

LAND CONTAMINATION PHASE 1 DESK STUDY

LAND WEST OF HESLEDEN HALL FARM

MONK HESLEDEN HARTLEPOOL TS27 4TH

On behalf of:

Bolder Developments

Report No.: A230802-R01

Date: August 2023

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1. INTRODUCTION

1.1 Background & Objectives

Adeptus was appointed to undertake a Land Contamination Phase 1 Desk Study on behalf of Bolder Developments, in support of a planning application for development at the site known as Land West of Hesleden Hall Farm (the study site). The report is required to assess the potential for significant contamination affecting the site and ensure suitability for the proposed use.

The objectives of the desk study are to:

- Review past land use on and in proximity to the study site
- Assess the likelihood of contamination, as well as its potential nature and extent
- Evaluate the site geological, environmental and land use setting
- Develop an initial conceptual site model
- Undertake a preliminary risk assessment in line with LCRM guidance
- Determine whether further investigation is required

1.2 Regulatory Framework

Land contamination is a material consideration under the National Planning Policy Framework (2012). This means that local authorities must take the potential or actual presence of contamination into account when considering planning applications.

"Contamination" is defined in BS 10175:2011 as:

presence of a substance or agent, as a result of human activity, in, on or under land, which has the potential to cause harm or to cause pollution.

1.3 Supporting Information

At the time of writing, no third-party reports have been made available to Adeptus.

A site plan is included as Appendix A.

Other sources of information utilised in producing this report are listed as Appendix B.



1. SITE CONTEXT

This section provides a review of the land use on and in the vicinity of the Site, with the purpose of identifying potentially significant current features and environmental constraints.

2.1 Location and Proposals

Table 2-1: Site Particulars

Location	The site is situated in a rural area east of Monk Hesleden.
Area & Coordinates	446097 537292 (centred on, approx.)
Development Proposals	Construction of 3NO detached dwellings with driveways and gardens.



Figure 2-1: Site Location



2.2 Site Reconnaissance

A site walkover was not commissioned by the client. Limited reconnaissance of the site was therefore undertaken via satellite imagery, and the findings are summarised in table below.

Table 2-2: Site Reconnaissance Notes

	Notes		
Current/Recent Land Use	On-site: Appears to be vacant land west of the main farm building complex.		
036	North: Small agricultural buildings with open land beyond.		
	East: Hesleden Farm consists of several interlinked traditional farm buildings recently granted planning permission for use as dwellings.		
	South: Open land and gardens to the farmhouse.		
	West: Open farmland.		
Topography	Appears to be flat and level.		
	Buildings: -		
Ground Cover Proportions On-site	Hardstanding: -		
	Soft Landscaping: 100% - appears to be ruderal vegetation.		
Fuel and/or Chemical Storage	None apparent from satellite imagery.		
Asbestos Containing Material (ACM)	None apparent from satellite imagery.		
Off Site Potential Contaminant Sources	None apparent from satellite imagery		
General Comments	The above planning permission was granted as a lawful development certificate, suggesting the buildings have been under residential use for some time, but only recently with full planning permission.		



3. PAST LAND USE

3.1 Historical Development

Historical Ordnance (OS) Survey map extracts have been examined to provide a summary of significant land use on and in proximity to the site, including industrial features within 100m and potential landfills within 250m.

Where available, more recent aerial photographs have also been reviewed for evidence of relevant land use.

Potentially significant features are noted in the table below. Where more than one instance of the same use occurs in the same direction, only the closest has been described.

Table 3-1: Historical Development Summary

	Map Years Noted			
On-site Source or Feature	First	Last	Description	
Unspecified outbuildings	1897	2003	The structure sits close to what appears to be a field boundary running north to south through the current site bounds and may belong to Hesleden Hall to the east.	
			The first structure is no longer present on the 1919 OS map, but another structure appears close by, against the northern boundary of the current site. Two further small outbuildings appear on 1938 OS map and remain on recent aerial photos.	
Farm buildings	1985	2010	Two large structure which are considered to be portal framed agricultural buildings appear at the centre of the site and remain on a 2000 aerial photo as well as the 2003 OS map. The roofs appear grey in colour and may be fibre cement sheeting.	
			The easternmost of these has been demolished by 2007 ³ , and the remaining one by 2012 ³ .	
			Aerial photos span from 2000 to 2021 and show various unidentifiable items around the buildings and remaining after their demolition, some of which are considered to be silage bails or similar. From 2012 no buildings remain but there is evidence of ground disturbance and possible Made Ground.	

Notes: 1 = earliest reviewed OS map | 2 = most recent reviewed OS map | 3 = aerial photograph

0//	Map Years Noted			
Off-site Source – Distance & Direction	First	Last	Description	
Railway	1857 ¹	1949	The railway is labelled dismantled by 1980 and generally fades into the landscape after this.	
Hesleden Hall – E	1897	Today	Aside from some small additions to their west, the general layout of the buildings appears to have changed very little since the earliest OS maps.	



Sheep wash – 35m E19592003A small shelter or similar labelled sheep wash appears in between Heslseden Hall and the three cottages further west which also appear for the first time on the 1959 OS map and remain today. The wash remains labelled on the 2003 OS map but no building is apparent on a 2000 aerial photo.	also appear for	Heslseden Hall and the three cottages further west which also are the first time on the 1959 OS map and remain today.The wash remains labelled on the 2003 OS map but no building	2003	1959	Sheep wash – 35m E
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Notes: 1 = earliest reviewed OS map | 2 = most recent reviewed OS map | 3 = aerial photograph

3.2 Landfill & Waste Sites

Landfills and other potentially significant waste sites identified within 250m of the site are reviewed in table below.

Table 3-2: Data on Landfill & Waste Sites

Records	Details & Significance
Active or recently closed landfills: 0	
BGS/DOE historical landfills: 0	There are no significant records within the search distance.
Local Authority/OS) historical landfill: 0	
• EA/NRW historical landfills: 0	
• EA/NRW current/recent landfills: 0	
Historical permissioned waste sites: 0	
Active or recently waste sites: 0	
Waste exemptions: 0	

3.3 Industrial Features & Records

Industrial features indicating an increased likelihood of the presence of contamination, pollution incidents, and sites determined as contaminated land by a statutory authority, within 100m, are reviewed in table below.

Table 3-3: Industrial Data

Records	Details & Significance
Current industrial sites: 1	
Current or recent petrol stations: 0	Industrial sites
Electricity cables: 0	The 1 record relates to the sheep wash identified in Section 3.1.
Gas pipelines: 0	
Sites determined as Contaminated Land: 0	There are no significant records within the search distance.
COMAH Sites: 0	
Regulated explosive sites: 0	
Hazardous substance storage: 0	
Integrated Pollution Control (IPC) records: 0	



- Part A(1) permitted installations: 0
- Licensed pollutant releases (Part A(2)/B): 0
- Radioactive substance authorisations: 0
- · Licensed discharges to controlled waters: 0
- Pollutant discharge to surface waters: 0
- Pollutant release to public sewer: 0
- List 1/2 dangerous substances discharge: 0
- Pollution incidents: 0
- Pollution inventory reporting: 0

4. ENVIRONMENTAL SETTING

The site's environmental and geological setting are reviewed characterise probable pathways and receptors, as well as identify relevant contaminant sources.

4.1 Geology & Geohazards

Published Geology

Data held by the British Geological Survey (BGS) indicate the site is underlain by the geological sequence summarised in the table below.

Table 4-1: Summary of Published Geology

Geological Unit	Description	Composition	Location
Superficial/Drift:	Till	Diamicton	On site
Bedrock/Solid:	Roker Formation	Dolostone	On site

Geohazards

Potential health and environmental hazards relating to recorded or unrecorded mine workings, artificial ground and permanent gases are reviewed in the table below.

Potential Geohazard	Details & Significance
Coal Mining Legacy	The site is located within the Development Low Risk Area, as defined by the Coal Authority. No further assessment is generally required in respect of mine gases.
Infilled or Made Ground	No evidence of significant ground workings or infilled voids has been identified.



Ground Gas Potential	The natural geological strata identified above not considered a significant source of permanent ground gases such as methane or carbon dioxide.
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4.2 Controlled Waters

4.2.1 Groundwater

Designated groundwater aquifers underlying the site are reviewed in the table below, along with any licenced abstractions and source protection zones.

Record	ls	Details & Significance
Superficial Aquifer:	Secondary Undifferentiated	Assigned in cases where it has not been possible to attribute either category A or B to a rock type. In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.'
Bedrock Aquifer:	Principal Aquifer	Layers of rock or drift deposits that have high intergranular and/or fracture permeability, meaning they usually provide a high level of water storage and transmission. They may support water supply and/or river base flow on a strategic scale
Groundwater Abstract	ions Licenses: 0	-
Surface Water Abstractions Licenses: 0		
Potable Water Abstractions Licenses: 0		
• The site is not within a	SPZ	

4.2.2 Surface Waters

Local surface water features and flood risk zones are reviewed in the table below.

Table 4-4: Surface Waters & Flood Risk Zones

Surface Waters	Details & Significance
Unnamed watercourse – 220m S	The watercourse is likely to receive surface waters from the site, although after very significant dispersion.
The site is in Flood Zone 1	Very low risk of flooding, with an annual probability according to the EA/NRW of less than 0.1%.

4.3 Protected Sites

4.3.1 Designated Environmental & Heritage Sites



Statutory protected environmental and heritage sites within 250m are reviewed in the table below.

Table 4-5: Statutory Protected Sites

Feature	Details & Significance
Ramsar sites: 0	Designated Ancient Woodland
Special Areas of Conservation (SAC): 0	Hesleden Dene - 186m S
Special Protection Areas (SPA): 0	
National Nature Reserves (NNR): 0	There are no further significant features within the search distance.
Local Nature Reserves (LNR): 0	
Designated Ancient Woodland: 1	
World Heritage Sites: 0	
Listed Buildings: 0	

4.4 Summary Environmental Sensitivity

Table 4-6: Site Sensitivity Assessment

Aspect	Environmental Sensitivity
Hydrogeology	<u><i>High</i></u> . Principal bedrock aquifer overlain with secondary aquifer in superficial deposits. No abstractions locally.
Hydrology	Moderate. Mapped surface waters are at some distance.
Environmental Designations	Moderate. Hesleden Dene - 186m S
Local Land Use	High. Residential immediately east.
Proposed Use	<u>High</u> . Residential with garden.
Overall Environmental Sensitivity:	High



5 INITIAL CONCEPTUAL SITE MODEL

For a conceptual risk of harm to human health or the environment to exist within the context of LCRM, all of the following elements must be present:

- a source i.e., a substance (contaminant(s)) that is capable of causing pollution or adverse health effects;
- a receptor i.e., something which could be adversely affected by the source; and
- a pathway i.e., a route by which the contaminant could come into contact with, or affect, the receptor.

Information on these three elements is used to form an initial conceptual site model (CSM) and identify potentially significant contaminant linkages.

5.1 Pollutant Linkage Assessment

Based on the information presented in sections 2 and 3, the following potential sources, receptors and relevant pathways for exposure are identified in relation to the development.

On-Site Potential Sources of Contamination

Source or Feature	Discussion	Primary CoPC
Unspecified outbuildings	It is possible that these small buildings could have given rise to contamination stemming from their use, maintenance with substances such as creosote, or subsequent demolition.	Metals/metalloids, PAHs
Farm buildings	General storage and small outbuildings associated with a farm are a potential source of contaminants associated with the storage, use and potential release of substances such as fuel, lubricants and herbicides, as well as informal waste disposal.	Metals/metalloids, hydrocarbons, PAHs
Demolition and Made Ground	Demolition of the two large former farm buildings is likely to have resulted in some degree of Made Ground underlying the site, and this could contain ACM from the roofs and similar.	Metals/metalloids, hydrocarbons, PAHs, sulphates
	Such Made Ground is very unlikely to be of sufficient thickness and composition to present a source of significant ground gases.	

Table 5-1: Potential on-site sources and contaminants of potential concern (CoC)

5.1.1 Off-Site Potential Sources of Contamination

Source or Feature	Discussion	Primary CoPC
Hesleden Hall – E	Historical use as a traditional farm buildings is in general considered relatively unlikely to have given rise to significant contamination affecting the study site.	-
Sheep wash – 35m E	Sheep dipping historically used insecticides/pesticides containing persistent contaminants such as organochlorine, organophosphate and synthetic pyrethroids pesticides, formaldehyde, chromium, arsenic and other metals/metalloids. Runoff and residue are very likely to impact the area used, and the possibility of waste disposal affecting adjacent land cannot be ruled out.	Arsenic, chromium, vanadium, OCP, OPP and SP pesticides



2.1.1 Potential Receptors

Potential receptors relevant to the documented history, potential sources, site-setting and proposed use include:

- Human Health: residential end users; nearby land users; construction workers
- Controlled Waters: underlying aquifers; watercourse
- **Property** in the form of buildings and structures
- Flora within soft landscaping
- Ecological or Heritage: Ancient Woodland

2.1.2 Potential Pathways

The primary pathways relevant to the identified potential sources and receptors are:

- Ingestion
- Dermal contact
- Inhalation
- Surface water run-off: leaching/migration
- Surface water infiltration: leaching/migration

Next page -



5.2 Preliminary Risk Assessment

Qualitative assessment of the risks posed by the potentially significant pollutant linkages identified in Section 5.1 is summarised in the table below. Risk classification is a function of the severity of a potential environmental or health effect, and the likelihood or frequency of its occurrence.

Table 5-3. Preliminary Risk Assessment

Source	Pathway	Receptor	Consequence	Likelihood	Classification*	Rationale
Organic and inorganic contaminants	organic ingestion, ontaminants particulate		Medium	Low Likelihood	Moderate Risk	There is the possibility of an elevated short-term risk to construction workers and off-site receptors, from particulates liberated during excavation/construction.
potentially present in soils and/or made ground	inhalation	Residential end	Medium	Likely	Moderate Risk	Development of the site for residential dwellings introduces the possibility of sensitive receptors such as young children being exposed to contaminants in near
	Consumption of home grown produce	users	Medium	Low Likelihood	Moderate/ Low Risk	surface soils should they be present. Similarly, the growing of produce in contaminated media is possible and may lead to ingestion.
	Uptake from root zone	Flora within future gardens	Minor	Low Likelihood	Low Risk	Flora may be affected by contaminants such as phytotoxic metals.
	Migration of vapours via strata, structures or services;	Residential end users	Medium	Unlikely	Low Risk	No suspected sources of volatile contaminants, such as tanks, have been directly identified in proximity to the site. Diesel is not highly volatile and not a potential source of significant vapours.
	subsequent inhalation	subsequent inhalation				It is also likely that any historical near surface sources would have been significantly attenuated by natural processes over time, including volatilsation and microbial degradation.
						The likelihood of sources capable of acute effects on construction workers (e.g. via excavations) is very low.

*in the absence of mitigation or remedial measures



Source	Pathway	Receptor	Consequence	Likelihood	Classification*	Rationale
Cont'd	Diffusion through plastic water supply pipes	Water supply pipes	Medium	Low Likelihood	Moderate/ Low Risk	Water supply pipes may be sited in media containing contaminants capable of permeating standard polyethylene pipes.
	Leaching and/or migration via unsaturated zone	Groundwater	Medium	Low Likelihood	Moderate/ Low Risk	Bedrock underlying the site is designated a Principal Aquifer. Superficial deposits are likely to be of generally low permeability but may contain high permeability zones.
	Leaching and/or migration via and migration via runoff or	Surface waters	Medium	Unlikely	Low Risk	There are no abstractions within 500m and the site is not in an SPZ. Mapped surface water features are at significant distance.
	drainage network					Any Made Ground is likely to be the main source of leachable contaminants, subject to its nature and
	Flooding	Ground/surface waters	Medium	Unlikely	Low Risk	thickness.
Aggressive ground (e.g. sulphate; pH)	Direct contact/ chemical attack	Buildings/ services	Mild	Low Likelihood	Low Risk	If present, Made Ground and/or demolition fill may present a source of aggressive contaminants.
Potential asbestos containing materials in soils	Release of asbestos fibres; subsequent	Site occupants & users	Medium	Low Likelihood	Moderate/ Low Risk	The likelihood of ACM contamination will largely depend on the nature of any Made Ground material present.
	inhalation					If ACM is present, groundworks are likely to liberate/damage these and lead to fibre release.
		Construction workers	Medium	Unlikely	Low Risk	Construction works are subject to separate regulation requiring safe systems of work, with any risk e.g., to site operatives mitigated through the use of PPE.

*in the absence of mitigation or remedial measures



6 CONCLUSIONS

6.1 Risk Assessment Summary

Adeptus was appointed by Bolder Developments to undertake a Geo-Environmental Phase 1 Desk Study in support of a planning application for development at the site known as Land West of Hesleden Hall Farm.

On the basis of the available information, potentially significant contaminant linkages have been identified. However, it is considered that relatively simple mitigation measures should be feasible based on the outcome of subsequent quantitative assessment.

Hesleden Hall east of the study site and some small associated outbuildings on-site predated the earliest OS maps, with the small outbuilding being demolished relatively recently.

Two large modern farm buildings were built on the study site between 1980 and 1985 but demolished between 2010 and 2012. Aerial photos span from 2000 to 2021 and show various unidentifiable items around the buildings and remaining after their demolition, some of which are considered to be silage bails or similar. From 2012 no buildings remain but there is evidence of ground disturbance and possible Made Ground.

Between 1959 and 2003 a sheep wash appeared in between Heslseden Hall and the three cottages which remain further west today. Sheep dipping historically used insecticides/pesticides containing persistent contaminants such as organochlorine, organophosphate and synthetic pyrethroids pesticides, formaldehyde, chromium, arsenic and other metals/metalloids.

The above activities and demolition of the buildings are likely to have resulted in Made ground and some degree of contamination affecting the study site.

N.B.: This summary forms part of the overall risk assessment and should not be viewed or used as an independent report.

6.2 Recommendations

It is recommended that further assessment of the potentially significant contaminant linkages highlighted in Section 5.2 is undertaken in order to further characterise the potential risks identified.

This should be achieved by intrusive investigation to address the potentially significant source areas summarised Section 5.1 and described throughout this report, to enable quantitative screening in respect of the relevant pathways.

A proportionate Phase 2 intrusive site investigation may be undertaken, with the following objectives:

- Characterise any Made Ground, as well as natural strata underlying the site
- Obtain data on soil chemical composition
- Enable environmental monitoring as required
- Update and refine the initial conceptual site model
- Provide data to enable basic waste characterisation in line with waste duty of care requirements if required at the construction stage.

Findings of the Phase 2 investigation and risk assessment will determine whether remediation or mitigation measures are required, in line with LCRM.

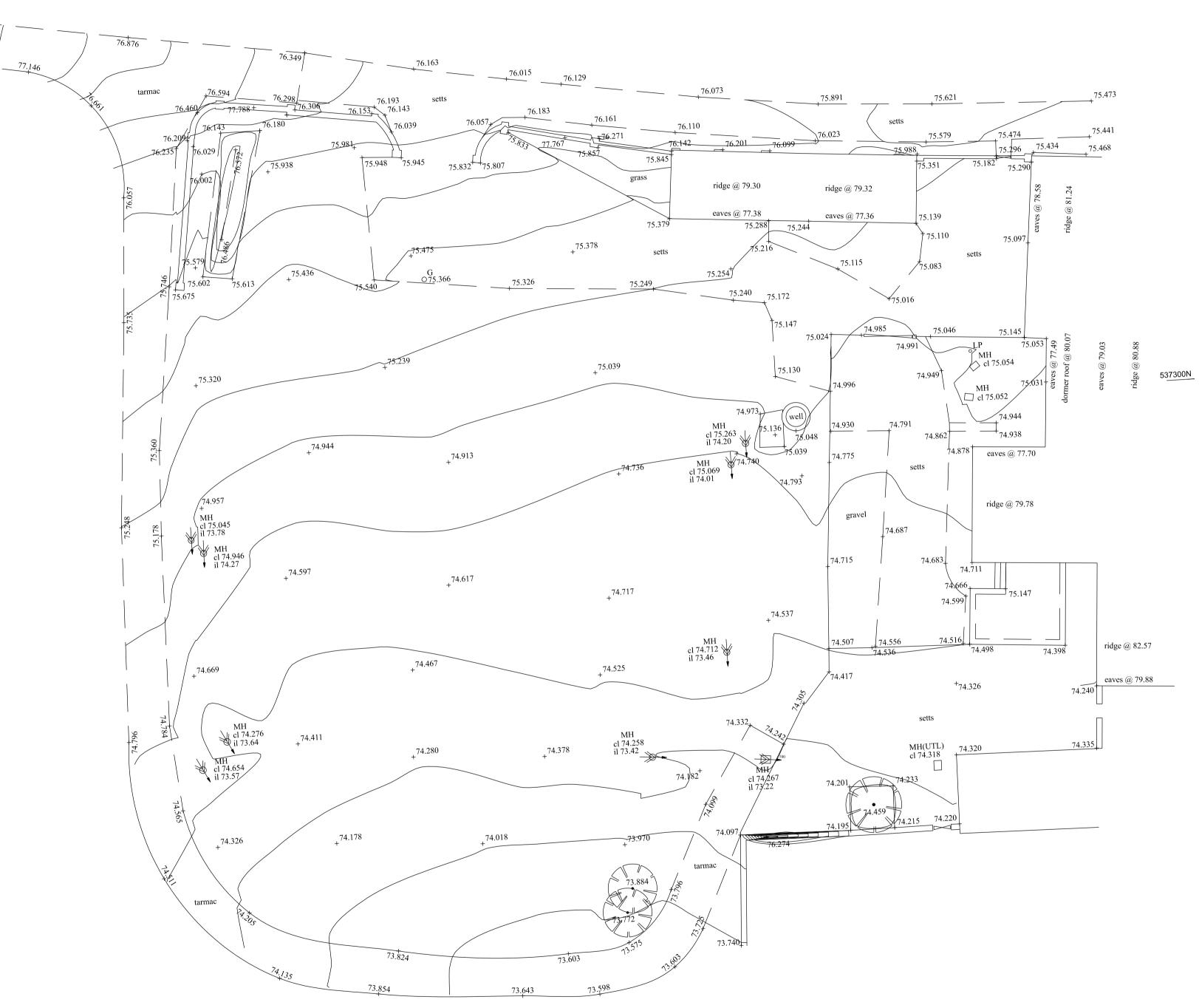
- End of report.

Land Contamination Phase 1 Desk Study

Project: Land West of Hesleden Hall Farm



APPENDIX A – SITE PLAN

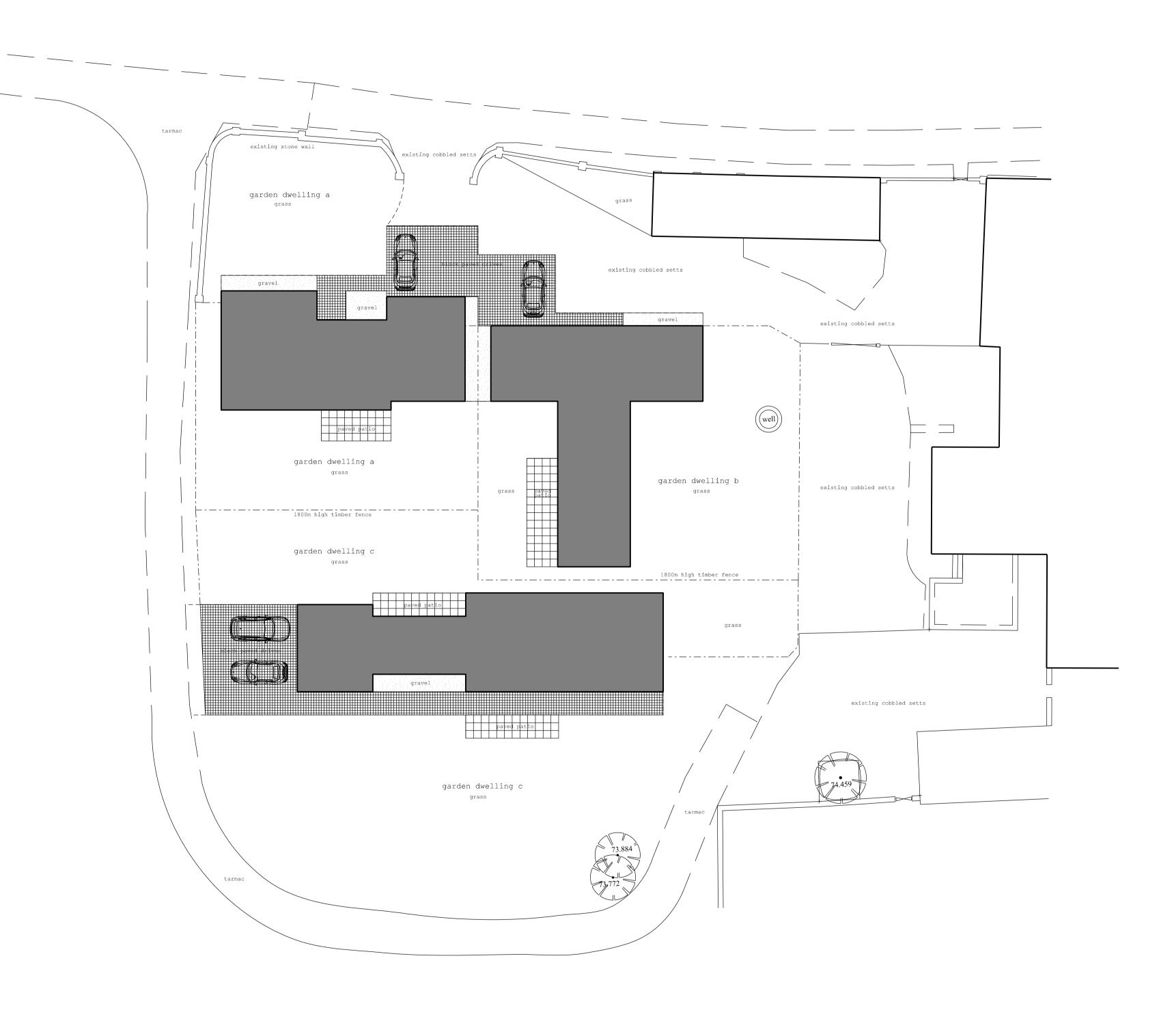


FITZARCHITECTS	6 Pier Point, Ma	+44	lerland, SR6 0PP (0)191 563 7025 urchitects.co.uk	revision:
project: Hesleden Hall	project no: 1488	drawing no:	AL (90) 0020	
drawing: Existing site plan stage: planning	date: March 2020	scale:	1:200 @ A1	

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project: Hesleden Hall	project no: 1488	drawing no:	AL (90) 0030			
drawing: Proposed site plan stage: planning	date: March 2020	scale:	1:200 @ A1			

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APPENDIX B – SUPPORTING INFORMATION

In compiling this report the following data sources have been consulted.

- Groundsure Enviro Insight Report (Appendix B1)
- Historical Ordnance Survey Maps (Appendix B2)
- Ordnance Survey Trade Directories
- British Geological Survey data, maps and memoirs
- Environment Agency and Local Authority designations, registers and permissions
- Site reconnaissance remote

This report is based on information available at the time of writing and is subject to the limitations set out in Appendix C. In general, the listed information sources have been accessed via the Enviro Insight Report.

Land Contamination Phase 1 Desk Study

Project: Land West of Hesleden Hall Farm



Appendix B1 – Enviro Insight Report



Enviro+Geo

BOWES COURT, ROAD LEADING TO HESLEDEN HALL, MONK HESLEDEN, HESLEDEN, TS27 4TH

Ord	ler	Det	ails

Date:	04/08/2023
Your ref:	Land_West_of_Hesleden_Hall_Farm
Our Ref:	GS-4ZJ-IYE-DNX-VK8

Site Details

 Location:
 446097 537292

 Area:
 0.38 ha

 Authority:
 Durham County Council ↗



Contact us with any questions at:



Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
<u>15</u> >	<u>1.1</u> >	Historical industrial land uses >	0	5	10	21	-
17	1.2	Historical tanks	0	0	0	0	-
17	1.3	Historical energy features	0	0	0	0	-
17	1.4	Historical petrol stations	0	0	0	0	-
18	1.5	Historical garages	0	0	0	0	-
18	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
<u>19</u> >	<u>2.1</u> >	Historical industrial land uses >	0	5	12	24	-
21	2.2	Historical tanks	0	0	0	0	-
21	2.3	Historical energy features	0	0	0	0	-
22	2.4	Historical petrol stations	0	0	0	0	-
22	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
23	3.1	Active or recent landfill	0	0	0	0	-
23	3.2	Historical landfill (BGS records)	0	0	0	0	-
23	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
23	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
23	3.5	Historical waste sites	0	0	0	0	-
24	3.6	Licensed waste sites	0	0	0	0	-
24	3.7	Waste exemptions	0	0	0	0	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
<u>25</u> >	<u>4.1</u> >	Recent industrial land uses >	0	1	0	-	-
26	4.2	Current or recent petrol stations	0	0	0	0	-
26	4.3	Electricity cables	0	0	0	0	-
26	4.4	Gas pipelines	0	0	0	0	-



26	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
27	4.7	Regulated explosive sites	0	0	0	0	-
27	4.8	Hazardous substance storage/usage	0	0	0	0	-
27	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
27	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
27	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
28	4.12	Radioactive Substance Authorisations	0	0	0	0	-
<u>28</u> >	<u>4.13</u> >	Licensed Discharges to controlled waters >	0	0	0	2	-
28	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
29	4.15	Pollutant release to public sewer	0	0	0	0	-
29	4.16	List 1 Dangerous Substances	0	0	0	0	-
29	4.17	List 2 Dangerous Substances	0	0	0	0	-
29	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
29	4.19	Pollution inventory substances	0	0	0	0	-
30	4.20	Pollution inventory waste transfers	0	0	0	0	-
30	4.21	Pollution inventory radioactive waste	0	0	0	0	
30	7.21	Poliution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	- 500-2000m
		·	On site		50-250m		- 500-2000m
Page	Section	<u>Hydrogeology</u> >	On site Identified (0-50m	50-250m		- 500-2000m
Page <u>31</u> >	Section <u>5.1</u> >	Hydrogeology > Superficial aquifer >	On site Identified (Identified (^{0-50m} within 500m	50-250m		- 500-2000m
Page <u>31</u> > <u>33</u> >	Section 5.1 > 5.2 >	Hydrogeology > Superficial aquifer > Bedrock aquifer >	On site Identified (Identified (0-50m within 500m within 500m within 50m)	50-250m		- 500-2000m
Page <u>31</u> > <u>33</u> > <u>34</u> >	Section <u>5.1</u> > <u>5.2</u> > <u>5.3</u> >	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability >	On site Identified (Identified (Identified (0-50m within 500m within 500m within 50m) within 0m)	50-250m		- 500-2000m
Page <u>31</u> > <u>33</u> > <u>34</u> > <u>35</u> >	Section 5.1 > 5.2 > 5.3 > 5.4 >	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk >	On site Identified (Identified (Identified (Identified (0-50m within 500m within 500m within 50m) within 0m)	50-250m		- 500-2000m
Page <u>31</u> > <u>33</u> > <u>34</u> > <u>35</u> > <u>35</u> >	Section <u>5.1</u> > <u>5.2</u> > <u>5.3</u> > <u>5.4</u> > <u>5.5</u> >	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk > Groundwater vulnerability- local information >	On site Identified (Identified (Identified (Identified (0-50m within 500m within 500m within 50m) within 0m) within 0m)	50-250m)	250-500m	
Page 31 33 34 35 35 35 35 35 36	Section 5.1 > 5.2 > 5.3 > 5.4 > 5.5 > 5.6	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk > Groundwater vulnerability- local information > Groundwater abstractions	On site Identified (Identified (Identified (Identified (Identified (0-50m within 500m within 500m within 50m) within 0m) within 0m)	50-250m))	250-500m	0
Page 31 33 34 35 35 36 36	Section 5.1 > 5.2 > 5.3 > 5.4 > 5.5 > 5.6 5.7	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk > Groundwater vulnerability- local information > Groundwater abstractions Surface water abstractions	On site Identified (Identified (Identified (Identified (0 0	0-50m within 500m within 500m within 50m) within 0m) within 0m) 0 0	50-250m)) 0 0	250-500m 0 0	0 0
Page 31 33 34 35 35 36 36 36 36 36 36 36 36 36 36 36 36 36	Section 5.1 > 5.2 > 5.3 > 5.4 > 5.6 5.6 5.7 5.8	Hydrogeology >Superficial aquifer >Bedrock aquifer >Groundwater vulnerability >Groundwater vulnerability- soluble rock risk >Groundwater vulnerability- local information >Groundwater abstractionsSurface water abstractionsPotable abstractions	On site Identified (Identified (Identified (Identified (0 0 0 0	0-50m within 500m within 500m within 50m) within 0m) within 0m) 0 0 0	50-250m)) 0 0 0 0	250-500m 0 0	0 0
Page 31 33 34 35 36 36 36 36 36 36 36 36 36 36 36 36 36 36 36 36	Section 5.1 > 5.2 > 5.3 > 5.4 > 5.6 5.7 5.8 5.9	Hydrogeology >Superficial aquifer >Bedrock aquifer >Groundwater vulnerability >Groundwater vulnerability- soluble rock risk >Groundwater vulnerability- local information >Groundwater abstractionsSurface water abstractionsPotable abstractionsSource Protection Zones	On site Identified (Identified (Identified (Identified (0 0 0 0 0 0	0-50m within 500m within 500m) within 50m) within 0m) 0 0 0 0 0	50-250m)) 0 0 0 0 0 0	250-500m 0 0 0	0 0
Page 31 > 33 > 34 > 35 > 36 36 36 36 36 36 37	Section 5.1 > 5.2 > 5.3 > 5.4 > 5.6 5.7 5.8 5.9 5.10	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk > Groundwater vulnerability- local information > Groundwater abstractions Surface water abstractions Potable abstractions Source Protection Zones Source Protection Zones (confined aquifer)	On site Identified (Identified (Identified (Identified (0 0 0 0 0 0 0 0	0-50m within 500m within 500m) within 50m) within 0m) 0 0 0 0 0 0 0	50-250m)) 0 0 0 0 0 0 0 0	250-500m 0 0 0 0 0 0	0 0 0 -





<u>39</u> >	<u>6.2</u> >	Surface water features >	0	1	2	-	-
<u>39</u> >	<u>6.3</u> >	WFD Surface water body catchments >	1	-	-	-	-
<u>39</u> >	<u>6.4</u> >	WFD Surface water bodies >	0	0	1	-	-
<u>40</u> >	<u>6.5</u> >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
41	7.1	Risk of flooding from rivers and the sea	None (with	in 50m)			
41	7.2	Historical Flood Events	0	0	0	-	-
41	7.3	Flood Defences	0	0	0	-	-
42	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
42	7.5	Flood Storage Areas	0	0	0	-	-
43	7.6	Flood Zone 2	None (with	in 50m)			
43	7.7	Flood Zone 3	None (with	in 50m)			
Page	Section	Surface water flooding >					
<u>44</u> >	<u>8.1</u> >	Surface water flooding >	1 in 30 yea	r, 0.3m - 1.0r	m (within 50	m)	
Page	Section	Groundwater flooding >					
<u>46</u> >	<u>9.1</u> >	<u>Groundwater flooding</u> >	Low (withir	1 50m)			
Page	Section	Environmental designations	On site	0-50m	50-250m		
		Environmental designations >	On site	0 5011	00 20011	250-500m	500-2000m
<u>47</u> >	<u>10.1</u> >	Sites of Special Scientific Interest (SSSI) >	0	0	0	250-500m 0	500-2000m 2
<u>47</u> > <u>48</u> >	<u>10.1</u> > <u>10.2</u> >	-					
		Sites of Special Scientific Interest (SSSI) >	0	0	0	0	2
<u>48</u> >	<u>10.2</u> >	Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) >	0	0	0	0	2
<u>48</u> > <u>48</u> >	<u>10.2</u> > <u>10.3</u> >	Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) > Special Areas of Conservation (SAC) >	0 0 0	0 0 0	0 0 0	0 0 0	2 1 1
<u>48</u> > <u>48</u> > <u>49</u> >	<u>10.2</u> > <u>10.3</u> > <u>10.4</u> >	Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) > Special Areas of Conservation (SAC) > Special Protection Areas (SPA) >	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	2 1 1 2
48 > 48 > 49 > 49 >	10.2 > 10.3 > 10.4 > 10.5 >	Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) > Special Areas of Conservation (SAC) > Special Protection Areas (SPA) > National Nature Reserves (NNR) >	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0	2 1 1 2 1
48 > 48 > 49 > 49 > 50 >	10.2 10.3 10.4 10.5 10.6	Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) > Special Areas of Conservation (SAC) > Special Protection Areas (SPA) > National Nature Reserves (NNR) > Local Nature Reserves (LNR) >	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	2 1 1 2 1 2 2
48 > 48 > 49 > 49 > 50 > 50 >	10.2 10.3 10.4 10.5 10.6 10.7	Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) > Special Areas of Conservation (SAC) > Special Protection Areas (SPA) > National Nature Reserves (NNR) > Local Nature Reserves (LNR) > Designated Ancient Woodland >			0 0 0 0 0 0 1	0 0 0 0 0 0 1	2 1 1 2 1 2 5
48 > 48 > 49 > 49 > 50 > 50 > 51 >	10.2 10.3 10.4 10.5 10.6 10.7 10.8	Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) > Special Areas of Conservation (SAC) > Special Protection Areas (SPA) > National Nature Reserves (NNR) > Local Nature Reserves (LNR) > Designated Ancient Woodland > Biosphere Reserves			0 0 0 0 0 0 1 0	0 0 0 0 0 0 1 0	2 1 1 2 1 2 5 0
48 > 48 > 49 > 49 > 50 > 50 > 51 51	10.2 10.3 10.4 10.5 10.6 10.7 10.8 10.9	Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) > Special Areas of Conservation (SAC) > Special Protection Areas (SPA) > National Nature Reserves (NNR) > Local Nature Reserves (LNR) > Designated Ancient Woodland > Biosphere Reserves Forest Parks			0 0 0 0 0 0 1 0 0	0 0 0 0 0 0 1 0 0	2 1 1 2 1 2 5 0 0



52	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
52	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
52	10.15	Nitrate Sensitive Areas	0	0	0	0	0
52	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
<u>53</u> >	<u>10.17</u> >	SSSI Impact Risk Zones >	1	-	-	-	-
<u>54</u> >	<u>10.18</u> >	<u>SSSI Units</u> >	0	0	0	0	5
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
57	11.1	World Heritage Sites	0	0	0	-	-
58	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
58	11.3	National Parks	0	0	0	-	-
<u>58</u> >	<u>11.4</u> >	Listed Buildings >	0	1	0	-	-
59	11.5	Conservation Areas	0	0	0	-	-
59	11.6	Scheduled Ancient Monuments	0	0	0	-	-
59	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
<u>60</u> >	<u>12.1</u> >	Agricultural Land Classification >	Grade 3 (w	ithin 250m)			
<u>60</u> > 61	<u>12.1</u> > 12.2	Agricultural Land Classification > Open Access Land	Grade 3 (w	ithin 250m) 0	0	-	-
					0	-	-
61	12.2	Open Access Land	0	0		-	- - -
61 61	12.2 12.3	Open Access Land Tree Felling Licences	0	0	0	-	- - -
61 61 61	12.2 12.3 12.4	Open Access Land Tree Felling Licences Environmental Stewardship Schemes	0 0 0	0 0 0	0 0	- - - 250-500m	- - - 500-2000m
61 61 61 <u>61</u> >	12.2 12.3 12.4 <u>12.5</u> >	Open Access Land Tree Felling Licences Environmental Stewardship Schemes <u>Countryside Stewardship Schemes</u> >	0 0 0	0 0 0 1	0 0 1	- - - 250-500m	- - - 500-2000m
61 61 61 <u>61</u> > Page	12.2 12.3 12.4 12.5 > Section	Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes > Habitat designations >	0 0 0 0 On site	0 0 0 1 0-50m	0 0 1 50-250m	- - - 250-500m -	- - - 500-2000m -
61 61 61 61 > Page 62 >	12.2 12.3 12.4 12.5 > Section 13.1 >	Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes > Habitat designations > Priority Habitat Inventory >	0 0 0 0 0 0 0 0	0 0 0 1 0-50m	0 0 1 50-250m 4	- - - 250-500m - -	- - - 500-2000m - -
61 61 61 61 > Page 62 > 63	12.2 12.3 12.4 12.5 > Section 13.1 > 13.2	Open Access LandTree Felling LicencesEnvironmental Stewardship SchemesCountryside Stewardship Schemes >Habitat designations >Priority Habitat Inventory >Habitat Networks	0 0 0 0 0 0 0 0	0 0 0 1 0-50m 0 0	0 0 1 50-250m 4 0	- - - 250-500m - - -	- - - 500-2000m - - - -
61 61 61 61 > Page 62 > 63 63	12.2 12.3 12.4 12.5 > Section 13.1 > 13.2 13.3 >	Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes > Habitat designations > Priority Habitat Inventory > Habitat Networks Open Mosaic Habitat >	0 0 0 0 0 0 0 0 0	0 0 0 1 0-50m 0 0	0 0 1 50-250m 4 0 1	- - - 250-500m - - - - - - - - - - - - - - - - - -	- - - 500-2000m - - - - - - - - - - - -
61 61 61 > Page 62 > 63 63 63 >	12.2 12.3 12.4 12.5 > Section 13.1 > 13.2 13.3 > 13.4	Open Access LandTree Felling LicencesEnvironmental Stewardship SchemesCountryside Stewardship Schemes >Habitat designations >Priority Habitat Inventory >Habitat NetworksOpen Mosaic Habitat >Limestone Pavement Orders	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 0-50m 0 0 0 0	0 0 1 50-250m 4 0 1 0 50-250m		
61 61 61 > Page 62 > 63 63 63 Page	12.2 12.3 12.4 12.5 > Section 13.2 13.2 13.4 Section	Open Access LandTree Felling LicencesEnvironmental Stewardship SchemesCountryside Stewardship Schemes >Habitat designations >Priority Habitat Inventory >Habitat NetworksOpen Mosaic Habitat >Limestone Pavement OrdersGeology 1:10,000 scale >	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 0-50m 0 0 0 0 0	0 0 1 50-250m 4 0 1 0 50-250m		
61 61 61 > Page 62 > 63 63 63 Page 64 >	<pre>12.2 12.3 12.4 12.5 > Section 13.1 > 13.2 13.4 13.4 Section</pre>	Open Access LandTree Felling LicencesEnvironmental Stewardship SchemesCountryside Stewardship Schemes >Habitat designations >Priority Habitat Inventory >Habitat NetworksOpen Mosaic Habitat >Limestone Pavement OrdersGeology 1:10,000 scale >10k Availability >	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 0-50m 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 50-250m 4 0 1 0 50-250m 50-250m	- - - 250-500m	



<u>68</u> >	<u>14.4</u> >	Landslip (10k) >	0	0	0	3	-
<u>70</u> >	<u>14.5</u> >	Bedrock geology (10k) >	1	0	0	0	-
71	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
<u>72</u> >	<u>15.1</u> >	<u>50k Availability</u> >	Identified (within 500m)		
73	15.2	Artificial and made ground (50k)	0	0	0	0	-
73	15.3	Artificial ground permeability (50k)	0	0	-	-	-
<u>74</u> >	<u>15.4</u> >	Superficial geology (50k) >	1	0	1	6	-
<u>75</u> >	<u>15.5</u> >	Superficial permeability (50k) >	Identified (within 50m)			
75	15.6	Landslip (50k)	0	0	0	0	-
75	15.7	Landslip permeability (50k)	None (with	in 50m)			
<u>76</u> >	<u>15.8</u> >	Bedrock geology (50k) >	1	0	0	0	-
<u>77</u> >	<u>15.9</u> >	Bedrock permeability (50k) >	Identified (within 50m)				
77	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
78	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence >					
<u>79</u> >	<u>17.1</u> >	<u>Shrink swell clays</u> >	Low (withir	n 50m)			
<u>80</u> >	<u>17.2</u> >	<u>Running sands</u> >	Very low (w	vithin 50m)			
<u>81</u> >	<u>17.3</u> >	<u>Compressible deposits</u> >	Negligible (within 50m)			
<u>82</u> >	<u>17.4</u> >	<u>Collapsible deposits</u> >	Very low (w	vithin 50m)			
<u>83</u> >	<u>17.5</u> >	Landslides >	Very low (w	vithin 50m)			
<u>84</u> >	<u>17.6</u> >	Ground dissolution of soluble rocks >	Very low (w	vithin 50m)			
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
<u>86</u> >	<u>18.1</u> >	<u>BritPits</u> >	0	0	0	3	-
<u>87</u> >	<u>18.2</u> >	Surface ground workings >	0	5	8	-	-
88	18.3	Underground workings	0	0	0	0	0
88	18.4	Underground mining extents	0	0	0	0	-
88	18.5	Historical Mineral Planning Areas	0	0	0	0	-





89	18.6	Non-coal mining	0	0	0	0	0
89	18.7	JPB mining areas	None (with	iin 0m)			
89	18.8	The Coal Authority non-coal mining	0	0	0	0	-
89	18.9	Researched mining	0	0	0	0	-
90	18.10	Mining record office plans	0	0	0	0	-
90	18.11	BGS mine plans	0	0	0	0	-
<u>90</u> >	<u>18.12</u> >	<u>Coal mining</u> >	Identified (within 0m)			
90	18.13	Brine areas	None (with	iin 0m)			
91	18.14	Gypsum areas	None (with	iin 0m)			
91	18.15	Tin mining	None (with	nin 0m)			
91	18.16	Clay mining	None (with	in 0m)			
Page	Section	Ground cavities and sinkholes >	On site	0-50m	50-250m	250-500m	500-2000m
92	19.1	Natural cavities	0	0	0	0	-
93	19.2	Mining cavities	0	0	0	0	0
93	19.3	Reported recent incidents	0	0	0	0	-
<u>93</u> >	<u>19.4</u> >	<u>Historical incidents</u> >	0	0	2	1	-
94	19.5	National karst database	0	0	0	0	-
Page	Section	<u>Radon</u> >					
<u>95</u> >	<u>20.1</u> >	Radon >	Less than 1	% (within On	n)		
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
<u>97</u> >	<u>21.1</u> >	BGS Estimated Background Soil Chemistry >	1	0	-	-	-
97	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
97	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	<u>Railway infrastructure and projects</u> >	On site	0-50m	50-250m	250-500m	500-2000m
98	22.1	Underground railways (London)	0	0	0	-	-
98	22.2	Underground railways (Non-London)	0	0	0	-	-
99	22.3	Railway tunnels	0	0	0	-	-
<u>99</u> >	<u>22.4</u> >	Historical railway and tunnel features >	0	0	5	-	-
99	22.5	Royal Mail tunnels	0	0	0	-	-





<u>100</u> >	<u>22.6</u> >	Historical railways >	0	2	0	-	-
100	22.7	Railways	0	0	0	-	-
100	22.8	Crossrail 1	0	0	0	0	-
100	22.9	Crossrail 2	0	0	0	0	-
101	22.10	HS2	0	0	0	0	-







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Recent aerial photograph



Capture Date: 19/04/2021 Site Area: 0.38ha



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





Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Recent site history - 2018 aerial photograph



Capture Date: 18/07/2018 Site Area: 0.38ha



Contact us with any questions at: info@groundsure.com 7 01273 257 755





Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Recent site history - 2012 aerial photograph



Capture Date: 30/03/2012 Site Area: 0.38ha



Contact us with any questions at: info@groundsure.com 7 01273 257 755





Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Recent site history - 2007 aerial photograph



Capture Date: 11/09/2007 Site Area: 0.38ha



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





Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Recent site history - 2000 aerial photograph



Capture Date: 07/05/2000 Site Area: 0.38ha



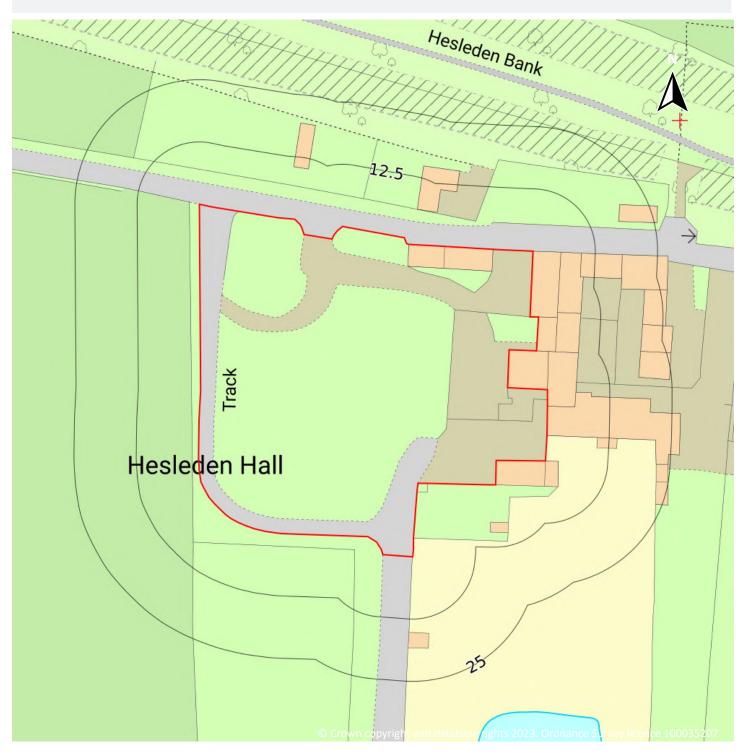
Contact us with any questions at: <u>info@groundsure.com</u> ↗ 01273 257 755





Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

OS MasterMap site plan



Site Area: 0.38ha







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

1 Past land use



1.1 Historical industrial land uses

Records within 500m

36

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
А	9m NE	Cuttings	1940	1358336







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

A11m NECuttings18571355887A11m NECuttings19221400750A14m NECuttings19801405141A21m NECuttings18981399253B71m ERallway Sidings1922 - 194013844391133m ERallway Sidings198013912782147m SWUnspecified Hole1898 - 19221340825B152m ERallway Building19801322539C189m ECuttings19201353797C189m ECuttings19401360352C192m ECuttings19401360352C195m ECuttings19801376456D212m SUnspecified Old Quarry1922135742C228m ECuttings1980139604D228m SUnspecified Old Quarry19801336604D291m SEUnspecified Quarry19801309754D295m SEUnspecified Quarry19801309754D295m SEUnspecified Old Quarry19801309754D295m SEUnspecified Old Quarry19801312100D295m SEUnspecified Pit19801312100D308m SUnspecified Pit19801312100E313m EUnspecified Pit19801391448E313m EUnspecified Pit19401379499F340m SEUnspecified P	ID	Location	Land use	Dates present	Group ID
A 14m NE Cuttings 1980 1405141 A 21m NE Cuttings 1898 1399253 B 71m E Railway Sidings 1922 - 1940 1384439 1 133m E Railway Sidings 1980 1391278 2 147m SW Unspecified Hole 1898 - 1922 1340825 B 152m E Railway Building 1980 1322539 C 189m E Cuttings 1922 1353797 C 189m E Cuttings 1940 1360352 C 192m E Cuttings 1940 1360352 C 192m E Cuttings 1980 1376456 D 212m S Unspecified Old Quarry 1922 135742 C 289m E Cuttings 1980 139888 3 262m SW Unspecified Hole 1980 139808 4 269m S Unspecified Quarry 1980 130010 D 291m SE Unspecified Old	А	11m NE	Cuttings	1857	1355887
A 21m NE Cuttings 1898 1399253 B 71m E Railway Sidings 1922 - 1940 1384439 1 133m E Railway Sidings 1980 1391278 2 147m SW Unspecified Hole 1898 - 1922 1340825 B 152m E Railway Building 1980 1322539 C 189m E Cuttings 1922 1353797 C 189m E Cuttings 1857 1361457 C 192m E Cuttings 1940 1360352 D 212m S Unspecified Old Quarry 1922 135742 C 228m E Cuttings 1980 1394578 4 269m S Unspecified Pit 1980 1300754 D 291m SE Unspecified Quarry	А	11m NE	Cuttings	1922	1400750
B71m ERailway Sidings1922 - 194013844391133m ERailway Sidings198013912782147m SWUnspecified Hole1898 - 19221340825B152m ERailway Building19801322539C189m ECuttings19221353797C189m ECuttings19221353797C189m ECuttings19401360352C192m ECuttings19401360352C195m ECuttings19801396364D212m SUnspecified Old Quarry1922135742C228m ECuttings1980139604D291m SEUnspecified Pit19801336604D291m SEUnspecified Quarry1980130754D295m SEUnspecified Quarry19401372934D295m SEUnspecified Old Quarry19401372934D296m SEUnspecified Pit19801306595D308m SUnspecified Pit19801312100E313m EUnspecified Pit19801391448E313m EUnspecified Pit19401379499F349m SEUnspecified Pit19401379499	А	14m NE	Cuttings	1980	1405141
1133m ERailway Sidings198013912782147m SWUnspecified Hole1898 - 19221340825B152m ERailway Building19801322539C189m ECuttings19221353797C189m ECuttings19221353797C192m ECuttings19401360352C192m ECuttings19401360352C195m ECuttings18981376456D212m SUnspecified Old Quarry19221357242C228m ECuttings198013989883262m SWUnspecified Hole198013945784269m SUnspecified Quarry19801300754D291m SEUnspecified Ground Workings1980130754D295m SEUnspecified Old Quarry19401372934D295m SEUnspecified Pit19801306595D308m SUnspecified Pit19801312100E313m EUnspecified Pit19801312100E313m EUnspecified Pit19801391448E313m EUnspecified Pit19401379499F349m SEUnspecified Old Quarry1922-1940136039	А	21m NE	Cuttings	1898	1399253
2 147m SW Unspecified Hole 1898 - 1922 1340825 B 152m E Railway Building 1980 1322539 C 189m E Cuttings 1922 1353797 C 189m E Cuttings 1857 1361457 C 192m E Cuttings 1940 1360352 C 192m E Cuttings 1898 1376456 D 212m S Unspecified Old Quarry 1922 135742 C 228m E Cuttings 1980 1398988 3 262m SW Unspecified Hole 1980 1394578 4 269m S Unspecified Pit 1980 1336604 D 291m SE Unspecified Quarry 1898 1320010 D 295m SE Unspecified Quarry 1980 1309754 D 295m SE Unspecified Old Quarry 1940 1372934 D 296m SE Unspecified Pit 1980 1312100 E 313m E	В	71m E	Railway Sidings	1922 - 1940	1384439
B 152m E Railway Building 1980 1322539 C 189m E Cuttings 1922 1353797 C 189m E Cuttings 1857 1361457 C 192m E Cuttings 1940 1360352 C 195m E Cuttings 1898 1376456 D 212m S Unspecified Old Quarry 1922 1357242 C 228m E Cuttings 1980 1398988 3 262m SW Unspecified Old Quarry 1980 1394578 4 269m S Unspecified Plt 1980 1320010 D 291m SE Unspecified Quarry 1898 1320010 D 291m SE Unspecified Ground Workings 1980 130604 D 295m SE Unspecified Old Quarry 1940 1372934 D 299m SE Cuttings 1980 1306595 D 308m S Unspecified Plt 1980 1312100 E 313m E	1	133m E	Railway Sidings	1980	1391278
C 189m E Cuttings 1922 1353797 C 189m E Cuttings 1857 1361457 C 192m E Cuttings 1940 1360352 C 195m E Cuttings 1898 1376456 D 212m S Unspecified Old Quarry 1922 1357242 C 228m E Cuttings 1980 1398988 3 262m SW Unspecified Hole 1980 1394578 4 269m S Unspecified Quarry 1980 1336604 D 291m SE Unspecified Quarry 1898 1320010 D 295m SE Unspecified Quarry 1898 1320010 D 295m SE Unspecified Quarry 1940 1372934 D 296m SE Unspecified Heap 1980 1306595 D 308m S Unspecified Pit 1980 1312100 E 313m E Unspecified Pit 1980 1391448 E 313m E U	2	147m SW	Unspecified Hole	1898 - 1922	1340825
C 189m E Cuttings 1857 1361457 C 192m E Cuttings 1940 1360352 C 195m E Cuttings 1898 1376456 D 212m S Unspecified Old Quarry 1922 1357242 C 228m E Cuttings 1980 1398988 3 262m SW Unspecified Hole 1980 1394578 4 269m S Unspecified Pit 1980 1336604 D 291m SE Unspecified Quarry 1898 1320010 D 295m SE Unspecified Quarry 1898 1320010 D 295m SE Unspecified Quarry 1980 1309754 D 295m SE Unspecified Old Quarry 1940 1372934 D 299m SE Cuttings 1980 1306595 D 308m S Unspecified Heap 1980 1312100 E 313m E Unspecified Pit 1980 1391448 E 313m E	В	152m E	Railway Building	1980	1322539
C 192m E Cuttings 1940 1360352 C 195m E Cuttings 1898 1376456 D 212m S Unspecified Old Quarry 1922 1357242 C 228m E Cuttings 1980 1398988 3 262m SW Unspecified Hole 1980 1394578 4 269m S Unspecified Pit 1980 1336604 D 291m SE Unspecified Quarry 1898 1320010 D 291m SE Unspecified Quarry 1898 1320010 D 295m SE Unspecified Ground Workings 1980 1309754 D 296m SE Unspecified Old Quarry 1940 1372934 D 296m SE Unspecified Old Quarry 1980 1312100 E 313m E Unspecified Pit 1980 1391448 E 313m E Unspecified Pit 1940 1379499 F 349m SE Unspecified Old Quarry 1922 - 1940 1363039	С	189m E	Cuttings	1922	1353797
C 195m E Cuttings 1898 1376456 D 212m S Unspecified Old Quarry 1922 1357242 C 228m E Cuttings 1980 1398988 3 262m SW Unspecified Hole 1980 1394578 4 269m S Unspecified Pit 1980 1336604 D 291m SE Unspecified Quarry 1898 1320010 D 291m SE Unspecified Ground Workings 1980 1309754 D 295m SE Unspecified Ground Workings 1980 1302010 D 295m SE Unspecified Ground Workings 1980 1309754 D 296m SE Unspecified Heap 1980 1306595 D 308m S Unspecified Heap 1980 1312100 E 313m E Unspecified Pit 1980 1391448 E 313m E Unspecified Pit 1940 1379499 F 349m SE Unspecified Old Quarry 1922 - 1940 1363039	С	189m E	Cuttings	1857	1361457
D 212m S Unspecified Old Quarry 1922 1357242 C 228m E Cuttings 1980 1398988 3 262m SW Unspecified Hole 1980 1394578 4 269m S Unspecified Pit 1980 1336604 D 291m SE Unspecified Quarry 1898 1320010 D 295m SE Unspecified Ground Workings 1980 1309754 D 295m SE Unspecified Quarry 1940 1372934 D 299m SE Cuttings 1980 1306595 D 308m S Unspecified Heap 1980 1312100 E 313m E Unspecified Pit 1980 1391448 E 313m E Unspecified Pit 1940 1379499 F 349m SE Unspecified Old Quarry 1940 1379499	С	192m E	Cuttings	1940	1360352
C228m ECuttings198013989883262m SWUnspecified Hole198013945784269m SUnspecified Pit19801336604D291m SEUnspecified Quarry18981320010D295m SEUnspecified Ground Workings19801309754D296m SEUnspecified Old Quarry19401372934D299m SECuttings19801306595D308m SUnspecified Heap19801312100E313m EUnspecified Pit19801391448E313m EUnspecified Pit19401379499F349m SEUnspecified Old Quarry1922-19401363039	С	195m E	Cuttings	1898	1376456
3 262m W Unspecified Hole 1980 1394578 4 269m S Unspecified Pit 1980 1336604 D 291m SE Unspecified Quarry 1898 1320010 D 295m SE Unspecified Ground Workings 1980 1309754 D 295m SE Unspecified Old Quarry 1940 1372934 D 296m SE Unspecified Old Quarry 1980 1306595 D 299m SE Cuttings 1980 1312100 E 313m E Unspecified Pit 1980 13191448 E 313m E Unspecified Pit 1940 1379499 F 349m SE Unspecified Old Quarry 1922 - 1940 1363039	D	212m S	Unspecified Old Quarry	1922	1357242
4 269m S Unspecified Pit 1980 1336604 D 291m SE Unspecified Quarry 1898 1320010 D 295m SE Unspecified Ground Workings 1980 1309754 D 296m SE Unspecified Old Quarry 1940 1372934 D 296m SE Unspecified Old Quarry 1980 1306595 D 299m SE Cuttings 1980 1312100 E 313m E Unspecified Pit 1980 1391448 E 313m E Unspecified Pit 1940 1379499 F 349m SE Unspecified Old Quarry 1922 - 1940 1363039	С	228m E	Cuttings	1980	1398988
D291m SEUnspecified Quarry18981320010D295m SEUnspecified Ground Workings19801309754D296m SEUnspecified Old Quarry19401372934D299m SECuttings19801306595D308m SUnspecified Heap19801312100E313m EUnspecified Pit19801391448F349m SEUnspecified Old Quarry1922-19401363039	3	262m SW	Unspecified Hole	1980	1394578
D295m SEUnspecified Ground Workings19801309754D296m SEUnspecified Old Quarry19401372934D299m SECuttings19801306595D308m SUnspecified Heap19801312100E313m EUnspecified Pit19801391448E313m EUnspecified Pit19401379499F349m SEUnspecified Old Quarry1922-19401363039	4	269m S	Unspecified Pit	1980	1336604
D 296m SE Unspecified Old Quarry 1940 1372934 D 299m SE Cuttings 1980 1306595 D 308m S Unspecified Heap 1980 1312100 E 313m E Unspecified Pit 1980 1391448 F 349m SE Unspecified Old Quarry 1940 1379499	D	291m SE	Unspecified Quarry	1898	1320010
D299m SECuttings19801306595D308m SUnspecified Heap19801312100E313m EUnspecified Pit19801391448E313m EUnspecified Pit19401379499F349m SEUnspecified Old Quarry1922 - 19401363039	D	295m SE	Unspecified Ground Workings	1980	1309754
D 308m S Unspecified Heap 1980 1312100 E 313m E Unspecified Pit 1980 1391448 E 313m E Unspecified Pit 1940 1379499 F 349m SE Unspecified Old Quarry 1922 - 1940 1363039	D	296m SE	Unspecified Old Quarry	1940	1372934
E 313m E Unspecified Pit 1980 1391448 E 313m E Unspecified Pit 1940 1379499 F 349m SE Unspecified Old Quarry 1922 - 1940 1363039	D	299m SE	Cuttings	1980	1306595
E 313m E Unspecified Pit 1940 1379499 F 349m SE Unspecified Old Quarry 1922 - 1940 1363039	D	308m S	Unspecified Heap	1980	1312100
F 349m SE Unspecified Old Quarry 1922 - 1940 1363039	Е	313m E	Unspecified Pit	1980	1391448
	Е	313m E	Unspecified Pit	1940	1379499
	F	349m SE	Unspecified Old Quarry	1922 - 1940	1363039
G 362m SE Unspecified Old Quarry 1898 1330555	G	362m SE	Unspecified Old Quarry	1898	1330555
F363m SEUnspecified Quarry19801406140	F	363m SE	Unspecified Quarry	1980	1406140
G 364m SE Unspecified Ground Workings 1980 1368227	G	364m SE	Unspecified Ground Workings	1980	1368227
F 365m SE Unspecified Quarry 1898 1371757	F	365m SE	Unspecified Quarry	1898	1371757







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ID	Location	Land use	Dates present	Group ID
G	366m SE	Unspecified Ground Workings	1940	1407708
Н	400m E	Cuttings	1857 - 1922	1375212
Н	419m E	Cuttings	1940	1366106
Н	421m E	Cuttings	1980	1400023
G	437m SE	Unspecified Quarry	1857	1320012
5	471m W	Grave Yard	1857	1320392
6	496m SE	Railway Building	1980	1322542

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

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 ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

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 ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

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







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succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped 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

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 ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

2 Past land use - un-grouped



2.1 Historical industrial land uses

Records within 500m

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 ungrouped 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 19 >

ID	Location	Land Use	Date	Group ID
А	9m NE	Cuttings	1940	1358336
А	11m NE	Cuttings	1922	1400750
А	11m NE	Cuttings	1857	1355887





Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

ID	Location	Land Use	Date	Group ID
А	14m NE	Cuttings	1980	1405141
А	21m NE	Cuttings	1898	1399253
В	71m E	Railway Sidings	1940	1384439
В	80m E	Railway Sidings	1922	1384439
1	133m E	Railway Sidings	1980	1391278
С	147m SW	Unspecified Hole	1922	1340825
В	152m E	Railway Building	1980	1322539
С	172m SW	Unspecified Hole	1898	1340825
D	189m E	Cuttings	1922	1353797
D	189m E	Cuttings	1857	1361457
D	192m E	Cuttings	1940	1360352
D	195m E	Cuttings	1898	1376456
Е	212m S	Unspecified Old Quarry	1922	1357242
D	228m E	Cuttings	1980	1398988
С	262m SW	Unspecified Hole	1980	1394578
2	269m S	Unspecified Pit	1980	1336604
Е	291m SE	Unspecified Quarry	1898	1320010
Е	295m SE	Unspecified Ground Workings	1980	1309754
Е	296m SE	Unspecified Old Quarry	1940	1372934
Е	299m SE	Cuttings	1980	1306595
Е	308m S	Unspecified Heap	1980	1312100
F	313m E	Unspecified Pit	1980	1391448
F	313m E	Unspecified Pit	1940	1379499
G	349m SE	Unspecified Old Quarry	1940	1363039
G	359m SE	Unspecified Old Quarry	1922	1363039
Н	362m SE	Unspecified Old Quarry	1898	1330555
G	363m SE	Unspecified Quarry	1980	1406140
Н	364m SE	Unspecified Ground Workings	1980	1368227







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

ID	Location	Land Use	Date	Group ID
G	365m SE	Unspecified Quarry	1898	1371757
Н	366m SE	Unspecified Ground Workings	1940	1407708
Ι	400m E	Cuttings	1922	1375212
Ι	400m E	Cuttings	1857	1375212
Ι	413m E	Cuttings	1898	1375212
Ι	419m E	Cuttings	1940	1366106
Ι	421m E	Cuttings	1980	1400023
Н	437m SE	Unspecified Quarry	1857	1320012
3	471m W	Grave Yard	1857	1320392
4	496m SE	Railway Building	1980	1322542

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records	within	500m
ILCCUI US	VVICIIIII	300111

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'.

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	
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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'.

This data is sourced from Ordnance Survey / Groundsure.





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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

2.4 Historical petrol stations

Records within 500m

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

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'.

This data is sourced from Ordnance Survey / Groundsure.





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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

3 Waste and landfill

3.1 Active or recent landfill

Records within 500m0Active 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

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

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

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





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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

3.6 Licensed waste sites

Records within 500m

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

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

3.7 Waste exemptions

Records within 500m

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.

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



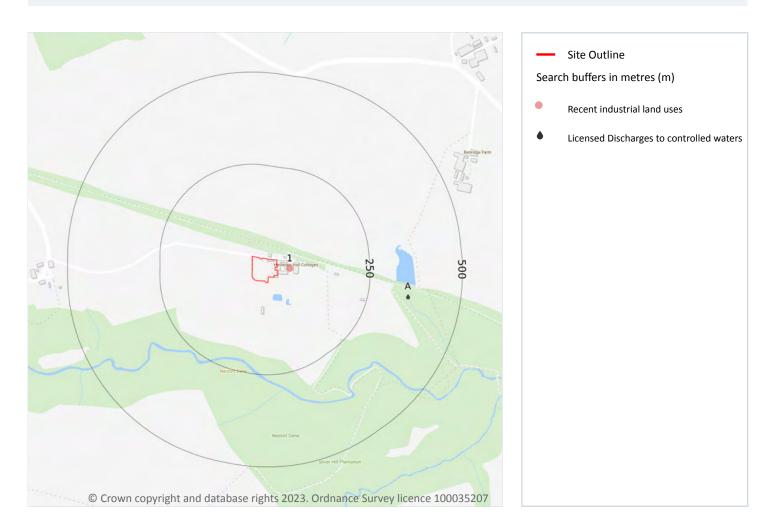


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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

4 Current industrial land use



4.1 Recent industrial land uses

Records within 250m

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on page 25 >

ID	Location	Company	Address	Activity	Category
1	32m E	Sheep Wash	Durham, TS27	Sheep Dips and Washes	Farming

This data is sourced from Ordnance Survey.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

4.2 Current or recent petrol stations

Records within 500m 0 Open, closed, under development and obsolete petrol stations. This data is sourced from Experian. 4.3 Electricity cables 0 Records within 500m 0 High voltage underground electricity transmission cables. This data is sourced from National Grid. 4.4 Gas pipelines 0 Records within 500m 0 High pressure underground gas transmission pipelines. 0

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m0Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

4.7 Regulated explosive sites

Records within 500m

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.

4.8 Hazardous substance storage/usage

Records within 500m

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.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

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.

4.10 Licensed industrial activities (Part A(1))

Records within 500m

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.

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

Records within 500m

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.





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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

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4.12 Radioactive Substance Authorisations

Records within 500m

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.

4.13 Licensed Discharges to controlled waters

Records within 500m

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 <u>page 25</u> >

ID	Location	Address	Details	
A	357m E	HESLEDEN HALL, MONK HESLEDEN, HARTLEPOOL, CLEVELAND, COUNTY DURHAM, TS27 4QB	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRMP3725GB Permit Version: 1 Receiving Water: UNNAMED TRIB OF CRIMDON BECK	Status: NEW ISSUED UNDER EPR 2010 Issue date: 18/11/2011 Effective Date: 18/11/2011 Revocation Date: 31/07/2012
A	357m E	HESLEDEN HALL, MONK HESLEDEN, HARTLEPOOL, CLEVELAND, COUNTY DURHAM, TS27 4QB	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRMP3725GB Permit Version: 2 Receiving Water: UNNAMED TRIB OF CRIMDON BECK	Status: NEW ISSUED UNDER EPR 2010 Issue date: 18/11/2011 Effective Date: 01/08/2012 Revocation Date: -

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0
Discharges of specified substances under the Environmental Protection (Prescribed Processes and Su	ubstances)

Regulations 1991.

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







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

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4.15 Pollutant release to public sewer

Records within 500m Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m

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.

4.17 List 2 Dangerous Substances

Records within 500m

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.

4.18 Pollution Incidents (EA/NRW)

Records within 500m

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

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

4.19 Pollution inventory substances

Records within 500m

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.







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4.20 Pollution inventory waste transfers

Records within 500m

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.

4.21 Pollution inventory radioactive waste

Records within 500m

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.

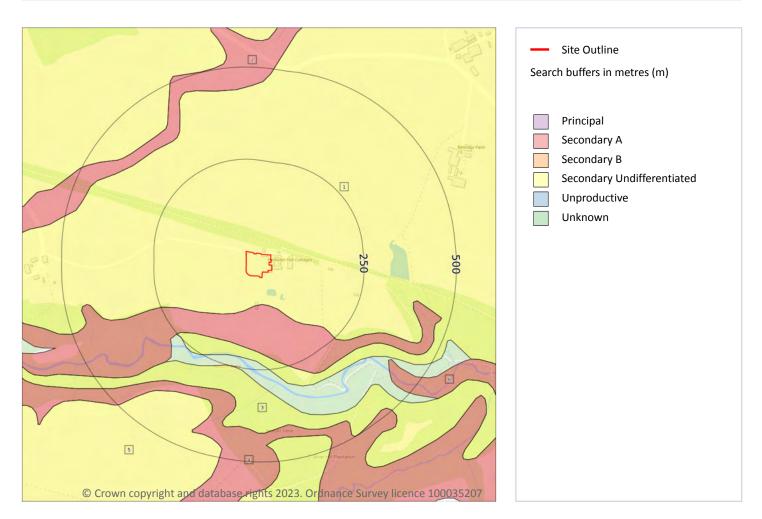






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5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m	6
Aquifer status of groundwater held within superficial geology.	

Features are displayed on the Hydrogeology map on page 31 >

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non- aquifer in different locations due to the variable characteristics of the rock type
2	73m S	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







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ID	Location	Designation	Description
3	251m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	320m S	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	356m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	399m SE	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

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







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Bedrock aquifer



5.2 Bedrock aquifer

Records within 500m	1
Aquifer status of groundwater held within bedrock geology.	
Features are displayed on the Bedrock aquifer map on page 33 >	

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

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

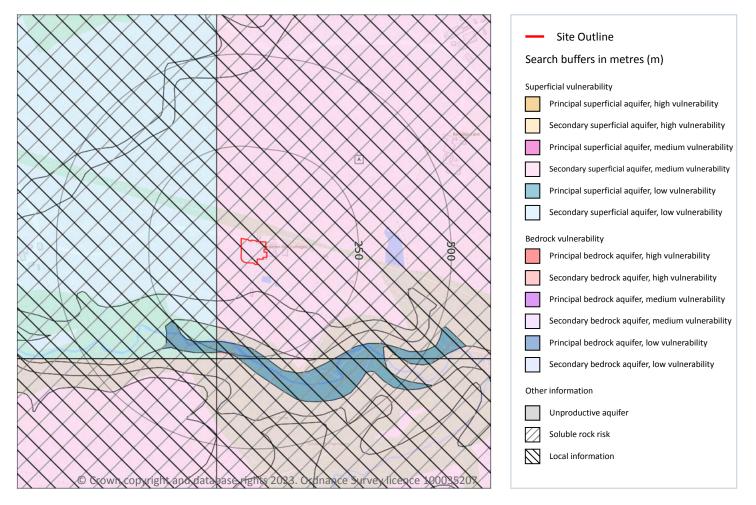






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Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

1

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 34 >







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	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
А	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal 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	s on site				1	
				-		

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
A	Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.	100.0%

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

5.5 Groundwater vulnerability- local information

Record	s on	site
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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 <u>enquiries@environment-agency.gov.uk</u> 7.

ID	Summary	Additional information
A	Limited protection of aquifers by superficial deposits	Local studies show that thin superficial deposits offer limited protection to the aquifers beneath

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







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Abstractions and Source Protection Zones

5.6 Groundwater abstractions

Records within 2000m

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.

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

5.7 Surface water abstractions

Records within 2000m

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.

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

5.8 Potable abstractions

Records within 2000m

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.

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

5.9 Source Protection Zones

Records within 500m

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.





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5.10 Source Protection Zones (confined aquifer)

Records within 500m

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.







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6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m

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 38 >

ID	Location	Type of water feature	Ground level	Permanence	Name
5	220m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Clay Pool Beck

This data is sourced from the Ordnance Survey.







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6.2 Surface water features

Records within 250m

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 38 >

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

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 38 >

ID	Location	Туре	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Crimdon Beck from Source to Sea	GB103025075910	Seaham Peterlee Coast	Wear

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

6.4 WFD Surface water bodies

Records identified

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 38 >

ID	Location	Туре	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
6	222m S	River	Crimdon Beck from Source to Sea	GB103025075910 7	Moderate	Fail	Moderate	2019





3

1



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 38 >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	On site	Wear Magnesian Limestone	<u>GB40301G703900</u> オ	Poor	Poor	Good	2019

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







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7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

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). The risk categories for FRAW for the sea are; Very low (less than 0 requal to 1 in 30 but greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 200 but greater than or equal to 1 in 1000 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance), Medium (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (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).

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

7.2 Historical Flood Events

Records within 250m

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.

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

7.3 Flood Defences

Records within 250m

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.

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





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7.4 Areas Benefiting from Flood Defences

Records within 250m

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

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.







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River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

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.

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

7.7 Flood Zone 3

Records within 50m

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 rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

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







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8 Surface water flooding



8.1 Surface water flooding



Negligible

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 44 >

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	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.

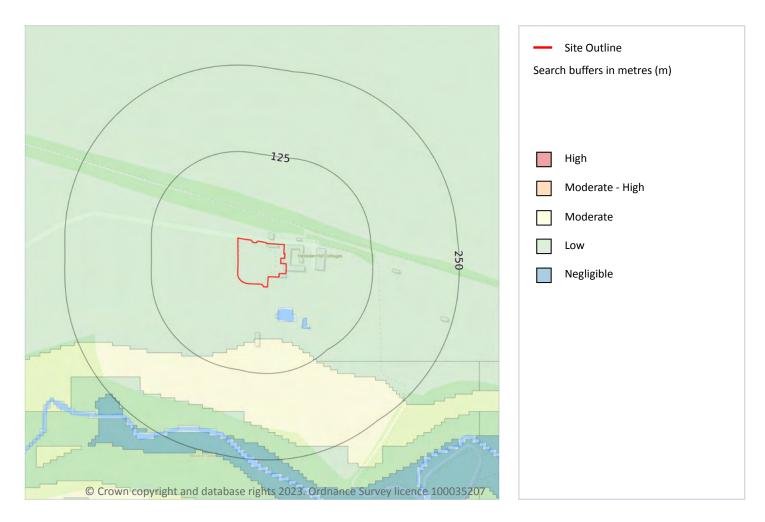






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9 Groundwater flooding



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 46 >

This data is sourced from Ambiental Risk Analytics.

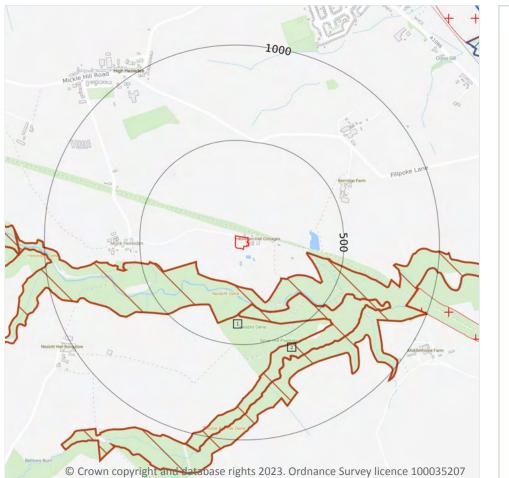


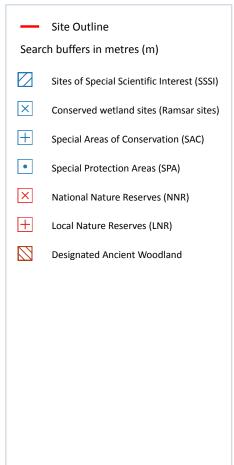




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10 Environmental designations





10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

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 renotified 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.

Features are displayed on the Environmental designations map on page 47 >

ID	Location	Name	Data source
А	1525m NE	Durham Coast	Natural England







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ID	Location	Name	Data source
-	1917m SW	Hart Bog	Natural England

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

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.

Features are displayed on the Environmental designations map on page 47 >

ID	Location	Site	Details
-	1737m NE	Name: Northumbria Coast Site status: Listed Data source: Natural England	Overview: The Northumbria Coast Ramsar site comprises several discrete sections of rocky foreshore between Spittal, in the north of Northumberland, and an area just south of Blackhall Rocks in County Durham. These stretches of coast regularly support nationally important numbers of purple sandpiper and high concentrations of turnstone. The Ramsar site also includes an area of sandy beach at Low Newton, which supports an nationally important breeding colony of little tern, and parts of three artificial pier structures which form important roost sites for purple sandpiper. Ramsar criteria: Ramsar criterion 6 The site supports internationally important wintering populations of ruddy turnstone Arenaria interpres and purple sandpiper Calidris maritima.

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	1

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.

Features are displayed on the Environmental designations map on page 47 >







2

ID	Location	Name	Features of interest	Habitat description	Data source
7	1525m NE	Durham Coast	Vegetated sea cliffs; Dune grassland.	Coastal sand dunes, Sand beaches, Machair; Marine areas, Sea inlets; Shingle, Sea cliffs, Islets; Humid grassland, Mesophile grassland	Natural England

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

10.4 Special Protection Areas (SPA)

Records within 2000m

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.

Features are displayed on the Environmental designations map on page 47 >

ID	Location	Name	Species of interest	Habitat description	Data source
-	1737m NE	Northumbria Coast	Purple sandpiper; Ruddy turnstone; Arctic tern; Little tern	Marine areas, Sea inlets; Shingle, Sea cliffs, Islets; Coastal sand dunes, Sand beaches, Machair	Natural England
-	1877m NE	Teesmouth and Cleveland Coast	Pied avocet; Red knot; Ruff; Common redshank; Sandwich tern; Common tern; Little tern	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Bogs, Marshes, Water fringed vegetation, Fens; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Shingle, Sea cliffs, Islets	Natural England

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

10.5 National Nature Reserves (NNR)

Records within 2000m

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.

Features are displayed on the Environmental designations map on page 47 >

ID	Location	Name	Data source
8	1525m NE	Durham Coast	Natural England





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7

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

10.6 Local Nature Reserves (LNR)

Records within 2000m

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 47 >

ID	Location	Name	Data source
3	884m E	Hart to Haswell Walkway	Natural England
9	1529m NE	Blackhall Grasslands	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m

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.

Features are displayed on the Environmental designations map on page 47 >

ID	Location	Name	Woodland Type
1	186m S	Hesleden Dene	Ancient & Semi-Natural Woodland
2	291m S	Hesleden Dene	Ancient Replanted Woodland
4	1130m W	Hesleden Dene	Ancient Replanted Woodland
5	1136m W	Hesleden Dene	Ancient & Semi-Natural Woodland
-	1349m W	Hesleden Dene	Ancient & Semi-Natural Woodland
-	1647m E	Hesleden Dene	Ancient & Semi-Natural Woodland
-	1737m E	Hesleden Dene	Ancient & Semi-Natural Woodland

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







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10.8 Biosphere Reserves

Records within 2000m

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

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

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	0	

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

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

10.12 Proposed Ramsar sites

Records within 2000m

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.



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10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

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

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

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

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These area 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.

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





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SSSI Impact Zones and Units



10.17 SSSI Impact Risk Zones

Records on site

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 53 >







ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.
		Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where
		footprint exceeds 1ha.
		Residential - Residential development of 50 units or more.
		Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas.
		Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m ² , slurry lagoons & digestate stores > 200m ² , manure stores > 250t).
		Combustion - General combustion processes >20MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.
		Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill.
		Composting - Any composting proposal with more than 75000 tonnes maximum annual operational throughput. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.
		Discharges - Any discharge of water or liquid waste of more than 5m ³ /day to ground (ie to seep away) or to surface water, such as a beck or stream.
		Water supply - Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m ² or more.
		Notes: Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m

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.

Features are displayed on the SSSI Impact Zones and Units map on page 53 >

ID:	10
Location:	1525m NE
SSSI name:	Durham Coast
Unit name:	Nnr Management Compartment 12
Broad habitat:	Calcareous Grassland - Lowland
Condition:	Unfavourable - Recovering
Reportable features:	







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Little tern, Sterna albifrons	Unfavourable - Recovering	29/11/2010
Aggregations of non-breeding birds - Purple sandpiper, Calidris maritima	Unfavourable - Recovering	29/11/2010
Aggregations of non-breeding birds - Sanderling, Calidris alba	Unfavourable - Recovering	29/11/2010
EC - Marine Permian	Unfavourable - Recovering	04/08/2014
H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts	Unfavourable - Recovering	31/07/2009
Lowland calcareous grassland (CG2)	Unfavourable - Recovering	29/11/2010
Sand dune; strandline, embryo and mobile dunes (SD1-6)	Unfavourable - Recovering	29/11/2010
Spring/flush fen (lowland)	Unfavourable - Recovering	29/11/2010

ID:	11
Location:	1693m NE
SSSI name:	Durham Coast
Unit name:	Nnr Management Compartment 11
Broad habitat:	Calcareous Grassland - Lowland
Condition:	Unfavourable - Recovering
Reportable features:	

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Little tern, Sterna albifrons	-	-
Aggregations of non-breeding birds - Purple sandpiper, Calidris maritima	-	-
Aggregations of non-breeding birds - Sanderling, Calidris alba	-	-
EC - Marine Permian	Favourable	01/05/2015
H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts	Unfavourable - Recovering	22/07/2014
Lowland calcareous grassland (CG2)	Unfavourable - Recovering	22/07/2014
Spring/flush fen (lowland)	Favourable	22/07/2014
Vascular plant assemblage	Favourable	22/07/2014

ID: Location: 1737m NE SSSI name: Durham Coast Unit name: Broad habitat: Littoral Rock Condition: Favourable Reportable features:

Blackhall-Crimdon Park





Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Little tern, Sterna albifrons	Favourable	29/11/2010
Aggregations of non-breeding birds - Purple sandpiper, Calidris maritima	Favourable	29/11/2010
Aggregations of non-breeding birds - Sanderling, Calidris alba	Favourable	29/11/2010
EC - Marine Permian	Favourable	04/08/2014
Lowland calcareous grassland (CG2)	Favourable	29/11/2010

-
1917m SW
Hart Bog
1
Fen, Marsh And Swamp - Lowland
Unfavourable - Declining

Feature name	Feature condition	Date of assessment
Basin fen (lowland)	Unfavourable - Declining	03/12/2014
FB - Quaternary of North-East England	Unfavourable - Declining	25/04/2022

ID:	-
Location:	1961m NE
SSSI name:	Durham Coast
Unit name:	Nnr Management Compartment 10
Broad habitat:	Calcareous Grassland - Lowland
Condition:	Favourable
Reportable features:	

Feature name	Feature condition	Date of assessment
EC - Marine Permian	Favourable	30/04/2015
H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts	Favourable	16/07/2014
Lowland calcareous grassland (CG2)	Favourable	16/07/2014
Spring/flush fen (lowland)	Favourable	16/07/2014
Vascular plant assemblage	Favourable	16/07/2014

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

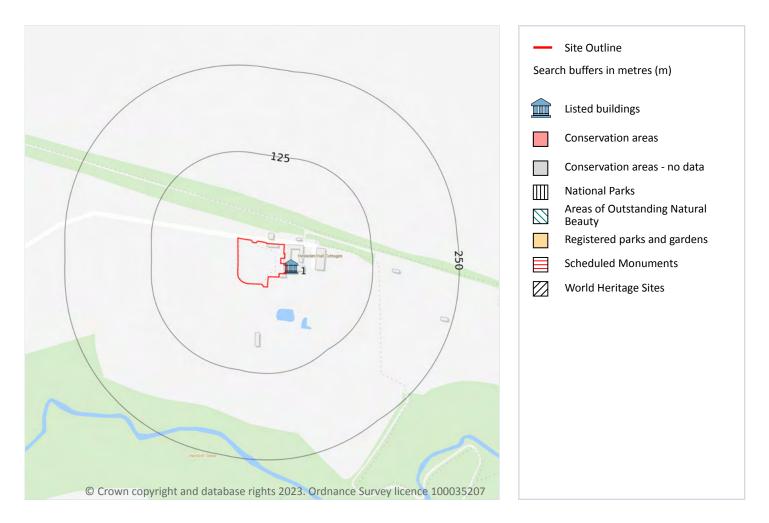






Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

11 Visual and cultural designations



11.1 World Heritage Sites

Records within 250m

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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

11.2 Area of Outstanding Natural Beauty

Records within 250m

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

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 wellbeing 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

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.

Features are displayed on the Visual and cultural designations map on page 57 >

ID	Location	Name	Grade	Reference Number	Listed date
1	7m E	Hesleden Hall With Wall And Gate Piers Attached To Left		1120946	20/02/1967

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





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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

11.5 Conservation Areas

Records within 250m

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

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

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.



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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

12 Agricultural designations



12.1 Agricultural Land Classification

Records within 250m

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 60 >

ID	Location	Classification	Description
1	On site	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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

12.2 Open Access Land

Records within 250m

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

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

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

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.

Location	Reference	Scheme	Start Date	End Date
1m SW	1048889	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025
224m W	1048889	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025

This data is sourced from Natural England.





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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

13 Habitat designations



13.1 Priority Habitat Inventory

Records within 250m

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 62 >

ID	Location	Main Habitat	Other habitats
2	186m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	223m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	231m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
5	245m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

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This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

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

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 62 >

ID	Location	Site reference	Identificati on confidence	Primary source	Secondary source	Tertiary source
1	158m E	HART & HASWELL WALKWAY (2) (CO. DURHAM)	Low	Butterfly Conservation Dingy Skipper data	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

14 Geology 1:10,000 scale - Availability



14.1 10k Availability

Records within 500m	1
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset p	rovided

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 64 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	NZ43NE







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

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



14.2 Artificial and made ground (10k)

Records within 500m

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 65 >

ID	Location	LEX Code	Description	Rock description
1	11m NE	WGR-VOID	Worked Ground (Undivided)	Void
А	307m SE	WGR-VOID	Worked Ground (Undivided)	Void
2	311m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
А	322m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

ID	Location	LEX Code	Description	Rock description
3	371m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	412m E	WMGR-ARTDP	Infilled Ground	Artificial Deposit







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Geology 1:10,000 scale - Superficial



14.3 Superficial geology (10k)

Records within 500m

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 67 >

ID	Location	LEX Code	Description	Rock description
1	On site	TILL-DMTN	Till - Diamicton	Diamicton
2	66m S	GFDU-XSV	Glaciofluvial Deposits - Sand And Gravel	Sand And Gravel
3	174m S	TILL-DMTN	Till - Diamicton	Diamicton
4	215m S	ALV-XVSZ	Alluvium - Gravel, Sand And Silt	Gravel, Sand And Silt







ID	Location	LEX Code	Description	Rock description
5	223m S	ALV-XVSZ	Alluvium - Gravel, Sand And Silt	Gravel, Sand And Silt
6	235m S	TILL-DMTN	Till - Diamicton	Diamicton
7	256m SW	RTD1-XVSZ	River Terrace Deposits, 1 - Gravel, Sand And Silt	Gravel, Sand And Silt
8	268m S	TILL-DMTN	Till - Diamicton	Diamicton
9	274m S	ALV-XVSZ	Alluvium - Gravel, Sand And Silt	Gravel, Sand And Silt
10	307m SW	RTD1-XVSZ	River Terrace Deposits, 1 - Gravel, Sand And Silt	Gravel, Sand And Silt
11	319m S	GFDU-XSV	Glaciofluvial Deposits - Sand And Gravel	Sand And Gravel
13	343m S	TILL-DMTN	Till - Diamicton	Diamicton
14	361m SE	RTD1-XVSZ	River Terrace Deposits, 1 - Gravel, Sand And Silt	Gravel, Sand And Silt
15	362m NW	ALV-XVSZ	Alluvium - Gravel, Sand And Silt	Gravel, Sand And Silt
16	365m SE	RTD1-XVSZ	River Terrace Deposits, 1 - Gravel, Sand And Silt	Gravel, Sand And Silt
17	376m SE	RTD1-XVSZ	River Terrace Deposits, 1 - Gravel, Sand And Silt	Gravel, Sand And Silt
19	397m SE	RTD1-XVSZ	River Terrace Deposits, 1 - Gravel, Sand And Silt	Gravel, Sand And Silt
20	412m SW	RTD1-XVSZ	River Terrace Deposits, 1 - Gravel, Sand And Silt	Gravel, Sand And Silt
21	428m SE	ALV-XVSZ	Alluvium - Gravel, Sand And Silt	Gravel, Sand And Silt
22	436m S	HMGD-XVSZ	Hummocky (moundy) Glacial Deposits - Gravel, Sand And Silt	Gravel, Sand And Silt
23	438m SW	RTD1-XVSZ	River Terrace Deposits, 1 - Gravel, Sand And Silt	Gravel, Sand And Silt
25	494m SE	RTD1-XVSZ	River Terrace Deposits, 1 - Gravel, Sand And Silt	Gravel, Sand And Silt

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

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.

Features are displayed on the Geology 1:10,000 scale - Superficial map on page 67 >

ID	Location	LEX Code	Description	Rock description
12	339m S	SLIP-UKNOWN	Landslide Deposits	Unknown/unclassified Entry







ID	Location	ation LEX Code Description R		Rock description	
18	388m SE	SLIP-UKNOWN	Landslide Deposits	Unknown/unclassified Entry	
24	466m SE	SLIP-UKNOWN	Landslide Deposits	Unknown/unclassified Entry	

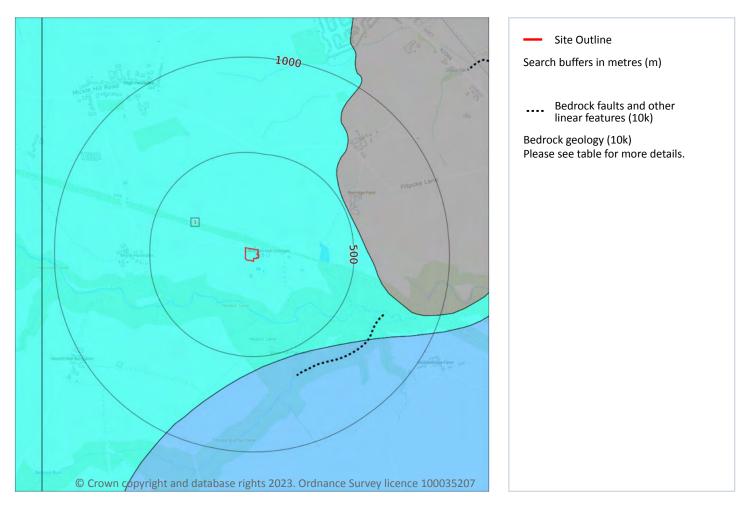






Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Geology 1:10,000 scale - Bedrock



14.5 Bedrock geology (10k)

Records within 500m

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 70 >

ID	Location	LEX Code	Description	Rock age
1	On site	ROD-DOLO	Roker Formation - Dolostone	Late Permian Epoch [Obsolete name]

This data is sourced from the British Geological Survey.





Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

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14.6 Bedrock faults and other linear features (10k)

Records within 500m

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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

15 Geology 1:50,000 scale - Availability



15.1 50k Availability

Records within 500m

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 72 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	Full	EW027_durham_v4

This data is sourced from the British Geological Survey.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

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

15.2 Artificial and made ground (50k)

Records within 500m

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.

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

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).







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Geology 1:50,000 scale - Superficial



15.4 Superficial geology (50k)

Records within 500m

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 74 >

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD- DMTN	TILL, DEVENSIAN	DIAMICTON
2	73m S	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL
3	251m S	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON







ID	Location	LEX Code	Description	Rock description
4	274m SW	RTDU-XVSZ	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	GRAVEL, SAND AND SILT
5	320m S	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL
6	359m NW	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
7	399m SE	RTDU-XVSZ	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	GRAVEL, SAND AND SILT
8	443m S	HMGDD- XDSV	HUMMOCKY (MOUNDY) GLACIAL DEPOSITS, DEVENSIAN	DIAMICTON, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	1
A qualitative classification of estimated rates of vertical movement of water from the ground surfa	ce through
the unsaturated zone of any superficial deposits (the zone between the land surface and the water	r table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records wit	thin 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

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.

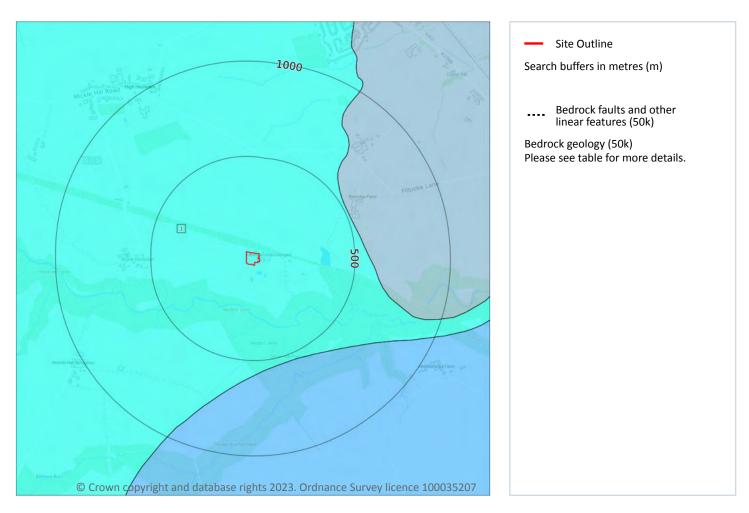
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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Geology 1:50,000 scale - Bedrock



15.8 Bedrock geology (50k)

Records within 500m

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 76 >

ID	Location	LEX Code	Description	Rock age
1	On site	ROD-DOLO	ROKER FORMATION - DOLOSTONE	-

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	Very High	High

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m 0	
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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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

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16 Boreholes

16.1 BGS Boreholes

Records within 250m

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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m 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 79 >

Location	Hazard rating	Details
On site	Low	Ground conditions predominantly medium plasticity.

This data is sourced from the British Geological Survey.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

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 80 >

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.

This data is sourced from the British Geological Survey.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

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 81 >

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m

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 82 >

Location	Hazard rating	Details
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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m

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 83 >

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

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 84 >

Location	Hazard rating	Details
On site	Very low	Soluble rocks are present within the ground. Few dissolution features are likely to be present. Potential for difficult ground conditions or localised subsidence are at a level where they need not be considered.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

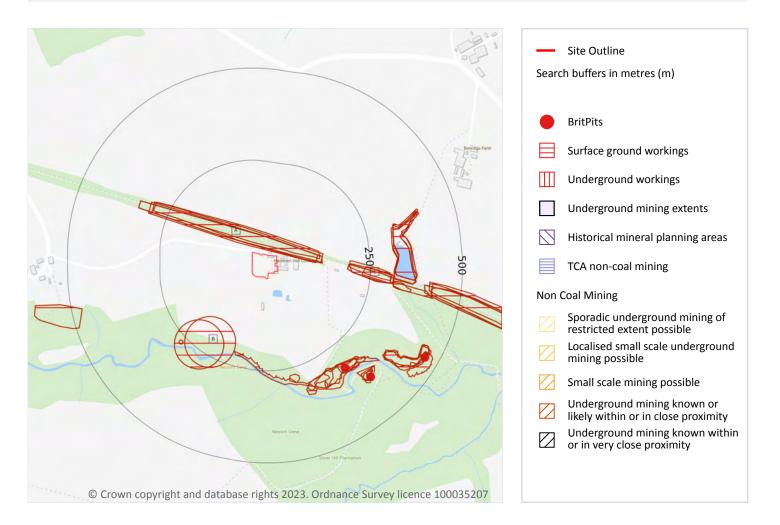






Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

18 Mining and ground workings



18.1 BritPits

Records within 500m

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.

Features are displayed on the Mining and ground workings map on page 86 >







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

ID	Location	Details	Description
D	318m SE	Name: Silver Hill Plantation Address: Blackhall Rocks, PETERLEE, Co. Durham Commodity: Dolomite Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
G	380m SE	Name: Silver Hill Plantation Address: Blackhall Rocks, PETERLEE, Co. Durham Commodity: Dolomite Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
Η	461m SE	Name: Silver Hill Plantation Address: Blackhall Rocks, PETERLEE, Co. Durham Commodity: Dolomite Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	13
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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 86 >

ID	Location	Land Use	Year of mapping	Mapping scale
А	9m NE	Cuttings	1940	1:10560
А	11m NE	Cuttings	1922	1:10560
А	11m NE	Cuttings	1857	1:10560
А	14m NE	Cuttings	1980	1:10000
А	21m NE	Cuttings	1898	1:10560
В	147m SW	Unspecified Hole	1922	1:10560
В	172m SW	Unspecified Hole	1898	1:10560







ID	Location	Land Use	Year of mapping	Mapping scale
С	189m E	Cuttings	1922	1:10560
С	189m E	Cuttings	1857	1:10560
С	192m E	Cuttings	1940	1:10560
С	195m E	Cuttings	1898	1:10560
D	212m S	Unspecified Old Quarry	1922	1:10560
С	228m E	Cuttings	1980	1:10000

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

workings e.g. mine shafts.

Records within 1000m	0
Historical land uses identified from Ordnance Survey mapping that indicate the presence of undergro	und

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m

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

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.

This data is sourced from the British Geological Survey.





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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

18.6 Non-coal mining

Records within 1000m

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

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

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

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.





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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

18.10 Mining record office plans

Records within 500m

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

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

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

Location	Details
On site	The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site

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.





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18.14 Gypsum areas

Records on site0Generalised areas that may be affected by gypsum extraction.
This data is sourced from British Gypsum.118.15 Tin mining0Records on site0Generalised areas that may be affected by historical tin mining.0

This data is sourced from Groundsure.

18.16 Clay mining

Records on site

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

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

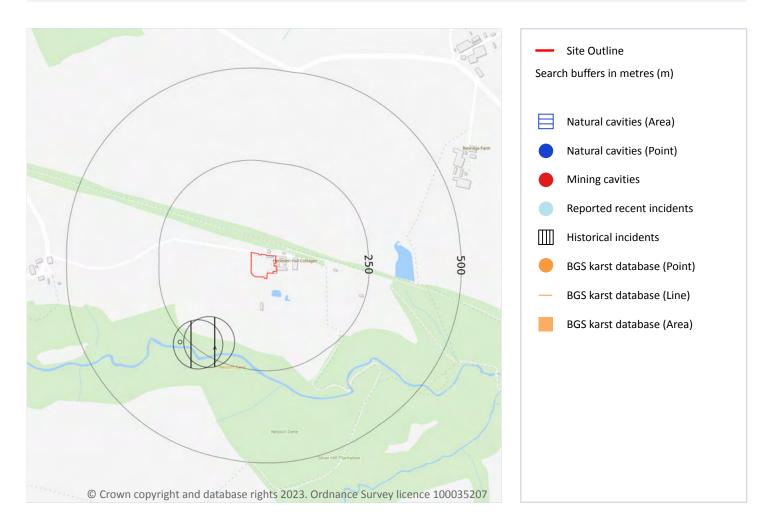






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19 Ground cavities and sinkholes



19.1 Natural cavities

Records within 500m

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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

19.2 Mining cavities

Records within 1000m

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

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

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.

Features are displayed on the Ground cavities and sinkholes map on page 92 >

ID	Location	Туре	Date of mapping
А	147m SW	Unspecified Hole	1922
А	172m SW	Unspecified Hole	1898
А	262m SW	Unspecified Hole	1980

This data is sourced from Groundsure.



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



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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

19.5 National karst database

Records within 500m

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This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.

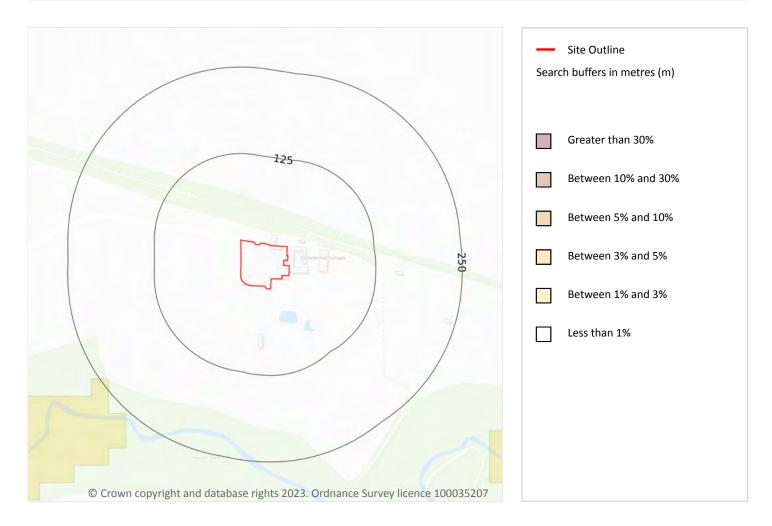






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20 Radon



20.1 Radon

Records on site

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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 95 >

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







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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

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 km². 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 km²; 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 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 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

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 km²).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m

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 km².

This data is sourced from the British Geological Survey.





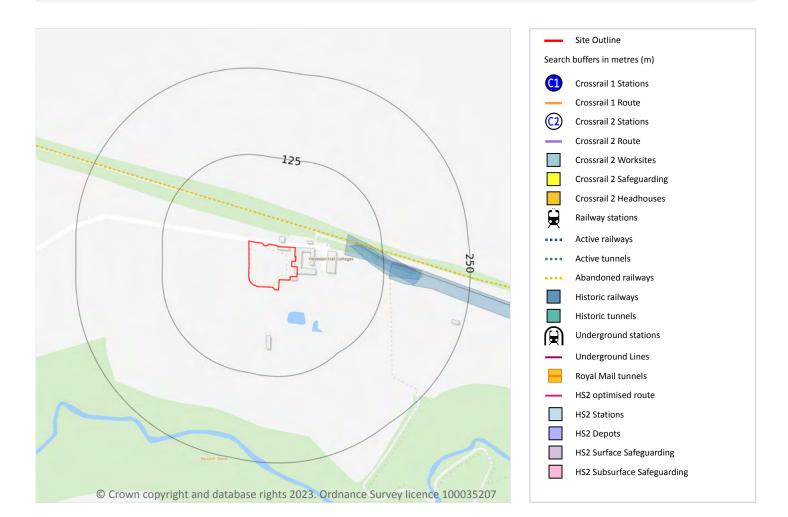
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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

22 Railway infrastructure and projects



22.1 Underground railways (London)

Records within 250m

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

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.





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This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m

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

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 98 >

Location	Land Use	Year of mapping	Mapping scale
71m E	Railway Sidings	1940	10560
80m E	Railway Sidings	1922	10560
86m E	Railway Sidings	1938	2500
133m E	Railway Sidings	1980	10000
136m E	Railway Sidings	1958	2500

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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

22.6 Historical railways

Records within 250m 2 Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

Features are displayed on the Railway infrastructure and projects map on page 98 >

Location	Description
32m NE	Abandoned
32m NE	Historic

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways. This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0
The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the	west,

through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m

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.





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Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

22.10 HS2

Records within 500m

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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.







Ref: GS-4ZJ-IYE-DNX-VK8 Your ref: Land_West_of_Hesleden_Hall_Farm Grid ref: 446097 537292

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 <u>https://www.groundsure.com/sources-reference</u> \nearrow .

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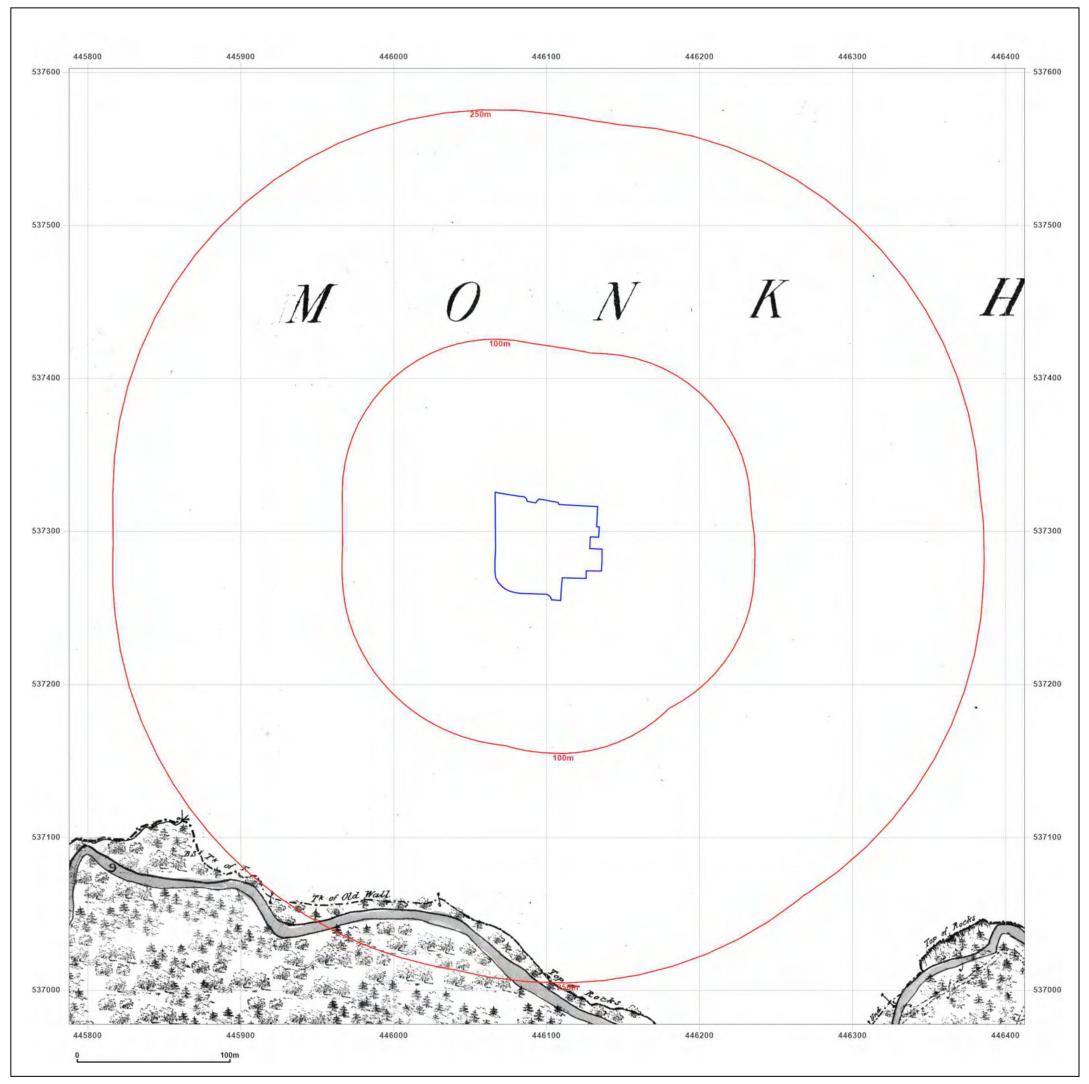


Land Contamination Phase 1 Desk Study

Project: Land West of Hesleden Hall Farm



Appendix B2 – Historical Ordnance Survey Maps







Client Ref: Report Ref: Grid Ref:	Land_West_of_Hesleden_Ha GS-UFH-YPU-QHP-GEO 446100, 537290	ll_Farm
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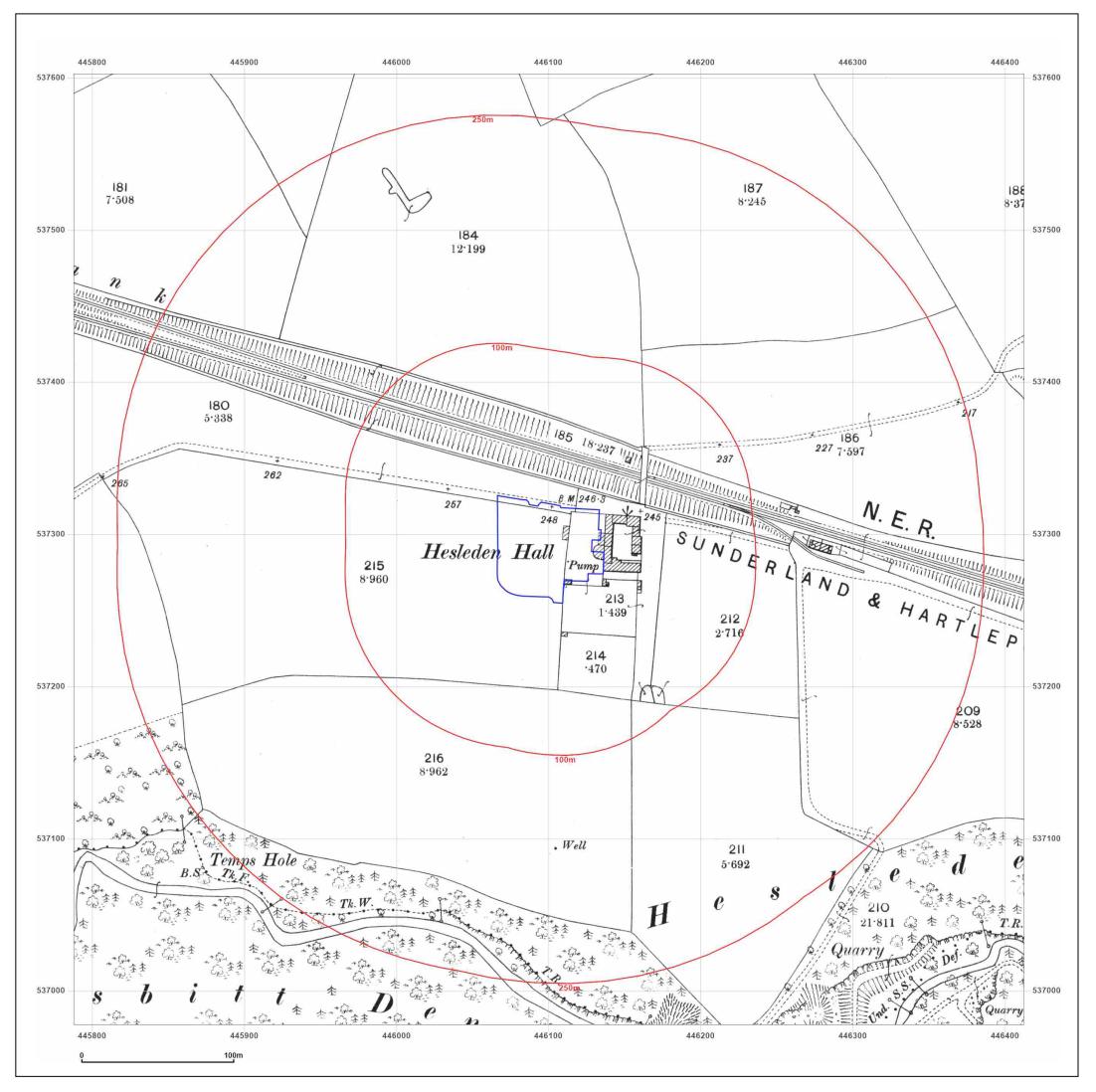
Surveyed N/A Revised N/A Edition N/A Copyright N/A Levelled N/A



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Production date: 04 August 2023





BOWES COURT, ROAD LEADING TO HESLEDEN HALL, MONK HESLEDEN, HESLEDEN, TS27 4TH

Client Ref: Report Ref: Grid Ref:	Land_West_of_Hesleden_Hal GS-UFH-YPU-QHP-GEO 446100, 537290	l_Farm
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Map date:	1897	
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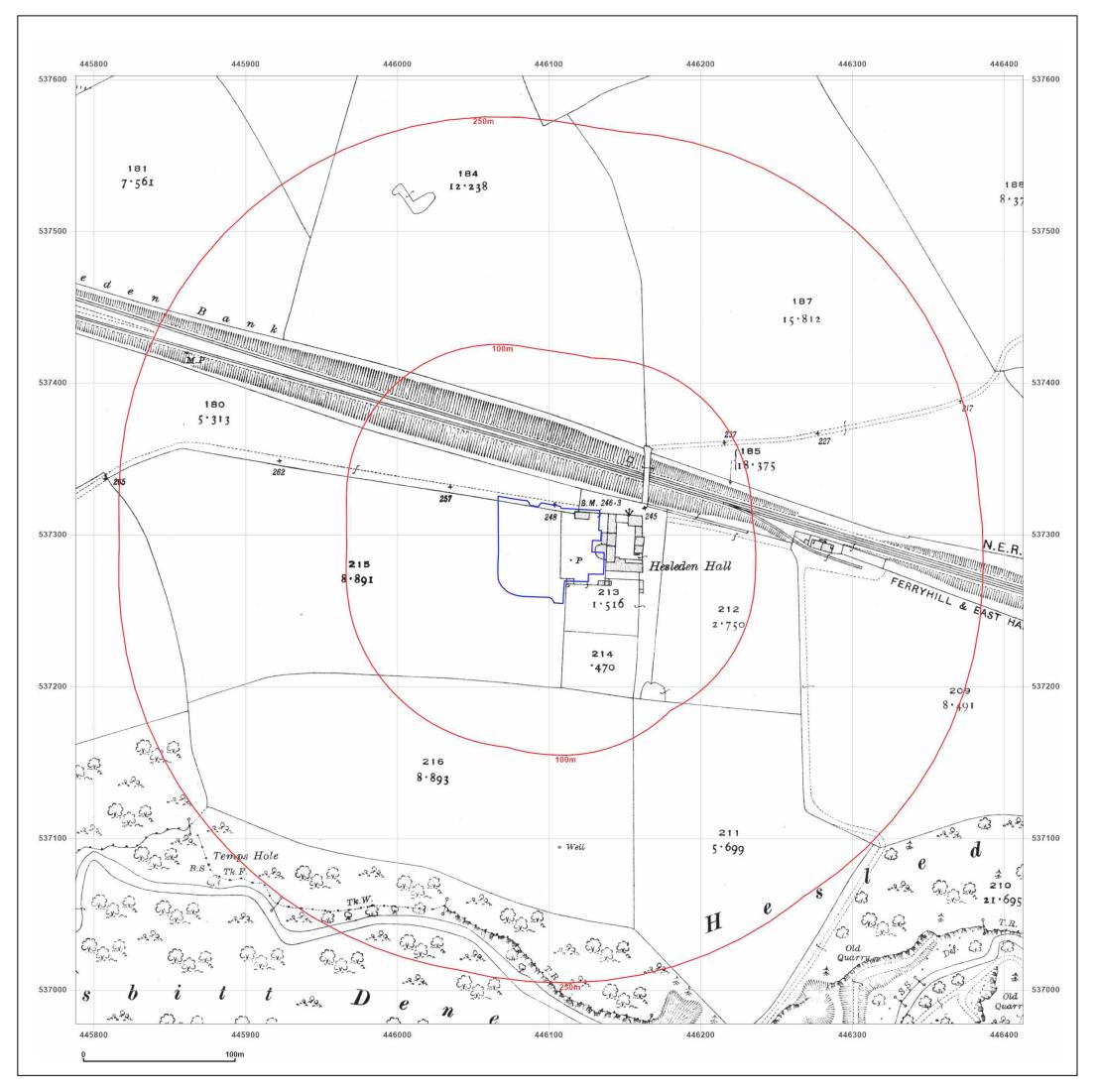
Surveyed 1897 Revised 1897 Edition N/A Copyright N/A Levelled N/A



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Client Ref: Report Ref: Grid Ref:	Land_West_of_Hesleden_Hal GS-UFH-YPU-QHP-GEO 446100, 537290	l_Farm
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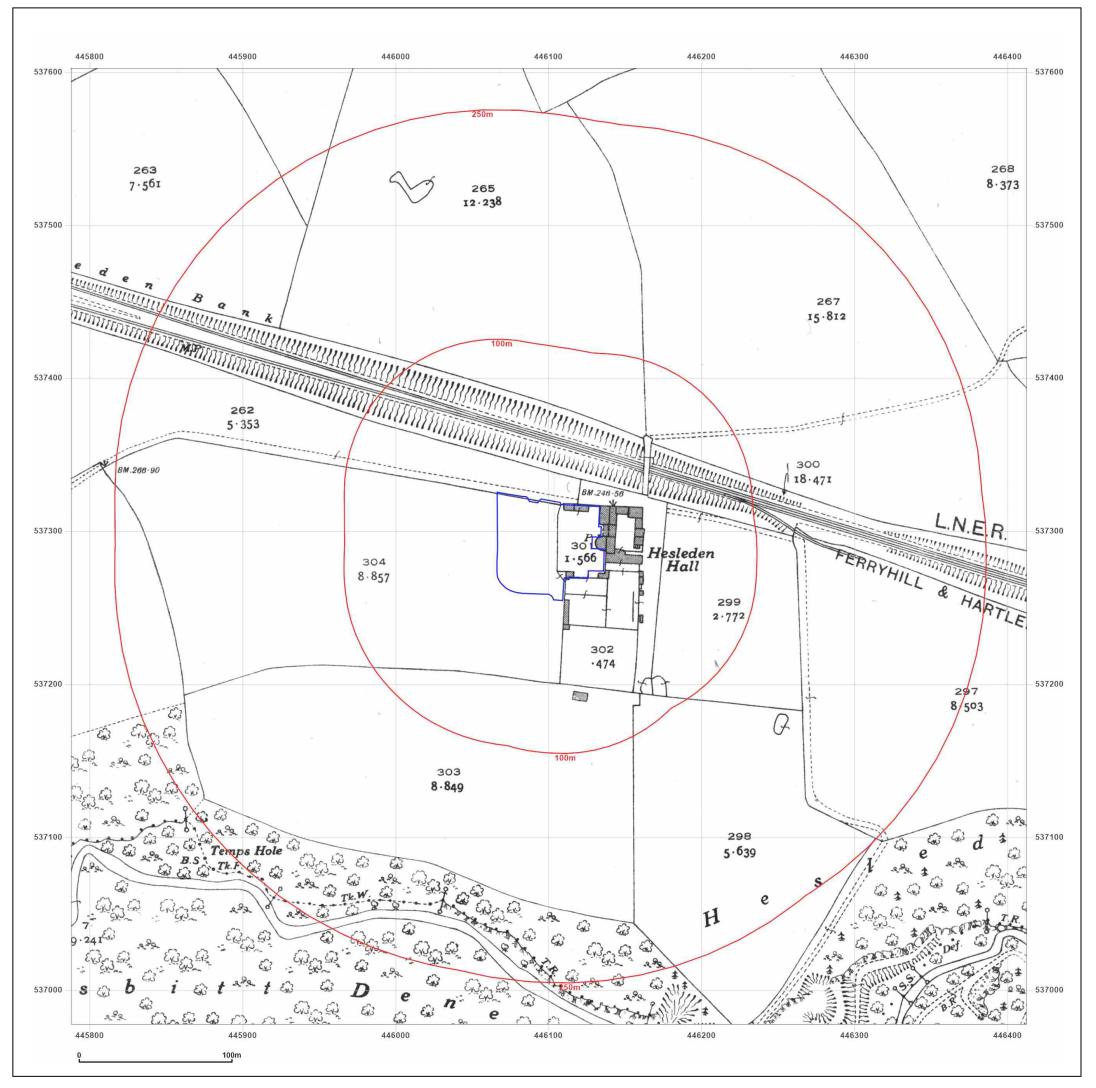
Surveyed 1919 Revised 1919 Edition N/A Copyright N/A Levelled N/A



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Client Ref: Report Ref: Grid Ref:	Land_West_of_Hesleden_Hal GS-UFH-YPU-QHP-GEO 446100, 537290	ll_Farm
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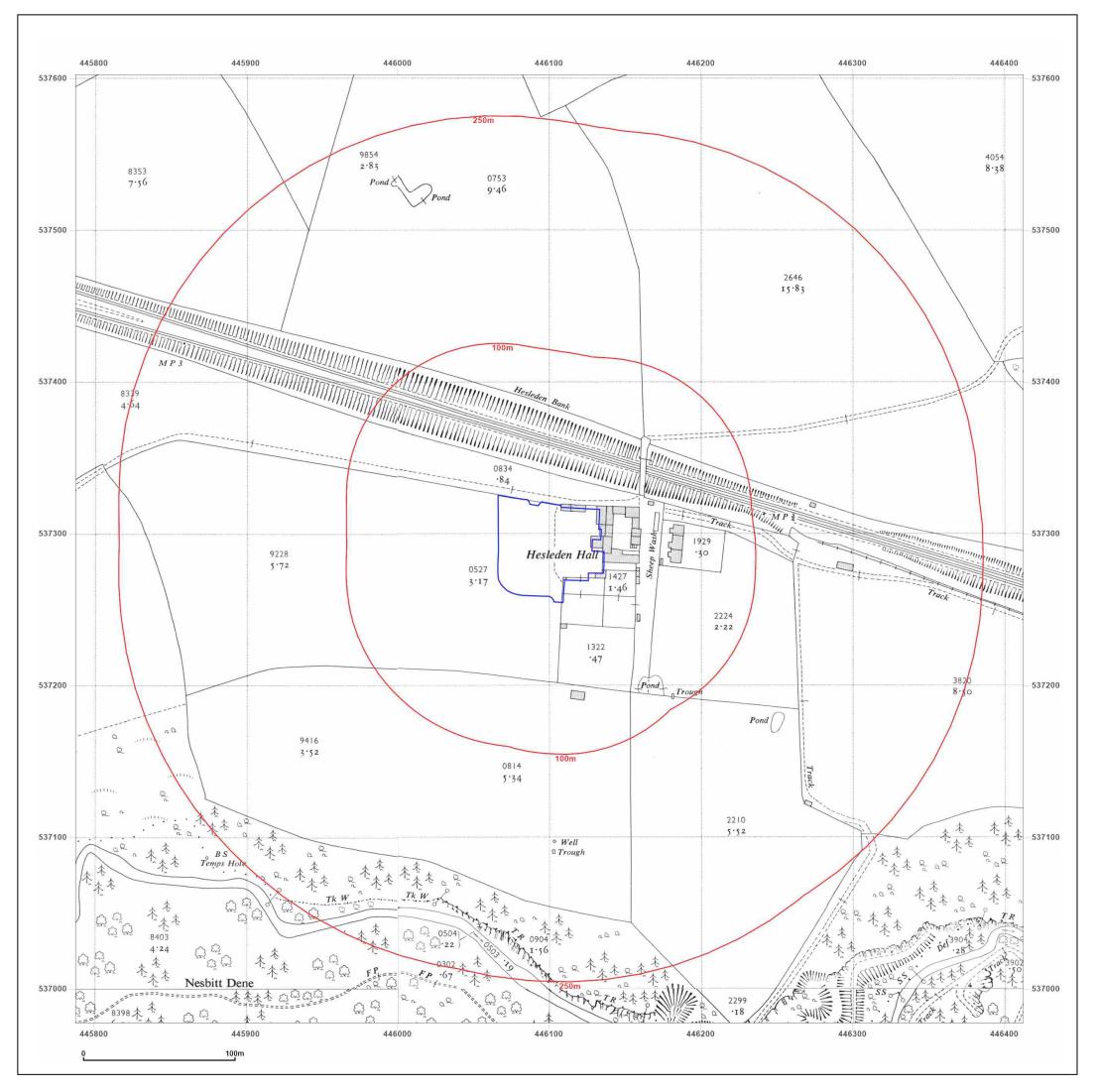
Surveyed 1938 Revised 1938 Edition N/A Copyright N/A Levelled N/A



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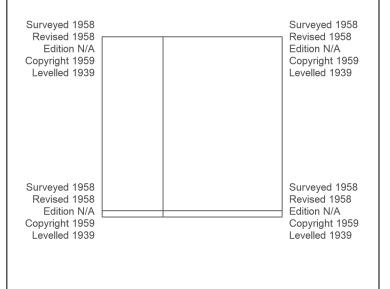
Production date: 04 August 2023







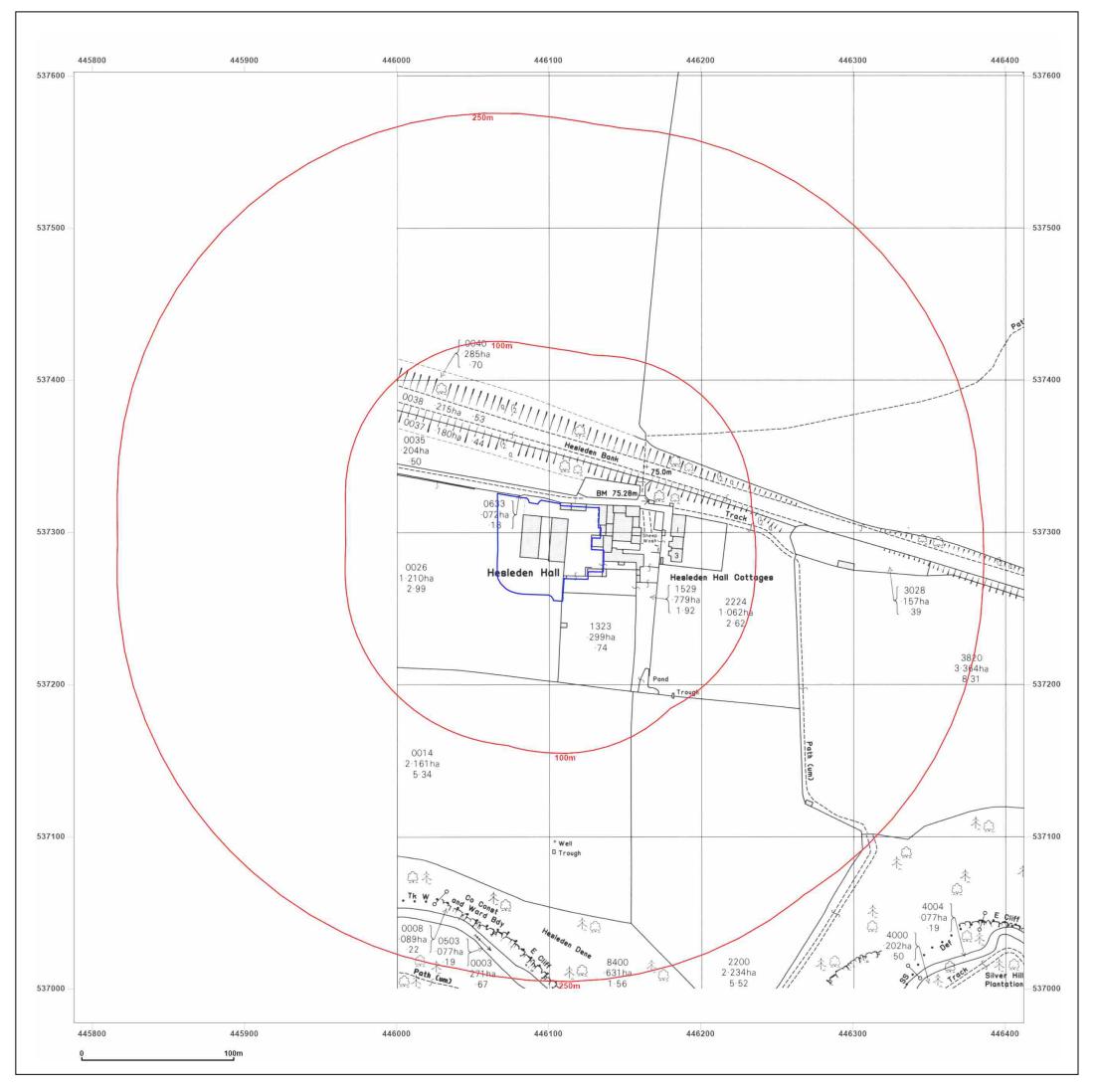
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Map Name:	National Grid	Ν
Map date:	1959	
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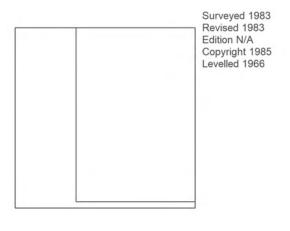
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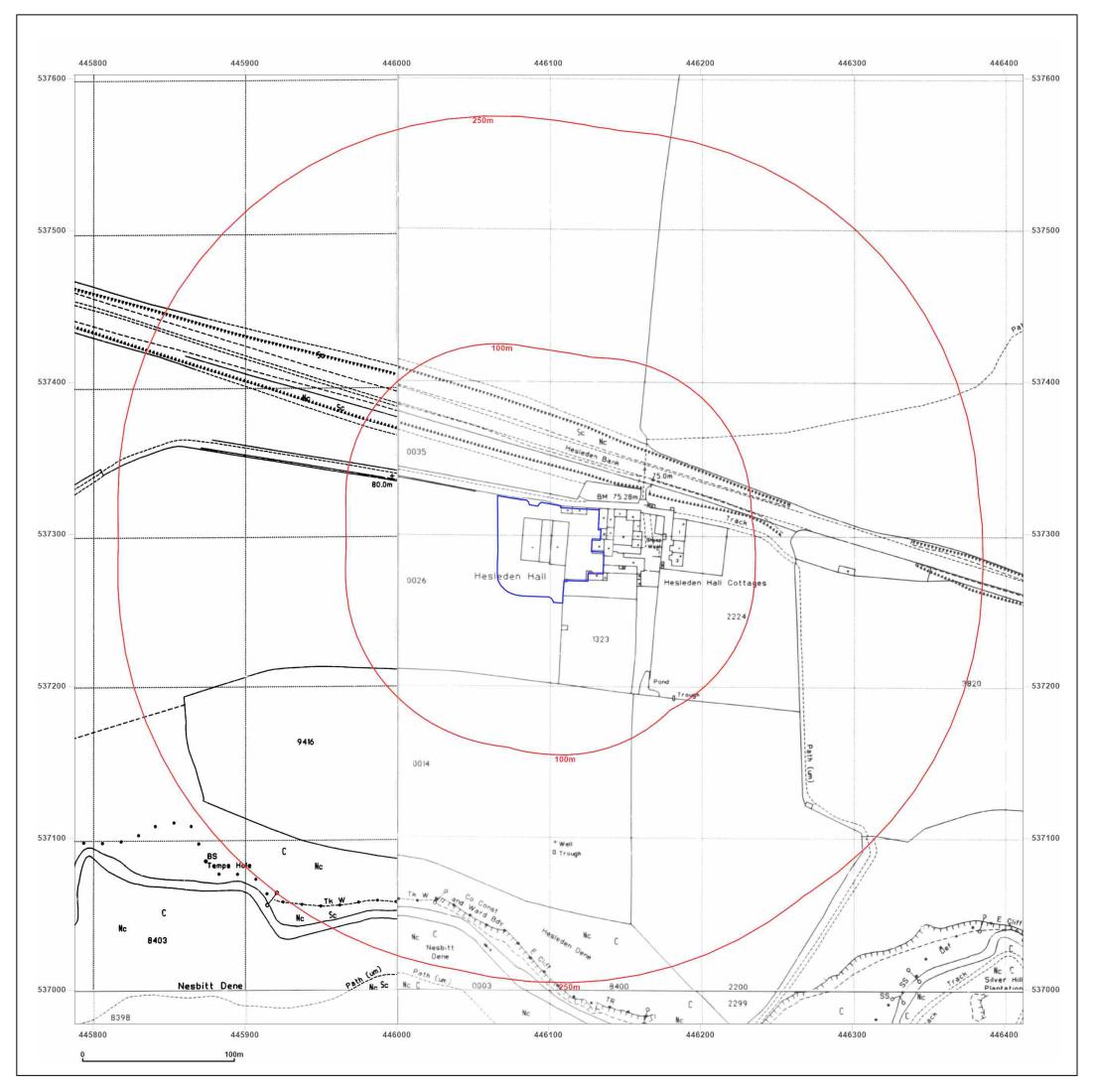




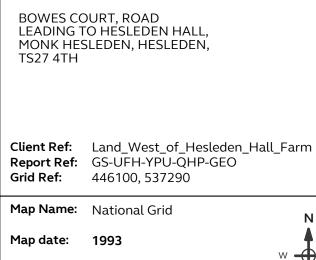
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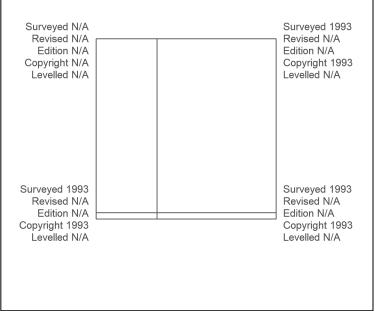




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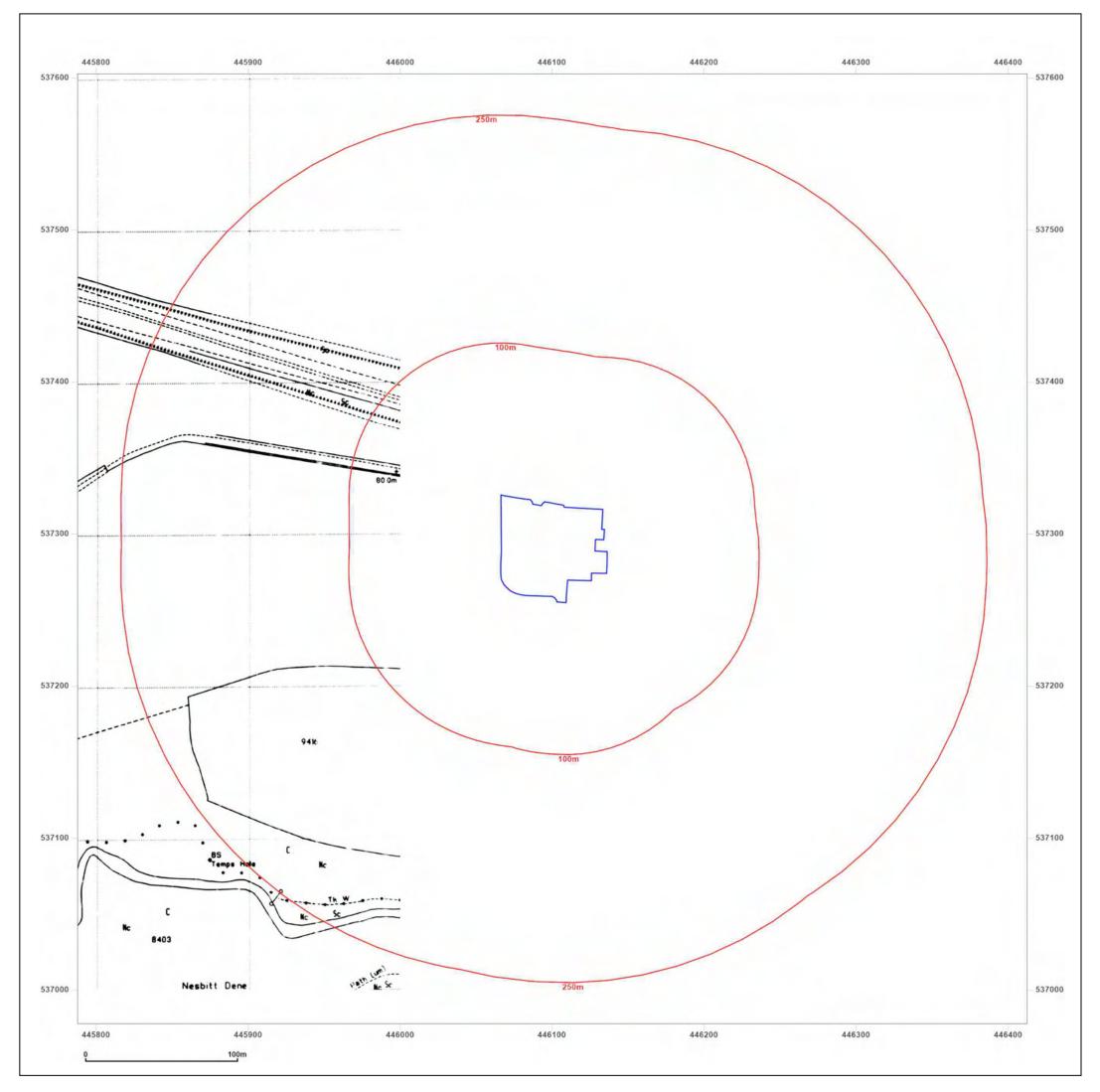
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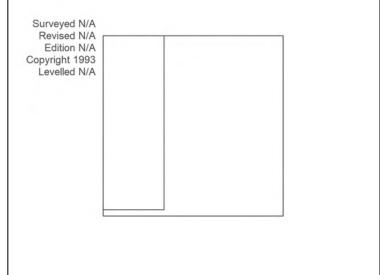
Production date: 04 August 2023





BOWES COURT, ROAD LEADING TO HESLEDEN HALL, MONK HESLEDEN, HESLEDEN, TS27 4TH

Client Ref: Report Ref: Grid Ref:	Land_West_of_Hesleden_Ha GS-UFH-YPU-QHP-GEO 446100, 537290	ll_Farm
Map Name:	National Grid	Ν
Map date:	1993	
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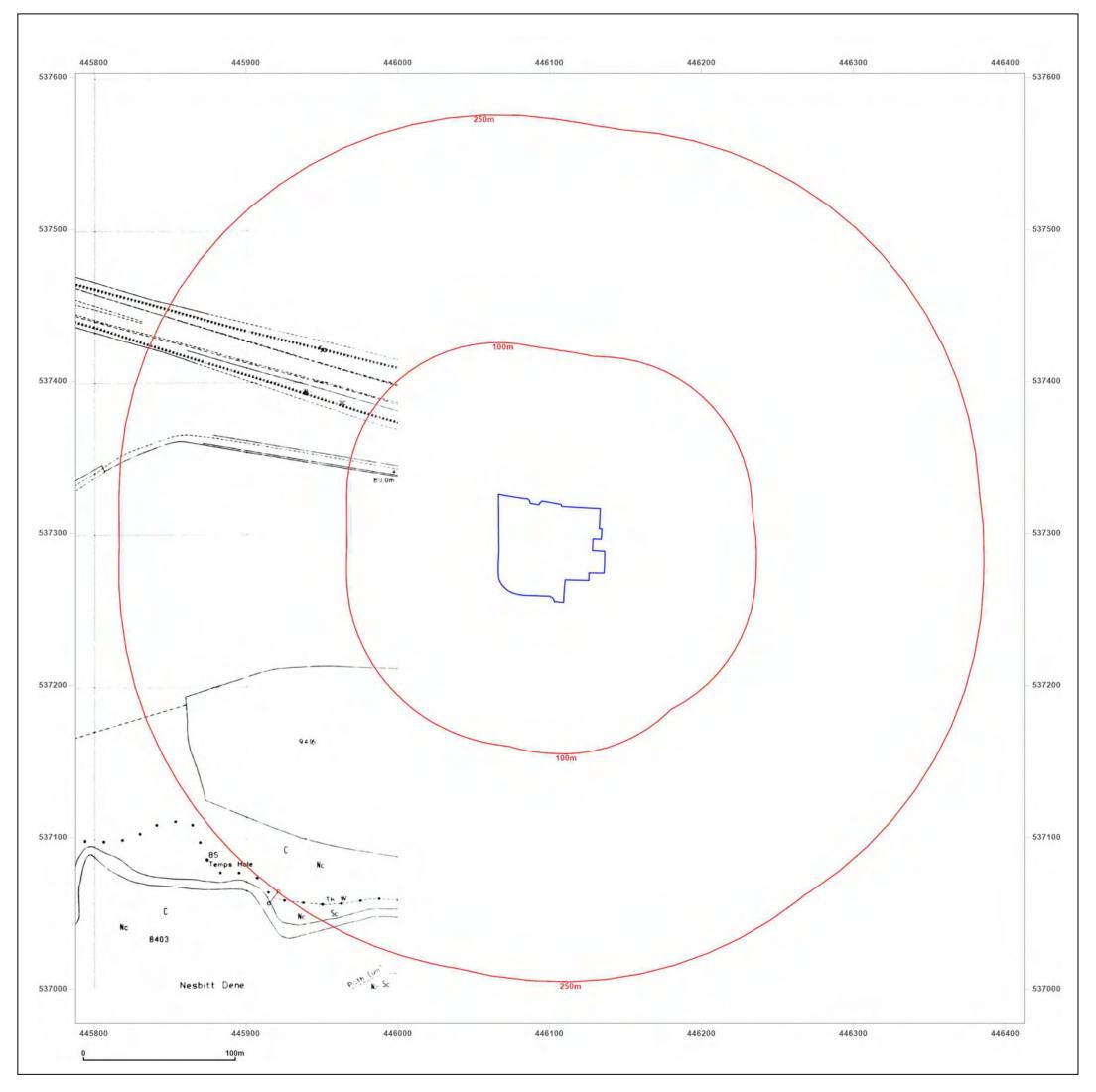




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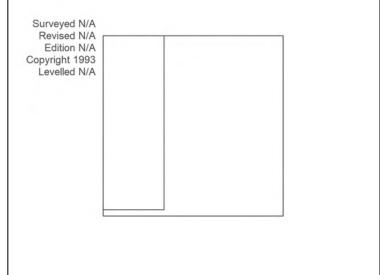
Production date: 04 August 2023





BOWES COURT, ROAD LEADING TO HESLEDEN HALL, MONK HESLEDEN, HESLEDEN, TS27 4TH

Client Ref: Report Ref: Grid Ref:	Land_West_of_Hesleden_Ha GS-UFH-YPU-QHP-GEO 446100, 537290	ll_Farm
Map Name:	National Grid	Ν
Map date:	1993	
Scale:	1:2,500	₩ ₩
Printed at:	1:2,500	S

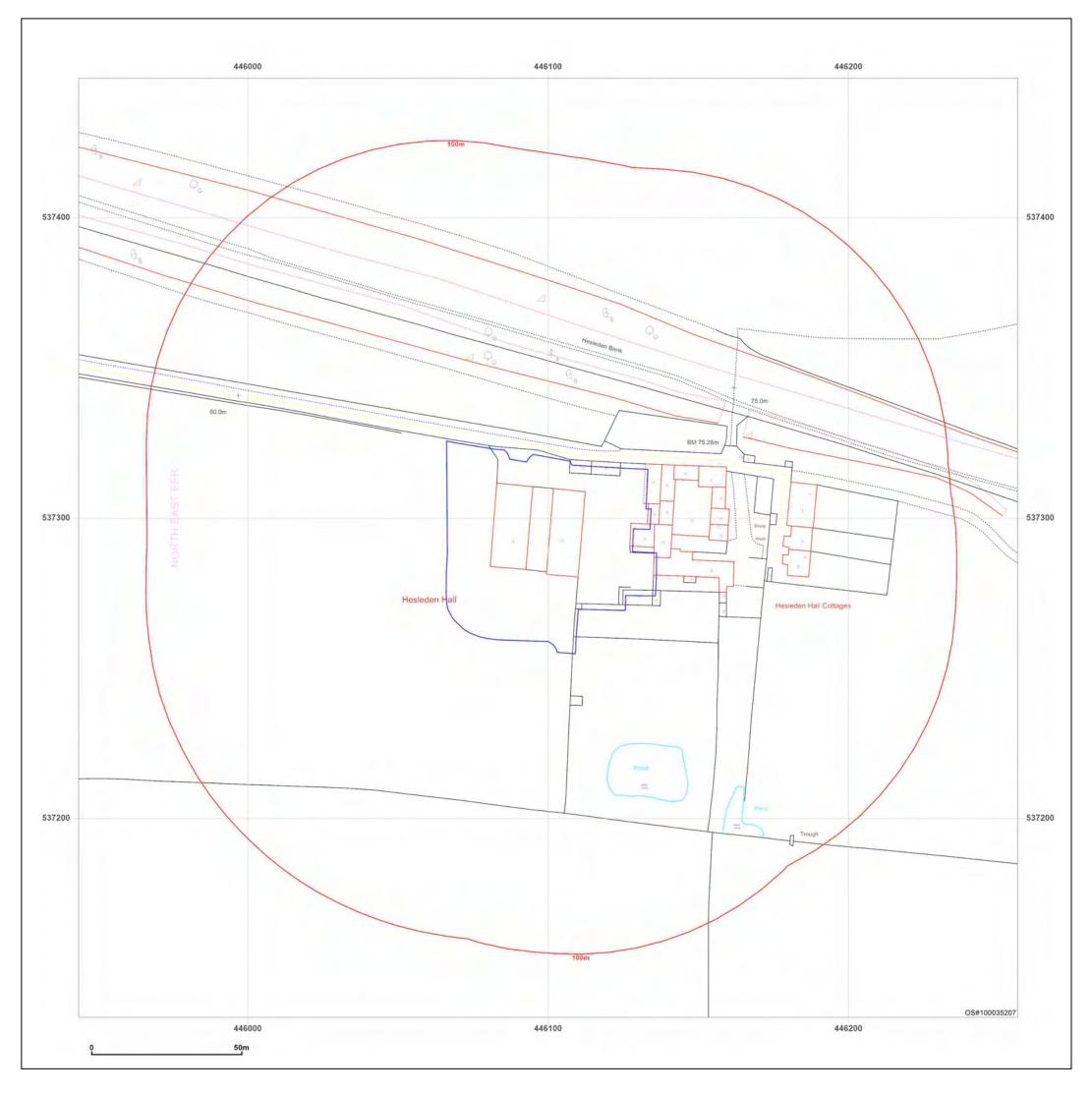




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BOWES COURT, ROAD LEADING TO HESLEDEN HALL, MONK HESLEDEN, HESLEDEN, TS27 4TH

Client Ref: Report Ref: Grid Ref:	Land_West_of_Hesleden_Ha GS-UFH-YPU-QHP-GEO 446100, 537290	ll_Farm
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Map date:	2003	
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Printed at:	1:1,250	S

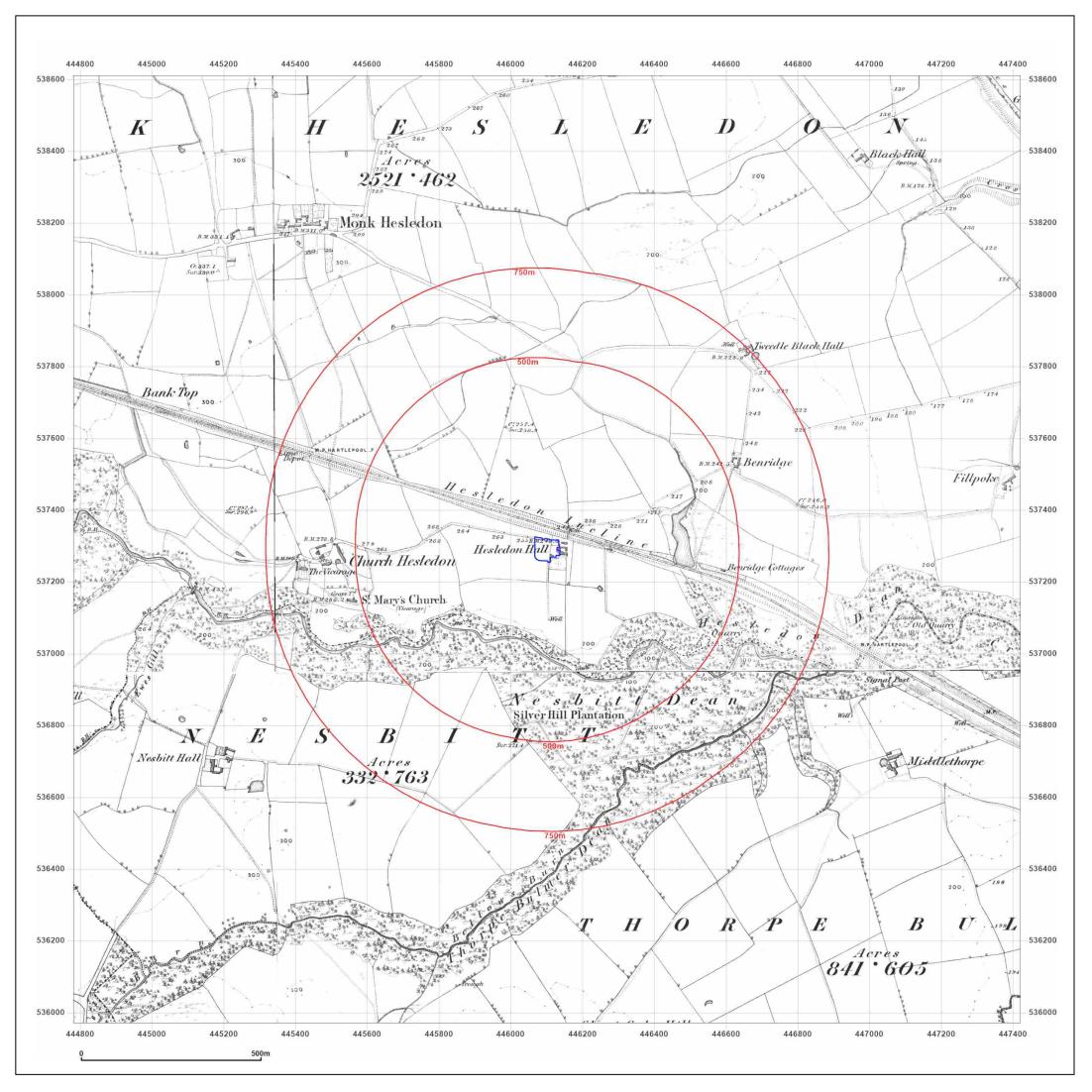
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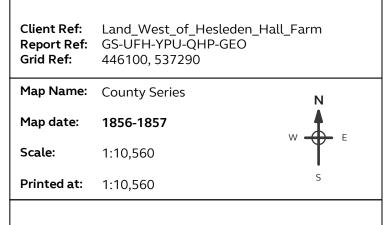
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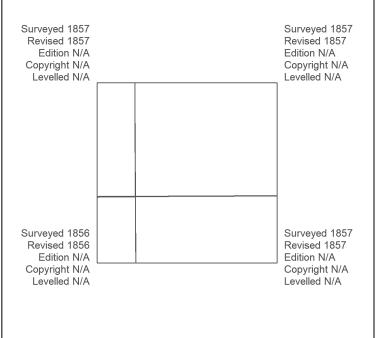
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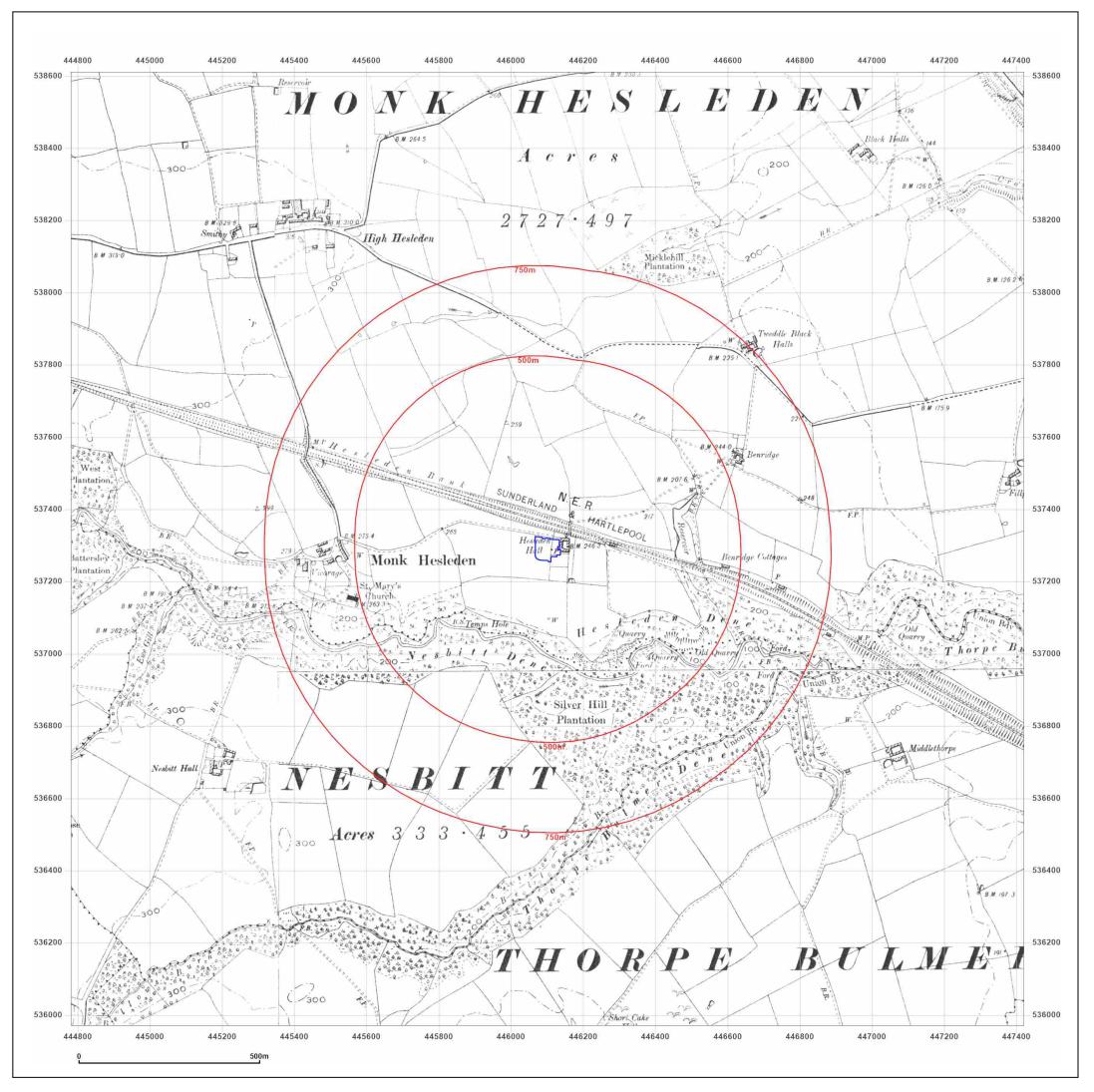




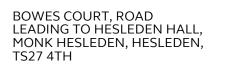


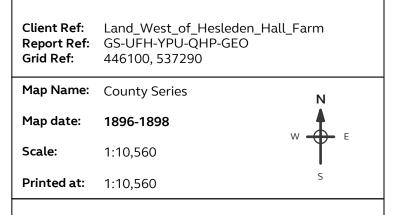
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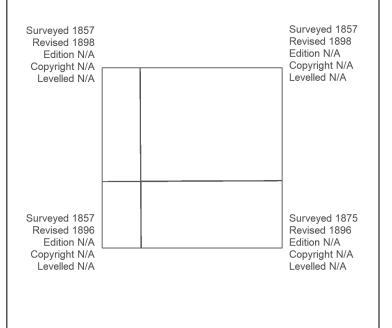
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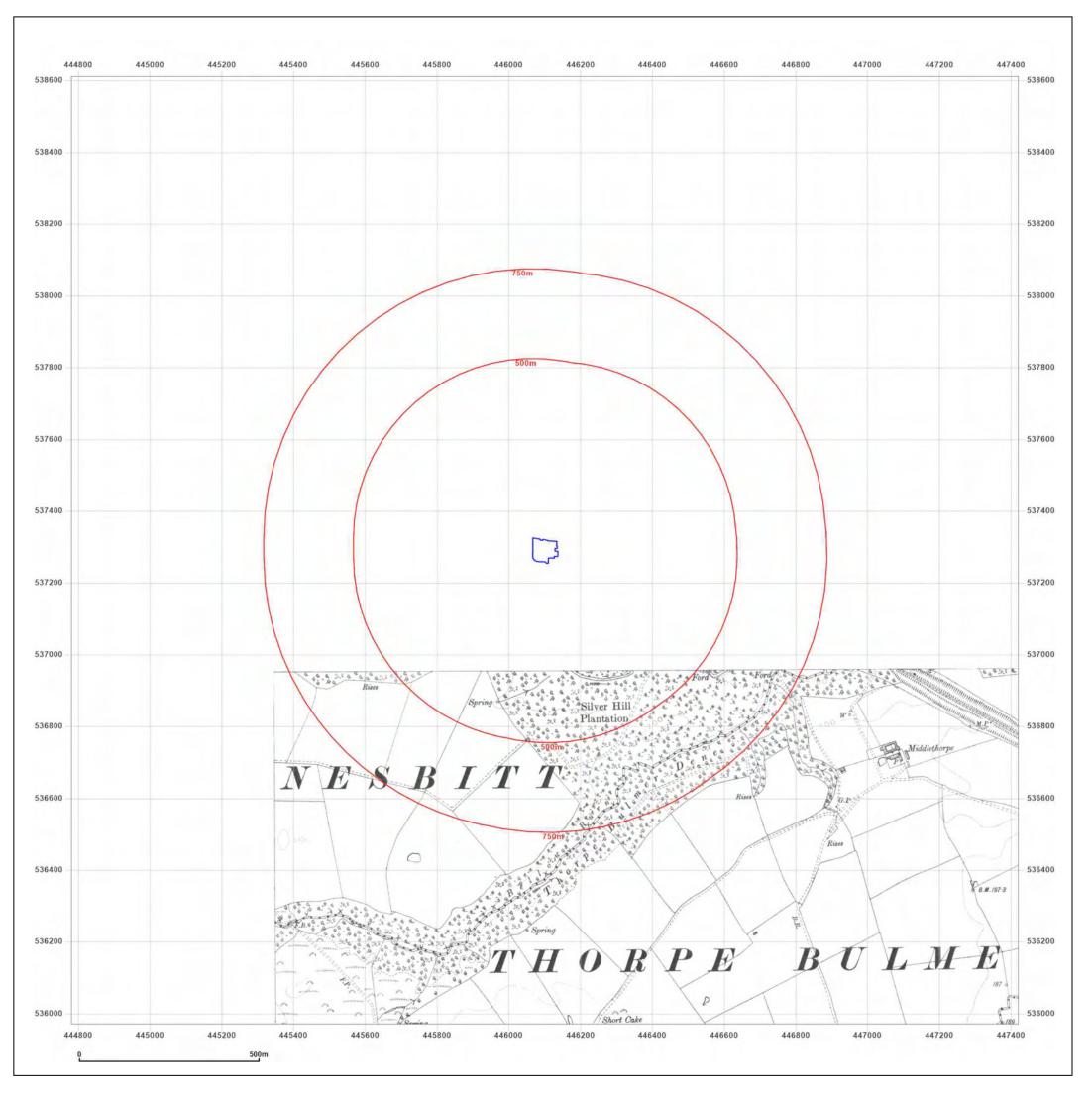






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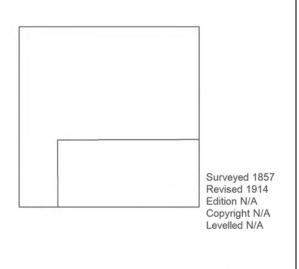
Production date: 04 August 2023





BOWES COURT, ROAD LEADING TO HESLEDEN HALL, MONK HESLEDEN, HESLEDEN, TS27 4TH

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Map Name:	County Series	Ν
Map date:	1914	
Scale:	1:10,560	Ψ
Printed at:	1:10,560	S





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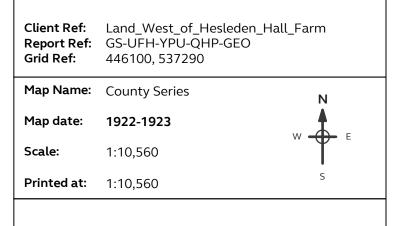
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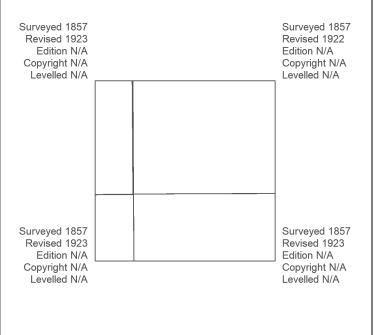
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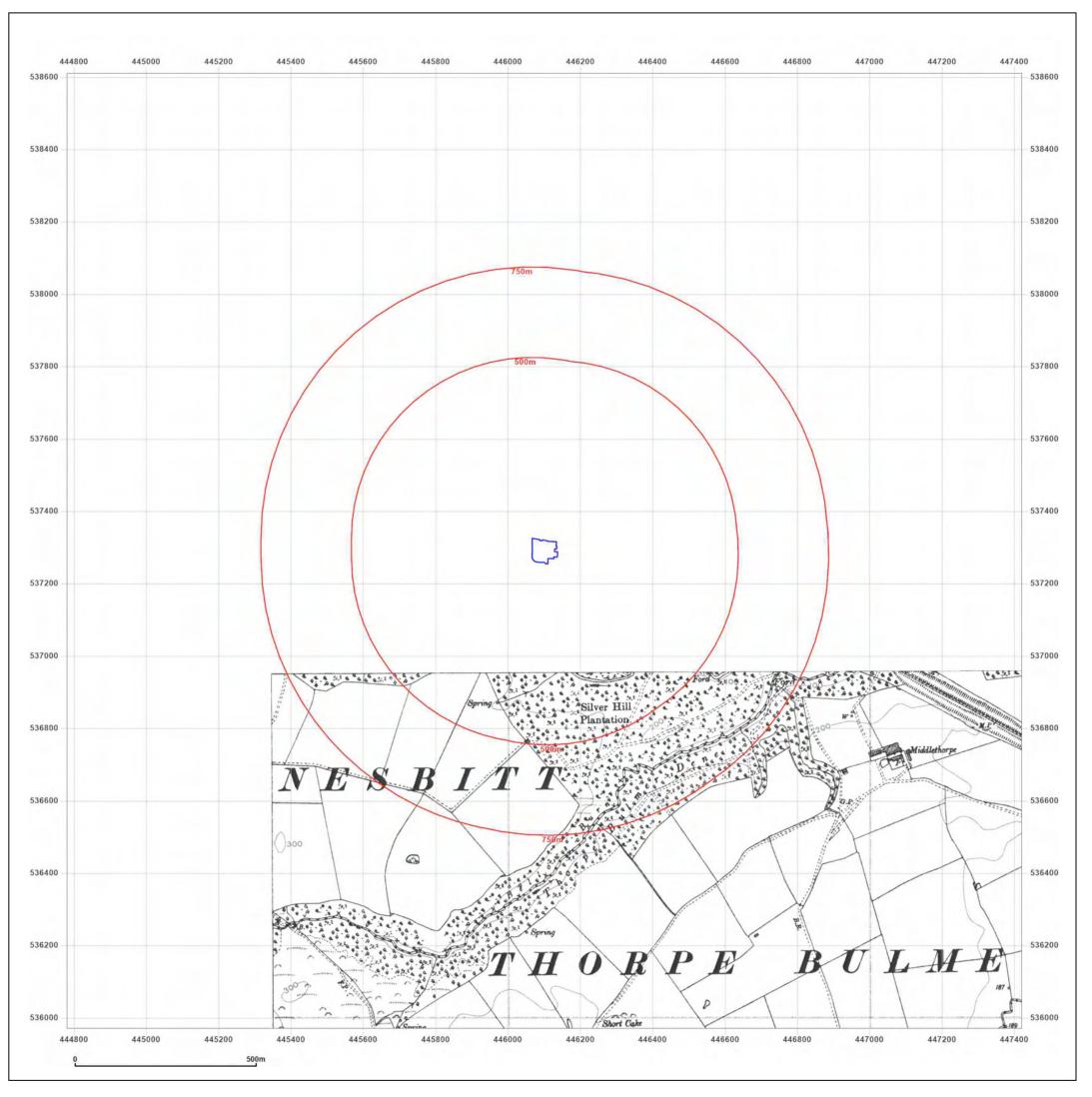






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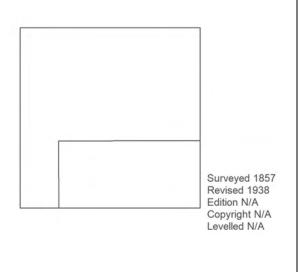
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BOWES COURT, ROAD LEADING TO HESLEDEN HALL, MONK HESLEDEN, HESLEDEN, TS27 4TH

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Map Name:	County Series	N
Map date:	1938	
Scale:	1:10,560	Ψ
Printed at:	1:10,560	S

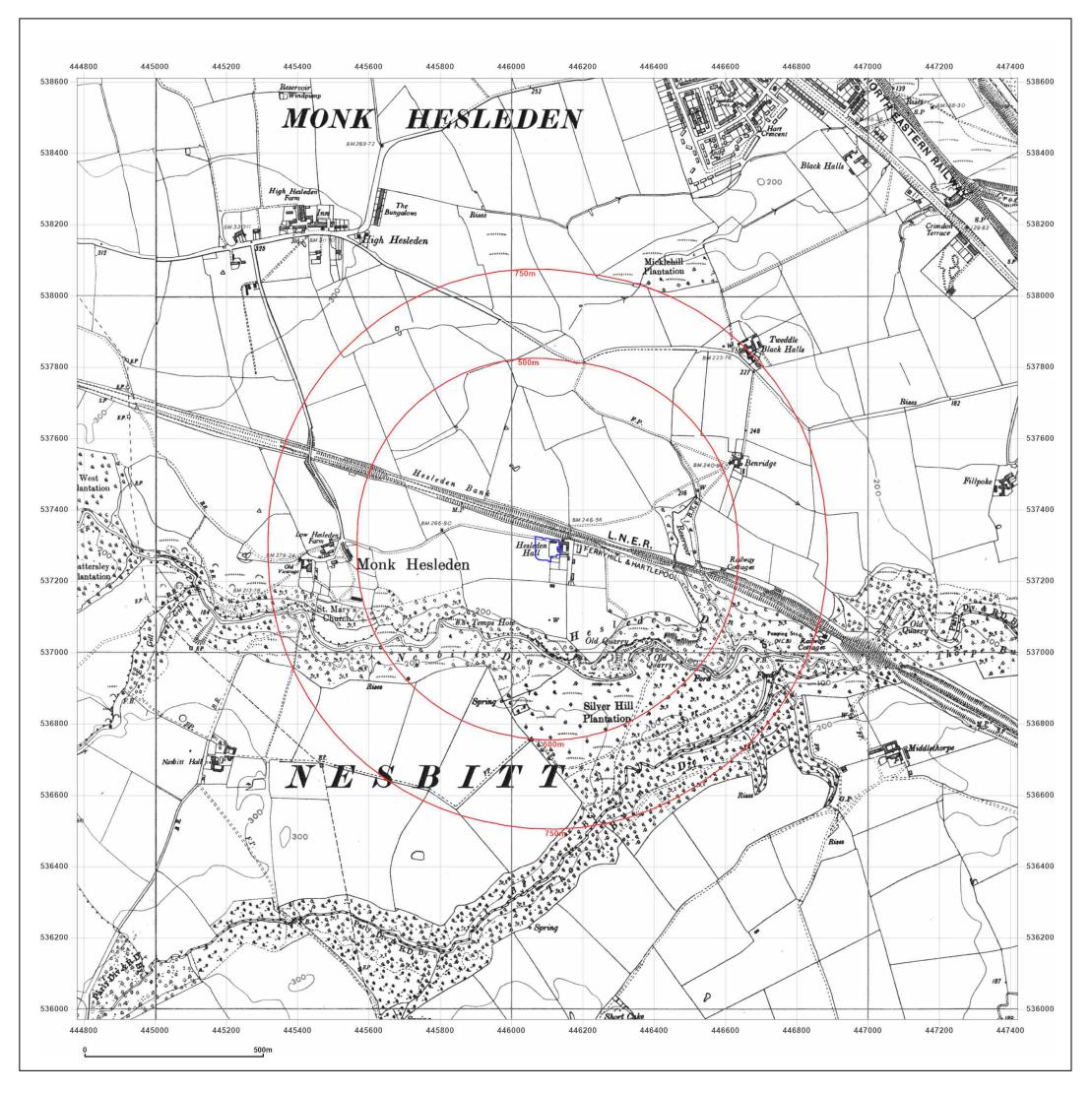




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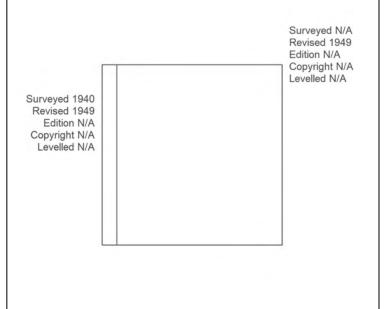
Production date: 04 August 2023







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Map date:	1949	
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Printed at:	1:10,560	S

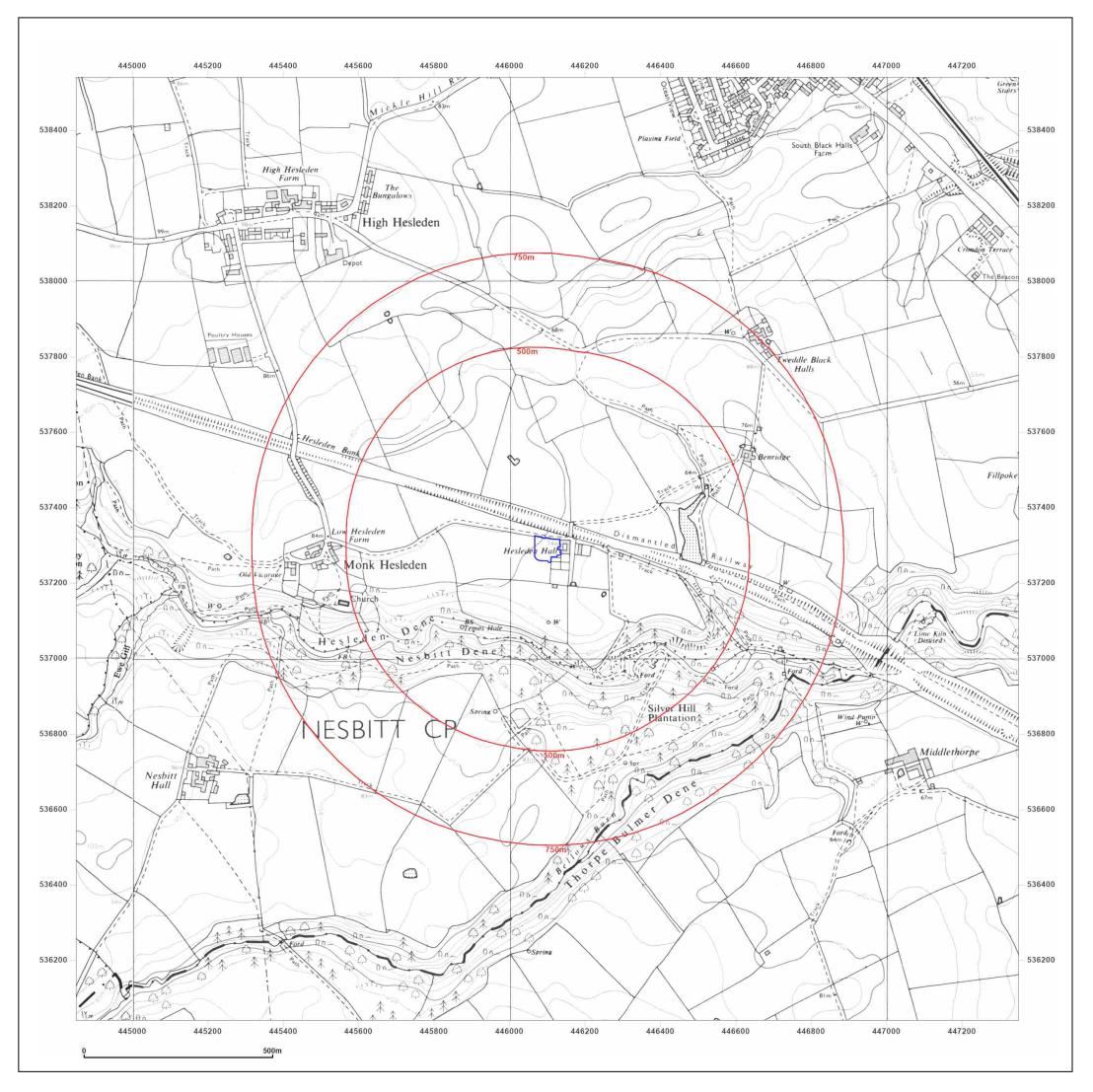




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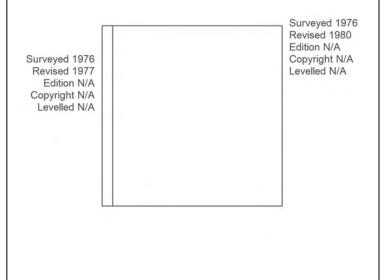
Production date: 04 August 2023







Client Ref: Report Ref: Grid Ref:	Land_West_of_Hesleden_Ha GS-UFH-YPU-QHP-GEO 446100, 537290	ll_Farm
Map Name:	National Grid	Ν
Map date:	1977-1980	
Scale:	1:10,000	Ψ L
Printed at:	1:10,000	S

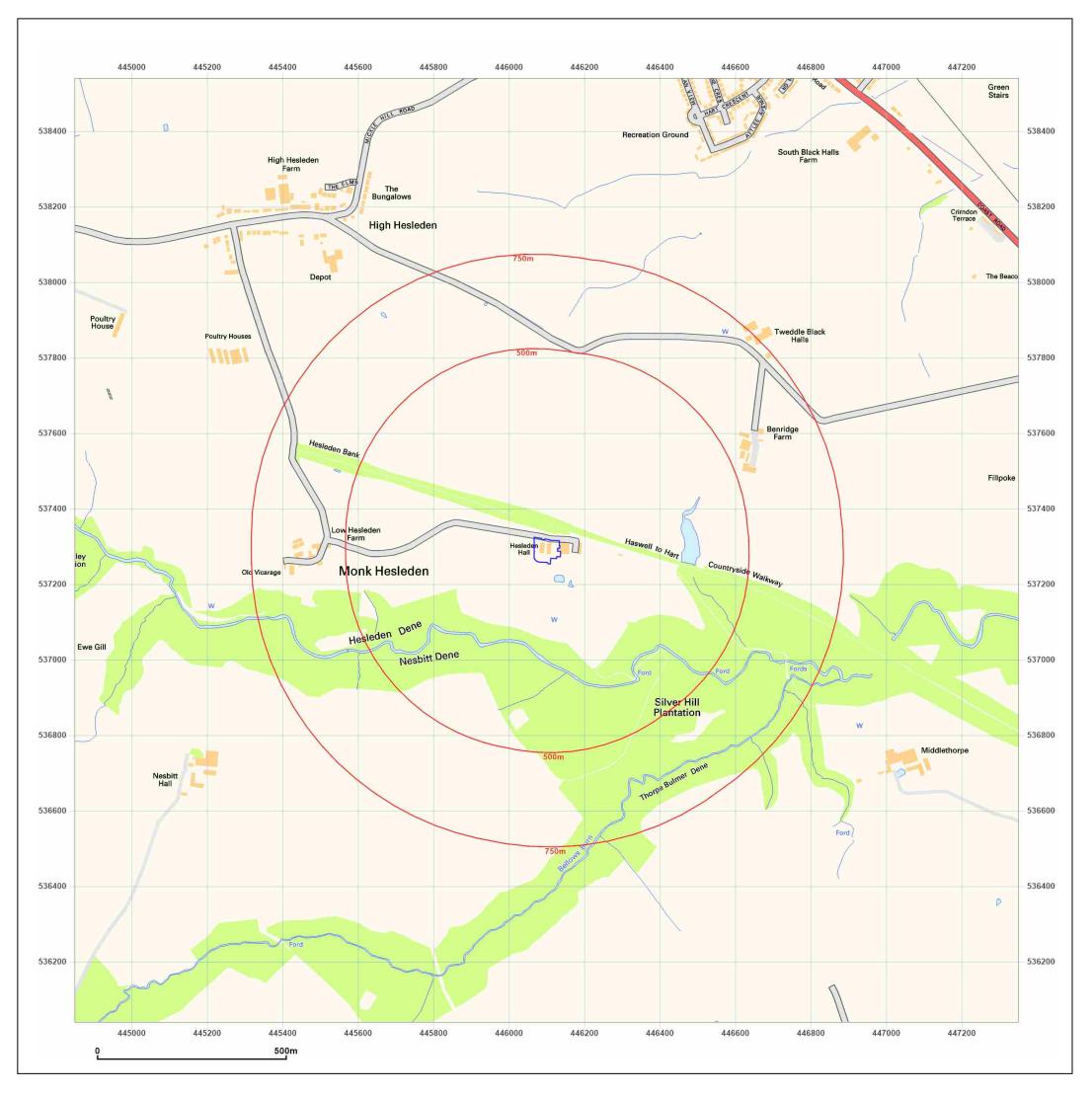




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Client Ref: Report Ref: Grid Ref:	Land_West_of_Hesleden_Ha GS-UFH-YPU-QHP-GEO 446100, 537290	ll_Farm
Map Name:	National Grid	Ν
Map date:	2001	
Scale:	1:10,000	" T
Printed at:	1:10,000	S

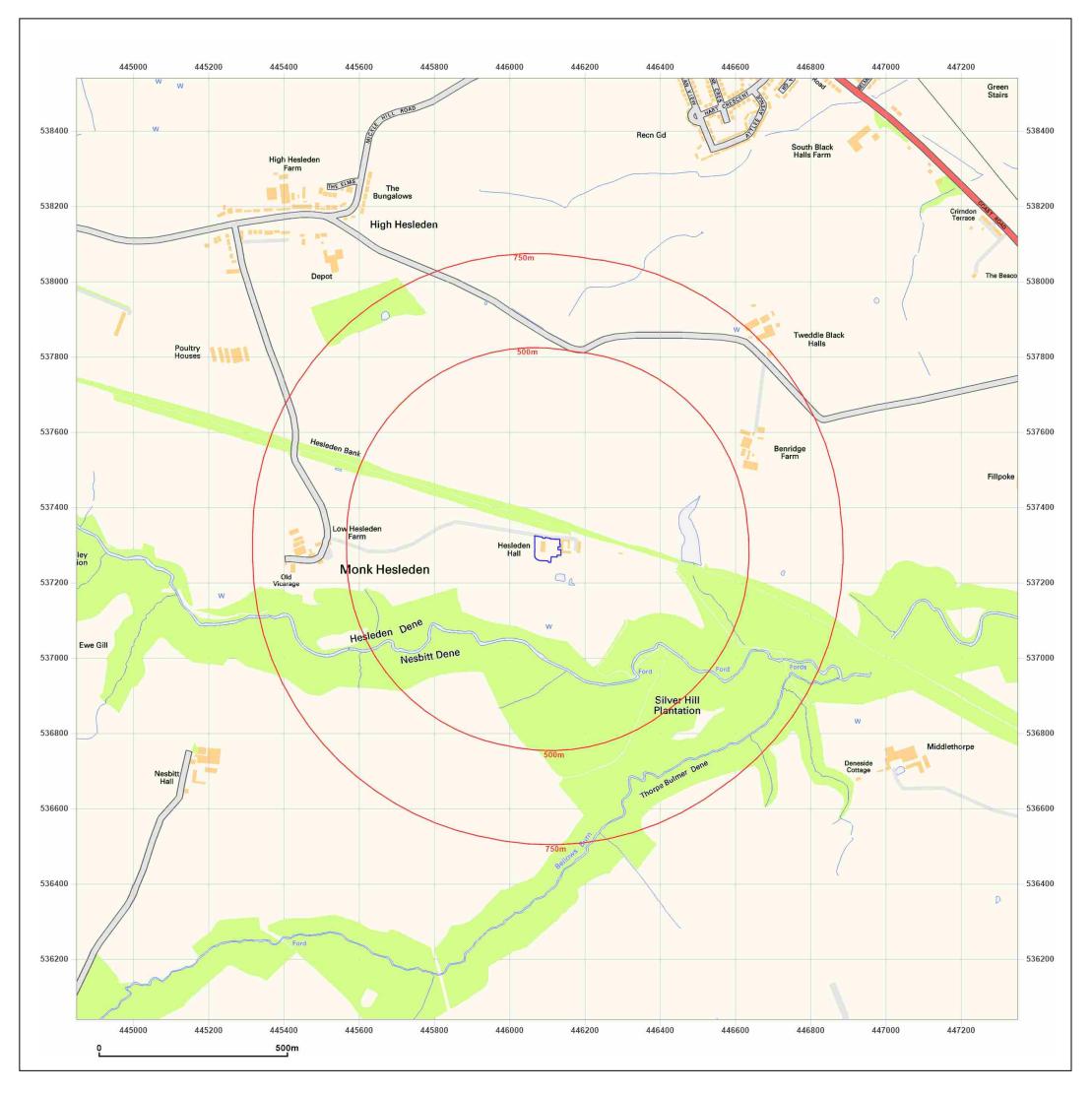
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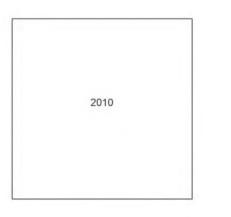
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Printed at:	1:10,000	S	

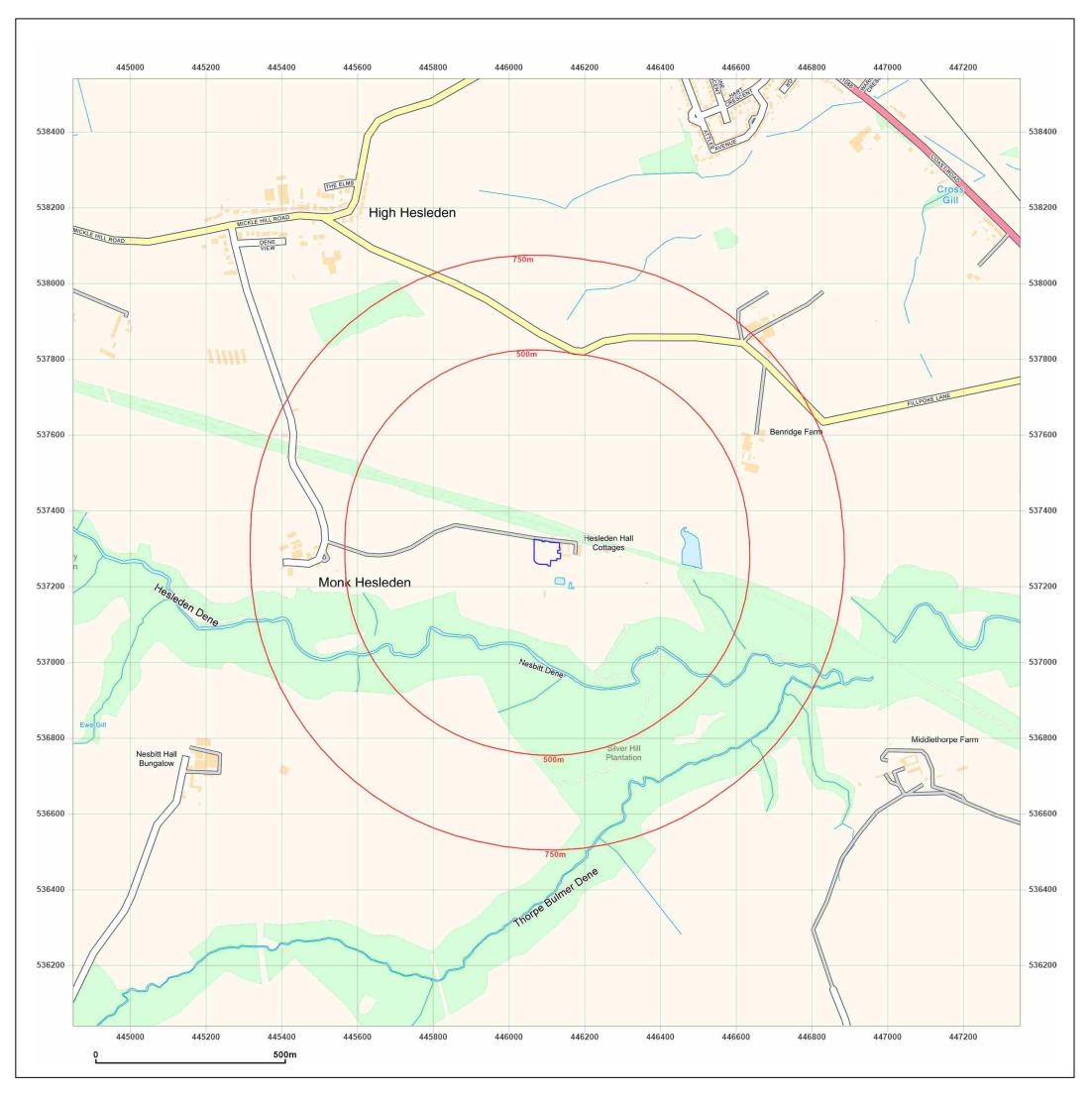




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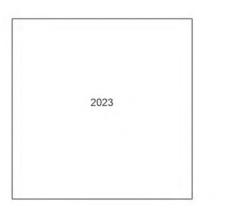
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Client Ref: Report Ref: Grid Ref:	Land_West_of_Hesleden_Hall_Farm GS-UFH-YPU-QHP-GEO 446100, 537290		
Map Name:	National Grid	Ν	
Map date:	2023		
Scale:	1:10,000	T L	
Printed at:	1:10,000	S	





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APPENDIX C – LIMITATIONS

This report was prepared by Adeptus (registered in England: 05908395) for the use of the client, named on page 1. The report has been prepared specifically on the basis of the end use as defined by the client. Any change of end use would necessitate review of this report and its findings. Use of or reliance on this report by any third party is not permitted without our express written agreement, and where this is given, will be subject to our terms and conditions.

We have prepared this report in our professional capacity using reasonable skill, care and diligence. The assessments, conclusions and recommendations within this report pertain to the study site (the extents of which are in Figure 1, below) and the immediate area in continuity with the Site. They are based on the established historical uses, information available at the time of writing and the proposed use of the Site. Where any information supplied by the client or other sources have been utilised, it has been assumed that the information is correct. No responsibility can be accepted by Adeptus for inaccuracies in data supplied by any other party.

Any plans, diagrams, cross sections or images are for illustrative purposes only and should be checked for accuracy on-site. In the event of changes to the proposed end use of the Site, the report may require updating to reflect such changes. Although reference may be made to archaeological, ecological or geotechnical issues, invasive species, flood risk and the presence of asbestos containing materials (ACMs), this report does not constitute an archaeological assessment, ecological assessment, geotechnical assessment, invasive species survey, flood risk assessment or asbestos survey and liability for any claim caused by arising out of or in any way involving asbestos is excluded.

New information relating to environmental matters can come to light after the report has been prepared and changes in conditions and regulatory requirements may occur in future. Either of those factors may change the conclusions presented in our report. If development does not take place within the expected timescales, consideration should be given to reviewing this assessment to confirm that no changes to the site or relevant legislation have taken place. No part of this report is intended to provide legal advice or opinion of any nature.