



Phase I Geo-Environmental Desk Study

Fear End

Fears Green
Sandon
Hertfordshire
SG9 0QY

Prepared for:

Rosemary Campbell

Fear End
Fears Green
Sandon
Hertfordshire
SG9 0QY

EPS Project Reference: UK25.7444

Date Issued: 2nd July 2025

Report Status: Issue 1

FEAR END, FEARS GREEN, SANDON

NON-TECHNICAL CLIENT SUMMARY

This report presents the findings of a Phase I Geo-Environmental Desk Study which was carried out to assess risks posed by contaminated land and to provide an initial assessment of geological and geotechnical aspects to inform how the proposed development might be affected.

- The site comprises two sections, the first being the main 'L' shaped portion to the east of Fears Green in Sandon, which includes a residential dwelling and several agricultural buildings. The second area is a small rectangular parcel of land with a barn to the west of Fears Green. Proposals comprise the conversion of existing barns on site into residential dwellings.
- The study area is reported to be underlain by superficial deposits of the Lowestoft Formation (gravelly clay), followed by chalk bedrock, both of which have notable groundwater resource potential (particularly the chalk). The site also lies within an area which is protected for groundwater abstraction, and a drainage ditch lies adjacent to the south, feeding into a local watercourse to the east. As such, the site is considered to be an area of moderate to high environmental sensitivity.
- Historically, the surrounding area has had very limited signs of development/ formal use apart from for agricultural purposes. Buildings were not present on site until the 1970s, which appear to be associated with the farm holding and has remained relatively consistent thereafter. A slurry tank and oil drum storage have also been highlighted during the walkover survey and background checks.
- On the basis of the current and historic use of the site as a farm, a number of plausible risks have been identified, most notably associated with interaction between future site users and potentially contaminated shallow soils. Therefore, it is recommended that an intrusive site investigation is undertaken to assess the presence of any contamination and whether the soils present are suitable for use in modern residential gardens.
- A copy of this report should be provided to the Environmental Health department of North Hertfordshire District Council so that it may be used to support planning proposals. This report should satisfy the outline requirements of the planning process relating to contamination and the issue does not appear to present a barrier to a viable redevelopment.

By their very nature, the above bullet points represent a simplified summary of our work and **must not** be relied upon to form the basis for key decisions for the proposed development. A full picture is provided in the following report, or alternatively give us a call and we'll talk you through it.



Project Reference:	UK25.7444	
Title:	Phase I Geo–Environmental Desk Study - Fear End, Fears Green, Sandon	
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Status:	Issue 1	

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The report has been written, reviewed and authorised by the persons listed above. It has also undergone EPS' in house quality management inspection. Should you require any further assistance regarding the information provided within the report, please do not hesitate to contact us.

The National Planning Policy Framework requires a competent person to prepare site investigation information, which is defined as a person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation. EPS considers that it fulfils these criteria and would welcome any request for staff CVs or case studies to demonstrate it.

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1 INTRODUCTION

In June 2025, Environmental Protection Strategies Ltd (EPS) was commissioned by Sworders on behalf of Rosemary Campbell to complete a Phase I Geo-Environmental Desk Study for Fear End, Fears Green, Sandon, Hertfordshire, SG9 0QY ('the site'); see Figure 1.

The work was commissioned to support outline planning proposals for the conversion of seven agricultural buildings to residential properties, under North Hertfordshire District Council Planning Permission Reference: 24/02908/PNQ; by addressing the requirements of the planning process relating to contaminated land.

This report presents the findings, conclusions, and recommendations of the Phase I Desk Study undertaken for the site as instructed.

1.1 Objectives

The purpose of this desk study is to evaluate the potential contaminant linkages which may be active at the site in its current condition, or could become active in future, and to determine if any action is required to investigate them further or to break them.

This is achieved by carrying out the following activities:

- a) Examining the site history - late 1800s to present day, through collection of historical maps of the area, site records, records held by relevant local authorities, the Environment Agency and review of other information databases.
- b) Characterising the site's environmental and geological sensitivity through examination of existing geological, hydrogeological, topographical, and historical maps and aerial photographs of the area.
- c) Identifying Potential Areas of Concern (PAOC's) through a combination of historical map and data review.
- d) Consideration of any future plans for the site and the effects any proposed changes may have on contaminant linkages over time.
- e) Development of a Conceptual Site Model through a Preliminary Risk Assessment to evaluate the potential risks posed by the site and make recommendations for any further work that may be required to ensure suitability for use and safe development. In accordance with the Environment Agency's *Land Contamination: Risk Management* guidance and the *National Planning Policy Framework*.

1.2 Project Limitations and Constraints

The purpose of this report is to present the findings of a Phase I Geo-Environmental Desk Study conducted at the location(s) specified. When examining the data collected from the investigations made during the assessment, EPS makes the following statements:

This report does not include specific investigation for the presence of either Potential Asbestos Containing Material (PACM) or Japanese Knotweed at the subject site however, if obvious evidence of either is observed during EPS site walkover, details will be provided in this report. Specialist contractors should be commissioned to make detailed assessments and recommendations if these materials are suspected.

2 SITE CHARACTERISATION

The following section provides a summary of the information collected in relation to the site location and history.

2.1 Site Location and Description

Detail	Description
Location	The site lies either side of Fears Green, approximately 800m north east of Sandon, Hertfordshire.
Grid Reference	532600, 234970
Topographic Elevation	The site lies between 154m and 155m Above Ordnance Datum (AOD) and slopes gently up towards the north west.
Description of Site	A walkover survey was completed by EPS in June 2025 and the site was found to be split into two sections, located either side of Fears Green. The main 'L' shaped portion being to the east, and a small rectangular parcel of land to the west. In the north of the larger, eastern section is an open grass field, and to the south of this is a residential dwelling with a paved driveway/ approach, which is surrounded by private gardens. Beyond this (to the east) is a collection of five rectangular barns, two large and three smaller; which are accessed via a separate track. This track extends to the south east corner of the site where there is a further small barn with a disused allotment and the remains of a large disused slurry tank nearby. Just south of the larger barns in the centre of this area is a greenhouse and large metal water tank standing above-ground on concrete plinths. A small orchard also features in the centre of site. The buildings were generally constructed from concrete blocks, with wooden beams and cladding. Some were open sided and others were closed off but typically all benefited from a concrete floor found to be in good condition. The structures were largely empty, but occasionally used for storage of small scale equipment, building materials, furniture and firewood. Evidence of suspected asbestos containing materials (ACM) was also recorded in the form of roofing, guttering and cladding of selected structures. Anecdotal evidence from the site walkover suggests oil drums are stored with the smaller barn along the northern border, however this structure was not accessed during the visit to confirm.

Detail	Description
Description of Site (cont.)	To the west of Fears Green, the site continues onto a small pocket of land which is accessed by a wooden gate from the road. This area has a surface of grass with occasional shrubs and there is a hedgerow with trees that runs adjacent to the road. There is a barn used for hay storage located in the south west corner of this section. The site is fairly flat and has a combination of soft and hard landscaping, with shrubs, grass and trees scattered throughout. Along the southern border there is a more established row of mature trees as well as a drainage ditch.
Surrounding Land Use	The site is surrounded in all directions by undeveloped agricultural fields, although a single residential dwelling borders the study area to the north.

A plan showing the site location is provided as Figure 1 and the current site layout is detailed on Figure 2 with an aerial photograph included as Figure 3. Selected Site Photographs are included as Appendix A along with the Walkover Notes, Proposed Development Plans are included as Appendix B and relevant extracts of a Landmark Envirocheck report which are included as Appendix C.

2.2 Geo-Environmental Setting

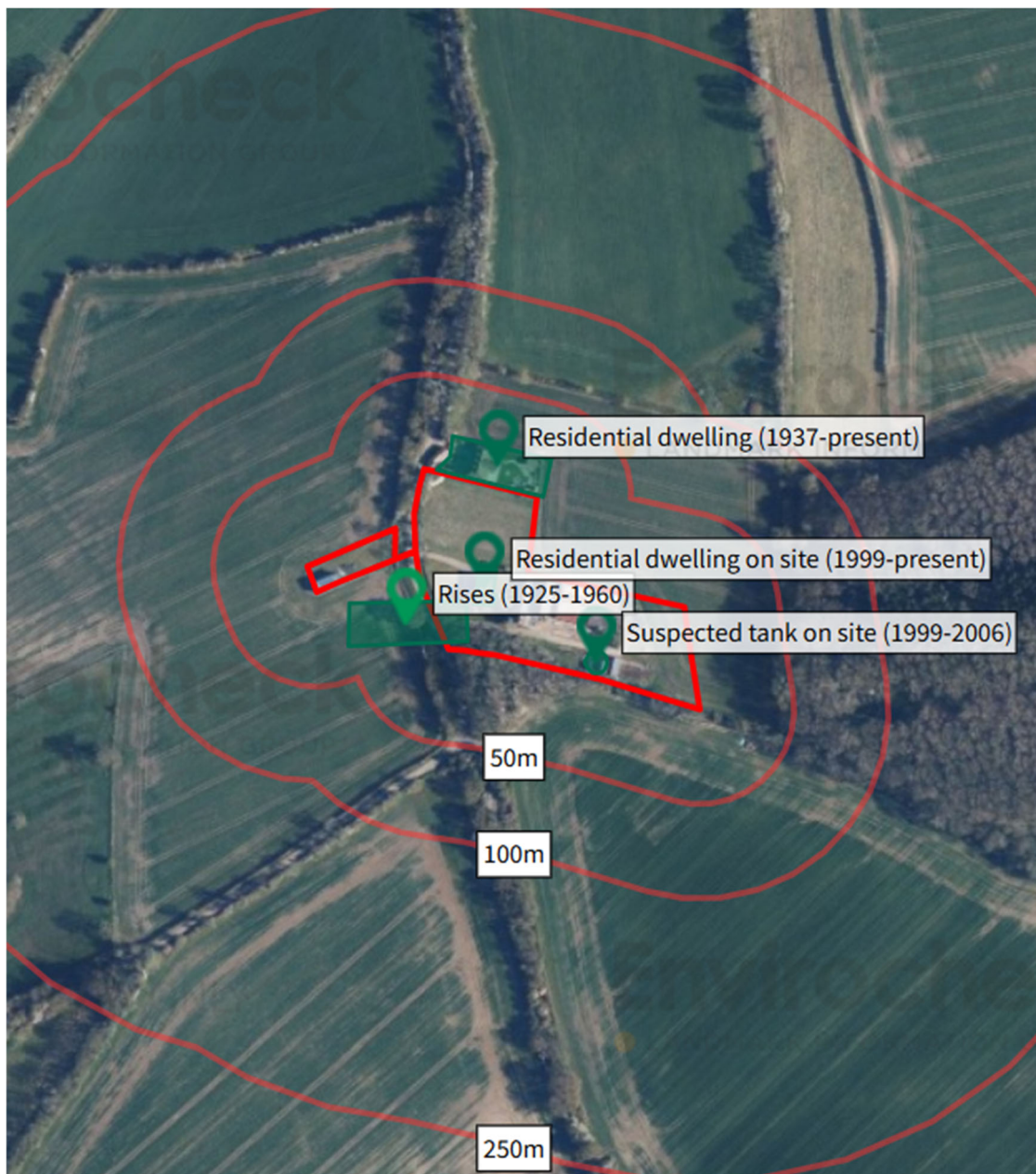
Detail	Description	
Geology	Geological maps of the area indicate that superficial deposits of Lowestoft Formation (Diamicton) are present below the site, followed by bedrock of Lewes Nodular Chalk Formation and Seaford Chalk Formation (undifferentiated). Information on the site’s geological context is included as Appendix D.	
British Geological Survey (BGS)	An historic borehole has been obtained from the BGS for a location around 530m south west and found boulder clay to approximately 9.2m, at which point sand and gravel was encountered and the borehole terminated. No groundwater was recorded. A copy of the historic borehole is included within Appendix D.	
Geological Hazards	Hazard	On Site Risk
	Mining (non-coal)	Rare
	Collapsible Ground	Very Low
	Compressible Ground	No Hazard
	Ground Dissolution	Very Low
	Running Sand	Very Low
	Landslide	Very Low
	Shrinking / Swelling Clay	Low
	No BGS mineral sites, natural or man-made cavities are recorded within 1km.	

Detail	Description
Radon	The Envirocheck indicates the site to lie in a location where the percentage of homes above the radon action level is less than 1%. It further reports that the site does not require radon protection measures in the construction of new structures to comply with Building Control.
Hydrogeology	Groundwater vulnerability maps for the area show that the underlying superficial deposits are classified as a Secondary Aquifer and the bedrock geology is classified as a Principal Aquifer. The plot lies within a Total Catchment (Zone 3) Source Protection Zone (SPZ) for local groundwater abstraction. The nearest groundwater abstraction is recorded around 1.5km south east, operated by 'D M Hodge Ltd' for general farming and domestic purposes. Groundwater vulnerability maps are included as Appendix E.
Hydrology & Flood Risk	A small, unnamed drainage ditch is shown on mapping which runs along the southern border of the site and eventually connects with the River Rib to the east. The next closest watercourse is another small drainage ditch located around 320m west. No surface water abstractions are located within 1.5km. Review of the EA Flood Zone Map for the area indicates that the site lies within Flood Zone 1, which is defined as the area with a low potential risk of flooding from fluvial or tidal sources. It should be noted that the EA maps do not take into account flooding from poor drainage or groundwater. A copy of the flood map for the site and surrounding area is also included within Appendix E.
Landfill & Waste	No active or historic landfills are recorded within 1km. Furthermore, no potentially infilled land entries are highlighted within the same radius.
Permitted Industrial Activity	There are no pollution and prevention controls recorded within 1km.
Industrial Land Use & Points of Interest	The Envirocheck report does not list any industrial land uses/ points of interest within 500m. Furthermore, no tanks or fuel station entries are listed in the surrounding area.
Pollution Incidents	No pollution incidents are recorded within 1km.
Previous Investigation or Remediation	EPS are not aware of any previous site investigations or remedial works undertaken at the site.

Detail	Description
Sensitive Land Use	The site lies within a Nitrate Vulnerable Zone where surface water and groundwater are identified as being at risk. Lords Wood, located roughly 460m north east is listed as a parcel of ancient and semi-natural woodland.

2.3 Site History

A summary of historical map data from 1878 to 2024 is provided below. Key points are highlighted and copies of relevant historic maps and any others examined during the investigation are included in this report as Appendix F.



- In the late 1800s, the site and surrounding area was mostly undeveloped, except from a small road running from the north along the western border of the eastern section of the plot and towards the village of Sandon. At this time, there was also a small property named Bleak Hall located approximately 550m north west. Groundwater springs are present on mapping just south west of site from the early to the late 1900s.
- By 1937, a residential dwelling appears on mapping bordering the site to the north, which is still present today. Buildings don't appear on-site until the 1970s, starting with a cluster of barns in the east. More structures appear on mapping by 1999, located in the south east, east and centre of the eastern section, in a similar layout to present day. The building located in the centre of site at this time appears to be a residential dwelling, which is also consistent with present day. Also by 1999, a large tank is present on site, located along the southern border, which aligns with the remains of the anticipated slurry tank identified during the walkover survey.
- Within the last 5 years, one of the barns in the larger portion of the plot disappears from mapping and a small building is constructed in the section to the west of Fears Green, leaving a total of seven structures. There was evidence of this former building during the walkover survey, through the presence of a separate concrete floor slab.
- Quite limited changes in the surrounding area have been identified through review of the historic map series, with no potentially contaminative land uses anticipated to have been established within 500m. Overall, surrounding land is dominated by agricultural fields and the village of Sandon to the south west.

3 PRELIMINARY RISK ASSESSMENT & CONCEPTUAL SITE MODEL

In accordance with the Environment Agency's *Land Contamination: Risk Management* guidance, there are three stages to managing contaminated land (Risk Assessment, Remedial Options Appraisal / Remediation and Verification). This section outlines the first tier of Stage 1, the Preliminary Risk Assessment.

The following section provides a review of the contaminant linkages that may be active at the site, whereby EPS have examined the potential sources that may be present as a result of historic and / or current site activities and where potential interaction between these sources and the identified human / environmental receptors may occur.

3.1 Background

A Desk Study comprises the first stage of any geo-environmental assessment, the purpose of which is to determine what potentially contaminative activities may have occurred at the property or the surrounding area which may pose an environmental or geological risk to site users, the surrounding environment or proposed development, either at present or in the future.

The method used in this investigation to assess the environmental risk posed is based on the concept of 'contaminant linkage', which considers the following three factors:

Source	The location from which an environmentally hazardous / contaminative substance is, (or was,) derived.
Pathway	A route or mechanism via which a source could come into contact with a receptor to cause significant harm.
Receptor	An environmentally sensitive object or condition e.g. person, property, controlled water, or ecological system, which may be present now or in future.

If all three factors are identified, there is the potential for a 'contaminant linkage' to be active, which could result in significant harm being caused to the environment or human health.

3.2 Source Characterisation

The following potential contaminant sources have been identified at the site and in the surrounding area:

Potential Source	Source Description	Principal Contaminants of Concern
Current Site Use	Infill material of unknown origin (made ground) used to level areas beneath the former and existing buildings/ hardstanding.	PAH, Metals & ACM
	Suspected ACM roofing, cladding and guttering on selected buildings.	ACM
Current and Historical Site Use	Orchards and allotments present in the centre and east of the site.	Herbicides, Pesticides & Metals
	Historic use of the site as part of a farm with a large slurry tank in the south east corner and anecdotal evidence of oil drums having been present on site.	PAH, TPH, Metals & ACM

Notes: PAH Polycyclic Aromatic Hydrocarbons ACM Asbestos Containing Materials
 TPH Total Petroleum Hydrocarbons

3.3 Potential Receptors

A framework for the assessment of risks arising from the presence of contamination in soils has been produced by the Environment Agency and the Department for the Environment, Food and Rural Affairs (DEFRA) and is presented with the report: '*Using Science to Create A Better Place: Updated Technical Background to the CLEA Model – Science Report SC050021/SR3*'. This guidance document defines a series of standard land-uses which have been further developed into six generic landuses in the Category 4 Screening Levels project for Land Affected by Contamination (DEFRA/Contaminated Land: Applications in Real Environments (CL:AIRE) Project Report SP1010, 2014) which form a basis for the development of the Conceptual Site Model.

Risks posed to controlled waters have been considered in line with the Environment Agency's *approach to groundwater protection* (v1.2, 2018) and associated position statements.

The proposed development plan for the site includes the conversion of agricultural buildings to residential properties. This proposed land use has been considered as:

- Residential (with home-grown produce)

In view of the environmental setting, current and potential future land use of the site and surrounding sites, the potential receptors for any contaminant impact are discussed below:

Receptor	Site Specific Description
Human	Future site users, construction workers involved in the redevelopment, and those working and living in the surrounding area have the potential to be at risk from exposure to potential contaminants of concern (CoCs).
Groundwater	The site is reported to be underlain by superficial deposits which are classified as a Secondary Aquifer and chalk bedrock defined as a Principal Aquifer. Furthermore, the site lies within a Total Catchment SPZ for local groundwater abstraction. Whilst the historic boreholes suggest that shallow groundwater is unlikely, historic maps show previous groundwater springs on the border of site. Therefore, groundwater is being considered as a potential receptor to site derived contaminants at this stage.
Surface Water	A small unnamed drainage ditch is recorded bordering the south of the plot which then connects to the River Rib to the east. It is possible that site derived contaminants could enter this drainage ditch through unsaturated soils or via overland flow. Therefore, surface water has been identified as a sensitive receptor to site derived contaminants.
Flora and Fauna	The proposed development is likely to include the provision of private gardens and/ or areas of soft landscaping. Some of the identified contaminants of concern are known to be phytotoxic and as such, the potential for this impact should be considered.
Buildings & Infrastructure	Subsurface structures are likely to be present at the site which may be adversely affected by the potential presence of the identified contaminants of concern. These include concrete used in building foundations, buried potable water supply pipes and other service lines and pipes.
Adjacent Land	A residential property is located just north of site, which could also be at risk from potential contaminants identified. Therefore, the adjacent land has been identified as a sensitive receptor.

3.4 Potential Pathways

Where contaminants may be present in soil, there are a number of potential pathways that enable human receptors to come into contact with or be exposed to them. The most direct pathways, considered under current UK legislation, can be summarised as follows:

- Direct ingestion of contaminated soil
- Ingestion of household dust
- Ingestion of contaminated vegetables
- Ingestion of soil attached to vegetables
- Dermal contact with contaminated soil
- Dermal contact with household dust
- Inhalation of fugitive soil dust
- Inhalation of fugitive household dust
- Inhalation of vapours outdoors
- Inhalation of vapours indoors

Clearly, not all of these potential pathways apply for every standard land-use. For example, ingestion of contaminated vegetables will not apply to land uses other than residential with plant uptake and allotments.

However, in addition to direct exposure pathways, a number of physical transport mechanisms / pathways may also exist at a site that allow remote or less accessible contaminants in soil or groundwater to reach human or environmental receptors both at a site and beyond the site boundary. These include the following:

- Downward and lateral movement of contaminants in soil either by gravity or through being 'leached' by percolating rainwater.
- Lateral migration of contaminants dissolved in groundwater.
- Direct seepage or leaching of contaminants from soil into subsurface drains or supply pipework.
- Volatilisation of contaminants from groundwater or unsaturated soils into buildings or outdoor air.

Through examination of the standard land use and environmental setting at each site, the presence of pathways and transport mechanisms described above must be considered when assessing whether a contaminant linkage may plausibly be active, and therefore be included in the conceptual site model.

3.5 Summary of Contaminant Linkages

Considering the site use and environmental setting, and the proposed land use; the plausible contaminant linkages that have been identified through the Preliminary Risk Assessment which require further investigation are summarised in the following table:

Source	Pathway	Receptor
Contaminated Soil (made ground, activities associated with site use as a farm)	Direct contact and inadvertent ingestion by eating or smoking with dirty hands	Construction workers during redevelopment & site users
	Inhalation of fugitive dusts	
	Direct uptake and / or adherence of contaminated soil to vegetation and subsequent ingestion	Site users
	Direct uptake via root systems	Plants

Source	Pathway	Receptor
Contaminated soil / groundwater	Direct contact	Buried infrastructure and potable water supply pipework
	Lateral migration through unsaturated soils or groundwater	Surface water
	Leaching of contaminants vertically through unsaturated soil.	Groundwater

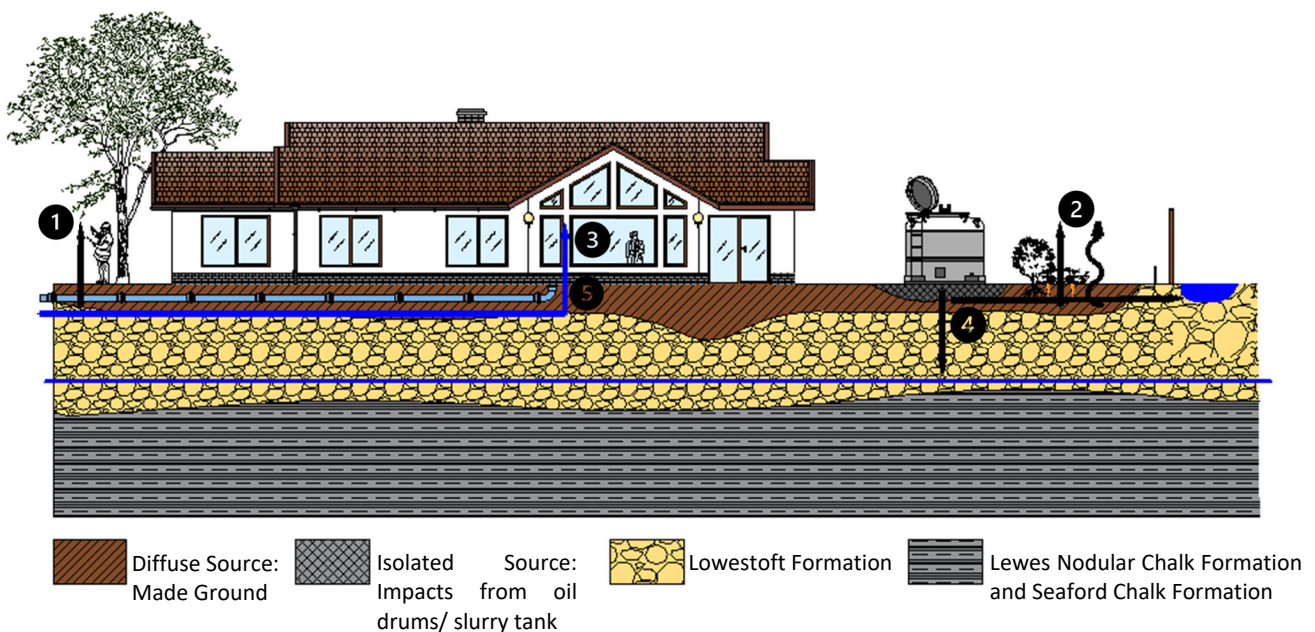
The following comments are made with respect to contaminant linkages which have been considered through development of the conceptual model, but have not been concluded as 'plausible' – i.e. through which a significant possibility of significant harm could occur to an identified receptor:

- PAHs and metals have been identified as contaminants of concern associated with the historic on-site infill, however these contaminants are considered to be relatively immobile in the environment by virtue of their very low solubility and volatility. On this basis, plausible pathways by which these potential contaminants could pose a significant risk to groundwater or surface water are not considered to be active. However, risks to controlled waters from more mobile contaminants such as TPH have not been ruled out at this stage.
- Suspected ACM was noted within the roofing, cladding and guttering on some of the existing buildings. If confirmed, these materials should be removed in accordance with current best practice including the *Control of Asbestos Regulations 2012* and as such, have not been considered as a plausible contaminant linkage at this stage. Given the sites historic use, there does remain some risk of asbestos being present within shallow soils however.
- Pesticides and herbicides have been identified as potential contaminants associated with orchard and allotments in the centre and east of the study area. The application of modern pesticides and herbicides follows strict guidelines which aim to minimise their effects on the environment and human health. Furthermore, given the low residence time of these contaminants in soil, it is considered highly unlikely that significant pesticide or herbicide contamination associated with these sources would still be present in shallow soils at concentrations capable of posing a risk to on-site receptors or controlled waters.

- Whilst oil drums have been identified as potential sources of contamination based on anecdotal evidence provided by the client, it is likely that this would have represented heavy fuel oil for farm machinery and therefore is unlikely to be volatile in nature. As such, risks from volatilisation of organic compounds into future buildings is considered to be low, with any spills or leaks likely to be relatively minor and confined to surface; which is typically capped with hardstanding both within and around the apron of the barns.

The following diagram provides an illustration of the plausible contaminant linkages that may be active at the site and which may need further investigation or control to ensure safe development:

Fear End, Fears Green, Sandon – Illustrative Conceptual Site Model



Potential Contaminant Linkages:

1. Direct contact with/ ingestion of soil by eating or smoking with dirty hands and inhalation of fugitive dusts
2. Direct uptake and / or adherence of contaminated soil to vegetation and subsequent ingestion
3. Ingress / diffusion through permeable potable water supply pipes
4. Migration of contaminants vertically and laterally through unsaturated soils
5. Direct contact with buried infrastructure such as building foundations and other services

3.6 Key Areas of Potential Concern & Uncertainty

The main sources of potential contamination for this site relate to either made ground (infilled soils) beneath existing buildings and hardstanding, as well as isolated impacts which may arise through daily farming activities or around specific features such as the old slurry tank in the south east corner.

It should be noted that whilst risks to groundwater have been identified in the above conceptual model, historic borehole records in the local area do suggest groundwater is likely to lie at significant depth, potentially separated from the surface by a significant layer of low permeability clay soils. However, there is some uncertainty around the historic mapping depicting 'rises', which is usually interpreted to indicate the presence of a spring, and a far shallower groundwater presence. Therefore, on a conservative basis, risks to groundwater have been retained at this stage, pending confirmation of the ground conditions.

4 CONCLUSIONS & RECOMMENDATIONS

This Phase I Desk Study has identified several plausible contaminant linkages which have the potential to be active, or to become active through the proposed redevelopment, primarily because of the current and historical use of the site as a farm.

In the context of potentially unacceptable or acceptable risks as outlined within the Environment Agency's *Land Contamination: Risk Management* guidance, the contaminant linkages which pose potentially unacceptable risks and warrant further assessment to determine the most appropriate action are as follows:

- Human health risks associated with interaction between future residents and potentially contaminated shallow soils, especially within domestic garden areas.
- Potential exposure of construction workers to contaminated soils during the proposed redevelopment.
- Risks to groundwater and surface water from site derived contaminants of concern.
- Potential impacts to buried infrastructure such as new foundations and services.

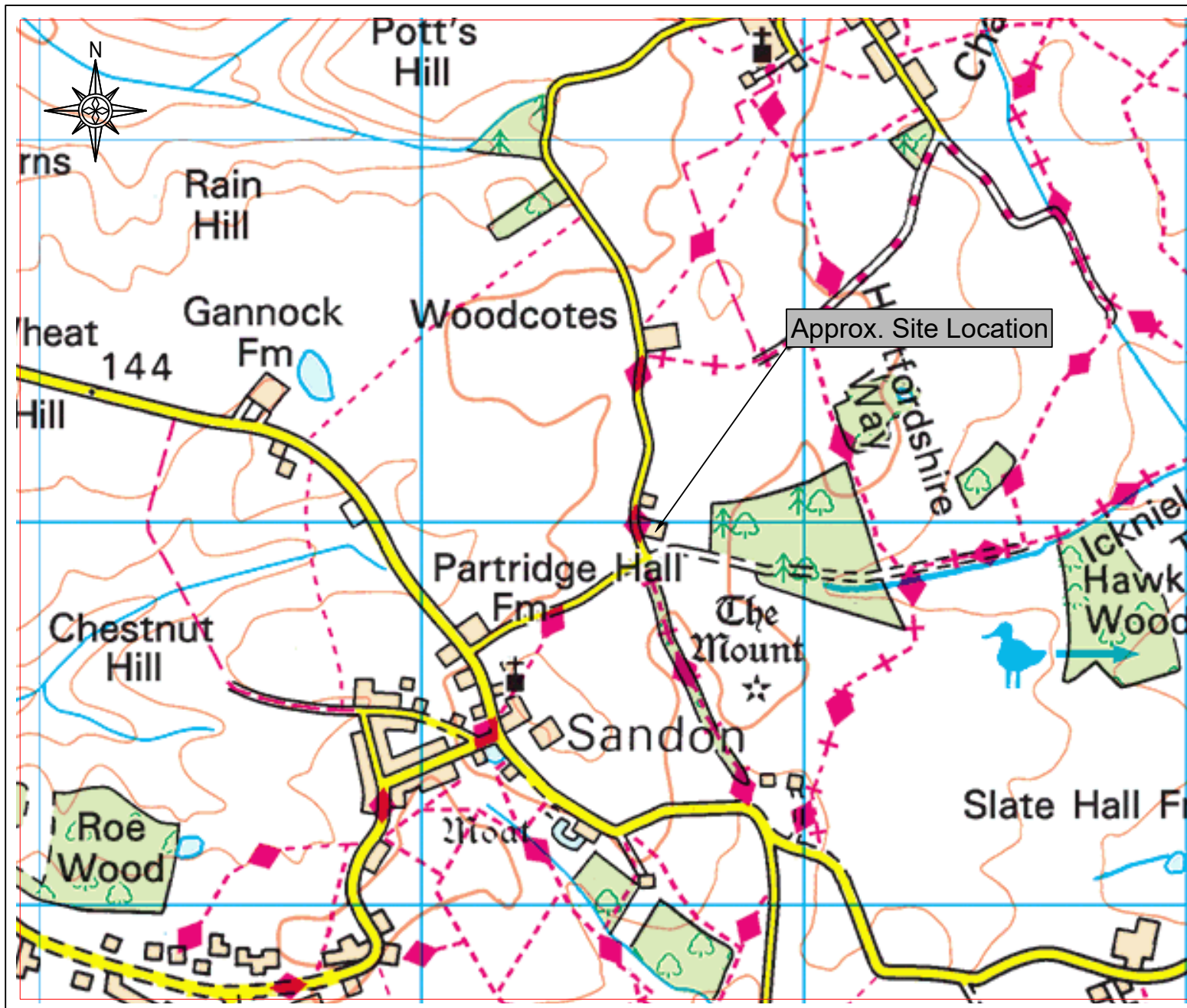
It is therefore recommended that, initially, the identified plausible contaminant linkages should be further investigated by means of exploratory intrusive investigation. A proposed scope and costing for this work can be provided upon request and, where appropriate discussed and agreed with the local authority prior to commencement.

Any impacts to soil quality by source contaminants which are identified by the exploratory investigation may require further targeted intrusive assessment in order to delineate the contaminants found and quantitatively evaluate the risks posed.

Any materials confirmed as being asbestos containing on the existing buildings (roofing, cladding and guttering), should be removed prior to the commencement of any formal redevelopment works in accordance with current best practise including the *Control of Asbestos Regulations 2012*. This process should remove any risks posed by this specific material to construction workers or end users at the site.

A copy of this report should be provided to the Environmental Health department of North Hertfordshire District Council so that the information may be used to support planning proposals for the site. This report should satisfy the outline requirements of the planning process relating to contamination and the issue of contaminated land does not appear to present a barrier to a viable redevelopment.

FIGURES



KEY:
SITE BOUNDARY

Rev	Date	Drawn	Description	Check



The Geotechnical and Environmental Engineers
www.epstrategies.co.uk

Site
Fear End, Fears Green, Sandon
Hertfordshire, SG9 0QY

Client
Rosemary Campbell

Title
Figure 1 - Site Location Plan

Drawn by	CR	Check by	MJ
Date	25/06/2025	Date	
Scale	Not to Scale	Drawing Reference	UK25.7444/0625/01
Job No	UK25.7444	Rev	01



KEY:
SITE BOUNDARY

Rev	Date	Drawn	Description	Drawn



The Geotechnical and Environmental Engineers
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Site
Fear End, Fears Green, Sandon
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Client
Rosemary Campbell

Title
Figure 2 - Current Site Layout

Drawn by	CR
Checked by	MJ
Date	25/06/2025

Scale	(As Shown)	Drawing Reference
Not to Scale	UK25.7444/0625/02	

Job No	Rev
UK25.7444	01



KEY:
SITE BOUNDARY

Rev	Date	Drawn	Description	Chk'd



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Site
Fear End, Fears Green, Sandon
Hertfordshire, SG9 0QY

Client
Rosemary Campbell

Title
Figure 3 - Aerial Photography

Drawn by	CR
Checked by	MJ
Date	25/06/2025
Scale	(As Shown)
Drawing Reference	UK25.7444/0625/03
Job No	UK25.7444
Rev	01

APPENDICES

APPENDIX A

Selected Site Photographs & Walkover Notes

Photo 1:



View from access gate - Residential property in the centre of site.

Photo 2:



Rectangular barns located in the east of site.

Photo 3:



Large rectangular barn in the east of site with suspected asbestos roof and smaller rectangular barns just east of this.

Photo 4:



Historic slurry tank and small barn in the south east corner of site.

Photo 5:



Rectangular barn and orchard located in the east of site.

Photo 6:



Green house and large water tank located south of the large barn in the east of site.

Photo 7:



Historic slurry tank located in the east of site.

Photo 8:



Orchard located in the east of site, just south of the rectangular barns.

Photo 9:



Historic allotments in the southeast corner of site.

Photo 10:



Area in which an historic barn used to be, just south of the other rectangular barns.

Photo of Asbestos Contamination (if present)



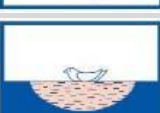
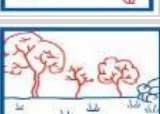
Suspected asbestos roof on barn in east of site.

Photo of Historic Site Use (if present)



Disused rectangular barns in the east of site.

SITE WALKOVER CHECKLIST 2024

GEOTECHNICAL		COMMENTS/EVIDENCE
	Are there any abrupt changes in slope profiles?	No
	Is there evidence of overburden on the slopes?	No
	Is there evidence of excavation at the base of a slope?	No
	Are there signs of landslip, such as tilting trees/posts?	No
	Are there signs of subsidence?	No
	Is there evidence of cracked ground?	No
	Is there evidence of compressible ground (i.e. Peat)?	No
	Is there evidence of an abrupt change in ground conditions?	No
	Is there evidence of high groundwater, such as areas of waterlogged ground?	No
	Do signs of water loving plants such as reeds exist?	No
	Are there any ponds, streams, ditches (even if dry), springs or wells?	Yes, drainage ditch to south
	Is there vegetation? What is the nature of it?	Yes, mature trees along the south border, several trees scattered on site. Shrubs and grasses throughout site.
	Are trees present? What are the species & height of the trees?	Yes, >10m

Job Number: UK25.7444
Date: 23 June 2025
Engineer: CR

To be completed by consultant for all Phase I Desk Studies and completed form must be scanned/photographed and saved in job folder under 'Scanned Site Notes'. EPS Lower Risk Assessment (EPS025a) also must be completed and scanned.



	What is the nature and condition of vegetation on adjoining land?	<i>Yes, agricultural fields surround the site</i>
	Is there evidence of former vegetation?	<i>No</i>
	Is there evidence of movement in any existing structures?	<i>No</i>
	Evidence of below ground structures & services?	<i>No</i>
	Any evidence of mine shafts or adits? (Check Coal Authority Mapping)	<i>No</i>
	Are there any access issues for a digger/drilling rig (slopes, height, gates etc.)?	<i>Yes, locked gates to the west off Fears Green</i>

Any other comments?

CONTAMINATION		COMMENTS/EVIDENCE
	Evidence of ground contamination?	<i>No</i>
	Evidence of groundwater /surface water contamination?	<i>No</i>
	Evidence of historic site use?	<i>Yes, several old barns around site and a disused slurry tank in the southeast with an overgrown allotment to the east of this.</i>
	Have all buildings been accessed internally, what was found?	<i>No</i>
	Evidence of /suspected asbestos? In building fabric or on ground, describe condition and form (cement/fibrous).	<i>Yes, asbestos roofs on some of the barns</i>

Job Number: UK25.7444
Date: 23 June 2025
Engineer: CR

To be completed by consultant for all Phase I Desk Studies and completed form must be scanned/photographed and saved in job folder under 'Scanned Site Notes'. EPS Lower Risk Assessment (EPS025a) also must be completed and scanned.



	Any man-made surfacing present? Including bituminous road planings/scalpings. Describe condition of hardstanding.	No
	Any fuel or oil storage? If above ground, are tanks bunded/ steel/with above ground pipe or any staining?	No
	Obvious drainage features observed such as 3-chamber oil-water interceptor?	Yes, drainage ditch to south. Property lies on watershed
	Any waste deposition observed, such as fly-tipped soils or chemical containers/ drums or areas of burning?	No
	Electricity substation present, maintained/operational? Are there any warning stickers on the gates/fence regarding chemicals?	No
	Evidence of previous investigation/remediation (e.g. old monitoring wells)?	No
	Walked around surrounding areas? Identify any off-site sources such as petrol stations, heating oil tanks.	No
	Anecdotal evidence	Old slurry tank in south. Allotment in south west which has been there for around 15 years.

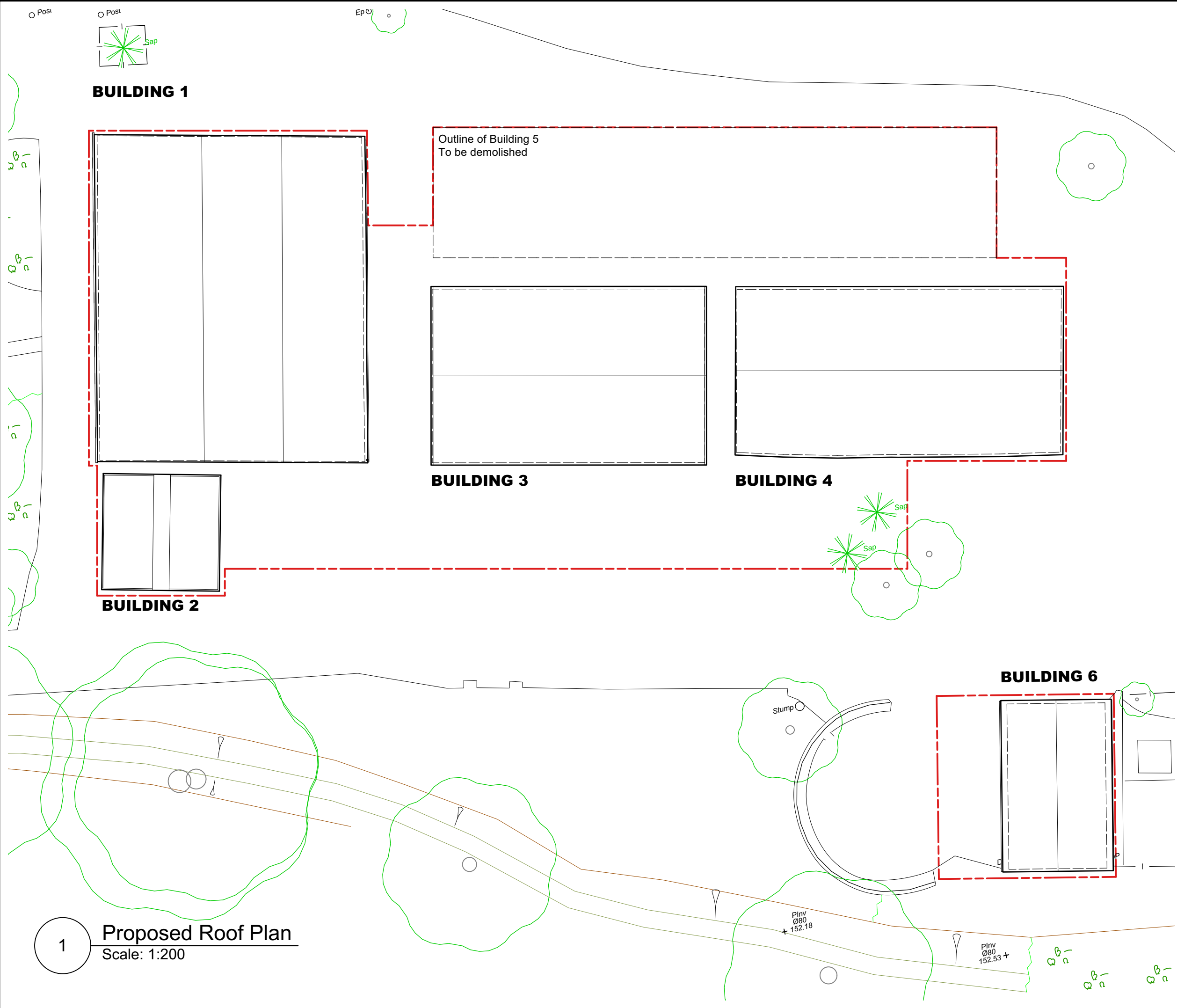
Any other comments?

AIR QUALITY (ONLY NECESSARY IF INSTRUCTED – CHECK WITH AQ TEAM)

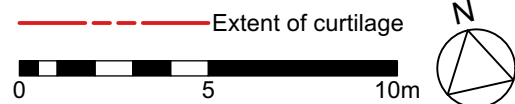
Completed Air Quality Walkover Checklist?	No
---	----

APPENDIX B

Proposed Development Plan



Notes:



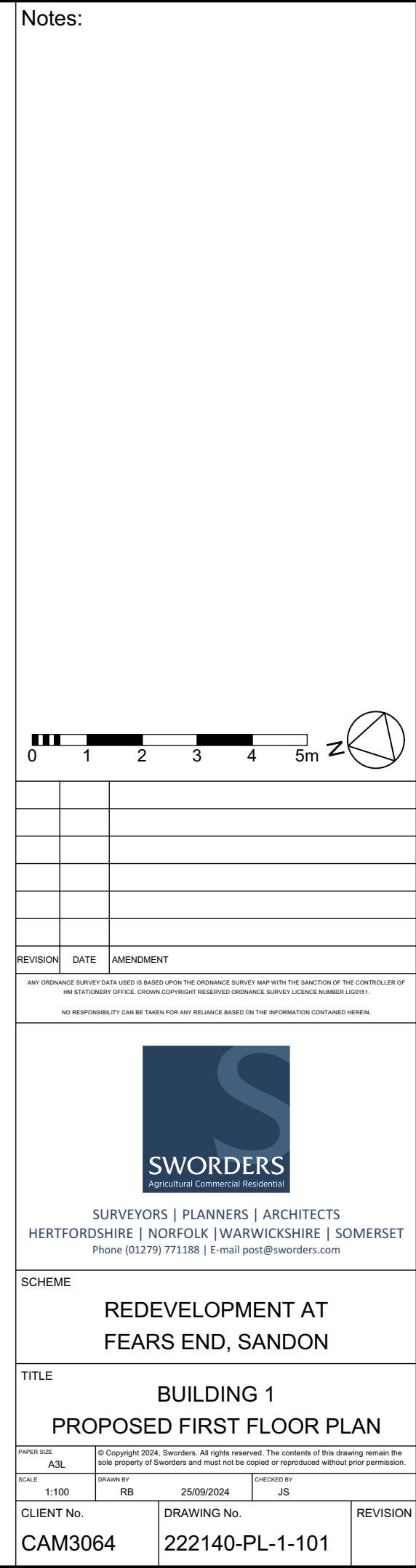
A	17/12/2024	BUILDING 5 DEMOLISHED, REDLINE ADJUSTED TO SUIT
REVISION	DATE	AMENDMENT
ANY ORDINANCE SURVEY DATA USED IS BASED UPON THE ORDINANCE SURVEY MAP WITH THE SANCTION OF THE CONTROLLER OF HM STATIONERY OFFICE. CROWN COPYRIGHT RESERVED. ORDINANCE SURVEY LICENCE NUMBER LIG0151.		
NO RESPONSIBILITY CAN BE TAKEN FOR ANY RELIANCE BASED ON THE INFORMATION CONTAINED HEREIN.		

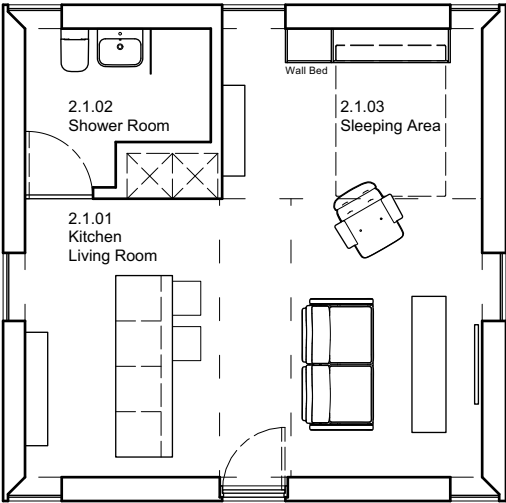


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HERTFORDSHIRE | NORFOLK | WARWICKSHIRE | SOMERSET
Phone (01279) 771188 | E-mail post@sworders.com

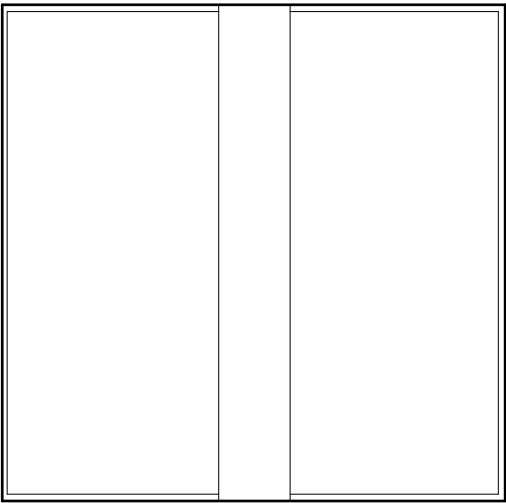
SCHEME		
REDEVELOPMENT AT FEARS END, SANDON		
TITLE		
PROPOSED ARRANGEMENT ROOF PLAN		

PAPER SIZE A3L	© Copyright 2024, Sworders. All rights reserved. The contents of this drawing remain the sole property of Sworders and must not be copied or reproduced without prior permission.	
SCALE 1:200	DRAWN BY RB	CHECKED BY JS
CLIENT No. CAM3064	DRAWING No. 222140-PL-0-102	REVISION A

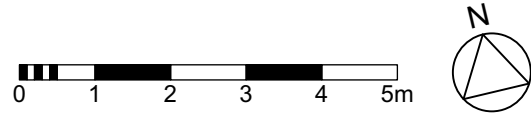




UNIT 2.1



Notes:



A	11/10/2024	SHOWER ROOM AND WALL BED ADDED
REVISION	DATE	AMENDMENT

ANY ORDNANCE SURVEY DATA USED IS BASED UPON THE ORDNANCE SURVEY MAP WITH THE SANCTION OF THE CONTROLLER OF HM STATIONERY OFFICE. CROWN COPYRIGHT RESERVED ORDNANCE SURVEY LICENCE NUMBER LG0151.
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SCHEME
**REDEVELOPMENT AT
FEARS END, SANDON**

TITLE
**BUILDING 2
PROPOSED PLANS**

PAPER SIZE: A3L
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SCALE: 1:100
DRAWN BY: RB
25/09/2024
CHECKED BY: JS

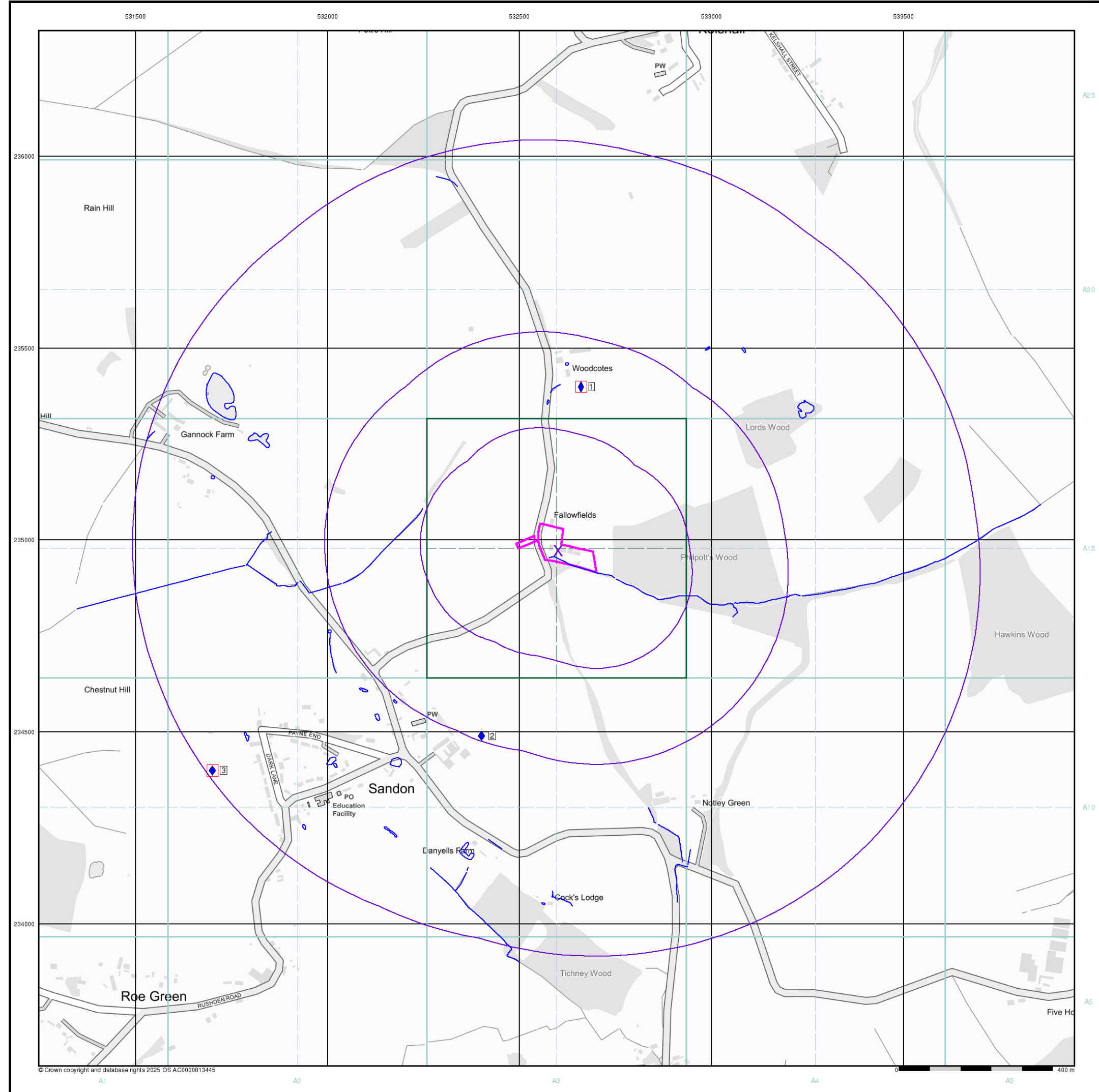
CLIENT No.	DRAWING No.	REVISION
CAM3064	222140-PL-2-100	A

1 **Building 2 - Ground Floor Plan**
Scale: 1:100

2 **Building 2 - Roof Plan**
Scale: 1:100

APPENDIX C

Surrounding Land use



General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Historical Prosecutions
- Prosecutions
- Registered Radioactive Substance
- River Network or Water Feature
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

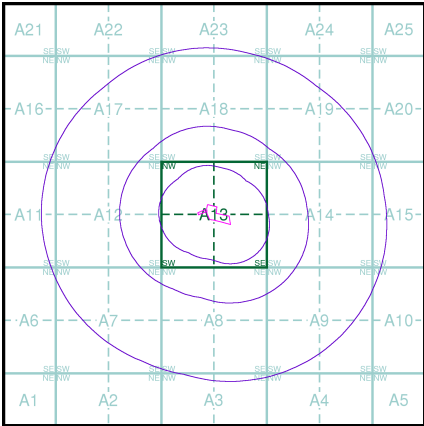
Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement
- BGS Recorded Mineral Site

Site Sensitivity Map - Slice A



Order Details
Order Number: 379131012_1_1
Customer Ref: UK25.7444
National Grid Reference: 532600, 234970
Slice: A
Site Area (Ha): 1.01
Search Buffer (m): 1000

Site Details
Site at 532590, 235000



Industrial Land Use Map

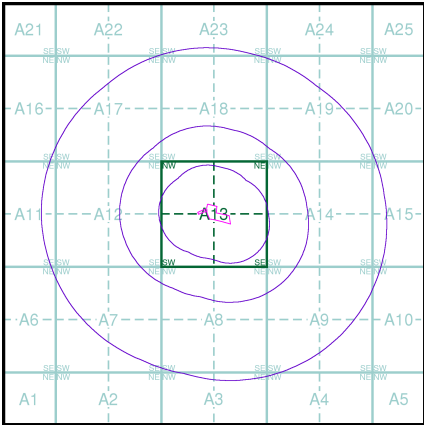
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



Order Details

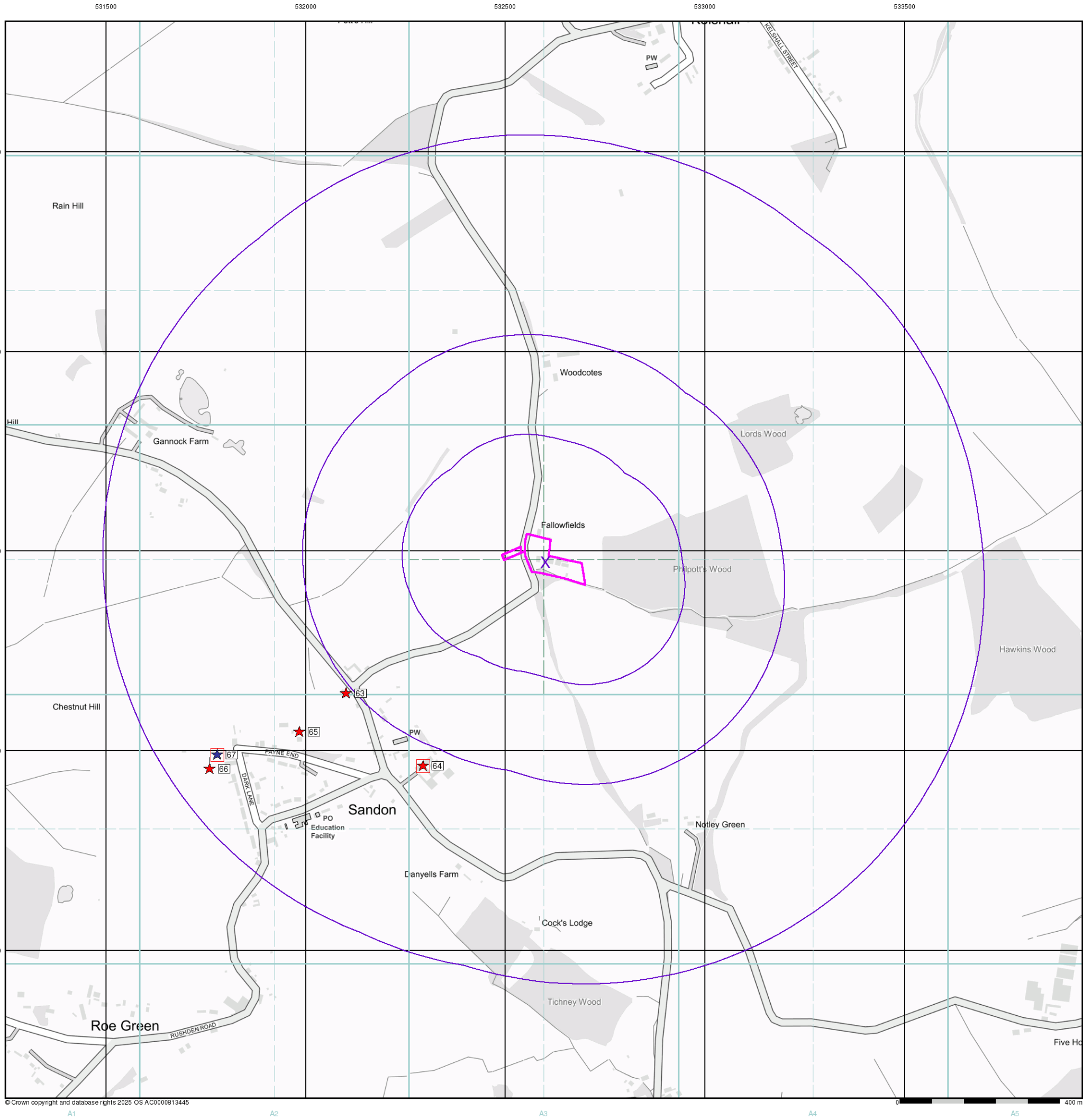
Order Number: 379131012_1_1
Customer Ref: UK25.7444
National Grid Reference: 532600, 234970
Slice: A
Site Area (Ha): 1.01
Search Buffer (m): 1000

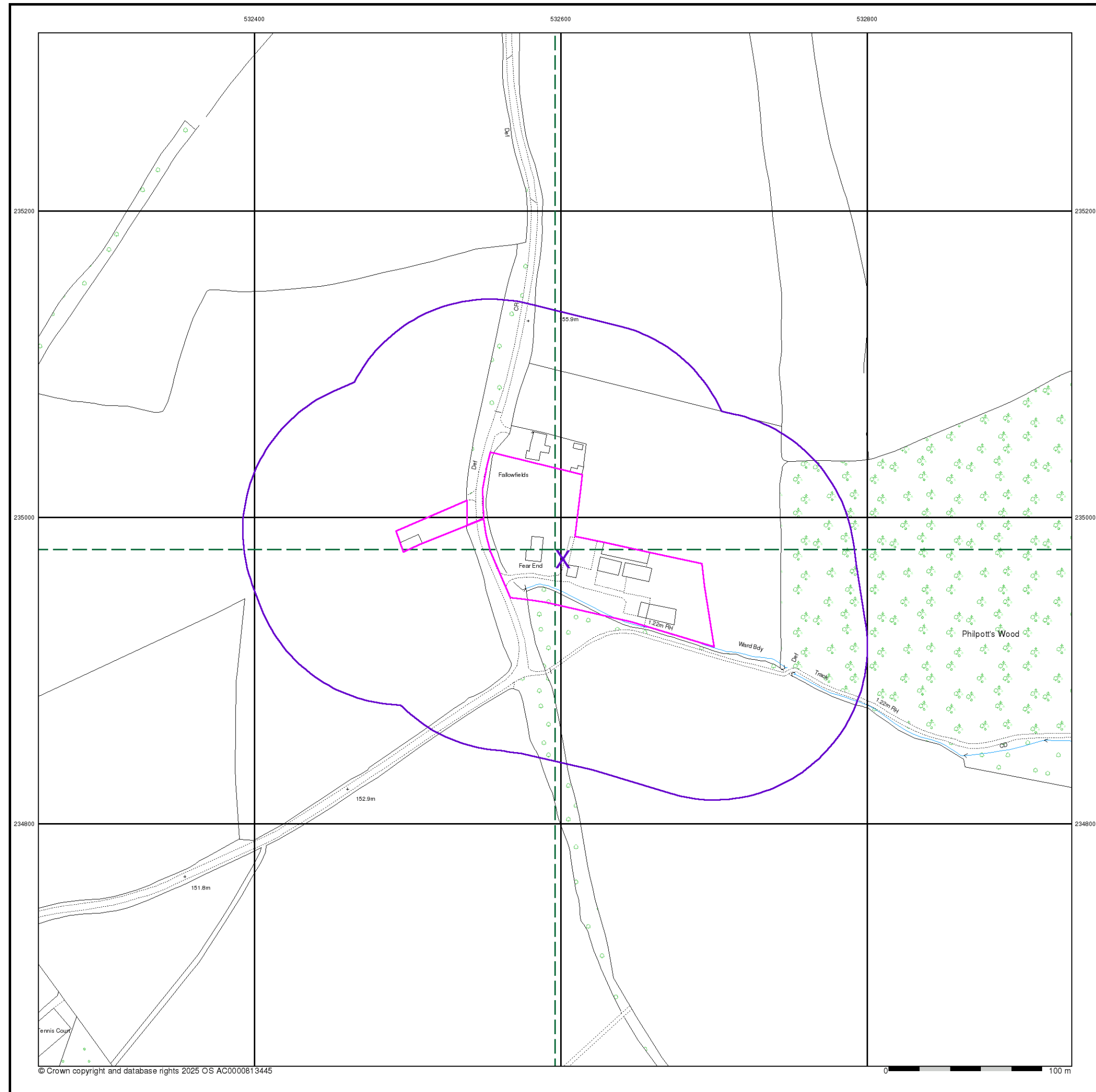
Site Details

Site at 532590, 235000



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Fax: 0844 844 9951
Web: www.envirocheck.co.uk





General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Historical Prosecutions
- Prosecutions
- Registered Radioactive Substance
- River Network or Water Feature
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Waste

- BGS Recorded Landfill Site (Location)
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- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
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- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

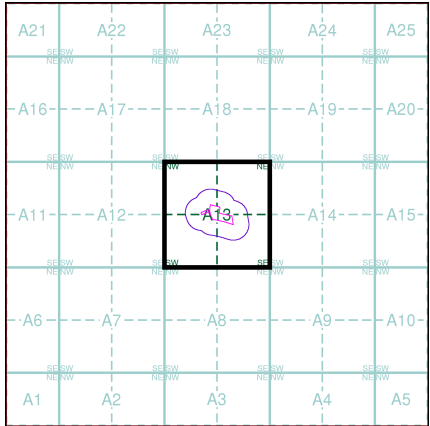
Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Geological

- BGS Recorded Mineral Site

Site Sensitivity Map - Segment A13



Order Details

Order Number: 379131012_1_1
Customer Ref: UK25.7444
National Grid Reference: 532600, 234970
Slice: A
Site Area (Ha): 1.01
Plot Buffer (m): 100

Site Details

Site at 532590, 235000



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APPENDIX D

Geological Context

Geology 1:50,000 Maps Legends

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LOFT	Lowestoft Formation	Diamicton	Not Supplied - Anglian
	LOFT	Lowestoft Formation	Diamicton with Chalk Rafts	Not Supplied - Anglian
	GFDMP	Glaciofluvial Deposits, Mid Pleistocene	Sand and Gravel	Not Supplied - Cromerian
	GLLMP	Glaciolacustrine Deposits, Mid Pleistocene	Clay and Silt	Not Supplied - Cromerian
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary
	CWF	Clay-with-flints Formation	Clay, Silt, Sand and Gravel	Not Supplied - MIOCENE

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LESE	Lewes Nodular Chalk Formation and Seaford Chalk Formation (Undifferentiated)	Chalk	Not Supplied - Turonian
	CKR	Chalk Rock Member	Chalk	Not Supplied - Turonian
	TRK	Top Rock Bed	Chalk	Not Supplied - Turonian
	HNCK	Holywell Nodular Chalk Formation and New Pit Chalk Formation (Undifferentiated)	Chalk	Not Supplied - Cenomanian



Geology 1:50,000 Maps

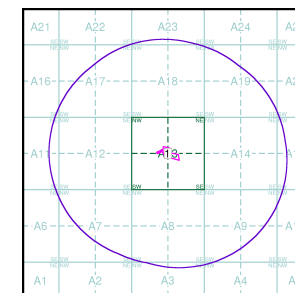
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID: 1
 Map Sheet No: 221
 Map Name: Hitchin
 Map Date: 1995
 Bedrock Geology: Available
 Superficial Geology: Available
 Artificial Geology: Available
 Faults: Not Supplied
 Landslip: Available
 Rock Segments: Not Supplied

Geology 1:50,000 Maps - Slice A



Order Details:

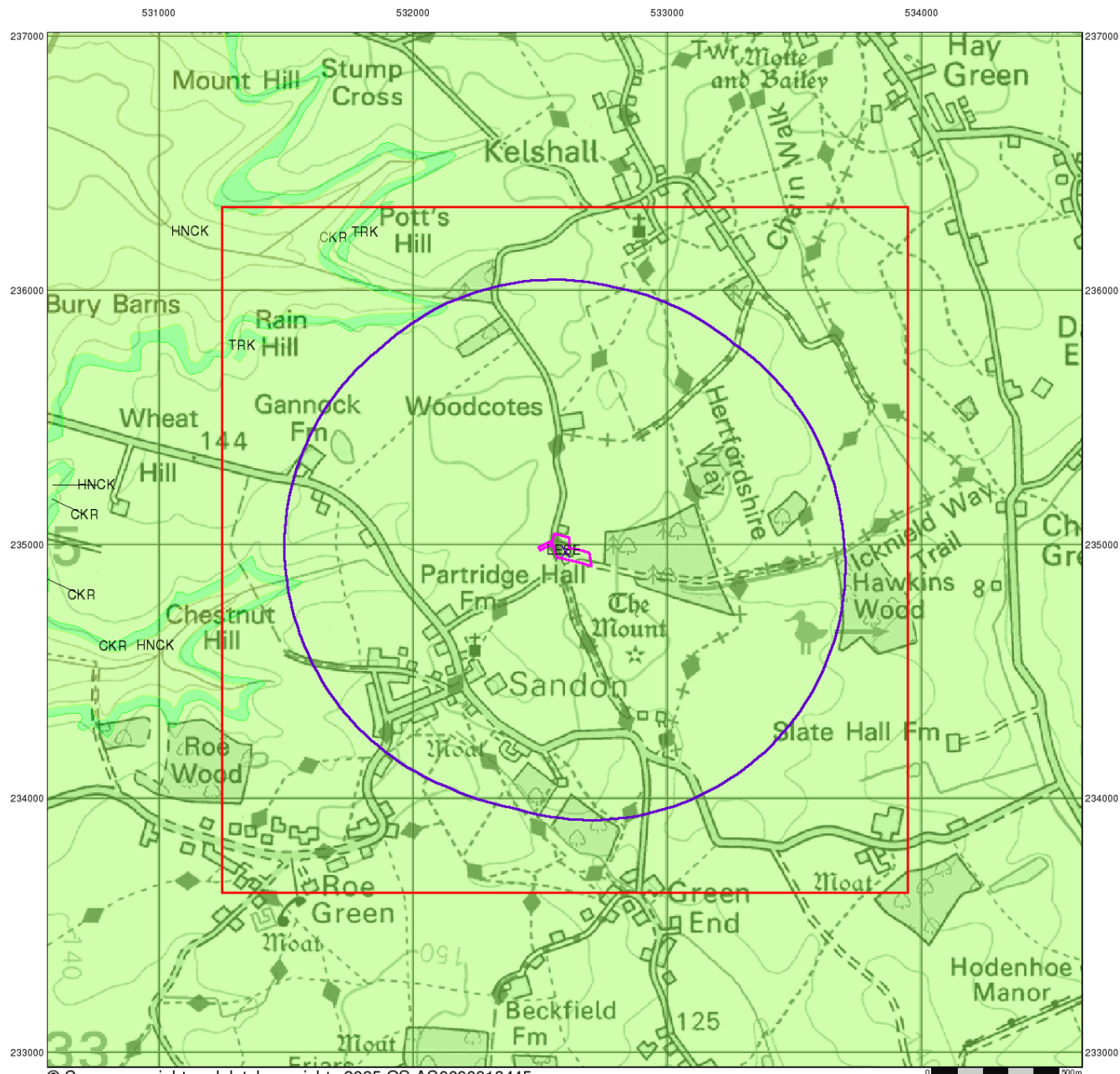
Order Number: 379131012_1_1
 Customer Reference: UK25.7444
 National Grid Reference: 532600, 234970
 Slice: A
 Site Area (Ha): 1.01
 Search Buffer (m): 1000

Site Details:

Site at 532590, 235000

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Bedrock and Faults

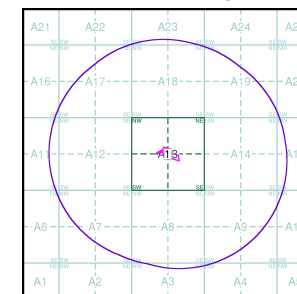
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A



Order Details:

Order Number: 379131012_1_1
 Customer Reference: UK25.7444
 National Grid Reference: 532600, 234970
 Slice: A
 Site Area (Ha): 1.01
 Search Buffer (m): 1000

Site Details:

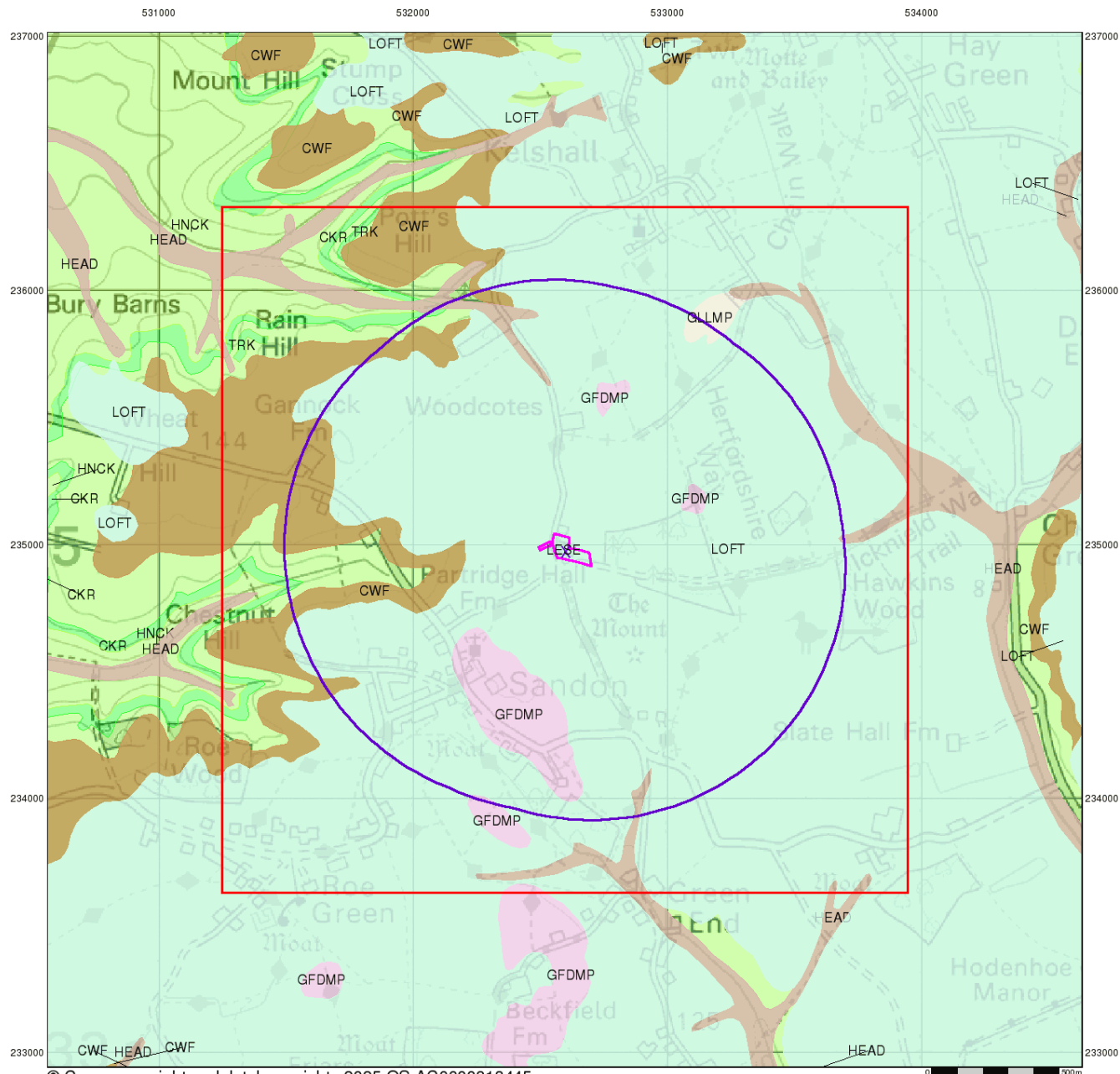
Site at 532590, 235000

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v15.0 16-Jun-2025

Page 4 of 5



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Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

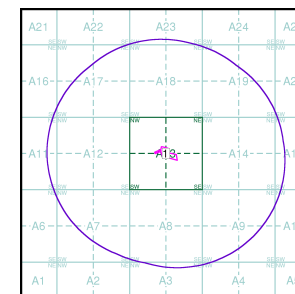
Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A



Order Details:

Order Number: 379131012_1_1
Customer Reference: UK25.7444
National Grid Reference: 532600, 234970
Slice: A
Site Area (Ha): 1.01
Search Buffer (m): 1000

Site Details:

Site at 532590, 235000

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Page 5 of 5

221/75 The Vicarage, Sandon. (Sealed)

W.S.B.H. p. 245. Surface +519. Shaft. Ingold, 1872.
[Hardness: P. 250, T. 200. Anal. June 1939.]

Boulder Clay ... 30 1/2
Sand and Gravel ... touched

GEOLOGICAL CLASSIFICATION	NATURE OF STRATA	THICKNESS ft.	DEPTH ft.
Boulder clay 30 1/2 Sand + Gravel	Clay with sand at bottom	30 1/2	30 1/2

By L.P. Thomas 8/12/68.

water supply of
Eucks. & Herts.
Page 245
20 June 1939

TL33SW/3
3218. 3459



221/75 The Vicarage, Sandon. (Sealed)

W.S.B.H. p. 245. Surface +519. Shaft. Ingold, 1872.
[Hardness: P. 250, T. 200. Anal. June 1939.]

TL33/48

Boulder Clay ... 30 1/2
Sand and Gravel ... touched

GEOLOGICAL
CLASSIFICATION

NATURE OF STRATA

THICKNESS
ft.

DEPTH
ft.

GEOLOGICAL CLASSIFICATION	NATURE OF STRATA	THICKNESS ft.	DEPTH ft.
Boulder clay 30 1/2 Sand + Gravel	Clay with sand at bottom	30 1/2	30 1/2

Ap. L.P. Thomas 8/7/68.

TL 3218 3459

Sandon.

Ordnance Map 221, new ser. (Herts 8, NE.). Geologic Maps 47 and 46, NE.
Vicarage.

Made and communicated by G. INGOLD.

[Boulder] Clay, with sand at the bottom, 30½ ft.

Boulder Clay }
Sand and gravel }

mjc
July 66
LST 24/5/68

TL 33/48

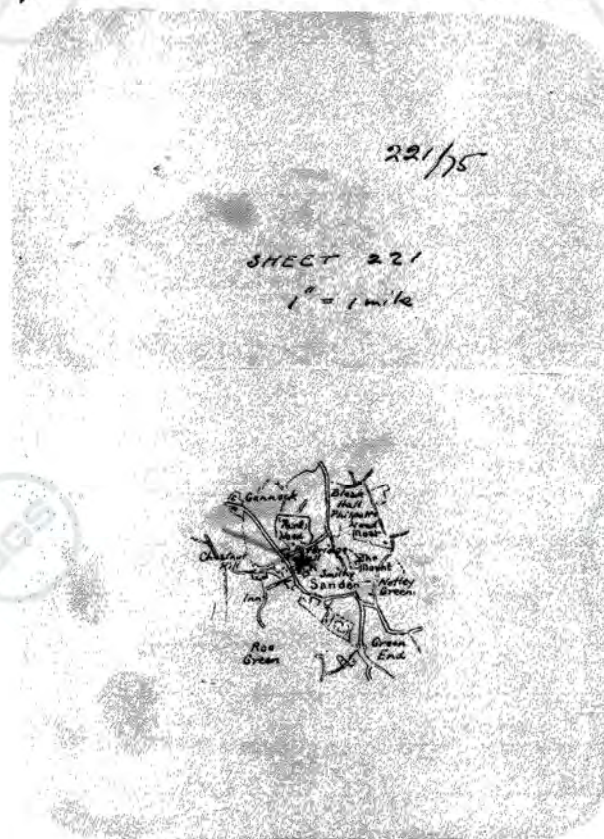
Drawn Dec. 1939. except for general letter from Rev CTE Birds
Sandon Vicarage, 18/1/1940, enclosing analysis attached
(file 9509/221).

100 yds. NNW of All Saints' Church. Surface c 50'

The Vicarage.

Sealed by concrete. Situated at N.W. corner of house
adjacent to rainwater tank. OD + 519. Visited. Site altered.
MCD.

10.11.64



Herts 8 NE-W

Water Supply of
Eucks. & Herts.

Page 245



SECTION OF 2 AT Landon The Vicarage
One-inch Map (NS) 221 Six-inch Map 8 NE W (?)
Made by X Date 1872
Communicated by Mr. G. Ingham
HEIGHT ABOVE O.D. 75 WATER LEVEL
YIELD TL33/48

✓ blay with sand at bottom

THICKNESS. DEPTH.
Feet. Inches. Feet. Inches.

30 6 30 6

3
Necarage Well, Sandon

Parts per 100 000

221
75

TL33/48

Appearance: Bright with slight granular deposit of mineral matter
Crustacea present.

Colour, yellow brown - APHA 16.

pH Neutral 7.4 Odour Nil

Electrical Conductivity at 20°C. 820 Total Solids, dried at 100°C. 56

Cl in Chlorides 4.5 Alkalinity as CaCO₃ 22

Hardness. Temp 20. Perm 28 Total 45

N as Nitrate 0.84 Nitrite absent

Free Ammonia 0.0000 Ammon. Nitrate absent

Calc. " 0.0186 Calc. " "

Oxygen absorbed L 4 hrs at 60°F 0.170

Metals Iron 0.007. Other metals absent

Bacteria on Agar plate in 1 day at 37°C 120

2 days 730

3 at 20°C 960

B. coli absent in 100 cc.

This sample has slight colour and deposit, and low forms of animal life are present. Water is neutral in reaction, exceedingly hard in character, contains no trace of salinity, and no metal apart from a negligible trace of iron.

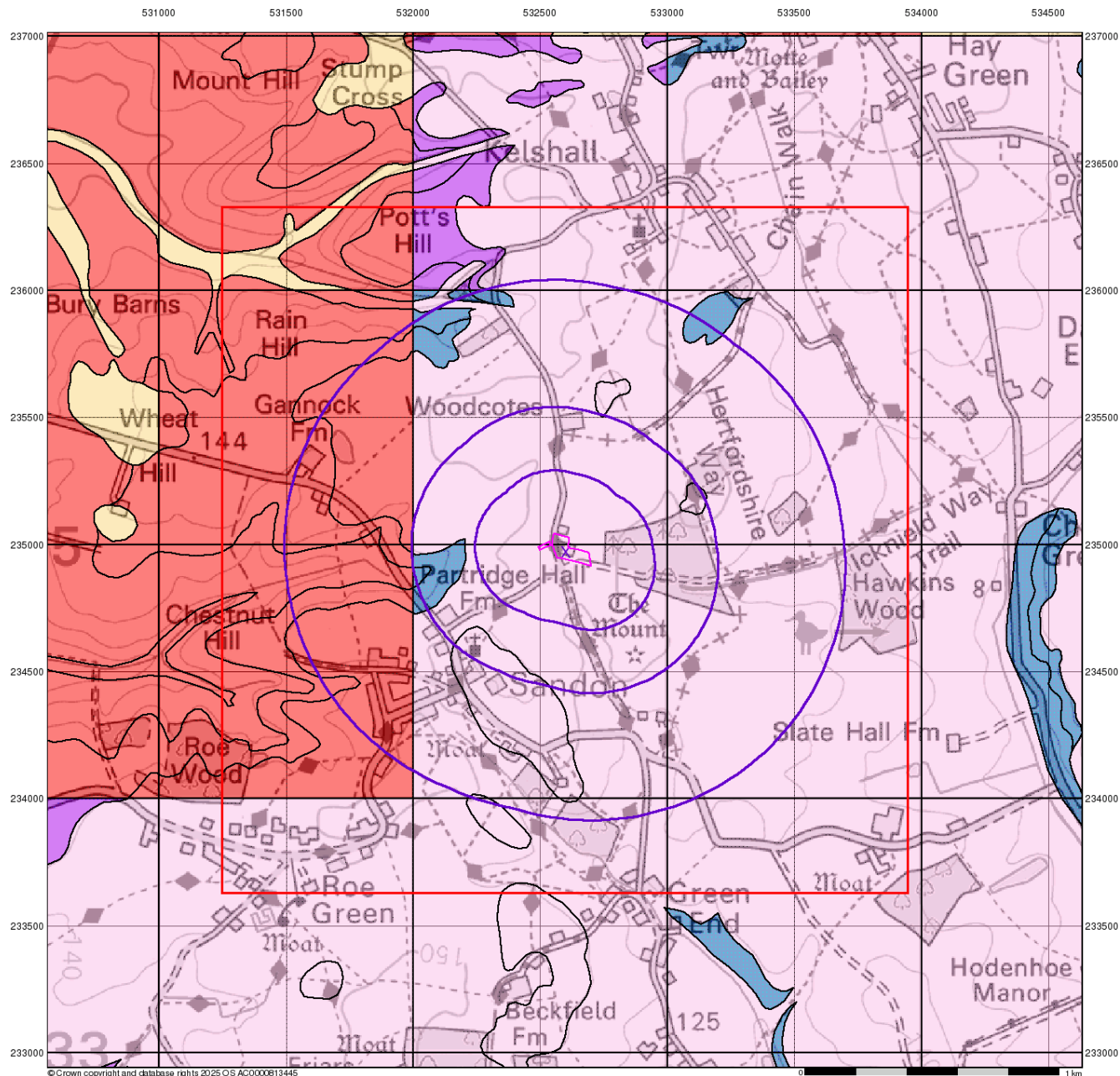
Water contains a little trace of organic matter, and also a large number of bacteria including coliform organisms in small numbers, but typical B. coli were not found.

The presence of low forms of animal life, organic matter and bacteria indicate surface exposure and contamination and if this could be prevented the purity of the water might be improved to the standard desirable for drinking & domestic purposes.

By the Consumer Public Health Laboratory
91, Queen Street E.C.4
26 June 1939.

APPENDIX E

Groundwater Vulnerability and Flood Maps



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Groundwater Vulnerability

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Bedrock Aquifers

- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer

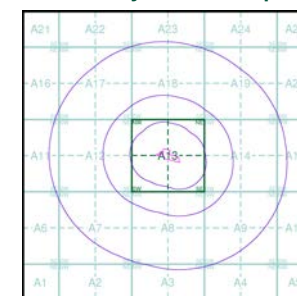
Superficial Aquifers

- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

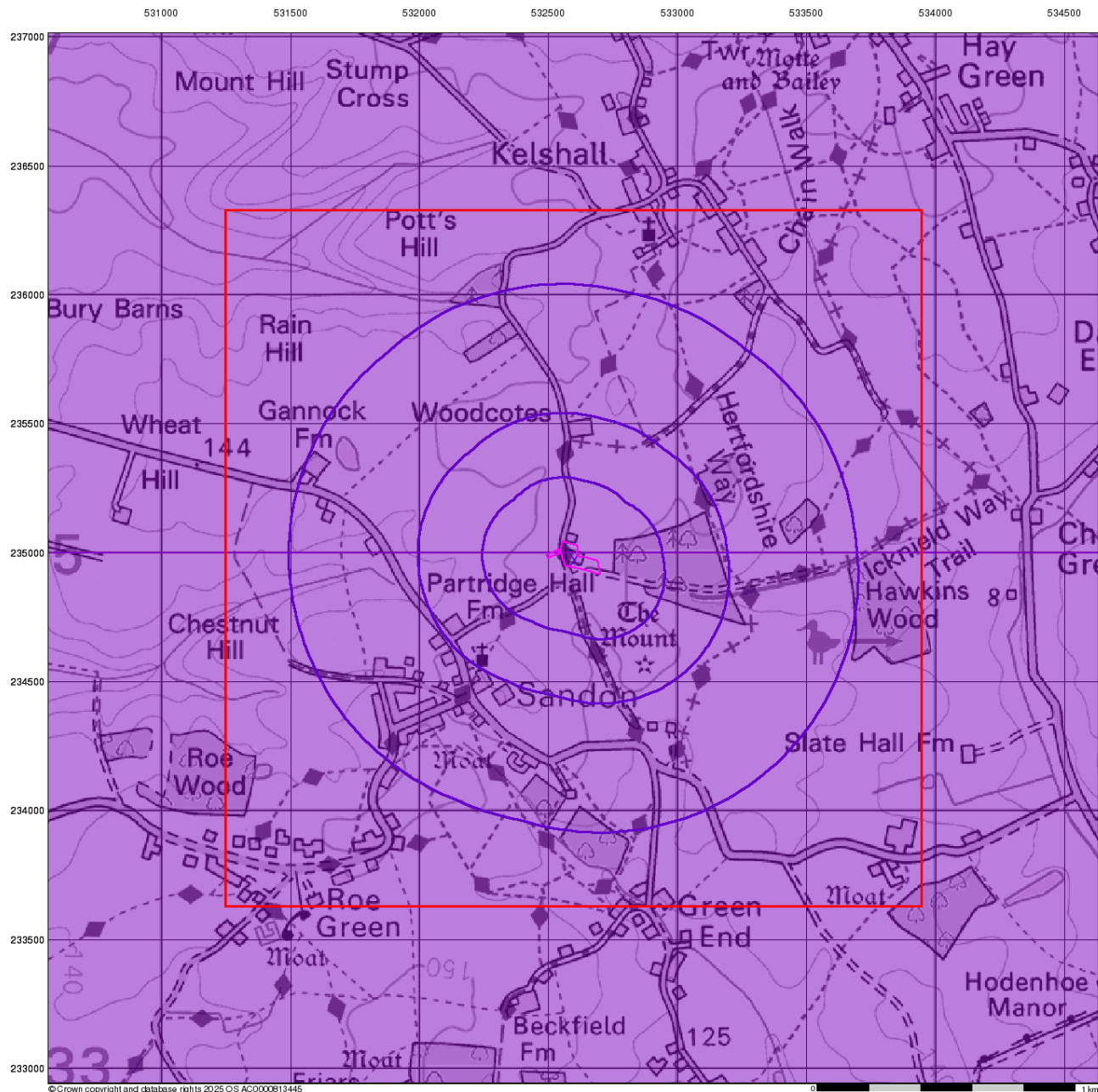
Order Number: 379131012_1_1
 Customer Ref: UK25.7444
 National Grid Reference: 532600, 234970
 Slice: A
 Site Area (Ha): 1.01
 Search Buffer (m): 1000

Site Details

Site at 532590, 235000

Landmark
 INFORMATION GROUP

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 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



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Bedrock Aquifer Designation

General

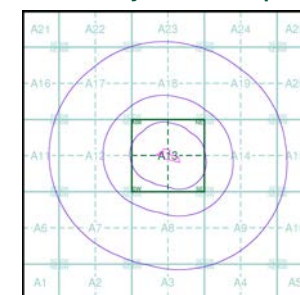
- ◇ Specified Site ○ Specified Buffer(s) X Bearing Reference Point
- Slice 8 Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

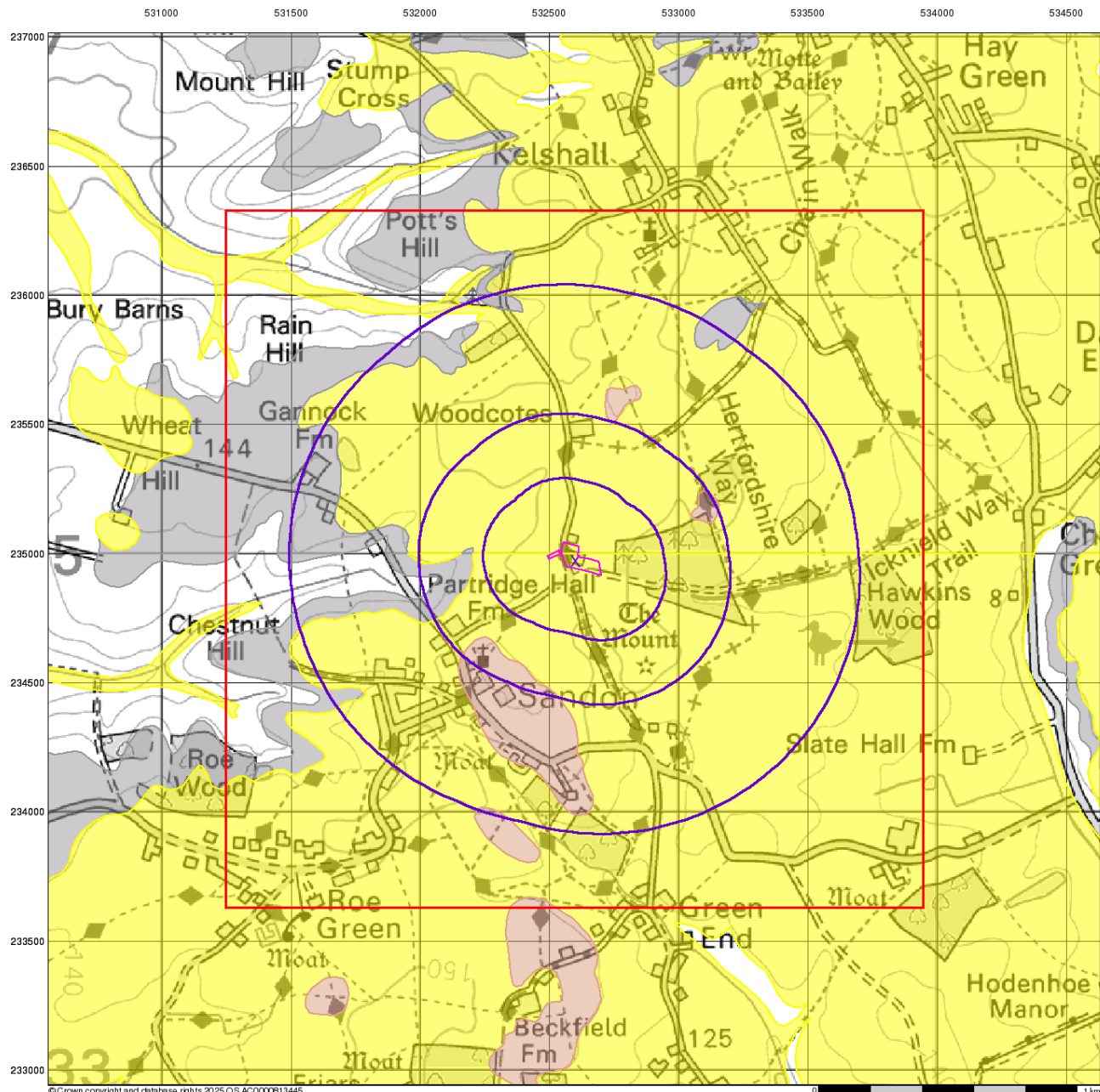
Order Number: 379131012_1_1
 Customer Ref: UK25.7444
 National Grid Reference: 532600, 234970
 Slice: A
 Site Area (Ha): 1.01
 Search Buffer (m): 1000

Site Details

Site at 532590, 235000



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Superficial Aquifer Designation

General

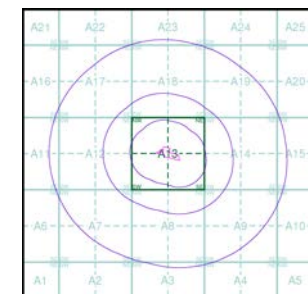
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

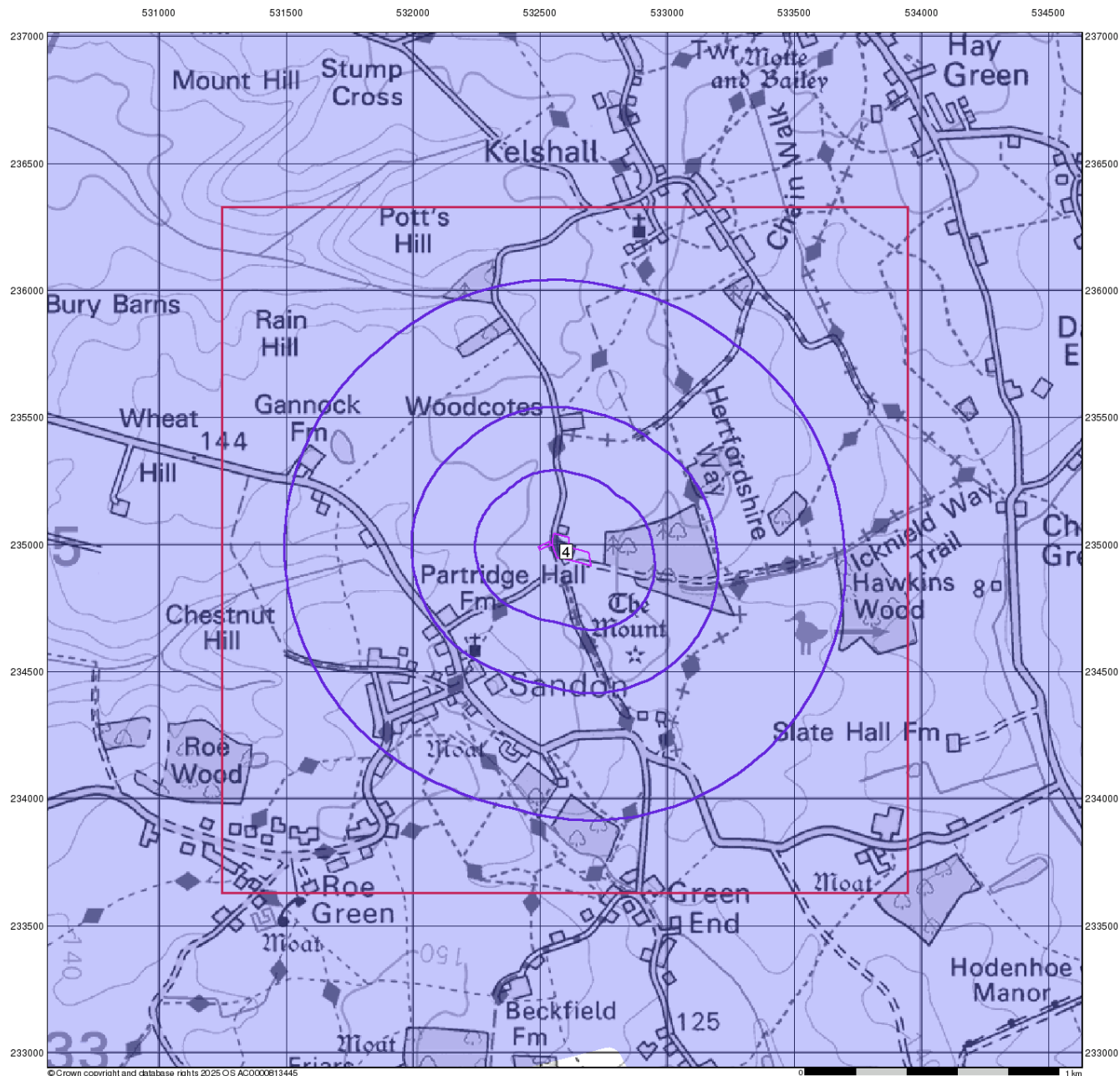
Order Number: 379131012_1_1
 Customer Ref: UK25.7444
 National Grid Reference: 532600, 234970
 Slice: A
 Site Area (Ha): 1.01
 Search Buffer (m): 1000

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Source Protection Zones

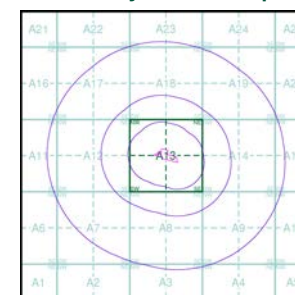
General

- ◊ Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Slice
- 8 Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- ▨ Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- ▨ Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- ▨ Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A



Order Details

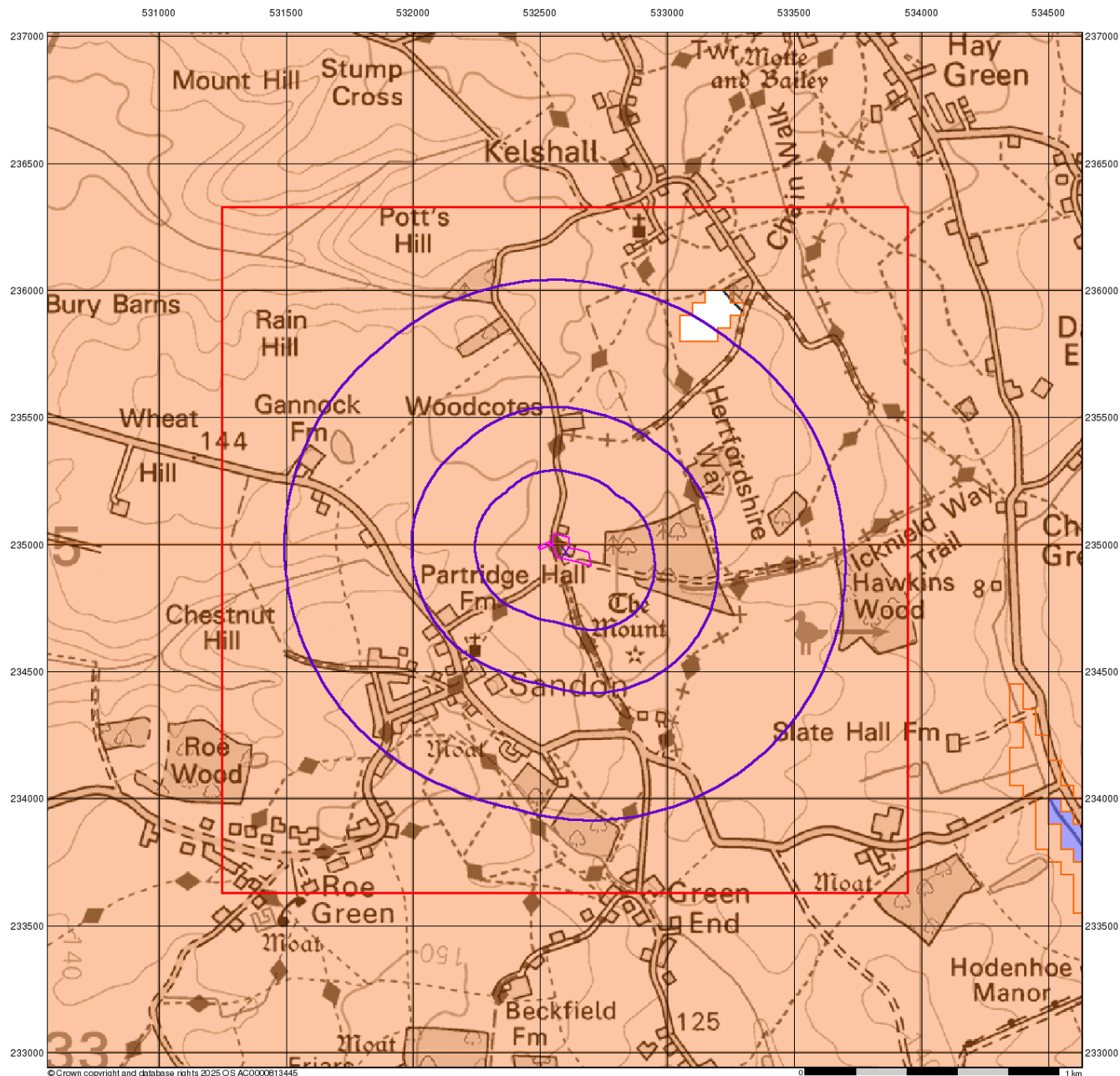
Order Number: 379131012_1_1
 Customer Ref: UK25.7444
 National Grid Reference: 532600, 234970
 Slice: A
 Site Area (Ha): 1.01
 Search Buffer (m): 1000

Site Details

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BGS Flood GFS Data

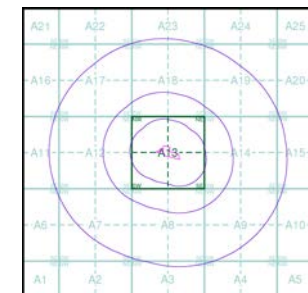
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

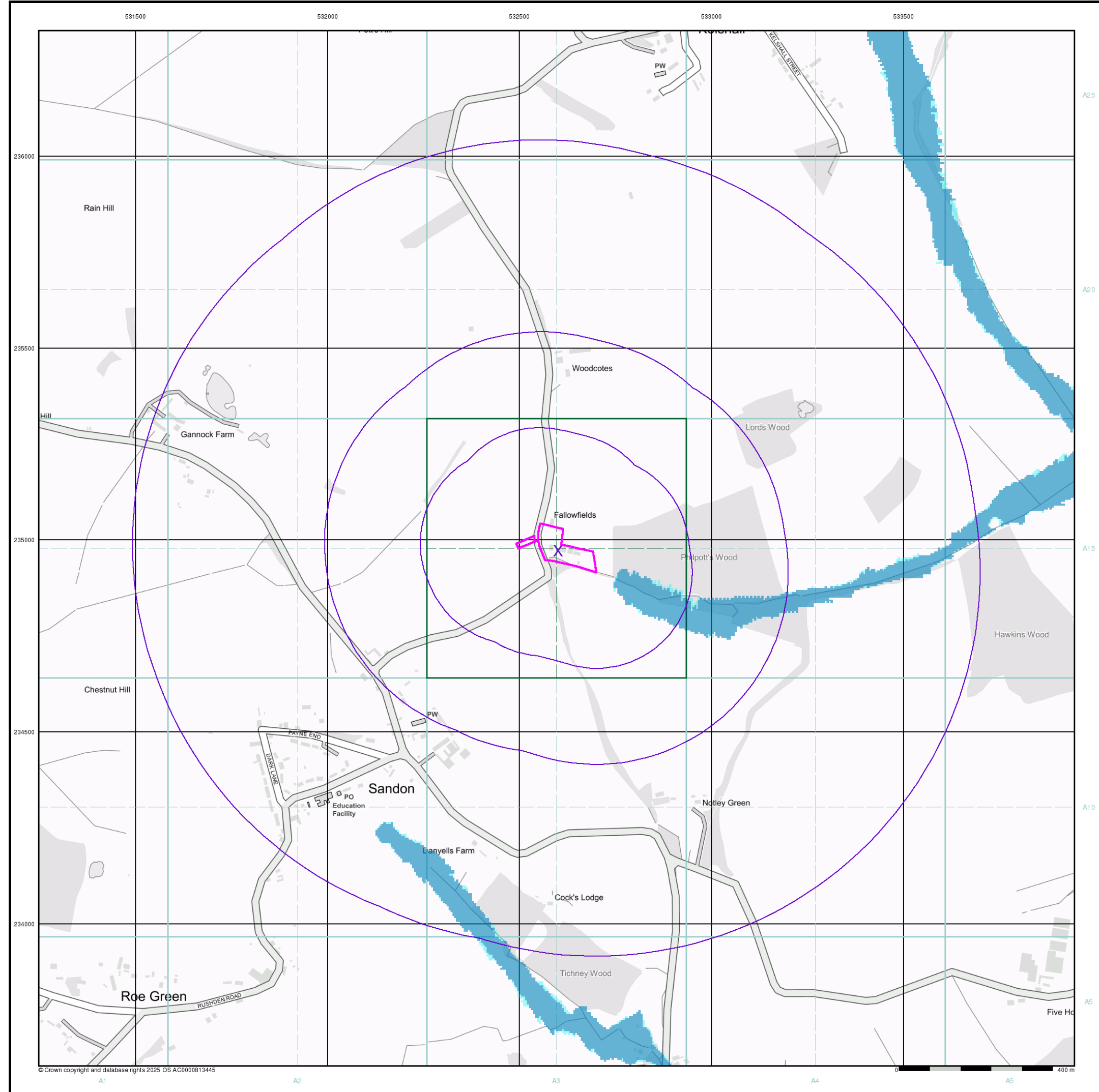
Order Number: 379131012_1_1
 Customer Ref: UK25.7444
 National Grid Reference: 532600, 234970
 Slice: A
 Site Area (Ha): 1.01
 Search Buffer (m): 1000

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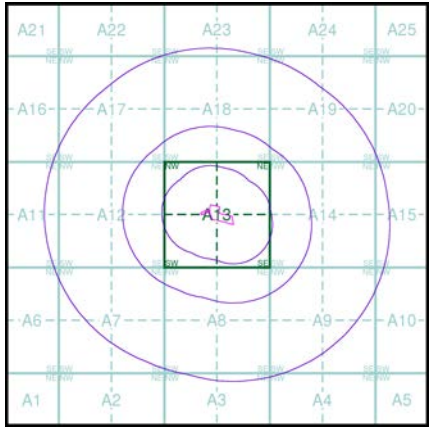
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A



Order Details

Order Number: 379131012_1_1
Customer Ref: UK25.7444
National Grid Reference: 532600, 234970
Slice: A
Site Area (Ha): 1.01
Search Buffer (m): 1000

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APPENDIX F

A Selection of Historic Maps



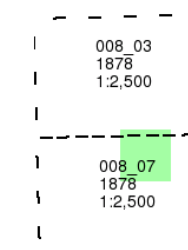
Hertfordshire

Published 1878

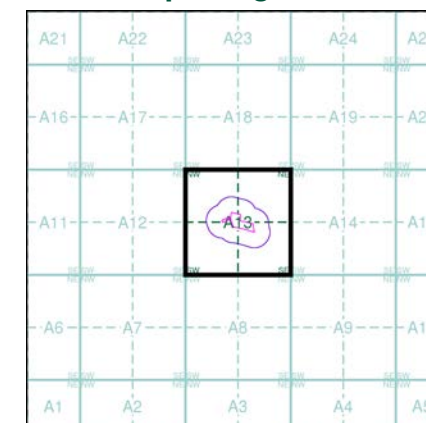
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

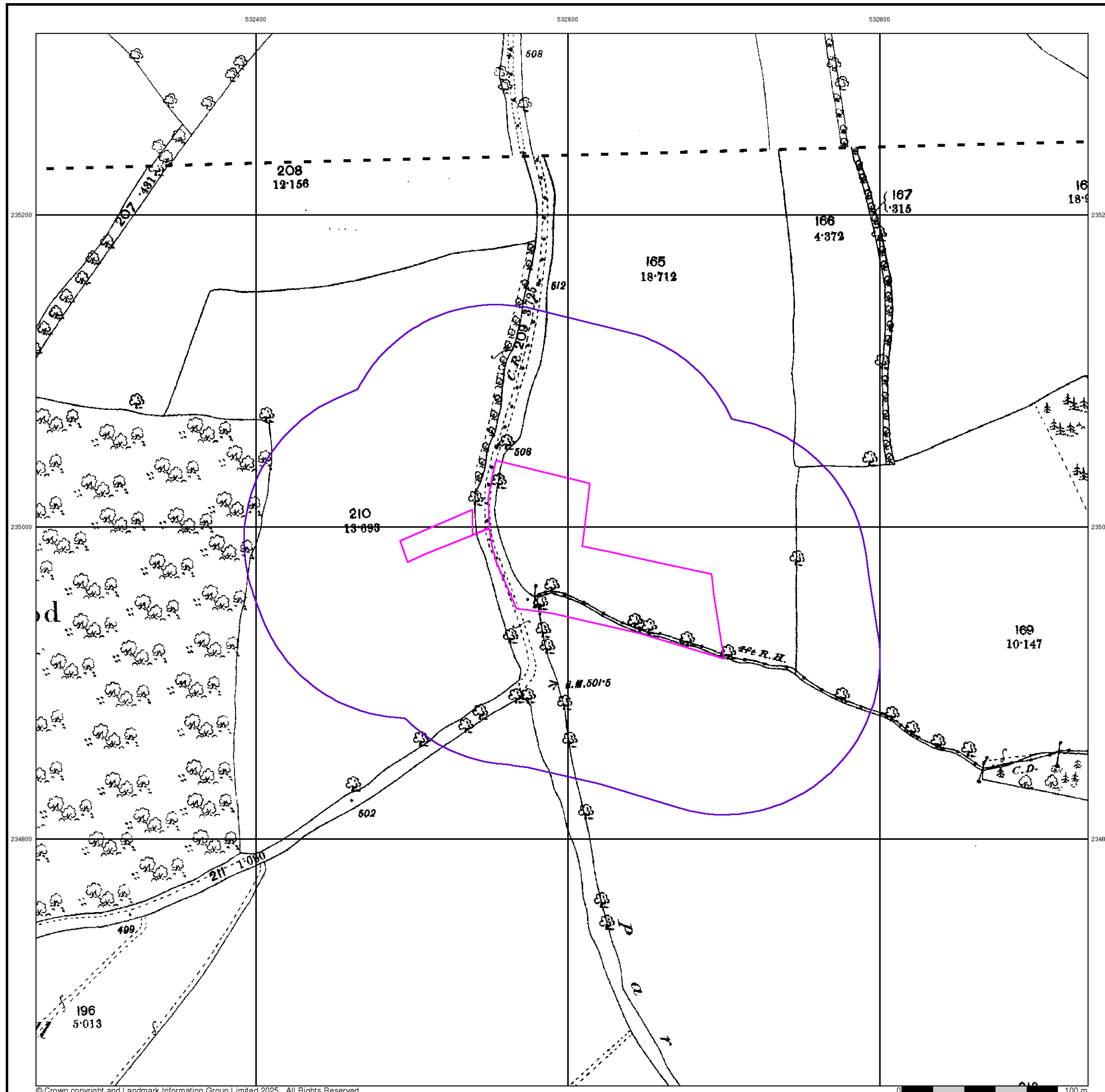
Order Number: 379131012_1_1
Customer Ref: UK25.7444
National Grid Reference: 532600, 234970
Slice: A
Site Area (Ha): 1.01
Search Buffer (m): 100

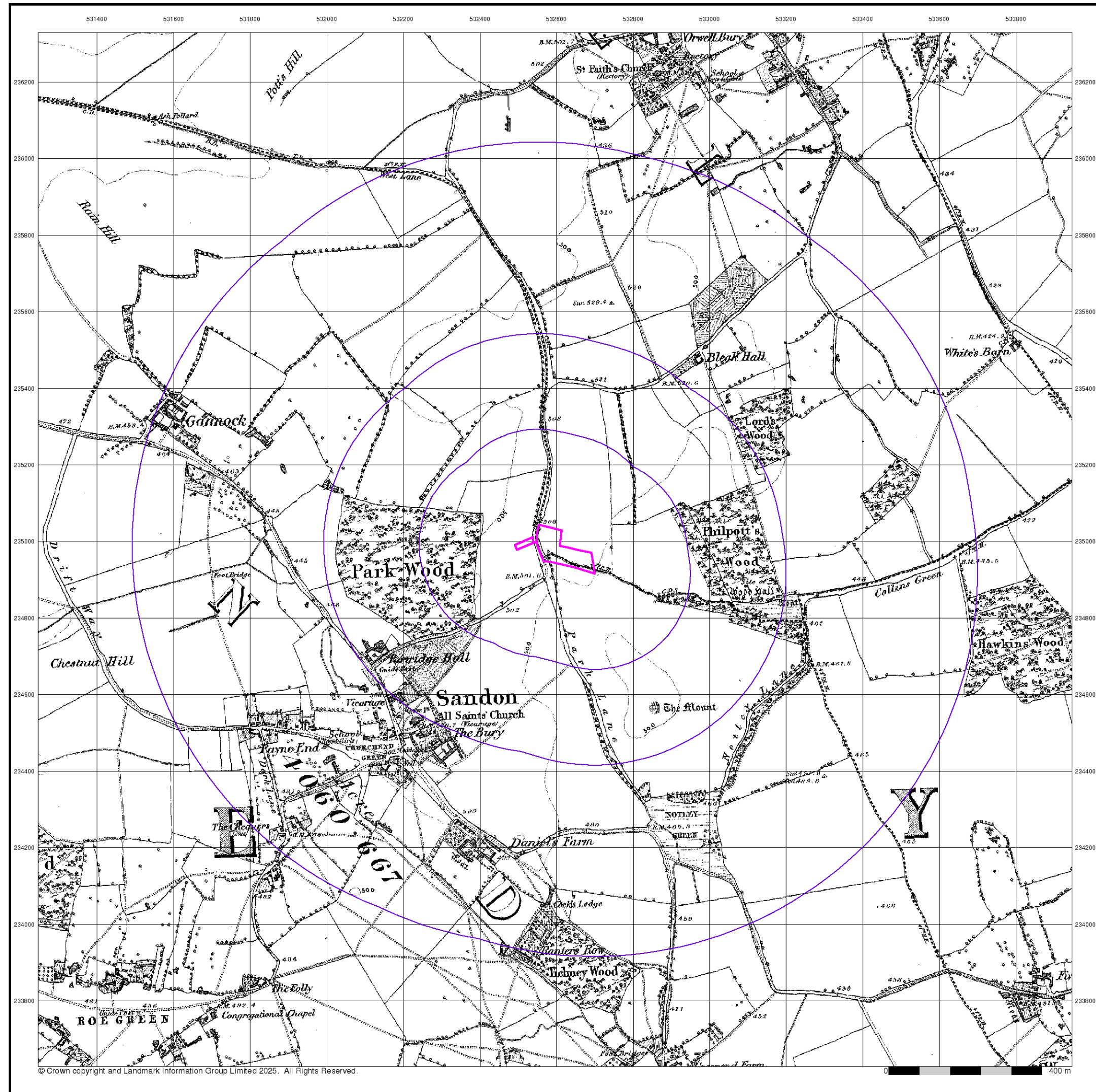
Site Details

Site at 532590, 235000

Landmark
INFORMATION GROUP

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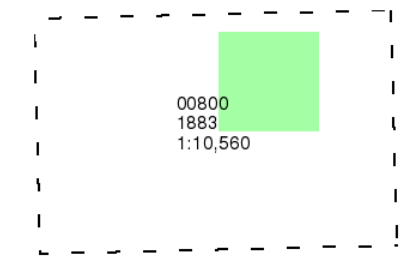
Hertfordshire

Published 1883

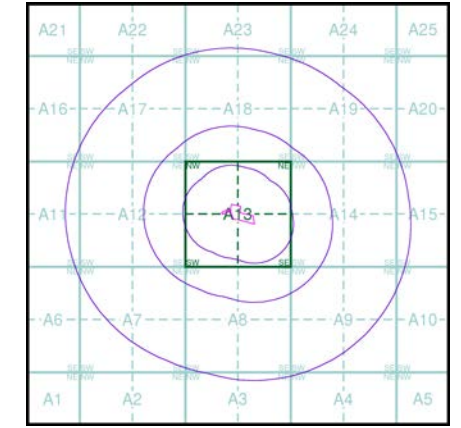
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

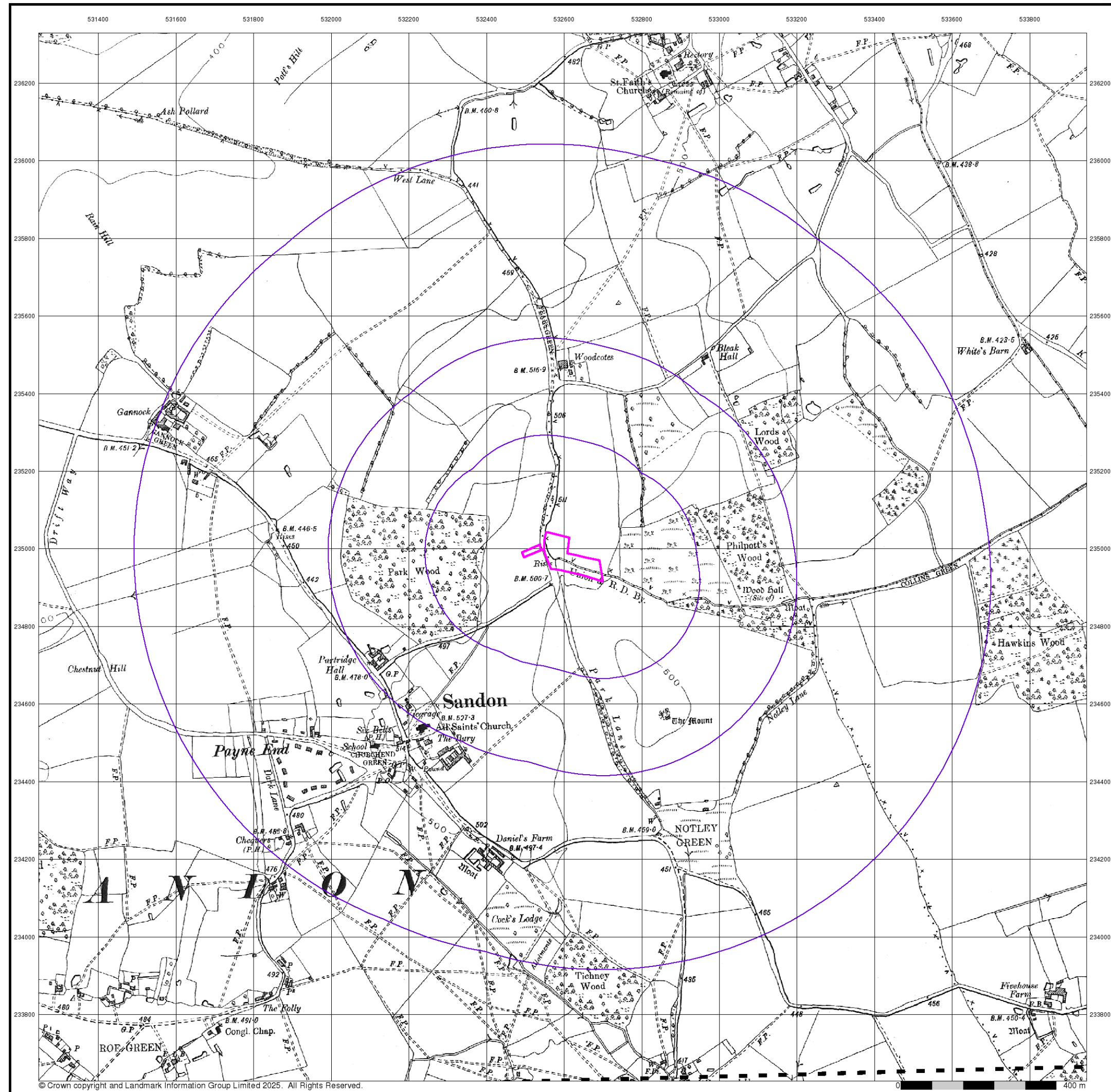
Order Number: 379131012_1_1
Customer Ref: UK25.7444
National Grid Reference: 532600, 234970
Slice: A
Site Area (Ha): 1.01
Search Buffer (m): 1000

Site Details

Site at 532590, 235000



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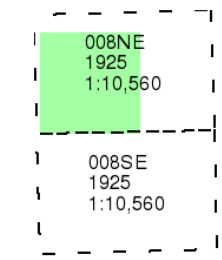
Hertfordshire

Published 1925

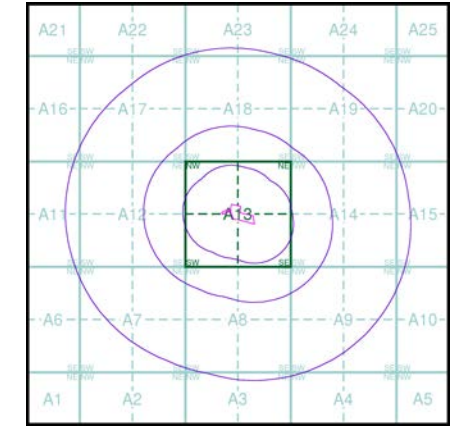
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

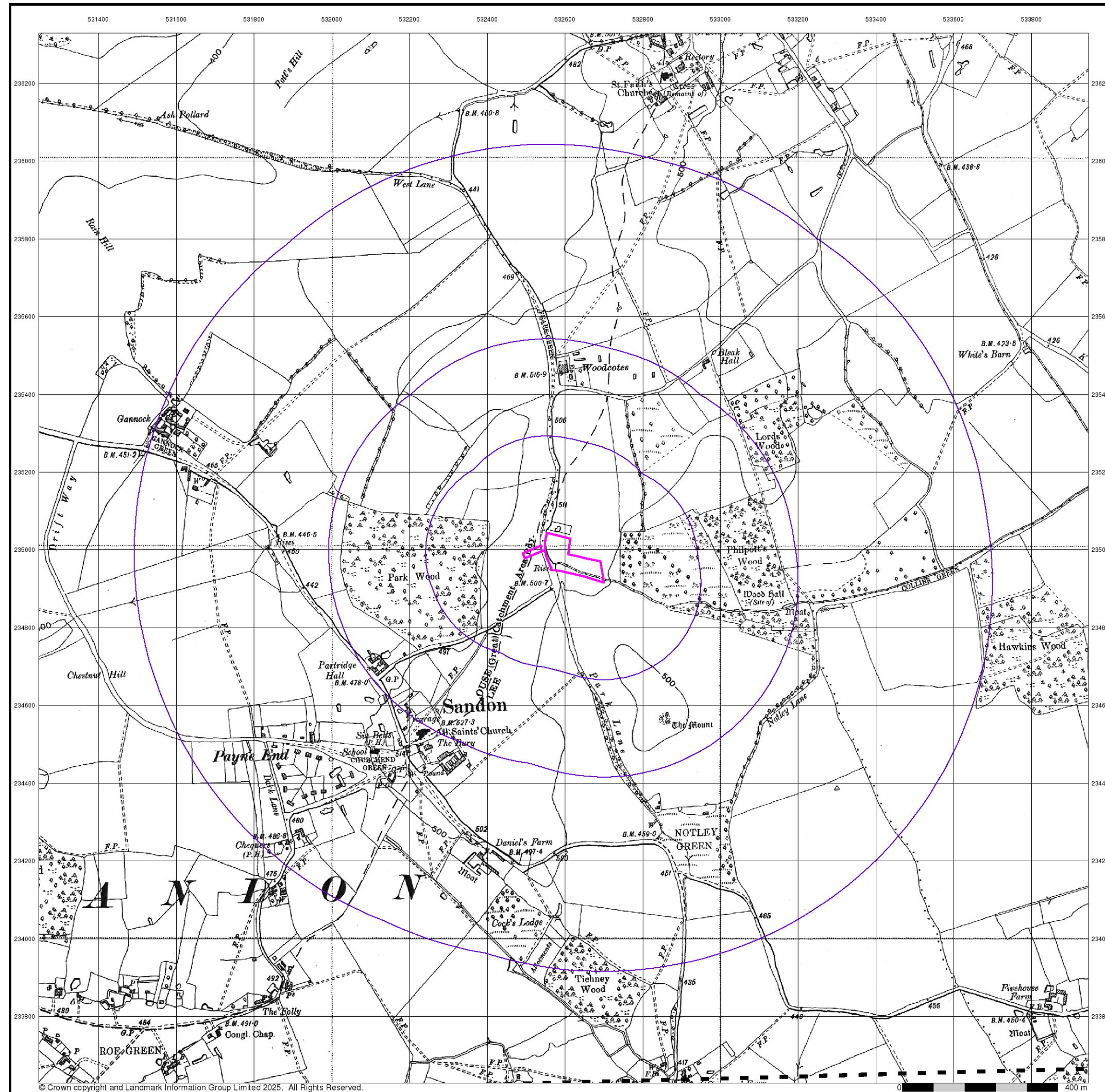
Order Number: 379131012_1_1
Customer Ref: UK25.7444
National Grid Reference: 532600, 234970
Slice: A
Site Area (Ha): 1.01
Search Buffer (m): 1000

Site Details

Site at 532590, 235000



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Hertfordshire

Published 1947 - 1950

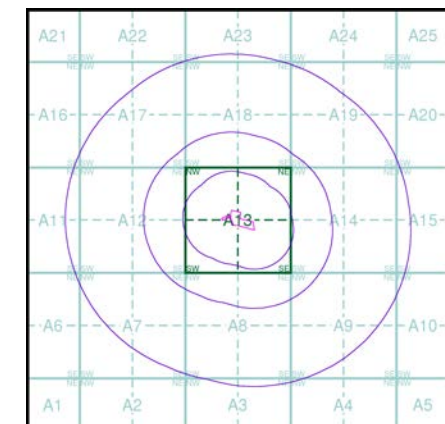
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

008NE
1947
1:10,560
008SE
1950
1:10,560

Historical Map - Slice A



Order Details

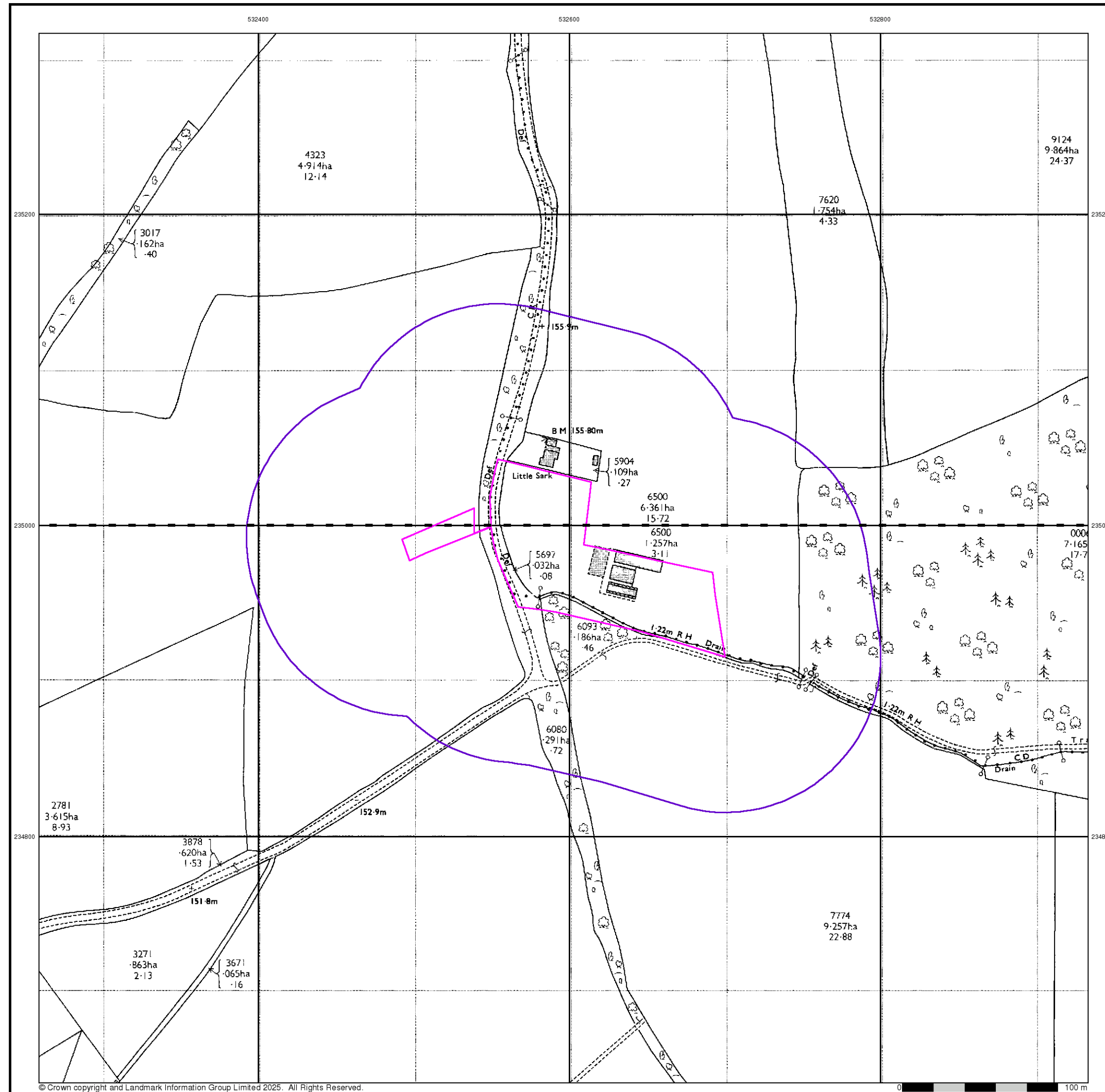
Order Number: 379131012_1_1
Customer Ref: UK25.7444
National Grid Reference: 532600, 234970
Slice: A
Site Area (Ha): 1.01
Search Buffer (m): 1000

Site Details

Site at 532590, 235000



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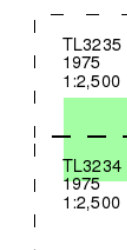
Ordnance Survey Plan

Published 1975

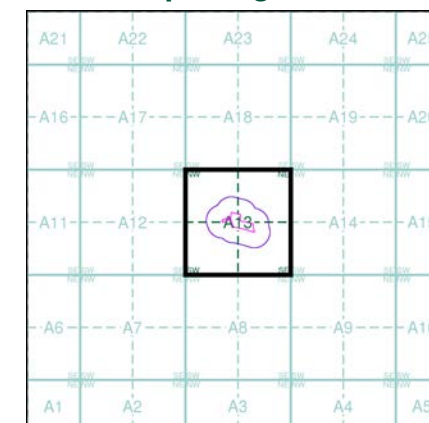
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

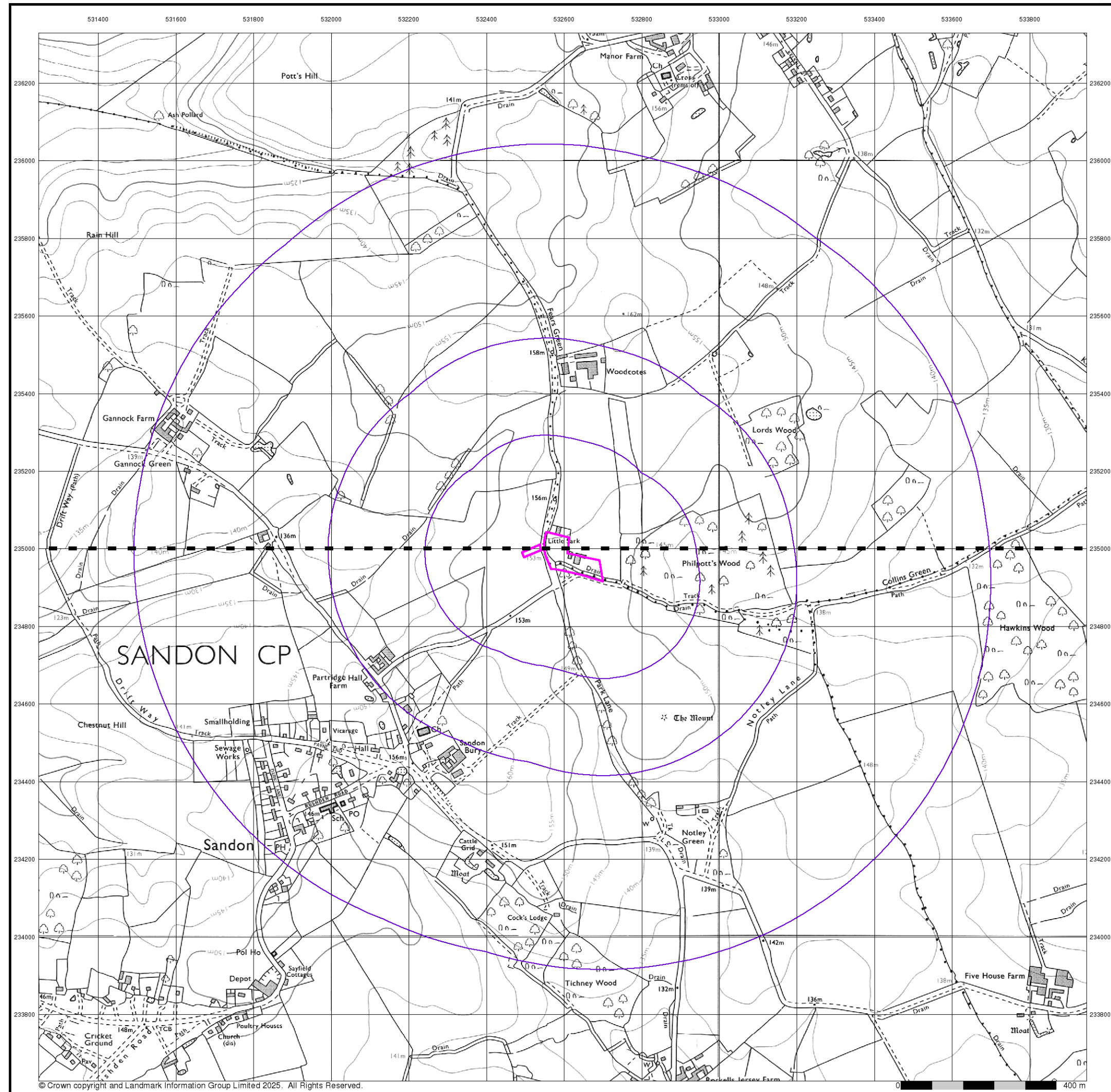
Order Number: 379131012_1_1
Customer Ref: UK25.7444
National Grid Reference: 532600, 234970
Slice: A
Site Area (Ha): 1.01
Search Buffer (m): 100

Site Details

Site at 532590, 235000



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Ordnance Survey Plan

Published 1982 - 1984

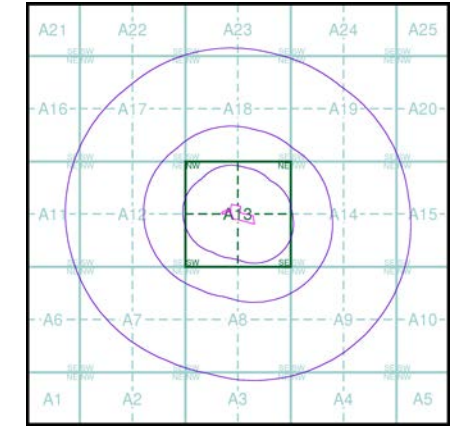
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

TL33NW	1984
1:10,000	
TL33SW	1982
1:10,000	

Historical Map - Slice A



Order Details

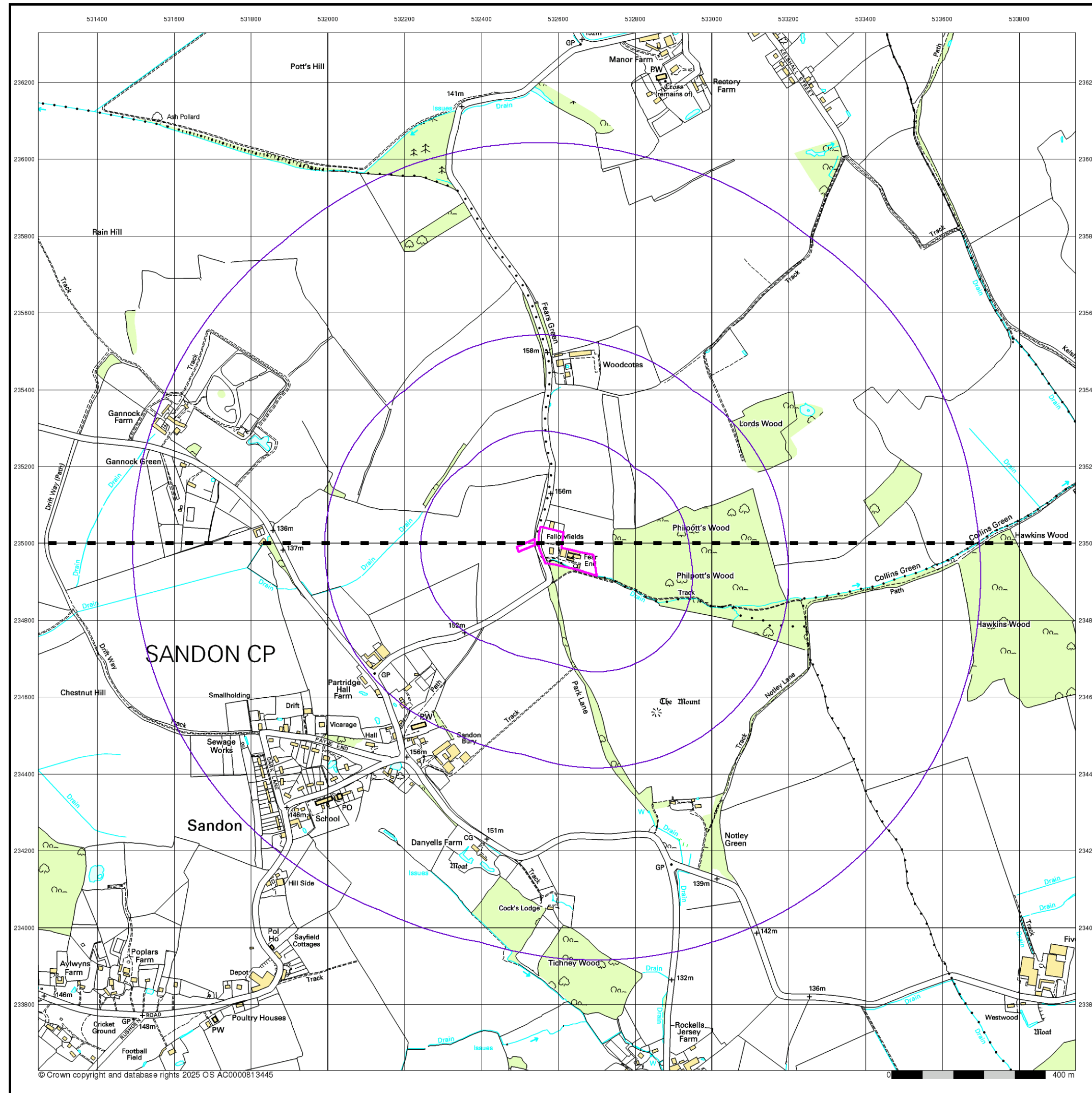
Order Number:	379131012_1_1
Customer Ref:	UK25.7444
National Grid Reference:	532600, 234970
Slice:	A
Site Area (Ha):	1.01
Search Buffer (m):	1000

Site Details

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10k Raster Mapping

Published 2006

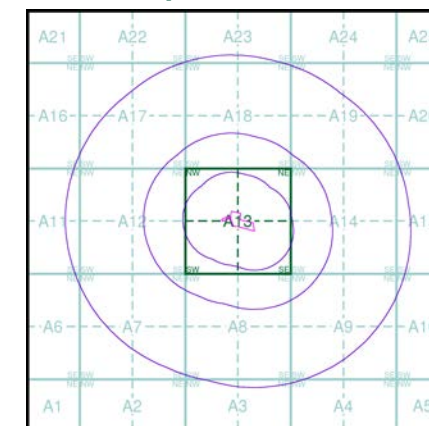
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

TL33NW
2006
1:10,000
TL33SW
2006
1:10,000

Historical Map - Slice A



Order Details

Order Number: 379131012_1_1
Customer Ref: UK25.7444
National Grid Reference: 532600, 234970
Slice: A
Site Area (Ha): 1.01
Search Buffer (m): 1000

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Landmark
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