordingly.

Any historic ground disturbances (e.g. field boundaries) which ran through the site may not be encountered by future site investigations, but any future construction should be vigilant for unusual ground conditions in such areas. Elemental GI Ltd should be contacted for further advice if encountered.

6.2 Drainage

At this stage it is considered likely that the site will be underlain by made ground and then mixed / variable residual soils. These may include granular soils associated with superficial deposits or with sandstone bands in the solid geology. The potential for on-site natural soils to support *in situ* soakaways should be assessed through appropriate testing.

6.3 Mining

Potential mining issues have not been identified at this stage.

6.4 Contamination

Potential contamination issues have been identified at / around the site which require further investigation. These mainly relate to the historic construction of the school ('earthworks' materials used in forming development platforms, construction materials (e.g. potential asbestos-containing materials) and former tanks / boiler rooms (if present). The

substation and more recent 'rough ground' and demolition of the school are also considered to be worth consideration within the site's CSM and investigation strategy. A Council Depot was present adjacent to the south-west of the site which may have included storage / use of chemicals, fuels etc.

6.5 Ground Gas and Radon

Potential minor ground gas sources have been identified at / around the site which require further investigation. These relate to the 'landscaped ground' / topographical modifications on site and historic excavations off-site.

Please see section 3.3 for information relating to radon risks at the site.

6.6 Further Works

At this stage the following further works will be necessary, subject to comments from the Regulatory Authorities:

- Completion of a full Phase II geo-environmental intrusive site investigation to determine specific recommendations for future work (subject to advice from specialist design engineers etc.);
- Assessment of soils on site to confirm their feasibility for drainage testing (i.e. 'soakaways'); and
- Discussion with the Council to confirm their approval for our investigation strategy.

Our Standard Terms and Conditions

Our ref: T&C2024-12.20

This document accompanies all fee proposals, reports and other services which we have offered in relation to your site(s) and should be read carefully. The terms and conditions described below supersede all others and are final unless altered by prior agreement with ourselves before site works commence. We reserve the right to withdraw this report at any time without notice.

Important: **your attention is drawn to the arrangement of our insurance cover, which is supplied / applied strictly on a consultancy basis for low-rise structures only, under the explicit condition that we cannot and will not 'sign off' any works or designs, but we are able to provide general advice and recommendations.**

Due to recent changes in the insurance market, our insurers are unable to settle claims relating to asbestos and therefore we are able to provide advice relating to ground conditions but the remediation / handling etc. of asbestos and / or asbestos contaminated materials must always be undertaken by others.

Definitions:
The following definitions apply:
"Client" means any organisation / company (or similar) or person who orders and subsequently pays in full for works including consultancy services from Elemental GI Ltd. For the purposes of clarity, in the event of non-payment or late payment of any of our invoices relating to each site / project, the organisation / company (or similar) or person who ordered any works including consultancy services from Elemental GI Ltd shall not be considered as a client in the context of our report (including any and all related documents, drawings, emails etc.) and any / all of its contents.

Assumptions:
- Elemental GI has made no allowance to reinstate ground cover or intrusive positions following completion of site works although (as always) we will try to leave the work areas in a clean and tidy state which is free of immediate health and safety hazards.
- We have not made an allowance for the removal of waste materials (soil arisings) from the site.
- Where utility / service records are supplied to us then we would require these to be provided at least 72 hours before the start of site works. If sufficient plans are not available then we may be able to obtain these on your behalf (rates available on request) upon request.
- Cancellation charges will apply for all works which are cancelled (or where access is in any way otherwise prohibited e.g. access is not provided to the site) within 72 hours of the start of site works (3 No. working days).

Site Investigation Works:
We have assumed that full and unconstrained access will be given to the site for the duration of our works.

Where works have been specified (e.g. exploratory hole positions, soakaway depths etc) we will try to complete these in accordance with the requirements. However, site-specific limitations (including ground conditions and health and safety hazards) may require some works to be adjusted accordingly. Any ground investigation works will only ever be able to cover a very small proportion of the site and therefore assumptions may have been made in relation to ground conditions between / around the exploratory hole positions completed. Such assumptions are for guidance only and no liability can be accepted for the accuracy of such assumptions. All comments, recommendations, interpretations and conclusions presented in this report and associated correspondence are based solely on the ground conditions recorded at the exploratory holes that we have completed. Because of the natural variability of all ground (and groundwater) at all sites, conditions between exploratory holes can only be interpreted and not defined. In addition it is important to note that the description of the site and the ground / groundwater conditions should only be taken as being accurate during the specific time / date(s) of the field works. For example, groundwater levels may vary seasonally and significantly.

Our insurers have informed us that we are not liable for damage to services not brought to our attention prior to the start of the investigation works. We have assumed that we will be supplied with plans accurately showing the location of both public and private underground services on the site. Although Elemental GI will take all appropriate precautions, we cannot be held liable for damage to any services not brought to our attention or any delays / cancellation charges incurred if full utilities enquiries aren't passed to Elemental GI Ltd at instruction stage. We can arrange for a service trace team to attend site to locate services over the work areas to allow intrusive investigation to proceed (subject to utility provider approvals etc.), the costs will vary depending on the size of the site and the service required (usually £715+VAT), if it is not mentioned within the accompanying email then please advise in your instruction if you wish to proceed with the above additional works.

In the unlikely event that artesian water is encountered (groundwater which rises to the surface under pressure, similar to a spring) we will need to take steps to seal it in site. This typically involves the temporary halting of drilling works, installation of elevated casing and addition of sealing pellets. Additional costs will automatically apply where this is encountered which shall be in the region of £400+VAT to £800+VAT.

Laboratory Testing:
Laboratory testing is scheduled on a fixed 10 day turnaround for most analyses. Certain tests (e.g. 'soaked CBR tests') may take longer and can sometimes have an unspecified duration / cost.

Regulatory Discussions / Approvals:
We cannot guarantee that the works that have been suggested will satisfy the regulators / warranty providers. These bodies and other stakeholders (e.g. piling contractors) may require further works which are not shown on this quote and which will be provided at extra cost. The fees which we have provided do not include any extended liaison with statutory bodies (LA & EA) following submission of the report as part of any planning application. However, notwithstanding the above we would be happy to undertake initial discussions with the regulators where necessary and to submit the report if instructed.

Timescales:
We can typically meet the following timescales (from date of instruction):

- Desk Studies: 1-2 weeks;
- Mobilisation to Site: 1-3 weeks;
- Final Reporting: 5 to 6 weeks after completion of site works.

All reports are provided electronically. 'Hard' copies can be provided on request although additional charges will apply for paper / bound copies of our reports. Where relevant, outstanding gas monitoring results will be forwarded as an addendum.

Additional Costs:
The need for further works can sometimes arise during / after the site investigation. For example it may be necessary to undertake gas/groundwater monitoring should sources of gas be identified. Indicative additional costs for potential further works are provided for your information below (please note that these would be confirmed on a site-specific basis if / when required):

- Combined gas/groundwater monitoring installations including well specific sampling equipment @ £315+VAT per installation (n.b. requires WS drilling rig);
- Gas/groundwater monitoring visits by a qualified technician @ £SITE SPECIFIC per visit (please note a minimum of 6 months (6 visits) worth of data may be required by the Local Authority);
- Additional site visits/reporting/liaison with the Regulatory Authorities @ £60+VAT per hour and £0.60+VAT per mile.

We would strongly advise that all gas monitoring wells be fully and appropriately decommissioned following completion of site works where elevated gas concentrations or gas flows are detected. Once final layouts are confirmed please contact us for further information.

Compliance and Risk:
Users of any / all of our reports, letters etc. must always ensure that they are reading the latest version / revision before undertaking any works and / or making any assessments, designs, decisions or related ventures. Unless otherwise specified, the works quoted shall not be undertaken in full accordance with Eurocode 7 (EC7), although this can be undertaken at extra cost upon request prior to site works. If these works have not been done in accordance with EC7 then it is assumed that the Client accepts that a lower level of investigation (in terms of spacing and depth) may have been undertaken, which may decrease our understanding of site conditions.

Whilst every effort will be made to investigate the ground and groundwater conditions beneath each site, ground conditions around and beneath each exploratory hole may vary and Elemental GI Ltd will not accept any responsibility for issues arising from such unknown conditions. No warranty is given relating to any possibility of future changes in the status / condition of the site.

Payment and Insurance:
Due to significant late payments in the past we have had to introduce **credit limits** for all Clients for all works commencing from 01st October 2022. This shall be set at £10,000+VAT and shall apply to the combined value of all overdue invoices for each Client. Once this limit is met or exceeded then all works shall be put on 'hold' (including verbal / informal advice, updates, release of reports etc.) until the total unpaid overdue invoices are paid in full.

Our standard payment terms are typically either 14 days or 30 days (or as shown on each invoice). Notwithstanding any contrary provision in these terms or in any other terms agreed between us or implied by statute or otherwise, any warranty arising (whether under contract or implied by statute) provided with our works / reports etc. shall only apply once all invoices that we have sent in relation to the same site / project discussed herein (i.e. the site discussed within this document) have been paid by the Client. All warranties relating to; and reliance upon / use of; this report (in part or in full, including all text, drawings, logs, associated correspondence etc.) is rendered null and void unless all invoices relating to it are settled in full within the period specified on the related invoices, and any use of the report (and all related documents, drawings etc.) would then be entirely at your own risk. In the case of non-payment, all works which have been completed in relation to the site (including all advice whether verbal or written, all reports and any / all other works which we have undertaken and / commissioned on behalf of the Client including regulatory discussions) shall also be rendered null and void with respect to all warranties whether formal or informal.

If payment has not been received within 60 days of the date of each invoice (i.e. "60 days overdue") our external credit controllers "Corporate & Commercial Credit Solutions Limited" will automatically be appointed to pursue payment on our behalf. At this point 10% of the invoice will automatically be added to each invoice to cover their time and charges.

We will send an invoice for all 'site works' and Phase I reports as soon as these are complete, and our final invoice (typically covering lab. analysis and Phase II reporting) will be released once the final report has been issued for the site. For new Clients we will release our Phase II report once any outstanding invoices have been paid.

Elemental GI Ltd can confirm that a policy of Professional Indemnity (PI) Insurance is held, which has a limit of one million pounds (£1M) for any one single claim (with defence costs in addition). Our liability is strictly limited to the amount offered by the PI cover that is held in place at the time that any claim is made. Our warranty which is provided to the Client and is insured through this cover which shall be in force for a period of six years from the date of the earliest report in connection with the project which was produced in the name of that Client by ourselves. Should market forces mean that continuation of this level of cover becomes unreasonable through factors beyond our control, then alternative cover shall be sought by Elemental GI Ltd for the remaining duration of the period of warranty at a level which is fair and reasonable under the prevailing circumstances. The warranty which is provided is to a performance standard no greater than reasonable care and skill.

We do not and will not accept any alteration to the fee proposal that is not favourable to Elemental GI Ltd following receipt of your instruction, unless agreed otherwise in writing prior to the completion of the related site works.

Unless agreed otherwise and in advance of the commencement of works, the PI cover which we hold shall be limited to an industry standard level of cover which shall not exceed the lesser of either £1M (aggregate) or ten times the value of that project (based upon invoices released by ourselves in relation to the project). PI will become applicable once satisfactory payment of fees has been received in accordance with our agreed terms.

H&S Regulations
Elemental GI Ltd maintains a focus on the safety of our staff and of those who we appoint to work with in relation to our projects. This is described fully within our Health and Safety Policy. A wide variety of rules and regulations apply to the projects with which we are involved, including (but not limited to) our Client's own procedures, site-specific requirements and nationally applicable regulations such as the Construction, Design and Management Regulations: 2015 (CDM).

There is considerable ambiguity in terms of CDM and how it applies to site investigation works, and whilst some clarification has been informally provided, formal and authoritative clarification or updated legislation / regulation has not been issued at the time of writing. However, it is noted that the Association of Geotechnical & Geoenvironmental Specialists (AGS) has noted that "…the regulations should be applied proportionally to the level of risk involved.". For clarity, we therefore confirm that CDM applies only to a limited extent and for a limited period in relation to our works (i.e. only for the duration of the site works) and that we are not the principal contractor unless agreed otherwise prior to instruction. If any related requirements are expected of us by our Client (i.e. the person(s) or company etc. to whom the quote is addressed and sent) then it is assumed that these shall be described and explained in full upon instruction, and furthermore it is assumed that the 'Client' within the descriptions of CDM, will have honoured their duties under CDM in a reasonable time in order for us to have done the same.

If additional risk assessments and method statements ('RAMS') are required by the Client or other stakeholders which are above / beyond our usual in-house health and safety documentation then a charge of £250.00+VAT will apply to cover the time taken to prepare such items (plus any additional necessary disbursements for any additional health and safety items / works etc.).

Notes to be Considered **Following** Review of our Report / Advice by the Client:

Consideration of factors such as concrete design class, desiccation, settlement and related matters may need to be undertaken separately once this information is known / provided and this has not been assessed unless stated otherwise as it is assumed that your appointed Structural Engineers have made sufficient allowances etc. and / or have assessed such factors directly. Specific details relating to construction (e.g. concrete design class) MUST be assessed conservatively and directly by the parties finalising those aspects of the project as part of their own works once the project details can be considered holistically by them.

With respect to the documents, reports and all advice (including verbal an electronic) relating to this site; notwithstanding any contrary provision in these terms or in any other terms agreed between us or implied by statute or otherwise, any warranty arising (whether under contract or implied by statute) provided with our works / reports etc. shall only apply once all invoices that we have sent in relation to the same site / project discussed herein (i.e. the site discussed within this document) have been settled by the Client in full within the period (i.e. 'Terms' e.g. 'Net 20') specified on such invoices. All warranties (i.e. any warranty arising whether under contract or implied by statute) relating to; and reliance upon / use of; this report (in part or in full, including all text, drawings, logs, associated correspondence etc.) are rendered null and void unless all invoices relating to it are settled in full within the period specified on the related invoices. In the case of late payment and non-payment, all works which have been completed in relation to the site (including all advice whether verbal or written, all reports and any / all other works which we have undertaken and / commissioned on behalf of the Client including regulatory discussions) shall also be rendered null and void with respect to all warranties (i.e. any warranty arising whether under contract or implied by statute) whether formal or informal and the ownership / use / reliance on any and all such works is withdrawn automatically and immediately.

For total clarity, the warranty (i.e. any warranty arising whether under contract or implied by statute) and all reliance upon / use of this report (in part or in full, including all text, drawings, logs, associated correspondence etc.) is both voided and prohibited unless all invoices relating to it are settled in full within the period (i.e. 'Terms' e.g. 'Net 20') specified on such invoices.

We have obtained and reviewed information relating to the site, but this may not be complete, and liability cannot be accepted for information not available to Elemental GI Ltd at the time of writing this report. This report has been written in consideration of construction / development proposals (or similar) as described in Section 1.0 of this report. If any of these proposals change (e.g. layout), then this report may be subject to change. Environmental factors may change over time (including climate change, water / rainfall conditions etc) which may present conditions not experienced during the works described herein. We cannot accept liability for any conditions not identified / experienced during the works described herein, and it is assumed that suitable contingencies are therefore included within site designs by your other appointed Engineers (and similar professionals) in accordance with best practice and appropriate precautions.

The actual measurable area of the site which has been physically inspected (e.g. through drilling / excavations etc.) as part of the works discussed in this report is very small when compared to the total area of the site, and therefore our findings should not be seen as being complete, thorough or comprehensive in relation to the ground / water conditions at this stage. Whilst we have endeavoured to assess and investigate the site in accordance with the scope of these works, it always remains possible that ground conditions will vary between and beneath locations. This may include ground type, strength and groundwater conditions. There may therefore be conditions prevailing on site which have not been revealed by this assessment and which have not been taken into account by this report. The best way to ensure that recommendations (including foundation recommendations) are appropriate is to appoint a suitably experienced and qualified Engineer to inspect all formations (foundation excavations) prior to construction. It is therefore always recommended that the Client undertakes this for all sites, and this advice applies to the site discussed in this report. Responsibility cannot be accepted for any works undertaken which deviate from the recommendations presented herein and for all / any conditions not revealed by this investigation and assessment. It should be noted that groundwater levels etc. may vary due to seasonal and other effects. Whilst it may be

utilised by others for reference purposes at the Client's discretion, it has not been prepared for any other purposes (e.g. waste classification, drainage excavations etc.) and therefore additional works may be required by third parties dependent upon their own requirements / works. Any works which are proposed at greater depths than reported herein may require confirmatory investigation works as necessary.

This report has been prepared for the sole use and reliance of the Client. No other third party may rely upon, use or reproduce the content of this report without our prior written approval. If any unauthorised third party comes into possession of this report, they rely upon it entirely at their own risk and the authors do not owe them any warranty, duty of care or skill.
Our report, including the conclusions and recommendations, are considered reasonable based on the findings of the various assessments. However, these cannot be guaranteed to gain regulatory approval and therefore the Client should submit it to them (as necessary) for their comments and approval prior to undertaking any irrecoverable works associated with the subject site.

The findings and recommendations made in this report are based on published information (as presented in the accompanying appendices). Elemental GI Ltd cannot accept responsibility for the reliability and authenticity of published information or reports prepared by third parties.

The conclusions and recommendations presented herein are considered reasonable based on the assessments of the site undertaken by Elemental GI Ltd. However, these cannot be guaranteed to gain regulatory approval and therefore copies of this report should be sent to the appropriate regulatory authorities and / or other organisations (as appropriate) by the Client for their comments and approval prior to undertaking any irrecoverable works associated with the site.
We cannot accept responsibility for any ground conditions (including groundwater, gas etc.) that have not been revealed by the exploratory holes, or which (most importantly) occur between / beneath them. The possibility of significant variation in ground conditions existing between / beneath test locations / depths cannot be discounted and must be considered within the design proposals for the subject site. All soakaway designs should be approved by the relevant statutory authority prior to implementation and must adhere to the standard design and ground setting requirements, upon which your appointed drainage design engineers should advise you. Where comments / recommendations have been made relating to specific depths it cannot be guaranteed that ground conditions shall be similar at surrounding / underlying depths, which should be taken into consideration as necessary by others.

Elemental GI Ltd – 2024 V1.20

Elemental GI Ltd – Our Standard Risk Assessment Approach

We have used various guidelines and current legislation in the preparation of this report. This includes (but is not limited to) the following:

- **DEFRA / EA document 'Contaminated Land Report 11 (CLR11) Model Procedures for the Management of Land Contamination' (2004) [*withdrawn but used for general reference purposes*];**
- **NHBC / EA / CIEH document 'Guidance for the Safe Development of Housing on Land Affected by Contamination' (2008);**
- **DEFRA 'Environmental Protection Act 1990: Part 2A – Contaminated Land Statutory Guidance (2012); and**
- **Environment Agency 'Land contamination risk management (LCRM)' (2020, last updated April 2021) held at:**
  - **https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm**

Construction of Conceptual Site Model

Elemental GI Ltd have based our standard risk assessment methodology upon current legislation and prevailing best practice and available guidance. This includes the assessment of potentially contaminated land in terms of 'significant pollutants' and 'pollutant linkages', using SOURCE-PATHWAY-RECEPTOR' scenarios for the site. For a pollutant linkage to exist all three of these elements must be present. These have been clearly defined in the guidance as follows:

- …..potential source as 'a contaminant which is in, or under the land and which has the potential to cause significant harm or to cause pollution of controlled waters'.
- …..potential pathway as 'one or more routes or means by, or through, which a receptor is being exposed to, or affected by a contaminant, or could be so exposed or affected'.
- …..potential receptor as 'a living organism, a group of living organisms, an ecological system or a piece of property which is being or could be, harmed by a contaminant or controlled waters which are being, or could be, polluted by a contaminant'.

Within this report, common pathways including (but not limited to) the following have been considered (amended on a site-specific basis):

- Ingestion of soil;
- Ingestion of site-grown vegetables;
- Ingestion of site-reared livestock / fish;
- Dermal contact with soils;
- Inhalation of vapours;
- Inhalation of soil-derived dust.

Receptors will be considered on a site-specific basis, but will usually include the current / future users of the site itself as well as users of surrounding sites. Other receptors including controlled waters will also be considered and assessed.

Risk Assessment Methodology

Our risk assessment methodology is based upon a phased approach which is created through the construction of the sites conceptual site model, and which takes the following steps (taken from LCRM Guidance):

1. *Identify the hazard – establish contaminant sources.*
2. *Assess the hazard – use a source-pathway-receptor (S-P-R) linkage approach to find out if there is the potential for unacceptable risk.*
3. *Estimate the risk – predict what degree of harm or pollution might result and how likely it is to occur by using the tiered approach to risk assessment.*
4. *Evaluate the risk – decide whether a risk is unacceptable.*

The meaning of the terms are:

- *hazard – a property or situation that in particular circumstances could lead to harm or pollution;*
- *risk – a combination of the probability, or frequency of occurrence of a defined hazard and the magnitude of the consequences of the occurrence;*
- *risk assessment – the formal process of identifying, assessing and evaluating the health and environmental risks that may be associated with a hazard;*
- *risk management – the formal process to identify, assess and determine the risks, and to select and take action to mitigate them.*

Our definitions and classification matrix for risk descriptions have been taken from the NHBC document "Guidance for the Safe Development of Housing on Land Affected by Contamination" (Ref. R&D P66, dated 2008)

Table A1: Risk Categorisation (Adapted from Table 1.8 of NHBC, R&D P66 (2008))

Probability (Likelihood)		Consequence			
		Severe	Medium	Mild	Minor
	High Likelihood	Very High Risk	High Risk	Moderate Risk	Moderate / Low Risk
	Likely	High Risk	Moderate Risk	Moderate / Low Risk	Low Risk
	Low Likelihood	Moderate Risk	Moderate / Low Risk	Low Risk	Very Low Risk
	Not likely	Moderate / Low Risk	Low Risk	Very Low Risk	Very Low Risk

The R&D P66 document goes on to provide further descriptions of these risk levels, which are also reproduced below:

Table A2: Risk Level Descriptions (Adapted from Table 1.9 of NHBC, R&D P66 (2008))

Term	Description
Very High Risk	A high probability exists that severe / significant harm could arise to someone or something from the hazard which has been identified. Remedial action is required.
High Risk	Harm is likely to arise to someone or something from the hazard which has been identified. Remedial action is usually required.
Moderate Risk	Harm could potentially arise to someone or something from the hazard which has been identified without remedial action, although it is considered to be relatively unlikely that such harm would be severe.
Low Risk	Harm could theoretically arise to someone or something from the hazard which has been identified without remedial action, although it is considered that any effects would be mild.
Very Low Risk	Harm is not likely to arise to someone or something from the hazard which has been identified.

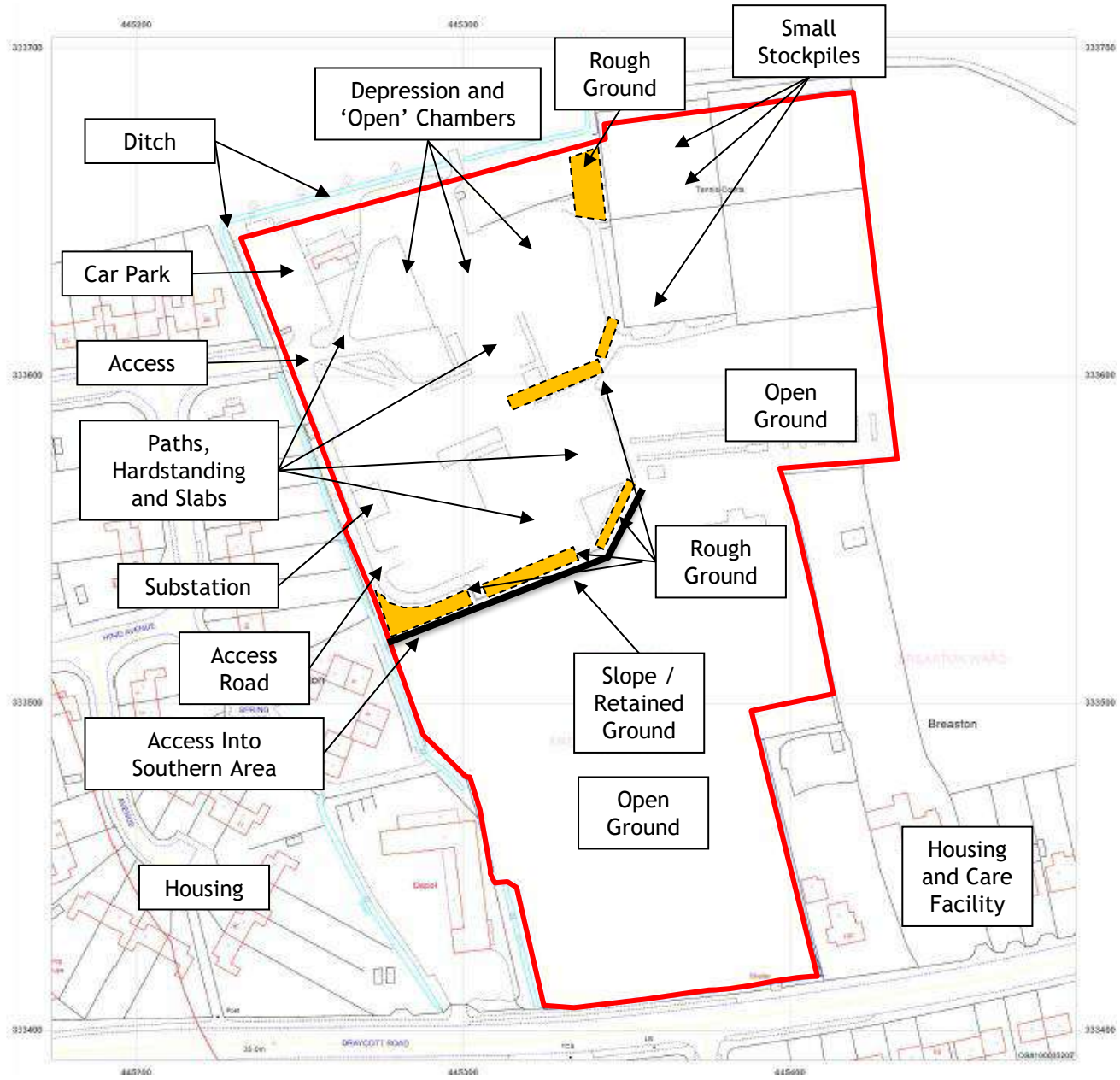
APPENDIX I

Proposed Site Layout Plan

CLIENT: PEVERIL HOMES TO BUILD A LIFE IN	TITLE: Proposed Site Layout Plan	DATE: Oct. 2025	SCALE@SIZE: NOT TO SCALE	Elemental GI Ltd
		DRAWING No: E24151_001	DESIGN/DRAWN: JR	

APPENDIX II

Site Features Plan



CLIENT:	TITLE:	DATE:	SCALE@SIZE:
PEVERIL HOMES TO BUILD A LIFE IN	Site Features Plan	Oct. 2025	NOT TO SCALE
		DRAWING No: E24151_002	DESIGN/DRAWN: JR

Elemental GI Ltd

APPENDIX III

General Photographic Record

CLIENT: PEVERIL HOMES TO BUILD A LIFE IN	TITLE: General Site Photographs	DATE: Oct. 2025	SCALE@SIZE: NOT TO SCALE
		DRAWING No: E24151_003a	DESIGN/DRAWN: JR

Elemental GI Ltd

Photo 1 – Site Entrance / Gate

Photo 2 – View of Access Road Looking East

Photo 3 – Car Park North of Gate

Photo 4 – Ditch North of Car Park

CLIENT:	TITLE:	DATE:	SCALE@SIZE:	
PEVERIL HOMES TO BUILD A LIFE IN	General Site Photographs	Oct. 2025	NOT TO SCALE	Elemental GI Ltd
		DRAWING No: E24151_003a	DESIGN/DRAWN: JR	

Photo 5 – View of North-Western Areas (from NW Corner)

Photo 6 – Remnant Concrete Pads / Blocks

Photo 7 – View of North-Western Areas (from Centre)

Photo 8 – Old Footbridge Leading Off-Site to North

CLIENT:	TITLE:	DATE:	SCALE@SIZE:	
PEVERIL HOMES TO BUILD A LIFE IN	General Site Photographs	Oct. 2025	NOT TO SCALE	Elemental GI Ltd
		DRAWING No: E24151_003a	DESIGN/DRAWN: JR	

Photo 9 – Rough Ground and Trees Near Sports Courts

Photo 10 – View of North-Eastern Area (Sports Courts)

Photo 11 – View of North-Eastern Area (Sports Courts)

Photo 12 – Exposed Tarmac in North-Eastern Area

CLIENT:	TITLE:	DATE:	SCALE@SIZE:	
PEVERIL HOMES TO BUILD A LIFE IN	General Site Photographs	Oct. 2025	NOT TO SCALE	Elemental GI Ltd
		DRAWING No: E24151_003a	DESIGN/DRAWN: JR	

Photo 13 – Small Stockpile of Wood / Wire Materials

Photo 14 – Stockpile of Vegetation / Building Materials

Photo 15 – View of Central Area

Photo 16 – View of Central Area

CLIENT:	TITLE:	DATE:	SCALE@SIZE:	
PEVERIL HOMES TO BUILD A LIFE IN	General Site Photographs	Oct. 2025	NOT TO SCALE	Elemental GI Ltd
		DRAWING No: E24151_003a	DESIGN/DRAWN: JR	

Photo 17 – Rough Ground in Central Area

Photo 18 – Gate Leading from North-to-South Areas

Photo 19 – View Over Southern Areas

Photo 20 – View Over Southern Areas

CLIENT:	TITLE:	DATE:	SCALE@SIZE:	
PEVERIL HOMES TO BUILD A LIFE IN	General Site Photographs	Oct. 2025	NOT TO SCALE	Elemental GI Ltd
		DRAWING No: E24151_003a	DESIGN/DRAWN: JR	

APPENDIX IV

Environmental Data Report

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

E24151 Gregory Ave., Breaston

Order Details

Date: 27/08/2025

Your ref: E24151_Breaston

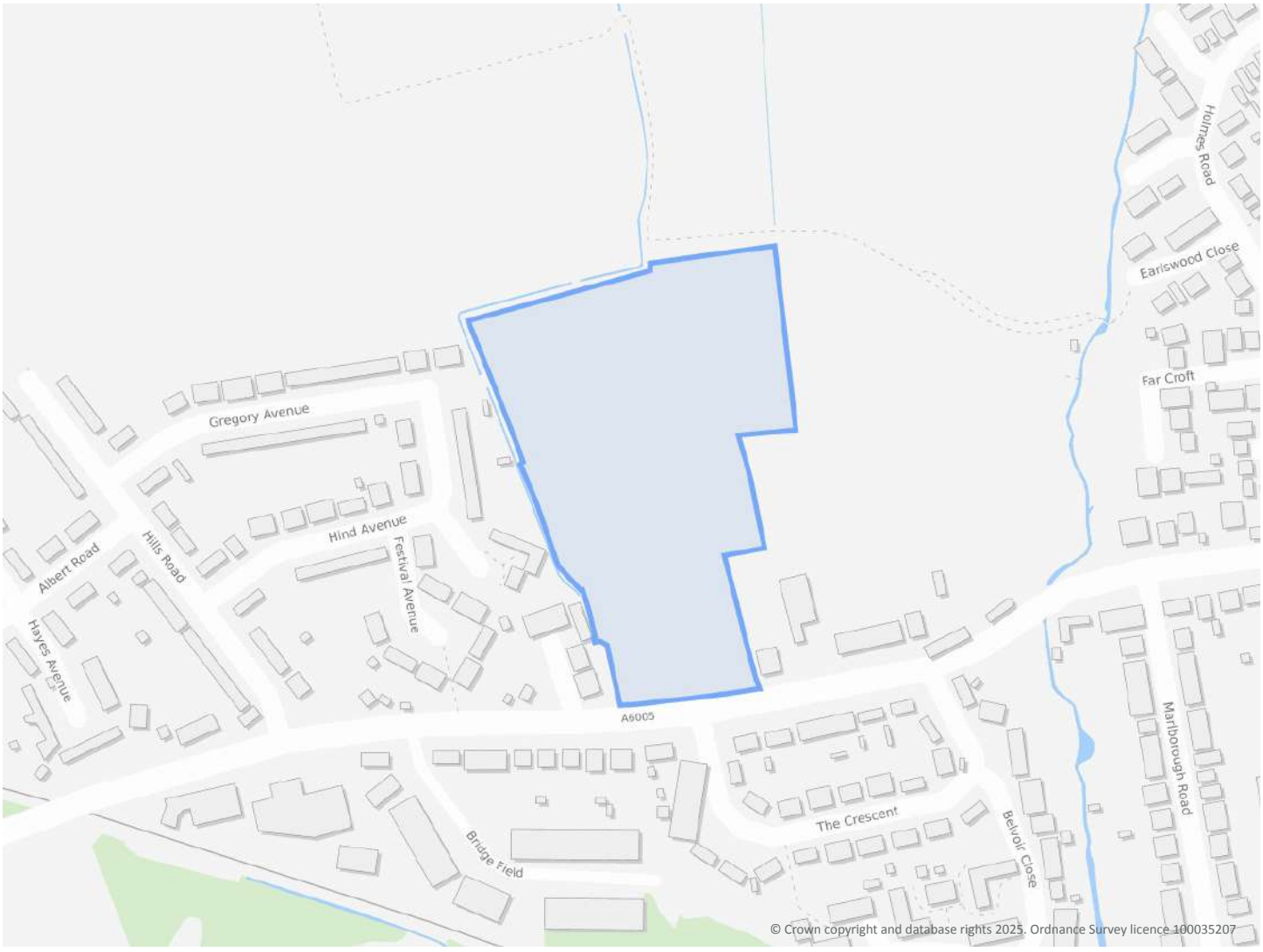
Our Ref: GS-4VI-LWD-K9B-Q9G

Site Details

Location: 445343 333560

Area: 3.56 ha

Authority: Erewash Borough Council ↗



Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	1	0	14	23	-
17 >	1.2 >	Historical tanks >	1	0	0	1	-
17 >	1.3 >	Historical energy features >	0	0	3	1	-
18	1.4	Historical petrol stations	0	0	0	0	-
18 >	1.5 >	Historical garages >	0	0	0	3	-
19	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
20 >	2.1 >	Historical industrial land uses >	3	0	18	26	-
22 >	2.2 >	Historical tanks >	1	0	0	1	-
23 >	2.3 >	Historical energy features >	0	0	5	2	-
23	2.4	Historical petrol stations	0	0	0	0	-
23 >	2.5 >	Historical garages >	0	0	0	4	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
25	3.1	Active or recent landfill	0	0	0	0	-
25	3.2	Historical landfill (BGS records)	0	0	0	0	-
26	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
26	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
26 >	3.5 >	Historical waste sites >	0	0	1	0	-
26 >	3.6 >	Licensed waste sites >	0	0	1	2	-
27 >	3.7 >	Waste exemptions >	0	1	0	1	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
29 >	4.1 >	Recent industrial land uses >	0	0	11	-	-
30	4.2	National Geographic Database (NGD) - Current or recent tanks	0	0	0	-	-
30	4.3	Current or recent petrol stations	0	0	0	0	-
31	4.4	Electricity cables	0	0	0	0	-
31	4.5	Gas pipelines	0	0	0	0	-

31	4.6	Sites determined as Contaminated Land	0	0	0	0	-
31	4.7	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
31	4.8	Regulated explosive sites	0	0	0	0	-
32	4.9	Hazardous substance storage/usage	0	0	0	0	-
32	4.10	Historical licensed industrial activities (IPC)	0	0	0	0	-
32	4.11	Licensed industrial activities (Part A(1))	0	0	0	0	-
32	4.12	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
32	4.13	Radioactive Substance Authorisations	0	0	0	0	-
33 >	**4.14 >**	**Licensed Discharges to controlled waters >**	0	1	1	3	-
34	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
34	4.16	Pollutant release to public sewer	0	0	0	0	-
34	4.17	List 1 Dangerous Substances	0	0	0	0	-
34	4.18	List 2 Dangerous Substances	0	0	0	0	-
34 >	**4.19 >**	**Pollution Incidents (EA/NRW) >**	0	0	0	1	-
35	4.20	Pollution inventory substances	0	0	0	0	-
35	4.21	Pollution inventory waste transfers	0	0	0	0	-
35	4.22	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	**Hydrogeology >**	On site	0-50m	50-250m	250-500m	500-2000m
36 >	**5.1 >**	**Superficial aquifer >**	Identified (within 500m)				
38 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
40 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
41	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
41	5.5	Groundwater vulnerability- local information	None (within 0m)				
42 >	**5.6 >**	**Groundwater abstractions >**	0	0	0	1	7
44 >	**5.7 >**	**Surface water abstractions >**	0	0	0	0	3
45 >	**5.8 >**	**Potable abstractions >**	0	0	0	0	2
46	5.9	Source Protection Zones	0	0	0	0	-
46	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m

47 >	6.1 >	Water Network (OS MasterMap) >	1	6	12	-	-
49 >	6.2 >	Surface water features >	0	4	7	-	-
49 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
50 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
50 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	**River and coastal flooding >**	On site	0-50m	50-250m	250-500m	500-2000m
51 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
52 >	7.2 >	Historical Flood Events >	0	0	4	-	-
52 >	7.3 >	Flood Defences >	0	0	1	-	-
53	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
53	7.5	Flood Storage Areas	0	0	0	-	-
54 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
55 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	**Surface water flooding >**					
56 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	**Groundwater flooding >**					
58 >	9.1 >	Groundwater flooding >	Low (within 50m)				
Page	Section	**Environmental designations >**	On site	0-50m	50-250m	250-500m	500-2000m
59	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
60	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
60	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
60	10.4	Special Protection Areas (SPA)	0	0	0	0	0
60	10.5	National Nature Reserves (NNR)	0	0	0	0	0
61 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	1
61	10.7	Designated Ancient Woodland	0	0	0	0	0
61	10.8	Biosphere Reserves	0	0	0	0	0
61	10.9	Forest Parks	0	0	0	0	0
62	10.10	Marine Conservation Zones	0	0	0	0	0
62 >	10.11 >	Green Belt >	1	0	0	0	1

62	10.12	Proposed Ramsar sites	0	0	0	0	0
62	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
63	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
63	10.15	Nitrate Sensitive Areas	0	0	0	0	0
63 >	10.16 >	Nitrate Vulnerable Zones >	0	0	0	1	0
64 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
65	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
66	11.1	World Heritage Sites	0	0	0	-	-
66	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
66	11.3	National Parks	0	0	0	-	-
66	11.4	Listed Buildings	0	0	0	-	-
67	11.5	Conservation Areas	0	0	0	-	-
67	11.6	Scheduled Ancient Monuments	0	0	0	-	-
67	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
68 >	12.1 >	Agricultural Land Classification >	Grade 3 (within 250m)				
69	12.2	Open Access Land	0	0	0	-	-
69	12.3	Tree Felling Licences	0	0	0	-	-
69	12.4	Environmental Stewardship Schemes	0	0	0	-	-
70	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
71 >	13.1 >	Priority Habitat Inventory >	0	0	1	-	-
72	13.2	Habitat Networks	0	0	0	-	-
72 >	13.3 >	Open Mosaic Habitat >	1	0	0	-	-
72	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
73 >	14.1 >	10k Availability >	Identified (within 500m)				
74 >	14.2 >	Artificial and made ground (10k) >	1	0	7	6	-

76 >	14.3 >	Superficial geology (10k) >	3	1	2	5	-
77	14.4	Landslip (10k)	0	0	0	0	-
78 >	14.5 >	Bedrock geology (10k) >	1	0	1	0	-
79 >	14.6 >	Bedrock faults and other linear features (10k) >	0	0	1	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
80 >	15.1 >	50k Availability >	Identified (within 500m)				
81 >	15.2 >	Artificial and made ground (50k) >	0	0	0	1	-
82	15.3	Artificial ground permeability (50k)	0	0	-	-	-
83 >	15.4 >	Superficial geology (50k) >	3	1	2	5	-
84 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
84	15.6	Landslip (50k)	0	0	0	0	-
85	15.7	Landslip permeability (50k)	None (within 50m)				
86 >	15.8 >	Bedrock geology (50k) >	1	0	1	0	-
87 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
87 >	15.10 >	Bedrock faults and other linear features (50k) >	0	0	1	0	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
88 >	16.1 >	BGS Boreholes >	0	0	3	-	-
Page	Section	Natural ground subsidence >					
90 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
91 >	17.2 >	Running sands >	Low (within 50m)				
93 >	17.3 >	Compressible deposits >	Moderate (within 50m)				
95 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
96 >	17.5 >	Landslides >	Very low (within 50m)				
97 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
99	18.1	BritPits	0	0	0	0	-
100 >	18.2 >	Surface ground workings >	0	0	3	-	-
100	18.3	Underground workings	0	0	0	0	0
100	18.4	Underground mining extents	0	0	0	0	-

100 >	**18.5 >**	**Historical Mineral Planning Areas >**	0	0	1	1	-
101	18.6	Non-coal mining	0	0	0	0	0
101	18.7	JPB mining areas	None (within 0m)				
101	18.8	The Coal Authority non-coal mining	0	0	0	0	-
102	18.9	Researched mining	0	0	0	0	-
102	18.10	Mining record office plans	0	0	0	0	-
102	18.11	BGS mine plans	0	0	0	0	-
102	18.12	Coal mining	None (within 0m)				
102	18.13	Brine areas	None (within 0m)				
103	18.14	Gypsum areas	None (within 0m)				
103	18.15	Tin mining	None (within 0m)				
103	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
104	19.1	Natural cavities	0	0	0	0	-
104	19.2	Mining cavities	0	0	0	0	0
104	19.3	Reported recent incidents	0	0	0	0	-
104	19.4	Historical incidents	0	0	0	0	-
Page	Section	**Radon >**					
106 >	**20.1 >**	**Radon >**	Less than 1% (within 0m)				
Page	Section	**Soil chemistry >**	On site	0-50m	50-250m	250-500m	500-2000m
108 >	**21.1 >**	**BGS Estimated Background Soil Chemistry >**	8	3	-	-	-
109	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
109	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	**Railway infrastructure and projects >**	On site	0-50m	50-250m	250-500m	500-2000m
110	22.1	Underground railways (London)	0	0	0	-	-
110	22.2	Underground railways (Non-London)	0	0	0	-	-
111	22.3	Railway tunnels	0	0	0	-	-
111 >	**22.4 >**	**Historical railway and tunnel features >**	0	0	18	-	-
112	22.5	Royal Mail tunnels	0	0	0	-	-

112	22.6	Historical railways	0	0	0	-	-
112 >	**22.7 >**	**Railways >**	0	0	5	-	-
113	22.8	Crossrail 2	0	0	0	0	-
113	22.9	HS2	0	0	0	0	-

Recent aerial photograph

Capture Date: 10/07/2022

Site Area: 3.56ha

Recent site history - 2019 aerial photograph

Capture Date: 20/04/2019

Site Area: 3.56ha

Recent site history - 2015 aerial photograph

Capture Date: 04/06/2015

Site Area: 3.56ha

Recent site history - 2000 aerial photograph

Capture Date: 17/06/2000

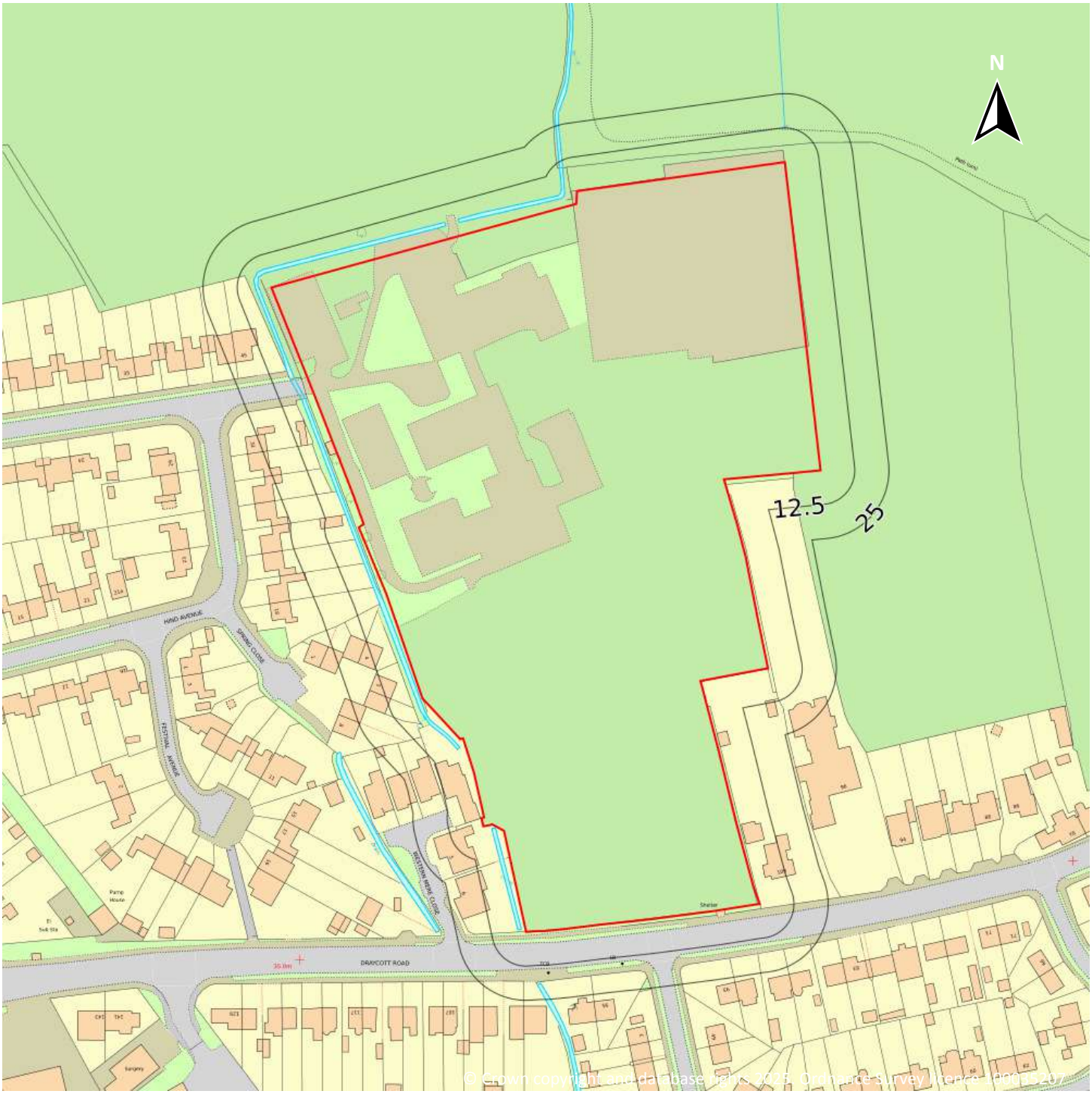
Site Area: 3.56ha

Recent site history - 1999 aerial photograph

Capture Date: 06/11/1999

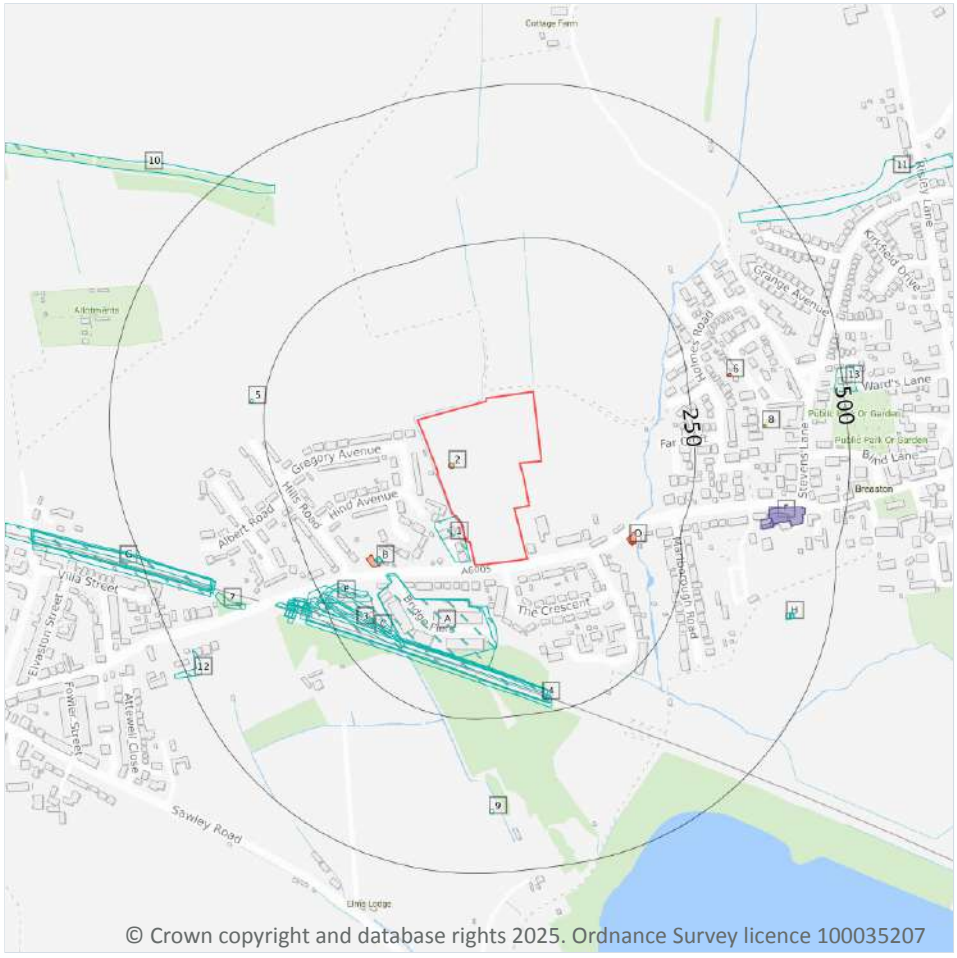
Site Area: 3.56ha

OS MasterMap site plan



Site Area: 3.56ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	38

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Council Depot**	**1969 - 1994**	**1695844**

ID	Location	Land use	Dates present	Group ID
A	56m S	Unspecified Works	1969	1612313
A	59m S	Industrial Estate	1994	1615085
B	136m SW	Valve House	1921 - 1938	1680423
B	137m SW	Valve House	1921	1696209
C	150m S	Railway Sidings	1921	1674778
C	152m S	Railway Sidings	1921	1676419
C	154m S	Railway Sidings	1921 - 1938	1769331
C	154m S	Railway Sidings	1955	1703650
C	162m S	Railway Sidings	1883	1739125
3	171m SW	Railway Sidings	1899 - 1900	1744963
E	176m W	Unspecified Pit	1883 - 1899	1761953
E	179m SW	Unspecified Ground Workings	1900	1592202
4	223m S	Railway Building	1883	1632087
E	245m SW	Railway Building	1883	1632088
E	258m W	Railway Building	1883	1632205
5	267m W	Air Valve	1921	1594618
E	273m W	Railway Station	1921 - 1938	1693739
E	274m W	Railway Station	1921	1648132
E	274m SW	Railway Station	1900	1681070
E	275m W	Railway Station	1921	1764208
E	276m W	Railway Station	1955	1738587
E	276m W	Disused Railway Station	1969	1635088
E	277m SW	Railway Station	1883	1639916
E	288m W	Railway Station	1899	1746871
7	365m SW	Unspecified Pit	1899	1605797
9	397m S	Air Valve	1921	1594620
G	399m W	Cuttings	1955	1730477
G	401m W	Cuttings	1921	1716744

ID	Location	Land use	Dates present	Group ID
G	402m W	Cuttings	1921	1769928
G	404m W	Cuttings	1921 - 1938	1724045
G	406m W	Cuttings	1883	1701236
H	428m E	Sewage Tank	1921	1755237
H	434m E	Sewage Tank	1921	1775223
10	435m NW	Disused Canal	1967	1611874
11	435m NE	Disused Canal	1969	1611867
12	472m SW	Unspecified Ground Workings	1921	1592292
13	484m E	Smithy	1883	1714527

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m **2**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
2	**On site**	**Unspecified Tank**	**1982**	**271558**
8	365m E	Unspecified Tank	1991	271552

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m **4**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
B	145m W	Electricity Substation	1982 - 1988	181302
D	164m E	Electricity Substation	1969 - 1982	175944
D	169m E	Electricity Substation	1988	167308
6	317m E	Electricity Substation	1982 - 1991	179408

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	3

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
F	369m E	Garage	1963 - 1969	59664
F	373m E	Garage	1988	55654
F	378m E	Garage	1982	53685

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped

Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

2.1 Historical industrial land uses

Records within 500m	47

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 20 >**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Council Depot**	**1981**	**1695844**
A	**On site**	**Council Depot**	**1969**	**1695844**
A	**On site**	**Council Depot**	**1994**	**1695844**

ID	Location	Land Use	Date	Group ID
B	56m S	Unspecified Works	1969	1612313
B	59m S	Industrial Estate	1994	1615085
C	136m SW	Valve House	1938	1680423
C	136m SW	Valve House	1921	1680423
C	137m SW	Valve House	1921	1696209
D	150m S	Railway Sidings	1921	1674778
D	152m S	Railway Sidings	1921	1676419
D	154m S	Railway Sidings	1938	1769331
D	154m S	Railway Sidings	1921	1769331
D	154m S	Railway Sidings	1955	1703650
D	162m S	Railway Sidings	1883	1739125
F	171m SW	Railway Sidings	1899	1744963
F	175m SW	Railway Sidings	1900	1744963
G	176m W	Unspecified Pit	1899	1761953
G	176m W	Unspecified Pit	1883	1761953
G	179m SW	Unspecified Ground Workings	1900	1592202
2	223m S	Railway Building	1883	1632087
G	245m SW	Railway Building	1883	1632088
G	258m W	Railway Building	1883	1632205
3	267m W	Air Valve	1921	1594618
G	273m W	Railway Station	1938	1693739
G	273m W	Railway Station	1921	1693739
G	274m W	Railway Station	1921	1648132
G	274m SW	Railway Station	1900	1681070
G	275m W	Railway Station	1921	1764208
G	276m W	Railway Station	1955	1738587
G	276m W	Disused Railway Station	1969	1635088
G	277m SW	Railway Station	1883	1639916

ID	Location	Land Use	Date	Group ID
G	288m W	Railway Station	1899	1746871
4	365m SW	Unspecified Pit	1899	1605797
6	397m S	Air Valve	1921	1594620
J	399m W	Cuttings	1955	1730477
J	401m W	Cuttings	1921	1716744
J	402m W	Cuttings	1921	1769928
J	404m W	Cuttings	1921	1724045
J	404m W	Cuttings	1938	1724045
J	406m W	Cuttings	1883	1701236
K	428m E	Sewage Tank	1921	1755237
K	434m E	Sewage Tank	1921	1775223
K	434m E	Sewage Tank	1921	1775223
7	435m NW	Disused Canal	1967	1611874
8	435m NE	Disused Canal	1969	1611867
9	472m SW	Unspecified Ground Workings	1921	1592292
10	484m E	Smithy	1883	1714527

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**2**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 20 >**

ID	Location	Land Use	Date	Group ID
1	**On site**	**Unspecified Tank**	**1982**	**271558**
5	365m E	Unspecified Tank	1991	271552

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	7

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 20 >**

ID	Location	Land Use	Date	Group ID
C	145m W	Electricity Substation	1982	181302
C	146m W	Electricity Substation	1988	181302
E	164m E	Electricity Substation	1982	175944
E	165m E	Electricity Substation	1969	175944
E	169m E	Electricity Substation	1988	167308
H	317m E	Electricity Substation	1991	179408
H	318m E	Electricity Substation	1982	179408

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	4

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

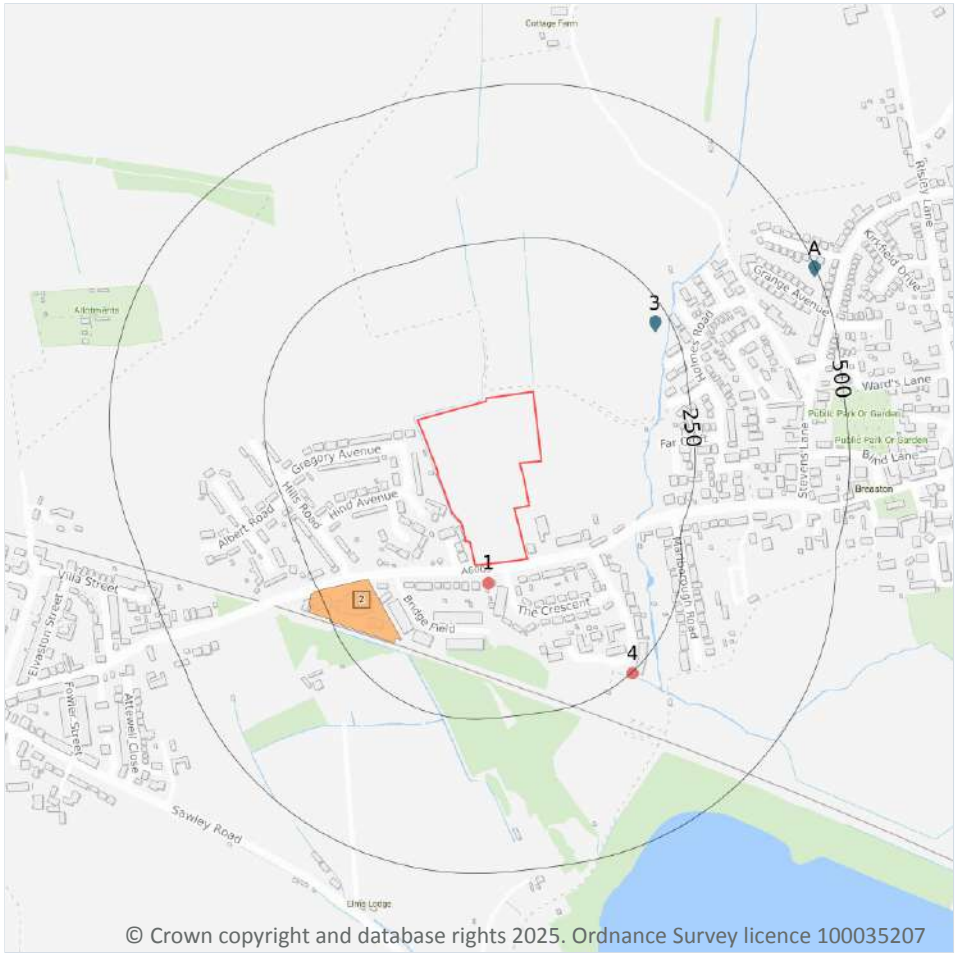
Features are displayed on the Past land use - un-grouped map on **page 20 >**

ID	Location	Land Use	Date	Group ID
I	369m E	Garage	1963	59664

ID	Location	Land Use	Date	Group ID
I	369m E	Garage	1969	59664
I	373m E	Garage	1988	55654
I	378m E	Garage	1982	53685

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Historical waste sites

Licensed waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m	0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m	0

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m	1

Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 25 >**

ID	Location	Address	Further Details	Date
2	163m SW	Site Address: N/A	Type of Site: Scrap Metal Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1969

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m	3

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 25 >**

ID	Location	Details		
3	226m NE	Site Name: Crossgate Drive Clinical Waste Treatment Facility Site Address: Crossgate Drive, Queens Drive Indust Est, Nottingham, Nottinghamshire, NG2 1LW Correspondence Address: Concorde House, Concorde Way, Preston Farm Industrial E, Stockton On Tees, Cleveland, TS18 3RB	Type of Site: Clinical Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MED012 EPR reference: - Operator: Medical Waste Solutions Ltd Waste Management licence No: 100171 Annual Tonnage: 0	Issue Date: 21/12/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
A	498m NE	Site Name: Waste Transfer Station & Skip Hire Site Address: Unit 6, Poulton Drive, Nottingham, Nottinghamshire, NG2 4BN Correspondence Address: -	Type of Site: 75kte HCI Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SAL026 EPR reference: EA/EPR/HP3590VM/A001 Operator: Salmon Martin Waste Management licence No: 101682 Annual Tonnage: 74999	Issue Date: 07/06/2010 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked
A	498m NE	Site Name: Waste Transfer Station & Skip Hire Site Address: Unit 6, Poulton Drive, Nottingham, Nottinghamshire, NG2 4BN Correspondence Address: -	Type of Site: 75kte HCI Waste Transfer Station Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 632959 EPR reference: EA/EPR/HP3590VM Operator: Martin Salmon Waste Management licence No: 101682 Annual Tonnage: 74999	Issue Date: 07/06/2010 Effective Date: 07/06/2010 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m	**2**

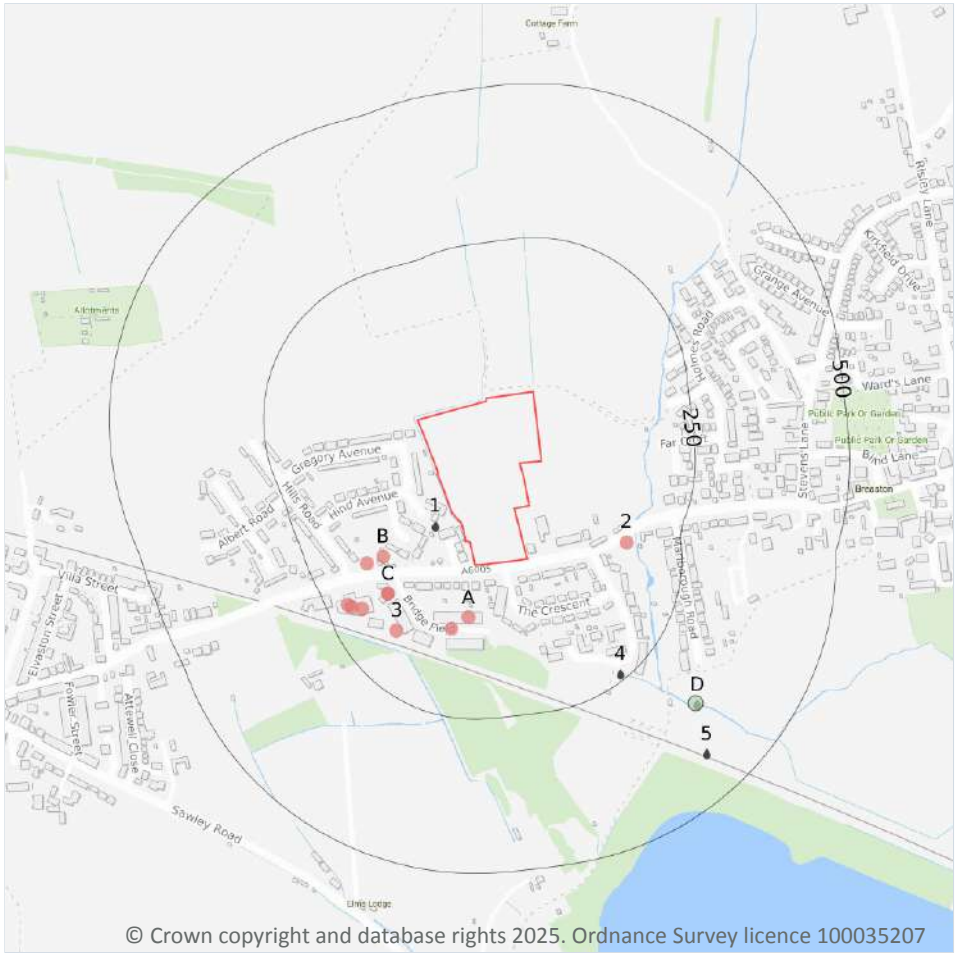
Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 25 >**

ID	Location	Site	Reference	Category	Sub-Category	Description
1	31m S	-	WEX294559	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
4	253m SE	-	WEX419153	Disposing of waste exemption	Not on a farm	Deposit of waste from dredging of inland waters

This data is sourced from the Environment Agency and Natural Resources Wales.

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	11

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 29 >**

ID	Location	Company	Address	Activity	Category
A	86m S	Trimlace Ltd	Unit D4, Bridge Field, Breaston, Derbyshire, DE72 3DS	Textiles, Fabrics, Silk and Machinery	Industrial Products
A	110m S	Bridgefield Industrial Estate	Derbyshire, DE72	Business Parks and Industrial Estates	Industrial Features

ID	Location	Company	Address	Activity	Category
B	133m SW	Pump House	Derbyshire, DE72	Water Pumping Stations	Industrial Features
C	149m W	Creative Projects	1, Bridge Field, Breaston, Derbyshire, DE72 3DS	General Construction Supplies	Industrial Products
C	149m W	Just Engineers Technical Solutions Ltd	1, Bridge Field, Breaston, Derbyshire, DE72 3DS	Industrial Engineers	Engineering Services
B	160m SW	Electricity Sub Station	Derbyshire, DE72	Electrical Features	Infrastructure and Facilities
2	162m E	Electricity Sub Station	Derbyshire, DE72	Electrical Features	Infrastructure and Facilities
3	166m SW	Mast	Derbyshire, DE72	Telecommunications Features	Infrastructure and Facilities
C	196m W	Fords International Ltd	147, Draycott Road, Breaston, Derbyshire, DE72 3DB	Distribution and Haulage	Transport, Storage and Delivery
C	211m W	Harry Steer	149, Draycott Road, Breaston, Derbyshire, DE72 3DB	Industrial Engineers	Engineering Services
C	216m W	Works	Derbyshire, DE72	Unspecified Works Or Factories	Industrial Features

This data is sourced from Ordnance Survey.

4.2 National Geographic Database (NGD) - Current or recent tanks

Records within 250m	0

Current or recent tanks identified from the Ordnance Survey NGD.

This data is sourced from Ordnance Survey.

4.3 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.6 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.7 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.8 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.9 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.10 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed industrial activities (Part A(1))

Records within 500m	0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.12 Licensed pollutant release (Part A(2)/B)

Records within 500m	0

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from Local Authority records.

4.13 Radioactive Substance Authorisations

Records within 500m	0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Licensed Discharges to controlled waters

Records within 500m	**5**

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on **page 29 >**

ID	Location	Address	Details	
1	35m SW	FESTIVAL AVENUE - SWS, FESTIVAL AVENUE, BREASTON, EREWASH, DERBYSHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: T/61/07197/O Permit Version: 1 Receiving Water: ELMS BROOK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 24/06/1976 Effective Date: 24/06/1976 Revocation Date: 02/04/2000
4	240m SE	CRESCENT - SURFACE WATER SEWER, BREASTON, EREWASH, DERBYSHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: T/61/12393/O Permit Version: 1 Receiving Water: ELMS BROOK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 14/11/1986 Effective Date: 14/11/1986 Revocation Date: 02/04/2000
D	363m SE	MARLBOROUGH ROAD (REAR) CSO, BREASTON, DERBYSHIRE, DE72 3DD	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: T/49/02839/O Permit Version: 2 Receiving Water: GOLDEN BROOK	Status: VARIED UNDER EPR 2010 Issue date: 21/11/2017 Effective Date: 21/11/2017 Revocation Date: 30/03/2018
D	363m SE	MARLBOROUGH ROAD (REAR) CSO, BREASTON, DERBYSHIRE, DE72 3DD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: T/49/02839/O Permit Version: 3 Receiving Water: GOLDEN BROOK	Status: VARIED UNDER EPR 2010 Issue date: 21/11/2017 Effective Date: 31/03/2018 Revocation Date: -
5	429m SE	MARLBOROUGH ROAD (REAR) CSO, BREASTON, DERBYSHIRE, DE72 3DD	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: T/49/02839/O Permit Version: 1 Receiving Water: GOLDEN BROOK (RIVER EREWASH)	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 22/12/1970 Effective Date: 22/12/1970 Revocation Date: 20/11/2017

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to surface waters (Red List)

Records within 500m	0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 1 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 List 2 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution Incidents (EA/NRW)

Records within 500m	1

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 29 >**

ID	Location	Details	
D	359m SE	Incident Date: 06/06/2003 Incident Identification: 163806 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.20 Pollution inventory substances

Records within 500m	0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.21 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

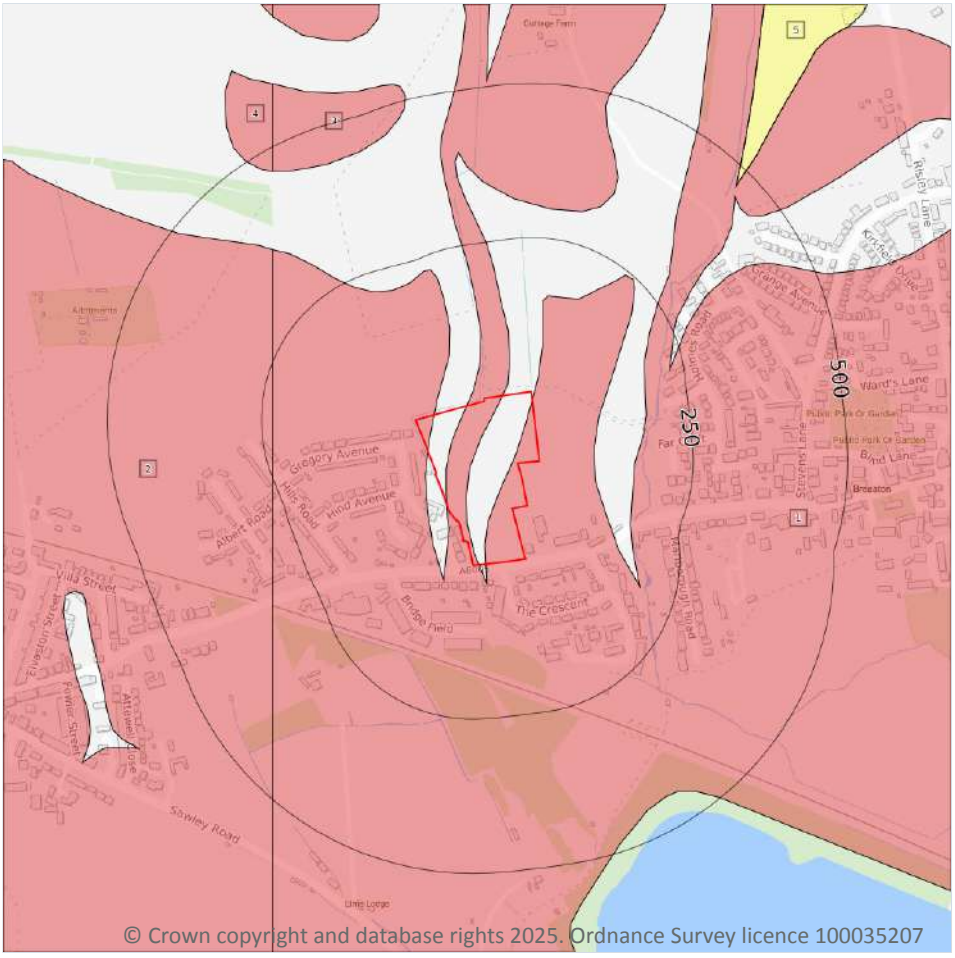
4.22 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m	5

Aquifer status of groundwater held within superficial geology.

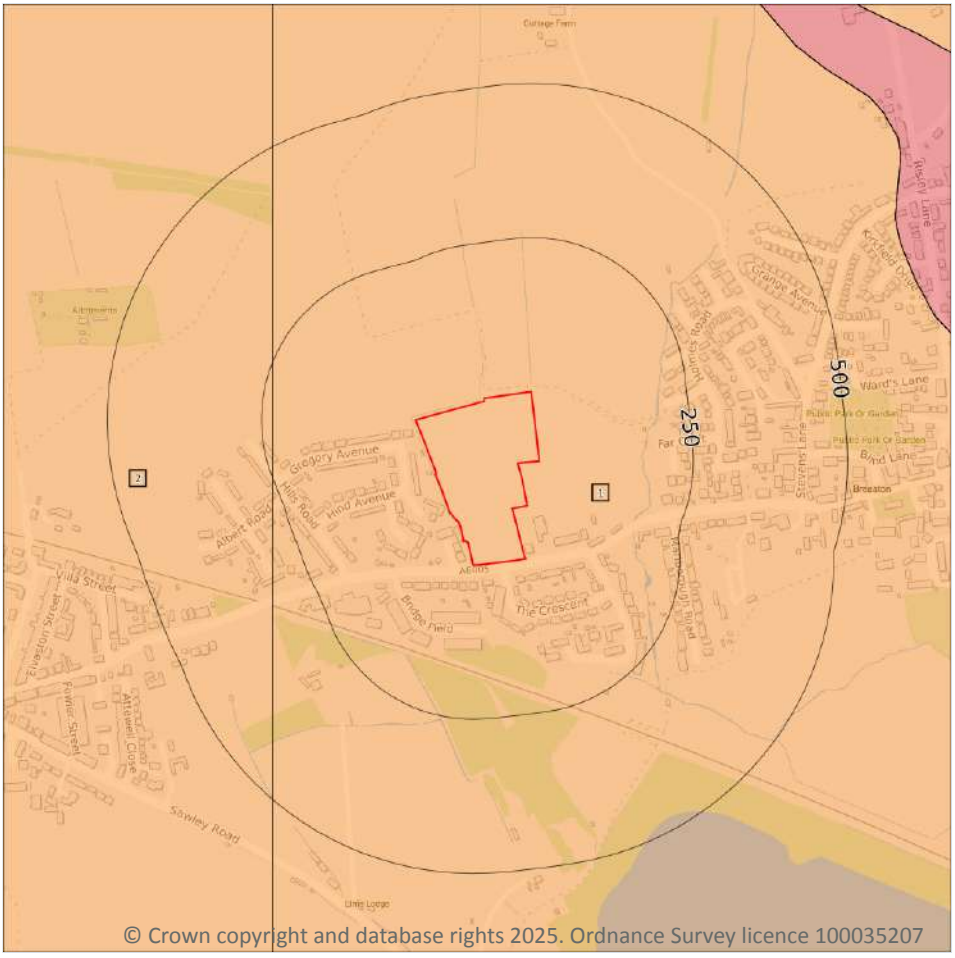
Features are displayed on the Hydrogeology map on **page 36 >**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	232m 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

ID	Location	Designation	Description
3	439m N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	465m NW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
5	470m NE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	2

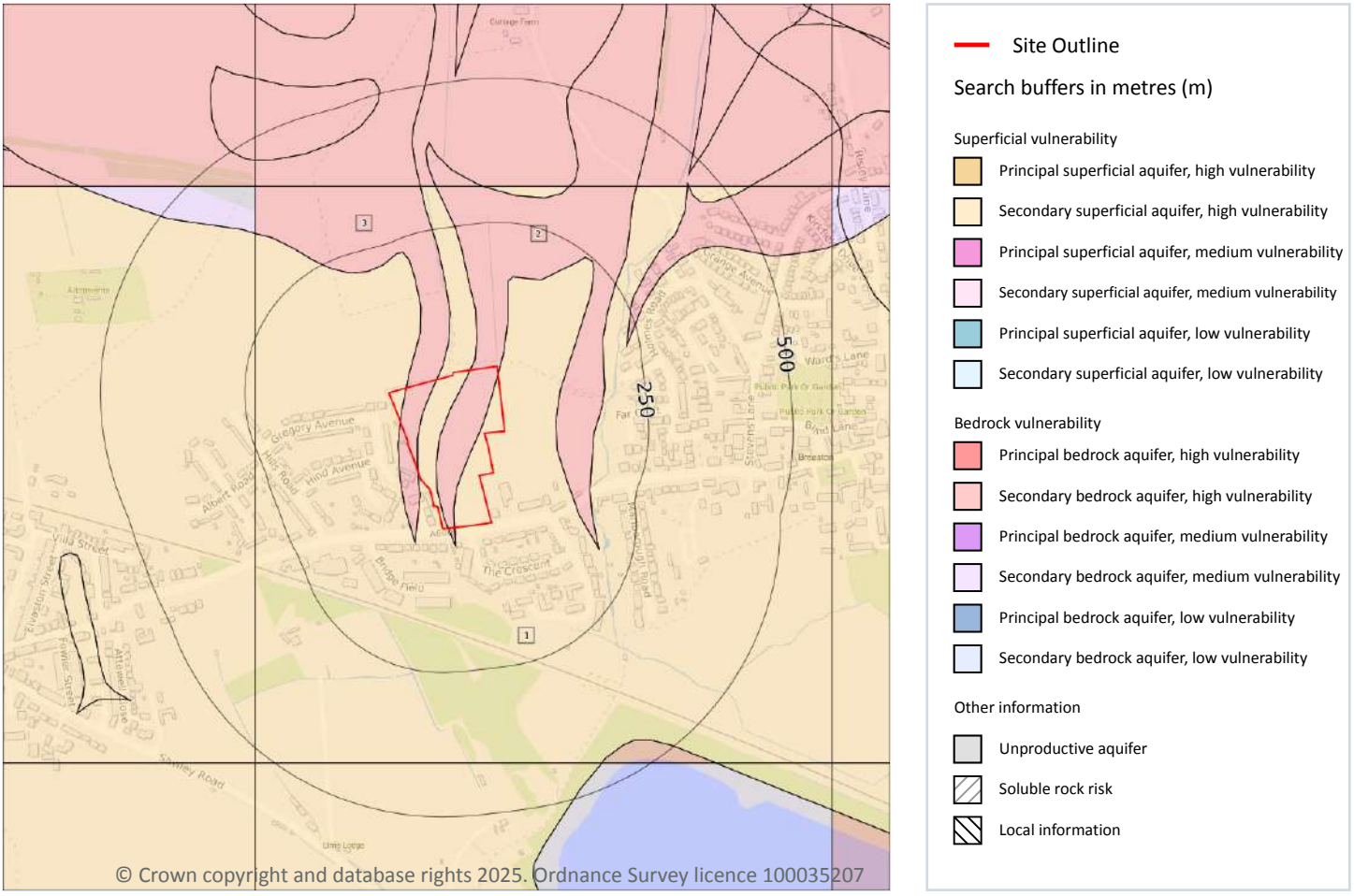
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 38 >**

ID	Location	Designation	Description
1	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
2	232m W	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m	3

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 40 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

5.5 Groundwater vulnerability- local information

Records on site	0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones

Site Outline

Search buffers in metres (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
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	8

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 42 >**

ID	Location	Details	
1	397m E	Status: Historical Licence No: 03/28/61/0043 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: HOLMES FARM - WELL Data Type: Point Name: SAIL Easting: 445800 Northing: 333800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/08/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -
2	513m N	Status: Historical Licence No: 03/28/61/0035 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: COTTAGE FARM - WELL Data Type: Point Name: SAIL Easting: 445400 Northing: 334200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 30/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -
-	1382m SE	Status: Historical Licence No: MD/028/0061/013 Details: Dewatering Direct Source: Groundwater Midlands Region Point: RIVER TERRACE DEPOSITS AT CHURCH WILNE, DRAYCOTT, DERBYSHIRE Data Type: Poly4 Name: MWH Treatment Limited Easting: 446573 Northing: 332671	Annual Volume (m^3): 30190 Max Daily Volume (m^3): 90 Original Application No: NPS/WR/040426 Original Start Date: 14/06/2024 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 14/06/2024 Version End Date: -
-	1382m SE	Status: Historical Licence No: MD/028/0061/013 Details: Dewatering Direct Source: Groundwater Midlands Region Point: RIVER TERRACE DEPOSITS AT CHURCH WILNE, DRAYCOTT, DERBYSHIRE Data Type: Poly4 Name: MWH Treatment Limited Easting: 446573 Northing: 332671	Annual Volume (m^3): 30190 Max Daily Volume (m^3): 90 Original Application No: NPS/WR/040426 Original Start Date: 14/06/2024 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 14/06/2024 Version End Date: -
-	1445m NE	Status: Historical Licence No: 03/28/61/0069 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: MILL LANE, BREASTON - DERBYSHIRE Data Type: Point Name: HORTON-TURNER Easting: 446450 Northing: 334700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 07/06/2001 Expiry Date: - Issue No: 1 Version Start Date: 07/06/2001 Version End Date: -

ID	Location	Details	
-	1583m E	Status: Historical Licence No: 03/28/61/0018 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: BELMONT NURSERIES - WELL Data Type: Point Name: SIDDALS Easting: 447000 Northing: 333800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 08/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -
-	1672m E	Status: Historical Licence No: 03/28/61/0028 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: LAND AT BREASTON - WELL Data Type: Point Name: KITCHING Easting: 447000 Northing: 332900	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 03/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -
-	1765m W	Status: Historical Licence No: 03/28/48/0006 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: BANKFIELDS FARM - WELL Data Type: Point Name: BARKER Easting: 443500 Northing: 333300	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	**3**

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 42 >**

ID	Location	Details	
-	1078m SW	Status: Active Licence No: 03/28/44/0006 Details: Potable Water Supply - Direct Direct Source: Surface Water Midlands Region Point: DRAYCOTT INTAKE - RIVER DERWENT Data Type: Point Name: Severn Trent Water Ltd Easting: 444510 Northing: 332700	Annual Volume (m^3): 59860000 Max Daily Volume (m^3): 184000 Original Application No: NPS/WR/040965 Original Start Date: 31/08/1989 Expiry Date: - Issue No: 107 Version Start Date: 11/12/2024 Version End Date: -
-	1078m SW	Status: Active Licence No: 03/28/44/0006 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface Water Midlands Region Point: DRAYCOTT INTAKE - RIVER DERWENT Data Type: Point Name: Severn Trent Water Ltd Easting: 444510 Northing: 332700	Annual Volume (m^3): 59860000 Max Daily Volume (m^3): 184000 Original Application No: NPS/WR/040965 Original Start Date: 31/08/1989 Expiry Date: - Issue No: 107 Version Start Date: 11/12/2024 Version End Date: -
-	1078m SW	Status: Historical Licence No: 03/28/44/0006 Details: Potable Water Supply - Direct Direct Source: Surface Water Midlands Region Point: DRAYCOTT INTAKE - RIVER DERWENT Data Type: Point Name: Severn Trent Water Ltd Easting: 444510 Northing: 332700	Annual Volume (m^3): 59860000 Max Daily Volume (m^3): 184000 Original Application No: NPS/WR/036377 Original Start Date: 31/08/1989 Expiry Date: - Issue No: 105 Version Start Date: 28/06/2023 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	**2**

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 42 >**

ID	Location	Details	
-	1078m SW	Status: Active Licence No: 03/28/44/0006 Details: Potable Water Supply - Direct Direct Source: Surface Water Midlands Region Point: DRAYCOTT INTAKE - RIVER DERWENT Data Type: Point Name: Severn Trent Water Ltd Easting: 444510 Northing: 332700	Annual Volume (m^3): 59860000 Max Daily Volume (m^3): 184000 Original Application No: NPS/WR/040965 Original Start Date: 31/08/1989 Expiry Date: - Issue No: 107 Version Start Date: 11/12/2024 Version End Date: -
-	1078m SW	Status: Historical Licence No: 03/28/44/0006 Details: Potable Water Supply - Direct Direct Source: Surface Water Midlands Region Point: DRAYCOTT INTAKE - RIVER DERWENT Data Type: Point Name: Severn Trent Water Ltd Easting: 444510 Northing: 332700	Annual Volume (m^3): 59860000 Max Daily Volume (m^3): 184000 Original Application No: NPS/WR/036377 Original Start Date: 31/08/1989 Expiry Date: - Issue No: 105 Version Start Date: 28/06/2023 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m	**0**

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

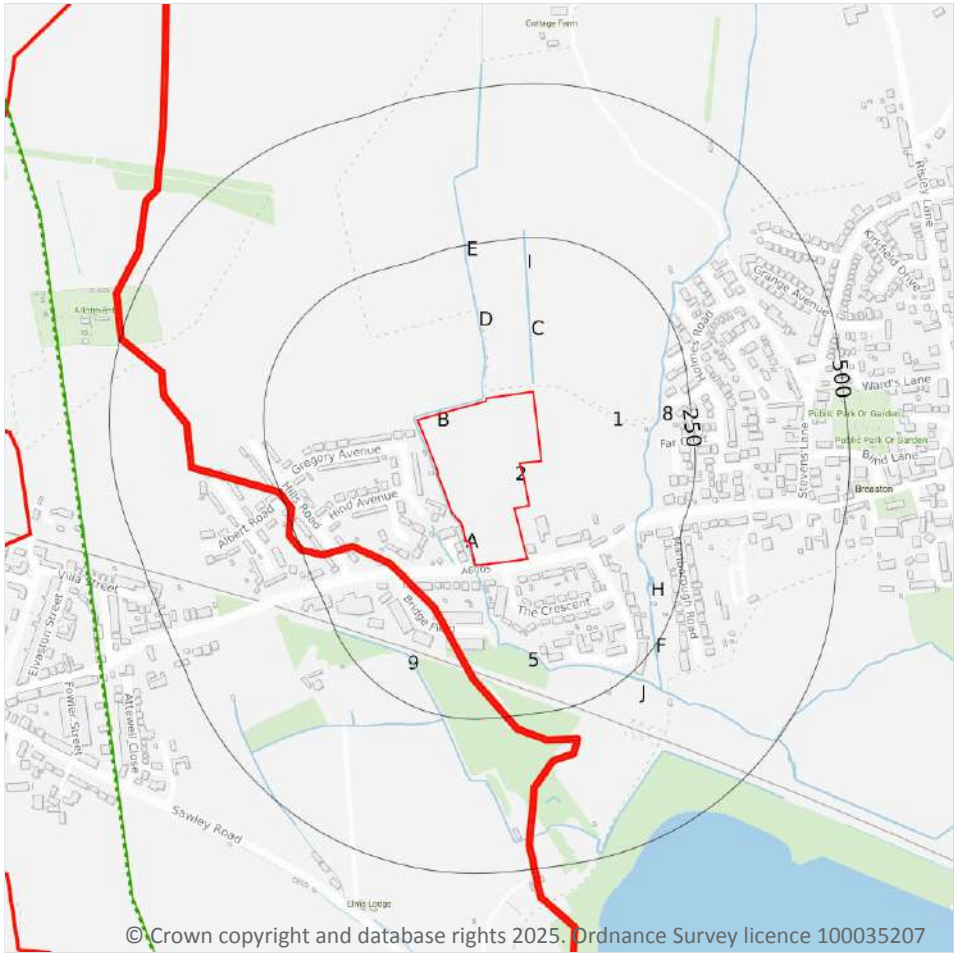
5.10 Source Protection Zones (confined aquifer)

Records within 500m	**0**

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	19

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 47 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
A	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**

ID	Location	Type of water feature	Ground level	Permanence	Name
A	1m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	1m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	2m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	13m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	19m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	32m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	142m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
D	143m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	150m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	155m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
8	167m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Golden Brook
9	183m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	200m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Golden Brook

ID	Location	Type of water feature	Ground level	Permanence	Name
H	200m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Golden Brook
H	200m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Golden Brook
I	222m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
I	227m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	236m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	11

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 47 >**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 47 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Erewash from Gilt Brook to Trent**	**GB104028052480**	**Erewash River**	**Trent Lower and Erewash**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	**1**

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on **page 47 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	3261m E	River	Erewash from Gilt Brook to Trent	GB104028052480 ↗	Moderate	Fail	Moderate	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	**1**

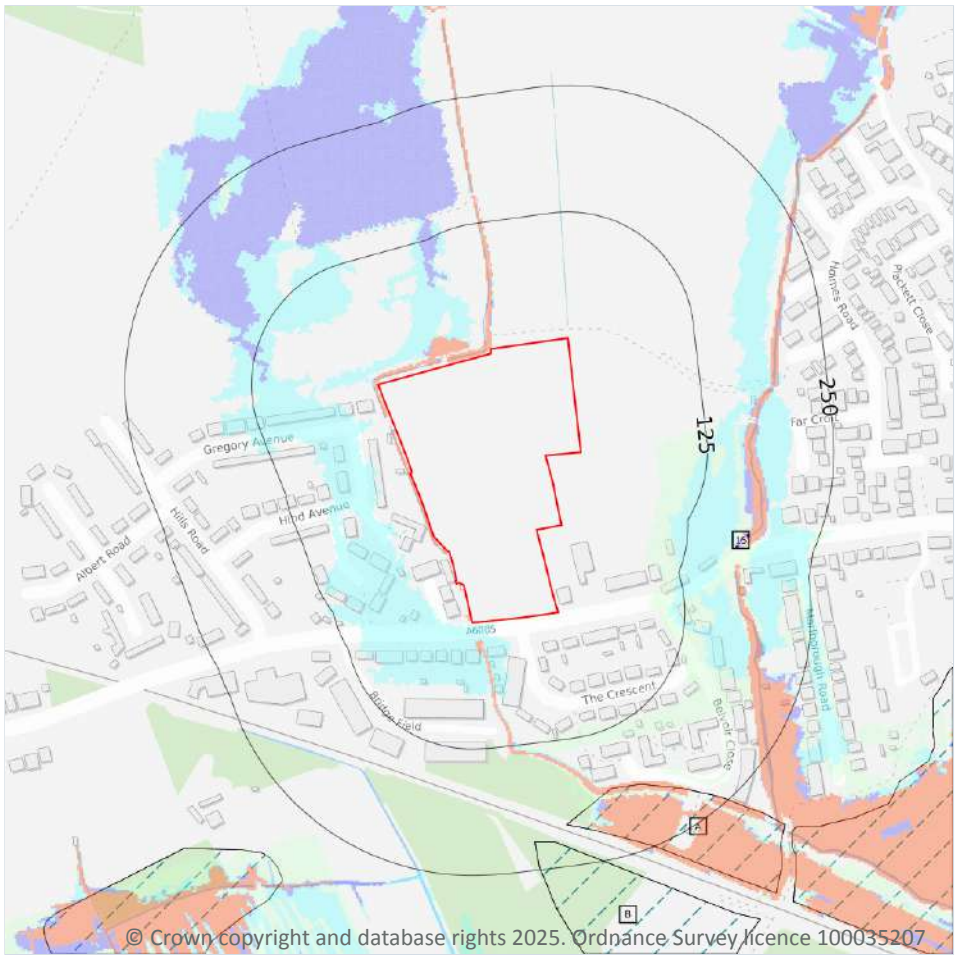
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 47 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	**On site**	**Lower Trent Erewash - Secondary Combined**	**GB40402G990300 ↗**	**Good**	**Good**	**Good**	**2019**

This data is sourced from the Environment Agency and Natural Resources Wales.

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	7

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on **page 51 >**

Distance	Flood risk category
On site	**High**
0 - 50m	High

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m	**4**

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

Features are displayed on the River and coastal flooding map on **page 51 >**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
A	182m S	Derwent 6th Nov 2000	2000-11-06 2000-11-06	Main river	Channel capacity exceeded (no raised defences)	Fluvial
A	182m S	Derwent 6th Nov 2000	2000-11-06 2000-11-06	Main river	Channel capacity exceeded (no raised defences)	Fluvial
B	222m S	Derwent 6th Nov 2000	2000-11-06 2000-11-06	Main river	Channel capacity exceeded (no raised defences)	Fluvial
B	222m S	Derwent 6th Nov 2000	2000-11-06 2000-11-06	Main river	Channel capacity exceeded (no raised defences)	Fluvial

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m	**1**

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

Features are displayed on the River and coastal flooding map on **page 51 >**

ID	Location	Update
15	175m E	08/11/2022

This data is sourced from the Environment Agency and Natural Resources Wales.

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

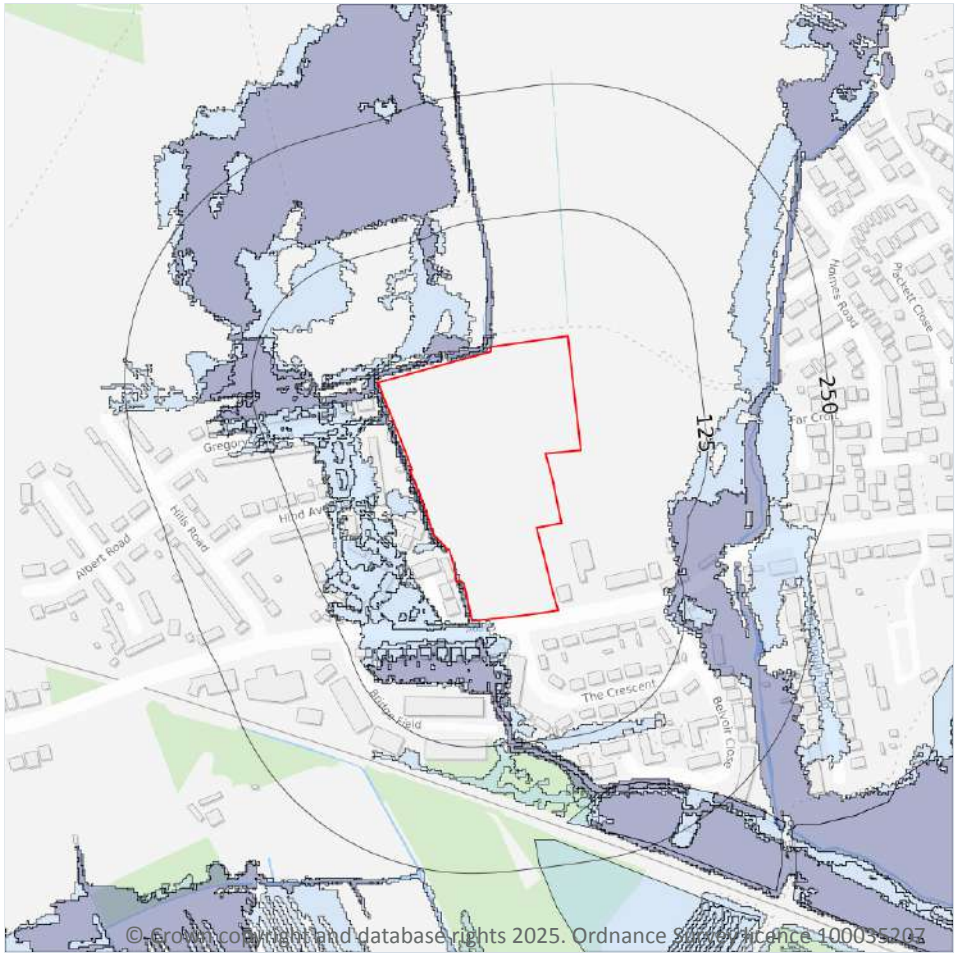
7.5 Flood Storage Areas

Records within 250m	0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones



Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

Features are displayed on the River and coastal flooding map on **page 51 >**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m	1

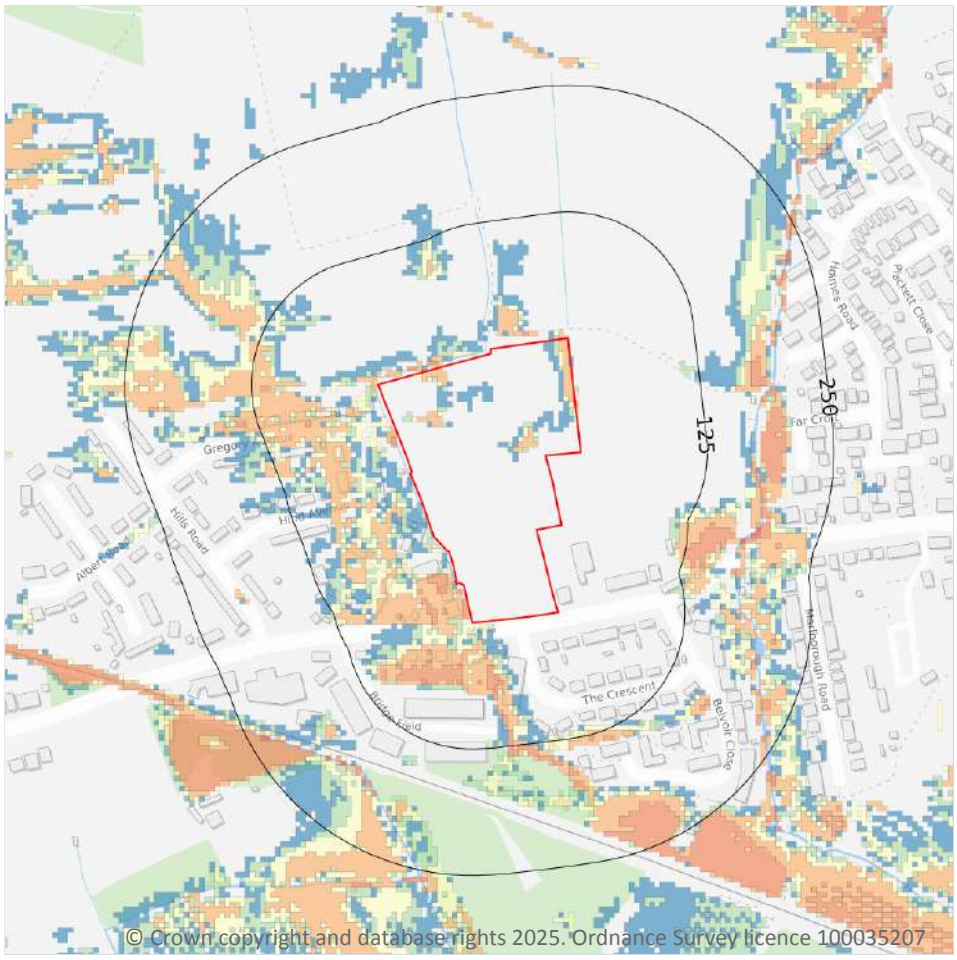
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 51 >**

Location	Type
On site	**Zone 3 - (Fluvial /Tidal Models)**

This data is sourced from the Environment Agency and Natural Resources Wales.

8 Surface water flooding



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.3m - 1.0m**
Highest risk within 50m	**1 in 30 year, 0.3m - 1.0m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 56 >**

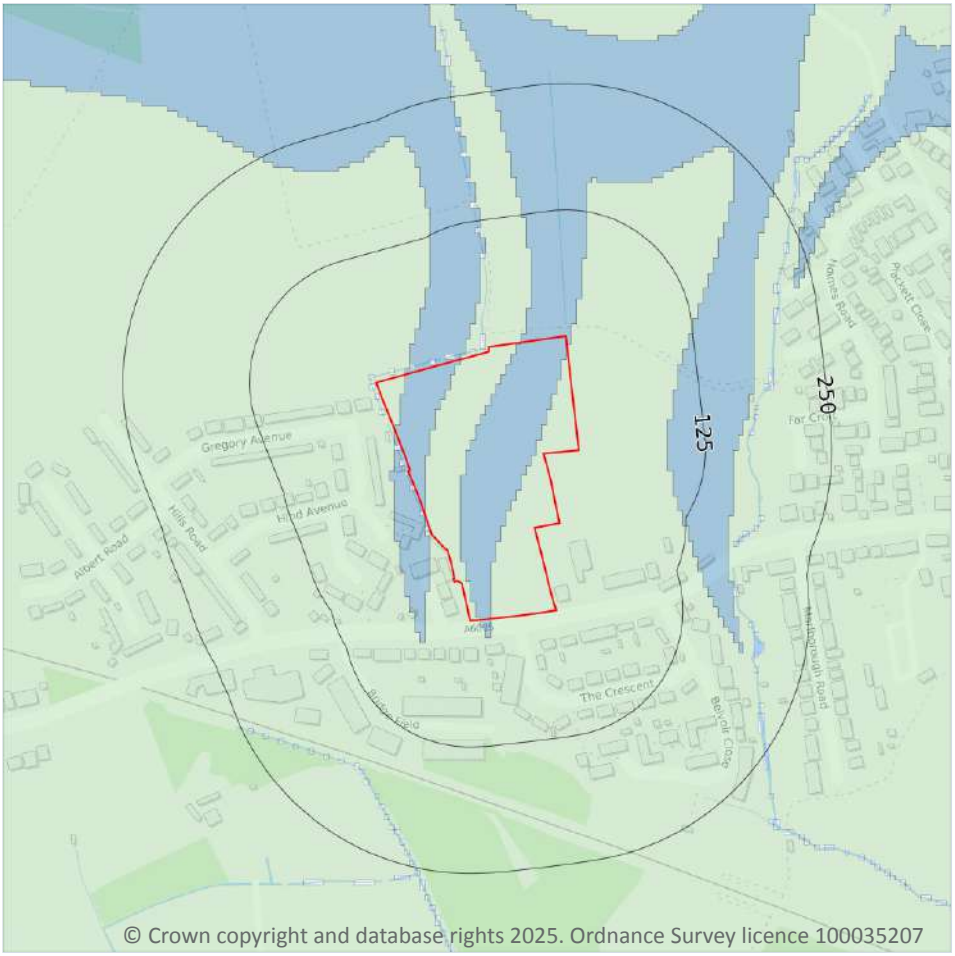
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

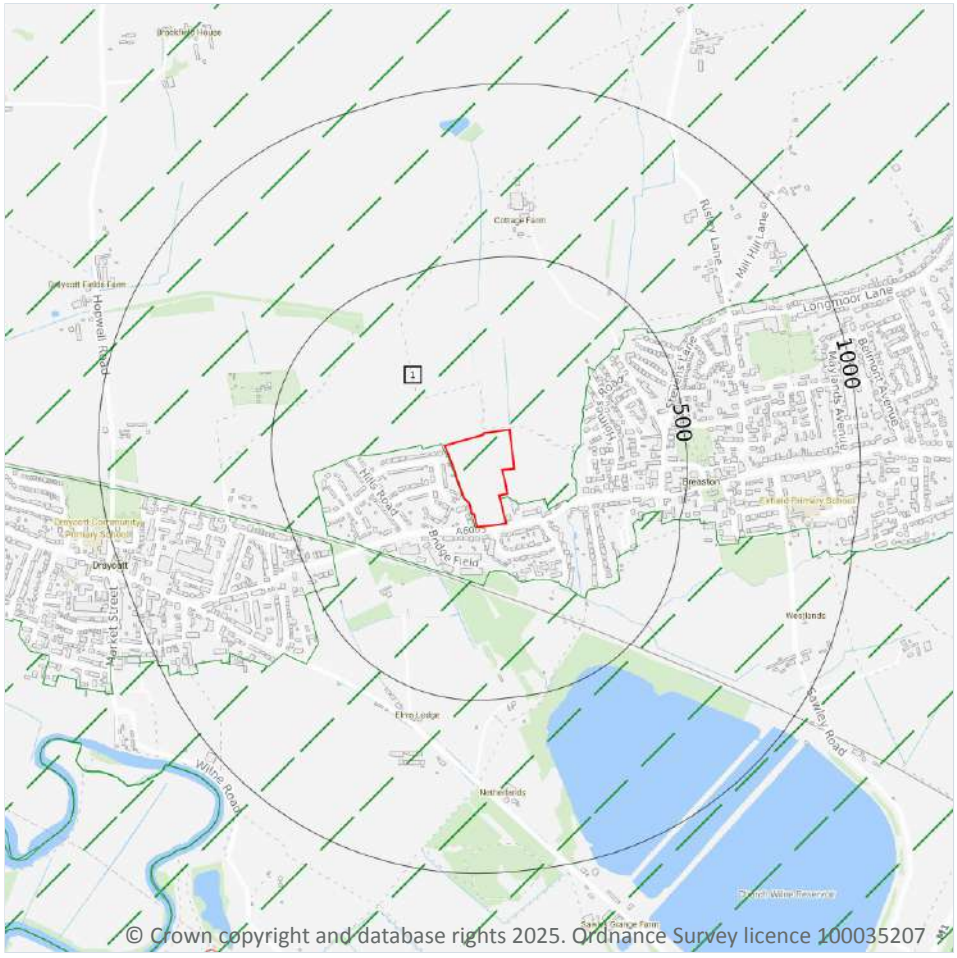
Highest risk on site	**Low**
Highest risk within 50m	**Low**

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 58 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m	0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m	0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m	1

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

Features are displayed on the Environmental designations map on **page 59 >**

ID	Location	Name	Data source
3	1438m SW	St Chad's Water	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m	0

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m	2

Areas designated to prevent urban sprawl by keeping land permanently open.

Features are displayed on the Environmental designations map on **page 59 >**

ID	Location	Name	Local Authority name
1	**On site**	**Derby and Nottingham Green Belt**	**Erewash**
2	1071m SW	Derby and Nottingham Green Belt	South Derbyshire

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

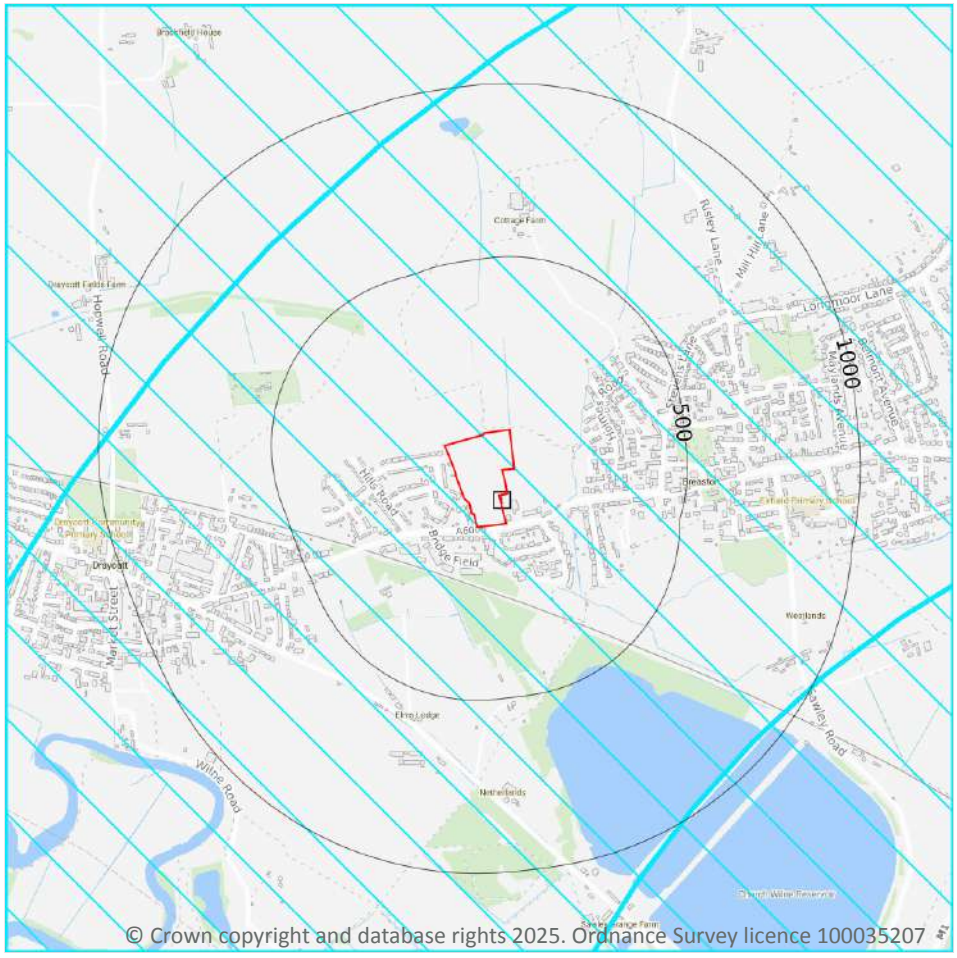
Records within 2000m	1

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
330m E	River Trent from River Soar to Carlton-on-Trent NVZ	Surface Water	320	Existing

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units



Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site	1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 64 >**

ID	Location	Type of developments requiring consultation
1	**On site**	**https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0300000500050&notes=&location=445954,340445%20(IRZ%20polygon%20centre)**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m	0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

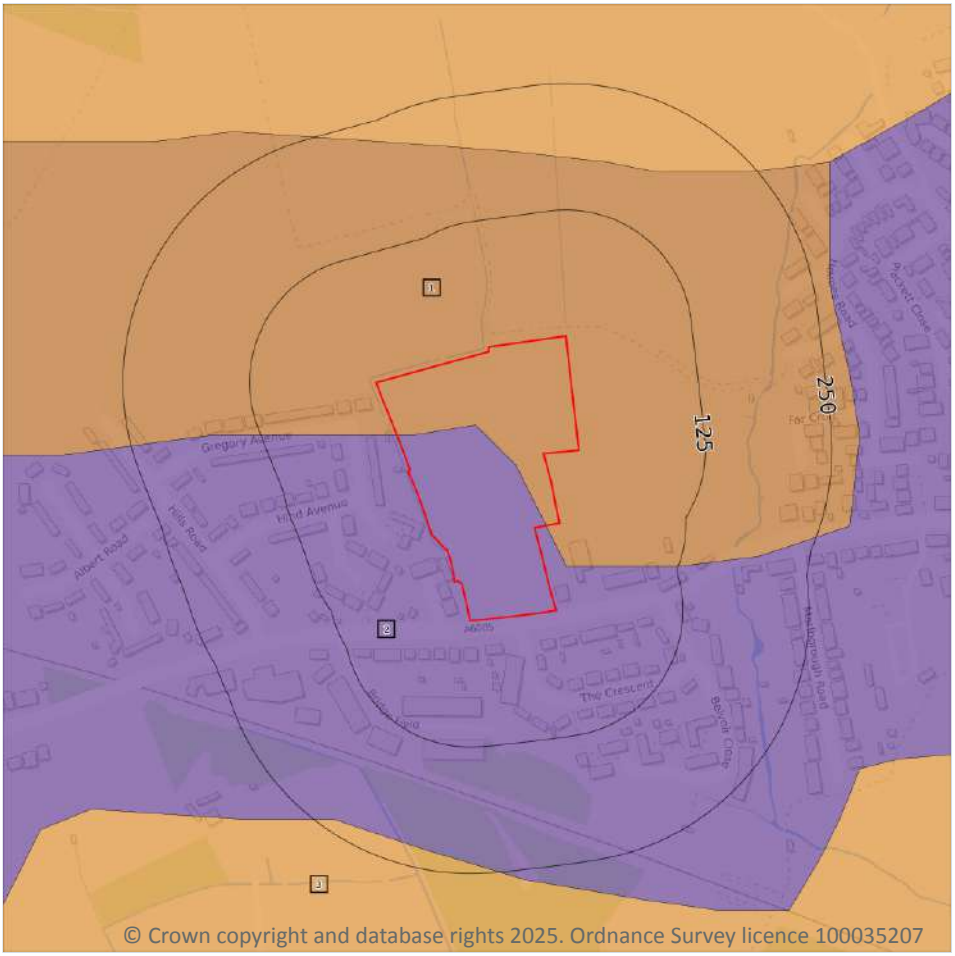
11.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	3

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 68 >**

ID	Location	Classification	Description
1	**On site**	**Grade 2**	**Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.**
2	**On site**	**Urban**	**Non-agricultural/no quality assigned**
3	176m N	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	**0**

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	**0**

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	**0**

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

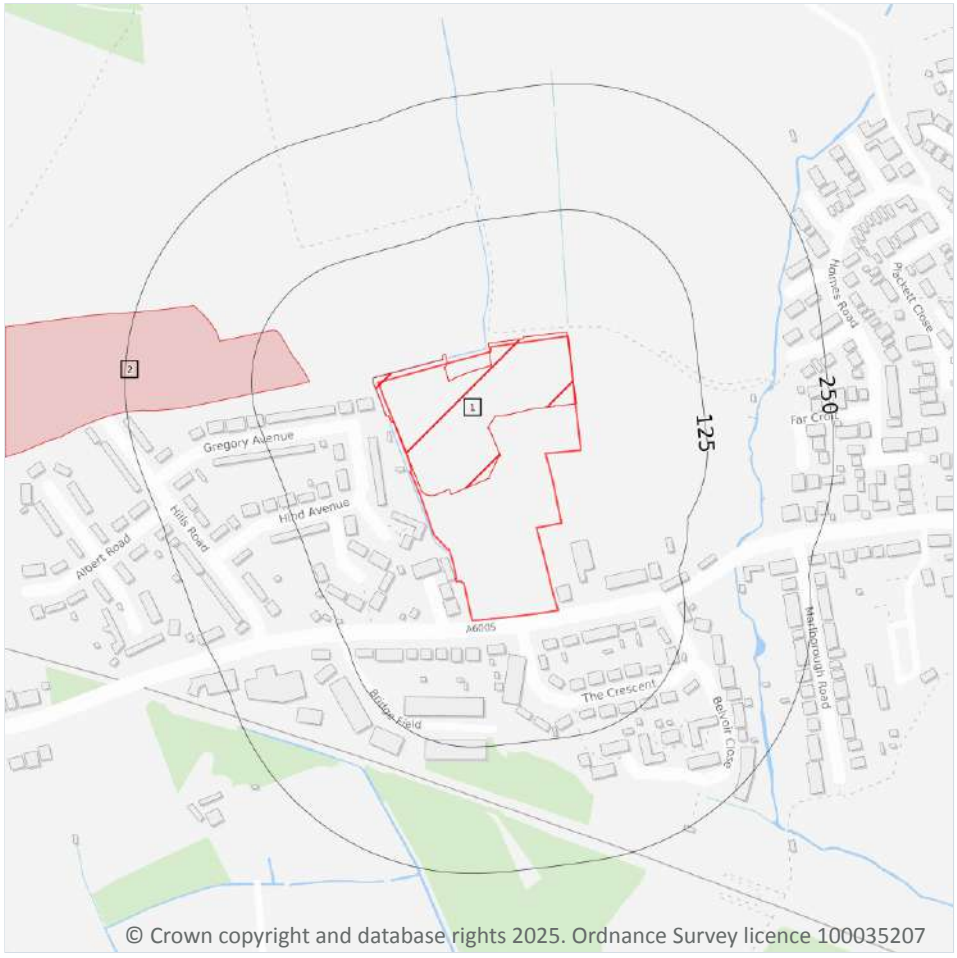
12.5 Countryside Stewardship Schemes

Records within 250m	0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.

13 Habitat designations



Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks

Primary Habitat
Restorable Habitat
Associated Habitats
Habitat Restoration-Creation
Network Enhancement Zone 1
Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m	1

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 71 >**

ID	Location	Main Habitat	Other habitats
2	68m W	Good quality semi-improved grassland	Main habitat: LMEAD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	1

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

Features are displayed on the Habitat designations map on **page 71 >**

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
1	**On site**	**NLUD Ref: 102500023**	**Low**	**National Land Use Database - Previously Developed Land**	**UK Perspectives Aerial Photography**	**-**

This data is sourced from Natural England.

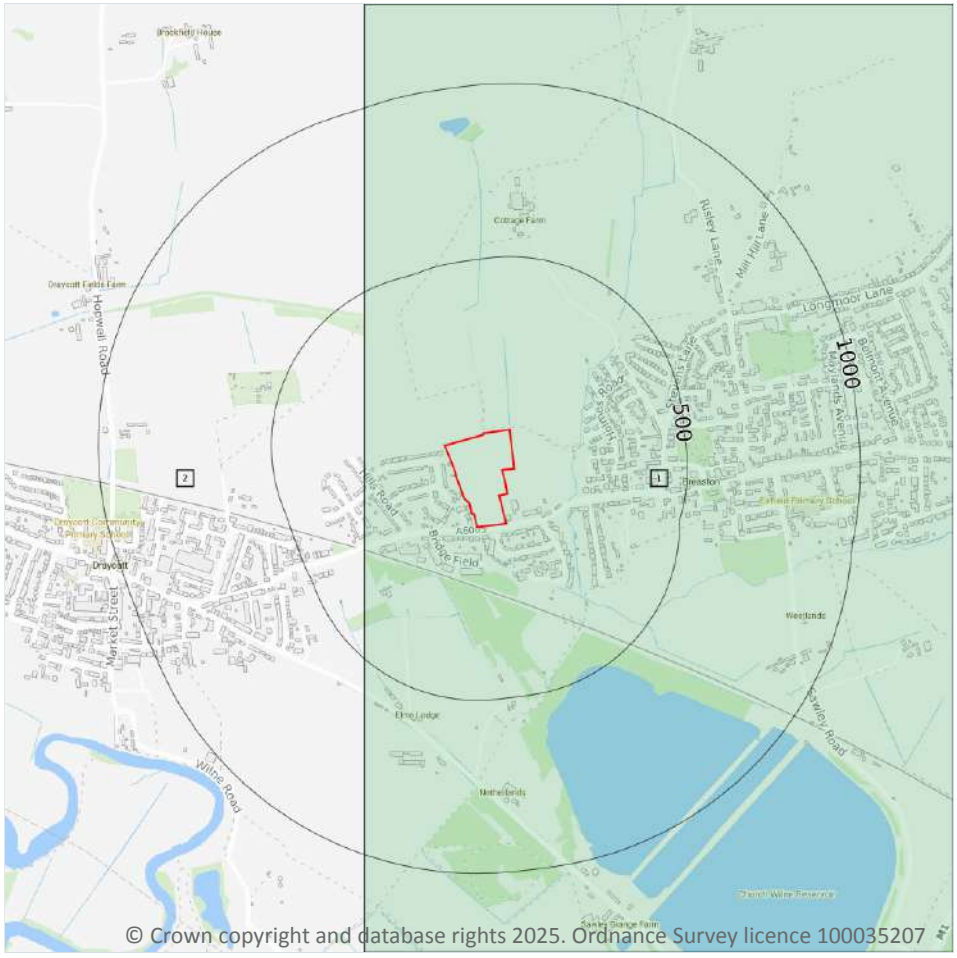
13.4 Limestone Pavement Orders

Records within 250m	0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

14.1 10k Availability

Records within 500m	2

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 73 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**SK43SE**
2	232m W	No coverage	No coverage	No coverage	No coverage	NoCov

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground

Site Outline

Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m	14

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 74 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**LSGR-UKNOWN**	**Landscaped Ground (Undivided)**	**Unknown/unclassified Entry**
2	79m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	138m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	174m SW	WMGR-ARTDP	Infilled Ground	Artificial Deposit

ID	Location	LEX Code	Description	Rock description
A	179m SW	WGR-VOID	Worked Ground (Undivided)	Void
4	199m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	225m SW	WGR-VOID	Worked Ground (Undivided)	Void
5	248m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	257m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	263m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
7	361m N	WGR-VOID	Worked Ground (Undivided)	Void
8	423m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
9	439m SE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
10	478m SE	WGR-VOID	Worked Ground (Undivided)	Void

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m **11**

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 76 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCZSV**	**Alluvium - Clay, Silt, Sand And Gravel**	**Clay, Silt, Sand And Gravel**
2	**On site**	**ALTD-XSV**	**Allenton Terrace Deposits - Sand And Gravel**	**Sand And Gravel**
3	**On site**	**ALTD-XSV**	**Allenton Terrace Deposits - Sand And Gravel**	**Sand And Gravel**
4	15m SW	HETD-XCZSV	Hemington Member - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel

ID	Location	LEX Code	Description	Rock description
5	202m E	BSSG-XSV	Beeston Sand And Gravel Member - Sand And Gravel	Sand And Gravel
6	248m SE	HETD-XCZSV	Hemington Member - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
7	300m N	BOSG-XSV	Borrowash Sand And Gravel - Sand And Gravel	Sand And Gravel
8	442m N	BOSG-XSV	Borrowash Sand And Gravel - Sand And Gravel	Sand And Gravel
9	443m NE	HEAD-DMTN	Head - Diamicton	Diamicton
10	461m NE	BOSG-XSV	Borrowash Sand And Gravel - Sand And Gravel	Sand And Gravel
11	472m N	RTDU-XSV	River Terrace Deposits (undifferentiated) - Sand And Gravel	Sand And Gravel

This data is sourced from the British Geological Survey.

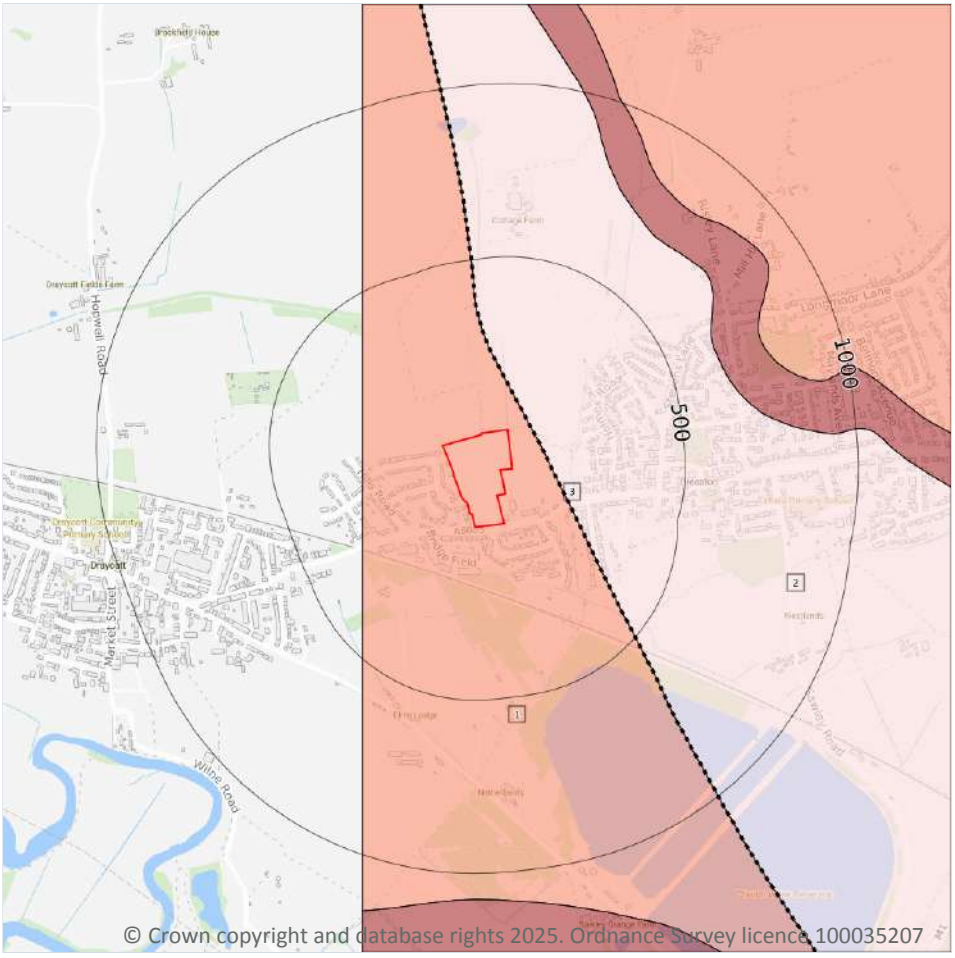
14.4 Landslip (10k)

Records within 500m	**0**

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m	2

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 78 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**GUN-MDST**	**Gunthorpe Member - Mudstone**	**Ladinian Age - Anisian Age**
2	63m NE	EDW-MDST	Edwalton Member - Mudstone	Carnian Age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	1

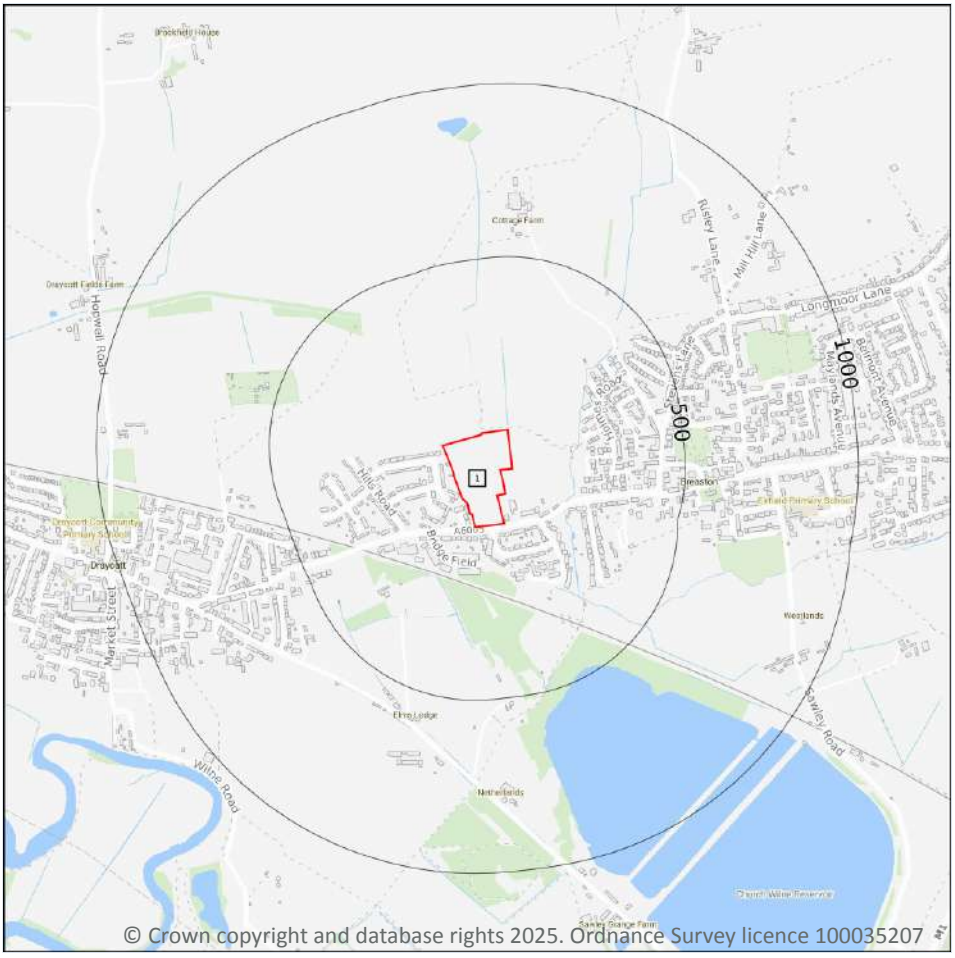
Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 78 >**

ID	Location	Category	Description
3	63m NE	FAULT	Normal fault, inferred

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



15.1 50k Availability

Records within 500m	1

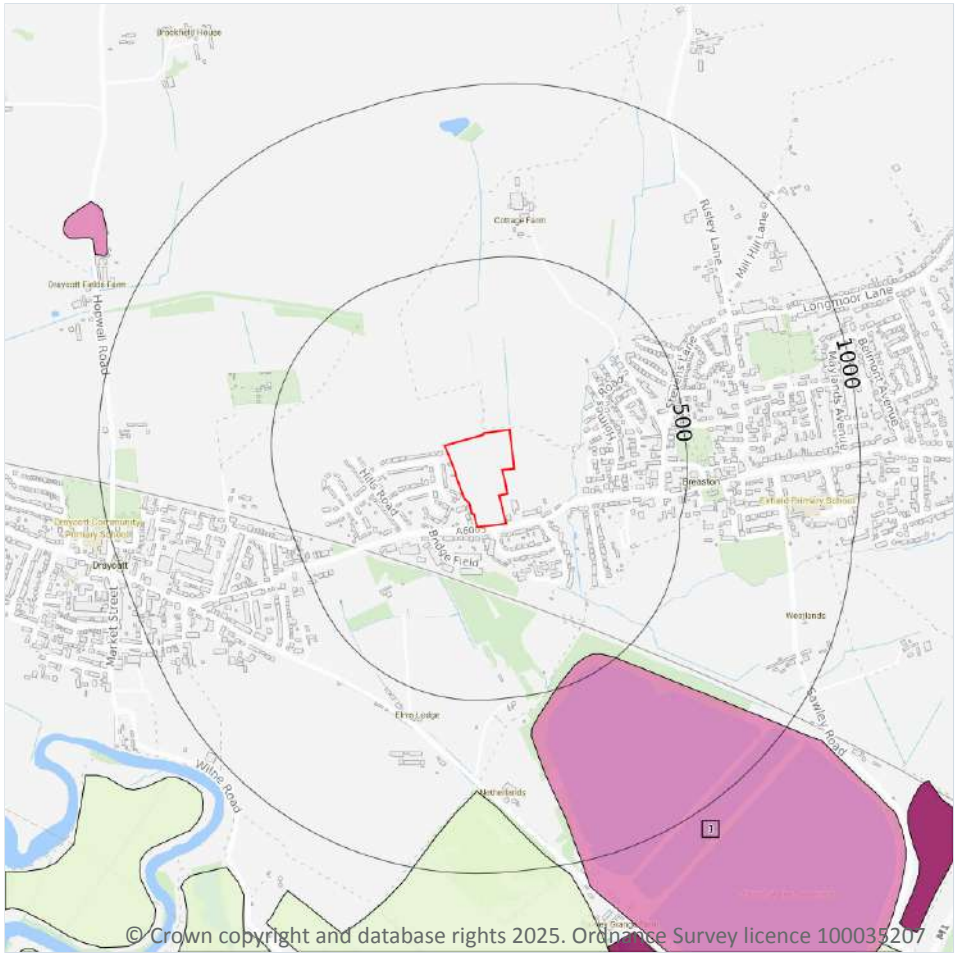
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 80 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW141_loughborough_v4**

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground



15.2 Artificial and made ground (50k)

Records within 500m	1

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 81 >**

ID	Location	LEX Code	Description	Rock description
1	448m SE	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

This data is sourced from the British Geological Survey.

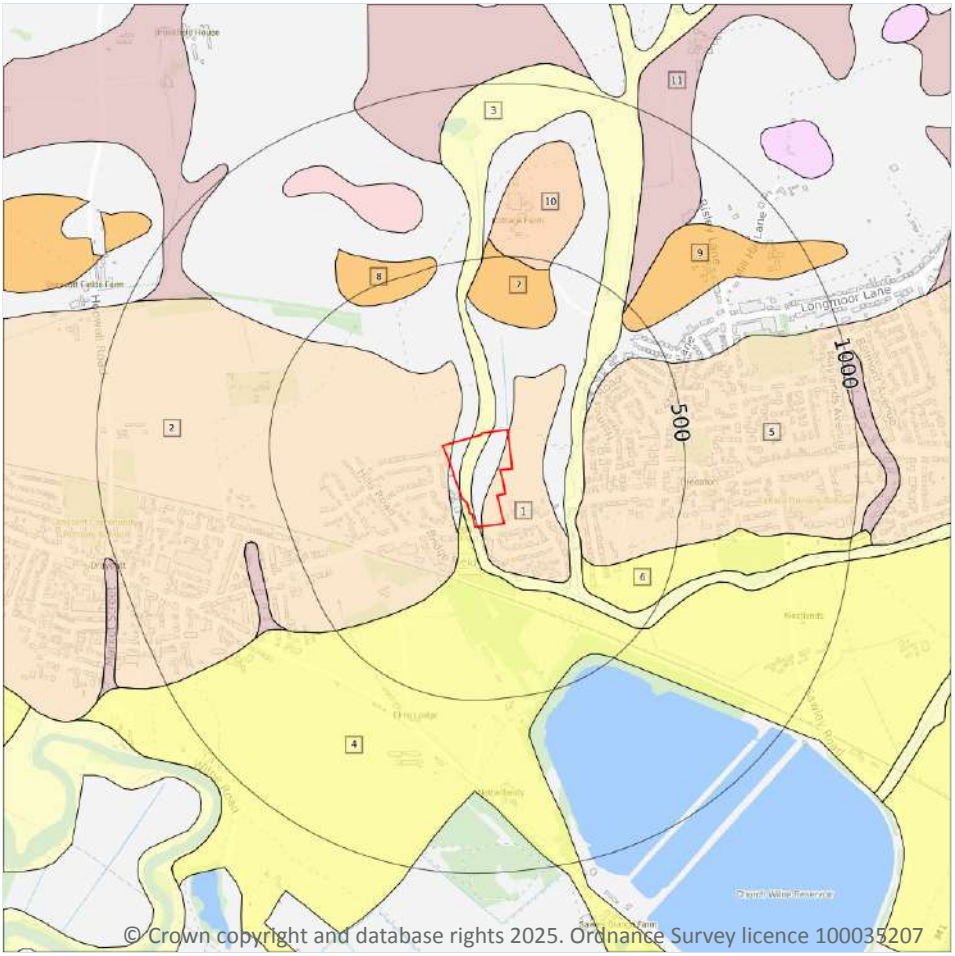
15.3 Artificial ground permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m **11**

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 83 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALTD-XSV**	**ALLENTON TERRACE DEPOSITS**	**SAND AND GRAVEL**
2	**On site**	**ALTD-XSV**	**ALLENTON TERRACE DEPOSITS**	**SAND AND GRAVEL**
3	**On site**	**ALV-XCZSV**	**ALLUVIUM**	**CLAY, SILT, SAND AND GRAVEL**
4	17m W	HETD-XZV	HEMINGTON MEMBER	SILT AND GRAVEL

ID	Location	LEX Code	Description	Rock description
5	206m E	BSSG-XSV	BEESTON SAND AND GRAVEL MEMBER	SAND AND GRAVEL
6	242m SE	HETD-XZV	HEMINGTON MEMBER	SILT AND GRAVEL
7	298m N	BOSG-XSV	BORROWASH SAND AND GRAVEL	SAND AND GRAVEL
8	439m N	BOSG-XSV	BORROWASH SAND AND GRAVEL	SAND AND GRAVEL
9	451m NE	BOSG-XSV	BORROWASH SAND AND GRAVEL	SAND AND GRAVEL
10	470m N	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL
11	470m NE	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m **4**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**High**	**Very Low**
On site	**Intergranular**	**Very High**	**High**
On site	**Intergranular**	**Very High**	**High**
17m W	Intergranular	High	Moderate

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m **0**

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

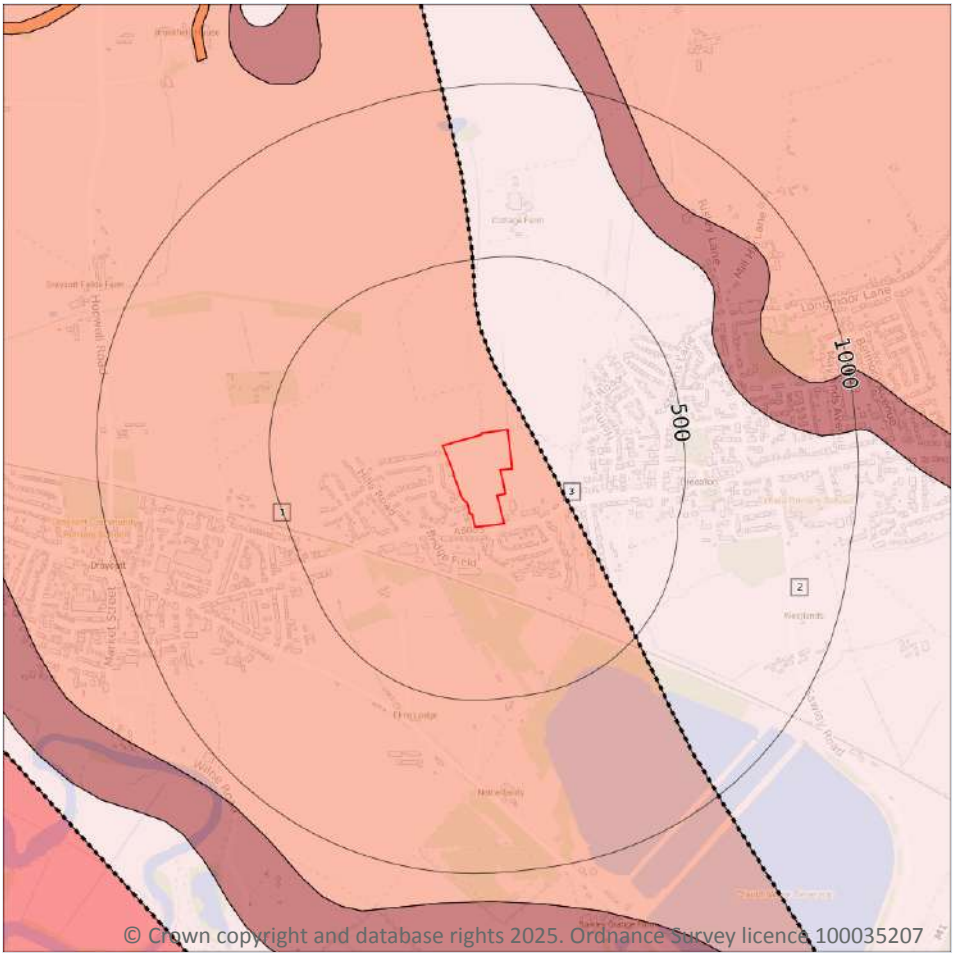
15.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m **2**

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 86 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**GUN-MDST**	**GUNTHORPE MEMBER - MUDSTONE**	**ANISIAN**
2	57m NE	EDW-MDST	EDWALTON MEMBER - MUDSTONE	CARNIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	**1**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**Low**	**Low**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	**1**

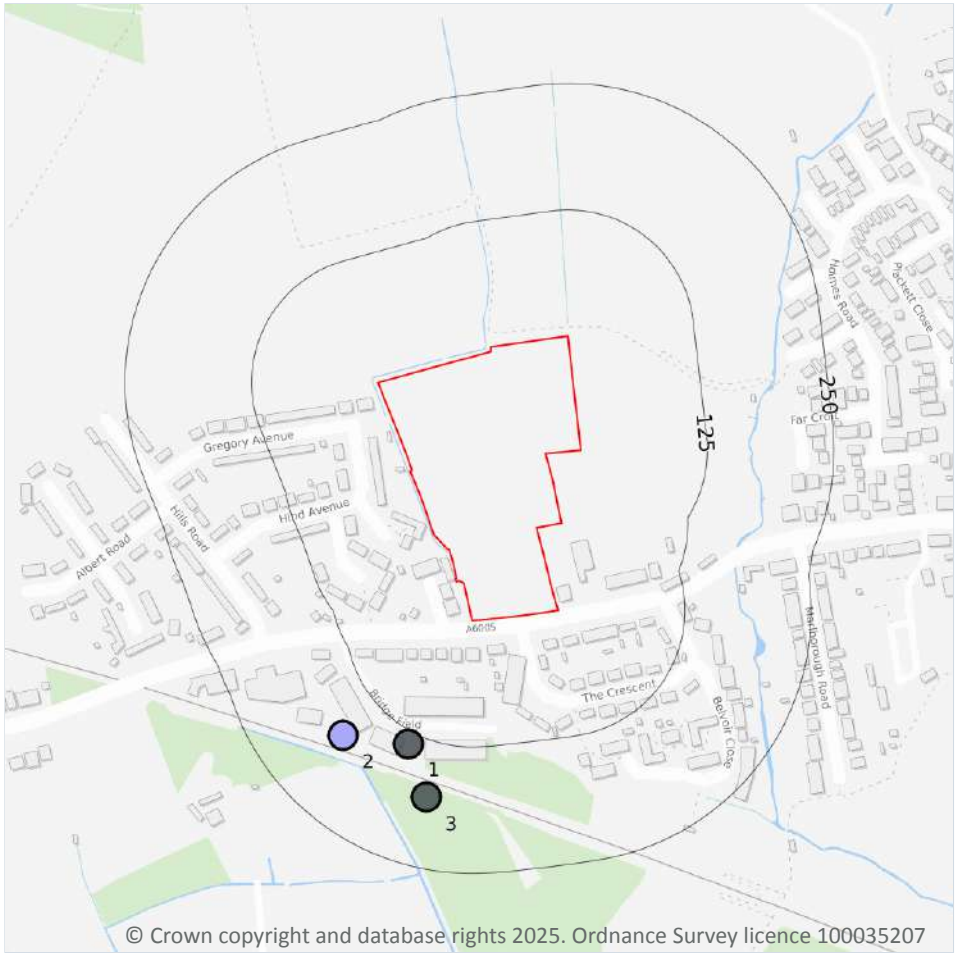
Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 86 >**

ID	Location	Category	Description
3	57m NE	FAULT	Fault, inferred

This data is sourced from the British Geological Survey.

16 Boreholes



16.1 BGS Boreholes

Records within 250m **3**

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

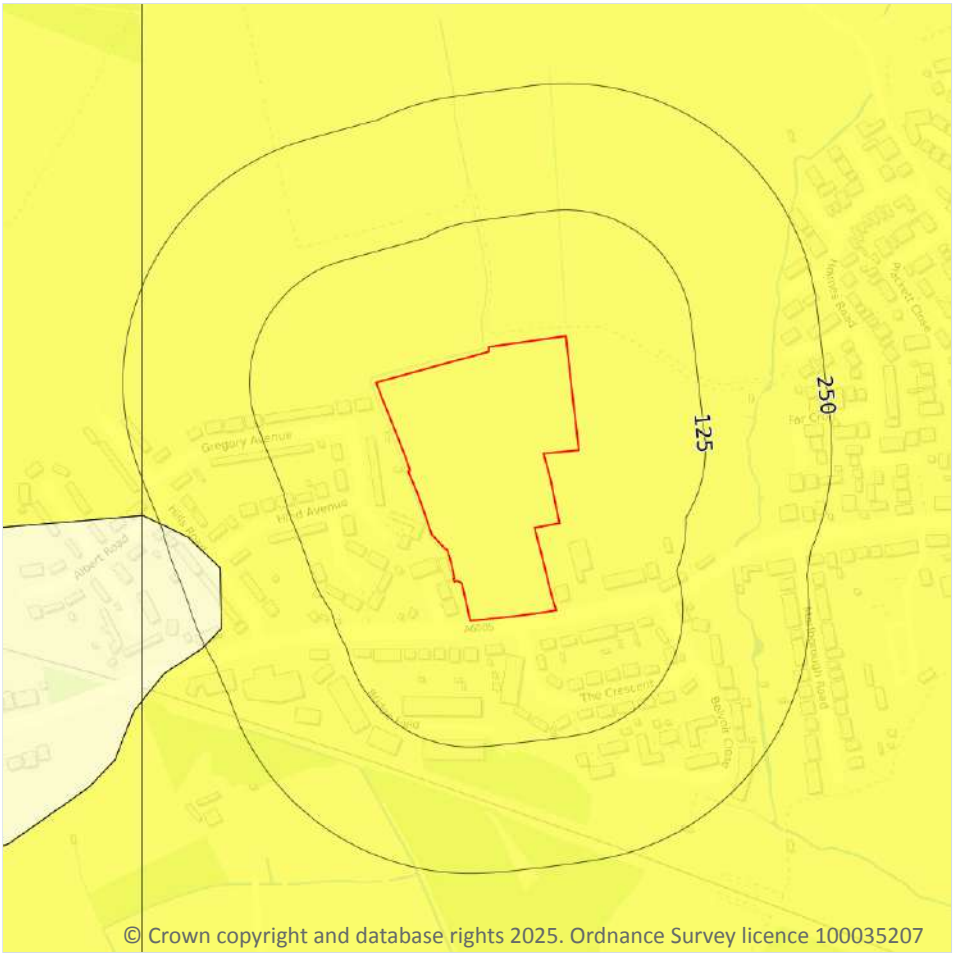
Features are displayed on the Boreholes map on **page 88 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	137m SW	445262 333285	DERBY DVA DUPLICATION BH6	-	Y	N/A
2	171m SW	445197 333293	TELECOM TOWER BREASTON DERBY DBY 0139 1	3.5	N	20308573 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
3	180m S	445279 333232	DERBY DVA DUPLICATION BH4	-	Y	N/A

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m	1

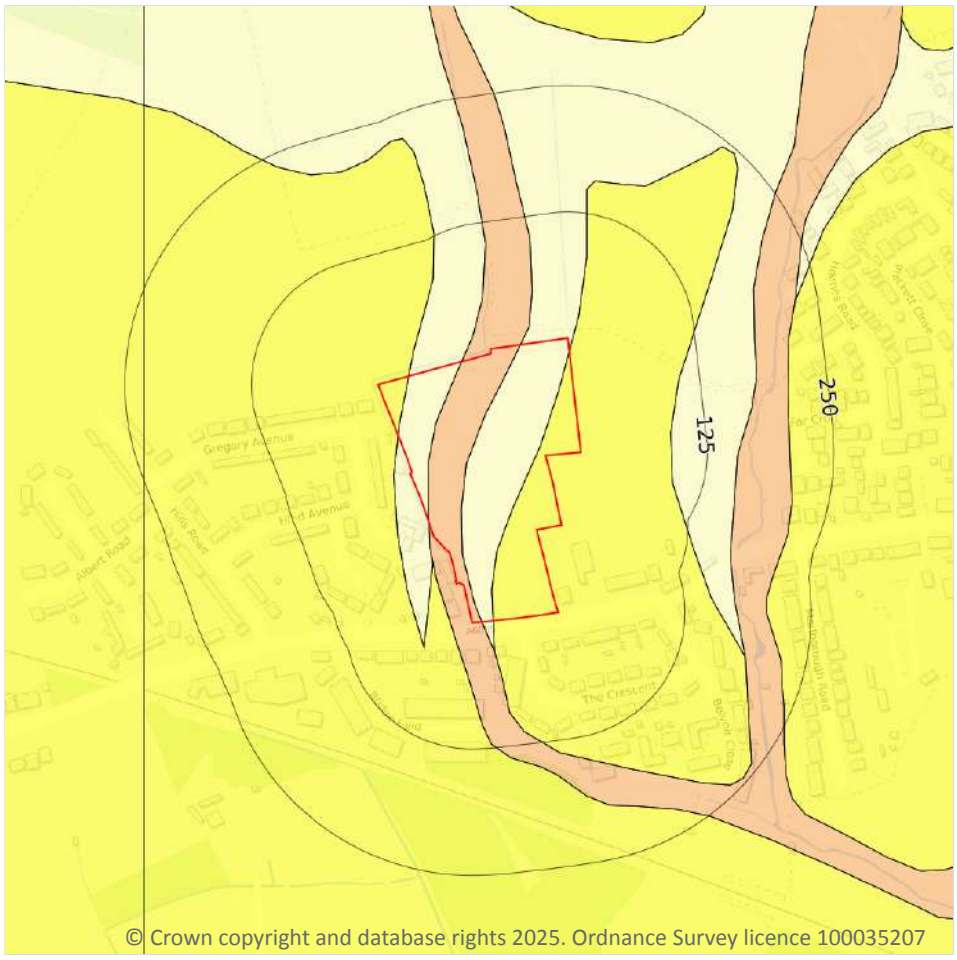
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 90 >**

Location	Hazard rating	Details
On site	**Very low**	**Ground conditions predominantly low plasticity.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	3

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

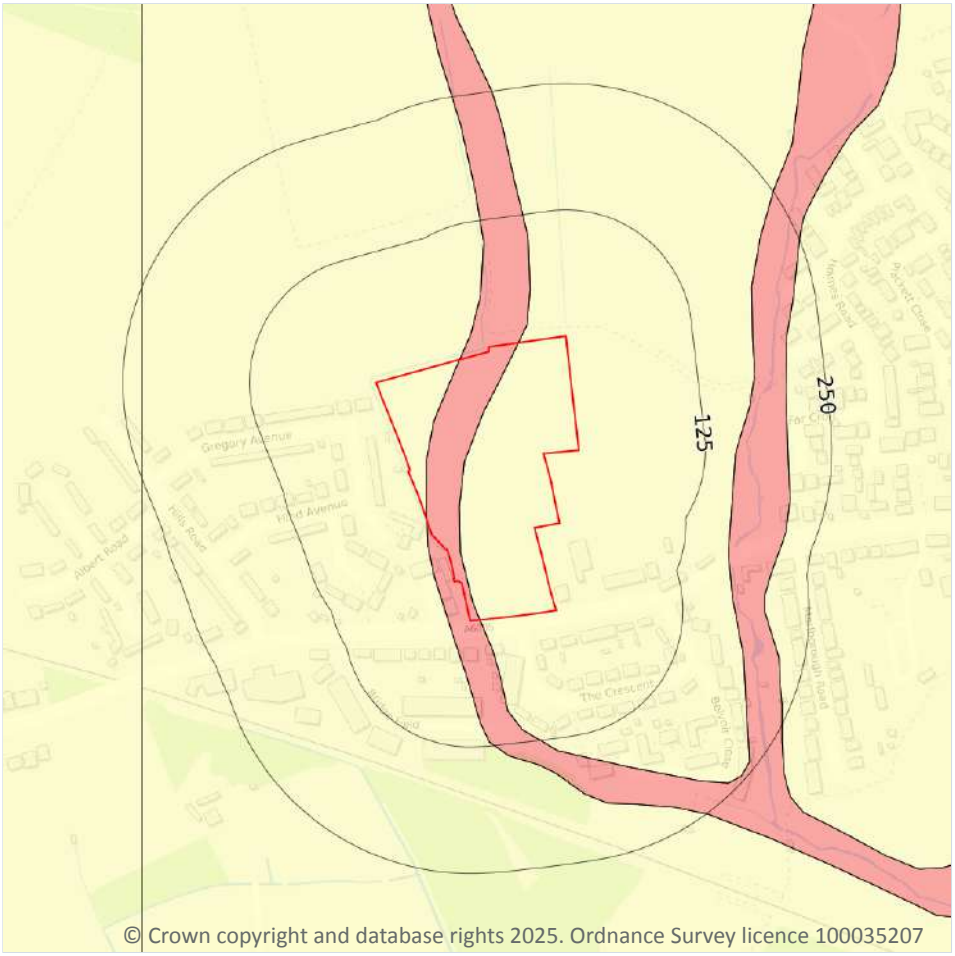
Features are displayed on the Natural ground subsidence - Running sands map on **page 91 >**

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m	2

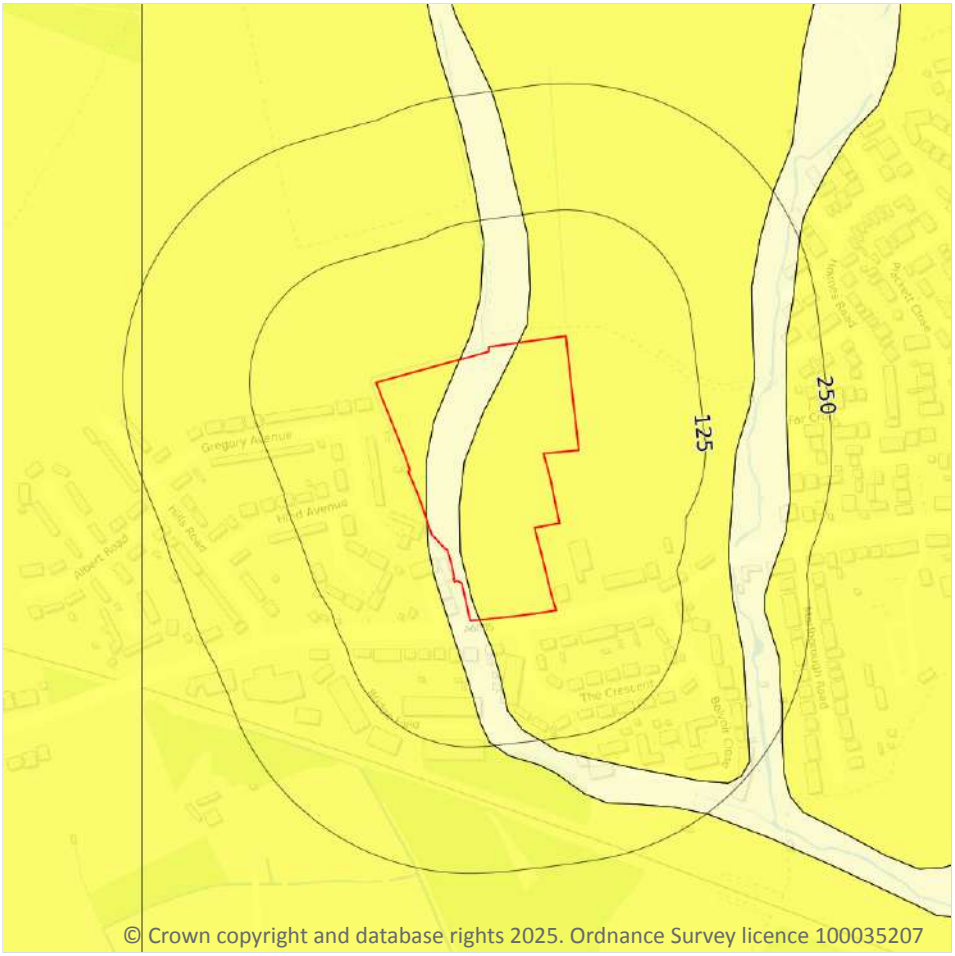
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 93 >**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
On site	**Moderate**	**Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	2

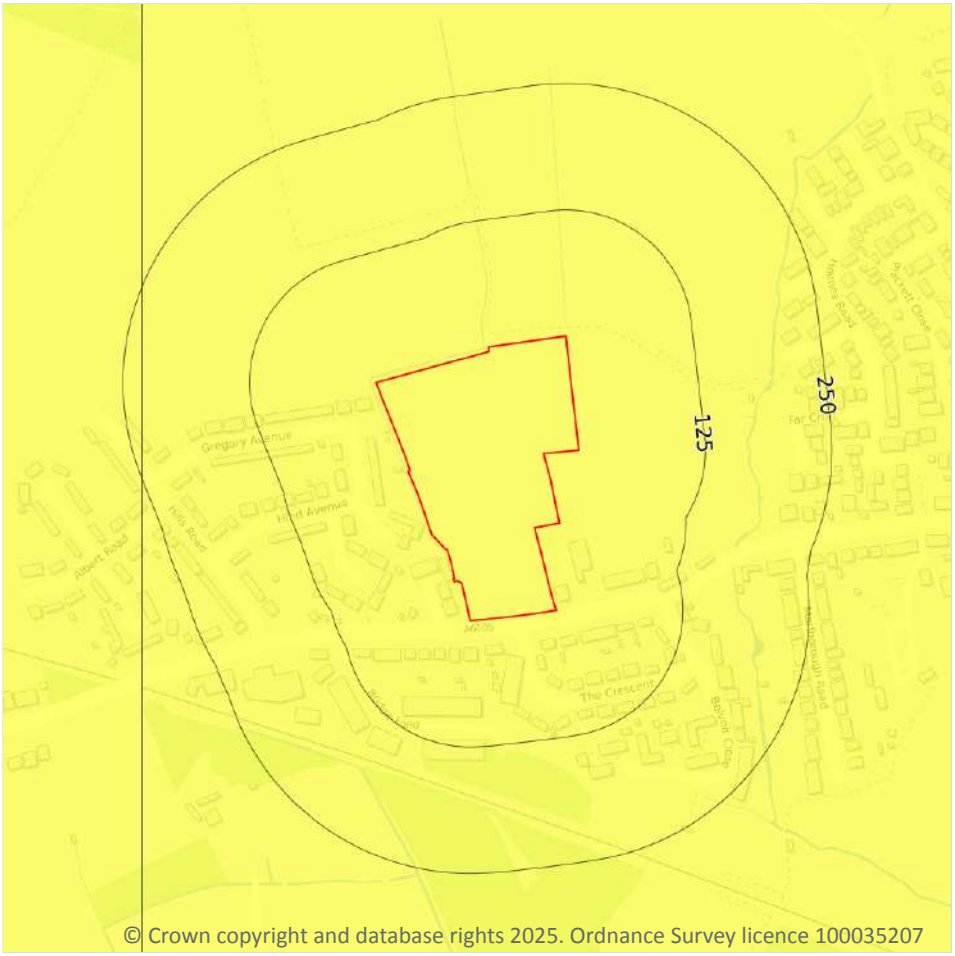
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 95 >**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m	1

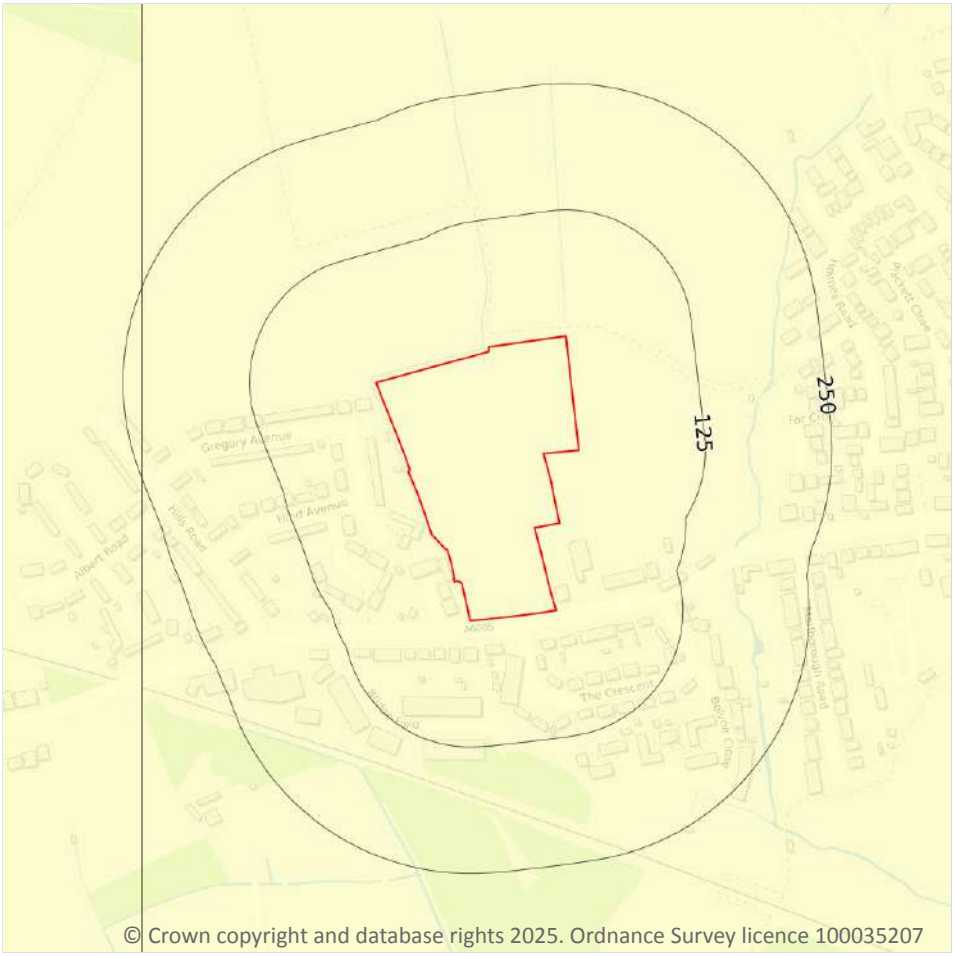
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 96 >**

Location	Hazard rating	Details
On site	**Very low**	**Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m	1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 97 >**

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

This data is sourced from the British Geological Survey.

18 Mining and ground workings

Site Outline

Search buffers in metres (m)

- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining

Non Coal Mining

- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	3

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining and ground workings map on **page 99 >**

ID	Location	Land Use	Year of mapping	Mapping scale
A	176m W	Unspecified Pit	1899	1:10560
A	176m W	Unspecified Pit	1883	1:10560
A	179m SW	Unspecified Ground Workings	1900	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m	0

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m	0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	2

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

Features are displayed on the Mining and ground workings map on **page 99 >**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
1	205m S	Sawley Road	Sand and gravel	Surface mineral working	Valid	14/6/66
4	405m NE	Breaston	Sand and gravel	Surface mineral working	Refused	Not available

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

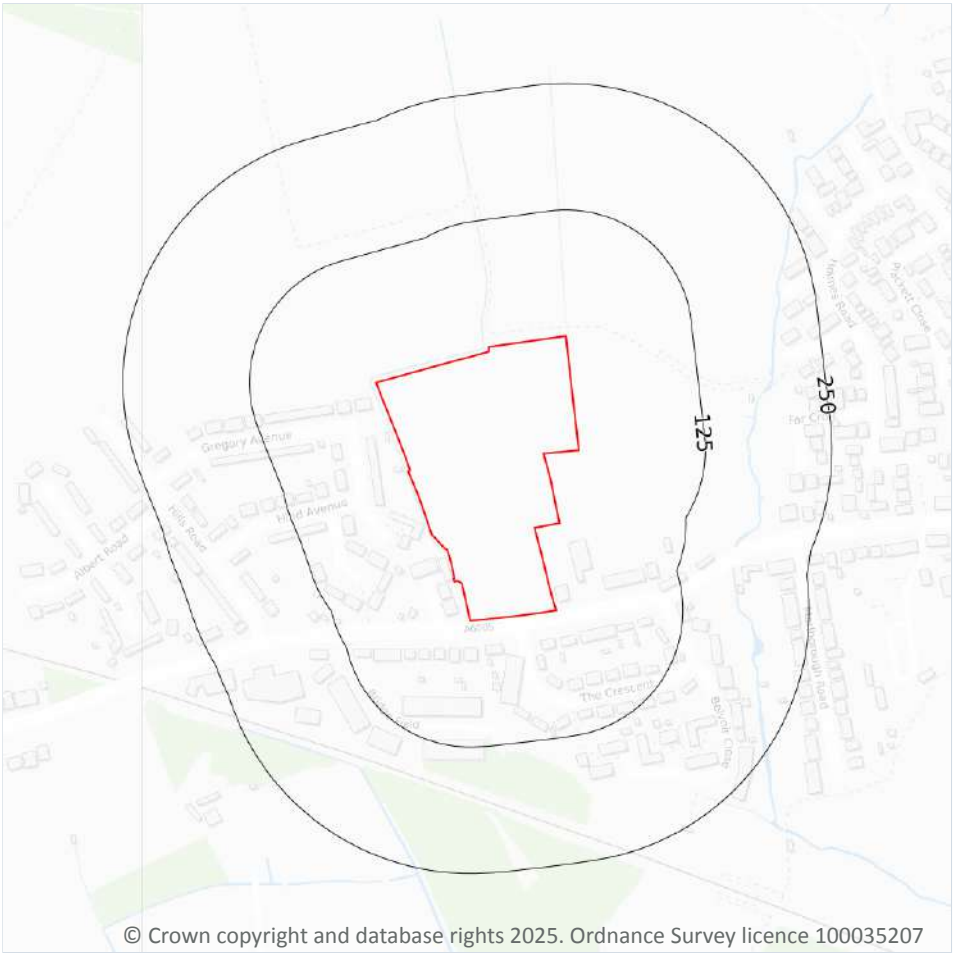
Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

20 Radon



20.1 Radon

Records on site	1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 106 >**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Less than 1%**	**None**

This data is sourced from the British Geological Survey and UK Health Security Agency.

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	11

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 - 2.2 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 - 2.2 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
On site	**15 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 - 2.2 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
2m W	15 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
17m W	15 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
32m W	15 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

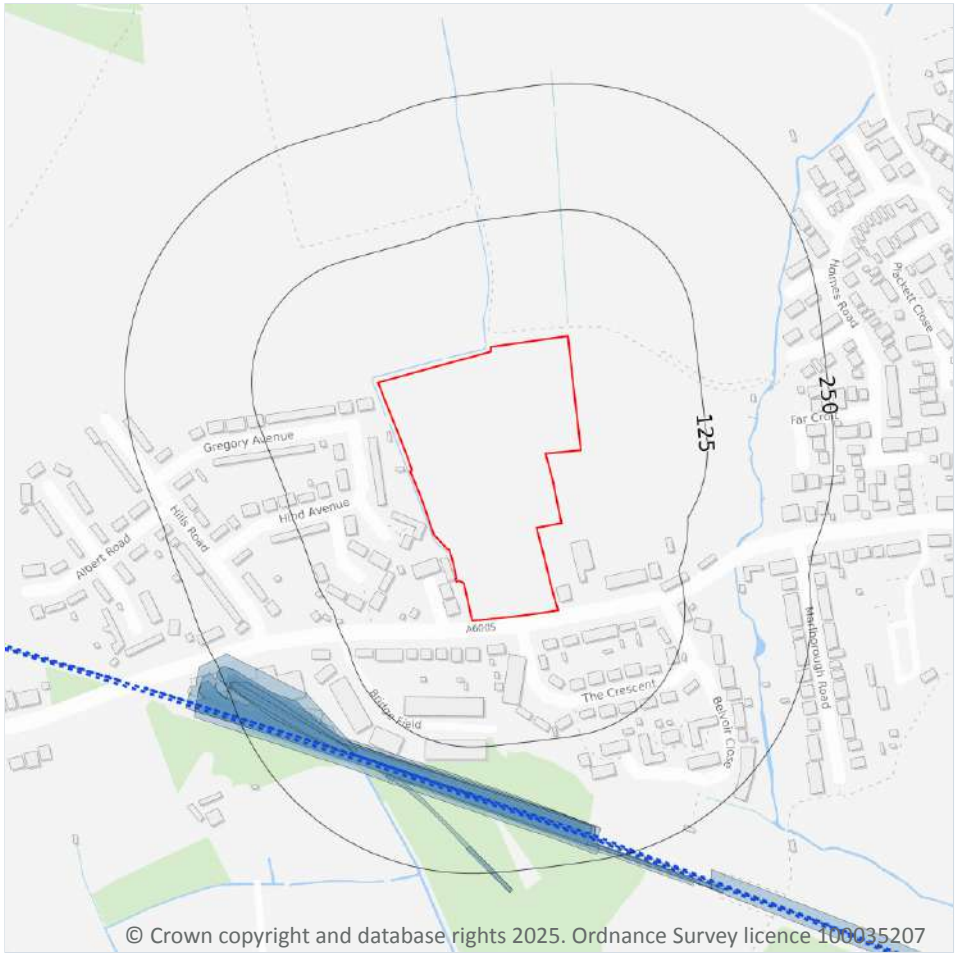
21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects



22.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	18

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on **page 110 >**

Location	Land Use	Year of mapping	Mapping scale
150m S	Railway Sidings	1921	10560
152m S	Railway Sidings	1921	10560
154m S	Railway Sidings	1938	10560
154m S	Railway Sidings	1921	10560
154m S	Railway Sidings	1955	10560
156m S	Railway Sidings	1963	2500
156m S	Railway Sidings	1914	2500
156m S	Railway Sidings	1937	2500
157m S	Railway Sidings	1900	2500
157m S	Railway Sidings	1881	2500
162m S	Railway Sidings	1883	10560
171m SW	Railway Sidings	1899	10560
171m SW	Railway Sidings	1982	1250
171m SW	Railway Sidings	1988	1250
174m SW	Railway Sidings	1899	-
175m SW	Railway Sidings	1900	10560
192m S	Railway Sidings	1963	2500

Location	Land Use	Year of mapping	Mapping scale
223m S	Railway Sidings	1988	1250

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	5

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

Features are displayed on the Railway infrastructure and projects map on **page 110 >**

Location	Name	Type
163m S	Midland Main Line	rail
164m S	Not given	Multi Track
166m S	Midland Main Line	rail
176m SW	Not given	Multi Track
248m S	Not given	Multi Track

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.9 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

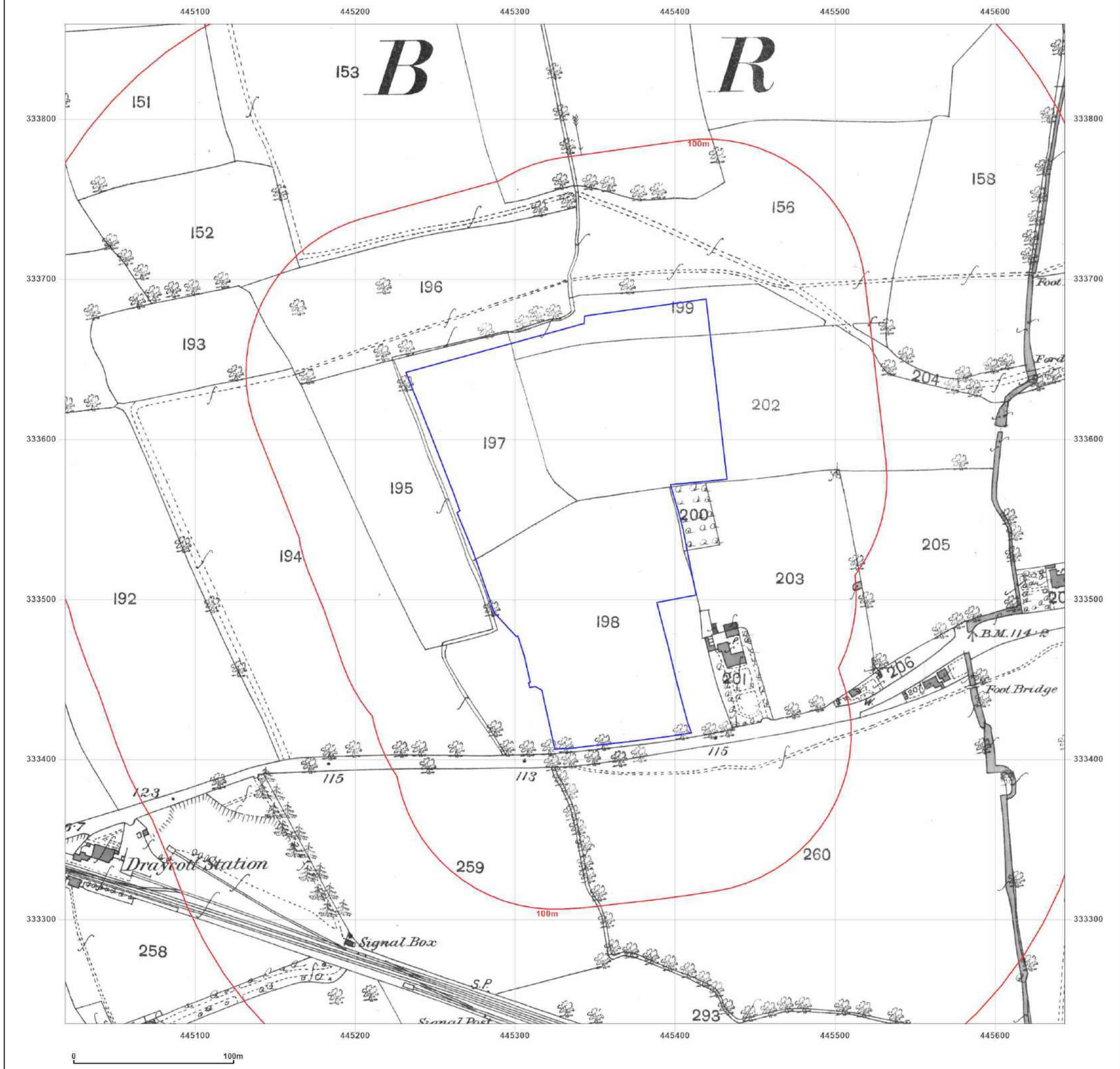
Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗.

APPENDIX V

Historical Mapping



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: County Series

Map date: **1881**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

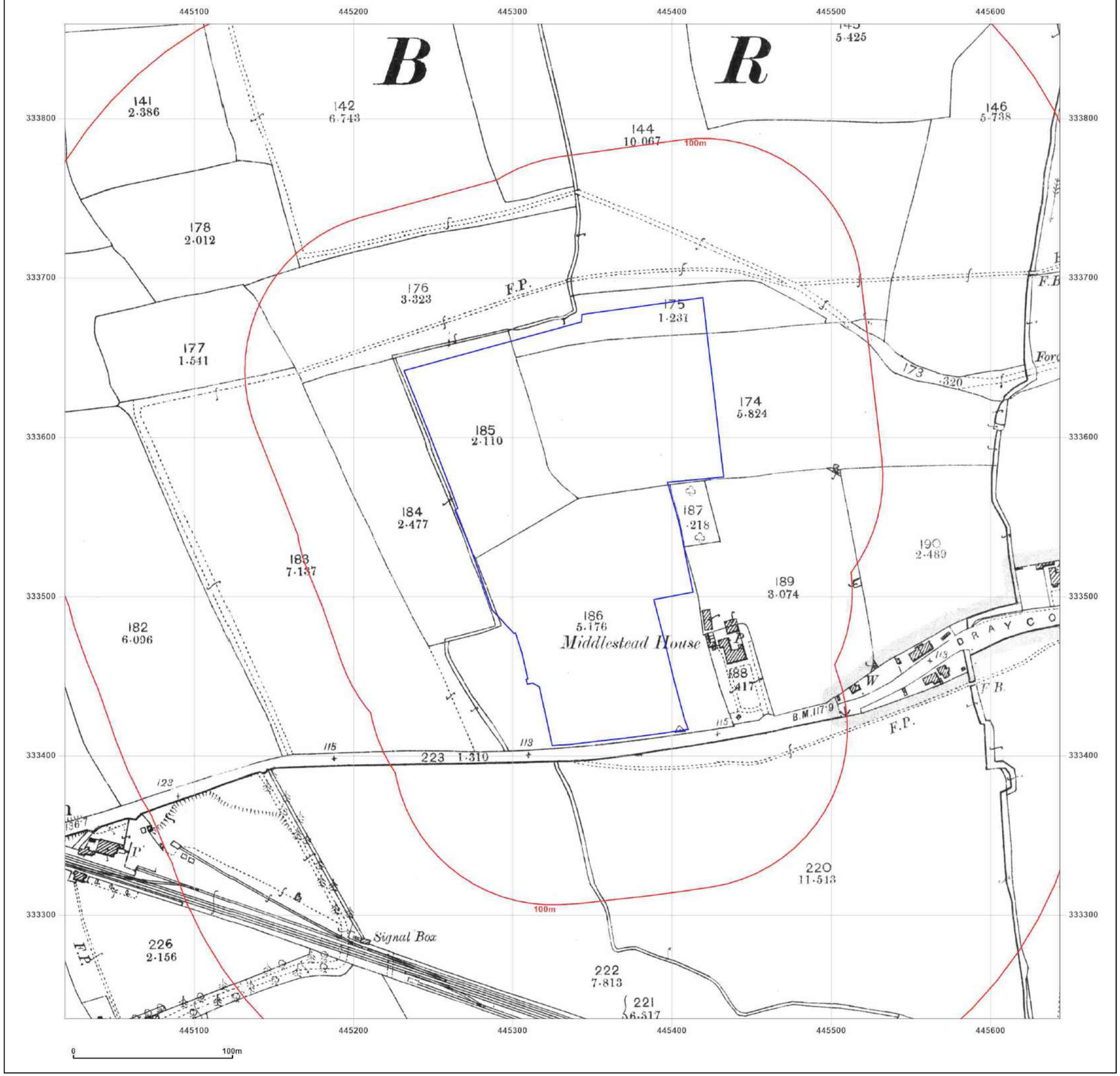
Surveyed 1881
Revised 1881
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: County Series

Map date: **1900**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

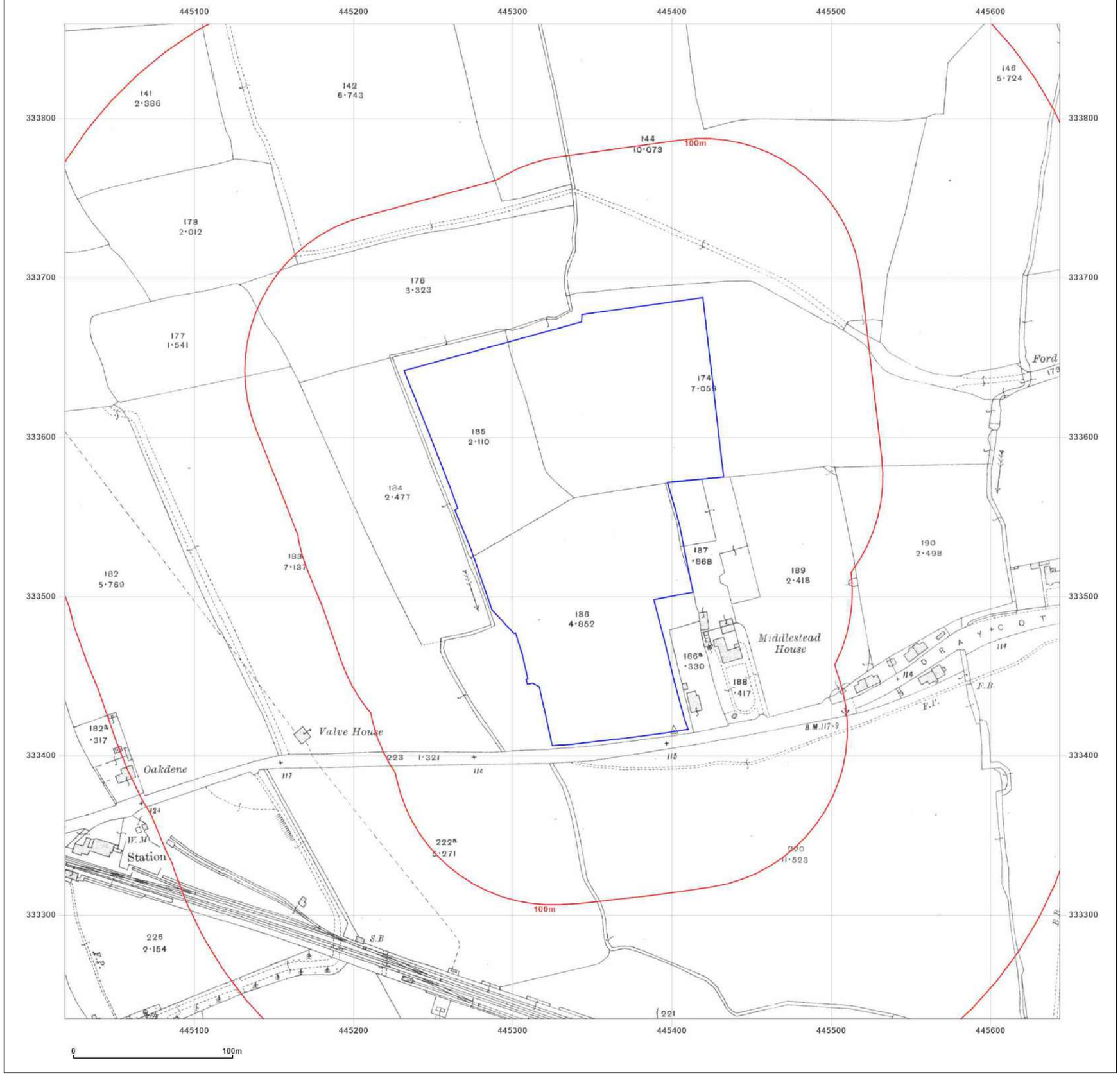
Surveyed 1900
Revised 1900
Edition N/A
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: County Series

Map date: **1914**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

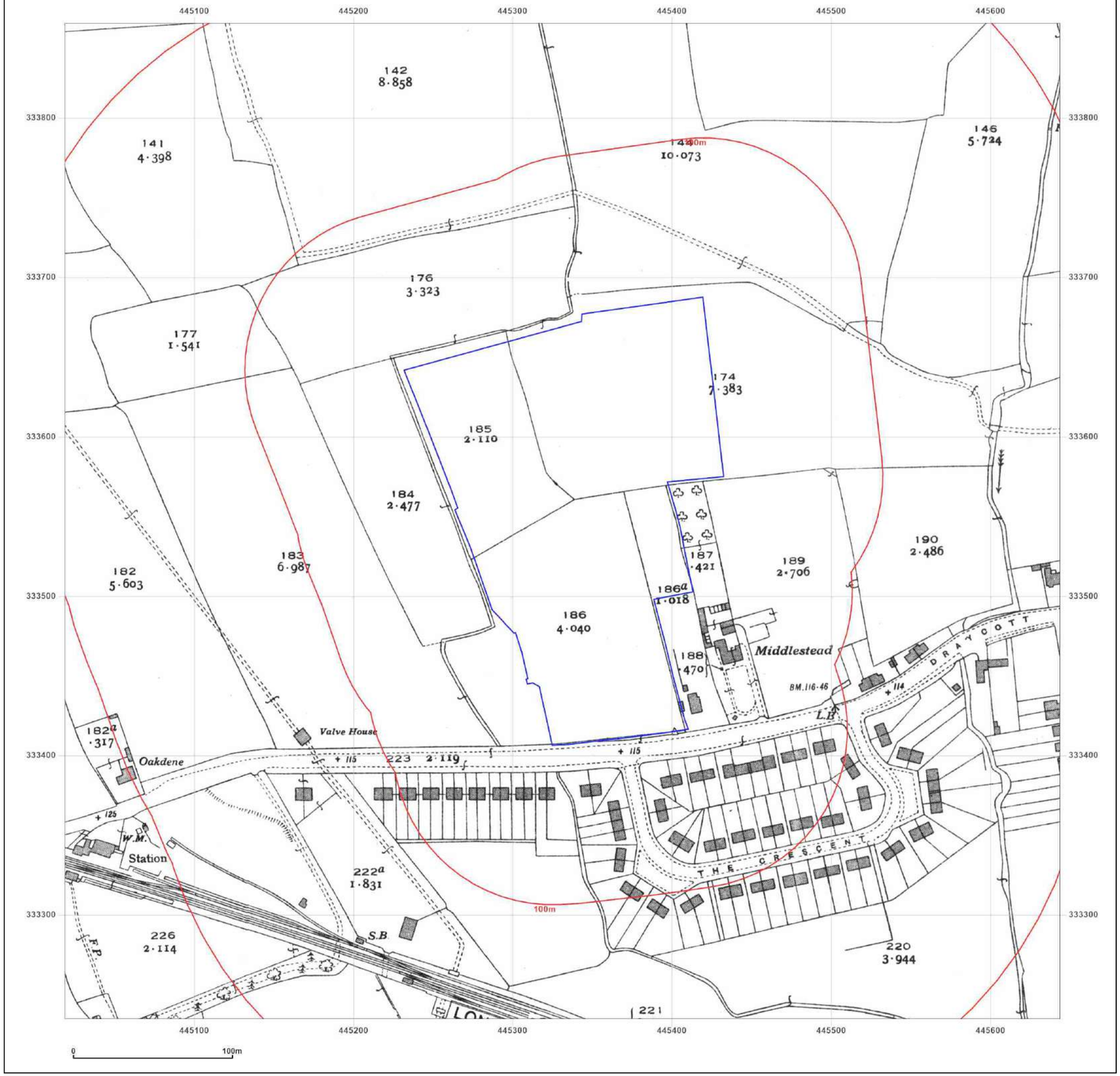
Surveyed 1914
Revised 1914
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: County Series

Map date: **1937**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: National Grid

Map date: **1963**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1961
Revised 1961
Edition N/A
Copyright 1963
Levelled 1956

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: National Grid

Map date: **1969**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: National Grid

Map date: **1969**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1968
Revised 1968
Edition N/A
Copyright 1969
Levelled 1956

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: National Grid

Map date: **1982**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1981
Revised 1981
Edition N/A
Copyright 1982
Levelled 1956

Surveyed 1981
Revised 1981
Edition N/A
Copyright 1982
Levelled 1956

Surveyed 1981
Revised 1981
Edition N/A
Copyright 1982
Levelled 1956

Surveyed 1981
Revised 1981
Edition N/A
Copyright 1982
Levelled 1956

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: National Grid

Map date: **1988-1993**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1993 Revised N/A Edition N/A Copyright 1993 Levelled N/A	Surveyed 1956 Revised 1991 Edition N/A Copyright 1991 Levelled 1956
Surveyed 1956 Revised 1988 Edition N/A Copyright 1988 Levelled 1956	Surveyed 1956 Revised 1988 Edition N/A Copyright 1988 Levelled 1956

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: National Grid

Map date: **1993**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

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

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

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

Groundsure INSIGHTS

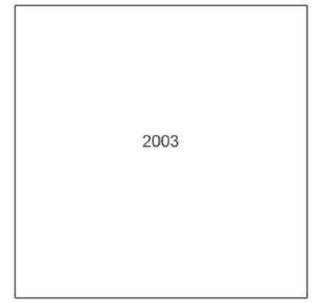
Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

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

N
W E
S

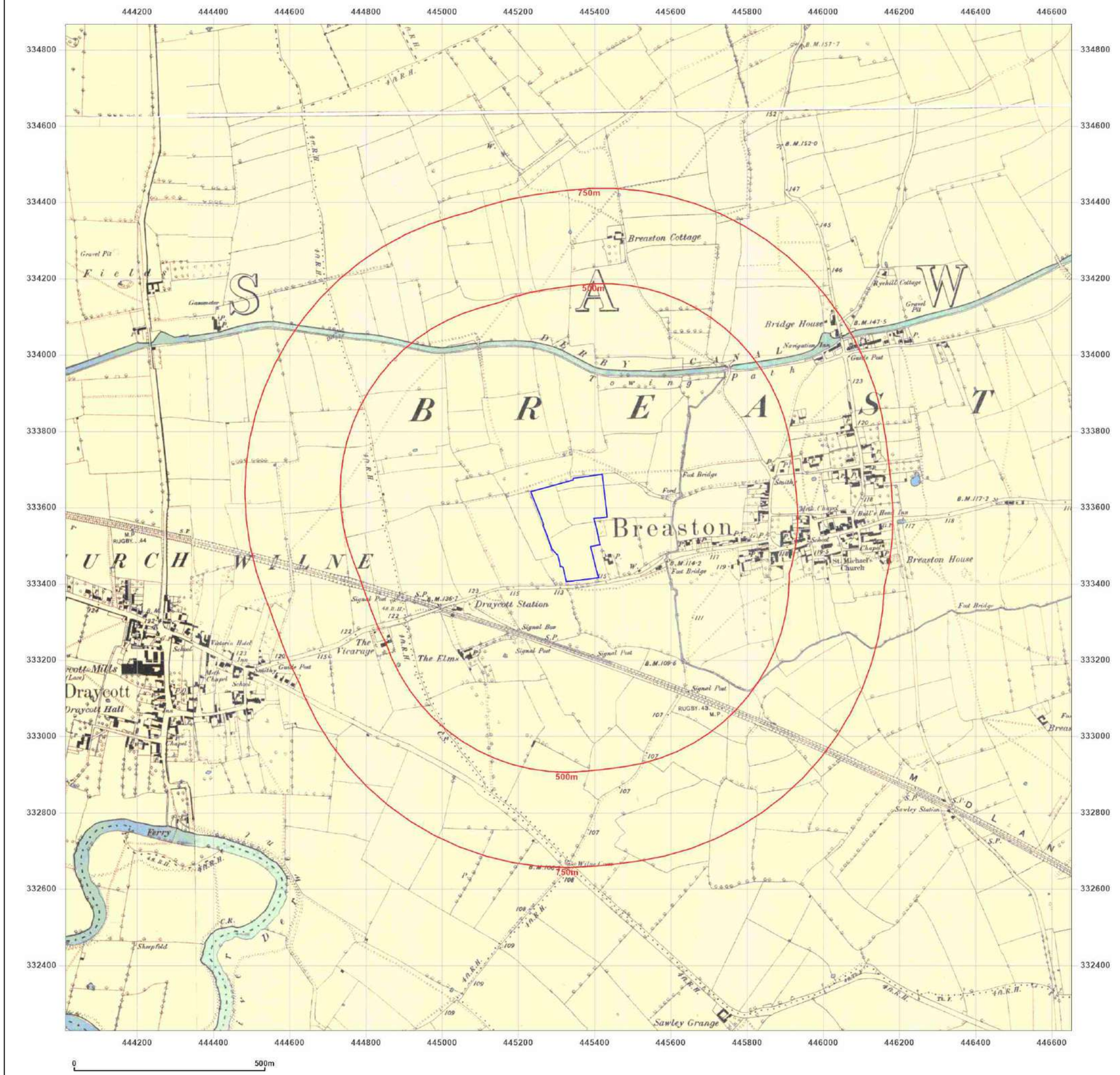


Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: County Series

Map date: **1881-1883**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

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

Surveyed 1883
Revised 1883
Edition N/A
Copyright N/A
Levelled N/A

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

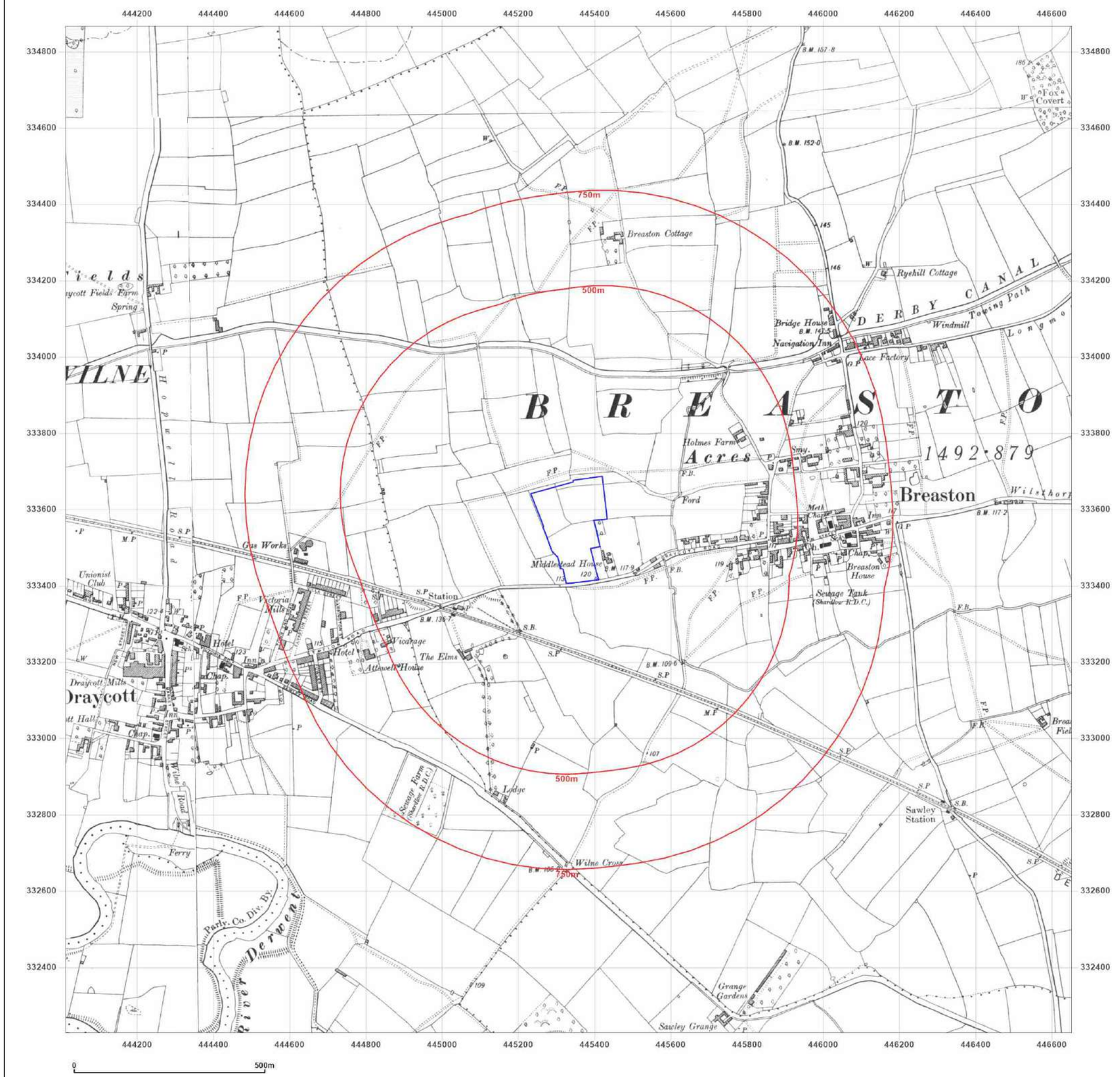
Surveyed 1883
Revised 1883
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: County Series

Map date: **1899**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1881
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

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

Surveyed 1880
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

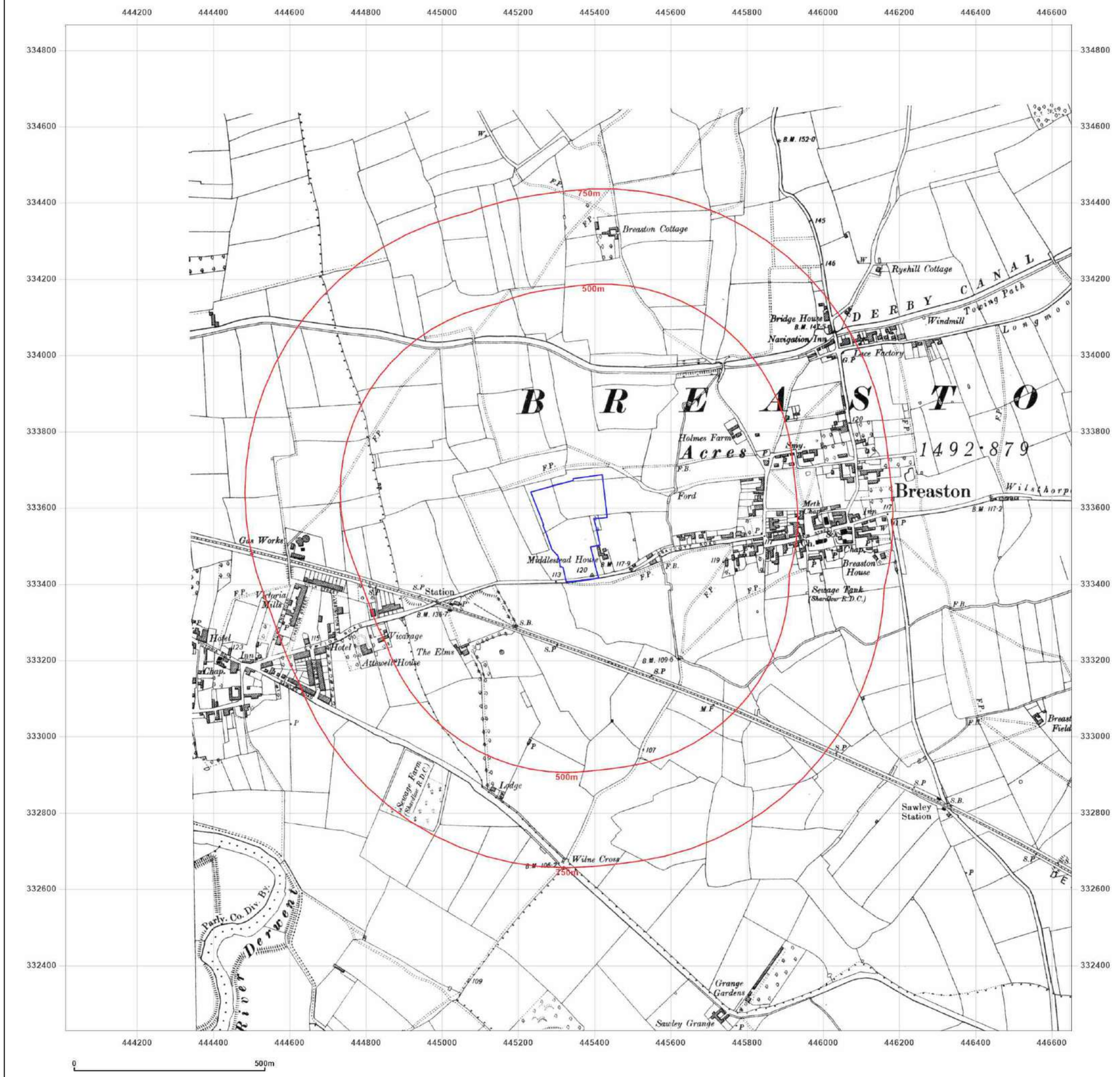
Surveyed 1881
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

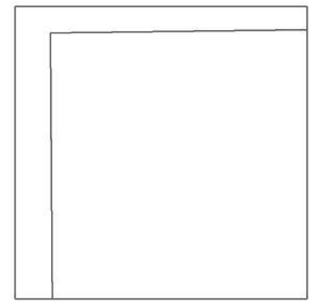
Map Name: County Series

Map date: **1900**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S



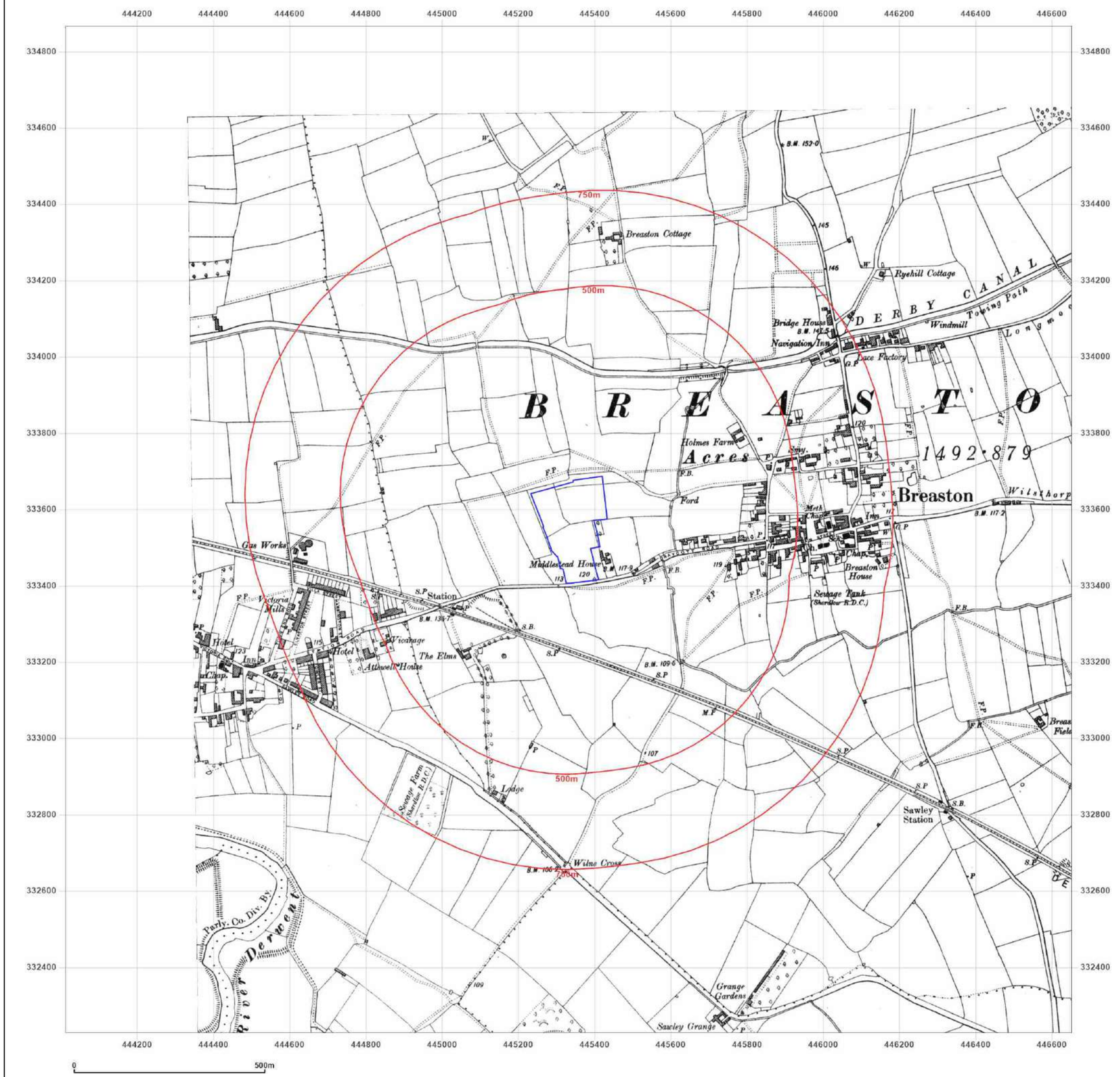
Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

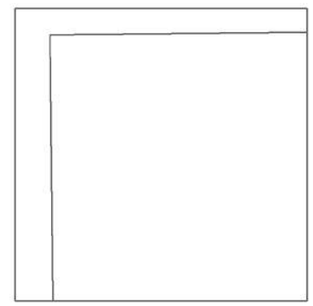
Map Name: County Series

Map date: **1901**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S



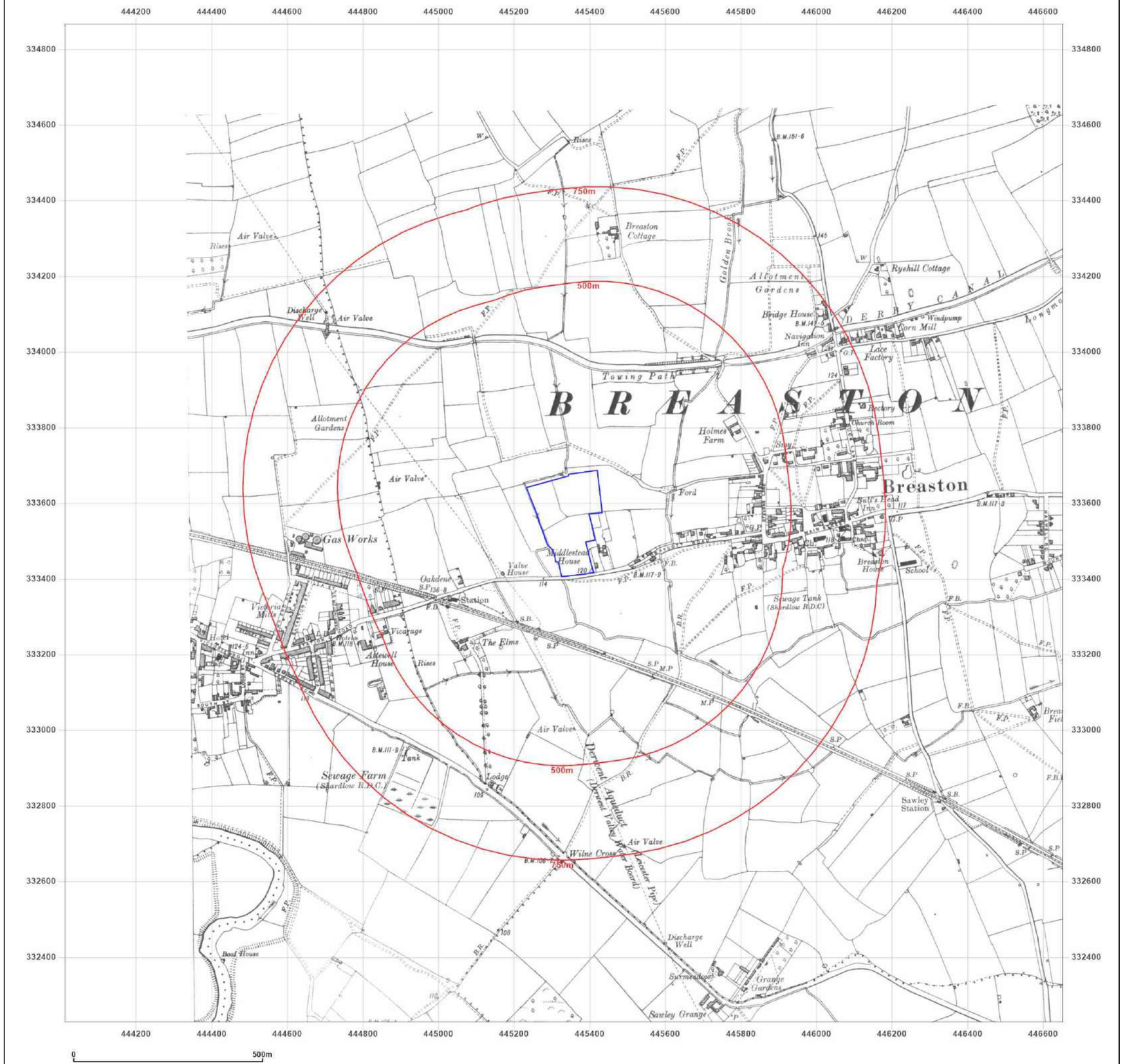
Surveyed N/A
Revised 1899
Edition 1901
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

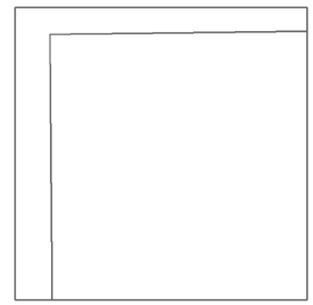
Map Name: County Series

Map date: **1921**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S



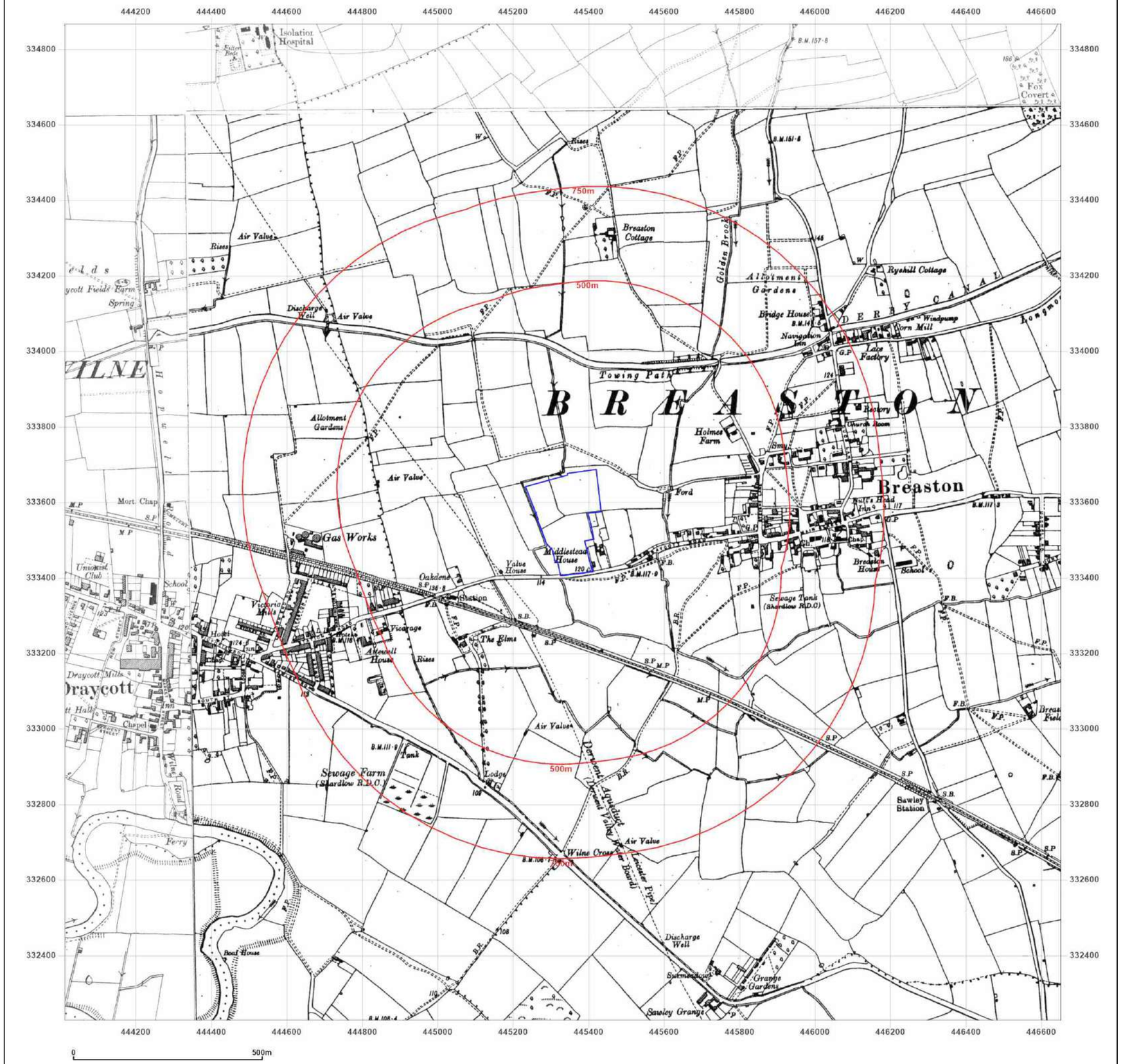
Surveyed 1881
Revised 1921
Edition 1921
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: County Series

Map date: **1921-1924**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

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

Surveyed 1881
Revised 1918
Edition 1921
Copyright N/A
Levelled N/A

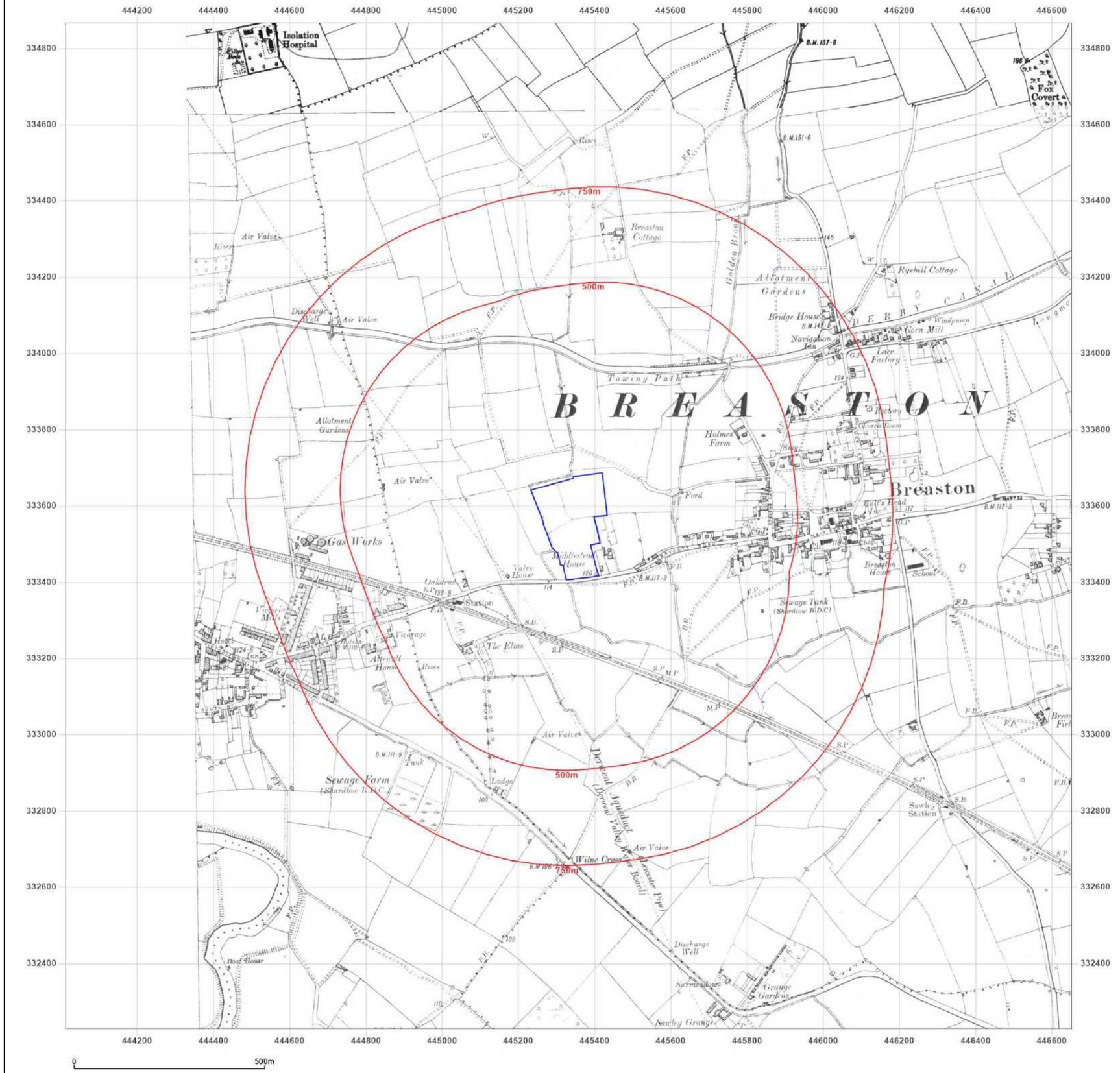
Surveyed 1882
Revised 1924
Edition N/A
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: County Series

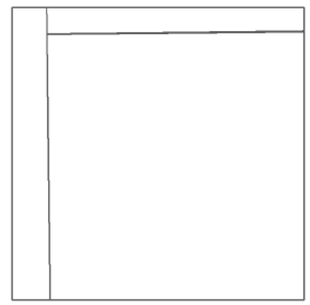
Map date: **1921-1924**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

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



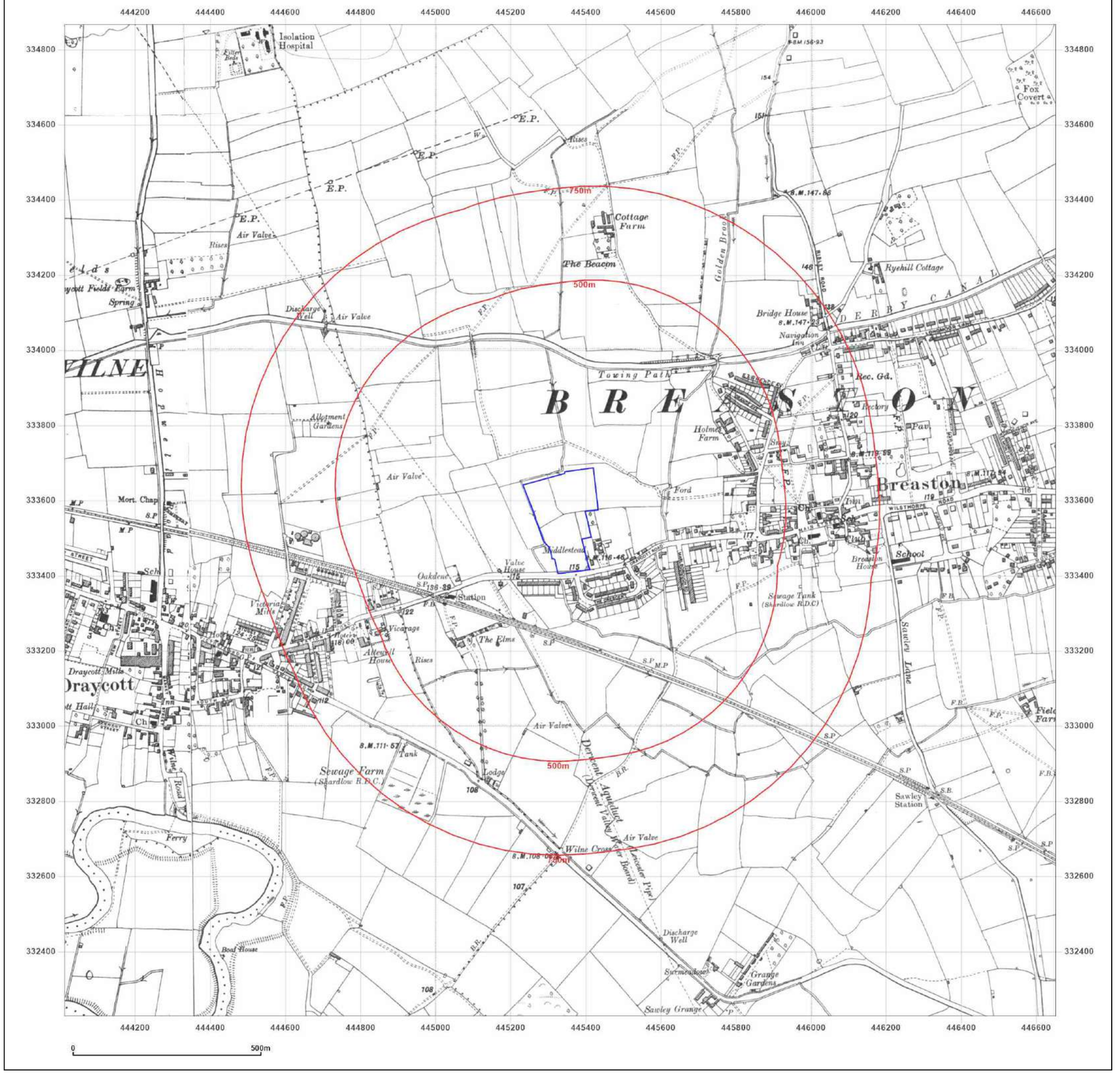
Surveyed 1882
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: County Series

Map date: **1938**

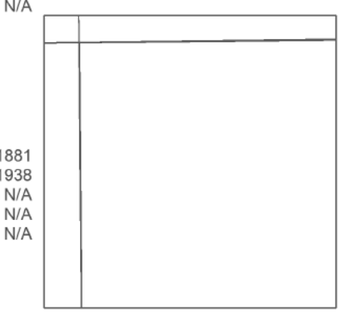
Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1880
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1879
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A



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

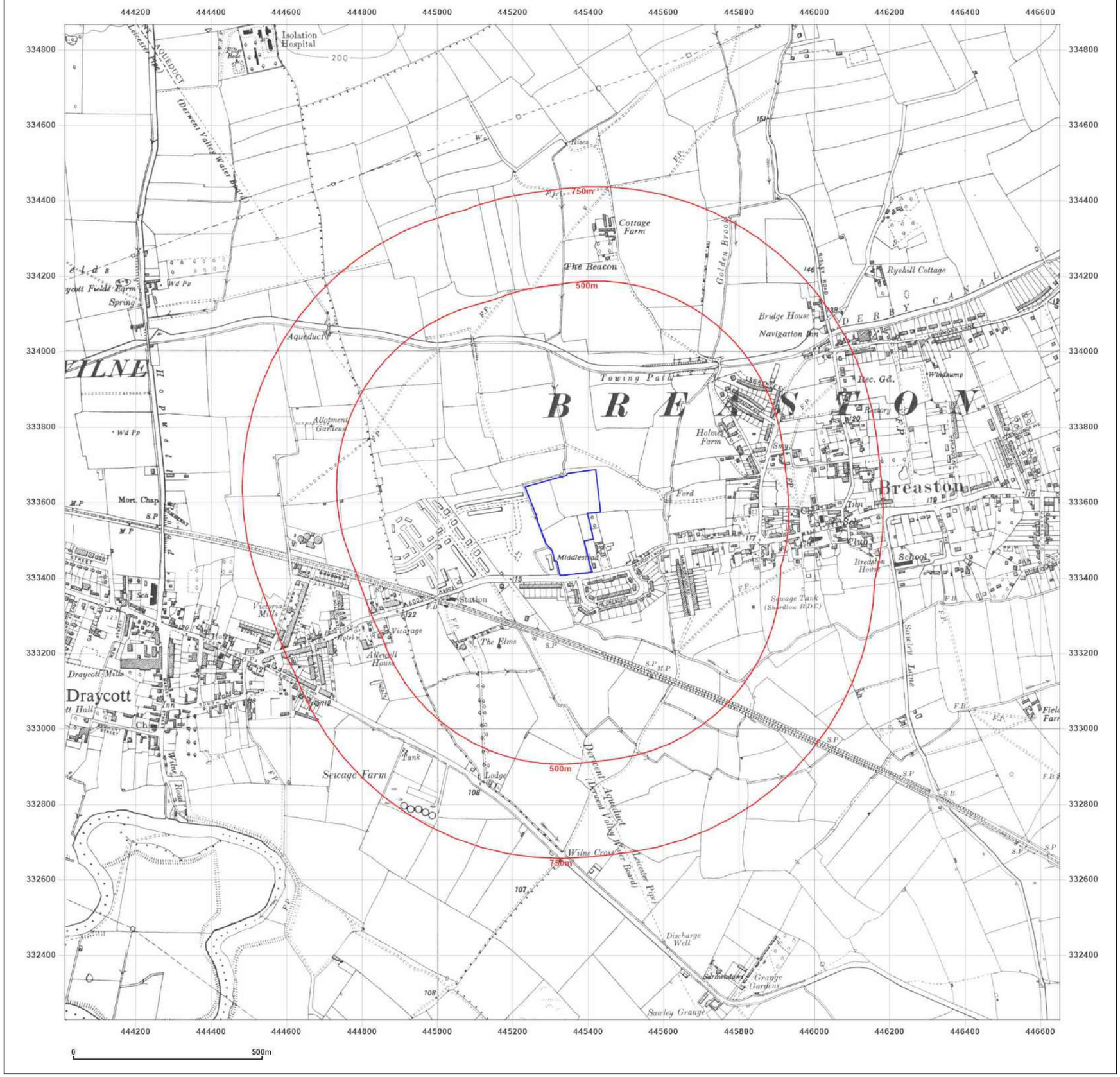
Surveyed 1881
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: Provisional

Map date: **1955**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed N/A
Revised 1955
Edition N/A
Copyright 1955
Levelled N/A

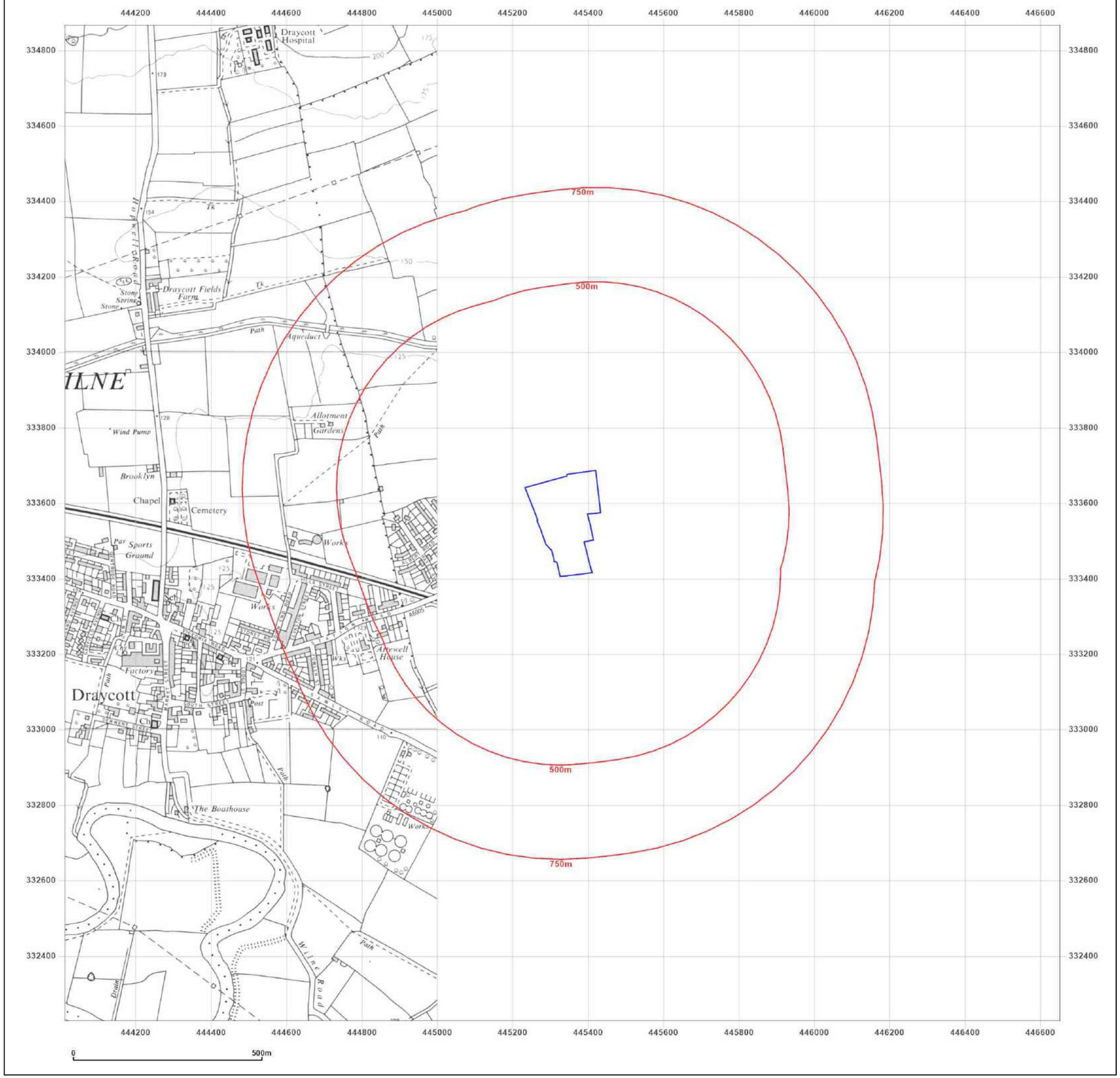
Surveyed N/A
Revised 1955
Edition 1955
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: Provisional

Map date: **1967**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

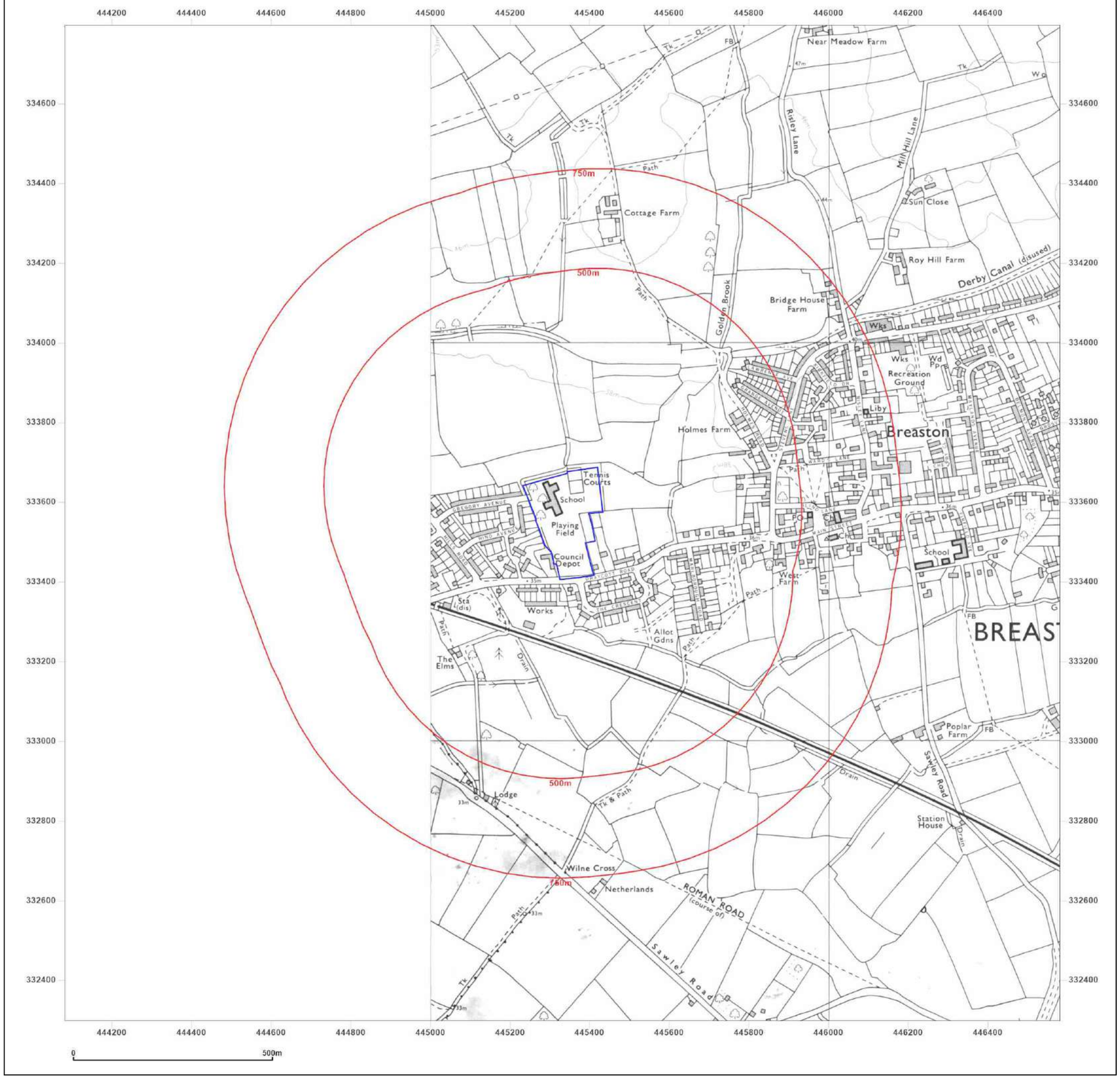
Surveyed 1967
Revised 1967
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: National Grid

Map date: **1969**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

Surveyed 1969
Revised 1969
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

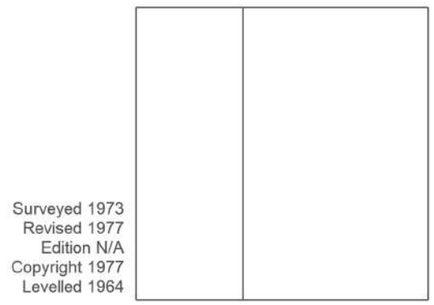
Map Name: National Grid

Map date: **1977-1981**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

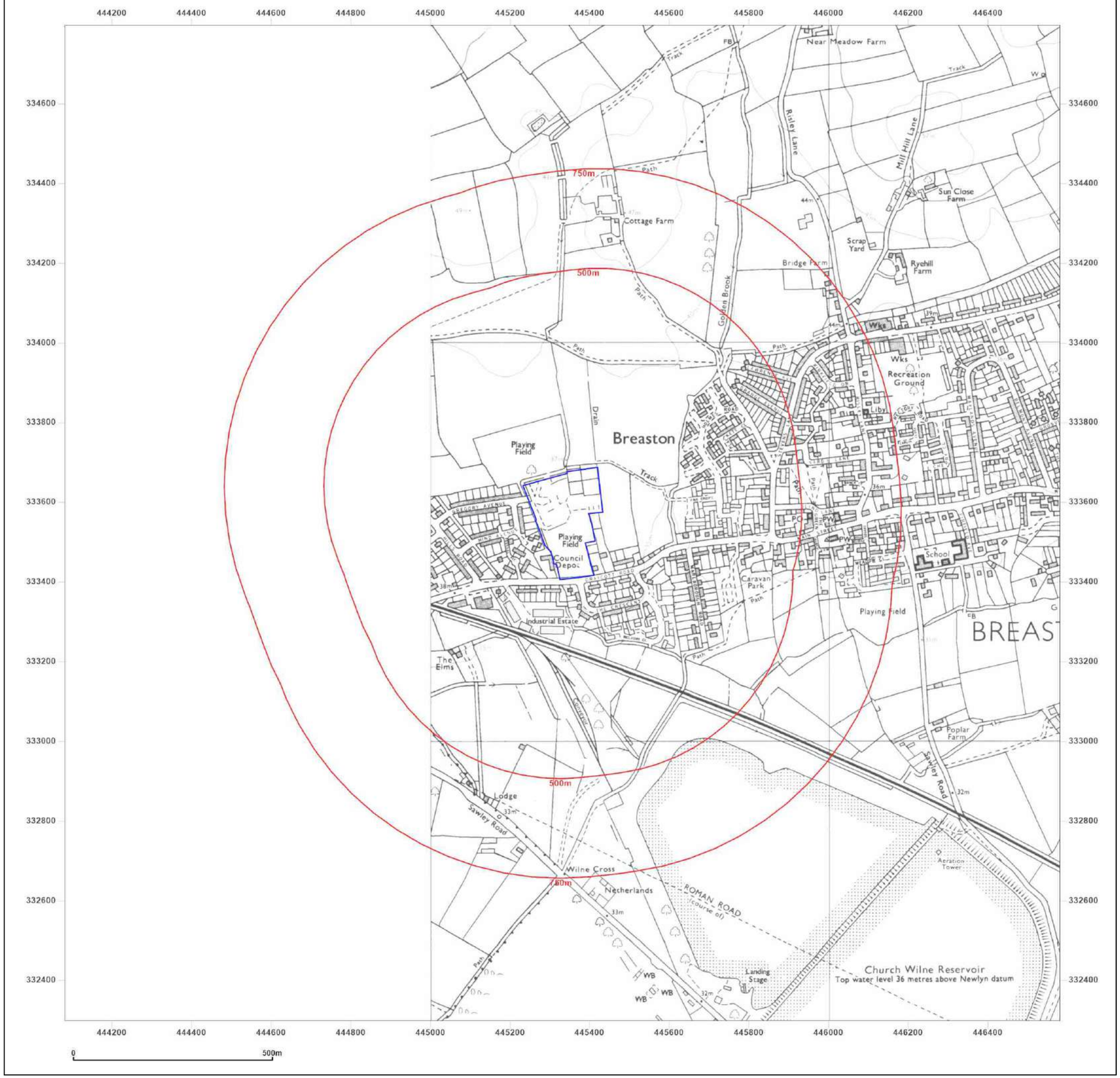


Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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



Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: National Grid

Map date: **1994**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

Surveyed 1981
Revised 1994
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

2001

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

2010

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

Groundsure INSIGHTS

Site Details:

E24151 Gregory Ave., Breaston

Client Ref: E24151_Breaston
Report Ref: GS-KYA-ZUZ-TME-6DP
Grid Ref: 445331, 333547

Map Name: National Grid

Map date: **2025**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

2025

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 27 August 2025

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

APPENDIX VI

Unexploded Ordnance Information

UNEXPLODED BOMB RISK MAP

SITE LOCATION

Map Centre: 445322,333491

This map principally indicates a hazard from Unexploded Bombs (UXB) due to WWII bombardment. Other sources of Unexploded Ordnance (UXO) may be present. It should be noted that this map does not represent UXO risk and should not be reported as such when reproduced.

LEGEND

- **High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- **Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- **Low:** Areas indicated as having 15 bombs per 1000acre or less.

Miltary | **Industry** | **UXO find** | **Other**
Transport | **Docks** | **Luftwaffe targets**
Utilities | **Bombing decoy** | **Airfields**

How to use your Unexploded Bomb (UXB) risk map?

This map indicates the potential for UXBs to be present because of World War Two (WWII) bombing. It can be incorporated into a technical report, such as a Phase 1 Desk Study, or similar document as an indication of the potential for UXO encounter on a Site. Other sources of UXO may also be indicated, although note that these are not comprehensive and more detailed research is required to confirm their presence.

What if my Site is in a moderate or high density area?

We typically recommend that a detailed UXO desk study and risk assessment is undertaken for sites in an area with a moderate or high bombing density.
Additionally, if your site is in close proximity to a strategic target, military establishment, airfield or bombing decoy, then additional detailed research is recommended.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirm that there is a low potential for UXO to be present on your site, then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

If you are unsure whether other sources of UXO may be present, you can request one of our pre-desk study assessments (PDSA) by emailing a site boundary and location to pdsa@zetica.com.

You should never plan site work or undertake a risk assessment using these maps alone. More detail is required, to include an assessment of the likelihood of a source of UXO hazard from other military activity not reflected on these maps.

If I have any questions, who do I contact?

tel: +44 (0) 1993 886682 **email:** uxo@zetica.com **web:** www.zeticauxo.com

The information in this UXB risk map is derived from a range of sources and should be used with the accompanying notes on our website.