



**Carnell Management Services Ltd.**

# **Birdwell, Rockingham**

Preliminary Risk Assessment and Coal Mining Risk  
Assessment

350525-R01 (00)

**AUGUST 2022**



## RSK GENERAL NOTES

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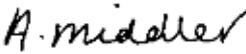
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**Client:** Carnell Management Services Ltd.

**Date:** August 2022

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### Revision control sheet

Revision reference	Date	Reason for revision
Rev 00	09.08.22	First issue

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK Environment Ltd.

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## EXECUTIVE SUMMARY

<b>Commissioning and purpose of assessment</b>	<p>RSK Environment Limited (RSK) was commissioned by Carnell Management Services Ltd to carry out a Preliminary Risk Assessment and Coal Mining Risk Assessment of the land at Birdwell, Rockingham, S74 0SB.</p> <p>The overall aim of the project was to identify any land contamination to the proposed development and to support discharge of relevant planning conditions and relevant building control requirements</p>
<b>Site description and proposed development</b>	<p>The site is currently unoccupied and is being considered for the development of seven commercial units.</p>
<b>History of site and surrounding area</b>	<p>The site was historically surrounded by Rockingham Colliery and Quarry and marked within a licensed Coal Authority Opencast Mining Area. The site was bordered to the north of site by a railway line which was then dismantled and became a licensed landfill from 1893 to 1989.</p>
<b>Previous site investigation (SI) reports</b>	<p>Previous investigations of the wider Rockingham development have included the subject site, including the most recent Rockingham Phase I Environmental Report (Enzygo) reference SHF.1122.002 GE R 0001.</p>
<b>Geology and environmental setting</b>	<p>The site is underlain by made ground to depths up to 4m, bedrock comprises by Haigh Moor Rock and the Pennine Middle Coal Measures Formation. The Coal Measures are classified as a Secondary A aquifer. The depth to groundwater is anticipated to be in the order of 10m to 20m bgl, with localised shallower perched water within made ground. Drilling logs from nearby boreholes indicate no water to be detected to almost 15m bgl. An inland river associated with the Don and Rother Catchment is 170m northeast of the site.</p>
<b>Site walkover findings</b>	<p>No evidence of contamination was noted during the site walkover survey and no evidence of asbestos was found on the ground surface.</p>
<b>Initial conceptual site model (CSM) and preliminary risk assessment (PRA)</b>	<p>Potentially complete contaminant linkages identified with a risk estimate of moderate to low or above include:</p> <ol style="list-style-type: none"> <li>1. Direct contact of the potential contamination within the soils to future site users (proposed commercial users and workers).</li> <li>2. Migration and build-up of ground gas within on-site buildings.</li> </ol> <p>To reduce the uncertainty associated with the conceptual model and to quantify the risk associated with the contaminant linkages above, intrusive investigation and subsequent quantitative risk assessment is proposed.</p>
<b>Coal Mining Risk Assessment findings</b>	<p>The CMRA has identified only limited potential coal mining issues which may require mitigation and consequently necessitate further assessment by intrusive investigation. This includes confirmation of ground conditions including in situ properties of the fill and depth to rockhead, as well as confirmation of the current ground gas regime.</p>
<p><i>The information given in this summary is necessarily incomplete and is provided for initial briefing purposes only. The summary must not be used as a substitute for the full text of the report.</i></p>	

# 1 INTRODUCTION

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## 1.1 Commissioning

RSK Environment Limited (RSK) was commissioned by Carnell Management Services Ltd to carry out a preliminary risk assessment (PRA) and coal mining risk assessment (CMRA) of the land at Birdwell, Rockingham, S74 0SB (“the site”). The site location is shown as [Figure 1](#).

The project was carried out to an agreed brief as set out in RSK’s proposal (email to RWO dated 7<sup>th</sup> July 2022). This report is subject to the RSK service constraints given in Appendix A and limitations that may be described through this document.

RSK understand the site is currently being considered for redevelopment, comprising of the construction of seven commercial units on the undeveloped ground at site. The proposed site layout (reference 12215-WMS-XX-XX-DR-A-10003-S2-P4) is included in [Appendix B](#).

## 1.2 Objectives

The objective of the report is to assess the potential environmental risks associated with the redevelopment, to support a planning application for the site.

A brief summary of relevant legislation and policy relating to land contamination is given in [Appendix C](#).

## 1.3 Scope of Works

The scope of works for this Phase 1 Desk Study has included the following:

- A site walk-over.
- A study of local geology and hydrogeology, including historical BGS boreholes.
- The identification of potential geological hazards, including radon.
- A study of the land-use, development history and environmental data on and around the site and its surroundings from local authority correspondence, an Envirocheck report and archival Ordnance Survey mapping.
- Review of previous RSK reports pertaining to the surrounding land.
- The identification of aquifer vulnerability rating beneath the site and local water abstraction points from Environment Agency records.
- The identification of potential targets at risk from possible contamination.
- Production of a preliminary conceptual site model (CSM).
- Recommendations for further work, including outline intrusive investigation recommendations.

The scope of this Coal Mining Risk Assessment (CMRA) is:

- Review information provided on the Coal Authority on-line interactive viewer.
- Purchase and review of the Coal Authority Consultants Mining Report.
- If required purchase and review abandonment plans
- Review the British Geological Survey Solid and drift geological maps, 1:10,000 and 1:50,000 series.
- Review borehole logs provided on the BGS website.
- Present a desk-based review of all available information on the coal mining issues which are
  - relevant to the site use that information to identify and assess the risks to the proposed development from coal mining legacy, including the cumulative impact of issues.
  - Set out appropriate mitigation measures to address the coal mining legacy issues affecting the site, including any necessary remedial works and/or demonstrate how coal mining issues have influenced the proposed development.
  - Demonstrate to the Local Planning Authority that the site is, or can be made, safe and stable to meet the requirements of national planning policy with regard to development on unstable land.

## 1.4 Existing Reports

The following report detailing previous works at the site were made available for review:

- Rockingham Development- Phase I Environmental Desk Study and Mining Report, reference SHF.1122.002 GE R 0001, Enzygo, August 2014.
- Proposed Rockingham Development, Birdwell- Phase II Geo- Environmental Assessment Summary, reference 15677, 3e Consulting Engineers Limited, August 2015.
- Landmark Utilities Report- Utilities Report, reference LM / 88697, October 2020.
- Drainage and Water Search- Commercial Drainage and Water Enquiry, reference OR-37210-R3P5S4, October 2020.

Pertinent information from these previous reports has been included in this report.

A Landmark Envirocheck report (reference 298598069\_1\_1) has been obtained to support the appraisal herein.

## 2 SITE DETAILS

### 2.1 Site Location

Site location details are presented in Table 1 and a site location plan is provided on Figure 1 (reference 350525-CS-111-SS-D-C-11101-C01).

**Table 1 Site Location Details**

<b>Site name</b>	Birdwell, Rockingham
<b>Full site address and postcode</b>	Proposed Development, off A6195, Birdwell, Rockingham, Barnsley. S74 0SB
<b>National Grid reference (centre of site)</b>	SE 34936 00516

### 2.2 Site Description

The site is roughly triangular in shape, covering an area of approximately 2.02 hectares (ha). The site comprises of open undeveloped land, which is largely vegetated particularly at the site boundaries. The access road to the site is via Kestrel Way.

### 2.3 Surrounding Land Uses

The site is located at Birdwell, Rockingham. Immediate surrounding land uses are described in Table 2.

**Table 2 Surrounding Land Uses**

<b>North</b>	Costa Coffee Drive Thru café and parking.
<b>East</b>	A6195 road and Rockingham roundabout.
<b>South</b>	Sheffield Road, Birdwell Roundabout and public footpath.
<b>West</b>	Highways England storage depot and Clayton Vallely tanker manufacturer.

## 3 DESK-BASED ASSESSMENT

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The desktop study was designed generally to meet the objectives of a preliminary (phase 1) investigation, as defined by BS 10175:2011 + A2 2017 (BSI, 2017) and this assessment relates to LCRM Stage 1, Tier 1 preliminary risk assessment. The "vicinity" of the site for the purposes of this report is defined as locations situated within an approximate 250 m radius of the site, although certain sources and/ or sensitive targets further than 250 m may also have been considered.

The study aims principally to identify and assess the potential risks and liabilities associated with contamination of the ground, on and in the vicinity of the site. While this includes consideration of current operations and housekeeping on the site, the report does not constitute a comprehensive environmental audit of the site, as covered under ISO 14001.

### 3.1 Site History

The development history of the site and surrounding area based upon assessment of historical plans and records is detailed below. The historical maps reviewed are shown within the Envirocheck report in [Appendix D](#).

#### 3.1.1 Summary of Historical Development On-Site

The earliest available historical map shows the site as agricultural land (two fields) in 1855 and is indicated to have been undeveloped to present. A footpath is shown to cross the site (east to west) from around 1893. A pond was present in the north east corner of site in 1931 and is no longer shown on maps by the 1950's.

#### 3.1.2 Summary of Historical Development Off-Site

The earliest map from 1855 shows a railway line along the northern site boundary. A partial map indicates that this was dismantled by 1986. The dismantled railway adjacent to the north of site is annotated as a Tip on the map from 1991 (indicated as British Rail Railway Cutting landfill, see Section 3.2).

Rockingham gas works are shown to the north of the railway line (approximately 80m north west of site) from 1893. The gas works site was replaced by NCB Central Workshops by 1965 and is no longer annotated by 1993.

Birdwell Quarry was situated from approximately 150m west from around 1893 to the 1970's.

Rockingham Colliery is indicated approximately 400m north east on historical maps from 1906 to 1989, when it is shown as disused workings.

The following relevant historical information has been summarised from previous reports:

- The site is indicated to be on the fringes of an opencast coal mine, which was backfilled in the 1990's.
- The railway line was north of site as early as 1850.

- The pond appeared in 1931 but was not shown in 1951.
- A map from 1987 showed the railway line to be disused.
- The footpath was diverted to the western boundary of site, with an overhead cable running north-south of site appearing in maps from 2002.

### 3.1.3 Unexploded Ordnance

A review of publicly available unexploded ordnance (UXO) risk maps indicates that the site is located in an area with 'low' potential for wartime bombs to be present (*Zetica, 2022*). The risk report is included within [Appendix E](#).

## 3.2 Information from Environmental Database Report

Relevant environmental permits and incidents detailed within the Environmental database report (see Appendix D) are summarised below in Table 3.

**Table 3 Summary of Environmental Permits, Landfills and Incidents**

Data type	Entries on-site	Entries <250m from site	Entries >250m from site of relevance	Details
<b>Agency and hydrological</b>				
Environmental permits – incorporating Integrated Pollution Prevention and Control, Integrated Pollution Controls, Local Authority Integrated Pollution Prevention and Control	0	2	2	The nearest Local Authority Pollution Prevention Controls entry is 145m northwest of site, associated with waste burning in 1998.
Enforcement and prohibition notices	0	0	0	None recorded.
Pollution incidents to controlled waters, Prosecutions relating to controlled waters, Substantiated pollution incident register, Water Industry Act referrals	2	3	3	The nearest pollution incident to controlled waters is on site relating to a minor incident with a colour change of a nearby freshwater stream. Another incident occurred on site relating to agricultural runoff. Both incidents occurred in 1993.

Data type	Entries on-site	Entries <250m from site	Entries >250m from site of relevance	Details
Discharge consents	0	0	6	The nearest Discharge Consent is 260m northeast of site, associated with sewage discharge.
Registered radioactive substances	0	0	0	None recorded.
<b>Landfill and waste</b>				
Active landfills	0	0	0	None recorded.
Historic/closed landfills	1	0	1	The nearest historical landfill was 2m northwest of the site at the dismantled railway line (named British Rail Railway Cutting). The landfill was licenced to accept commercial and inert waste (clay/subsoil/topsoil, construction/ demolition waste, foundry sand and slag, hardcore and ex coal processing waste) between 1893 and 1989.
Other waste management licences	0	4	0	The nearest operational waste management site is a scrapyards, 137m west (Hangmanstone Depot).
<b>Hazardous substances/industrial land uses</b>				
Control of Major Accident Hazards (COMAH) sites	0	0	0	None recorded.

Data type	Entries on-site	Entries <250m from site	Entries >250m from site of relevance	Details
Explosives sites, Notification of Installations Handling Hazardous Substances (NIHHS), Planning hazardous substance consents/enforcements	0	0	0	None recorded.
Contaminated land Part 2A register entries and notices	0	0	0	None recorded.
Contemporary trade directory entries	0	16	14	The nearest contemporary trade directory entry is 40m northwest of the site associated with mechanical handling equipment, another is 40m northwest of site related to packing cases and pallets.
Fuel station entries	0	2	1	The nearest fuel station entry is 60m northwest associated to the BP Service Station which is currently open.
<p><i>Note: Entries have only been included within the table where they are located within a 250m radius of the site or, where they fall outside of this radius but are considered to comprise a significant entry.</i></p>				

### 3.3 Site geology

#### 3.3.1 Anticipated Geological Sequence

The site is covered with a layer of made ground, recorded depths between 0.3m to greater than 4m.

The British Geological Survey (BGS) online viewer (2022) for the area indicates that no superficial deposits are present.

Bedrock below the site comprises the Pennine Middle Coal Measures Formation (mudstone, siltstone, sandstone and coal). Haigh Moor Rock sandstone (PMCM) is present in the west of site.

### 3.3.2 Radon

The environmental database report provides an assessment of radon risk. The report indicates an intermediate probability that 1-3% homes are above the Action Level of 200 Bq m<sup>-3</sup> but no radon protective measures are required within new dwellings at the site.

Further assessment may be required, in line with the guidance provided in BRE publication 211 “Radon: Guidance on Protective Measures for New Dwellings (2015)”.

## 3.4 Mining and Quarrying

Evidence has been sought to identify any mining, quarrying, landfilling and land reclamation operations, past and present, which have taken place within 500 m of the site.

The online Coal Authority interactive map (2022) indicates the site lies within the Coal Authority Consultation Area (NOTTS). A Coal Authority Summary of Findings Map is included in [Appendix E](#). This map shows the site to be located within an opencast mine licence area.

### 3.4.1 Coal Mining

A Consultants Coal Mining Report commissioned from the Coal Authority is included in [Appendix E](#). The report indicates that the site has been subject to underground mining in eight seams of coal at 58m to 322m depth, the last date of underground working being 1959. There are no recorded mine entries within 100m of the site. No outcrops, faults, fissures or breaklines were recorded on the site.

A more detailed coal mining risk assessment is presented in Section 6.

### 3.4.2 Quarrying

The review of historical maps highlighted the presence of a quarry (Birdwell Quarry) approximately 150m west from around 1893 to the 1970’s.

## 3.5 Hydrogeology

A summary of the hydrogeological setting of the site, with respect to the anticipated geological sequence set out in Section 3.3 is presented below in Table 4 below.

**Table 4 Summary of Hydrogeological Setting**

Condition	Description
Aquifer characteristics	The site is underlain by a Secondary A aquifer relating to the Pennine Middle Coal Measures Formation.
Groundwater Vulnerability	The site is covered by a medium groundwater vulnerability risk (MAGIC, 2022).
Groundwater recharge/attenuation	The site is currently unsurfaced and will therefore drain to ground.

Condition	Description
Licensed groundwater abstractions	The environmental database report indicates that there are no groundwater abstractions within a 1km radius of the site.
Source Protection Zones (SPZ)	MAGIC map (2022) and the Envirocheck report both indicated the site does not lie within a currently designated groundwater Source Protection Zone (SPZ).

### 3.6 Hydrology

A summary of the hydrology within the site area is summarised in Table 5.

**Table 5 Summary of Hydrology in Site Area**

Condition	Description
Surface watercourses/features	The nearest watercourse is 170m northeast of the site, as an inland river associated with the Don and Rother Catchment.
Surface water abstractions	The environmental database report indicates that there are no surface water abstractions within a 1km radius of the site.
Site drainage	No evidence of drainage whilst on the site walkover.
Preliminary flood risk assessment	The indicative floodplain map for the area, shows that the site does not lie within a designated floodplain. A flood risk assessment (FRA) is outside the scope of this report.

### 3.7 Sensitive Land Uses

None identified.

### 3.8 Summary of previous ground investigation

A Phase II Geo-Environmental Assessment was undertaken by 3e Consulting Engineers Ltd in 2015. The investigation comprised trial pitting, mini percussion boreholes, laboratory testing and gas and groundwater monitoring.

Made ground was encountered as engineered colliery spoil to depths of between 0.3m and >4.0m, underlain by residual clay or weathered bedrock. Perched groundwater was encountered within the made ground between 1.3m and 2.7m bgl.

No visual or olfactory evidence of contamination was encountered and chemical testing results indicated concentrations below the generic assessment criteria for a commercial end use.



Ground gas monitoring, based on two visits at the time of writing the report, indicated negligible methane and low concentrations of carbon dioxide. The results suggested a Characteristic Situation 2 classification.

## 4 SITE WALKOVER

A site walkover was completed on 19th July 2022 by RSK. The characteristics of the site observed during the walkover and from current Ordnance survey maps are summarised in Table 6 below. Photographic records from site walkover are included in [Appendix F](#). A Site Features Plan has been created to accompany this information and is included as [Figure 2](#) (reference 350525-CS-121-SS-D-C-12101-C01).

Whilst the walkover summary includes consideration of current operations and housekeeping on the site as potential sources of contamination, it does not constitute a comprehensive environmental audit of the site, as covered under ISO 14001.

**Table 6 Site Walkover Findings**

Feature	Description
<b>Physical characteristics</b>	
Access constraints	Dense vegetation limited access to some parts of the site. Access is by Kestrel Way via Costa Coffee.
Site topography	The site surface is essentially level but with a shallow basin/pond in the centre of site.
Surface cover	The site is unsurfaced, and ground is predominantly vegetated.
Site drainage	Surface water run-off from the site appears to collect in an onsite pond in the centre of site. Although there was no water present during the walkover, plants including latifolias were growing within the basin, indicative of an aquatic setting.
Surface water	No evidence of drainage on site.
Trees and hedges	Vegetation present on-site comprises scrub vegetation, bushes and well-established trees. These are along site boundaries but also across site. Plants associated with aquatic life are present within a basin on site.
Invasive species	Based upon the walkover survey obvious evidence of Japanese Knotweed or other invasive species has not been identified on-site. However, it should be noted that a detailed survey of the possible presence or absence of invasive species is outside of the scope of investigation and consideration should be given to commissioning a specialist survey, as necessary.
Existing buildings on-site	No buildings are present on site.
Retaining walls and adjacent buildings on or close to site boundary	No such structures were identified on or close to the site boundary.
Basements on-site	No evidence of existing or infilled basements was observed.

Feature	Description
Made ground, earthworks and quarrying	Made ground is present across the entire site.
Potentially unstable slopes on or close to site	None observed.
Buried and overhead services present	No manholes present on site. One set of overhead cables and masts on site, by the A6159.
<b>Environmental characteristics</b>	
Underground/ above ground storage tanks and pipework	None observed.
Potentially hazardous materials storage and use	None observed.
Asbestos-containing materials	No evidence of asbestos on ground surface.
Waste storage	None observed.
Fly-tipping	Some general littering evidenced along the site boundaries. Some old drums and leftover plastic pipework at the northern site boundary which are thought to have been left from previous nearby earthworks.
Electricity sub-stations/ transformers	None observed.
Evidence of possible land contamination on-site	None observed.
Potential off-site sources of ground contamination	None observed.

No potentially significant land contamination or geotechnical issues were identified during the site walkover survey.

## 5 INITIAL CONCEPTUAL SITE MODEL

In the UK land contamination is assessed using a risk-based approach taking account of the magnitude (severity of the hazard) and likelihood (probability) of occurrence. A 'receptor' is something that could be adversely affected by contamination (e.g., people, an ecological system, property or a water body). A 'pathway' is a route or means by which a receptor is or could be exposed to or affected by a contaminant. A 'contaminant source' is a hazard but it can only pose a risk to a receptor where a pathway is present. The relationship between sources, pathways and receptors are referred to as a conceptual site model. A risk can only be released where a contaminant source, pathway and receptor are all in place, referred to as a 'pollutant linkage'.

In line with LCRM (Environment Agency, 2021) and BS 10175: 2011 + A2 2017 (BSI, 2017), RSK has used information in the preceding sections to identify hazards (sources of contaminants), receptors that may be impacted and plausible linking pathways. Where all three are present this is termed a potentially complete contaminant linkage and a qualitative risk estimation is made.

### 5.1 Potential soil, soil vapour and groundwater linkages

#### 5.1.1 Potential Sources of Contamination

Based on the review of historical land use associated with the site, and surrounding the site, in addition information from the site walkover, no significant development history has been identified. As such, the potential for plausible sources of contamination is considered limited, a summary is provided as Table 7.

**Table 7 Potential sources of soil and groundwater contamination**

Potential sources	Contaminants of concern
<b>On-site</b>	
Made ground associated with historic opencast mining, including infilled pond.	Material expected to be largely reworked mudstone and sandstone (colliery spoil) but has the possibility of containing extraneous materials such as ash and clinker with contaminants including heavy metals, sulphates, polycyclic aromatic hydrocarbons (PAHs), hydrocarbons and asbestos.
<b>Off-site</b>	
Historic railway (adjacent to north)	Petroleum hydrocarbons, toxic and phytotoxic metals, inorganics, PAHs, asbestos, herbicides
Historic landfill (railway cutting landfill, adjacent to north)	Inert/ commercial waste. Landfill leachate including ammoniacal nitrogen and chloride, heavy metals, sulphates, polycyclic aromatic hydrocarbons (PAHs), hydrocarbons and asbestos.
Historic gasworks (80m north west)	Coal tars, PAHs, toxic and phytotoxic metals, inorganics e.g. cyanide, sulphide., sulphate, ammonia, volatile organic

	compounds e.g. BTEX, semi-volatile organic compounds (SVOCs) e.g. phenols, asbestos
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### 5.1.2 Sources not Considered Plausible

Based on the review of historical information and evidence from the site walkover, the following sources are not considered a plausible:

- Asbestos (as a standalone source), given there was no external buildings on site or no asbestos containing material found during the walkover.
- No significant sources of volatile contamination have been identified.
- Fly tipped waste did not appear to be a contaminative concern and was primarily plastic pipes and general litter.

### 5.1.3 Sensitive Receptors and Linking Exposure/ Migration Pathways

Sensitive receptors identified at or in the vicinity of the site that could be affected by the potential sources identified above comprise:

- future site users – proposed commercial users and workers (oral, dermal and inhalation exposure with impacted soil, soil vapour and dust/fibres)
- adjacent site users – commercial workers (migration of contamination via dust/fibre deposition, vapour or groundwater migration combined with inhalation)
- groundwater in Secondary A aquifer within Coal Measures bedrock (leaching and vertical and lateral migration)

Potential linking pathways are shown in brackets for each item above.

Please note that construction workers and future maintenance workers have not been identified in the conceptual model as receptors because risks are considered to be managed through health and safety procedures according to the CDM Regulations.

Existing/ current vegetation has not been considered to be a sensitive receptor in the context of the conceptual model and ecological receptors are only considered within the CSM in the context of statutory protected sites.

## 5.2 Potential Ground Gas Linkages

### 5.2.1 Ground gas generation potential

Potential ground gas sources identified for the site and surrounding area are shown in Table 8.

**Table 8 Potential ground gas sources**

Potential sources	Indicative ground gas generation potential (CIEH, 2008)	Additional information
<b>On-site</b>		
Made ground with low degradable organic content (e.g., up to 5% organic material and no easily degradable waste).	Very low	The fill present beneath the site is both a potential source for hazardous ground gases and a potential pathway for coal bed methane and carbon dioxide from the underlying Coal Measure deposits and coal seams.
Underlying coal measures strata	Low	
Mine workings (last worked 1959)	Moderate	More than 50 years since last worked.
<b>Off-site</b>		
Historic landfill (railway cutting landfill, adjacent north)	High	Commercial and inert waste, between 1893 and 1989.
Historic opencast (north east of site)	Very low	Material is largely reworked mudstone and sandstone but backfill considered a possible source of ground gases including methane and carbon dioxide.

Given the anticipated ground conditions set out above, a low to high potential for ground gas generation, which may impact the site, has been identified.

### 5.2.2 Preferential pathways for ground gas migration

Credible preferential pathways potentially connecting the source and receptor through vertical and lateral migration are:

- the made ground (engineered fill) is a potential source of ground gases and a material through which such gases could migrate. The fill is known to be predominantly reworked mudstone and sandstone.
- recorded underground workings in the underlying Coal Measures Formation. There are no mine shafts recorded on site so vertical migration will be restricted by the lithological sequences between coal seams, but horizontal migration is likely in worked seams.

### 5.2.3 Sensitive receptors and linking pathways

Sensitive receptors identified at or in the vicinity of the site that could be affected by the potential ground gas sources identified above comprise:

- future site users – proposed commercial users and workers (migration and ingress of ground gases into buildings, build-up in confined spaces and explosion/ asphyxiation)
- adjacent site users – commercial workers (migration and ingress of ground gases into buildings, build-up in confined spaces and explosion/ asphyxiation)
- future buildings and services – proposed commercial units (migration and ingress of ground gases into buildings, build-up in confined spaces and explosion).

The assessment has identified receptors to include building structures and proposed end-users.

Construction workers have not been identified as receptors for the purposes of this assessment. Risks may still be present to construction workers especially where works include the entry into excavations within the ground. Construction workers should undertake appropriate risk assessments and risks should be managed through health and safety procedures and the use of PPE.

Intrusive investigation works are proposed, and monitoring will be undertaken to determine the ground gas regime and consequently the requirements or otherwise for gas ingress preventative measures.

## 5.3 Preliminary Risk Assessment

The preliminary risk assessment findings and potentially complete contaminant linkages are shown in Table 9 overleaf. The risk classification based on the combination of hazard consequence and probability using a risk matrix from CIRIA C552 (Rudland et al., 2001), a summary of which is included in [Appendix G](#). This relates to Tier 1 preliminary risk assessment in LCRM (Environment Agency, 2021).

Potentially complete contaminant linkages with a potential risk of moderate to low or higher identified in Table 9 comprise:

1. Direct contact of the potential contamination within the soils to future site users (proposed commercial users and workers).
2. Migration and build-up of ground gas within on-site buildings.

Previous contamination assessment indicated results below the Generic Assessment Criteria, however current acceptability criteria may be different from those used in 2015. It is recommended that supplementary soil samples are analysed and the results are compared to RSK's GAC, along with the existing data (from 2015).

Ground gas monitoring was undertaken as part of the previous investigation in 2015. The results from two monitoring rounds were included within the previous report, which indicated a CS2 classification based on the available results.



Since gas monitoring was previously undertaken in 2015, it is recommended that supplementary ground gas monitoring and risk assessment is undertaken to confirm the current ground gas regime beneath the site and confirm the CS2 classification.

**Table 9 Risk estimation for potentially complete contaminant linkages**

Potential source	Potential receptor	Possible pathway	Likelihood	Severity	Potential risk	Justification
Contaminants in site soils potentially containing heavy metals, sulphates, polycyclic aromatic hydrocarbons (PAHs), hydrocarbons and asbestos	Future site users and workers	Direct contact (oral, dermal and inhalation exposure with impacted soil, soil vapour and dust/fibres)	Low	Medium	<b>Moderate/low</b>	Potential for site users to come into contact with soils if there is an absence of hardstanding or clean cover systems in place. Previous investigation did not encounter significant contamination and laboratory results were below the GAC for a commercial end use.
	Adjacent site users (commercial workers)	Migration of contamination via dust/fibre deposition, vapour or groundwater migration combined with inhalation	Unlikely	Medium	<b>Low</b>	Potential exposure to site soils and airborne dust is possible where hardstanding or clean cover is absent. However, dust is unlikely to be generated in sufficient quantities to cause a significant risk.
	Shallow perched water in made ground	Leaching	Low	Mild	<b>Low</b>	Potentially impacted soils may be in direct contact with perched groundwater body, however shallow perched water is not deemed sensitive.
Affected shallow groundwater as a result of historical or	Groundwater in Secondary A aquifer (Pennine	Vertical migration	Unlikely	Medium	<b>Low</b>	The absence of significant contamination, the thickness and general low permeability of made ground and the

current leaching of soil contaminants	Middle Coal Measures)					depth to the main groundwater body indicates that potential contaminants are unlikely to migrate in sufficient quantities to significantly affect water quality.
Ground gases including carbon dioxide and methane derived from made ground, Coal Measures strata and off-site historic opencast	Future site users and properties	Migration and ingress of ground gases into buildings, build-up in confined spaces	Low	Severe	<b>Moderate</b>	If a pathway exists there is a potential for a risk of asphyxiation (from carbon dioxide) if gas concentrations build up in confined spaces or explosion if there is a build up of methane. Ground gas risk assessment undertaken as part of the previous investigation indicated a CS2 Characterisation.

Risk matrix		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very low	Very low

## **6 COAL MINING RISK ASSESSMENT**

---

The Coal Authority (CA), in common with other statutory consultees, utilises a risk-based approach for the advice that they offer on proposed developments in relation to coal mining legacy issues. The site lies within the Coal Authority Consultation Area and includes Development High Risk areas. It is a requirement for High-Risk areas to prepare a desk-based Coal Mining Risk Assessment (CMRA) Report to support planning applications.

A CMRA needs to consider a number of sources of information to determine coal mining issues relevant to a site. It then needs to identify and assess the site-specific coal mining risks and propose an appropriate mitigation strategy relevant for the proposed site end-use. This approach has been followed in the current assessment. The site-specific coal mining risks for the area are summarised in Section 6.1 and this is followed by the mitigation strategy in Section 6.2.

This section provides a desk-based coal mining risk assessment (CMRA) report for the Birdwell, Rockingham site. It uses publicly available data, information obtained from the Coal Authority and information from previous investigations to assess the potential risk from coal mining issues to the proposed development. A CMRA is required by the local planning authority (LPA) as part of the planning process and this document conforms to the guidance published by the CA “Risk Based Approach to Development Management – Guidance for Developers” Version 2 dated September 2014 (updated January 2017).

### **6.1 Summary of Site-Specific Coal Mining Risks**

#### **6.1.1 Underground Workings**

The Coal Authority report indicates that the site has been subject to underground mining in nine seams of coal at 58m to 322m bgl. The shallowest workable seam and associated workings present below the site is the is the Lidgett Coal Seam, which based on the records held by the CA, is at approximately 58m bgl; these were last mined in 1943. Flockton Thick Seam is at approximately 123m bgl and was last mined in 1952.

There are no recorded boreholes drilled on the site looking for coal. Borehole logs from 1993 and 1999 (references SE30SW147-149 and SE30SW169) surrounding the site were consulted as part of this report but coal was just encountered in thin (~0.3m) layers. The boreholes were not drilled deep enough to prove the existence of the Middleton Main and Silkstone Seams to the SW of the site.

#### **6.1.2 Old Mine Entries**

A review of the CA mining report indicates that there are no known coal mine entries on, or within 100m of, the site boundary.

### **6.1.3 Opencast Areas**

Although the site was located within the licenced area of the former opencast quarry it was outside the area subject to opencast coal workings. It was subject to regrading works during which ground levels were brought to final level by placement of engineered fill, which is locally <4m in thickness.

### **6.1.4 Coal Measures as a Gas Source**

The engineered fill present beneath the site is both a potential source for hazardous ground gases and a potential pathway for coal bed methane and carbon dioxide from the underlying Coal Measure deposits and coal seams.

This will be assessed as part of the proposed site investigation works, and monitoring will be undertaken to determine the ground gas regime. If required appropriate gas-ingress preventative measures will be included into building design.

## **6.2 Mitigation strategy**

The CMRA completed in the preceding sections has concluded that there are only limited issues relating to coal mining which might influence the proposed Birdwell development plot.

Aspects of coal mining and extraction discussed in the CMRA are covered in turn in this section, with comments provided as to why mitigation measures are considered necessary or not.

### **6.2.1 Underground workings**

It has been concluded that there is sufficient rock cover above any worked coal seams, therefore there is no risk to the proposed development from collapse of shallow workings, consequently no mitigation measures are required.

### **6.2.2 Old mine entries**

There are no old mine entries recorded within or immediately around the site boundary. No mitigation measures are therefore required.

### **6.2.3 Opencast areas**

The site lies outside the area subject to opencast coaling operations and any issues relating to opencast backfill, or highwalls are therefore not relevant to the subject site.

Previous site investigation works has confirmed the presence of <4m thickness of engineered fill beneath the subject site. Intrusive investigation works are proposed to further assess ground conditions including in situ properties of the fill and depth to rockhead.

No other mitigation measures in respect of the former opencast mining beneath the site are required.

#### **6.2.4 Coal Measures as a gas source**

The opencast backfill is considered to be a possible source or migration pathway for hazardous ground gases. This will be assessed as part of the proposed site investigation works. If required appropriate gas-ingress preventative measures will be included into building design.

## **7 CONCLUSIONS AND RECOMMENDATIONS**

---

### **7.1 Preliminary Risk Assessment**

Based on the review of previous information, the site walkover and PRA, significant soil and groundwater contamination is not anticipated.

However, potentially complete contaminant linkages were identified and those with risk estimations of moderate or above (as detailed in section 5.3) are:

1. Direct contact of the potential contamination within the soils to future site users (proposed commercial users and workers).
2. Migration and build-up of ground gas within on-site buildings.

Previous contamination assessment indicated results below the Generic Assessment Criteria, however current acceptability criteria may be different from those used in 2015. It is recommended that supplementary soil samples are analysed and the results are compared to RSK's GAC, along with the existing data (from 2015).

Ground gas monitoring was undertaken as part of the previous investigation in 2015. The results from two monitoring rounds were included within the previous report, which indicated a CS2 classification based on the available results. Since gas monitoring was previously undertaken in 2015, it is recommended that supplementary ground gas monitoring and risk assessment is undertaken to confirm the current ground gas regime beneath the site and confirm the CS2 classification.

### **7.2 Coal Mining Risk Assessment**

The CMRA has identified only limited potential coal mining issues which may require mitigation and consequently necessitate further assessment by intrusive investigation. This includes confirmation of ground conditions including in situ properties of the fill and depth to rockhead, as well as confirmation of the current ground gas regime.

### **7.3 Further Works**

Ground investigation will be required to investigate the pollutant linkages and coal mining issues identified in the PRA and CMRA respectively, in addition ground investigation is required to collect geotechnical information for building design.

Recommended ground investigation works comprises the following.

- Two days trial pitting to investigate shallow ground conditions.
- Two days windowless sampling to investigate deeper ground conditions, carry out insitu testing and to install ground gas monitoring wells.
- Six cable percussion boreholes to investigate deeper ground conditions, carry out insitu testing and to install ground gas monitoring wells.

- Three soakaway tests to determine infiltration rates.
- Plate load testing to derive CBR values for external areas.
- Six gas monitoring visits to be undertaken over 3 months.
- Contamination and geotechnical testing.
- Factual and interpretative geoenvironmental reporting to include foundation recommendations.

## 8 REFERENCES

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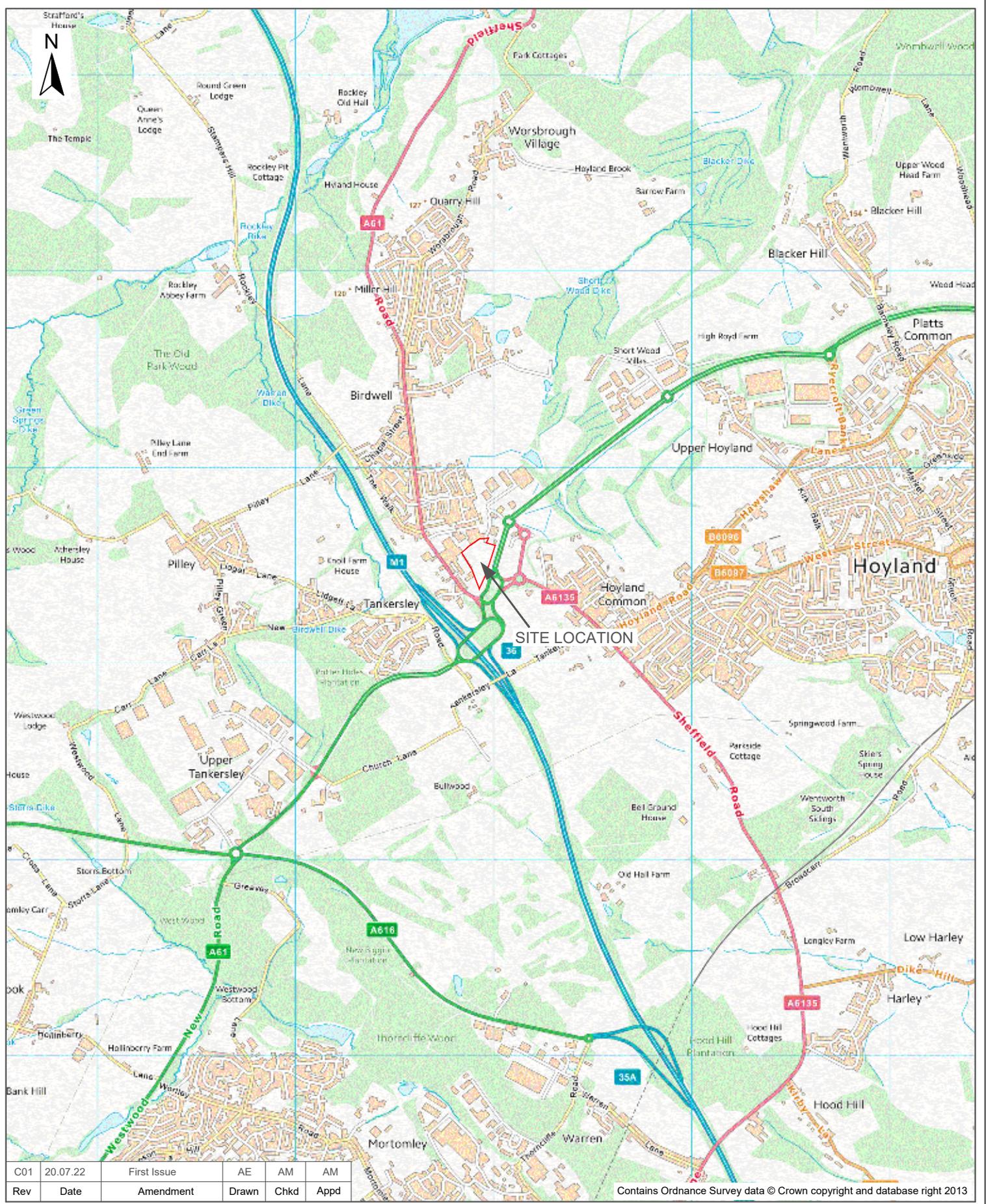
Rudland, D. J., Lancefield, R. M. and Mayell, P. N. (2001), CIRIA C552. Contaminated Land Risk Assessment: A Guide to Good Practice.

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## **FIGURE 1**

### **SITE LOCATION PLAN**

---



C01	20.07.22	First Issue	AE	AM	AM
Rev	Date	Amendment	Drawn	Chkd	Appd

Contains Ordnance Survey data © Crown copyright and database right 2013



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Client  
Carnell Management Ltd

Project Name  
Birdwell, Rockingham

Description  
Site Location Plan

Dimension	Size	Scale	Geolocation	Project ID	Drawing no.	Rev	File name
m	A4	1:25,000	434936, 400516	350525	11101	C01	350525-CS-111-SS-D-C-11101-C01

## FIGURE 2

## SITE FEATURES PLAN

---



**LEGEND**

— Site boundary

Access Road

Basin/Pond

Powerline mast

Concrete blocks and Made Ground stockpiles

Dense vegetation

C01	20.07.22	First Issue	AE	AM	AM
Rev	Date	Amendment	Drawn	Chkd	Appd



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**Carnell Management Ltd**

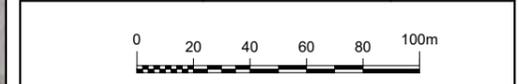
Project Name  
**Birdwell, Rockingham**

Description  
**Site Features Plan**

Project ID	Drawing no.	Revision
350525	12101	C01

File name  
**350525-CS-121-SS-D-C-12101-C01**

Dimensions	Scale	Size
m	1:2500	A3



# APPENDIX A

## SERVICE CONSTRAINTS

---

1. This report and the site investigation carried out in connection with the report (together the "Services") were compiled and carried out by RSK Environment Limited (RSK) for Carnell Management Services Ltd (the "Client") in accordance with the terms of a contract [RSK Environment Standard Terms and Conditions] between RSK and the Client, email dated 7<sup>th</sup> July 2022. The Services were performed by RSK with the reasonable skill and care ordinarily exercised by an environmental consultant at the time the Services were performed. Further, and in particular, the Services were performed by RSK taking into account the limits of the scope of works required by the client, the time scale involved and the resources, including financial and manpower resources, agreed between RSK and the Client.
2. Other than that, expressly contained in paragraph 1 above, RSK provides no other representation or warranty whether express or implied, in relation to the Services.
3. Unless otherwise agreed in writing, the Services were performed by RSK exclusively for the purposes of the Client. RSK is not aware of any interest of or reliance by any party other than the Client in or on the Services. Unless expressly provided in writing, RSK does not authorise, consent or condone any party other than the client relying upon the Services. Should this report or any part of this report, or otherwise details of the Services or any part of the Services be made known to any such party, and such party relies thereon that party does so wholly at its own and sole risk and RSK disclaims any liability to such parties. **Any such party would be well advised to seek independent advice from a competent environmental consultant and/or lawyer.**
4. It is RSK's understanding that this report is to be used for the purpose described in the introduction to the report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the report is used, or the proposed use of the site change, this report may no longer be valid and any further use of or reliance upon the report in those circumstances by the client without RSK 's review and advice shall be at the client's sole and own risk. Should RSK be requested to review the report after the date of this report, RSK shall be entitled to additional payment at the then existing rates, or such other terms as agreed between RSK and the client.
5. The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions contained in this report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the report in the future shall be at the Client's own and sole risk. Should RSK be requested to review the report in the future, RSK shall be entitled to additional payment at the then existing rate, or such other terms as may be agreed between RSK and the client.
6. The observations and conclusions described in this report are based solely upon the Services which were provided pursuant to the agreement between the Client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out or required by the contract between the client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this report, RSK did not seek to evaluate the presence on or off the site of asbestos, invasive plants, electromagnetic fields, lead paint, heavy metals, radon gas or other radioactive or hazardous materials, unless specifically identified in the Services.
7. The Services are based upon RSK's observations of existing physical conditions at the Site gained from a visual inspection of the site together with RSK's interpretation of information, including documentation, obtained from third parties and from the Client on the history and usage of the site, unless specifically identified in the Services or accreditation system (such as UKAS ISO 17020:2012 clause 7.1.6):

- a. The Services were based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely.
- b. The Services were limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the visual inspection.
- c. The Services did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the Services.

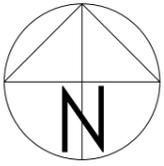
RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK and including the doing of any independent investigation of the information provided to RSK save as otherwise provided in the terms of the contract between the Client and RSK.

8. The intrusive environmental site investigation aspects of the Services are a limited sampling of the site at pre-determined locations based on the known historic / operational configuration of the site. The conclusions given in this report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent of the limited area depends on the properties of the materials adjacent and local conditions, together with the position of any current structures and underground utilities and facilities, and natural and other activities on site. In addition, chemical analysis was carried out for a limited number of parameters (as stipulated in the scope between the client and RSK, based on an understanding of the available operational and historical information) and it should not be inferred that other chemical species are not present.
9. Any site drawing(s) provided in this report is (are) not meant to be an accurate base plan but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (intrusive and sample locations etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for setting out and should be considered indicative only.
10. The comments given in this report and the opinions expressed are based on the ground conditions encountered during the site work and on the results of tests made in the field and in the laboratory. However, there may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account. In particular, it should be noted that there may be areas of made ground not detected due to the limited nature of the investigation or the thickness and quality of made ground across the site may be variable. In addition, groundwater levels and ground gas concentrations and flows, may vary from those reported due to seasonal, or other, effects and the limitations stated in the data should be recognised.
11. Asbestos is often observed to be present in soils in discrete areas. Whilst asbestos-containing materials may have been locally encountered during the fieldworks or supporting laboratory analysis, the history of brownfield and demolition sites indicates that asbestos fibres may be present more widely in soils and aggregates, which could be encountered during more extensive ground works.
12. Unless stated otherwise, only preliminary geotechnical recommendations are presented in this report and these should be verified in a Geotechnical Design Report, once proposed construction and structural design proposals are confirmed.

# APPENDIX B

## PROPOSED SITE LAYOUT

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Note. This drawing is based on the topographical survey by Ramowski Clarke Ltd, ref. 3508-02-a, dated 04/221.

Line of extg. sewers & easements as shown on dwg. no. 10-336-PH1-DE-500-001-REV J. (Hartwood).

This drawing is subject to Client & Planning approval.

Site boundary line to be confirmed.

Floor areas shown are 'footprint' areas.

As outlined in section 2.3 of the CITB Industry Guidance to Designers, insignificant risks can usually be ignored, as can risks arising from routine construction activities, unless the design compounds or significantly alters these risks. In accordance with CDM Regulations 8, 9 and 11, any significant risks relating to the design features shown on this drawing have been identified and are annotated thus: **I**

No significant risks have been identified.

Significant risks have been identified - refer to notes on drawing for information on residual risks and any control measures to be employed.

Refer to the current Designer's Risk Assessment sheets for further details.

Designer's Signature		Date	
Rev.	Description	Vf'd	Date
P2	Turning head added.	SW	02/22
P3	Overh'd elec. cable easement amended.	SW	02/22
P4	Site plan updated.	SW	05/22

Project Proposed Development, Rockingham.			
Client Carnell Management Services Ltd.			
Title Site Plan - 1.			
Drawing Status <b>INFORMATION.</b>			
WmS Project Ref. 12215	Drawn SW	Date Feb. '22	Scale 1:1000@ A3
Drawing/Document Reference Project Originator Zone Level Type Role Number Status Rev. 12215 - WMS - XX - XX - DR - A - 10003 - S2 - P4			

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# APPENDIX C

## SUMMARY OF LEGISLATION AND POLICY RELATING TO LAND CONTAMINATION

---

### Part IIA of the Environmental Protection Act 1990

Part IIA of the Environmental Protection Act 1990 (Part IIA) and its associated Contaminated Land Regulations 2000 (SI 2000/227), which came into force in England on 1 April 2000, formed the basis for the current regulatory framework and the statutory regime for the identification and remediation of contaminated land. Part IIA of the EPA 1990 defines contaminated land as 'any land which appears to the Local Authority in whose area it is situated to be in such a condition by reason of substances in, on or under the land, that significant harm is being caused, or that there is significant possibility of significant harm being caused, or that pollution of controlled waters is being or is likely to be caused'. Controlled waters are considered to include all groundwater, inland waters and estuaries.

In August 2006, the Contaminated Land (England) Regulations 2006 (SI 2006/1380) were implemented, which extended the statutory regime to include Part IIA of the EPA as originally introduced on 1 April 2000, together with changes intended chiefly to address land that is contaminated by virtue of radioactivity. These have been replaced subsequently by the Contaminated Land (England) (Amendment) Regulations 2012, which now exclude land that is contaminated by virtue of radioactivity.

The intention of Part IIA is to deal with contaminated land issues that are considered to cause significant harm on land that is not undergoing development (see Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance, April 2012). This document replaces Annex III of Defra Circular 01/2006, published in September 2006 (the remainder of this document is now obsolete).

### Planning Policy

Contaminated land is often dealt with through planning because of land redevelopment. This approach was documented in Planning Policy Statement: Planning and Pollution Control PPS23, which states that it remains the responsibility of the landowner and developer to identify land affected by contamination and carry out sufficient remediation to render the land suitable for use. PPS23 was withdrawn early in 2012 and has been replaced by much reduced guidance within the National Planning Policy Framework (NPPF), reference ISBN: 978-1-5286-1033-9, February 2019.

The new framework has only limited guidance on contaminated land, as follows:

#### Chapter 11. Making effective use of land

117 Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously developed or 'brownfield' land.

118. Planning policies and decisions should:

c) give substantial weight to the value of using suitable brownfield land within settlements for homes and other identified needs, and support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land.

## **Chapter 15. Conserving and enhancing the natural environment**

170. Planning policies and decisions should contribute to and enhance the natural and local environment by:

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

### **Ground conditions and pollution**

178. Planning policies and decisions should ensure that:

a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation).

b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990; and

c) adequate site investigation information, prepared by a competent person, is available to inform these assessments.

179. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rest with the developer and/or landowner.

## **Water Resources Act (WRA)**

The Water Resources Act 1991 (Amendment) (England and Wales) Regulations 2009 updated the Water Resources Act 1991, which introduced the offence of causing or knowingly permitting pollution of controlled waters. The Act provides the Environment Agency with powers to implement remediation necessary to protect controlled waters and recover all reasonable costs of doing so.

## **Water Framework Directive (WFD)**

The Water Framework Directive 2000/60/EC is designed to:

- enhance the status and prevent further deterioration of aquatic ecosystems and associated wetlands that depend on the aquatic ecosystems
- promote the sustainable use of water
- reduce pollution of water, especially by 'priority' and 'priority hazardous' substances
- ensure progressive reduction of groundwater pollution.

The WFD requires a management plan for each river basin be developed every six years.

## **Groundwater Directive (GWD)**

The 1980 Groundwater Directive 80/68/EEC and the 2006 Groundwater Daughter Directive 2006/118/EC of the WFD are the main European legislation in place to protect groundwater. The 1980 Directive is due to be repealed in December 2013. The European legislation has been transposed into national legislation by regulations and directions to the Environment Agency.

## **Priority Substances Directive (PSD)**

The Priority Substances Directive 2008/105/EC is a 'Daughter' Directive of the WFD, which sets out a priority list of substances posing a threat to or via the aquatic environment. The PSD establishes environmental quality standards for priority substances, which have been set at concentrations that are safe for the aquatic environment and for human health. In addition, there is a further aim of reducing (or eliminating) pollution of surface water (rivers, lakes, estuaries and coastal waters) by pollutants on the list. The WFD requires that countries establish a list of dangerous substances that are being discharged and EQS for them. In England and Wales, this list is provided in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive) (England and Wales) Directions 2010. In order to achieve the objectives of the WFD, classification schemes are used to describe where the water environment is of good quality and where it may require improvement.

## **Environmental Permitting Regulations (EPR)**

The Environmental Permitting (England and Wales) Regulations 2016 (as amended) provide a single regulatory framework that streamlines and integrates waste management licensing, pollution prevention and control, water discharge consenting, groundwater authorisations, and radioactive substances regulation. Schedule 22, paragraph 6 of EPR 2016 states: 'the regulator must, in exercising its relevant functions, take all necessary measures - (a) to prevent the input of any hazardous substance to groundwater; and (b) to limit the input of non-hazardous pollutants to groundwater so as to ensure that such inputs do not cause pollution of groundwater.'

### *Notes:*

- 1. The above information is provided for background but does not constitute site-specific advice*
- 2. The above summary applies to England only. Variations exist within other countries of the United Kingdom*



# **APPENDIX D**

# **ENVIRONMENTAL DATABASE REPORT**

---



## Envirocheck<sup>®</sup> Report:

### Datasheet

#### Order Details:

**Order Number:**

298598069\_1\_1

**Customer Reference:**

350525

**National Grid Reference:**

434940, 400510

**Slice:**

A

**Site Area (Ha):**

2.02

**Search Buffer (m):**

1000

#### Site Details:

Site at  
Birdwell  
Barnsley

#### Client Details:

Mr M Brannock  
RSK Environment Ltd  
Spring Lodge  
172 Chester Road  
Helsby  
Cheshire  
WA6 0AR

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#### Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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#### Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Agency &amp; Hydrological</b>					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 2			6	28
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 11		2	2	1
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 11		Yes		
Pollution Incidents to Controlled Waters	pg 12	2	3	2	3
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 13			1	1
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 14				1
Water Abstractions	pg 14				(*8)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 16	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 16	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 16		2	17	34

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Waste</b>					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 23		1	1	
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 23		2		
Local Authority Landfill Coverage	pg 23	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites	pg 24	1	2		
Registered Landfill Sites	pg 24	1			
Registered Waste Transfer Sites	pg 25		1		
Registered Waste Treatment or Disposal Sites	pg 25		1		
<b>Hazardous Substances</b>					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
<b>Geological</b>					
BGS 1:625,000 Solid Geology	pg 26	Yes	n/a	n/a	n/a
BGS Recorded Mineral Sites	pg 26		3	3	27
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 31	Yes	n/a	n/a	n/a
Mining Instability	pg 31	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 31	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 31	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 32		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 32	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 32		Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 32	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas	pg 33	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Industrial Land Use</b>					
Contemporary Trade Directory Entries	pg 34		16	14	30
Fuel Station Entries	pg 39		2	1	1
Gas Pipelines					
Underground Electrical Cables					
<b>Sensitive Land Use</b>					
Ancient Woodland	pg 40				4
Areas of Adopted Green Belt	pg 40	1			
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves	pg 40				1
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 40	1			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (SE)	0	1	434940 400514
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	16	1	434940 400650
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (N)	23	1	434950 400650
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	34	1	435050 400550
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (N)	90	1	435000 400700
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	108	1	435050 400700
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	120	1	434900 400750
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	132	1	435100 400350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	142	1	435150 400514
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	156	1	435050 400750
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	190	1	434800 400250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	207	1	435050 400200
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	207	1	434750 400300
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	230	1	434700 400300
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	234	1	435250 400550
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	237	1	434700 400350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	239	1	435250 400514
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	239	1	435200 400750
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (NE)	256	1	435250 400700
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (E)	284	1	435300 400600
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (E)	284	1	435300 400550
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (E)	289	1	435300 400650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (E)	334	1	435350 400514
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	344	1	435050 400050
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (NE)	350	1	435350 400700
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (SE)	379	1	435300 400250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (NE)	391	1	435350 400800
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SE (N)	416	1	434940 401050
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SE (N)	417	1	434950 401050
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SE (N)	422	1	435000 401050
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (E)	437	1	435450 400650
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SE (NE)	443	1	435200 401000
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (SW)	448	1	434700 400000
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A19SW (NE)	453	1	435300 400950
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NE (S)	454	1	435100 399950
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (W)	458	1	434450 400350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (N)	467	1	434900 401100
1	<b>Discharge Consents</b> Operator: G.B. Truck Services Ltd Property Type: WAREHOUSING + SUPPORT ACTIVITIES FOR TRANSPORTATION Location: G.B. Trucks Services Ltd Cross Keys Works, Cross Keys Lane, Hoyland Land, Barnsley, S74 0qa Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: S/P/1181 Permit Version: 1 Effective Date: 19th May 1963 Issued Date: 19th May 1963 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Short Wood Dike <b>Status: Undetermined 1961 Application</b> Positional Accuracy: Located by supplier to within 10m	A13NE (E)	262	2	435272 400542

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	<p><b>Discharge Consents</b></p> <p>Operator: Gb Truck Services  Property Type: Undefined Or Other  Location: Cross Key Lane Works, Hoyland Common, Barnsley  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7281  Permit Version: 1  Effective Date: 28th January 1997  Issued Date: 28th January 1997  Revocation Date: 28th October 2015  Discharge Type: Trade Discharges - Site Drainage (Contaminated Surface Water, Not Waste Sites)  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Short Wood Dyke  <b>Status: Authorisation revoked</b>  Positional Accuracy: Located by supplier to within 100m</p>	A14NW (E)	284	2	435300 400600
2	<p><b>Discharge Consents</b></p> <p>Operator: Gb Truck Services  Property Type: Undefined Or Other  Location: Cross Key Lane Works, Hoyland Common, Barnsley  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: C5082  Permit Version: 2  Effective Date: 21st June 1994  Issued Date: 21st June 1994  Revocation Date: 1st October 1996  Discharge Type: Trade Discharges - Site Drainage (Contaminated Surface Water, Not Waste Sites)  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Trib Of Shortbridge Dyke  <b>Status: Lapsed (under Environment Act 1995, Schedule 23)</b>  Positional Accuracy: Located by supplier to within 100m</p>	A14NW (E)	284	2	435300 400600
2	<p><b>Discharge Consents</b></p> <p>Operator: Gb Truck Services  Property Type: Undefined Or Other  Location: Cross Key Lane Works, Hoyland Common, Barnsley  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: C5082  Permit Version: 1  Effective Date: 13th May 1988  Issued Date: 13th May 1988  Revocation Date: 20th June 1994  Discharge Type: Trade Discharges - Site Drainage (Contaminated Surface Water, Not Waste Sites)  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Trib Of Shortbridge Dyke  <b>Status: Transferred from COPA 1974</b>  Positional Accuracy: Located by supplier to within 100m</p>	A14NW (E)	284	2	435300 400600
3	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Woodbine Cottage Cso New Road/Lidget Lane (End Of), Tankersley, Barnsley, South Yorkshire, S75 3bl  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7987  Permit Version: 2  Effective Date: 27th August 2020  Issued Date: 27th August 2020  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dike  <b>Status: Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12SE (W)	479	2	434434 400334

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Woodbine Cottage Cso New Road/Lidget Lane (End Of), Tankersley, Barnsley, South Yorkshire, S75 3bl  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7987  Permit Version: 1  Effective Date: 31st March 2004  Issued Date: 3rd February 2004  Revocation Date: 26th August 2020  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dike  <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12SE (W)	485	2	434430 400330
4	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY)  Location: Tinker Lane Sewage Pumping Stn Tinker Lane, Wombwell, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7784  Permit Version: 2  Effective Date: 18th March 2003  Issued Date: 18th March 2003  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Pumping Station - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Short Wood Dike  <b>Status:</b> <b>Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A14NW (E)	595	2	435610 400570
4	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY)  Location: Tinker Lane Sewage Pumping Stn Tinker Lane, Wombwell, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7784  Permit Version: 2  Effective Date: 18th March 2003  Issued Date: 18th March 2003  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Short Wood Dike  <b>Status:</b> <b>Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A14NW (E)	595	2	435610 400570
4	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY)  Location: Tinker Lane Sewage Pumping Stn Tinker Lane, Wombwell, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7784  Permit Version: 1  Effective Date: 26th February 2002  Issued Date: 26th February 2002  Revocation Date: 17th March 2003  Discharge Type: Sewage Discharges - Pumping Station - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Short Wood Dike  <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A14NW (E)	595	2	435610 400570

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewage Disposal Works - Water Company  Location: Tankersley Stw, Nr Worsborough, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698 (Ss)  Permit Version: 1  Effective Date: 7th November 1989  Issued Date: 7th November 1989  Revocation Date: 31st March 1991  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status: Transferred from Water Act 1989</b>  Positional Accuracy: Located by supplier to within 100m</p>	A12NE (NW)	605	2	434300 400800
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewage Disposal Works - Water Company  Location: Tankersley Stw, Nr Worsborough, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698 (Ss)  Permit Version: 1  Effective Date: 7th November 1989  Issued Date: 7th November 1989  Revocation Date: 31st March 1991  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status: Transferred from Water Act 1989</b>  Positional Accuracy: Located by supplier to within 100m</p>	A12NE (NW)	605	2	434300 400800
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewage Disposal Works - Water Company  Location: Tankersley Stw, Nr Worsborough, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698 (Ss)  Permit Version: 3  Effective Date: 1st April 1992  Issued Date: 7th November 1989  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status: Transferred from Water Act 1989</b>  Positional Accuracy: Located by supplier to within 100m</p>	A12NE (NW)	605	2	434300 400800
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewage Disposal Works - Water Company  Location: Tankersley Stw, Nr Worsborough, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698 (Ss)  Permit Version: 3  Effective Date: 1st April 1992  Issued Date: 7th November 1989  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status: Transferred from Water Act 1989</b>  Positional Accuracy: Located by supplier to within 100m</p>	A12NE (NW)	605	2	434300 400800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Tankersley Sewage Treatment Works Lidgett Lane, Tankersley, Barnsley, South Yorkshire, S75 3bs</p> <p>Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698(Ss)  Permit Version: 1  Effective Date: 16th November 1981  Issued Date: 16th November 1981  Revocation Date: 23rd March 2004  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Ditch  Environment:  Receiving Water: Birdwell Dyke  <b>Status:</b> <b>Transferred from Rivers (Prevention of Pollution) Act 1951-1961</b>  Positional Accuracy: Located by supplier to within 100m</p>	A12NE (NW)	605	2	434300 400800
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Tankersley Sewage Treatment Works Lidgett Lane, Tankersley, Barnsley, South Yorkshire, S75 3bs</p> <p>Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698(Ss)  Permit Version: 3  Effective Date: 1st April 2009  Issued Date: 14th October 2008  Revocation Date: 26th March 2018  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status:</b> <b>Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12NE (NW)	629	2	434271 400793
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Tankersley Sewage Treatment Works Lidgett Lane, Tankersley, Barnsley, South Yorkshire, S75 3bs</p> <p>Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698(Ss)  Permit Version: 3  Effective Date: 1st April 2009  Issued Date: 14th October 2008  Revocation Date: 26th March 2018  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status:</b> <b>Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12NE (NW)	629	2	434271 400793
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Tankersley Sewage Treatment Works Lidgett Lane, Tankersley, Barnsley, South Yorkshire, S75 3bs</p> <p>Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698(Ss)  Permit Version: 4  Effective Date: 27th March 2018  Issued Date: 27th March 2018  Revocation Date: 31st March 2018  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status:</b> <b>Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12NE (W)	630	2	434269 400791

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Tankersley Sewage Treatment Works Lidgett Lane, Tankersley, Barnsley, South Yorkshire, S75 3bs</p> <p>Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698(Ss)  Permit Version: 6  Effective Date: 31st March 2020  Issued Date: 27th March 2018  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status: Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12NE (W)	630	2	434269 400791
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Tankersley Sewage Treatment Works Lidgett Lane, Tankersley, Barnsley, South Yorkshire, S75 3bs</p> <p>Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698(Ss)  Permit Version: 4  Effective Date: 27th March 2018  Issued Date: 27th March 2018  Revocation Date: 31st March 2018  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status: Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12NE (W)	630	2	434269 400791
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Tankersley Sewage Treatment Works Lidgett Lane, Tankersley, Barnsley, South Yorkshire, S75 3bs</p> <p>Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698(Ss)  Permit Version: 5  Effective Date: 1st April 2018  Issued Date: 27th March 2018  Revocation Date: 30th March 2020  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status: Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12NE (W)	630	2	434269 400791
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Tankersley Sewage Treatment Works Lidgett Lane, Tankersley, Barnsley, South Yorkshire, S75 3bs</p> <p>Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698(Ss)  Permit Version: 5  Effective Date: 1st April 2018  Issued Date: 27th March 2018  Revocation Date: 30th March 2020  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status: Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12NE (W)	630	2	434269 400791

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Tankersley Sewage Treatment Works Lidgett Lane, Tankersley, Barnsley, South Yorkshire, S75 3bs  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E698(Ss)  Permit Version: 6  Effective Date: 31st March 2020  Issued Date: 27th March 2018  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Birdwell Dyke  <b>Status: Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12NE (W)	630	2	434269 400791
6	<p><b>Discharge Consents</b></p> <p>Operator: British Coal Corporation  Property Type: Undefined Or Other  Location: Rockingham Pumping Station Upper Hoyland, Birdwell, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: 3703  Permit Version: 1  Effective Date: 6th June 1983  Issued Date: 6th June 1983  Revocation Date: 9th June 1983  Discharge Type: Trade Effluent  Discharge: Not Supplied  Environment:  Receiving Water: Not Supplied  <b>Status: Authorisation revoked</b>  Positional Accuracy: Located by supplier to within 100m</p>	A19NW (NE)	666	2	435300 401200
7	<p><b>Discharge Consents</b></p> <p>Operator: British Coal Corporation, South Yorks Group  Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY)  Location: Wharncliffe Silkstone Pumping Stn, Tankersley, Sheffield, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: 3696  Permit Version: 1  Effective Date: 11th May 1983  Issued Date: 11th May 1983  Revocation Date: 21st November 1994  Discharge Type: Trade Effluent  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Not Supplied  <b>Status: Consent revoked: Discharge ceased (Water Resources Act 1991, Schedule 10 &amp; 6)</b>  Positional Accuracy: Located by supplier to within 100m</p>	A12SW (SW)	749	2	434200 400200
8	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY)  Location: Cock Inn Sewage Pumping Stn End Of Chapel Street, Worsborough, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7785  Permit Version: 1  Effective Date: 26th February 2002  Issued Date: 26th February 2002  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Pumping Station - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Warren Dyke  <b>Status: New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A17SW (NW)	758	2	434200 400940

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Not Given  Location: Worsbrough Bridge, Westfields, WORSBROUGH  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: Not Supplied  Revocation Date: Not Supplied  Discharge Type: Storm /emergency overflow  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A17NE (NW)	787	2	434505 401295
9	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Not Given  Location: Blacker Lane, Blacker Hill, WORSBROUGH  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: Not Supplied  Revocation Date: Not Supplied  Discharge Type: Storm /emergency overflow  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A17NE (NW)	790	2	434500 401295
9	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Not Given  Location: Worsbrough Dale, Bank End Avenue, WORSBROUGH  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: Not Supplied  Revocation Date: Not Supplied  Discharge Type: Storm /emergency overflow  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A17NE (NW)	791	2	434505 401300
9	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Not Given  Location: Greenspring Avenue, Birdwell, WORSBROUGH  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: Not Supplied  Revocation Date: Not Supplied  Discharge Type: Storm /emergency overflow  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A17NE (NW)	794	2	434500 401300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Not Given  Location: Worsbrough Dale, West Street, WORSBROUGH  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: Not Supplied  Revocation Date: Not Supplied  Discharge Type: Storm /emergency overflow  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A17NE (NW)	795	2	434505 401305
9	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewerage Network - Sewers  Location: Greenspring Avenue, BIRDWELL  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: 9th January 1963  Revocation Date: Not Supplied  Discharge Type: Sewage Effluent Discharge-Storm Effluent  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A17NE (NW)	798	2	434500 401305
10	<p><b>Discharge Consents</b></p> <p>Operator: Uk Coal Mining Limited  Property Type: MINING OF COAL + LIGNITE  Location: Rockingham Occs, Sheffield Road, Birdwell, Barnsley  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wa 6019  Permit Version: 2  Effective Date: 5th November 1990  Issued Date: 5th November 1990  Revocation Date: 4th June 1996  Discharge Type: Trade Discharges - Site Drainage (Contaminated Surface Water, Not Waste Sites)  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Short Wood Dike  <b>Status: Consent revoked: Discharge ceased (Water Resources Act 1991, Schedule 10 &amp; 6)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A19NW (N)	905	2	435300 401460
10	<p><b>Discharge Consents</b></p> <p>Operator: Uk Coal Mining Limited  Property Type: MINING OF COAL + LIGNITE  Location: Rockingham Occs, Sheffield Road, Birdwell, Barnsley  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wa 6019  Permit Version: 1  Effective Date: 14th May 1990  Issued Date: 14th May 1990  Revocation Date: 4th November 1990  Discharge Type: Trade Discharges - Site Drainage (Contaminated Surface Water, Not Waste Sites)  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Short Wood Dike  <b>Status: Transferred from Water Act 1989</b>  Positional Accuracy: Located by supplier to within 100m</p>	A19NW (N)	905	2	435300 401460

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	<p><b>Discharge Consents</b></p> <p>Operator: British Coal Opencast  Property Type: MINING OF COAL + LIGNITE  Location: Rockingham Occs, Sheffield Road, Birdwell, Barnsley  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wa 6018  Permit Version: 1  Effective Date: 14th May 1990  Issued Date: 14th May 1990  Revocation Date: 30th August 1995  Discharge Type: Trade Effluent  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Not Supplied  <b>Status:</b> <b>Consent revoked: Discharge ceased (Water Resources Act 1991, Schedule 10 &amp; 6)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A19NW (N)	905	2	435300 401460
11	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Hartwood Exports (Machinery) Ltd  Location: Hangmanstone Depot, Sheffield Road, Birdwell, BARNSLEY, South Yorkshire, S70 5TR  Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards  Permit Reference: Ppc/B/14  Dated: 20th January 1998  Process Type: Local Authority Pollution Prevention and Control  Description: PG1/1Waste oil burners, less than 0.4MW net rated thermal input  <b>Status:</b> <b>Authorisation certificate surrendered by operator</b>  Positional Accuracy: Automatically positioned to the address</p>	A13NW (W)	143	3	434716 400589
12	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: British Coal Corporation  Location: Sheffield Road, Hoyland, Barnsley, S74  Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards  Permit Reference: Not Supplied  Dated: Not Supplied  Process Type: Local Authority Air Pollution Control  Description: PG3/5 Coal, coke and coal product processes  <b>Status:</b> <b>Authorisation revoked</b>  Positional Accuracy: Manually positioned to the road within the address or location</p>	A13SE (SE)	239	3	435201 400392
13	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: G B Trucks Ltd  Location: Cross Keys Works, Cross Keys Lane, Hoyland, Barnsley, South Yorkshire, S74 0QA  Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards  Permit Reference: Ppc/B/40  Dated: 14th July 1995  Process Type: Local Authority Pollution Prevention and Control  Description: PG6/34 Respraying of road vehicles  <b>Status:</b> <b>Permitted</b>  Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	262	3	435272 400542
14	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Cross Keys (Barnsley) Garage  Location: Sheffield Road, Hoyland, BARNSLEY, South Yorkshire, S74 0PY  Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards  Permit Reference: PPC/B/105  Dated: 12th May 1999  Process Type: Local Authority Air Pollution Control  Description: PG1/14 Petrol filling station  <b>Status:</b> <b>Authorised</b>  Positional Accuracy: Automatically positioned to the address</p>	A14SW (E)	373	3	435343 400394
15	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Hoyland Common Service Station  Location: Sheffield Road, Hoyland Common, BARNSLEY, S74 0DP  Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards  Permit Reference: Ppc/B/51  Dated: 12th May 1999  Process Type: Local Authority Pollution Prevention and Control  Description: PG1/14 Petrol filling station  <b>Status:</b> <b>Permitted</b>  Positional Accuracy: Manually positioned to the address or location</p>	A9NW (SE)	722	3	435586 400049
	<p><b>Nearest Surface Water Feature</b></p>	A13SE (SE)	46	-	435007 400417

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Industrial Premises            Location: Darfield/Source Dove(S) Afu            Authority: Environment Agency, North East Region            Pollutant: Miscellaneous - Colour            Note: Not Supplied            Incident Date: 26th July 1993            Incident Reference: 147990            Catchment Area: Not Given            Receiving Water: Freshwater Stream/River            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A13SW (W)	0	2	434900 400500
17	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Farm            Location: Netherwood Brdg/Aldham A633 Dove(S) 03            Authority: Environment Agency, North East Region            Pollutant: Agricultural: Yard Run Off (Dirty Water)            Note: Not Supplied            Incident Date: 15th March 1993            Incident Reference: 145168            Catchment Area: Not Given            Receiving Water: Freshwater Stream/River            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A13NW (NW)	0	2	434900 400600
18	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Chemical industry            Location: Rockingham Business Park, BIRDWELL            Authority: Environment Agency, North East Region            Pollutant: Chemicals - Unknown            Note: Pollution Found; Fish Killed: No Information            Incident Date: 4th July 1996            Incident Reference: SH960338            Catchment Area: Dearne Tributaries            Receiving Water: Freshwater Stream/River            Cause of Incident: Unknown            Incident Severity: Category 2 - Significant Incident            Positional Accuracy: Located by supplier to within 100m</p>	A13NW (N)	73	2	434900 400700
19	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Industrial: Other            Location: Shortwood Dyke, ROCKINGHAM            Authority: Environment Agency, North East Region            Pollutant: Unknown            Note: No Fish Killed            Incident Date: 6th February 1995            Incident Reference: SH950184            Catchment Area: Dearne Tributaries            Receiving Water: Freshwater Stream/River            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A13SW (W)	80	2	434800 400500
20	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Industrial: Other            Location: Chapman Drums, Rockingham Row, Birdwell, BARNSELY            Authority: Environment Agency, North East Region            Pollutant: Chemicals - Solvents            Note: Pollution Found; No Fish Killed            Incident Date: 4th November 1996            Incident Reference: SH960475            Catchment Area: Dearne Tributaries            Receiving Water: Freshwater Stream/River            Cause of Incident: Unknown            Incident Severity: Category 2 - Significant Incident            Positional Accuracy: Located by supplier to within 100m</p>	A13NE (N)	136	2	435001 400751
21	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Farm            Location: Mouth/Source Wiske Af            Authority: Environment Agency, North East Region            Pollutant: Silage Liquor            Note: Not Supplied            Incident Date: 7th June 1993            Incident Reference: 145363            Catchment Area: Not Given            Receiving Water: Freshwater Stream/River            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A14SW (E)	300	2	435300 400500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Industrial Premises            Location: Markers Bridge B6273, /Darfld A635 Dearne 08            Authority: Environment Agency, North East Region            Pollutant: Not Given            Note: Not Supplied            Incident Date: 11th December 1992            Incident Reference: 139886            Catchment Area: Not Given            Receiving Water: Freshwater Stream/River            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A19SW (NE)	415	2	435300 400900
23	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Water Company Sewage: Sewage Treatment Works            Location: Mouth/Source Wiske Af            Authority: Environment Agency, North East Region            Pollutant: Sewage - Treated Effluent            Note: Not Supplied            Incident Date: 2nd June 1992            Incident Reference: 133964            Catchment Area: Not Given            Receiving Water: Freshwater Stream/River            Cause of Incident: Not Given            Incident Severity: Category 2 - Significant Incident            Positional Accuracy: Located by supplier to within 100m</p>	A14SW (E)	520	2	435500 400400
24	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Water Company Sewage: Other            Location: Pilley Lane, BIRDWELL            Authority: Environment Agency, North East Region            Pollutant: Unknown Sewage            Note: Rockley Dyke; Fish Killed: No Information            Incident Date: 23rd July 1998            Incident Reference: SH980294            Catchment Area: Dearne Tributaries            Receiving Water: Freshwater Stream/River            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A17SW (NW)	789	2	434200 401000
25	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Water Company Sewage: Sewage Treatment Works            Location: Shortwood Works            Authority: Environment Agency, North East Region            Pollutant: Sewage - Septic Tank Effluent            Note: Blacker Dyke; Fish Killed: No Information            Incident Date: 24th September 1998            Incident Reference: SH980412            Catchment Area: Dearne Tributaries            Receiving Water: Freshwater Stream/River            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A19NW (N)	941	2	435300 401500
	<p><b>River Quality</b></p> <p>Name: Warren_Dyke            GQA Grade: River Quality D            Reach: Lower_Pilley_Rockley_Dyk            Estimated Distance (km): 2.4            Flow Rate: Flow less than 0.31 cumecs            Flow Type: River            Year: 2000</p>	A12SE (W)	428	2	434461 400381
	<p><b>River Quality</b></p> <p>Name: Blacker_Dyke            GQA Grade: River Quality C            Reach: Rockingham_Colliery_River_Dov            Estimated Distance (km): 2.9            Flow Rate: Flow less than 0.31 cumecs            Flow Type: River            Year: 2000</p>	A18NE (N)	751	2	435161 401349

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
26	<p><b>Substantiated Pollution Incident Register</b></p> <p>Authority: Environment Agency - North East Region, Yorkshire Area            Incident Date: 18th July 2003            Incident Reference: 174964            Water Impact: Category 1 - Major Incident            Air Impact: Category 3 - Minor Incident            Land Impact: Category 4 - No Impact            Positional Accuracy: Located by supplier to within 10m            Pollutant: Crude Sewage</p>	A12NW (W)	633	2	434254 400757
	<p><b>Water Abstractions</b></p> <p>Operator: Tankersley Park Golf Club            Licence Number: 2/27/06/043            Permit Version: 100            Location: Strafford Shaft            Authority: Environment Agency, North East Region            Abstraction: Golf Courses: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): 41            Yearly Rate (m3): 6820            Details: Tankersley Park Golf Club, High Green, Sheffield            Authorised Start: 01 January            Authorised End: 31 December            Permit Start Date: 27th March 1991            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 100m</p>	(S)	1801	2	435600 398700
	<p><b>Water Abstractions</b></p> <p>Operator: Tankersley Park Golf Club            Licence Number: 2/27/06/043            Permit Version: 102            Location: Borehole-Shaft Coal Measures-High Green            Authority: Environment Agency, North East Region            Abstraction: Golf Courses: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Tankersley Park Golf Club, High Green, Sheffield            Authorised Start: 01 January            Authorised End: 31 December            Permit Start Date: 9th February 2004            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	(S)	1809	2	435570 398680
	<p><b>Water Abstractions</b></p> <p>Operator: Tankersley Park Golf Club            Licence Number: 2/27/06/043            Permit Version: 103            Location: Borehole-Shaft Coal Measures-High Green            Authority: Environment Agency, North East Region            Abstraction: Golf Courses: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Tankersley Park Golf Club, High Green, Sheffield            Authorised Start: 01 January            Authorised End: 31 December            Permit Start Date: 1st April 2017            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	(S)	1810	2	435576 398681
	<p><b>Water Abstractions</b></p> <p>Operator: Tankersley Park Golf Club            Licence Number: 2/27/06/043            Permit Version: 103            Location: Borehole-Shaft Coal Measures-High Green            Authority: Environment Agency, North East Region            Abstraction: Golf Courses: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Tankersley Park Golf Club, High Green, Sheffield            Authorised Start: 01 April            Authorised End: 31 March            Permit Start Date: 1st April 2017            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	(S)	1810	2	435576 398681

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Water Abstractions</b></p> <p>Operator: Tankersley Park Golf Club  Licence Number: 2/27/06/043  Permit Version: 102  Location: Borehole-Shaft-Coal Measures-High Green-Sheffield  Authority: Environment Agency, North East Region  Abstraction: Golf Courses: Spray Irrigation - Direct  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Tankersley Park Golf Club, High Green, Sheffield  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 9th February 2004  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	(SE)	1840	2	435700 398700
	<p><b>Water Abstractions</b></p> <p>Operator: Tankersley Park Golf Club  Licence Number: 2/27/06/043  Permit Version: 101  Location: Borehole - Shaft - Coal Measures - High Green Sheffield  Authority: Environment Agency, North East Region  Abstraction: Golf Courses: Spray Irrigation - Direct  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Tankersley Park Golf Club, High Green, Sheffield  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 24th October 2000  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	(SE)	1840	2	435700 398700
	<p><b>Water Abstractions</b></p> <p>Operator: Mr H Brown  Licence Number: 2/27/08/040  Permit Version: 100  Location: Well - Coal Measures - Worsborough  Authority: Environment Agency, North East Region  Abstraction: General Farming And Domestic  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): 1  Yearly Rate (m3): 303  Details: 3 Acres Farmland, Brownfield, Worsborough Village, Barnsley  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 27th January 1966  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	(N)	1971	2	434800 402600
	<p><b>Water Abstractions</b></p> <p>Operator: J B Hodgson  Licence Number: 2/27/08/025  Permit Version: 100  Location: Dyke X4 - Worsborough  Authority: Environment Agency, North East Region  Abstraction: General Agriculture: Spray Irrigation - Direct  Abstraction Type: Water may be abstracted from a single point  Source: Surface  Daily Rate (m3): 159  Yearly Rate (m3): 2728  Details: Rockley Abbey Farm, Worsborough Bridge, Barnsley  Authorised Start: 01 May  Authorised End: 30 September  Permit Start Date: 14th December 1965  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A21NW (NW)	1973	2	433500 402000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Groundwater Vulnerability Map</b> Combined Classification: Secondary Bedrock Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: <40% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13NE (SE)	0	4	434940 400514
	<b>Groundwater Vulnerability Map</b> Combined Classification: Secondary Bedrock Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: <40% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13NE (E)	0	4	435000 400514
	<b>Groundwater Vulnerability - Soluble Rock Risk</b> None				
	<b>Bedrock Aquifer Designations</b> Aquifer Designation: Secondary Aquifer - A	A13NE (E)	0	4	435000 400514
	<b>Bedrock Aquifer Designations</b> Aquifer Designation: Secondary Aquifer - A	A13NE (SE)	0	4	434940 400514
	<b>Superficial Aquifer Designations</b> No Data Available				
	<b>Extreme Flooding from Rivers or Sea without Defences</b> None				
	<b>Flooding from Rivers or Sea without Defences</b> None				
	<b>Areas Benefiting from Flood Defences</b> None				
	<b>Flood Water Storage Areas</b> None				
	<b>Flood Defences</b> None				
27	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 180.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A13NE (NE)	169	5	435142 400710
28	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 157.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A13NE (NE)	221	5	435161 400763

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
29	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 117.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A13NE (NE)	251	5	435256 400671
30	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 62.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SE (NE)	322	5	435200 400861
31	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 65.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SW (N)	364	5	434866 400992
32	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 52.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SE (SW)	367	5	434596 400257
33	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 324.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A14NW (NE)	387	5	435357 400782
34	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 110.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SE (SW)	415	5	434544 400256
35	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 158.7 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19SW (NE)	417	5	435332 400869
36	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 266.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SE (N)	423	5	434970 401056
37	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 4.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SW (N)	424	5	434883 401055

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
38	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 352.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Birdwell Dike Catchment Name: Don and Rother Primacy: 1	A12SE (W)	435	5	434426 400494
39	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 96.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SE (NE)	455	5	435236 400995
40	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 16.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SE (W)	464	5	434453 400330
41	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 5.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SE (W)	464	5	434456 400325
42	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 1.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SE (W)	464	5	434457 400324
43	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 136.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Birdwell Dike Catchment Name: Don and Rother Primacy: 1	A12SE (W)	472	5	434439 400339
44	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 16.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SE (N)	486	5	435140 401073
45	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 37.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SE (N)	489	5	435156 401069
46	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 65.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A14NW (E)	510	5	435515 400700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
47	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 11.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SE (NE)	513	5	435190 401080
48	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 75.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SE (NE)	525	5	435191 401092
49	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 57.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Birdwell Dike Catchment Name: Don and Rother Primacy: 1	A12NE (W)	527	5	434333 400622
50	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 84.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A14NW (E)	530	5	435543 400658
51	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 398.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Warren Dike Catchment Name: Don and Rother Primacy: 1	A12NE (W)	552	5	434316 400677
52	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 43.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A14NW (E)	566	5	435578 400663
53	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 84.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A14NW (E)	589	5	435605 400600
54	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 267.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SE (NE)	600	5	435224 401160
55	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 29.1 Watercourse Level: Underground Permanent: True Watercourse Name: Birdwell Dike Catchment Name: Don and Rother Primacy: 1	A12SE (SW)	604	5	434332 400262

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
56	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 225.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Birdwell Dike Catchment Name: Don and Rother Primacy: 1	A12SE (W)	631	5	434303 400256
57	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 142.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (NE)	699	5	435269 401249
58	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 7.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A14NE (E)	711	5	435712 400742
59	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 178.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A14NE (E)	713	5	435715 400736
60	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 71.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	760	5	435263 401317
61	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 53.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	762	5	435260 401321
62	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 12.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NW (SW)	797	5	434198 400093
63	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 10.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NW (SW)	800	5	434198 400083
64	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 13.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	813	5	435270 401373

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
65	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 34.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	818	5	435311 401360
66	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 39.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Warren Dike Catchment Name: Don and Rother Primacy: 1	A17SW (NW)	826	5	434156 401000
67	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 39.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	827	5	435273 401387
68	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 55.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	846	5	435378 401361
69	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 31.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Birdwell Dike Catchment Name: Don and Rother Primacy: 1	A12SW (W)	852	5	434091 400185
70	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 18.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Short Wood Dike Catchment Name: Don and Rother Primacy: 1	A19NW (N)	860	5	435286 401417
71	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 136.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Warren Dike Catchment Name: Don and Rother Primacy: 1	A17SW (NW)	865	5	434126 401025
72	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 15.2 Watercourse Level: Underground Permanent: True Watercourse Name: Short Wood Dike Catchment Name: Don and Rother Primacy: 1	A19NW (N)	875	5	435297 401428
73	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 436.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Birdwell Dike Catchment Name: Don and Rother Primacy: 1	A12SW (W)	882	5	434059 400183

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
74	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 375.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SW (W)	882	5	434059 400183
75	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 23.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Short Wood Dike Catchment Name: Don and Rother Primacy: 1	A19NW (N)	889	5	435299 401443
76	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 7.3 Watercourse Level: Underground Permanent: True Watercourse Name: Short Wood Dike Catchment Name: Don and Rother Primacy: 1	A19NW (N)	911	5	435302 401466
77	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 472.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Short Wood Dike Catchment Name: Don and Rother Primacy: 1	A19NW (N)	917	5	435300 401473
78	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 6.6 Watercourse Level: Underground Permanent: True Watercourse Name: Warren Dike Catchment Name: Don and Rother Primacy: 1	A17SW (NW)	957	5	434095 401142
79	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 425.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Warren Dike Catchment Name: Don and Rother Primacy: 1	A17SW (NW)	961	5	434095 401149

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
80	<p><b>Historical Landfill Sites</b></p> <p>Licence Holder: Hartwood Exports            Location: Adjoining premises of Hartwood Exports (Machinery) Limited, Sheffield Road, Birdwell, Barnsley            Name: British Rail Railway Cutting            Operator Location: Sheffield Road, Birdwell, Barnsley            Boundary Accuracy: As Supplied            Provider Reference: EAHLD04408            First Input Date: 31st May 1983            Last Input Date: 31st December 1989            Specified Waste Type: Deposited Waste included Inert and Commercial Waste            EA Waste Ref: 0            Regis Ref: Not Supplied            WRC Ref: 4400/0455            BGS Ref: Not Supplied            Other Ref: WD20 B378, 4400/B378, 20B378(53), (36)B, 4400/(36), 4400/0439</p>	A13NW (NW)	2	2	434877 400594
81	<p><b>Historical Landfill Sites</b></p> <p>Licence Holder: B D R Waste Disposal Limited            Location: Birdwell, Barnsley, South Yorkshire            Name: Birdwell Common Quarry            Operator Location: Not Supplied            Boundary Accuracy: As Supplied            Provider Reference: EAHLD04406            First Input Date: Not Supplied            Last Input Date: Not Supplied            Specified Waste Type: Not Supplied            EA Waste Ref: 0            Regis Ref: Not Supplied            WRC Ref: 4400/0555            BGS Ref: Not Supplied            Other Ref: WD20 D928, 4400/(153)</p>	A12NE (W)	262	2	434595 400536
82	<p><b>Licensed Waste Management Facilities (Locations)</b></p> <p>Licence Number: 65291            Location: Lidget Garage, Sheffield Road, Hoyland Common, Barnsley, South Yorkshire, S74 0EB            Operator Name: Richard Adrian Goodwin            Operator Location: Not Supplied            Authority: Environment Agency - North East Region, Yorkshire Area            Site Category: Physico-chemical Treatment Facilities  <b>Licence Status: Expired</b>            Issued: 5th April 2006            Last Modified: Not Supplied            Expires: Not Supplied            Suspended: Not Supplied            Revoked: Not Supplied            Surrendered: Not Supplied            IPPC Reference: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A13SE (S)	82	2	434990 400309
83	<p><b>Licensed Waste Management Facilities (Locations)</b></p> <p>Licence Number: 60553            Location: Hangmanstone Depot, Sheffield Road, Birdwell, Barnsley, South Yorkshire, S70 5TR            Operator Name: Hartwood Estates Ltd            Operator Location: Not Supplied            Authority: Environment Agency - North East Region, Yorkshire Area            Site Category: Metal Recycling Sites (Vehicle Dismantlers)  <b>Licence Status: Surrendered</b>            Issued: 22nd November 1996            Last Modified: Not Supplied            Expires: Not Supplied            Suspended: Not Supplied            Revoked: Not Supplied            Surrendered: 16th February 2009            IPPC Reference: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A13NW (W)	137	2	434720 400580
	<p><b>Local Authority Landfill Coverage</b></p> <p>Name: Barnsley Metropolitan Borough Council            - Has supplied landfill data</p>		0	3	434940 400514

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
84	<p><b>Local Authority Recorded Landfill Sites</b></p> <p>Location: Not Supplied            Reference: 53            Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards</p> <p><b>Last Reported Status:</b> Unknown</p> <p>Types of Waste: Not Supplied            Date of Closure: Not Supplied            Positional Accuracy: Positioned by the supplier            Boundary Quality: Moderate</p>	A13NW (NW)	0	3	434878 400592
85	<p><b>Local Authority Recorded Landfill Sites</b></p> <p>Location: Not Supplied            Reference: 36            Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards</p> <p><b>Last Reported Status:</b> Unknown</p> <p>Types of Waste: Not Supplied            Date of Closure: Not Supplied            Positional Accuracy: Positioned by the supplier            Boundary Quality: Moderate</p>	A13SW (W)	125	3	434749 400496
86	<p><b>Local Authority Recorded Landfill Sites</b></p> <p>Location: Not Supplied            Reference: 153            Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards</p> <p><b>Last Reported Status:</b> Unknown</p> <p>Types of Waste: Not Supplied            Date of Closure: Not Supplied            Positional Accuracy: Positioned by the supplier            Boundary Quality: Moderate</p>	A13NW (W)	159	3	434698 400546
87	<p><b>Registered Landfill Sites</b></p> <p>Licence Holder: Hartwood Exports (Machinery)            Licence Reference: WD20 B 378            Site Location: Railway Cutting At Sheffield Road, Birdwell, Barnsley, South Yorkshire            Licence Easting: 434900            Licence Northing: 400600            Operator Location: Sheffield Road, Birdwell, Barnsley, South Yorkshire            Authority: Environment Agency - North East Region, Ridings Area            Site Category: Landfill - Railway cutting            Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year)            Waste Source: No known restriction on source of waste            Restrictions:            Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled            Dated: 1st May 1983            Preceded By: Not Given            Licence:            Superseded By: Not Given            Licence:            Positional Accuracy: Manually positioned to the address or location            Boundary Accuracy: Not Applicable            Authorised Waste: Clay, Subsoil, Topsoil            Construction And Demolition Wastes            Foundry Sand &amp; Slag            Hardcore            Waste Ex Coal Processing</p> <p>Prohibited Waste: Asbestos            Liquids In Containers Over 4l Cap.            Slurry In Containers Over 4l Cap.</p>	A13NW (NW)	0	2	434900 400600



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS 1:625,000 Solid Geology</b> Description: Pennine Middle Coal Measures Formation And South Wales Middle Coal Measures Formation (Undifferentiated)	A13NE (SE)	0	1	434940 400514
90	<b>BGS Recorded Mineral Sites</b> Site Name: Knoll Drift Mine Location: Tankersley Common, Hoyland, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 204806 Type: Underground <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Flockton Thick Coal (West And South Yorkshire) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SW (S)	23	1	434912 400394
90	<b>BGS Recorded Mineral Sites</b> Site Name: Knoll Drift Mine Location: Tankersley Common, Hoyland, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 204805 Type: Underground <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Flockton Thick Coal (West And South Yorkshire) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	60	1	434871 400396
91	<b>BGS Recorded Mineral Sites</b> Site Name: Birdwell Location: Hoyland, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13311 Type: Opencast <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NW (W)	199	1	434660 400595
92	<b>BGS Recorded Mineral Sites</b> Site Name: Rockingham Occs Location: Hoyland, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 201 Type: Opencast <b>Status: Ceased</b> Operator: Rjb Mining (Uk) Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Coal - Opencast Positional Accuracy: Located by supplier to within 10m	A18SE (N)	324	1	435059 400932
93	<b>BGS Recorded Mineral Sites</b> Site Name: Bird Well Common Location: Birdwell, Worsbrough, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 38056 Type: Opencast <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	457	1	434498 400845

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
94	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Rockingham Colliery, No. 1 Shaft            Location: Hoyland, Barnsley, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 13310            Type: Underground  <b>Status: Ceased</b>            Operator: Individual'S Name Withheld            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A19SW (NE)	481	1	435276 401002
94	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Rockingham Colliery, No. 2 Shaft            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204821            Type: Underground  <b>Status: Ceased</b>            Operator: Individual'S Name Withheld            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Coal Measures Group            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A19SW (NE)	525	1	435305 401036
95	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Hay Green Occs            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204804            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Swallow Wood Coal (West And South Yorkshire)            Commodity: Coal - Opencast            Positional Accuracy: Located by supplier to within 10m</p>	A18SW (N)	519	1	434843 401145
96	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Rockingham Colliery, Swallow Wood Drift            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204822            Type: Underground  <b>Status: Ceased</b>            Operator: Individual'S Name Withheld            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Swallow Wood Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A19SW (NE)	600	1	435333 401106
97	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Hay Green Coal Workings            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204803            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Swallow Wood Coal (West And South Yorkshire)            Commodity: Coal - Opencast            Positional Accuracy: Located by supplier to within 10m</p>	A18NW (N)	656	1	434690 401244
98	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Singleton Wood            Location: Upper Hoyland, Hoyland, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 38055            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A19SW (NE)	673	1	435447 401114

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
99	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lidget Quarry            Location: Pilley, Hoyland, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 38057            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A12SW (W)	683	1	434226 400296
100	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Birdwell Lodge Coal Mine            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204796            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Lidget Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A17SW (NW)	722	1	434194 400850
101	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Hoyland Common Occs            Location: Hoyland Common, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 235898            Type: Opencast  <b>Status: Ceased</b>            Operator: Individual'S Name Withheld            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Opencast            Positional Accuracy: Located by supplier to within 10m</p>	A19SE (NE)	725	1	435695 400850
102	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lacton House Drift Mine            Location: Tankersley Common, Hoyland, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204807            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Flockton Thick Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A12SW (SW)	733	1	434232 400176
103	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Potter Holes Bell Pits            Location: Tankersley Common, Hoyland, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204810            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Lower Coal Measures Formation            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A7NE (SW)	765	1	434289 399979
104	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Potter Holes Bell Pits            Location: Tankersley Common, Hoyland, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204811            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Lower Coal Measures Formation            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A7NE (SW)	769	1	434356 399879

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
105	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Hoyland Common Occs            Location: Hoyland Common, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 235897            Type: Opencast  <b>Status: Ceased</b>            Operator: Individual'S Name Withheld            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Opencast            Positional Accuracy: Located by supplier to within 10m</p>	A14NE (E)	775	1	435790 400635
106	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Birdwell Lodge Coal Mine            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204797            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Lidget Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A12NW (W)	776	1	434131 400837
107	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Potter Holes Bell Pits            Location: Tankersley Common, Hoyland, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204809            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Lower Coal Measures Formation            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A7NW (SW)	794	1	434219 400049
108	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Hay Green Lane Quarries            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204798            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A18NW (N)	831	1	434725 401439
108	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Hay Green Lane Quarries            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204799            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A18NW (N)	867	1	434732 401478
109	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Hay Green Lane Coal Pit            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204794            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Swallow Wood Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A17NE (N)	842	1	434592 401404

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
110	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Birdwell Lodge Coal Mine            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 108286            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Lidget Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A17SW (NW)	859	1	434114 400993
111	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lacton House Drift Mine Air Shaft            Location: Tankersley Common, Hoyland, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204808            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Flockton Thick Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A7NW (SW)	883	1	434085 400131
112	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Hay Green Lane Quarries            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204801            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A18NW (N)	886	1	434838 401515
113	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Hoyland Common Occs            Location: Hoyland Common, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204823            Type: Opencast  <b>Status: Ceased</b>            Operator: Individual'S Name Withheld            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14NE (E)	886	1	435900 400650
114	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Hay Green Lane Quarries            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204800            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A23SW (N)	900	1	434781 401521
115	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Knoll Drift Mine            Location: Pilley, Barnsley, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204817            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Lidget Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A11SE (W)	957	1	433913 400396

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
115	<b>BGS Recorded Mineral Sites</b> Site Name: Knoll Drift Mine Location: Pilley, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 204816 Type: Underground <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Lidget Coal (West And South Yorkshire) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A11SE (W)	991	1	433878 400403
116	<b>BGS Recorded Mineral Sites</b> Site Name: Tankersley Ironstone Pit Location: Tankersley, Hoyland, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 38097 Type: Underground <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Tankersley Ironstone Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 10m	A3NE (S)	972	1	434986 399405
117	<b>BGS Recorded Mineral Sites</b> Site Name: High Royd Brick Works Location: Upper Hoyland, Hoyland, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 108221 Type: Opencast <b>Status: Ceased</b> Operator: Ffrith Fireclay Co., Ltd Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A19NE (NE)	981	1	435645 401350
118	<b>BGS Recorded Mineral Sites</b> Site Name: Lacton House Occs Location: Pilley, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 204818 Type: Underground <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Flockton Thick Coal (West And South Yorkshire) Commodity: Coal - Opencast Positional Accuracy: Located by supplier to within 10m	A11SE (W)	992	1	433913 400253
	<b>Coal Mining Affected Areas</b> Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13NE (SE)	0	6	434940 400514
	<b>Mining Instability</b> Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13NE (SE)	0	-	434940 400514
	<b>Non Coal Mining Areas of Great Britain</b> Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	435000 400514
	<b>Non Coal Mining Areas of Great Britain</b> Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	434940 400514
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	434940 400514
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	435000 400514

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	434940 400514
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	435000 400514
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	3	1	434891 400610
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	75	1	435000 400683
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	137	1	435066 400319
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A18SE (N)	238	1	435041 400846
	<b>Potential for Ground Dissolution Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	434940 400514
	<b>Potential for Ground Dissolution Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	435000 400514
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	434940 400514
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	435000 400514
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	200	1	434865 400192
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	434940 400514
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	435000 400514
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	3	1	434891 400610
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	75	1	435000 400683
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	137	1	435066 400319
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	434940 400514
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	435000 400514
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	434960 400524
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	31	1	435059 400569
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	150	1	435170 400553

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b></p> <p>Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service</p>	A13NE (E)	222	1	435237 400530
	<p><b>Radon Potential - Radon Affected Areas</b></p> <p>Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service</p>	A13NE (E)	0	1	435000 400514
	<p><b>Radon Potential - Radon Affected Areas</b></p> <p>Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service</p>	A13NE (E)	0	1	434950 400514
	<p><b>Radon Potential - Radon Affected Areas</b></p> <p>Affected Area: The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service</p>	A13NE (SE)	0	1	434940 400514
	<p><b>Radon Potential - Radon Protection Measures</b></p> <p>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service</p>	A13NE (E)	0	1	435000 400514
	<p><b>Radon Potential - Radon Protection Measures</b></p> <p>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service</p>	A13NE (E)	0	1	434950 400514
	<p><b>Radon Potential - Radon Protection Measures</b></p> <p>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service</p>	A13NE (SE)	0	1	434940 400514

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
119	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Darwill Ltd            Location: Unit 13, Rockingham Business Park, Rockingham Row, Birdwell, Barnsley, South Yorkshire, S70 5TW            Classification: Mechanical Handling Equipment  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (N)	40	-	434906 400665
119	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: W R Rack Solutions Ltd            Location: Unit 13, Rockingham Business Park, Rockingham Row, Birdwell, Barnsley, South Yorkshire, S70 5TW            Classification: Pallets, Crates &amp; Packing Cases  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (N)	40	-	434906 400665
119	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Scrap My Car Now For Barnsley Kws            Location: Rockingham Row, Barnsley, South Yorkshire, S70 5TW            Classification: Car Breakers &amp; Dismantlers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned within the geographical locality</p>	A13NW (NW)	55	-	434875 400659
119	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Birdwell Garage            Location: Unit 6, Rockingham Business Park, Rockingham Row, Birdwell, Barnsley, South Yorkshire, S70 5TW            Classification: Garage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	55	-	434875 400659
120	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: B P Service Station            Location: BIRDWELL, BARNSELEY, S70 5SZ            Classification: Petrol Filling Stations  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (NE)	58	-	435005 400662
121	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Kia Services            Location: Unit 4, Rockingham Business Park, Rockingham Row, Birdwell, Barnsley, S70 5TW            Classification: Garage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	69	-	434838 400645
121	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: May Gurney Ltd            Location: Unit 4, Rockingham Business Park, Rockingham Row, Birdwell, BARNSELEY, South Yorkshire, S70 5TW            Classification: Sewage Disposal - Equipment &amp; Service  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	70	-	434836 400643
121	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Bmw Breaking Centre            Location: Unit 3, Rockingham Business Park, Rockingham Row, Birdwell, Barnsley, South Yorkshire, S70 5TW            Classification: Car Breakers &amp; Dismantlers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned in the proximity of the address</p>	A13NW (NW)	92	-	434852 400688
121	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Company Shop            Location: Rockingham Row, Birdwell, Barnsley, South Yorkshire, S70 5TW            Classification: Food Products - Manufacturers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the road within the address or location</p>	A13NW (NW)	93	-	434844 400684
122	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: European Welding Supplies Ltd            Location: Unit 3, Rockingham Business Park, Rockingham Row, Birdwell, Barnsley, S70 5TW            Classification: Abrasive Products - Wholesalers  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	83	-	434820 400642
123	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Birdwell Armoury Indoor Shooting Centre            Location: 346, Sheffield Road, Birdwell, Barnsley, South Yorkshire, S70 5TU            Classification: Gunsmiths  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A13SW (SW)	139	-	434774 400428

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
124	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Hartwood Exports (Machinery) Ltd            Location: Hangmanstone Depot, Sheffield Road, Birdwell, Barnsley, South Yorkshire, S70 5TR            Classification: Commercial Vehicle Servicing, Repairs, Parts &amp; Accessories  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (W)	143	-	434716 400589
125	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Trekdale Transport Ltd            Location: Rockingham Row, Birdwell, Barnsley, South Yorkshire, S70 5TW            Classification: Road Haulage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	143	-	434799 400711
126	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: The Partlow Partnership            Location: Unit 6 Rockingham Row, Birdwell, Barnsley, South Yorkshire, S70 5TW            Classification: Greeting Card Publishers &amp; Wholesalers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the road within the address or location</p>	A13NW (NW)	145	-	434760 400670
127	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Esco Gb            Location: Unit 2, Kestrel Way, Birdwell, Barnsley, S70 5SZ            Classification: Laboratory Equipment, Instruments &amp; Supplies  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A18SE (N)	229	-	434963 400860
128	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Colin Vaines &amp; Sons Ltd            Location: 2, The Walk, Birdwell, Barnsley, South Yorkshire, S70 5UA            Classification: Road Haulage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	244	-	434629 400651
129	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: G B Truck Services Ltd            Location: Cross Keys Works, Cross Keys Lane, Hoyland, Barnsley, South Yorkshire, S74 0QA            Classification: Diesel Fuel Injection Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	262	-	435272 400542
129	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: S &amp; H Recovery Services Ltd            Location: Cross Keys Works, Cross Keys Lane, Hoyland, Barnsley, South Yorkshire, S74 0QA            Classification: Breakdown and Recovery  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A13NE (E)	262	-	435272 400542
129	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: G B Truck Services Ltd            Location: Cross Keys Works, Cross Keys Lane, Hoyland, Barnsley, South Yorkshire, S74 0QA            Classification: Commercial Vehicle Bodybuilders &amp; Repairers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	262	-	435272 400542
129	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: G B Truck Service Ltd            Location: Cross Keys Works, Cross Keys Lane, Hoyland, Barnsley, South Yorkshire, S74 0QA            Classification: Commercial Vehicle Bodybuilders &amp; Repairers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	262	-	435272 400542
130	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Twin Tub (UK)            Location: 247, Sheffield Road, Birdwell, Barnsley, South Yorkshire, S70 5TN            Classification: Washing Machines - Servicing &amp; Repairs  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	275	-	434651 400744
131	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Talurit UK            Location: Unit 3, Kestrel Way, Birdwell, Barnsley, S70 5SZ            Classification: Ropes &amp; Hawsers  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A18SE (N)	284	-	434990 400912

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
132	<b>Contemporary Trade Directory Entries</b> Name: Jet Petrol Station Location: SHEFFIELD ROAD, HOYLAND, BARNSELY, S74 0PY Classification: Petrol Filling Stations <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	320	-	435288 400396
132	<b>Contemporary Trade Directory Entries</b> Name: Cross Keys Filling Station Location: Sheffield Road, Hoyland, Barnsley, South Yorkshire, S74 0PY Classification: Petrol Filling Stations <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	320	-	435288 400396
133	<b>Contemporary Trade Directory Entries</b> Name: Jet Cross Keys Location: Sheffield Road, Hoyland, Barnsley, S74 0PY Classification: Petrol Filling Stations <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	358	-	435328 400395
133	<b>Contemporary Trade Directory Entries</b> Name: A H Fastners (UK) Ltd Location: Sheffield Rd, Hoyland Common, Barnsley, South Yorkshire, S74 0EB Classification: Fasteners & Fixing Devices <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A14SW (SE)	363	-	435319 400352
133	<b>Contemporary Trade Directory Entries</b> Name: Cross Keys Garage (Barnsley) Ltd Location: Sheffield Road, Hoyland, Barnsley, South Yorkshire, S74 0PY Classification: Petrol Filling Stations <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	373	-	435343 400394
134	<b>Contemporary Trade Directory Entries</b> Name: Kustom Sport Location: Regent St, Hoyland, Barnsley, South Yorkshire, S74 0PU Classification: Carpets & Rugs - Manufacturers <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A14SW (E)	468	-	435436 400372
135	<b>Contemporary Trade Directory Entries</b> Name: Direct Waste Services Location: Tinker La, Hoyland, Barnsley, South Yorkshire, S74 0PR Classification: Waste Disposal Services <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A14NW (E)	474	-	435484 400524
136	<b>Contemporary Trade Directory Entries</b> Name: Puncturesafe Location: 12, Steele Street, Hoyland, Barnsley, South Yorkshire, S74 0PS Classification: Tyre Repairs & Retreading <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	477	-	435471 400456
137	<b>Contemporary Trade Directory Entries</b> Name: Hoyland Common Service Station Location: Sheffield Road, Hoyland, Barnsley, South Yorkshire, S74 0DP Classification: Petrol Filling Stations <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (SE)	544	-	435465 400221
138	<b>Contemporary Trade Directory Entries</b> Name: J M Cleaning Services Location: 10, Tankersley Lane, Hoyland, Barnsley, South Yorkshire, S74 0DS Classification: Commercial Cleaning Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A9NW (SE)	551	-	435444 400147
139	<b>Contemporary Trade Directory Entries</b> Name: Windows & Conservatories Location: 196, Sheffield Road, Birdwell, Barnsley, South Yorkshire, S70 5TD Classification: PVC-U Products - Manufacturers & Suppliers <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	554	-	434578 401060
140	<b>Contemporary Trade Directory Entries</b> Name: Don Mellor Location: Tinker La, Hoyland, Barnsley, South Yorkshire, S74 0PR Classification: Road Haulage Services <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A14SW (E)	598	-	435580 400396

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
141	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Rainford Developments Ltd            Location: Wentworth Street, Barnsley, S Yorkshire, S70 5UN            Classification: Fireplaces &amp; Mantelpieces  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the road within the address or location</p>	A17SE (NW)	609	-	434524 401088
142	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Central Garage            Location: Sheffield Road, Birdwell, Barnsley, South Yorkshire, S70 5TA            Classification: Car Body Repairs  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A17SE (NW)	635	-	434598 401175
142	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Hilltop Garage            Location: Sheffield Road, Birdwell, Barnsley, South Yorkshire, S70 5TA            Classification: Garage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A17SE (NW)	635	-	434598 401175
142	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: The Prestige Bodyshop            Location: 113, Sheffield Road, Birdwell, Barnsley, S70 5TA            Classification: Car Body Repairs  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A17NE (NW)	673	-	434591 401214
143	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Wilby Electrical Ltd            Location: 8a, Hoyland Road, Hoyland, Barnsley, South Yorkshire, S74 0LY            Classification: Electrical Engineers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A14SW (SE)	680	-	435596 400183
143	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Searns Decor            Location: 5-7, Hoyland Road, Hoyland, BARNLSLEY, South Yorkshire, S74 0LX            Classification: Wallpapers &amp; Wall Coverings  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A14SE (SE)	721	-	435635 400168
143	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Paul'S Print Shop            Location: 9, Hoyland Road, Hoyland, Barnsley, South Yorkshire, S74 0LT            Classification: Printers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A14SE (SE)	748	-	435672 400194
144	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: D H Armitage Ltd            Location: Fairfield Garage, Sheffield Road, Hoyland, Barnsley, South Yorkshire, S74 0DP            Classification: Road Haulage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A9NW (SE)	707	-	435564 400042
144	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Challenger Tyres &amp; Exhausts Co Ltd            Location: Sheffield Road, Hoyland, Barnsley, South Yorkshire, S74 0DP            Classification: Tyre Dealers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A9NW (SE)	707	-	435564 400042
144	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: D H Armitage            Location: Fairfield Garage, Sheffield Road, Hoyland, Barnsley, South Yorkshire, S74 0DP            Classification: Road Haulage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A9NW (SE)	707	-	435564 400042
144	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Challenger Tyres &amp; Exhausts            Location: Sheffield Road, Hoyland, Barnsley, South Yorkshire, S74 0DP            Classification: Tyre Repairs &amp; Retreading  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A9NW (SE)	707	-	435564 400042

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
144	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Shell            Location: Sheffield Road, Hoyland, Barnsley, S74 0DP            Classification: Petrol Filling Stations  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A9NW (SE)	735	-	435605 400059
145	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Bretton Telecom            Location: 51, Hay Green Lane, Birdwell, Barnsley, South Yorkshire, S70 5XA            Classification: Telecommunications Equipment &amp; Systems  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A18NW (N)	787	-	434799 401410
146	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: R G Carpet &amp; Upholstery Cleaning            Location: 27, Beaumont Street, Hoyland, Barnsley, South Yorkshire, S74 0NU            Classification: Carpet, Curtain &amp; Upholstery Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A9NE (SE)	836	-	435748 400141
147	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: H Booth &amp; Son Ltd            Location: Hoyland Rd, Hoyland, Barnsley, South Yorkshire, S74 0PB            Classification: Clothing &amp; Fabrics - Manufacturers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the road within the address or location</p>	A14SE (E)	848	-	435804 400274
148	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Shell            Location: Sheffield Road, Birdwell, Barnsley, South Yorkshire, S70 5XB            Classification: Petrol Filling Stations  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A17NE (NW)	855	-	434511 401378
149	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Ashbeck Aquatic'S Wholesale            Location: 80, Hoyland Road, Hoyland, Barnsley, South Yorkshire, S74 0AP            Classification: Hose, Tubing &amp; Fittings  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A14SE (E)	880	-	435851 400316
150	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Pro Display            Location: UNIT 5, SHORTWOOD COURT, SHORTWOOD BUSINESS PARK, HOYLAND, BARNLSLEY, S74 9LH            Classification: Screen Manufacturers &amp; Suppliers  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A19NE (NE)	901	-	435643 401244
150	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Pro Display            Location: Unit 5, Shortwood Court, Shortwood Business Park, Hoyland, Barnsley, South Yorkshire, S74 9LH            Classification: Screen Manufacturers &amp; Suppliers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A19NE (NE)	904	-	435645 401247
150	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Global Prints            Location: Unit 4, Shortwood Court, Shortwood Business Park, Hoyland, Barnsley, S74 9LH            Classification: Screen Process Printers  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A19NE (NE)	940	-	435665 401277
150	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Talurit            Location: Unit 4, Shortwood Ct, Shortwood Business Pk, Hoyland, Barnsley, South Yorkshire, S74 9LH            Classification: Engineering Services  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A19NE (NE)	944	-	435666 401282
151	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Imperial Damp Proofing            Location: 30, Herons Way, Birdwell, Barnsley, South Yorkshire, S70 5SF            Classification: Damp &amp; Dry Rot Control  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A23SW (N)	904	-	434884 401537

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
152	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Barnsley Superfit            Location: 57, Fitzwilliam Street, Barnsley, S74 0NJ            Classification: Garage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A9NE (SE)	924	-	435834 400123
153	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Elite Car Co            Location: Unit 6a, Shortwood Court, Shortwood Business Park, Hoyland, Barnsley, South Yorkshire, S74 9LH            Classification: Car Dealers - Used  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A19NE (NE)	972	-	435654 401330
154	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Barnsley Surfacing Co Ltd            Location: 54, Sheffield Road, Birdwell, Barnsley, South Yorkshire, S70 5UY            Classification: Asphalt &amp; Coated Macadam Laying Contractors  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A22SE (N)	994	-	434527 401542
155	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Remora Ltd            Location: Unit 8a, Shortwood Court, Shortwood Business Park, Hoyland, Barnsley, South Yorkshire, S74 9LH            Classification: Cable &amp; Wire Equipment Manufacturers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A19NW (NE)	1000	-	435584 401420
156	<p><b>Fuel Station Entries</b></p> <p>Name: Rockingham Roundabout Service Station            Location: Dearne Valley Parkway , Birdwell , Barnsley, South Yorkshire, S70 5SZ            Brand: Bp            Premises Type: Petrol Station  <b>Status: Open</b>            Positional Accuracy: Manually positioned to the address or location</p>	A13NE (NE)	56	-	435006 400660
157	<p><b>Fuel Station Entries</b></p> <p>Name: Lidgett Garage            Location: A6135 , Hoyland Common , Barnsley, South Yorkshire, S74 0PB            Brand: Power            Premises Type: Petrol Station  <b>Status: Non-Retail</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SE (S)	99	-	435006 400301
158	<p><b>Fuel Station Entries</b></p> <p>Name: Cross Keys Garage            Location: Sheffield Road Regent Street, Hoyland , Barnsley, South Yorkshire, S74 0PY            Brand: JET            Premises Type: Petrol Station  <b>Status: Open</b>            Positional Accuracy: Manually positioned to the address or location</p>	A14SW (E)	359	-	435328 400395
159	<p><b>Fuel Station Entries</b></p> <p>Name: Mfg Hoyland Common            Location: Sheffield Road , Hoyland Common , Barnsley, South Yorkshire, S74 0DP            Brand: Shell            Premises Type: Petrol Station  <b>Status: Open</b>            Positional Accuracy: Manually positioned to the address or location</p>	A9NW (SE)	734	-	435604 400058

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
160	<b>Ancient Woodland</b> Name: The Old Park Reference: 1103453 Area(m <sup>2</sup> ): 176563.46 Type: Plantation on Ancient Woodland	A17SW (NW)	846	7	434175 401062
161	<b>Ancient Woodland</b> Name: Short Wood Reference: 1103458 Area(m <sup>2</sup> ): 94053.63 Type: Ancient and Semi-Natural Woodland	A19NW (N)	853	7	435298 401404
162	<b>Ancient Woodland</b> Name: Bull Wood Reference: 1105013 Area(m <sup>2</sup> ): 20242.55 Type: Ancient and Semi-Natural Woodland	A3NW (S)	947	7	434802 399440
163	<b>Ancient Woodland</b> Name: The Old Park Reference: 1103453 Area(m <sup>2</sup> ): 38225.48 Type: Ancient and Semi-Natural Woodland	A17SW (NW)	968	7	434076 401135
164	<b>Areas of Adopted Green Belt</b> Authority: Barnsley Metropolitan Borough Council, Planning Department Plan Name: Proposal Map <b>Status: Adopted</b> Plan Date: 3rd January 2019	A13SE (S)	0	8	434944 400376
165	<b>Local Nature Reserves</b> Name: Potter Holes Plantation Multiple Area: N Area (m2): 84753.58 Source: Natural England Designation Date: 3rd May 1996	A7NE (SW)	693	7	434359 400003
166	<b>Nitrate Vulnerable Zones</b> Name: River Dearne Nvz Description: Surface Water Source: Environment Agency, Head Office	A13NE (SE)	0	4	434940 400514

Agency & Hydrological	Version	Update Cycle
<b>Contaminated Land Register Entries and Notices</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Environment Agency - Head Office Sheffield City Council - Environmental Protection Service Rotherham Metropolitan Borough Council - Environmental Health Department	January 2020 June 2020 October 2017 September 2017	Annual Rolling Update Annually Annual Rolling Update Annual Rolling Update
<b>Discharge Consents</b> Environment Agency - North East Region	April 2022	Quarterly
<b>Enforcement and Prohibition Notices</b> Environment Agency - North East Region	March 2013	
<b>Integrated Pollution Controls</b> Environment Agency - North East Region	January 2009	
<b>Integrated Pollution Prevention And Control</b> Environment Agency - North East Region	April 2022	Quarterly
<b>Local Authority Integrated Pollution Prevention And Control</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Sheffield City Council - Environmental Protection Service Rotherham Metropolitan Borough Council - Planning Department	April 2014 June 2014 October 2014	Variable Variable Variable
<b>Local Authority Pollution Prevention and Controls</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Sheffield City Council - Environmental Protection Service Rotherham Metropolitan Borough Council - Planning Department	April 2014 June 2014 October 2014	Annual Rolling Update Annual Rolling Update Annual Rolling Update
<b>Local Authority Pollution Prevention and Control Enforcements</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Sheffield City Council - Environmental Protection Service Rotherham Metropolitan Borough Council - Planning Department	April 2014 June 2014 October 2014	Variable Variable Variable
<b>Nearest Surface Water Feature</b> Ordnance Survey	May 2022	
<b>Pollution Incidents to Controlled Waters</b> Environment Agency - North East Region	December 1998	
<b>Prosecutions Relating to Authorised Processes</b> Environment Agency - North East Region	July 2015	
<b>Prosecutions Relating to Controlled Waters</b> Environment Agency - North East Region	March 2013	
<b>Registered Radioactive Substances</b> Environment Agency - North East Region	June 2016	As notified
<b>River Quality</b> Environment Agency - Head Office	November 2001	Not Applicable
<b>River Quality Biology Sampling Points</b> Environment Agency - Head Office	April 2012	
<b>River Quality Chemistry Sampling Points</b> Environment Agency - Head Office	April 2012	
<b>Substantiated Pollution Incident Register</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	April 2022 April 2022	Quarterly Quarterly
<b>Water Abstractions</b> Environment Agency - North East Region	July 2022	Quarterly
<b>Water Industry Act Referrals</b> Environment Agency - North East Region	October 2017	
<b>Groundwater Vulnerability Map</b> Environment Agency - Head Office	June 2018	As notified
<b>Bedrock Aquifer Designations</b> Environment Agency - Head Office	January 2018	Annually

Agency & Hydrological	Version	Update Cycle
<b>Superficial Aquifer Designations</b> Environment Agency - Head Office	January 2018	Annually
<b>Source Protection Zones</b> Environment Agency - Head Office	May 2021	Bi-Annually
<b>Extreme Flooding from Rivers or Sea without Defences</b> Environment Agency - Head Office	May 2022	Quarterly
<b>Flooding from Rivers or Sea without Defences</b> Environment Agency - Head Office	May 2022	Quarterly
<b>Areas Benefiting from Flood Defences</b> Environment Agency - Head Office	May 2022	Quarterly
<b>Flood Water Storage Areas</b> Environment Agency - Head Office	May 2022	Quarterly
<b>Flood Defences</b> Environment Agency - Head Office	May 2022	Quarterly
<b>OS Water Network Lines</b> Ordnance Survey	April 2022	Quarterly
<b>BGS Groundwater Flooding Susceptibility</b> British Geological Survey - National Geoscience Information Service	May 2013	As notified
Waste	Version	Update Cycle
<b>BGS Recorded Landfill Sites</b> British Geological Survey - National Geoscience Information Service	November 2002	As notified
<b>Historical Landfill Sites</b> Environment Agency - Head Office	April 2022	Quarterly
<b>Integrated Pollution Control Registered Waste Sites</b> Environment Agency - North East Region	January 2009	Not Applicable
<b>Licensed Waste Management Facilities (Landfill Boundaries)</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	April 2022 April 2022	Quarterly Quarterly
<b>Licensed Waste Management Facilities (Locations)</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	April 2022 April 2022	Quarterly Quarterly
<b>Local Authority Landfill Coverage</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Rotherham Metropolitan Borough Council - Environmental Health Department Sheffield City Council - Environmental Protection Service	February 2003 February 2003 February 2003	Not Applicable Not Applicable Not Applicable
<b>Local Authority Recorded Landfill Sites</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Rotherham Metropolitan Borough Council - Environmental Health Department Sheffield City Council - Environmental Protection Service	October 2018 October 2018 October 2018	
<b>Registered Landfill Sites</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	March 2006 March 2006	Not Applicable Not Applicable
<b>Registered Waste Transfer Sites</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	April 2018 April 2018	
<b>Registered Waste Treatment or Disposal Sites</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	June 2015 June 2015	

Hazardous Substances	Version	Update Cycle
<b>Control of Major Accident Hazards Sites (COMAH)</b> Health and Safety Executive	January 2022	Bi-Annually
<b>Explosive Sites</b> Health and Safety Executive	March 2017	Annually
<b>Notification of Installations Handling Hazardous Substances (NIHHS)</b> Health and Safety Executive	August 2001	
<b>Planning Hazardous Substance Enforcements</b> Rotherham Metropolitan Borough Council Sheffield City Council Barnsley Metropolitan Borough Council - Planning Department	February 2016 February 2016 January 2016	Variable Variable Variable
<b>Planning Hazardous Substance Consents</b> Rotherham Metropolitan Borough Council Sheffield City Council Barnsley Metropolitan Borough Council - Planning Department	February 2016 February 2016 January 2016	Variable Variable Variable
Geological	Version	Update Cycle
<b>BGS 1:625,000 Solid Geology</b> British Geological Survey - National Geoscience Information Service	January 2009	As notified
<b>BGS Recorded Mineral Sites</b> British Geological Survey - National Geoscience Information Service	May 2022	Bi-Annually
<b>CBSCB Compensation District</b> Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
<b>Coal Mining Affected Areas</b> The Coal Authority - Property Searches	March 2014	Annual Rolling Update
<b>Mining Instability</b> Ove Arup & Partners	June 1998	Not Applicable
<b>Non Coal Mining Areas of Great Britain</b> British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
<b>Potential for Collapsible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	April 2020	As notified
<b>Potential for Compressible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Ground Dissolution Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Landslide Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Running Sand Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Radon Potential - Radon Affected Areas</b> British Geological Survey - National Geoscience Information Service	July 2011	Annually
<b>Radon Potential - Radon Protection Measures</b> British Geological Survey - National Geoscience Information Service	July 2011	Annually

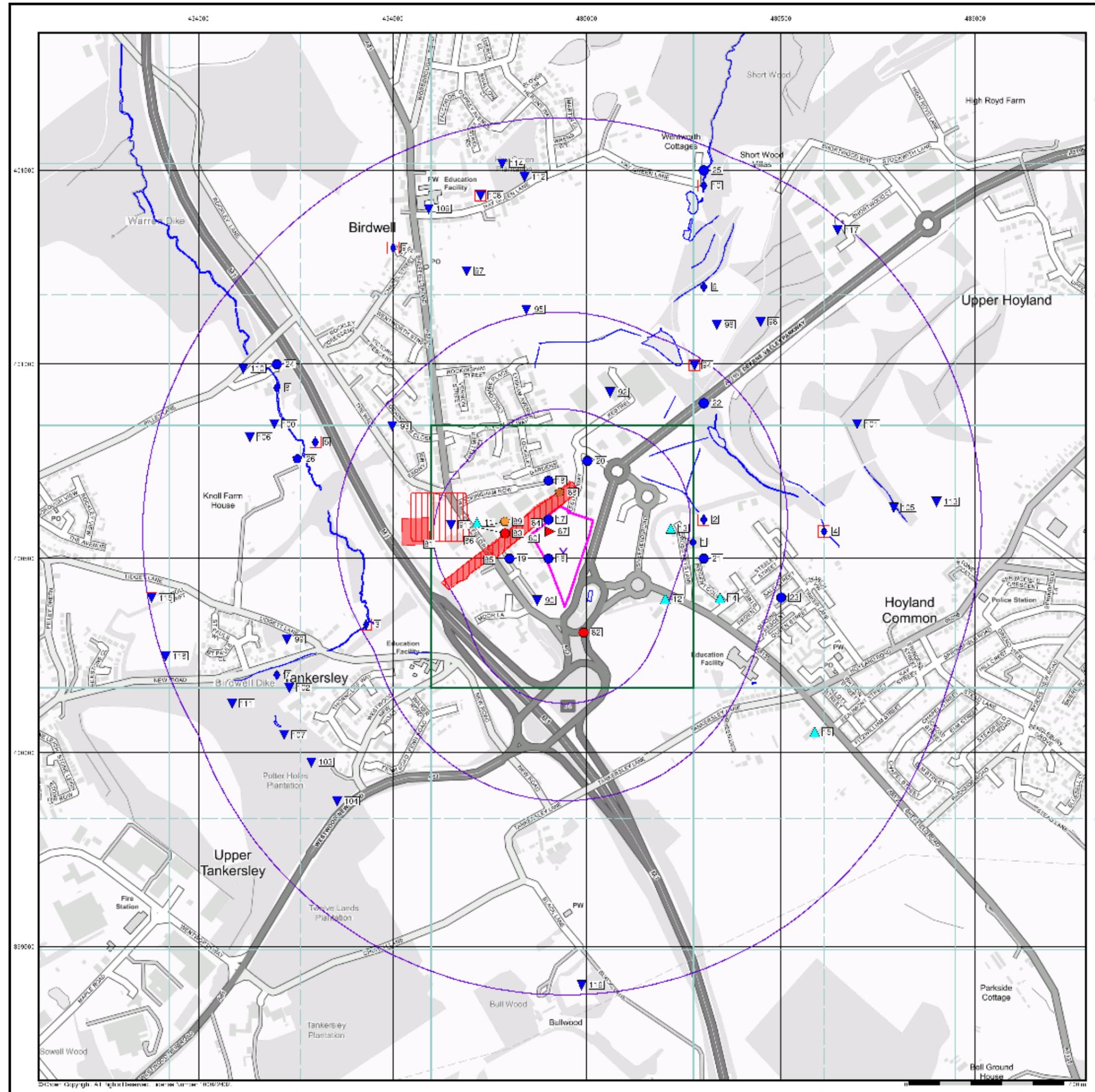
Industrial Land Use	Version	Update Cycle
<b>Contemporary Trade Directory Entries</b> Thomson Directories	April 2022	Quarterly
<b>Fuel Station Entries</b> Catalist Ltd - Experian	June 2022	Quarterly
<b>Gas Pipelines</b> National Grid	October 2021	Bi-Annually
<b>Underground Electrical Cables</b> National Grid	May 2021	Bi-Annually
Sensitive Land Use	Version	Update Cycle
<b>Ancient Woodland</b> Natural England	February 2021	Bi-Annually
<b>Areas of Adopted Green Belt</b> Barnsley Metropolitan Borough Council - Planning Department Rotherham Metropolitan Borough Council Sheffield City Council	October 2020 October 2020 October 2020	Quarterly Quarterly Quarterly
<b>Areas of Unadopted Green Belt</b> Barnsley Metropolitan Borough Council - Planning Department Rotherham Metropolitan Borough Council Sheffield City Council	October 2020 October 2020 October 2020	Quarterly Quarterly Quarterly
<b>Areas of Outstanding Natural Beauty</b> Natural England	January 2021	Bi-Annually
<b>Environmentally Sensitive Areas</b> Natural England	January 2017	
<b>Forest Parks</b> Forestry Commission	April 1997	Not Applicable
<b>Local Nature Reserves</b> Natural England	February 2021	Bi-Annually
<b>Marine Nature Reserves</b> Natural England	July 2019	Bi-Annually
<b>National Nature Reserves</b> Natural England	January 2021	Bi-Annually
<b>National Parks</b> Natural England	February 2018	Bi-Annually
<b>Nitrate Sensitive Areas</b> Natural England	April 2016	Not Applicable
<b>Nitrate Vulnerable Zones</b> Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) Environment Agency - Head Office	April 2016 June 2017	Bi-Annually
<b>Ramsar Sites</b> Natural England	August 2020	Bi-Annually
<b>Sites of Special Scientific Interest</b> Natural England	February 2021	Bi-Annually
<b>Special Areas of Conservation</b> Natural England	July 2020	Bi-Annually
<b>Special Protection Areas</b> Natural England	February 2021	Bi-Annually

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 <b>British Geological Survey</b> <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small>
Centre for Ecology and Hydrology	 <b>Centre for Ecology &amp; Hydrology</b> <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small>
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

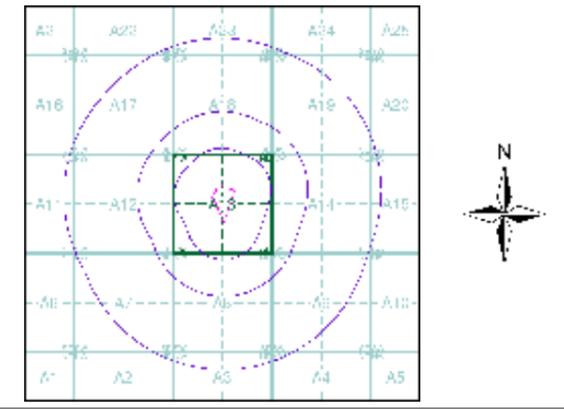
Contact	Name and Address	Contact Details
1	<b>British Geological Survey - Enquiry Service</b> British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	<b>Environment Agency - National Customer Contact Centre (NCCC)</b> PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	<b>Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards</b> Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
4	<b>Environment Agency - Head Office</b> Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
5	<b>Ordnance Survey</b> Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	<b>The Coal Authority - Property Searches</b> 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
7	<b>Natural England</b> County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
8	<b>Barnsley Metropolitan Borough Council - Planning Department</b> Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
9	<b>Sheffield City Council</b> Howden House, 1 Union Street, Sheffield, South Yorkshire, S1 2SH	Telephone: 0114 273 4215 Fax: 0114 273 5002 Website: www.sheffield.gov.uk
10	<b>Rotherham Metropolitan Borough Council</b> Bailey House, Rawmarsh Road, Rotherham, South Yorkshire, S60 1QT	Telephone: 01709 382121 Fax: 01709 823810 Website: www.rotherham.gov.uk
-	<b>Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards</b> Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	<b>Landmark Information Group Limited</b> Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.



- General**
- Specified Site
  - Specified Buffer(s)
  - Bearing Reference Point
  - Map ID
  - Several of Type at Location
- Agency and Hydrological**
- Contaminated Land Register Entry or Notice (Location)
  - Contaminated Land Register Entry or Notice
  - Discharge Consent
  - Enforcement or Prohibition Notice
  - Integrated Pollution Control
  - Integrated Pollution Prevention Control
  - Local Authority Integrated Pollution Prevention and Control
  - Local Authority Pollution Prevention and Control Enforcement
  - Pollution Incident to Controlled Waters
  - Prosecution Relating to Authorised Processes
  - Prosecution Relating to Controlled Waters
  - Registered Radioactive Substance
  - River Network or Water Feature
  - River Quality Sampling Point
  - Substantiated Pollution Incident Register
  - Water Abstraction
  - Water Industry Act Referral
- Waste**
- BGS Recorded Landfill Site (Location)
  - BGS Recorded Landfill Site
  - EA Historic Landfill (Buffered Point)
  - EA Historic Landfill (Polygon)
  - Integrated Pollution Control Registered Waste Site
  - Licensed Waste Management Facility (Landfill Boundary)
  - Licensed Waste Management Facility (Location)
  - Local Authority Recorded Landfill Site (Location)
  - Local Authority Recorded Landfill Site
  - Registered Landfill Site
  - Registered Landfill Site (Location)
  - Registered Landfill Site (Point Buffered to 100m)
  - Registered Landfill Site (Point Buffered to 250m)
  - Registered Waste Transfer Site (Location)
  - Registered Waste Transfer Site
  - Registered Waste Treatment or Disposal Site (Location)
  - Registered Waste Treatment or Disposal Site
- Hazardous Substances**
- COMAH Site
  - Explosive Site
  - NIHHS Site
  - Planning Hazardous Substance Consent
  - Planning Hazardous Substance Enforcement
- Geological**
- BGS Recorded Mineral Site
- Industrial Land Use**
- Contemporary Trade Directory Entry
  - Fuel Station Entry

**Site Sensitivity Map - Slice A**



**Order Details**

Order Number: 298598069\_1\_1  
 Customer Ref: 350525  
 National Grid Reference: 434940, 400510  
 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 1000

**Site Details**  
 Site at, Birdwell, Barnsley

**Landmark**  
 INFORMATION GROUP

Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



### Industrial Land Use Map

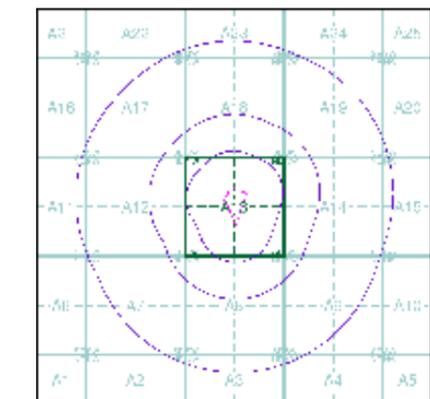
#### General

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

#### Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Underground Electrical Cables

### Industrial Land Use Map - Slice A



#### Order Details

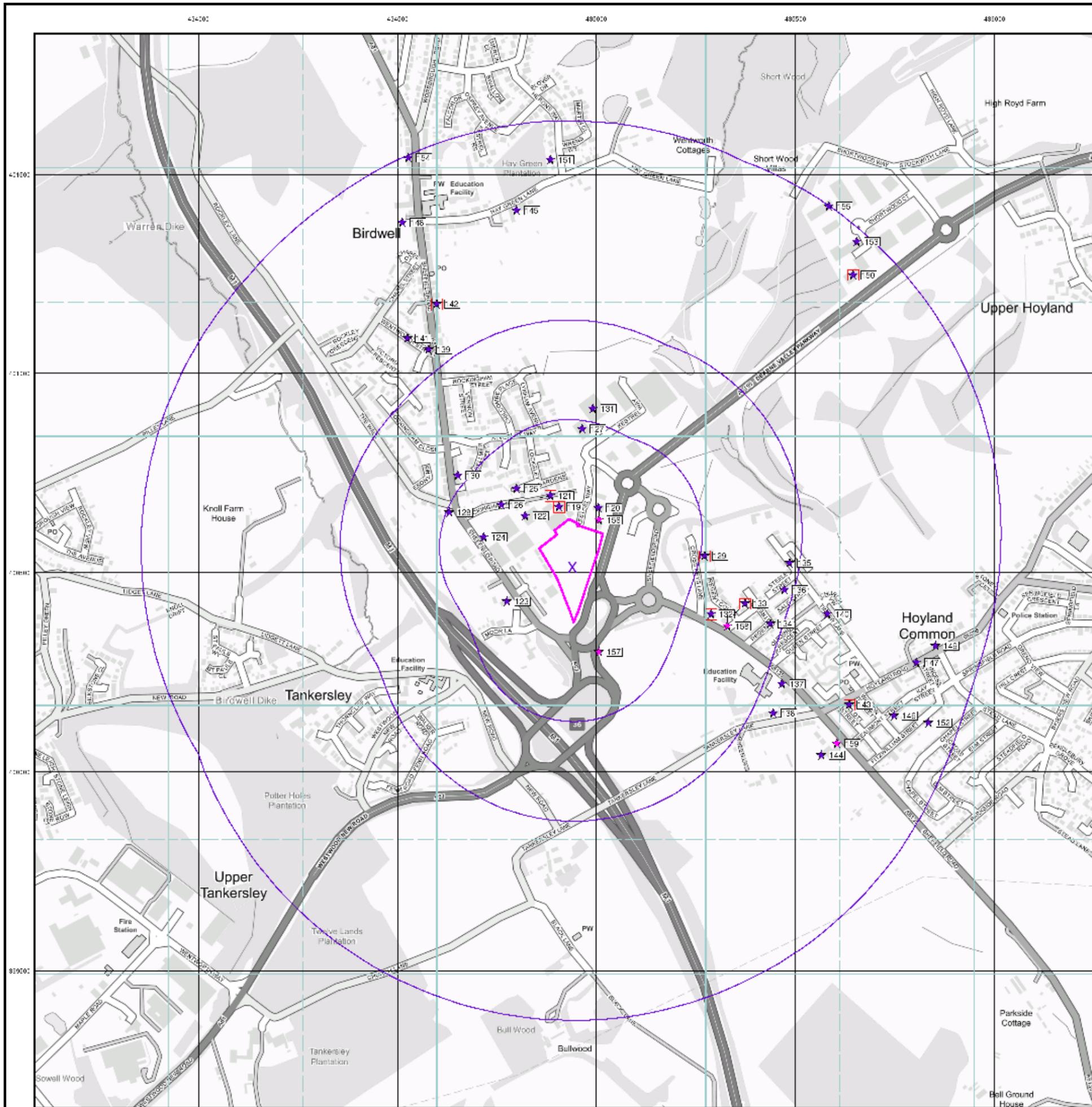
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 Customer Ref: 350525  
 National Grid Reference: 434940, 400510  
 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 1000

#### Site Details

Site at, Birdwell, Barnsley



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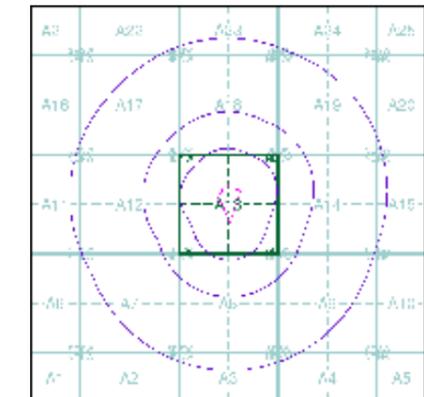
### General

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

### Agency and Hydrological (Flood)

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

### Flood Map - Slice A



### Order Details

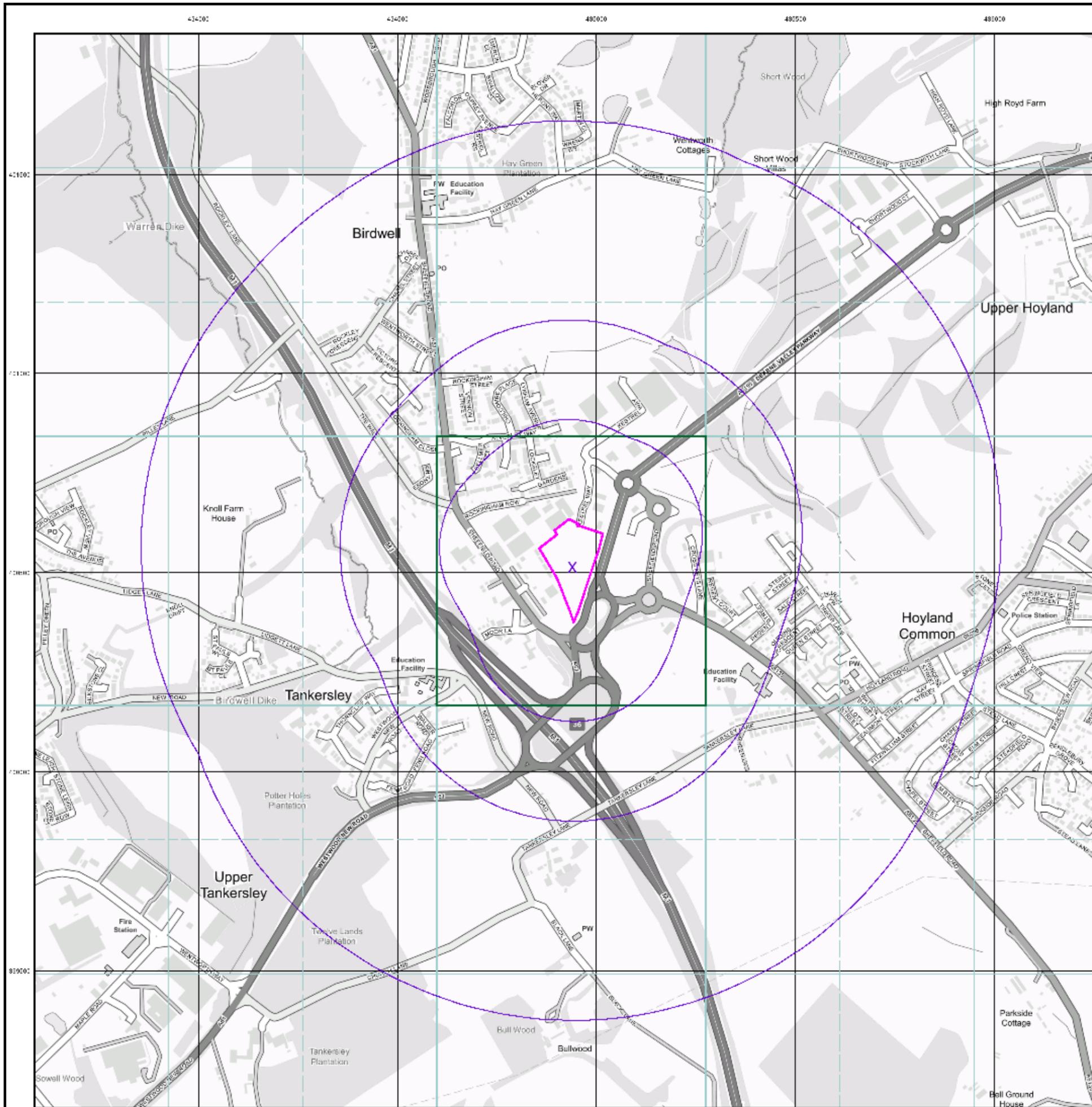
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 Customer Ref: 350525  
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 Site Area (Ha): 2.02  
 Search Buffer (m): 1000

### Site Details

Site at, Birdwell, Barnsley



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





### General

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

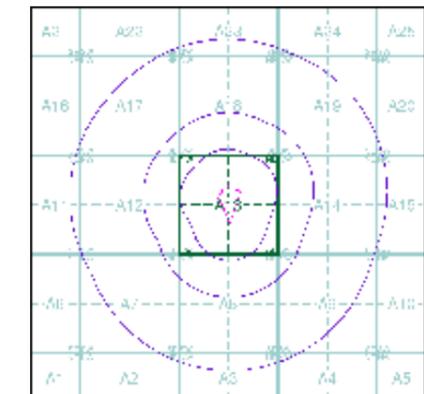
### Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of [www.envirocheck.co.uk](http://www.envirocheck.co.uk).

### Borehole Map - Slice A



### Order Details

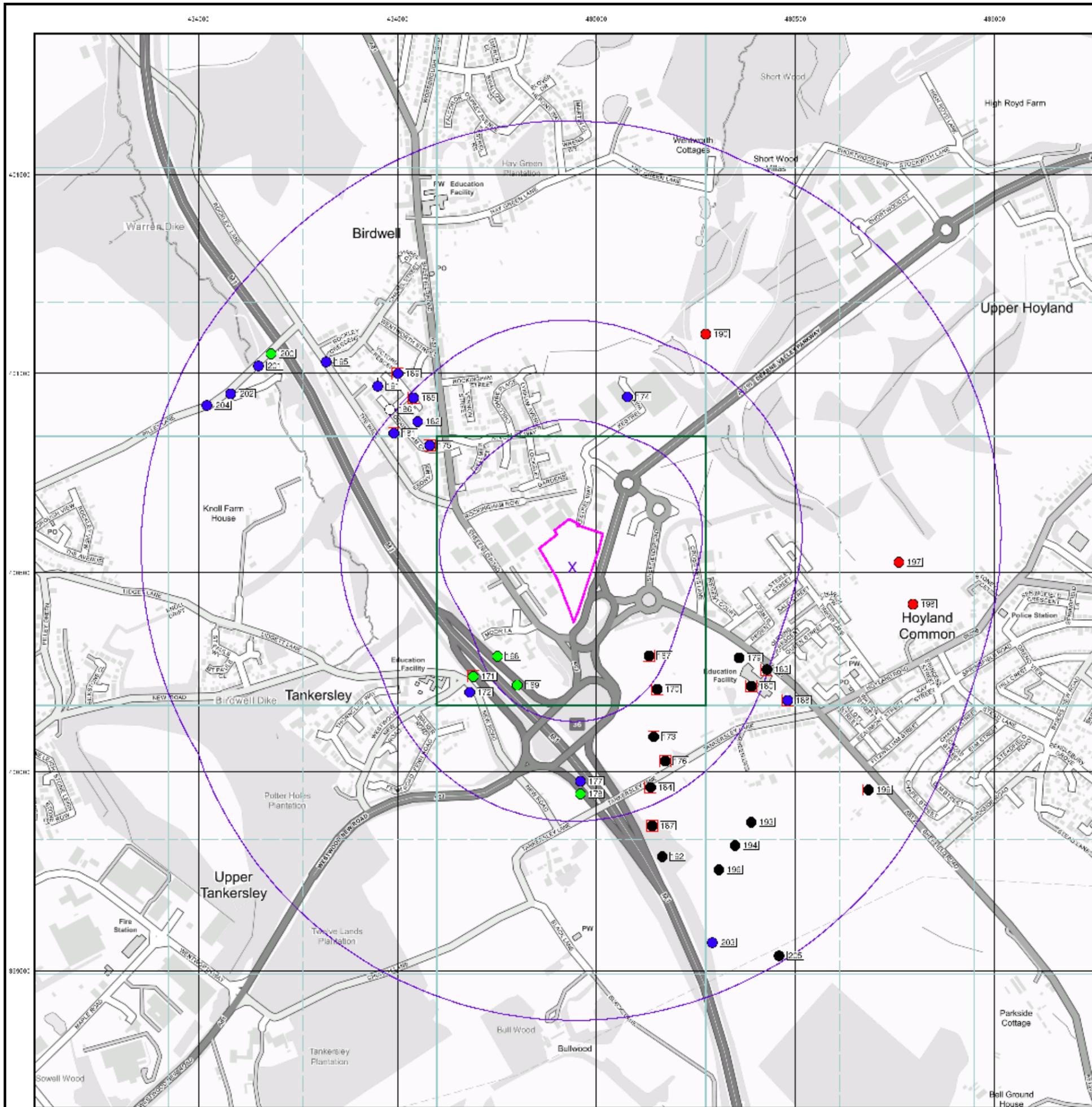
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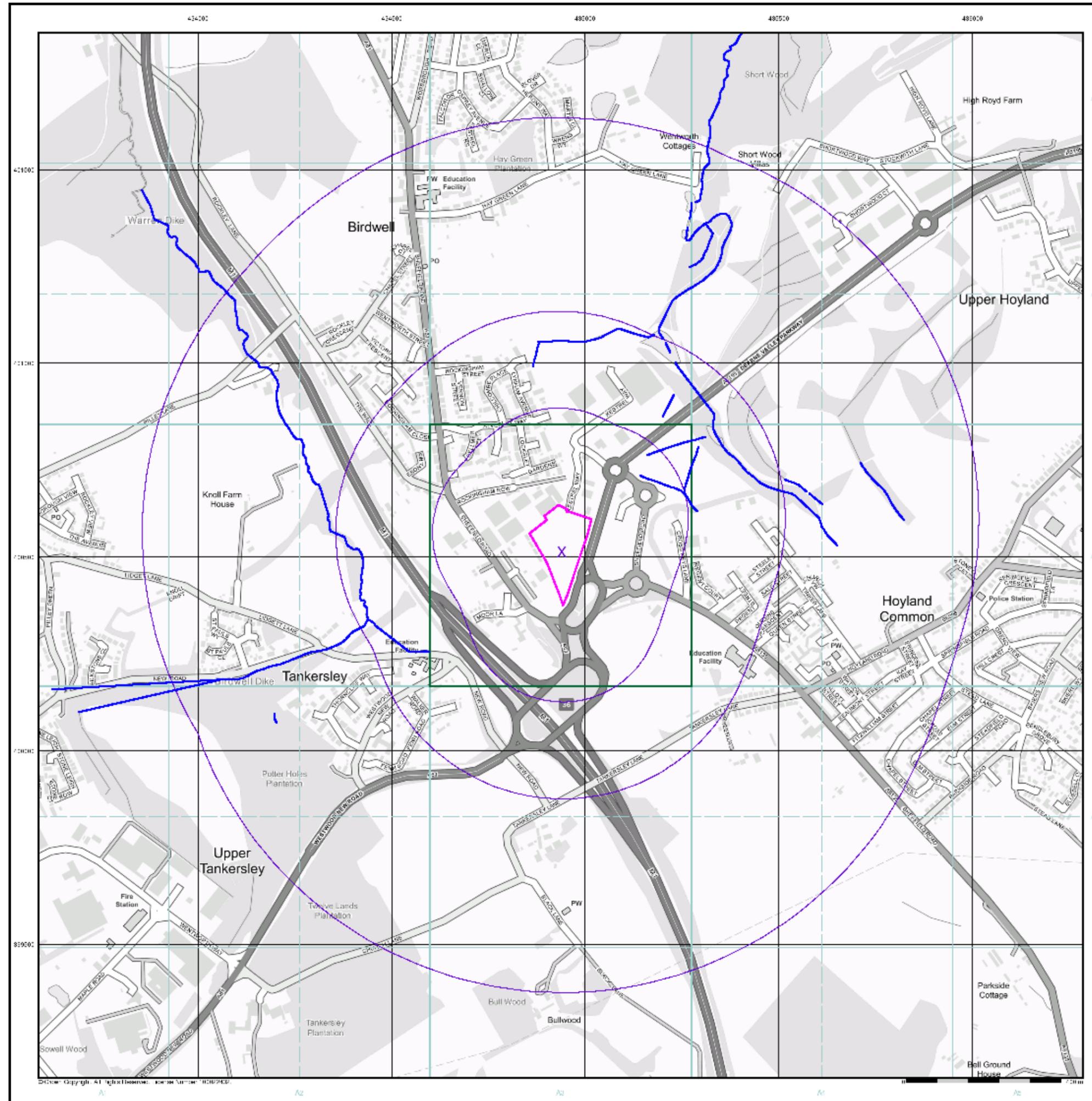
### Site Details

Site at, Birdwell, Barnsley



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: [www.envirocheck.co.uk](http://www.envirocheck.co.uk)





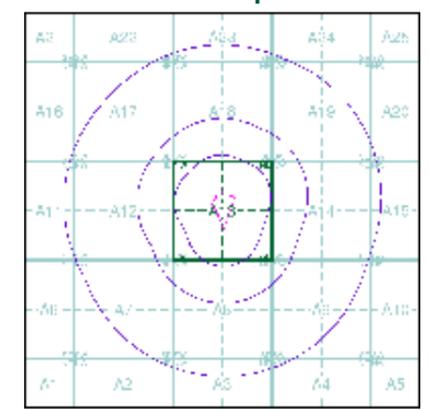
**General**

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

**OS Water Network Data**

- |              |                         |
|--------------|-------------------------|
| Canal        | Drain                   |
| Reservoir    | Other                   |
| Foreshore    | Lake                    |
| Marsh        | Transfer                |
| Tidal River  | Lock Or Flight Of Locks |
| Inland River | Sea                     |

**OS Water Network Map - Slice A**



**Order Details**

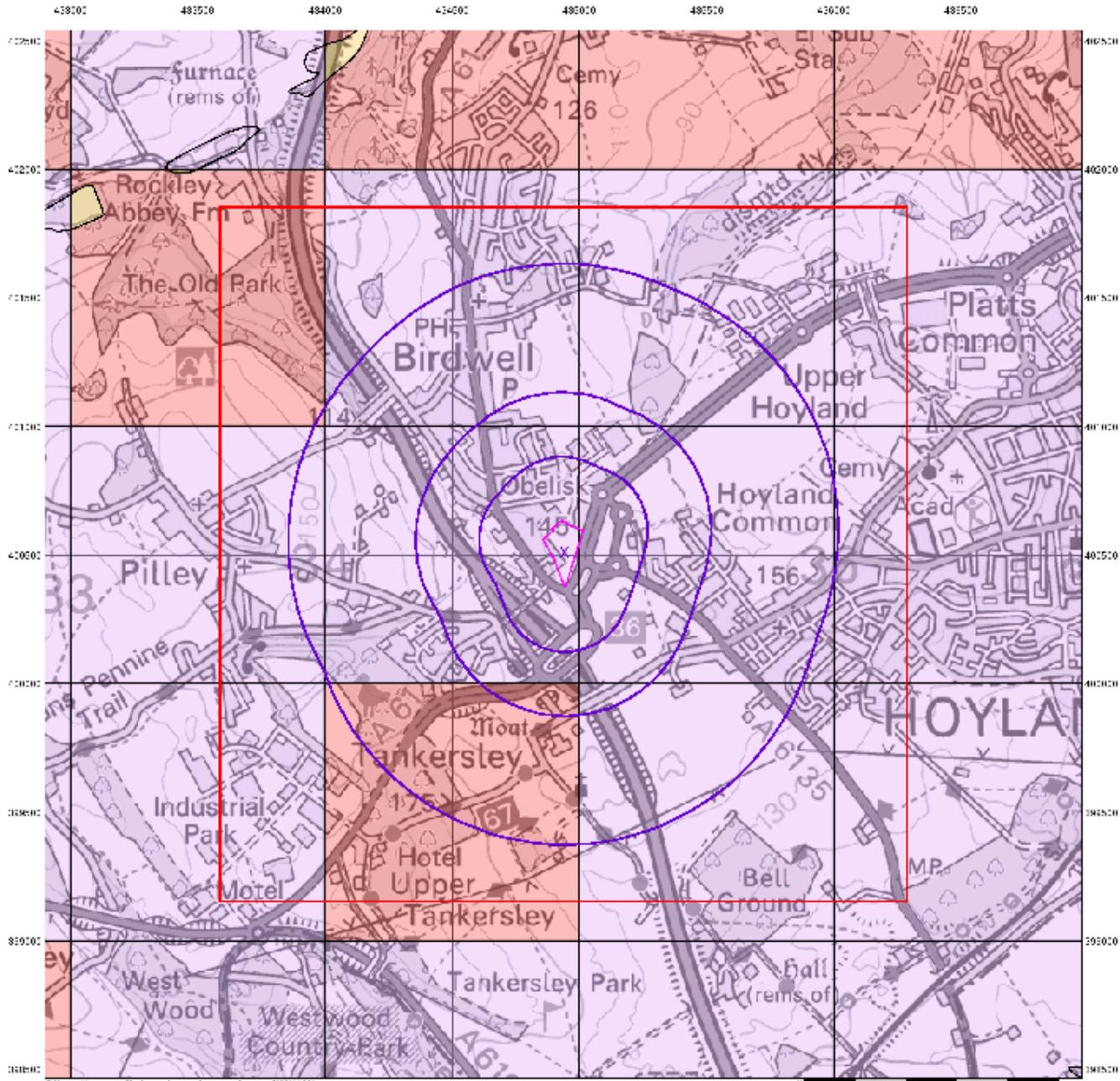
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 Customer Ref: 350525  
 National Grid Reference: 434940, 400510  
 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 1000

**Site Details**

Site at, Birdwell, Barnsley



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 Web: www.envirocheck.co.uk



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## Groundwater Vulnerability

### General

- Existing Reference Point
- Slice
- Search Buffer
- Road

### Agency and Hydrological

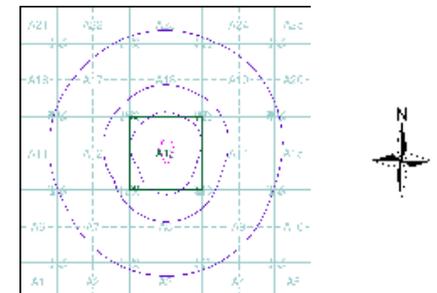
#### Bedrock Aquifers

- High vulnerability, Principal Aquifer
- High vulnerability, Secondary Aquifer
- Medium vulnerability, Principal Aquifer
- Medium vulnerability, Secondary Aquifer
- Low vulnerability, Principal Aquifer
- Low vulnerability, Secondary Aquifer
- Unproductive Aquifer
- Soluble Rock

#### Superficial Aquifers

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

### Site Sensitivity Context Map - Slice A



### Order Details

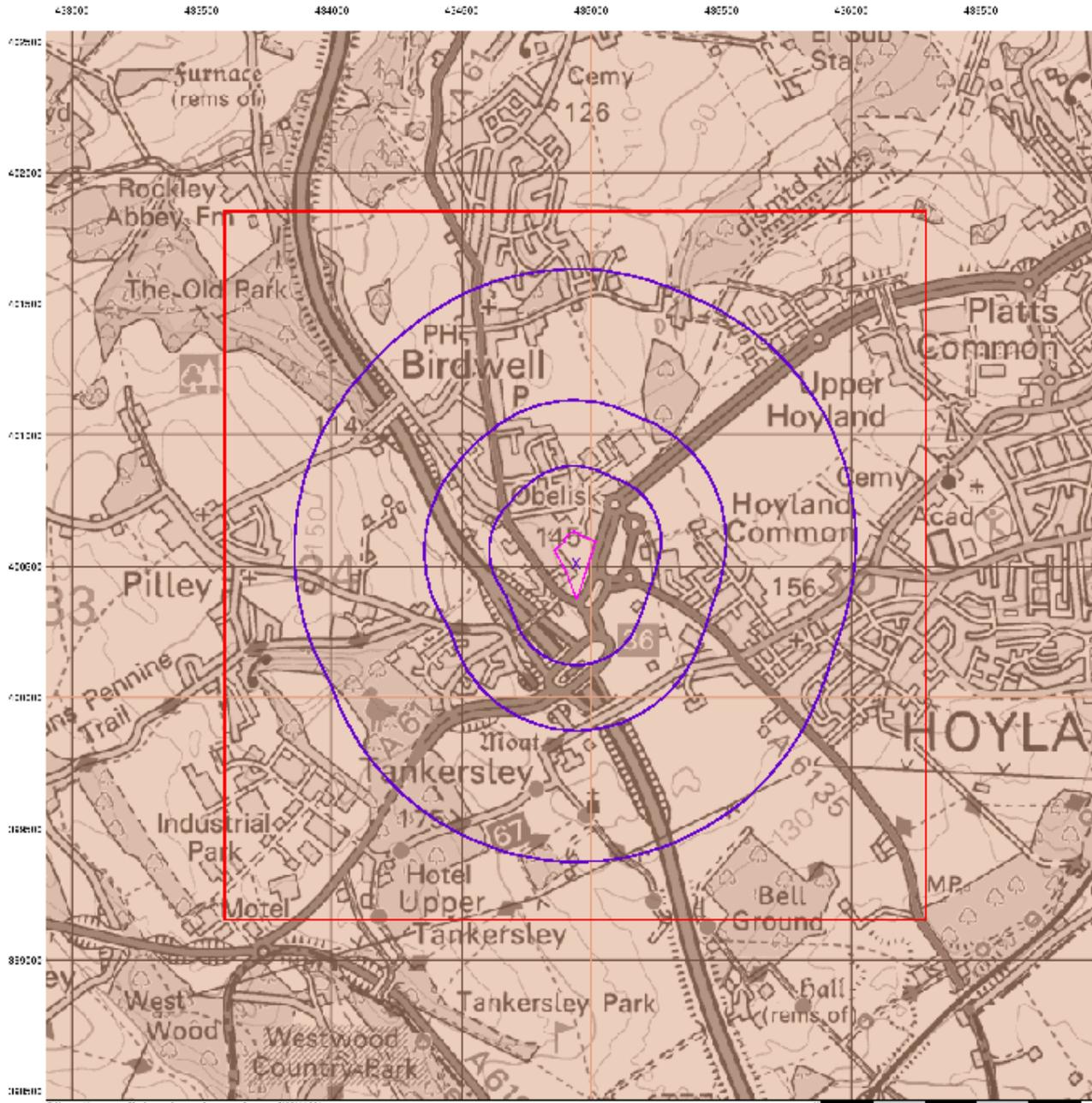
Order Number: 298598069\_1\_1  
 Customer Ref: 350525  
 National Grid Reference: 434940, 400510  
 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 1000

### Site Details

Site at, Birdwell, Barnsley



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



## Bedrock Aquifer Designation

### General

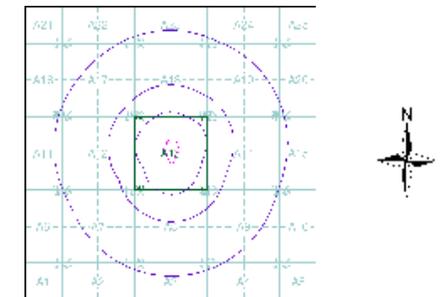
- Boundary ID
- Search Buffer ID
- Site
- Road
- Boring Reference Point

### Agency and Hydrological

#### Geological Classes

- Fracture Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Unfractured
- Unproductive Strata
- Unknown
- Unknown (rivers and land slip)

### Site Sensitivity Context Map - Slice A



### Order Details

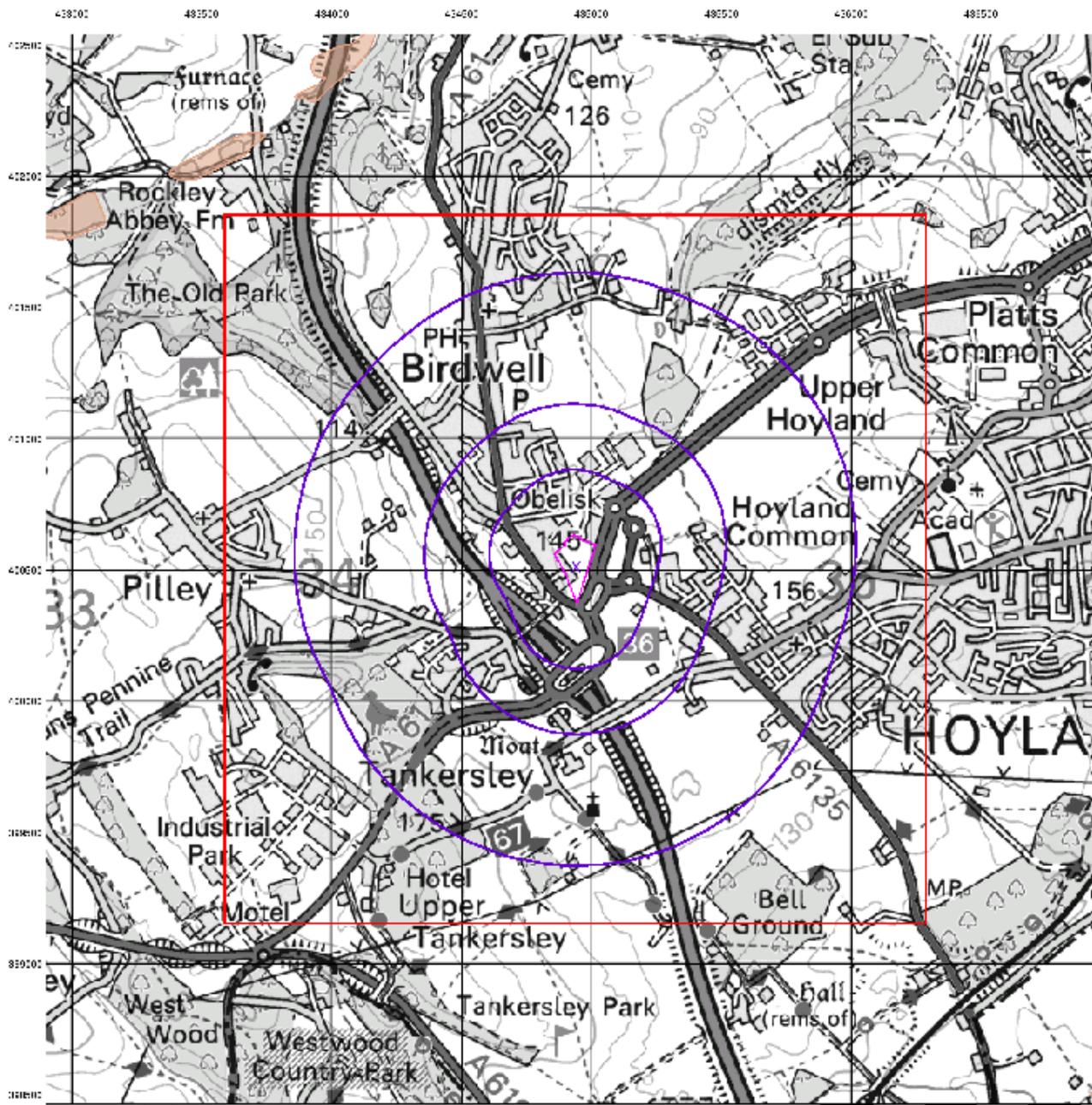
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 National Grid Reference: 434940, 400510  
 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 1000

### Site Details

Site at, Birdwell, Barnsley



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## Superficial Aquifer Designation

### General

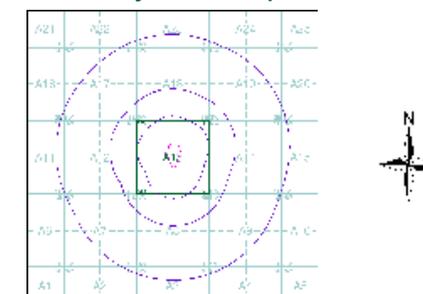
- Boundary ID
- Search Buffer ID
- Boring Reference Point
- Site
- Road

### Agency and Hydrological

#### Geological Classes

- Fractured Aquifer
- Secondary Aquifer
- Secondary Underdrained
- Unproductive Strata
- Unknown
- Unknown (lakes and ponds)

### Site Sensitivity Context Map - Slice A



### Order Details

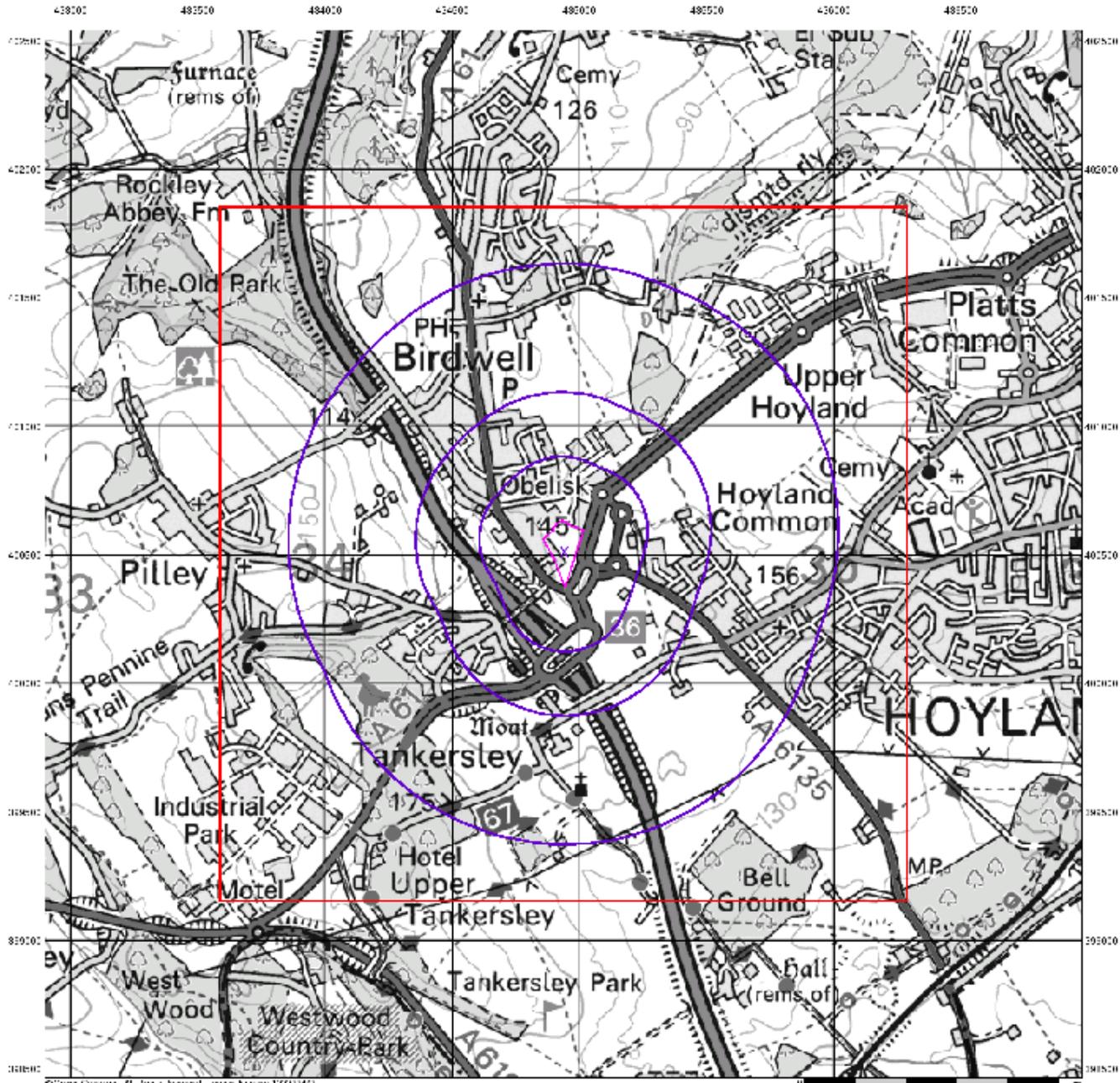
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 National Grid Reference: 434940, 400510  
 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 1000

### Site Details

Site at, Birdwell, Barnsley



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## Source Protection Zones

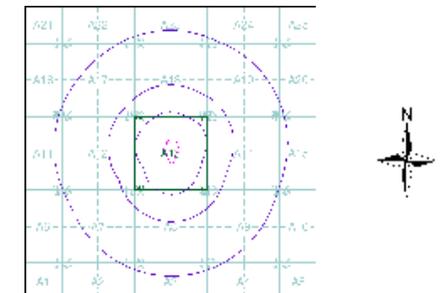
### General

- Location of site
- Search Buffer (m)
- Existing Reference Point
- Site
- Road

### Agency and Hydrological

- Flood (in 100 years)
- Interim zone (substance activity only) (200m)
- Zone 1 (200m)
- Zone 2 (substance activity only) (200m)
- Final protection zone (200m)
- Final protection zone (substance activity only) (200m)
- Special interest land (SI)

### Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 298598069\_1\_1  
 Customer Ref: 350525  
 National Grid Reference: 434940, 400510  
 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 1000

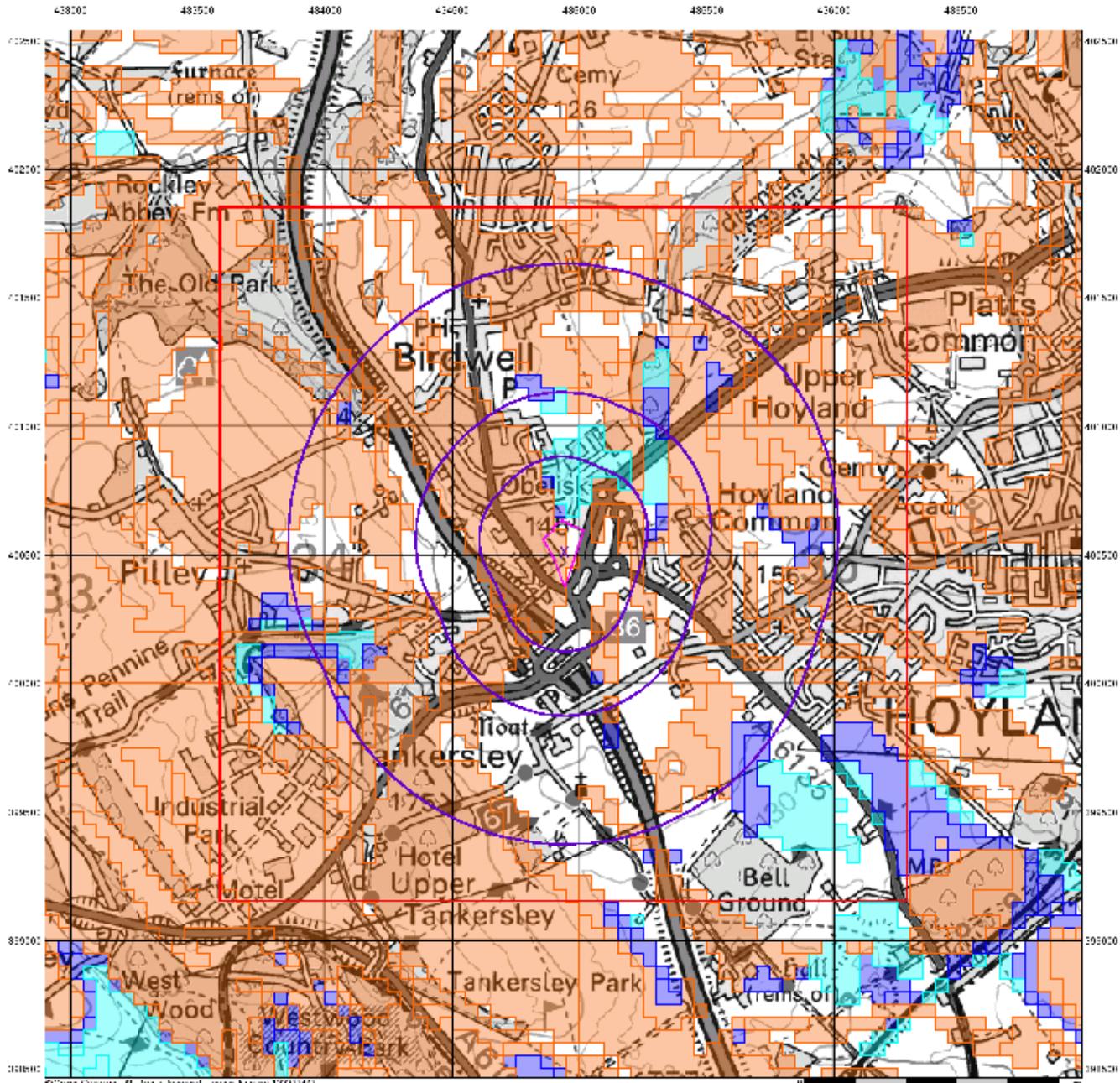
### Site Details

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**BGS Flood GFS Data**

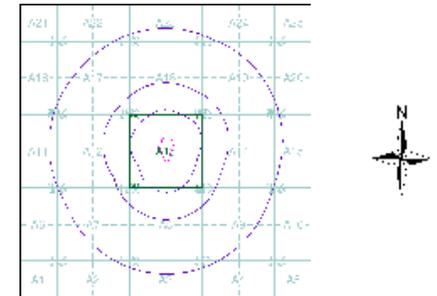
**General**

- Location of
- Search Buffer (m)
- Slice
- Erection Reference Point

**Agency and Hydrological (Flood)**

- Limited Potential for Groundwater Flooding - Core
- Potential for Groundwater Flooding of Trenches Situated Below Ground Level
- Potential for Groundwater Flooding - Core at Surface

**Site Sensitivity Context Map - Slice A**



**Order Details**

Order Number: 298598069\_1\_1  
 Customer Ref: 350525  
 National Grid Reference: 434940, 400510  
 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 1000

**Site Details**

Site at, Birdwell, Barnsley



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk

# Historical Mapping Legends

## Ordnance Survey County Series and Ordnance Survey Plan 1:2,500

**Quarry** **Gravel Pit** **Sand Pit**  
**Clay Pit** **Shingle** **Refuse Heap**  
**Sloping Masonry** **Flat Rock**  
**Marsh** **Reeds** **Osiers**  
**Rough Pasture** **Furze** **Wood**  
**Mixed Wood** **Brushwood** **Orchard**  
**Fir** **Ford** **Stepping Stones**  
**Ferry** **Waterfall** **Lock**  
**Trig. Station** **Altitude at Trig. Station**  
**B.M. 325.9** **Bench Mark** **Surface Level**  
**Arrow denotes flow of water** **Antiquities (site of)**  
**Cutting** **Embankment**  
**Railway crossing Road** **Level Crossing** **Road crossing Railway**  
**Railway crossing River or Canal** **Road over single stream** **Road over River or Canal**  
**County Boundary (Geographical)**  
**County & Civil Parish Boundary**  
**Administrative County & Civil Parish Boundary**  
**County Borough Boundary (England)**  
**Co. Boro. Bdy.**  
**County Burgh Boundary (Scotland)**  
**Co. Burgh Bdy.**  
**B.P. B.S.** **Boundary Post or Stone** **P.C.B.** **Police Call Box**  
**B.R.** **Bridle Road** **P.** **Pump**  
**E.P.** **Electricity Pylon** **S.P.** **Signal Post**  
**F.B.** **Foot Bridge** **Sl.** **Sluice**  
**F.P.** **Foot Path** **Sp.** **Spring**  
**G.P.** **Guide Post or Board** **T.C.B.** **Telephone Call Box**  
**M.S.** **Mile Stone** **Tr.** **Trough**  
**M.P. M.R.** **Mooring Post or Ring** **W.** **Well**

## Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250

**Inactive Quarry, Chalk Pit or Clay Pit** **Active Quarry, Chalk Pit or Clay Pit**  
**Rock** **Boulders**  
**Cliff** **Slopes** **Top**  
**Roofed Building** **Glazed Roof Building**  
**Sloping Masonry** **Archway**  
**Non-Coniferous Tree (surveyed)** **Coniferous Tree (surveyed)**  
**Non-Coniferous Trees (not surveyed)** **Coniferous Trees (not surveyed)**  
**Orchard Tree** **Scrub** **Bracken**  
**Coppice, Osier** **Reeds** **Marsh, Saltings**  
**Rough Grassland** **Heath** **Culvert**  
**Direction of water flow** **Bench Mark** **Antiquity (site of)**  
**Cave Entrance** **Triangulation Station** **Electricity Pylon**  
**Electricity Transmission Line**  
**County Boundary (Geographical)**  
**County & Civil Parish Boundary**  
**Civil Parish Boundary**  
**Admin. County or County Bor. Boundary**  
**London Borough Boundary**  
**Symbol marking point where boundary merging changes**  
**BH** **Beer House** **P** **Pillar, Pole or Post**  
**BP, BS** **Boundary Post or Stone** **PO** **Post Office**  
**Cn, C** **Capstan, Crane** **PC** **Public Convenience**  
**Chy** **Chimney** **PH** **Public House**  
**D Fn** **Drinking Fountain** **Pp** **Pump**  
**EI P** **Electricity Pillar or Post** **SB, S Br** **Signal Box or Bridge**  
**FAP** **Fire Alarm Pillar** **SP, SL** **Signal Post or Light**  
**FB** **Foot Bridge** **Spr** **Spring**  
**GP** **Guide Post** **TK** **Tank or Track**  
**H** **Hydrant or Hydraulic** **TCB** **Telephone Call Box**  
**LC** **Level Crossing** **TCP** **Telephone Call Post**  
**MH** **Manhole** **Tr** **Trough**  
**MP** **Mile Post or Mooring Post** **W.Pt, W.T** **Water Point, Water Tap**  
**MS** **Mile Stone** **W** **Well**  
**NTL** **Normal Tidal Limit** **Wd Pp** **Wind Pump**

## Large-Scale National Grid Data 1:2,500 and 1:1,250

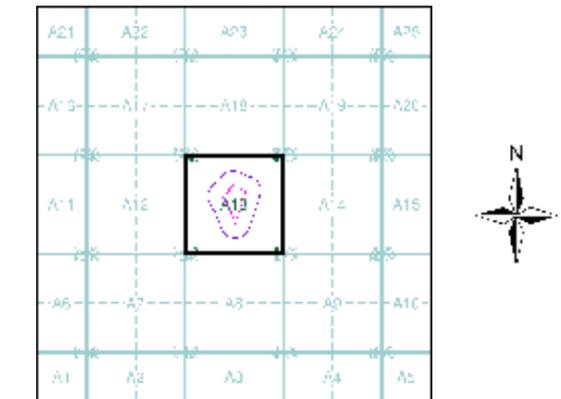
**Cliff** **Slopes** **Top**  
**Rock** **Rock (scattered)**  
**Boulders** **Boulders (scattered)**  
**Positioned Boulder** **Scree**  
**Non-Coniferous Tree (surveyed)** **Coniferous Tree (surveyed)**  
**Non-Coniferous Trees (not surveyed)** **Coniferous Trees (not surveyed)**  
**Orchard Tree** **Scrub** **Bracken**  
**Coppice, Osier** **Reeds** **Marsh, Saltings**  
**Rough Grassland** **Heath** **Culvert**  
**Direction of water flow** **Triangulation Station** **Antiquity (site of)**  
**Electricity Transmission Line** **Electricity Pylon**  
**BH** **Bench Mark** **Buildings with Building Seed**  
**Roofed Building** **Glazed Roof Building**  
**Civil parish/community boundary**  
**District boundary**  
**County boundary**  
**Boundary post/stone**  
**Boundary merging symbol (note: these always appear in opposed pairs or groups of three)**  
**Bks** **Barracks** **P** **Pillar, Pole or Post**  
**Bty** **Battery** **PO** **Post Office**  
**Cemty** **Cemetery** **PC** **Public Convenience**  
**Chy** **Chimney** **Pp** **Pump**  
**Cis** **Cistern** **Ppg Sta** **Pumping Station**  
**Diamtd Rly** **Dismantled Railway** **PW** **Place of Worship**  
**El Gen Sta** **Electricity Generating Station** **Sewage Ppg Sta** **Sewage Pumping Station**  
**EI P** **Electricity Pole, Pillar** **SB, S Br** **Signal Box or Bridge**  
**EI Sub Sta** **Electricity Sub Station** **SP, SL** **Signal Post or Light**  
**FB** **Filter Bed** **Spr** **Spring**  
**Fn / D Fn** **Fountain / Drinking Ftn.** **TK** **Tank or Track**  
**Gas Gov** **Gas Valve Compound** **Tr** **Trough**  
**GVC** **Gas Governor** **Wd Pp** **Wind Pump**  
**GP** **Guide Post** **W.Pt, W.T** **Water Point, Water Tap**  
**MH** **Manhole** **Wks** **Works (building or area)**  
**MP, MS** **Mile Post or Mile Stone** **W** **Well**

# RSK

## Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Yorkshire	1:2,500	1893	2
Yorkshire	1:2,500	1905	3
Yorkshire	1:2,500	1931	4
Ordnance Survey Plan	1:1,250	1956	5
Ordnance Survey Plan	1:2,500	1956 - 1957	6
Ordnance Survey Plan	1:1,250	1973 - 1974	7
Ordnance Survey Plan	1:2,500	1974	8
Additional SIMs	1:1,250	1986	9
Additional SIMs	1:2,500	1991	10
Large-Scale National Grid Data	1:2,500	1993	11
Large-Scale National Grid Data	1:1,250	1993	12
Large-Scale National Grid Data	1:2,500	1993	13

## Historical Map - Segment A13



## Order Details

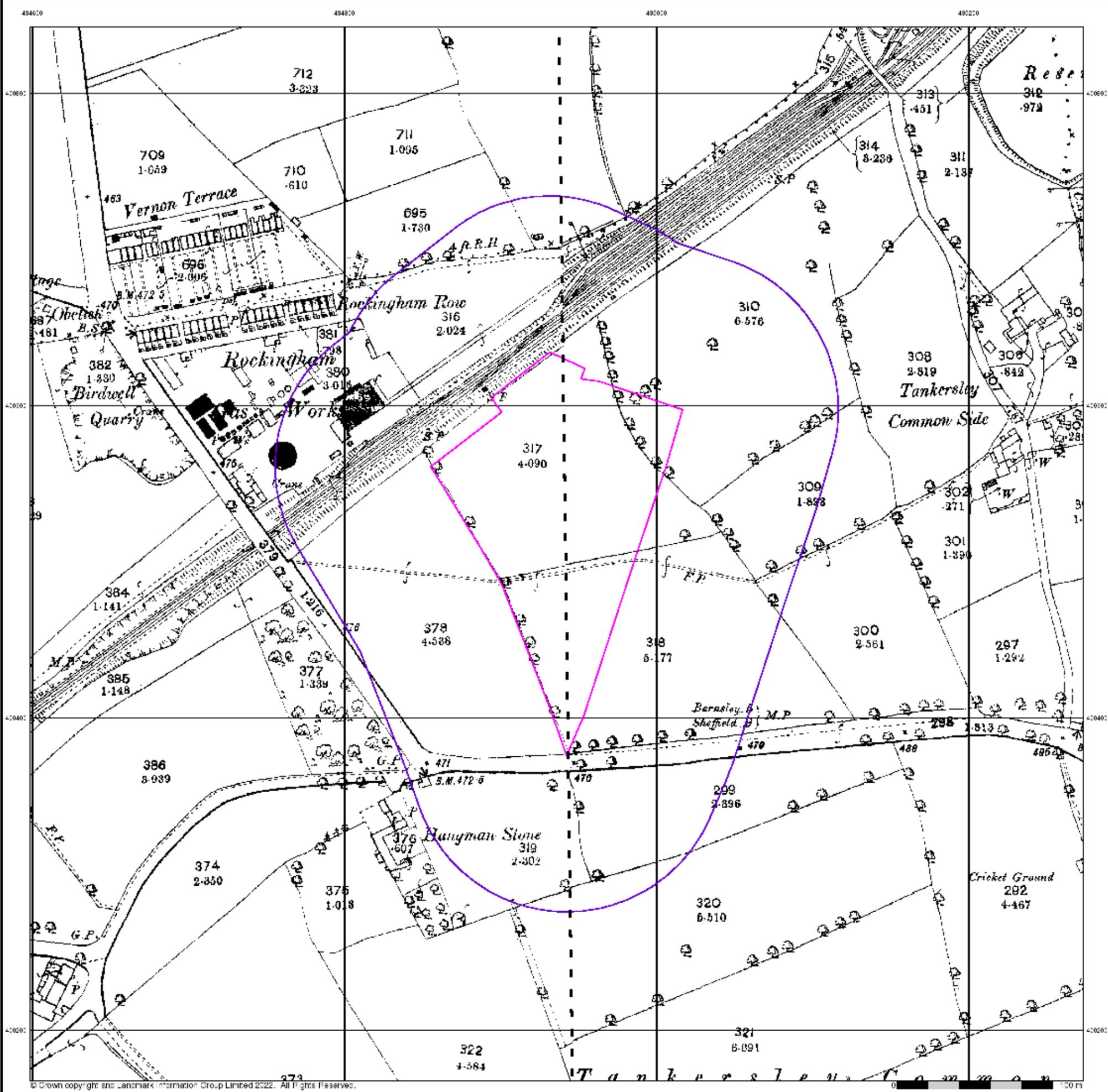
Order Number: 298598069\_1\_1  
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 National Grid Reference: 434940, 400510  
 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 100

## Site Details

Site at, Birdwell, Barnsley

**Landmark**  
 INFORMATION GROUP

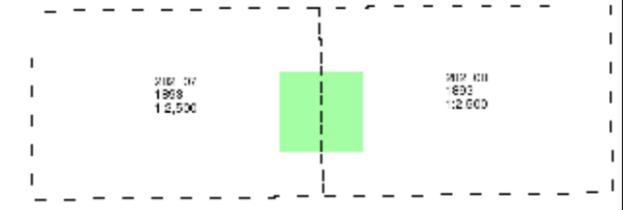
Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



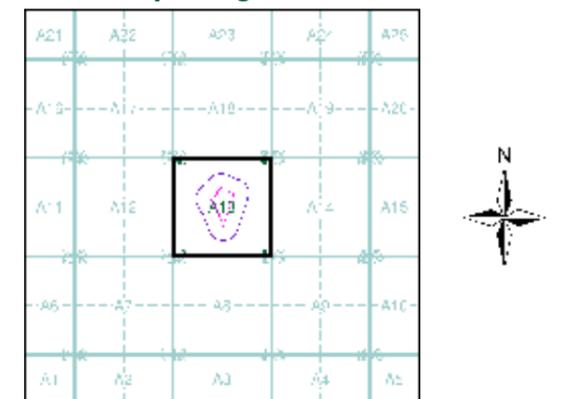
**Yorkshire**  
**Published 1893**  
**Source map scale - 1:2,500**

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

**Map Name(s) and Date(s)**



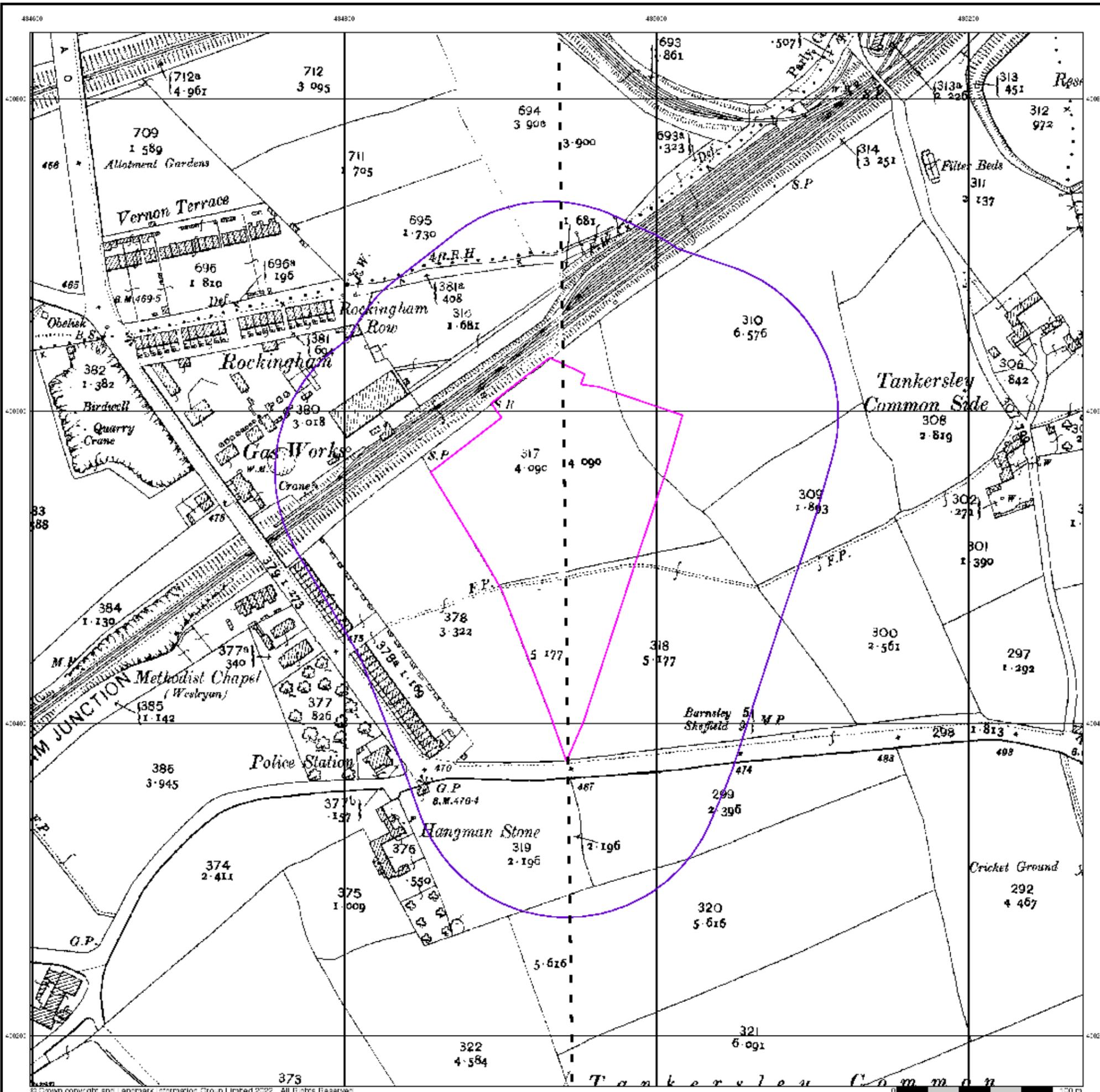
**Historical Map - Segment A13**



**Order Details**  
 Order Number: 298598069\_1\_1  
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 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 100

**Site Details**  
 Site at, Birdwell, Barnsley

**Landmark**  
 INFORMATION GROUP  
 Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



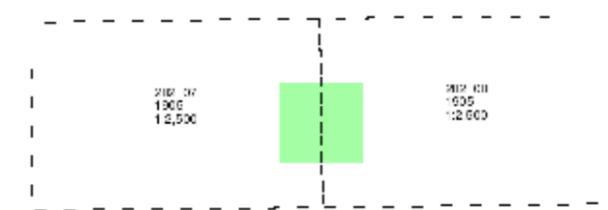
**Yorkshire**

**Published 1905**

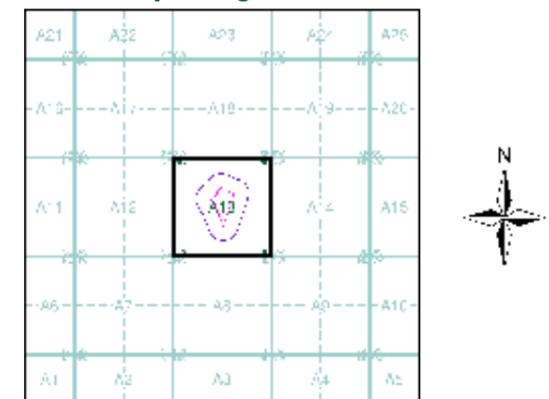
**Source map scale - 1:2,500**

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

**Map Name(s) and Date(s)**



**Historical Map - Segment A13**



**Order Details**

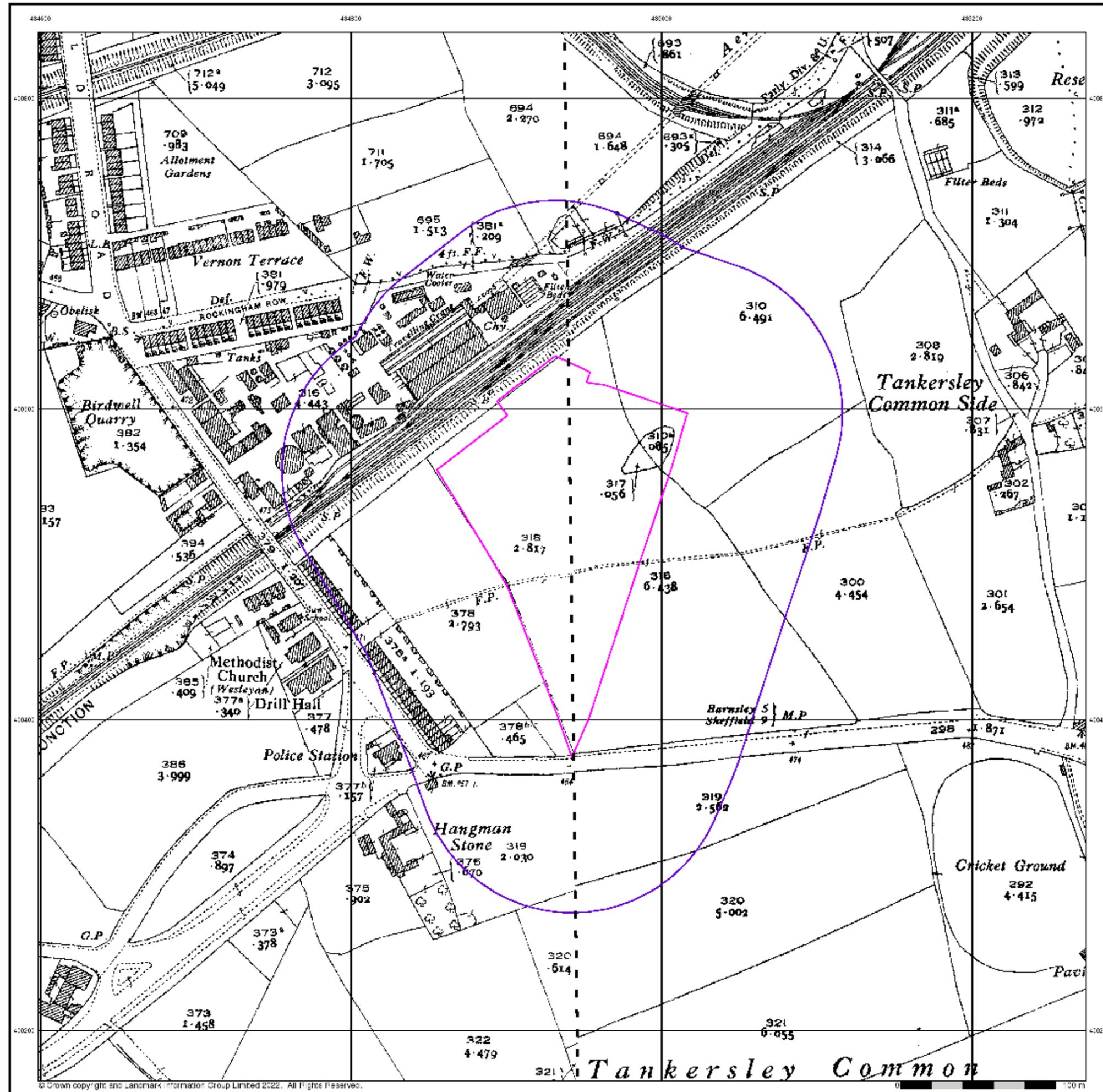
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 National Grid Reference: 434940, 400510  
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 Site Area (Ha): 2.02  
 Search Buffer (m): 100

**Site Details**

Site at, Birdwell, Barnsley



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 Web: www.envirocheck.co.uk



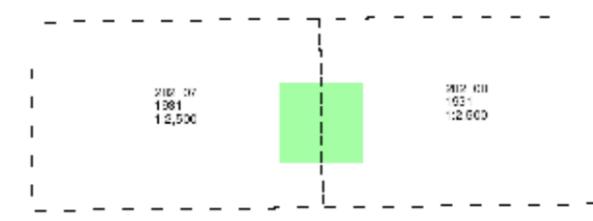
Yorkshire

Published 1931

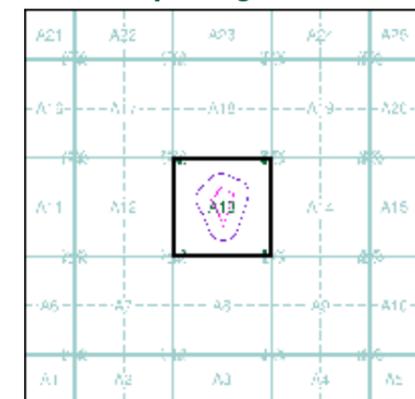
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

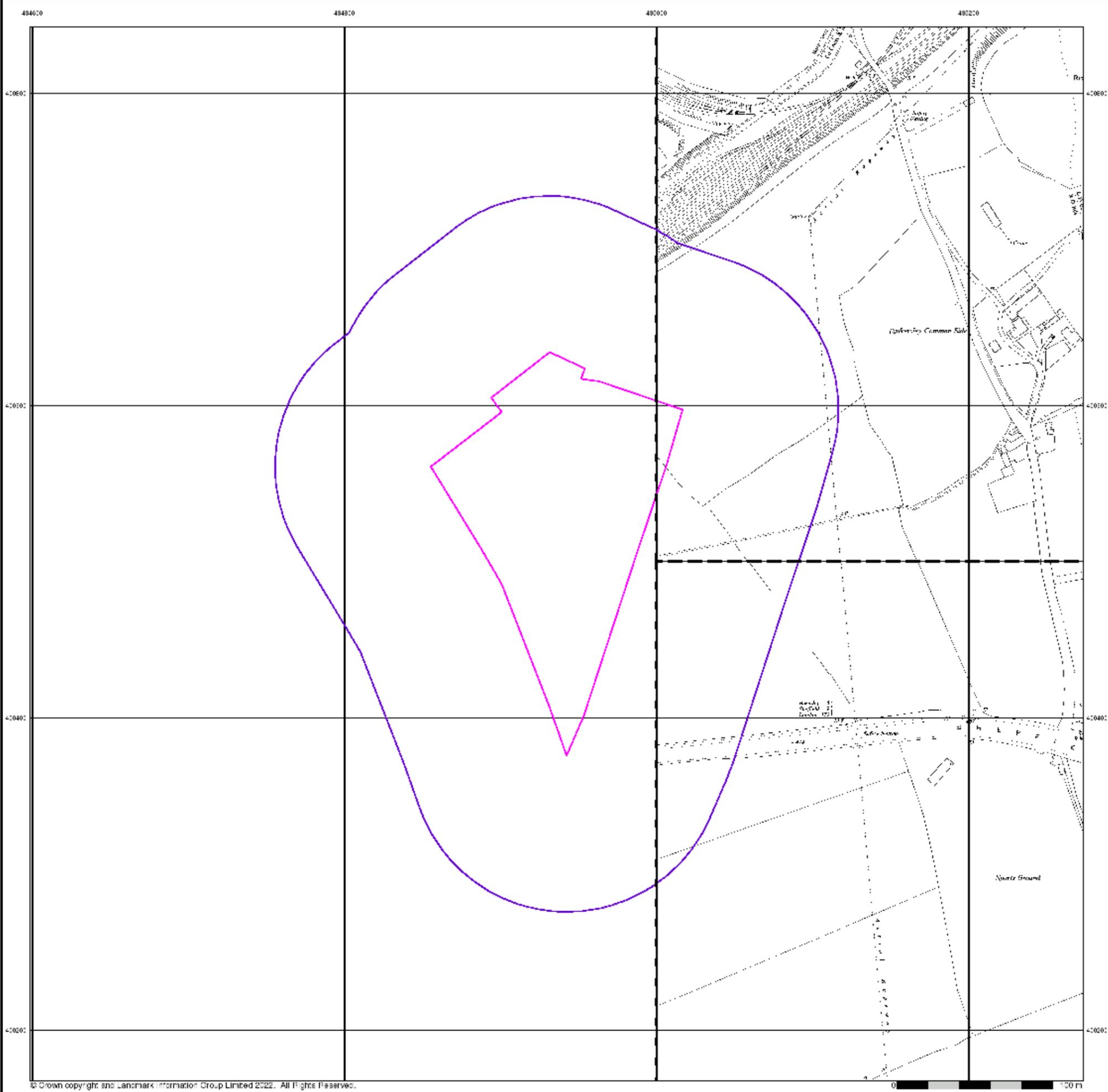
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 Search Buffer (m): 100

Site Details

Site at, Birdwell, Barnsley



Tel: 0844 844 9952  
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 Web: www.envirocheck.co.uk



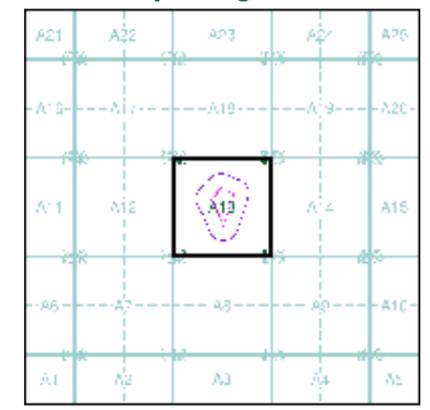
**Ordnance Survey Plan**  
**Published 1956**  
**Source map scale - 1:1,250**

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

**Map Name(s) and Date(s)**

SL3500NW	1856	1:1,250
SL3500SW	1955	1:1,250

**Historical Map - Segment A13**



**Order Details**

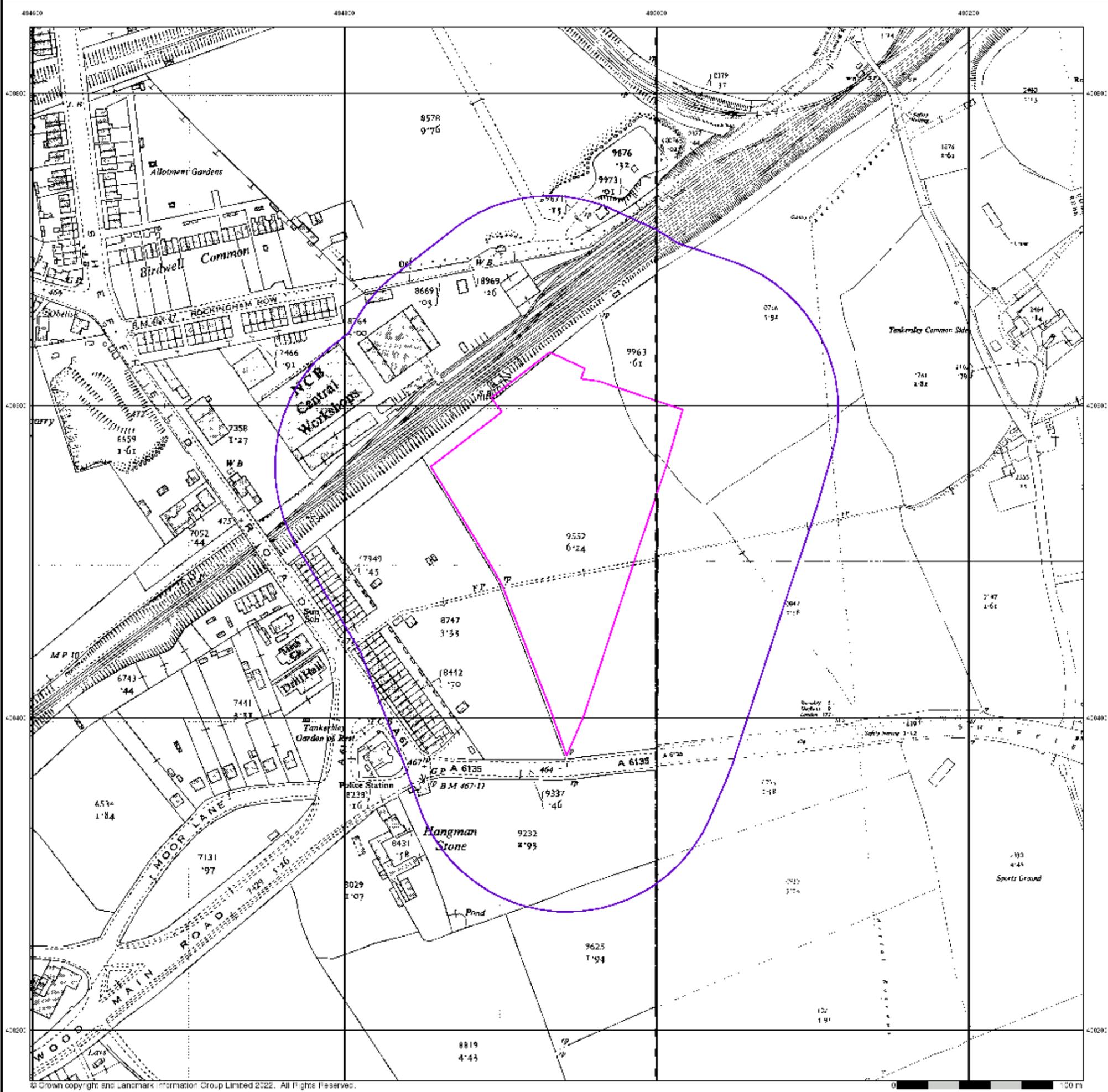
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 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 100

**Site Details**

Site at, Birdwell, Barnsley



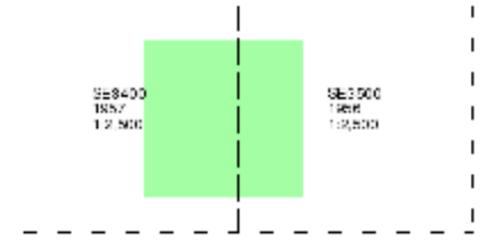
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 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



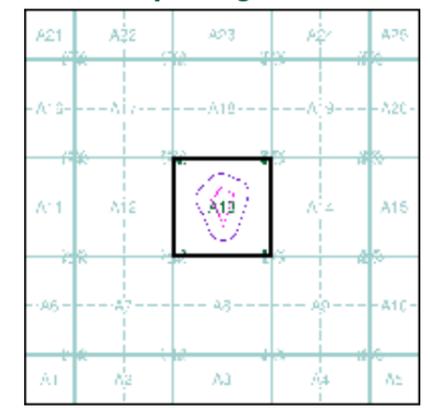
**Ordnance Survey Plan**  
**Published 1956 - 1957**  
**Source map scale - 1:2,500**

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

**Map Name(s) and Date(s)**



**Historical Map - Segment A13**



**Order Details**

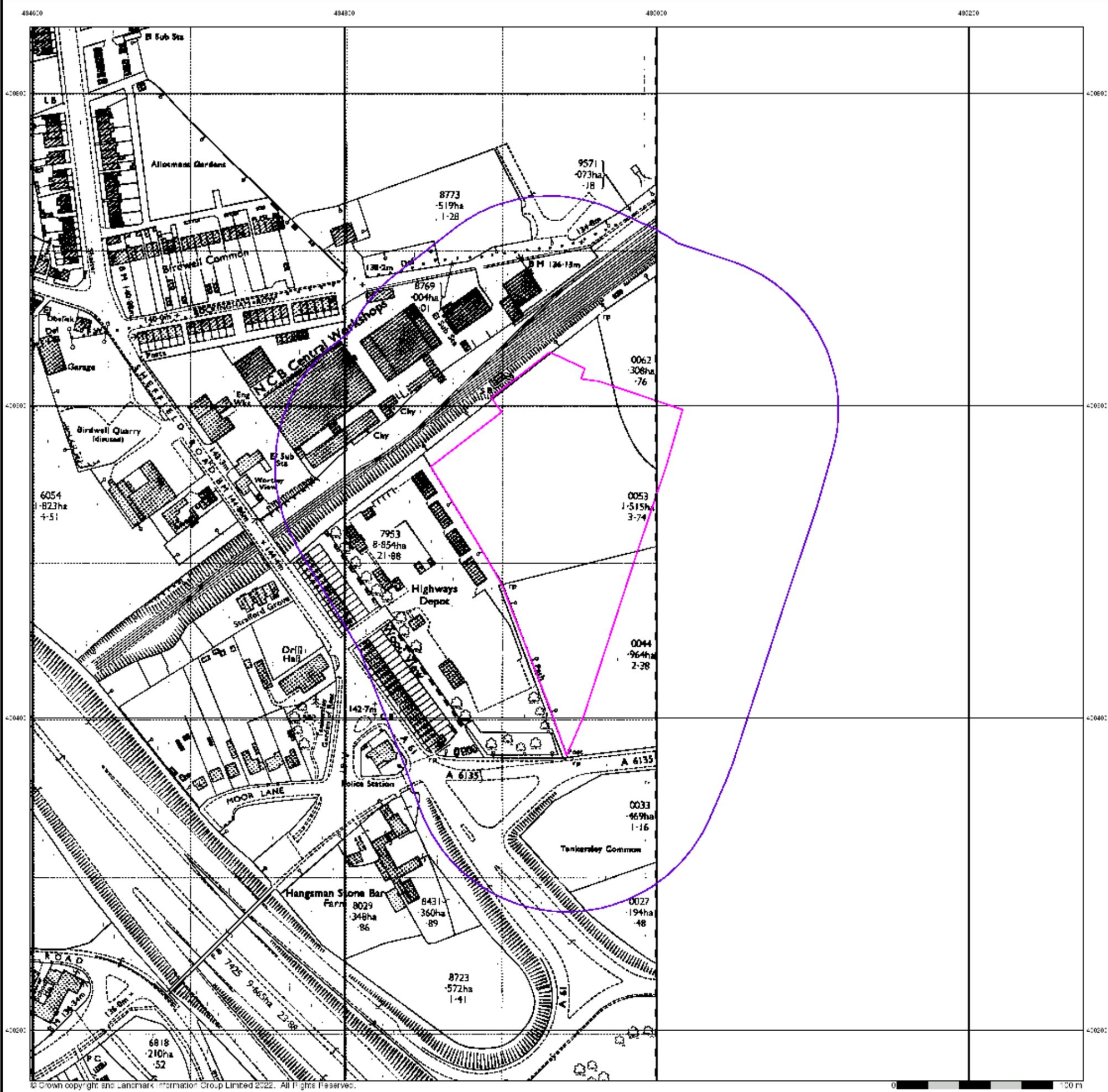
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**Site Details**

Site at, Birdwell, Barnsley



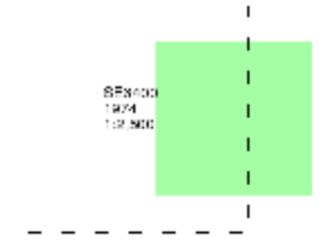
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 Web: www.envirocheck.co.uk



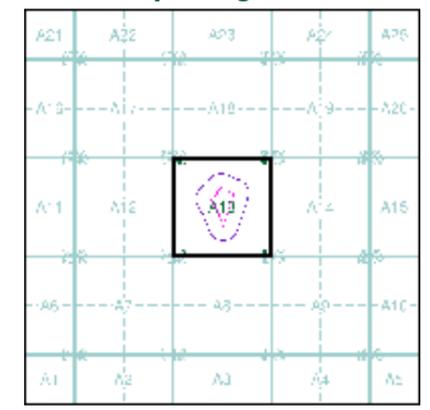
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**Published 1974**  
**Source map scale - 1:2,500**

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**Map Name(s) and Date(s)**

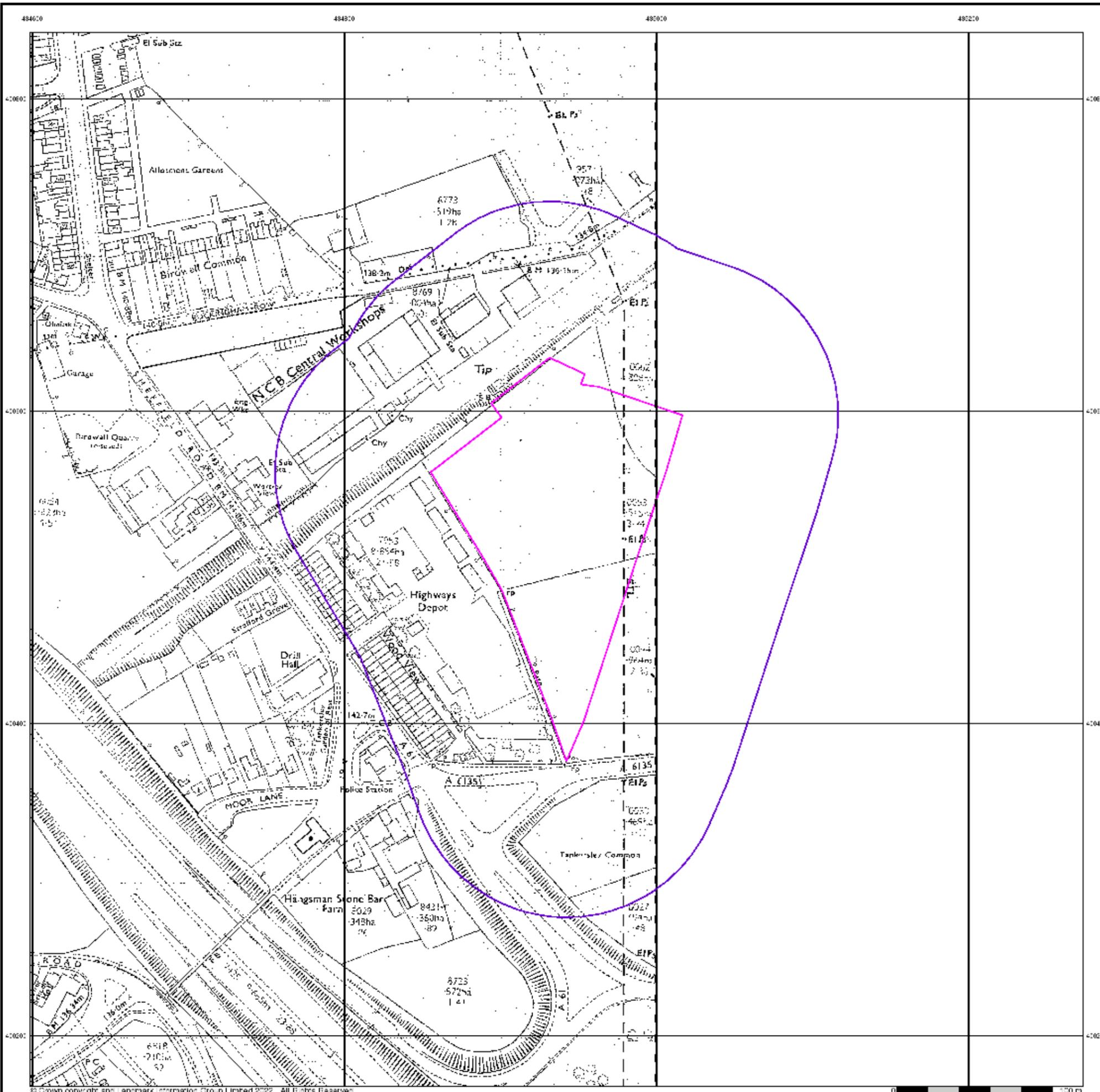


**Historical Map - Segment A13**



**Order Details**  
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 Site Area (Ha): 2.02  
 Search Buffer (m): 100

**Site Details**  
 Site at, Birdwell, Barnsley



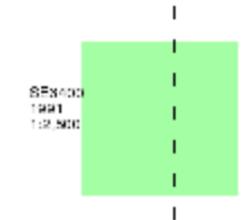
**Additional SIMs**

**Published 1991**

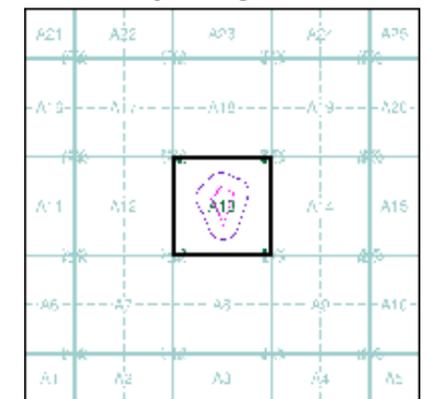
**Source map scale - 1:2,500**

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

**Map Name(s) and Date(s)**



**Historical Map - Segment A13**



**Order Details**

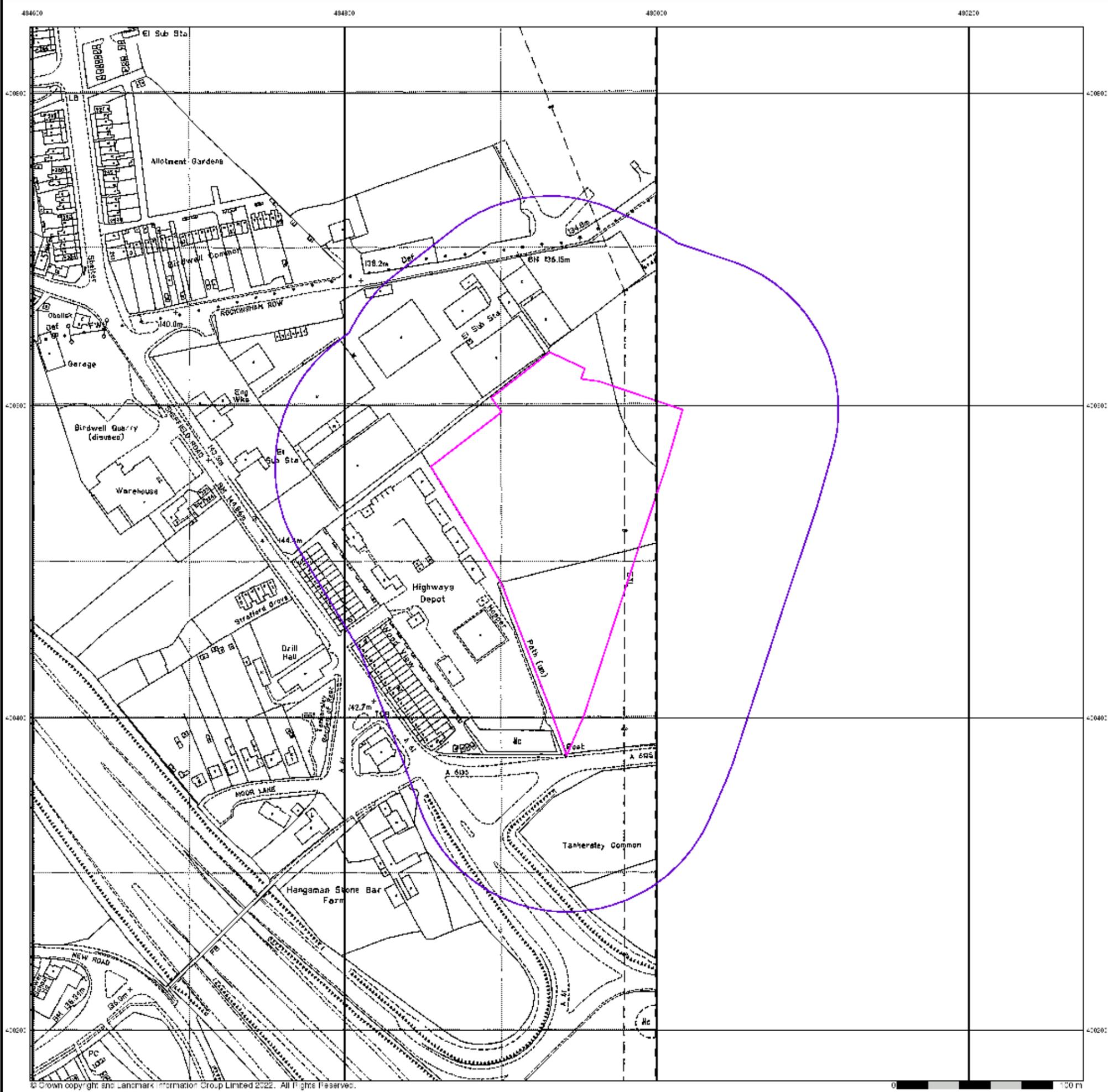
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 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 100

**Site Details**

Site at, Birdwell, Barnsley



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 Web: www.envirocheck.co.uk



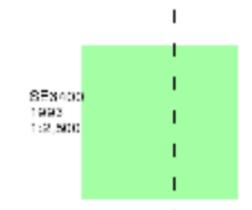
**Large-Scale National Grid Data**

**Published 1993**

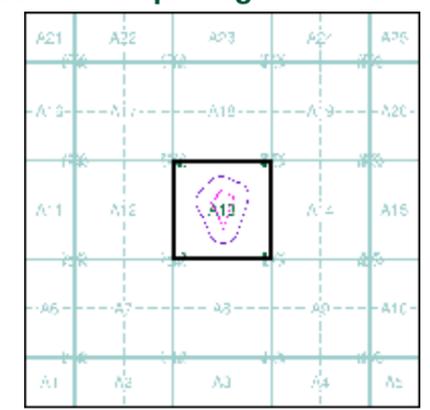
**Source map scale - 1:2,500**

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

**Map Name(s) and Date(s)**



**Historical Map - Segment A13**



**Order Details**

Order Number: 298598069\_1\_1  
 Customer Ref: 350525  
 National Grid Reference: 434940, 400510  
 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 100

**Site Details**

Site at, Birdwell, Barnsley



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



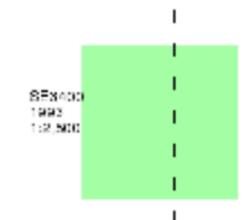
**Large-Scale National Grid Data**

**Published 1993**

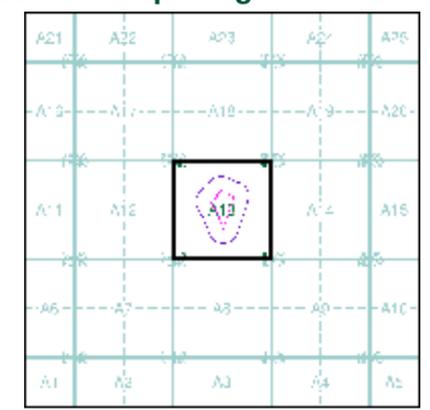
**Source map scale - 1:2,500**

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

**Map Name(s) and Date(s)**



**Historical Map - Segment A13**



**Order Details**

Order Number: 298598069\_1\_1  
 Customer Ref: 350525  
 National Grid Reference: 434940, 400510  
 Slice: A  
 Site Area (Ha): 2.02  
 Search Buffer (m): 100

**Site Details**

Site at, Birdwell, Barnsley



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk

# Historical Mapping Legends

## Ordnance Survey County Series 1:10,560

	Gravel Pit		Sand Pit		Other Pits
	Quarry		Shingle		Orchard
	Osiers		Reeds		Marsh
	Mixed Wood		Deciduous		Brushwood
	Fir		Furze		Rough Pasture
	Arrow denotes flow of water		Trigonometrical Station		
	Site of Antiquities		Bench Mark		
	Pump, Guide Post, Signal Post		Well, Spring, Boundary Post		
	•285 Surface Level				
	Sketched Contour		Instrumental Contour		
	Main Roads		Minor Roads		
	Sunken Road		Raised Road		
	Road over Railway		Railway over River		
	Railway over Road		Level Crossing		
	Road over River or Canal		Road over Stream		
	Road over Stream				
	County Boundary (Geographical)				
	County & Civil Parish Boundary				
	Administrative County & Civil Parish Boundary				
	County Borough Boundary (England)				
	County Burgh Boundary (Scotland)				
	Rural District Boundary				
	Civil Parish Boundary				

## Ordnance Survey Plan 1:10,000

	Chalk Pit, Clay Pit or Quarry		Gravel Pit
	Sand Pit		Disused Pit or Quarry
	Refuse or Slag Heap		Lake, Loch or Pond
	Dunes		Boulders
	Coniferous Trees		Non-Coniferous Trees
	Orchard		Scrub
	Coppice		
	Bracken		Heath
	Rough Grassland		
	Marsh		Reeds
	Saltings		
	Building		Glasshouse
	Sloping Masonry		Pylon
	Electricity Transmission Line		Pole
	Cutting		Embankment
	Standard Gauge Multiple Track		Standard Gauge Single Track
	Siding, Tramway or Mineral Line		Narrow Gauge
	Geographical County		
	Administrative County, County Borough or County of City		
	Municipal Borough, Urban or Rural District, Burgh or District Council		
	Borough, Burgh or County Constituency <small>Shown only when not coincident with other boundaries</small>		
	Civil Parish <small>Shown alternately when coincidence of boundaries occurs</small>		
	BP, BS Boundary Post or Stone		Pol Sta Police Station
	Ch Church		PO Post Office
	CH Club House		PC Public Convenience
	F E Sta Fire Engine Station		PH Public House
	FB Foot Bridge		SB Signal Box
	Fn Fountain		Spr Spring
	GP Guide Post		TCB Telephone Call Box
	MP Mile Post		TCP Telephone Call Post
	MS Mile Stone		W Well

## 1:10,000 Raster Mapping

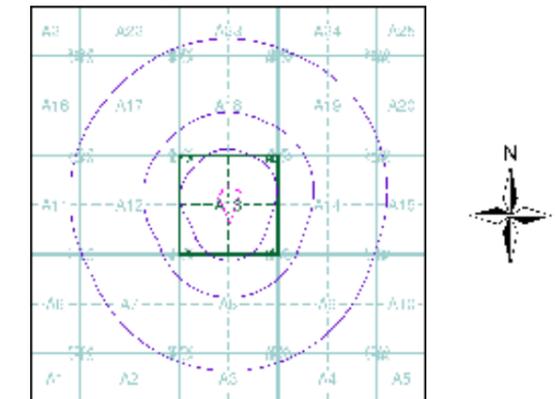
	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
	Area of wooded vegetation		Non-coniferous trees
	Non-coniferous trees (scattered)		Coniferous trees
	Coniferous trees (scattered)		Positioned tree
	Orchard		Coppice or Osiers
	Rough Grassland		Heath
	Scrub		Marsh, Salt Marsh or Reeds
	Water feature		Flow arrows
	MHW/S Mean high water (springs)		MLW/S Mean low water (springs)
	Telephone line (where shown)		Electricity transmission line (with poles)
	Bench mark (where shown)		Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)		Pylon, flare stack or lighting tower
	Site of (antiquity)		Glasshouse
	General Building		Important Building



## Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Yorkshire	1:10,560	1855	2
Yorkshire	1:10,560	1893 - 1894	3
Yorkshire	1:10,560	1906 - 1907	4
Yorkshire	1:10,560	1932	5
Yorkshire	1:10,560	1938	6
Yorkshire	1:10,560	1948	7
Ordnance Survey Plan	1:10,000	1956	8
Ordnance Survey Plan	1:10,000	1965 - 1966	9
Ordnance Survey Plan	1:10,000	1978	10
Ordnance Survey Plan	1:10,000	1980 - 1982	11
Ordnance Survey Plan	1:10,000	1989	12
Ordnance Survey Plan	1:10,000	1991 - 1992	13
10K Raster Mapping	1:10,000	2000	14
Street View	Variable		15

## Historical Map - Slice A



## Order Details

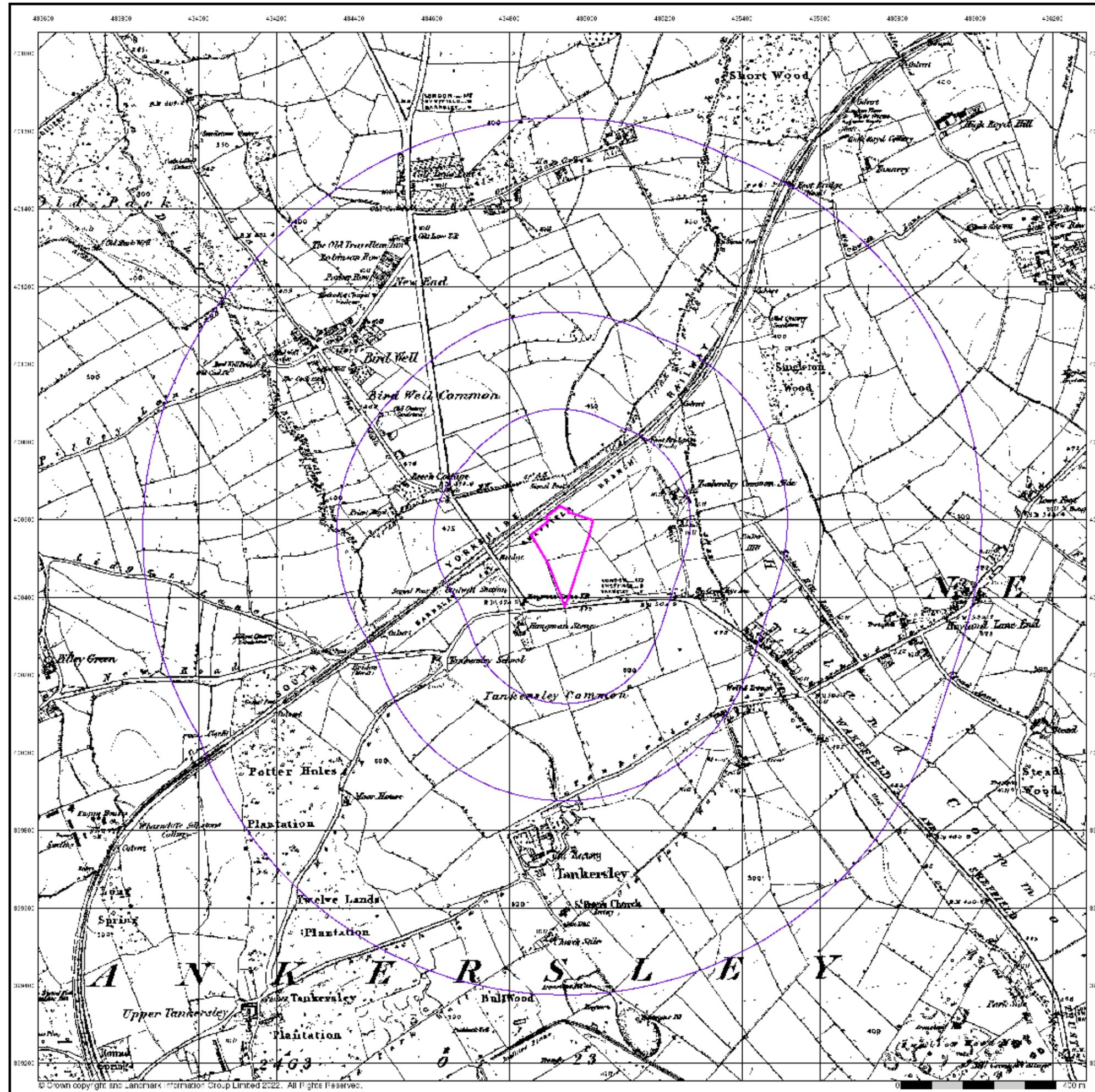
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 Site Area (Ha): 2.02  
 Search Buffer (m): 1000

## Site Details

Site at, Birdwell, Barnsley



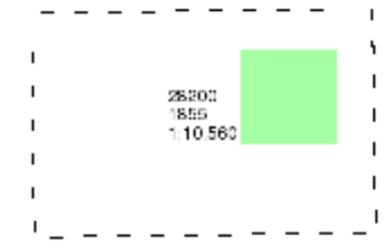
Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



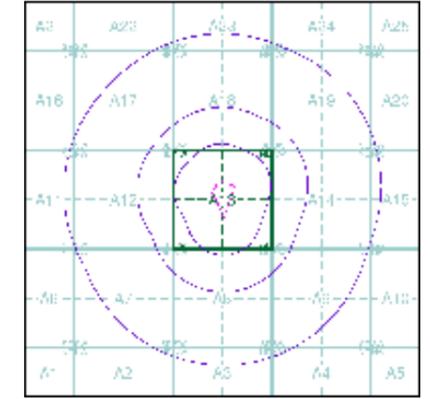
**Yorkshire**  
**Published 1855**  
**Source map scale - 1:10,560**

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

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

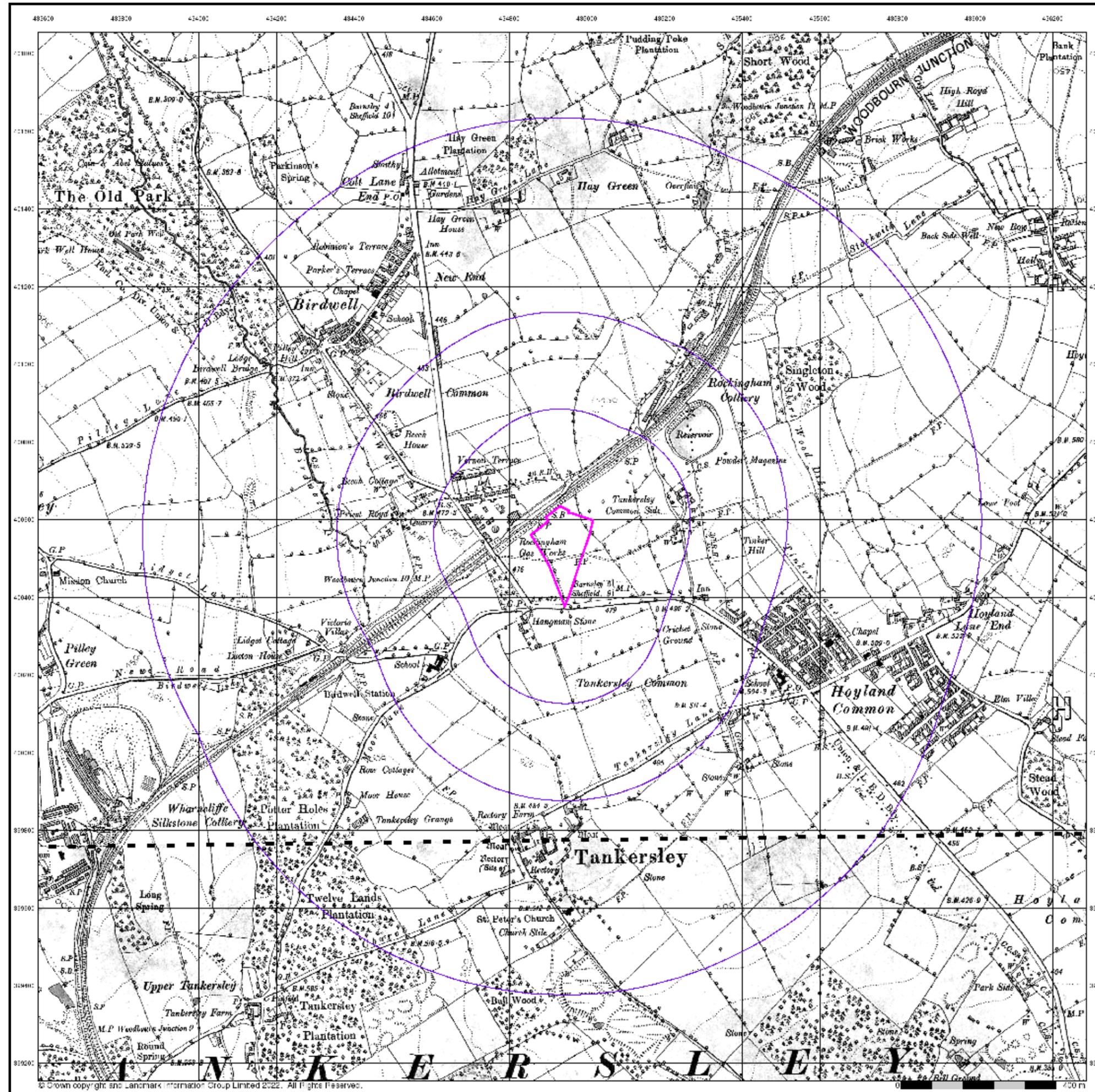
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**Site Details**

Site at, Birdwell, Barnsley



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



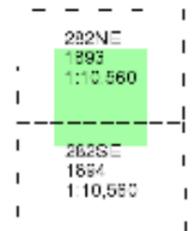
Yorkshire

Published 1893 - 1894

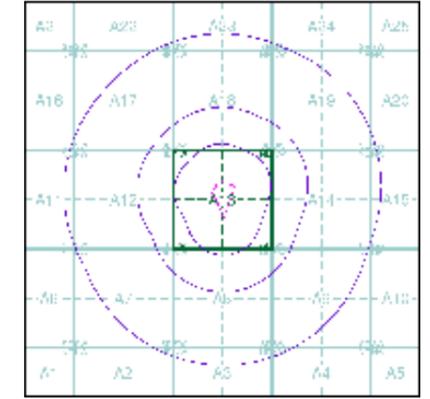
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Map Name(s) and Date(s)



Historical Map - Slice A



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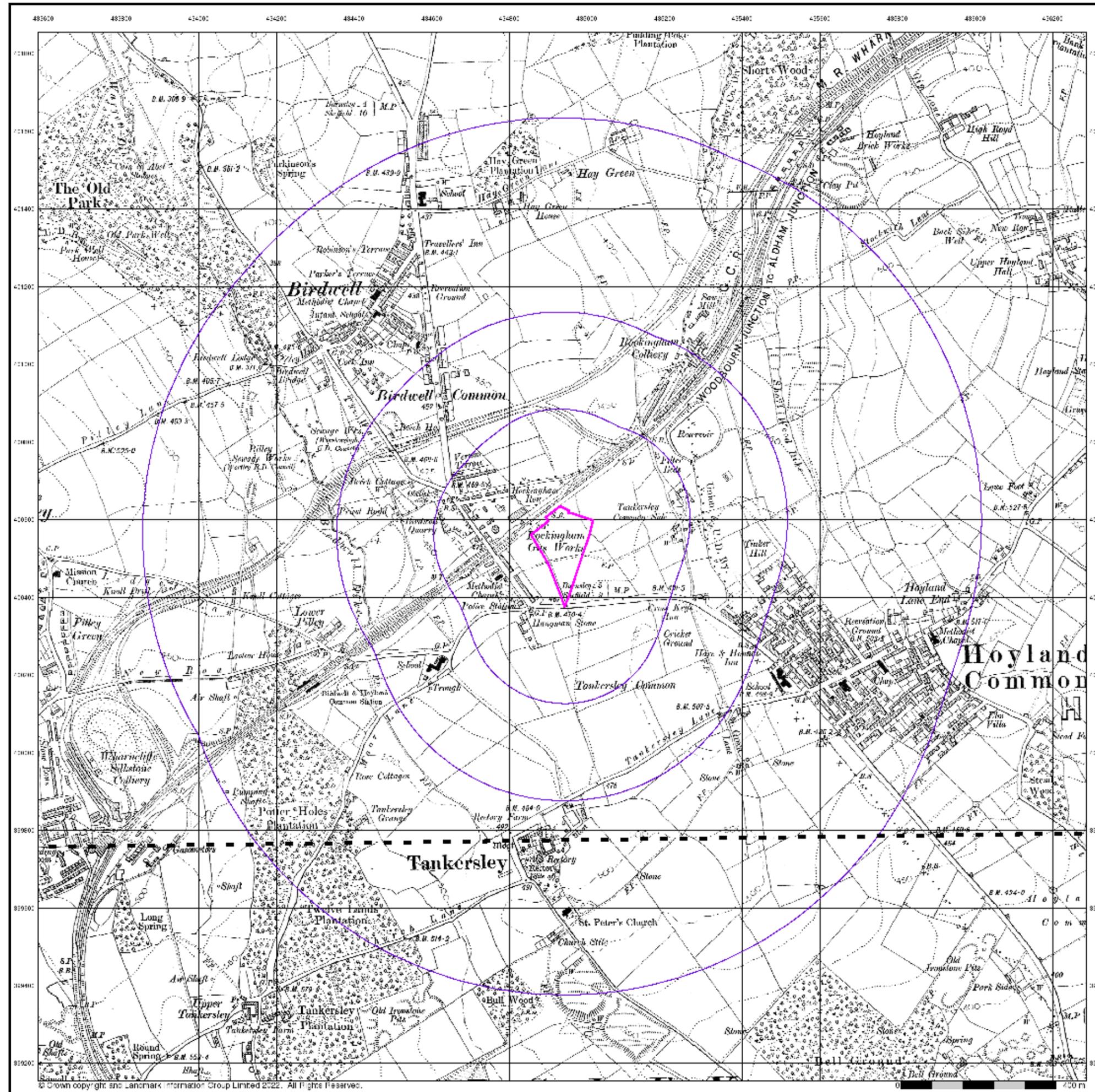
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Site at, Birdwell, Barnsley



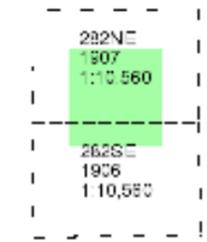
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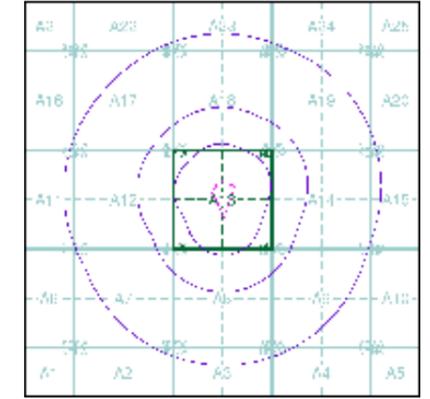
**Yorkshire**  
**Published 1906 - 1907**  
**Source map scale - 1:10,560**

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

**Map Name(s) and Date(s)**



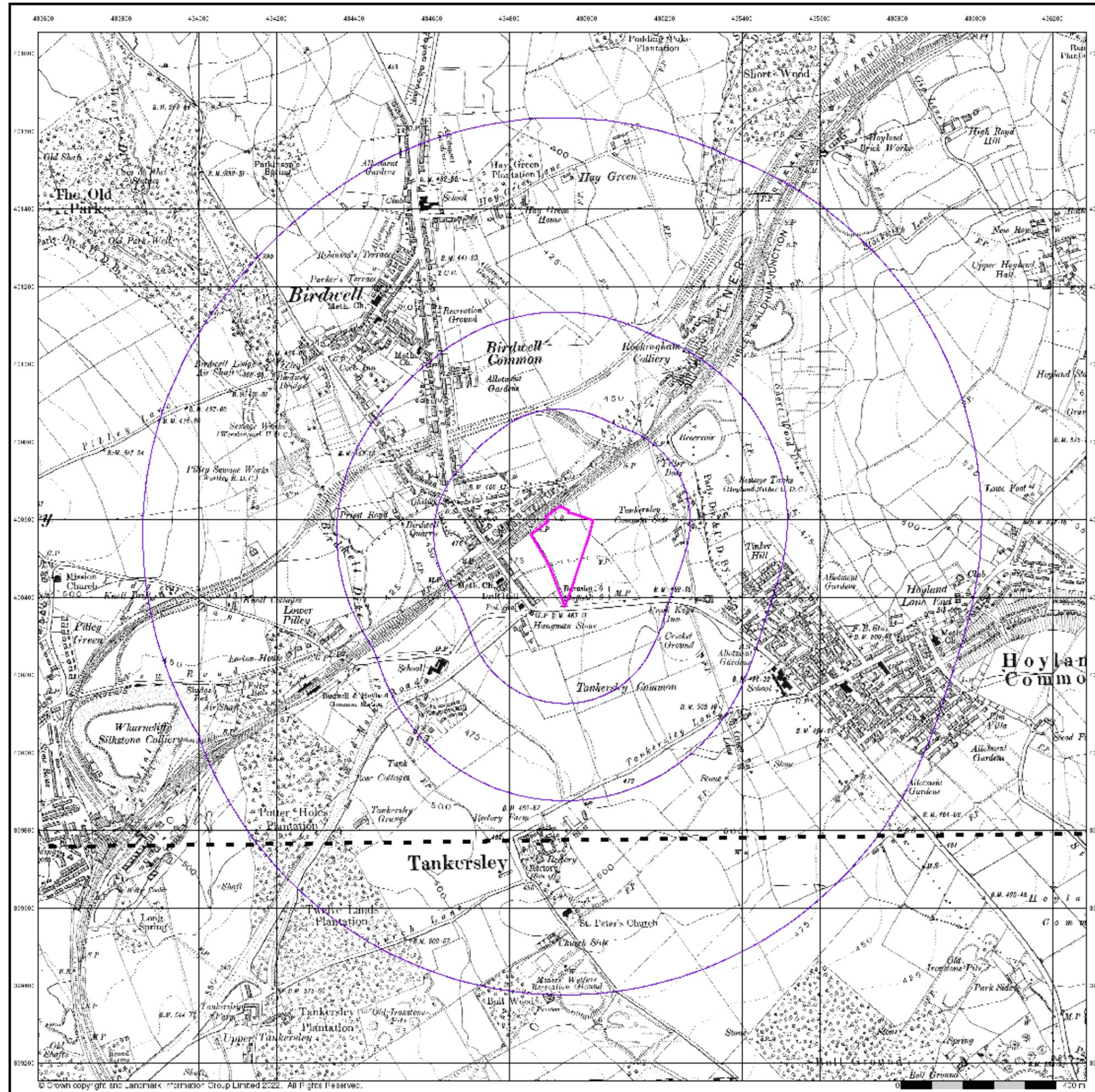
**Historical Map - Slice A**



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**Site Details**  
 Site at, Birdwell, Barnsley

**Landmark**  
 INFORMATION GROUP  
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 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



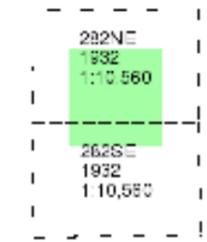
**Yorkshire**

**Published 1932**

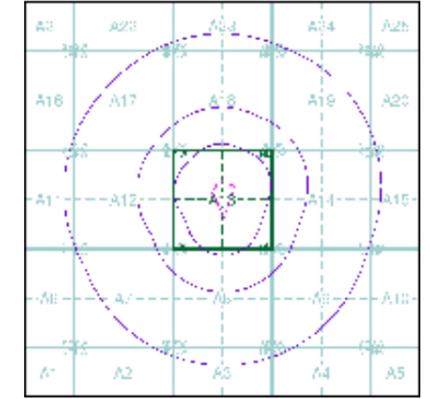
**Source map scale - 1:10,560**

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

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

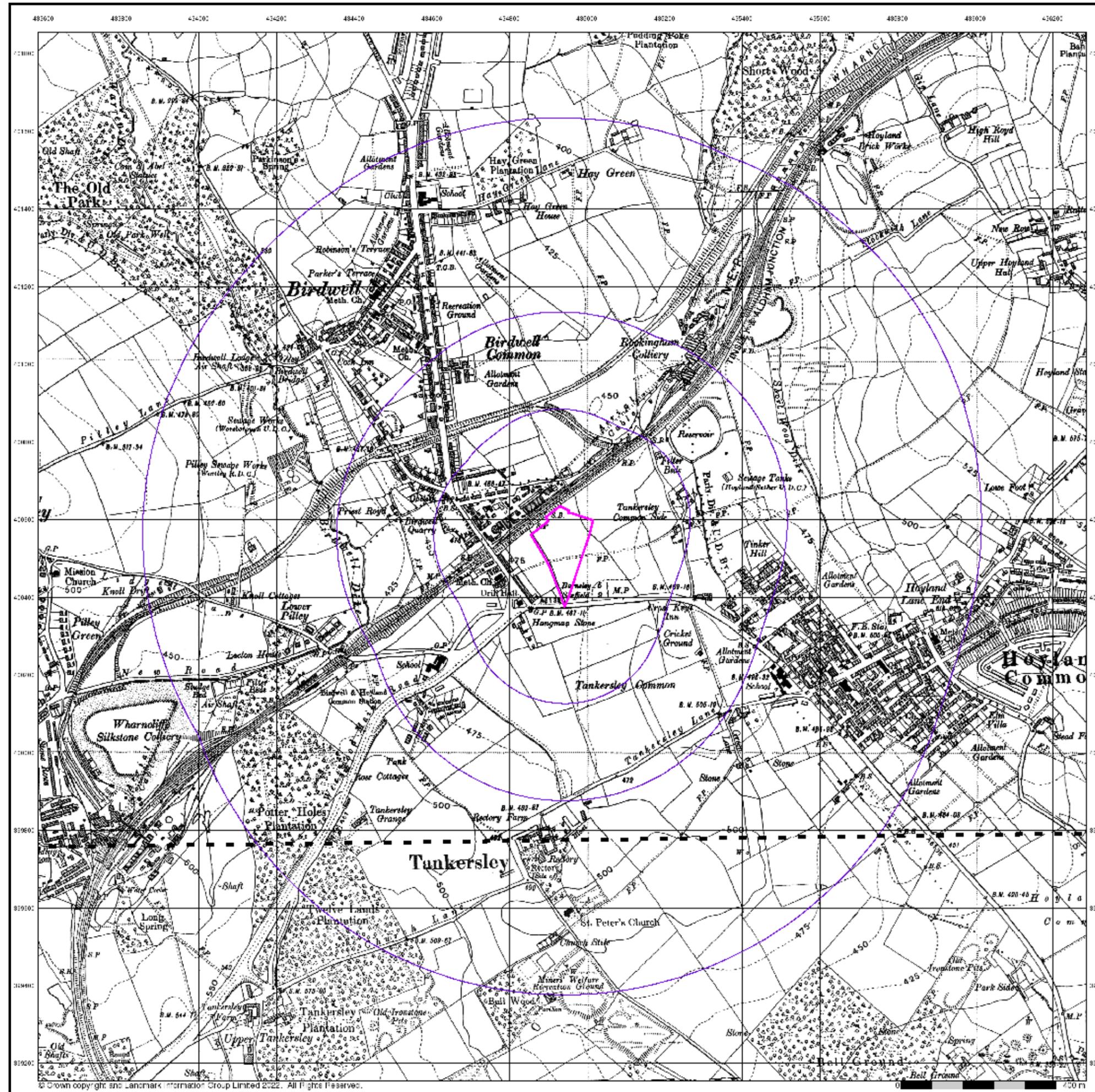
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**Site Details**

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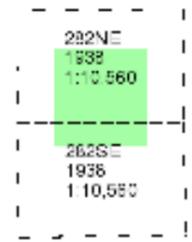
**Yorkshire**

**Published 1938**

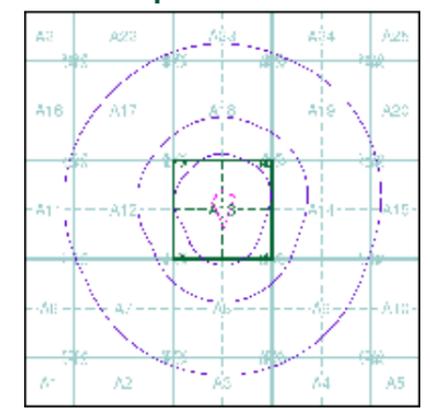
**Source map scale - 1:10,560**

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

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

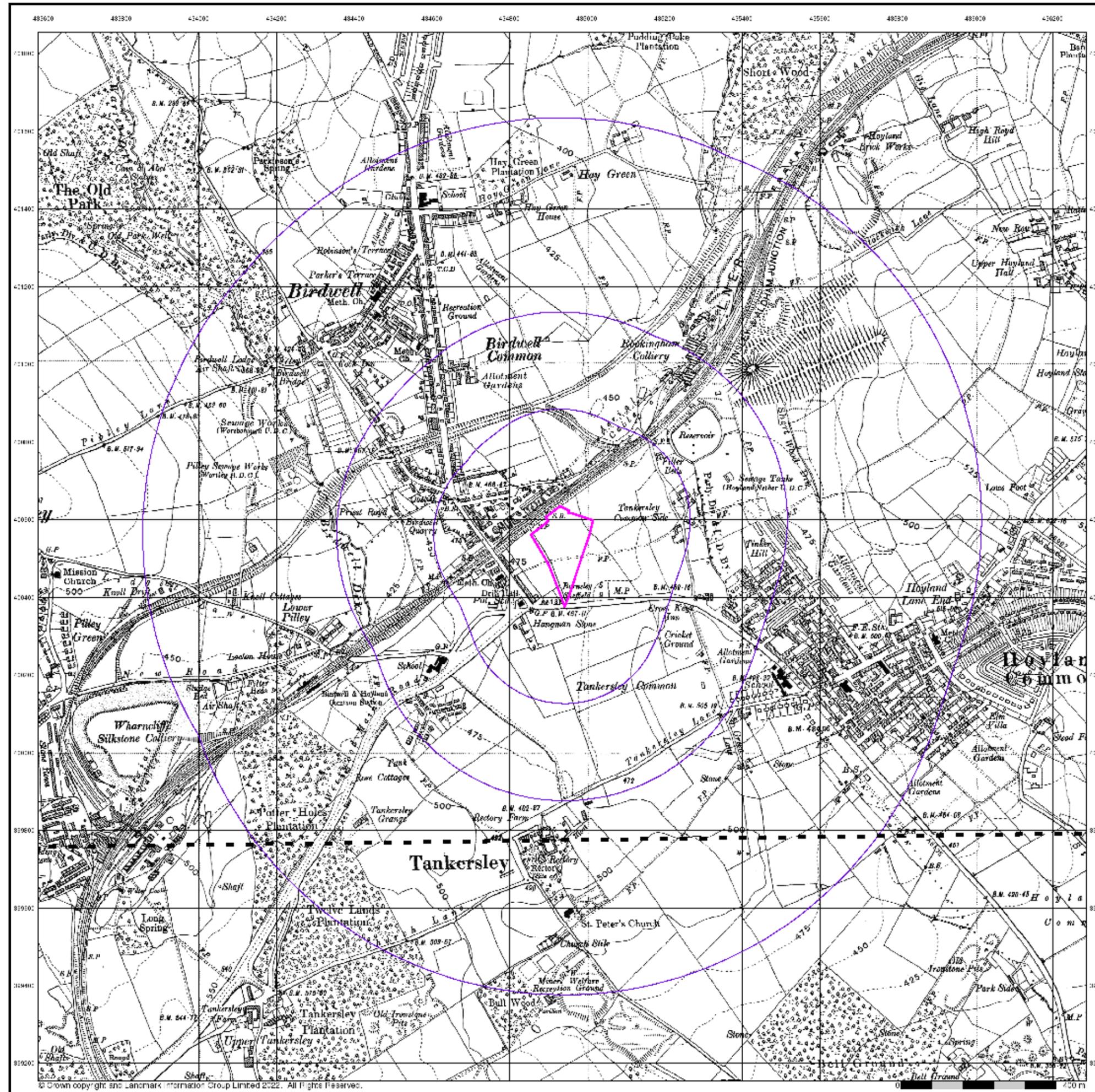
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**Site Details**

Site at, Birdwell, Barnsley



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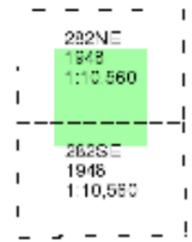
**Yorkshire**

**Published 1948**

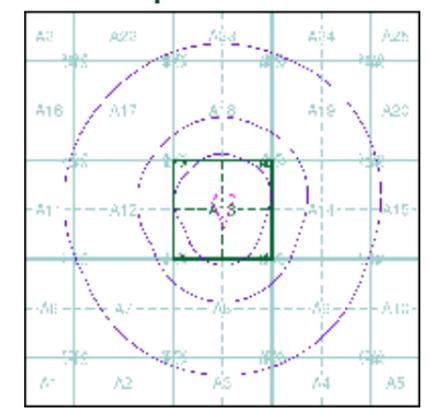
**Source map scale - 1:10,560**

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

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

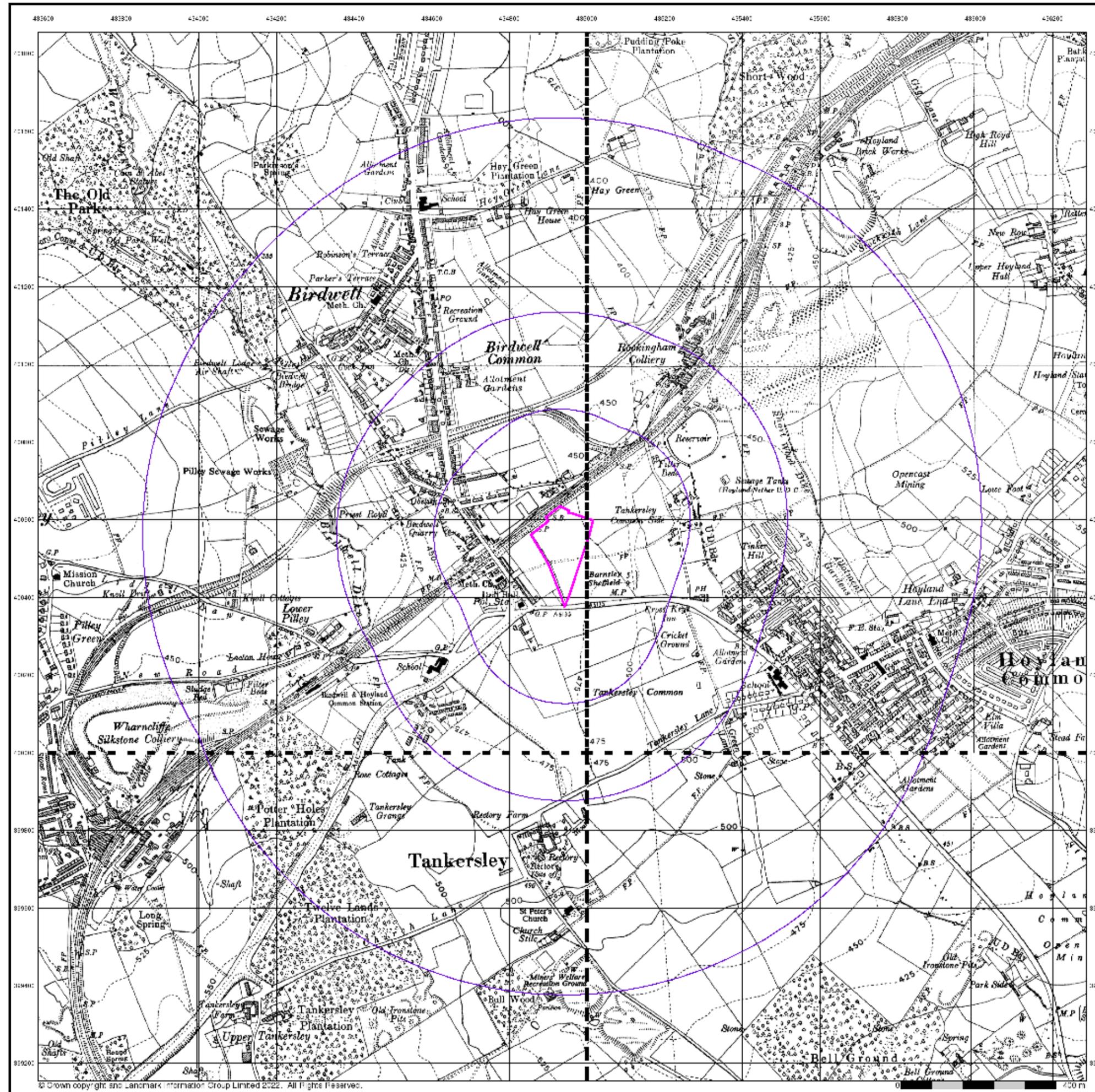
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**Site Details**

Site at, Birdwell, Barnsley



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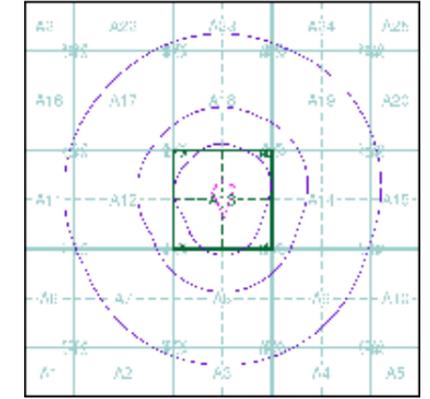
**Ordnance Survey Plan**  
**Published 1956**  
**Source map scale - 1:10,000**

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

**Map Name(s) and Date(s)**

SE83SW	SE83SE
1956	1956
1:10,560	1:10,560
SK99NW	SK88NE
1956	1956
1:10,560	1:10,560

**Historical Map - Slice A**



**Order Details**

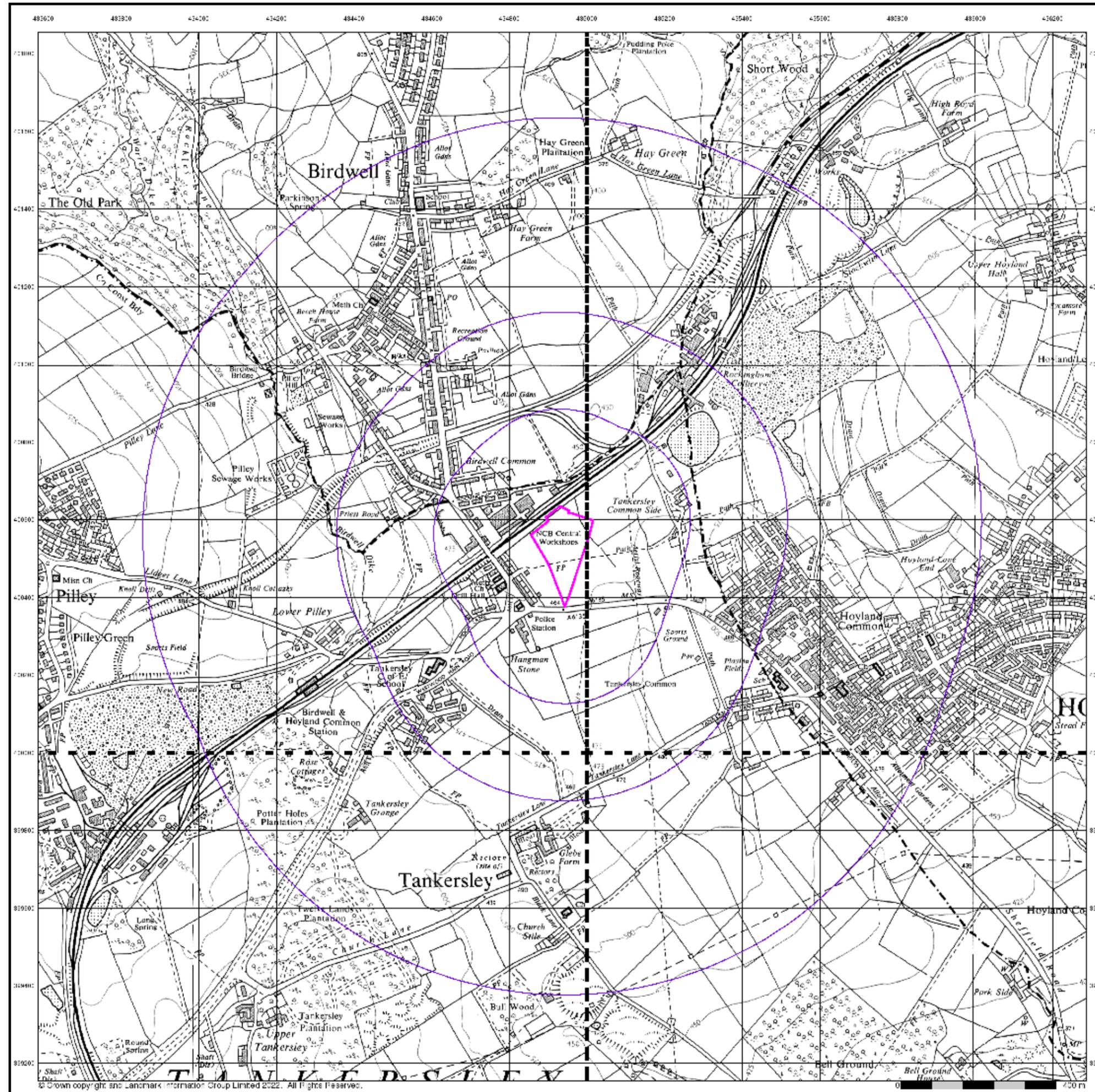
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**Site Details**

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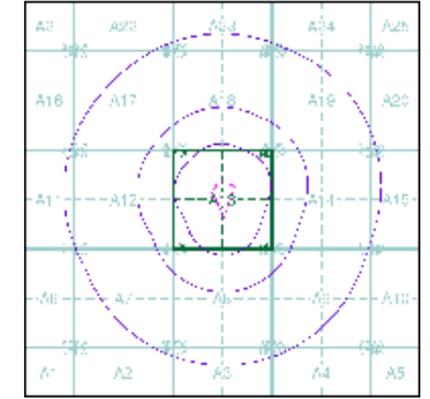
**Ordnance Survey Plan**  
**Published 1965 - 1966**  
**Source map scale - 1:10,000**

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

**Map Name(s) and Date(s)**

SE83SW	SE83SE
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1:10,560	1:10,560
SK99NW	SK98NE
1966	1965
1:10,560	1:10,560

**Historical Map - Slice A**



**Order Details**

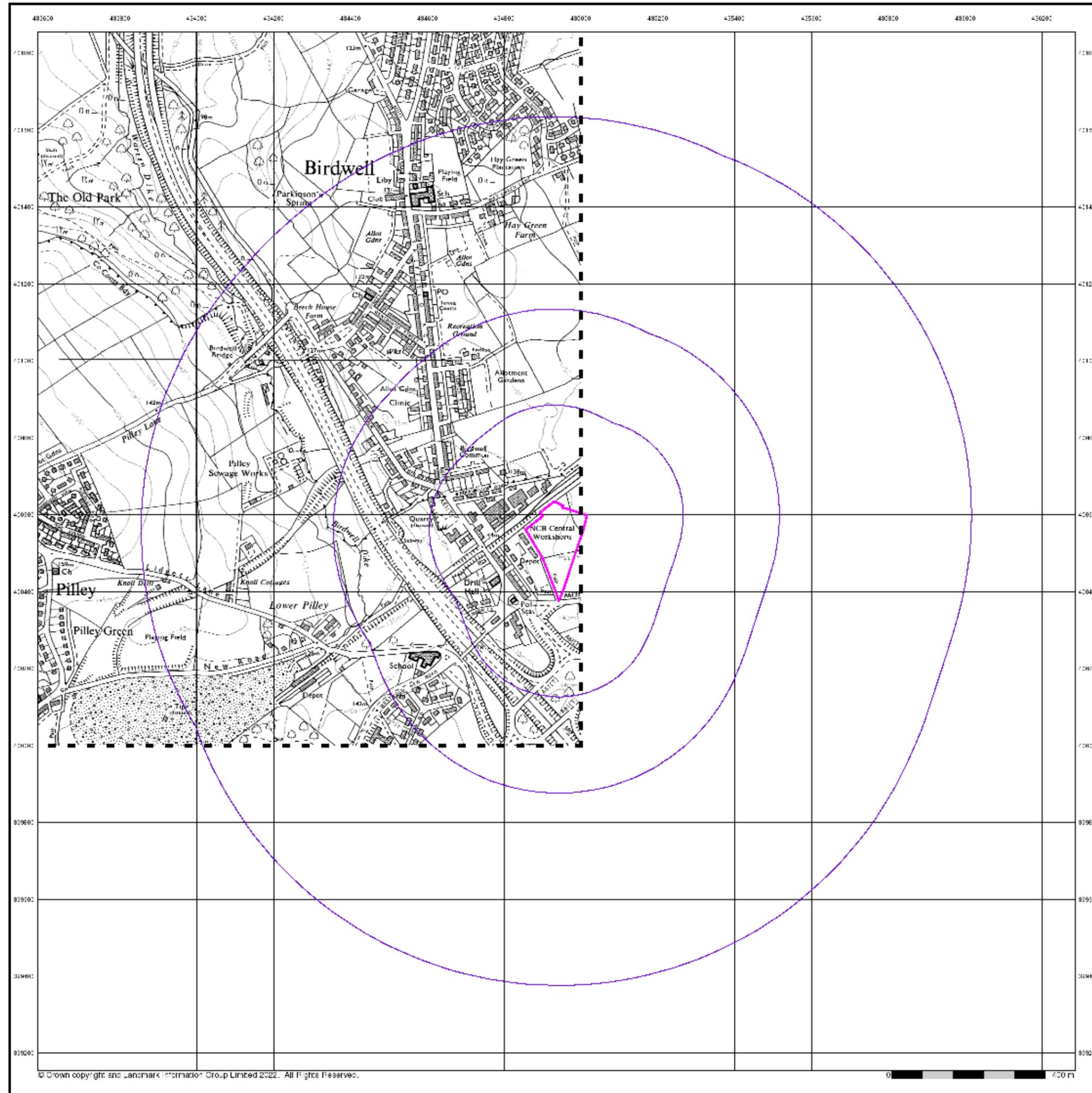
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**Site Details**

Site at, Birdwell, Barnsley



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



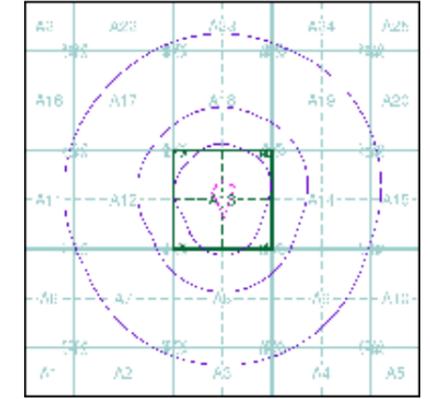
**Ordnance Survey Plan**  
**Published 1878**  
**Source map scale - 1:10,000**

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

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

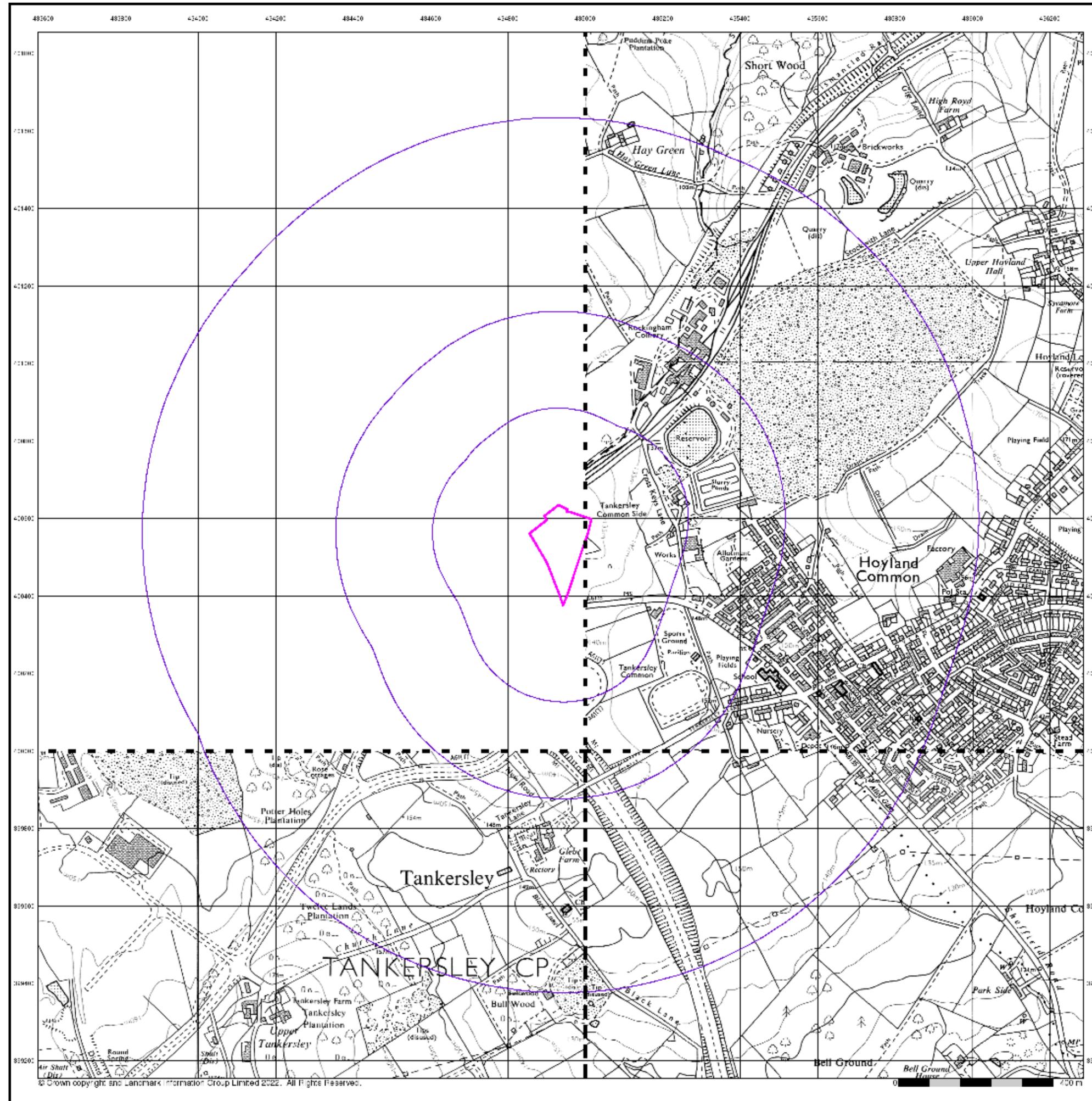
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**Site Details**

Site at, Birdwell, Barnsley



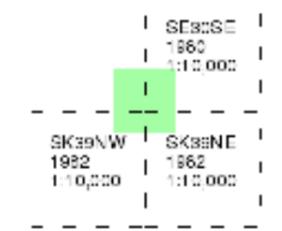
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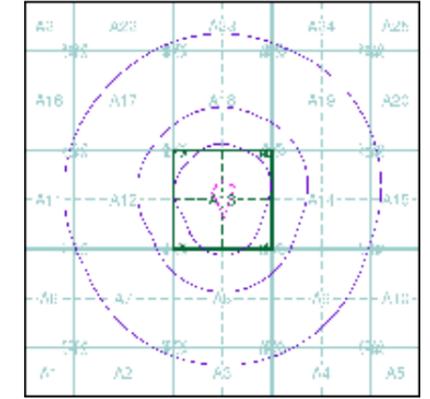
**Ordnance Survey Plan**  
**Published 1980 - 1982**  
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



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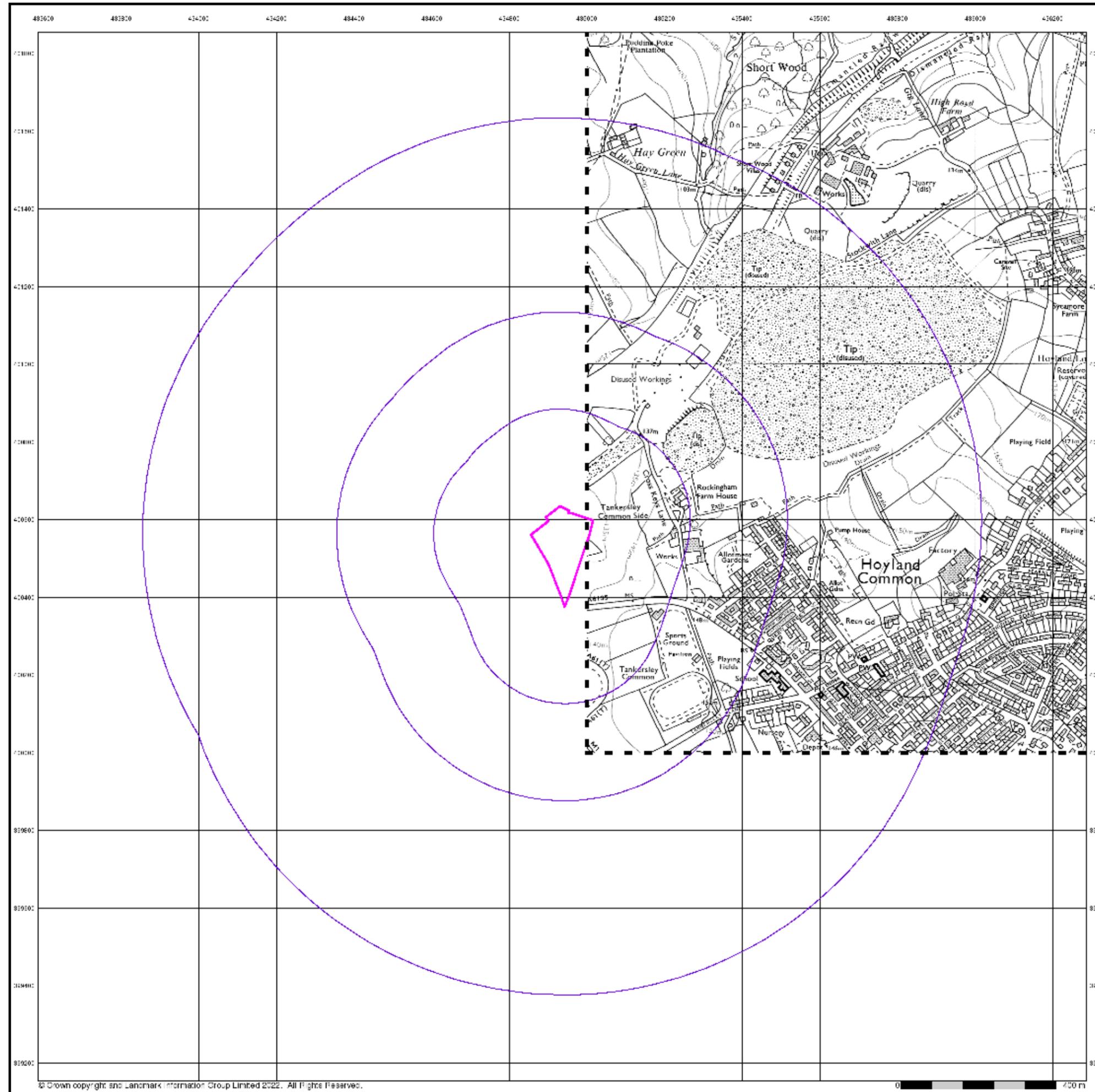
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**Site Details**

Site at, Birdwell, Barnsley



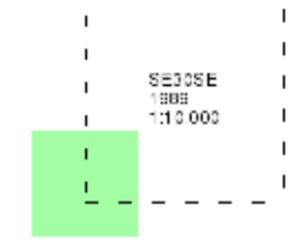
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 Web: www.envirocheck.co.uk



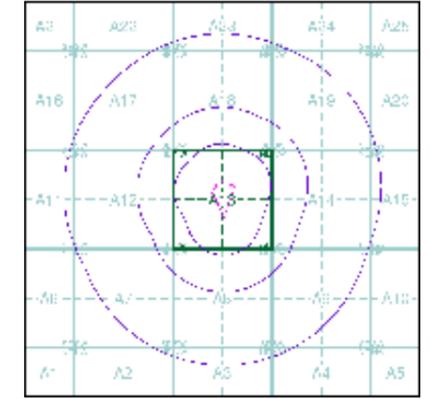
**Ordnance Survey Plan**  
**Published 1989**  
**Source map scale - 1:10,000**

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

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



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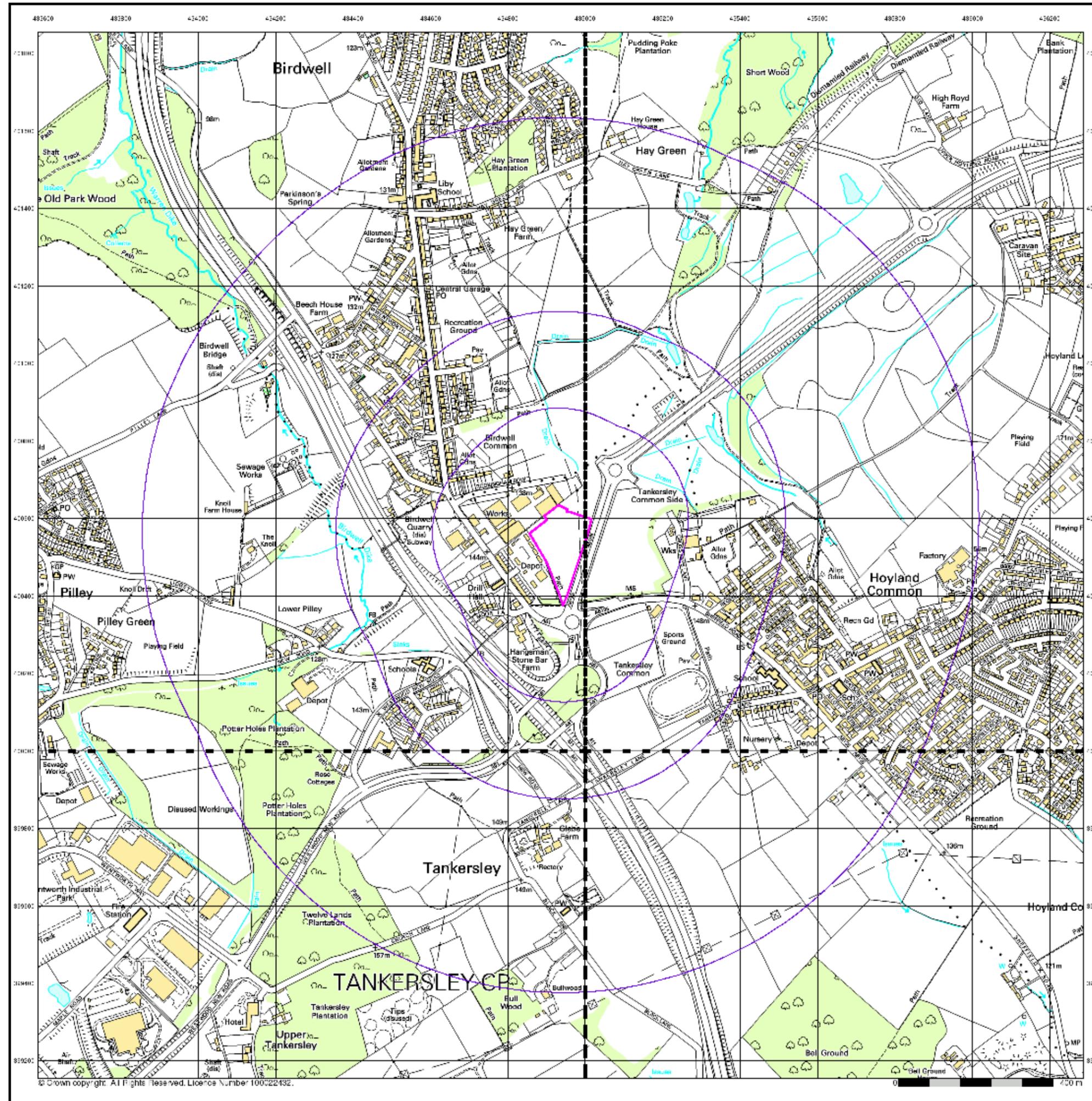
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**Site Details**

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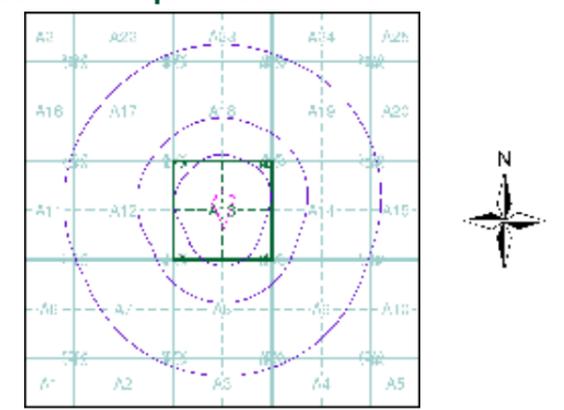
**10k Raster Mapping**  
**Published 2000**  
**Source map scale - 1:10,000**

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

**Map Name(s) and Date(s)**

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SK83NW	SK83NE
2000	2000
1:10,000	1:10,000

**Historical Map - Slice A**



**Order Details**

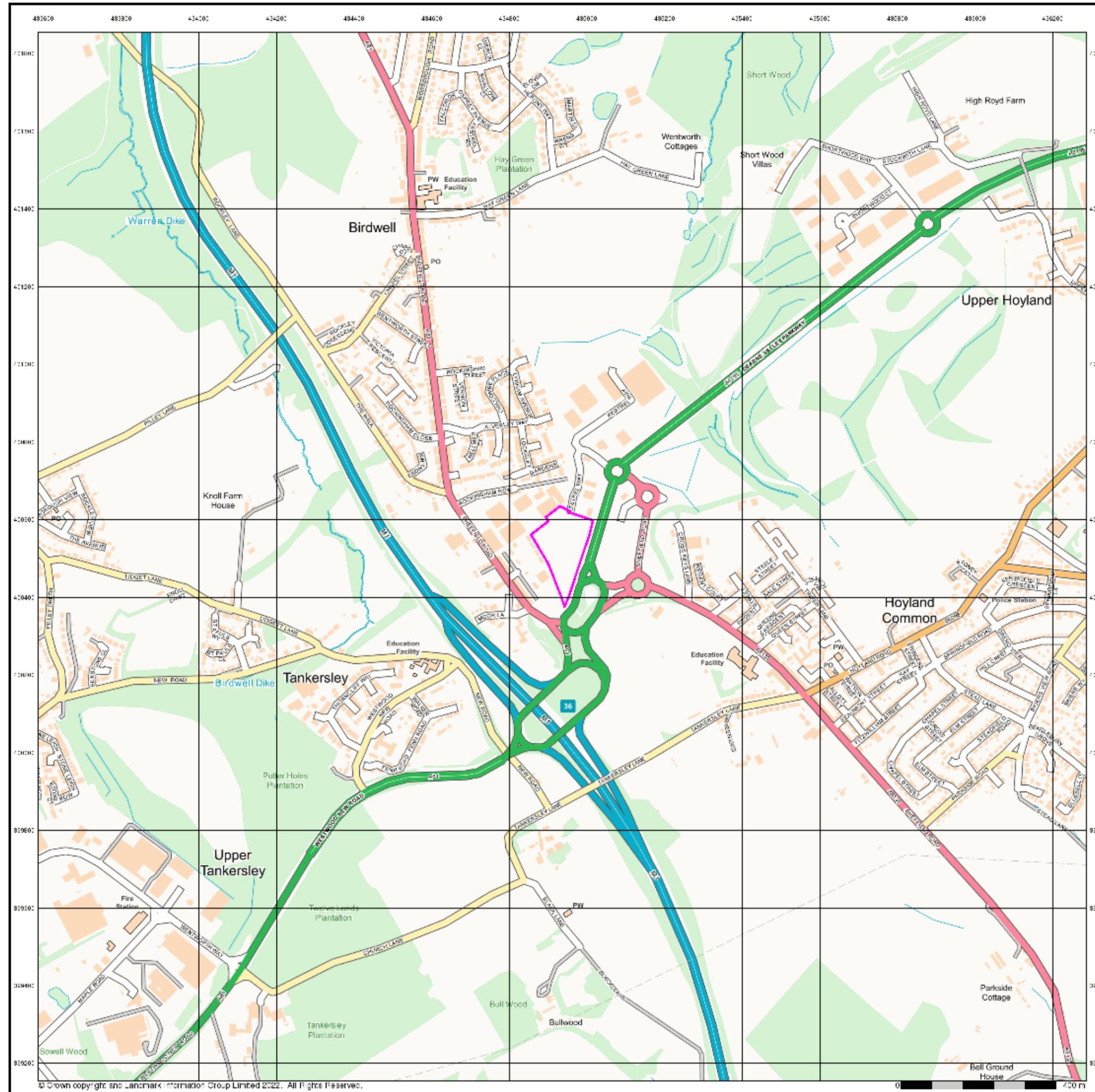
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**Site Details**

Site at, Birdwell, Barnsley



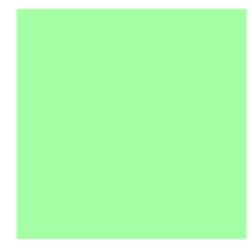
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 Web: www.envirocheck.co.uk



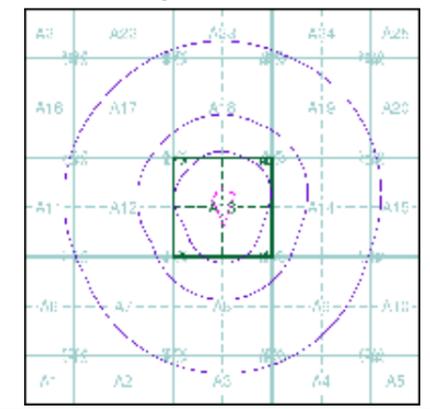
**Street View**  
**Published 2022**  
**Source map scale - 1:10,000**

Street View is a street-level map for the whole of Great Britain produced by the Ordnance Survey. These maps are provided at a nominal scale of 1:10,000

**Map Name(s) and Date(s)**



**Street View Map - Slice A**



**Order Details**  
 Order Number: 298598069\_1\_1  
 Customer Ref: 350525  
 National Grid Reference: 434940, 400510  
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**Site Details**  
 Site at, Birdwell, Barnsley

**Landmark**  
 INFORMATION GROUP  
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 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk

# **APPENDIX E**

## **SUPPORTING DESK STUDY INFORMATION**

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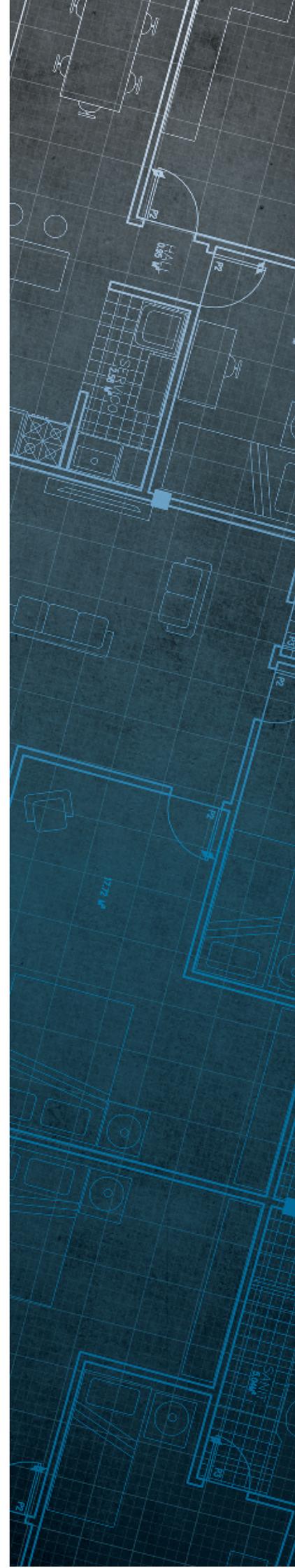
The Coal  
Authority

# Consultants Coal Mining Report

Site At, birdwell, barnsley  
South Yorkshire

Date of enquiry: 20 July 2022  
Date enquiry received: 20 July 2022  
Issue date: 20 July 2022

Our reference: 51003284020001  
Your reference: 298598069\_2



# Consultants Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

## Client name

NLIS Hub

## Enquiry address

Site At, birdwell, barnsley  
South Yorkshire

## How to contact us

0345 762 6848 (UK)  
+44 (0)1623 637 000 (International)

200 Lichfield Lane  
Mansfield  
Nottinghamshire  
NG18 4RG

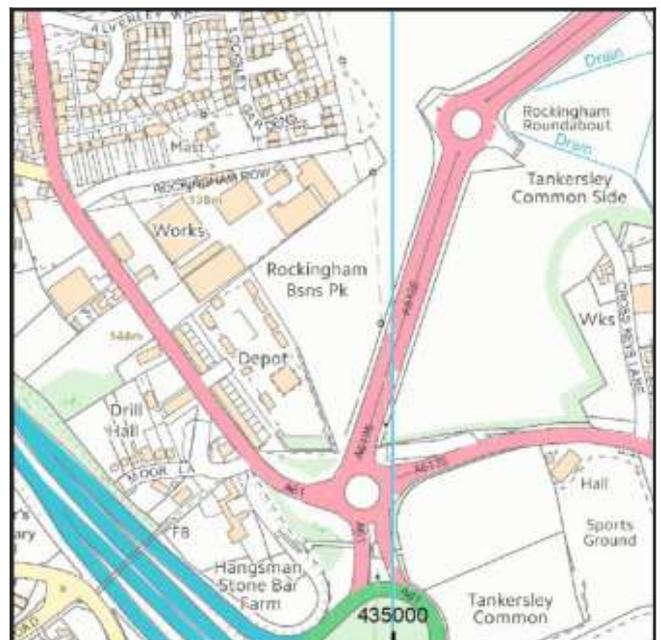
[www.groundstability.com](http://www.groundstability.com)

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

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Approximate position of property



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# Section 1 – Mining activity and geology

## Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
ROCKINGHAM	LIDGETT	Coal	64RA	58	Beneath Property	3.8	North-East	66	1943
ROCKINGHAM	FLOCKTON THICK	Coal	64RD	123	Beneath Property	2.9	North-East	104	1952
unnamed	FLOCKTON THICK	Coal	64RC	127	South-East	4.3	North-East	119	1956
unnamed	TOP FENTON	Coal	64RG	168	North-West	3.4	North-East	109	1929
unnamed	TOP FENTON	Coal	64RH	170	Beneath Property	3.5	North-East	109	1920
ROCKINGHAM	LOW FENTON	Coal	64RK	174	Beneath Property	3.4	North-East	137	1954
ROCKINGTON	LOW FENTON	Coal	64RL	174	South-East	3.8	North-East	132	1959
unnamed	PARKGATE	Coal	64RO	188	Beneath Property	3.0	East	152	1899
unnamed	PARKGATE	Coal	64RQ	190	North-West	3.7	North-East	147	1890
unnamed	PARKGATE	Coal	64PM	193	Beneath Property	2.3	East	152	1888
unnamed	MIDDLETON MAIN	Coal	64RT	220	Beneath Property	3.7	North-East	102	1904
unnamed	MIDDLETON MAIN	Coal	64RU	221	South-West	5.1	North-East	102	1898
unnamed	SILKSTONE	Coal	64S4	268	South-West	3.8	East	180	1897
UNAMED	SILKSTONE	Coal	64SB	270	Beneath Property	3.5	North-East	180	1918
unnamed	SILKSTONE	Coal	64SI	280	North-West	3.9	North-East	160	1909
unnamed	WHINMOOR	Coal	64RY	322	Beneath Property	3.8	East	91	1947

### Probable unrecorded shallow workings

None.

### Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

### Mine entries

None recorded within 100 metres of the enquiry boundary.

### Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

NE852	17828	NE855
NE853	OC142	12953
8805	NE856	NEST22

Our records show we have more plans than those shown above which could affect the enquiry boundary.

**Please contact us on 0345 762 6848** to determine the exact abandoned mine plans you require based on your needs.

### Outcrops

No outcrops recorded.

### Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

### Opencast mines

Please refer to the "Summary of findings" map (on separate sheet) for details of any opencast areas within 500 metres of the enquiry boundary.

### Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

## Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

### Site investigations

None recorded within 50 metres of the enquiry boundary.

### Remediated sites

None recorded within 50 metres of the enquiry boundary.

### Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

### Mine gas

None recorded within 500 metres of the enquiry boundary.

### Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

## Section 3 – Licensing and future mining activity

### Future underground mining

None recorded.

### Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

### Court orders

None recorded.

### Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

### Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

### Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

## Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

### **Development advice**

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

**For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at [groundstability@coal.gov.uk](mailto:groundstability@coal.gov.uk).**

## Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at [groundstability@coal.gov.uk](mailto:groundstability@coal.gov.uk)**.

### Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

### Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

### Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

### Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

### Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

### Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

### Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

### **Opencast mines**

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

### **Coal Authority managed tips**

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

### **Site investigations**

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

### **Remediated sites**

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

### **Coal mining subsidence**

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

### **Mine gas**

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission.

### **Mine water treatment schemes**

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

### **Future underground mining**

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

### **Coal mining licensing**

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

### **Court orders**

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

### **Section 46 notices**

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

### **Withdrawal of support notices**

Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

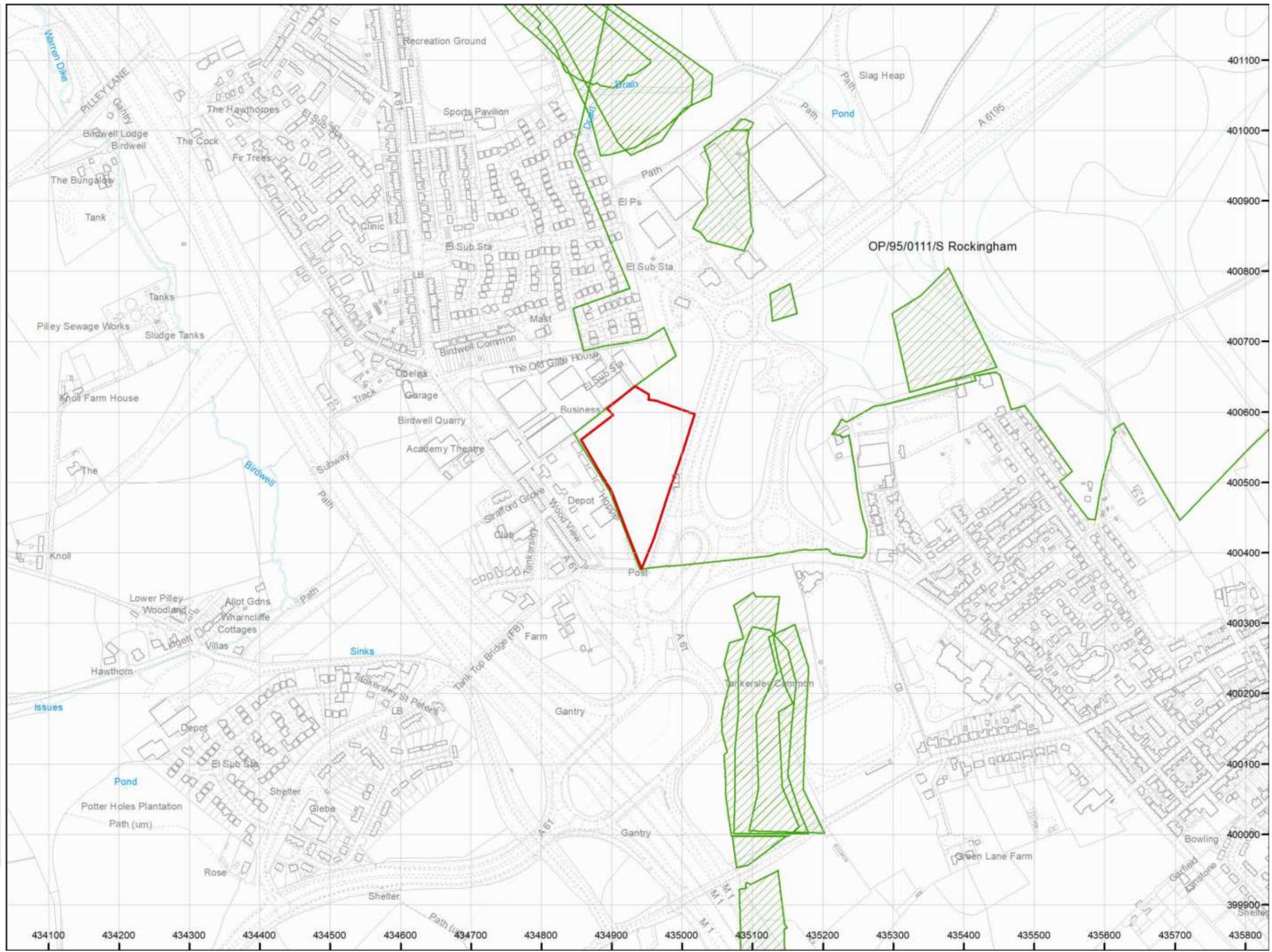
### **Payment to owners of former copyhold land**

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

The map highlights any specific surface or subsurface features within or near to the boundary of the site.

**Key**

- Approximate position of the enquiry boundary shown 
- Opencast mine licence area 
- Unlicensed opencast site 



**How to contact us**  
0345 762 6848 (UK)  
+44 (0)1623 637 000 (International)  
[www.groundstability.com](http://www.groundstability.com)

# UNEXPLODED BOMB RISK MAP



## SITE LOCATION

Location: S70 5SZ,  
Map Centre: 435038,400792



## LEGEND

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



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

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment\* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment\* is necessary.

### What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

**Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.**

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

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

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

### If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

web: **www.zeticauxo.com**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgment. The copyright remains with Zetica Ltd.

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

\*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

# APPENDIX F

## SITE WALKOVER PHOTOGRAPHS

<b>PHOTOGRAPHIC LOG</b>	
<b>Photo no.</b> 1	<b>Date:</b> 18.07.22
	
<b>Description:</b> Looking north. Highly vegetated site boundary along the A6195.	

<b>Photo No.</b> 2	<b>Date:</b> 18.07.22
	
<b>Description:</b> Looking east. Vegetated site and overhead powerline mast and cable.	

<b>Photo No.</b> 3	<b>Date:</b> 18.07.22	
<b>Description:</b> Powerline cable and mast.		

<b>Photo No.</b> 4	<b>Date:</b> 18.07.22	
<b>Description:</b> Surface conditions, showing vegetation scrub and is unsurfaced.		

<b>Photo No.</b> 5	<b>Date:</b> 18.07.22	
<b>Description:</b> Looking west. Highly vegetated in the centre of the site, showing concrete blocks in the centre of the photograph.		

<b>Photo No.</b> 6	<b>Date:</b> 18.07.22	
<b>Description:</b> Looking west. Shallow basin/pond in the centre of site. No water present during the site walkover.		

<b>Photo No.</b> 7	<b>Date:</b> 18.07.22	
<b>Description:</b> Looking south. Site boundary with barriers and obstructions. Some drums in the distance, unsure of the contents due to access restraints.		

<b>Photo No.</b> 8	<b>Date:</b> 18.07.22	
<b>Description:</b> Looking north. Main access road to the site.		

<b>Photo No.</b> 9	<b>Date:</b> 18.07.22	 A photograph showing a field of tall, dry grass and weeds in the foreground. In the background, there is a large, tan-colored building partially obscured by trees. The sky is clear and blue.
<b>Description:</b> Looking south. Made ground stockpiles.		

# APPENDIX G

## TECHNICAL BACKGROUND

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### G1 Desk Study

#### **Aquifer designation and Source protection zones**

Principal aquifer: layers of rock or drift deposit that have high intergranular and/or fracture permeability (usually providing a high level of water storage). They may support water supply and/or river base flow on a strategic scale.

Secondary A aquifer: 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.

Secondary B aquifer: predominantly lower permeability layers that may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.

Secondary undifferentiated aquifer: it has not been possible to attribute either a category A or B to a rock type. In most cases this means that it was previously designated as both a minor and non-aquifer in different locations owing to the variable characteristics.

Unproductive' strata: low permeability with negligible significance for water supply or river base flow.

The EA generally adopts a three-fold classification of source protection zones (SPZ) surround abstractions for public water supply. The Site is situated in an area defined as follows:

- Zone 1 or the 'inner protection zone' is located immediately adjacent to the groundwater source and is based on a 50-day travel time from any point below the water table to the source. It is designed to protect against the effects of human activity and biological/chemical contaminants that may have an immediate effect on the source
- Zone 2 or the 'outer protection zone' is defined by a 400-day travel time from a point below the water table to the source. The travel time is designed to provide delay and attenuation of slowly degrading pollutants
- Zone 3 or the 'total catchment' is the area around the source within which all groundwater recharge is presumed to be discharged at the source.

#### **Preliminary risk assessment methodology**

CLR11 outlines the framework to be followed for risk assessment in the UK. The framework is designed to be consistent with UK legislation and policies including planning. Under CLR11, three stages of risk assessment exist: preliminary, generic quantitative and detailed quantitative. An outline conceptual model should be formed at the preliminary risk assessment stage that collates all the existing information pertaining to a site in text, tabular or diagrammatic form. The outline conceptual model identifies potentially complete (termed possible) contaminant linkages (contaminant–pathway–receptor) and is used as the basis for the design of the site investigation. The outline conceptual model is updated as further information becomes available, for example as a result of the site investigation.

Production of a conceptual model requires an assessment of risk to be made. Risk is a combination of the likelihood of an event occurring and the magnitude of its consequences. Therefore, both the likelihood and the consequences of an event must be taken into account when assessing risk. RSK has adopted guidance provided in CIRIA C552 for use in the production of conceptual models.

The likelihood of an event can be classified on a four-point system using the following terms and definitions based on CIRIA C552:

- highly likely: the event appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution
- likely: it is probable that an event will occur, or circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term
- low likelihood: circumstances are possible under which an event could occur, but it is not certain even in the long term that an event would occur, and it is less likely in the short term
- unlikely: circumstances are such that it is improbable the event would occur even in the long term.

The severity can be classified using a similar system also based on CIRIA C552. The terms and definitions relating to severity are:

- severe: short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. Short-term risk to an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000)
- medium: chronic damage to human health ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000), pollution of sensitive water resources, significant change in an ecosystem or organism forming part of that ecosystem
- mild: pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures or the environment
- minor: harm, not necessarily significant, but that could result in financial loss or expenditure to resolve. Non-permanent human health effects easily prevented by use of personal protective clothing. Easily repairable damage to buildings, structures and services.

Once the probability of an event occurring and its consequences have been classified, a risk category can be assigned according to the table below.

		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very low	Very low

Definitions of these risk categories are as follows together with an assessment of the further work that may be required:

- very high: there is a high probability that severe harm could occur or there is evidence that severe harm is currently happening. This risk, if realised, could result in substantial liability; urgent investigation and remediation are likely to be required
- high: harm is likely to occur. Realisation of the risk is likely to present a substantial liability. Urgent investigation is required. Remedial works may be necessary in the short term and are likely over the long term
- moderate: it is possible that harm could arise, but it is unlikely that the harm would be severe, and it is more likely that the harm would be relatively mild. Investigation is normally required to clarify the risk and determine the liability. Some remedial works may be required in the longer term
- low: it is possible that harm could occur, but it is likely that if realised this harm would at worst normally be mild
- very low: there is a low possibility that harm could occur and if realised the harm is unlikely to be severe.