Desk Study and Preliminary Environmental Risk Assessment

Land off Edmunds Road, Worsbrough

Report Reference: AG/2096/081001/P1

October 2008

Report to:

Windle Cook Architects
927 Chesterfield Road
Sheffield
S8 0SS

Prepared by:

ECUS Ltd.
Endcliffe Holt
343 Fulwood Road
Sheffield
S10 3BQ

Tel: 0114 266 9292
Fax: 0114 266 8243

Windle Cook Architects

This page has been left intentionally blank.

ECUS LIMITED

Report to: **Windle Cook Architects**
927 Chesterfield Road
Sheffield
S8 0SS

Report Title: **Desk Study and Preliminary Environmental Risk Assessment, Land off Edmunds Road, Worsbrough**

Revision: **FINAL**
Date: **October 2008**
Report Ref: **AG/2096/081001/P1**

Originated By: ..... Date: October 2008
A. Grant
Senior Geo-environmental Engineer

Approved By: ..... Date: October 2008
C. Dainton
Senior Environmental Scientist

Prepared by:

ECUS Ltd
Endcliffe Holt
343 Fulwood Road
Sheffield S10 3BQ
Tel: 0114 2669292
Fax: 0114 2668243

The report and the site assessments carried out by ECUS on behalf of the client in accordance with the agreed terms of contract and/or written agreement form the agreed Services. The Services were performed by ECUS with the skill and care ordinarily exercised by a reasonable Environmental Consultant at the time the Services were performed. Further, and in particular, the Services were performed by ECUS 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 ECUS and the client.

Other than that expressly contained in the paragraph above, ECUS provides no other representation or warranty whether express or implied, in relation to the services.

This report is produced exclusively for the purposes of the client. ECUS 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, ECUS does not authorise, consent or condone any party other than the client relying upon the services provided. Any reliance on the services or any part of the services by any party other than the client is made wholly at that party's own and sole risk and ECUS disclaims any liability to such parties.

This report is based on site conditions, regulatory or other legal provisions, technology or economic conditions at the time of the Service provision. These conditions can change with time and reliance on the findings of the Services under changing conditions should be reviewed.

ECUS accepts no responsibility for the accuracy of third party data used in this report.

This page has been left intentionally blank.

CONTENTS

1 Introduction 1
1.1 Terms of Reference 1
1.2 Objectives of the Assessment 1
1.3 Sources of Information 1

2 Findings of the Assessment 3
2.1 Site Location and Current Condition 3
2.2 Topography and Ground Cover 3
2.3 Underground Structures and Services 3
2.4 Visual Evidence for Contamination Noted During the Site Walkover 3
2.5 Current Surrounding Land Use 3
2.6 Historical Land Use 4
2.7 Geology, Hydrogeology and Hydrology 6
2.8 Pollution Incidents 6
2.9 Landfill Sites and Waste Management Licences 7
2.10 Sensitive Land Uses 7
2.11 Radon 7
2.12 Flooding 7

3 Preliminary Risk Assessment and Conceptual Model 8
3.1 Introduction 8
3.2 Potential Contaminants and Sources 8
3.3 Potential Pathways and Receptors 8
3.4 Conceptual Model 9

4 Conclusions and Recommendations 12
4.1 Conclusions 12
4.2 Recommendations 12

Appendix A: Site Location and Layout Plans

Appendix B: Site Photographs

Appendix C: GroundSure Report

EXECUTIVE SUMMARY

Site location and current condition	The site is located of Edmunds Road, Worsbrough, Barnsley, and centres on National Grid Reference 436200, 403600. It consists of an area of overgrown undeveloped land approximately 0.1 hectares in area.
Site history	Historical Ordnance Survey mapping indicates that the site was occupied by a gas works from before 1891 to the 1960s. Following site clearance, the site has remained undeveloped until the present time.
Geology hydrogeology and hydrology	The geological map for the area indicates that the site is underlain by undifferentiated mudstones, siltstones and sandstones of the Carboniferous Coal Measures. No drift deposits are present. No shallow coal seams are thought to affect the site. The strata underlying the site are classified as a minor aquifer. There are no groundwater abstraction points in proximity to the site. The nearest surface water feature is the River Dove, located 100m south of the site.
Contamination Potential	The previous use as a gas works gives a high potential for a wide range of contaminants to be present within the ground. Due to the proposed residential use with gardens, there is potentially a high risk of short term and long-term harm to the site residents. There is a former landfill site within 250m of the site, and a backfilled canal exists in close proximity. Therefore there is potential for ground gases to migrate into the new build houses on the site.
Recommendations	A Phase 2 site investigation is required in order to characterise the actual contaminant linkages on the site. This should comprise trial pitting and window sampling to install gas monitoring wells. Laboratory analysis on soil samples for a range of potential gas works contaminants should be undertaken. Gas monitoring will be required in order to quantify the risk of ground gases affecting the site.

1 Introduction

1.1 Terms of Reference

1.1.1 ECUS Ltd (hereafter ECUS) was commissioned by Windle Cook Architects to provide a Desk Study and Preliminary Environmental Risk Assessment for a land off Edmunds Road, Worsbrough, Barnsley, hereafter referred to as 'the site'.

1.1.2 Figure A1, Appendix A shows the location of the site, which centres on National Grid Reference (NGR) 436200, 403600. Figure A2, Appendix A shows the current site layout.

1.1.3 To complete the assessment, a site walkover and review of current activities has been undertaken, together with an investigation into land use history and a review of local environmental conditions.

1.1.4 The results of the assessment are presented in Section 2 of this report and Section 3 draws together a preliminary conceptual model and risk assessment. Section 4 presents conclusions and summary recommendations for any necessary additional works. Appendices A - C provide supporting information.

1.2 Objectives of the Assessment

1.2.1 It is understood that it is intended to develop the site for residential housing with private gardens and a new access road. A plan showing the proposed development is shown in Figure A2, Appendix A. The assessment has been completed with the aim of preparing for that development by assessing likely risks associated with ground contamination at the site that may affect the development.

1.2.2 The assessment has been carried out in general accordance with the requirements of BS10175 (2001) – Code of Practice for the Investigation of Potentially Contaminated Sites and model procedures for the management of contaminated land[1] (CLR11), published by the Environment Agency.

1.2.3 The general objectives of the assessment are as follows:

- To provide information on past and current uses of the site and surrounding area, and the nature of hazards and physical constraints;
- To identify receptors, potential sources of contamination, likely pathways and any features of immediate concern;
- To provide information on the geology, hydrogeology and hydrology of the site to assist in establishing the conceptual model;
- To provide an initial conceptual model of the nature and extent of potential contamination and data for a preliminary qualitative risk assessment;
- To provide data to assist in the design of exploratory investigations;
- To identify and provide sufficient information to satisfy the requirements of regulatory bodies and other interested parties at the preliminary risk assessment stage of the investigation of the site.

1.3 Sources of Information

1.3.1 Table 1 presents sources of information that have been consulted in producing this assessment.

[1] Contaminated Land Report (CLR) 11. Model Procedures for the Management of Contaminated Land: Part 1 - Procedures. September 2004.

Table 1: Sources of Information

Source	Details
Site Walkover	Information about the site was gained from visual inspection during a site walkover undertaken on 1st October 2008.
GroundSure Report	Presented in Appendix C and containing historical mapping and records of environmental information for the surrounding area.
British Geological Survey (BGS) Geological Map	Sheet No. 87, Barnsley, 1:50,000, solid and drift edition was consulted.
Department of the Environment	The relevant Industry Profile (Coal Gasification Works) was consulted to determine the potential for ground contamination from the former site use.
Client	The Client provided plans showing the previous and proposed site layouts.

2 Findings of the Assessment

2.1 Site Location and Current Condition

2.1.1 A site walkover was carried out on the 1st October 2008. This site description is based on the observations made during the visit.

2.1.2 Photographs of the site are presented in Appendix B.

2.1.3 The site is located to the east of Edmunds Road, Worsbrough, Barnsley. It occupies an area of approximately 0.1 hectares.

2.1.4 The site is currently an area of unused overgrown land, characterised by long grass and weeds. There is an access track leading from Edmunds Road along the northern part of the site. This is made from crushed brick, concrete, sandstone and occasional slag.

2.1.5 The majority of the northern boundary is demarcated by a concrete panel fence, with the western and southern boundaries being marked by a wire mesh fence. The eastern boundary is unmarked.

2.1.6 There is a pile of vegetation in the centre of the site, presumably resulting from a site clearance.

2.1.7 The base to a sandstone block wall is visible along parts of the southern site boundary. Remnants of a brick wall or footings are visible in the north of the site, on the southern edge of the centre of the access track. There are also two remnant sections of a circular sandstone base in the south-western corner of the site.

2.2 Topography and Ground Cover

2.2.1 There is a slight gradient from north-west to south-east. The site surfacing generally comprised unmade ground with long grass, nettles and weeds. Below the vegetation, dark topsoil with occasional bricks and sandstone blocks was visible across the site.

2.3 Underground Structures and Services

2.3.1 No evidence of any underground structures or services affecting the site, except for the relict foundations observed and described above was identified during the site walkover.

2.4 Visual Evidence for Contamination Noted During the Site Walkover

2.4.1 Some blue-green discoloration of surface soils and sandstone blocks was observed locally in the south-western and south-eastern areas of the site. This is potentially indicative of gas works purifier wastes.

2.4.2 No other visual evidence for ground contamination was noted during the site walkover.

2.5 Current Surrounding Land Use

2.5.1 Land use surrounding the site is detailed in Table 2 which also describes surrounding land uses where it is considered that they may influence the contamination potential of the site.

Table 2: Current Surrounding Land Use

Direction	Immediately Surrounding Current Land Use	Other Potentially Significant Current Land Uses
North	Public house in west, waste ground in east.	-
East	Undeveloped waste ground.	-
South	Trans Pennine Trail (footpath / cycle track).	Sewage treatment works located approximately 50m to south of site.
West	Undeveloped waste ground.	Worsbrough Country Park located approximately 50m to south-east.

2.6 Historical Land Use

2.6.1 Historical Ordnance Survey (OS) mapping was obtained by commissioning a GroundSure report for the site. The historical maps are presented in Appendix C. A description of the historical use of the site is presented in Table 3 which also describes surrounding land uses where it is considered that they may influence the contamination potential of the site.

Table 3: Historical Use of the Site and Surrounding Land

Map Dates	Land use within the site boundary	Potentially significant surrounding land use
1891 – 1892	-	Edmunds Main Colliery is shown 250m to the south. On the 1892 edition, this is shown as being disused.
1891 – 1966	The site is shown as part of a Gas Works. There is a gas holder partly located in the western part of the site, with other unnamed buildings in the eastern and northern parts of the site. From 1938 onwards, the gas holder is not shown. Throughout the period of the gasworks, there are minor modifications to the site layout.	-
1891 – 1951	-	Unnamed buildings, probably associated with the Gas Works, are shown immediately to the west of the site. The configuration of these changes gradually during its history.
1891 – 1961	-	A Canal is shown close to the northern boundary, running in an east-west direction. This is shown as Disused on the 1960 map edition, and has been partially narrowed and occupied by marshy ground.
1891 – 1971	-	A railway is shown approximately 20m south of the site, in an east-west direction. On the 1977 and 1990 editions maps, the railway is labelled as 'Dismantled'.
1960 - 1971	-	There is a gas holder station located approximately 50m to the north, comprising two gas holders. From 1967, one of the gasholders has been removed, with a Pond shown in its place.
1967 – 2007	The site is shown as cleared of all features.	-
1904 – 2007	-	A sewage farm is located approximately 170m to the west of the site on the 1904 map. This is constantly developed and expanded throughout its history, and is within approximately 40m of the southern site boundary on the 2007 map.

Note: All distances are approximate.

2.6.2 A historical plan showing the layout of the former gasworks on the site has been provided by the Client. The date of the plan is possibly 1904. The plan is presented as Figure A3 in Appendix A.

2.6.3 The plan shows a 40-foot diameter, 10,000 cubic foot capacity gas holder at the western end of the site. The gas holder crosses the site boundary also occupying land to the west of the site. A well is shown to the east of the gas holder. There are a house, offices and stores along the northern boundary.

2.6.4 The main gasification plant is located in the eastern end of the site. This includes a retort house with 18 retorts, purifying house, engine shed, lime shed, meter house, scrubber and fitting shop.

2.7 Geology, Hydrogeology and Hydrology

Geology

2.7.1 The geological map for the area indicates that the site is directly underlain by undifferentiated mudstones, siltstones and sandstones of the Middle Coal Measures, of Carboniferous age.

2.7.2 No drift deposits are shown to underlie the site. No geological faults are shown to affect the site.

2.7.3 The Wathwood and Two Foot Coal seams, and possibly the Abdy Coal seam, are shown to outcrop to the north of the site. The geological map indicates that the strata locally dip gently to the north-east. Therefore, the coal seams are not expected to underlie the site itself.

Hydrogeology

2.7.4 The strata underlying the site are classified by the Environment Agency as a minor aquifer, which could be important for local supplies and supplying base flow to rivers. These are variably permeable formations usually with a known or probable presence of fracturing.

2.7.5 Soils are indicated to be of an unclassified (assumed high due to the urban location of the site) leaching potential.

2.7.6 The site is not located within a Source Protection Zones (SPZ) set by the Environment Agency for the protection of a groundwater supply in the vicinity.

2.7.7 According to the GroundSure Report, there are no licensed groundwater abstraction activities within 1km of the site, and no potable groundwater abstraction activities within 2km of the site.

2.7.8 There are no discharge consents that may affect groundwater recorded within the GroundSure report.

Hydrology

2.7.9 The closest surface water course to the site is the River Dove, which is located approximately 100m to the south of the site. This flows from west to east.

2.7.10 The River Dove has Environment Agency river quality classifications of Chemical Grade C – Fairly Good and Biological Grade C – Fairly Good. The River Dove is not classified as a Main River by the Environment Agency.

2.7.11 According to the GroundSure report, there are discharge consents for storm water overflow and treated effluent to be discharged to the River Dove from the Worsbrough waste water treatment works to the south of the site.

2.8 Pollution Incidents

2.8.1 The GroundSure report does not record any pollution incidents which are related to the site, or are likely to have adversely affected the site.

2.9 Landfill Sites and Waste Management Licences

2.9.1 The GroundSure report states that there is a historical landfill site located 185m to the north-west of the site. This is listed as being for Stallite Batteries, but the types and dates of wastes deposited is not stated.

2.9.2 No other waste management activities are recorded within 250m of the site.

2.10 Sensitive Land Uses

2.10.1 According to the GroundSure report, a Local Nature Reserve, Worsbrough Country Park, is located 44m to the west of the site.

2.10.2 No other sensitive land uses such as Sites of Special Scientific Interest (SSSI) are located within 1km of the site.

2.11 Radon

2.11.1 The GroundSure Report indicates that radon protective measures are not required for new dwellings built on the site.

2.12 Flooding

2.12.1 According to the GroundSure report, the site is located within Flood Zone 1, the lowest flood risk category in the Environment Agency's categorisation system.

3 Preliminary Risk Assessment and Conceptual Model

3.1 Introduction

3.1.1 This section of the Preliminary Environmental Risk Assessment provides information about the potential source-pathway-receptor linkages which may be present at the site as a result of its current or historical uses.

3.2 Potential Contaminants and Sources

3.2.1 The following sections provide an indication of the potentially contaminative activities that have been carried out throughout the historical use of the site and the surrounding land. Likely associated contaminants are also identified. It should be noted that the activities identified may not necessarily have resulted in contamination of the ground.

On-Site

3.2.2 The site was formerly used as a gasworks. These sites are known to have a high potential for significant contamination. The Department of the Environment Industry Profile for Coal Gasification[2], indicates that that there are a wide range of potential contaminants associated with former gas works, including:

- Heavy metals;
- Polyaromatic hydrocarbons (PAH);
- Aromatic hydrocarbons (benzene, toluene, ethylbenzene and xylenes (BTEX));
- Phenols;
- Acids and alkalis;
- Petroleum hydrocarbons;
- Cyanides;
- Sulphur compounds including sulphates;
- Asbestos.

Off-Site

3.2.3 The former gas works extended beyond the site boundary to the west and south. Contaminants as listed above may also be present in these areas.

3.2.4 There is a historical landfill within 250m of the site. There is also a backfilled canal within a short distance of the site. The material used to backfill the canal is unknown. Two gas holders were also historically present within 50m of the north of the site. Underground tanks were commonly associated with gas storage. Potentially contaminative fill materials may be present within the former gas holder bases.

3.2.5 There is therefore the potential for ground gases, mainly carbon dioxide and methane, to migrate onto the site from outside.

3.3 Potential Pathways and Receptors

3.3.1 Table 4 details and discusses the potential pathways and receptors identified during the assessment for any contaminants that may be present in the ground at the site following its redevelopment for residential housing with gardens.

[2] Department of Environment, Transport and the Regions, 1995. Industry Profile: Gas works, coke works and other coal carbonisation plants.

3.3.2 It should be noted that the site workers during redevelopment may also be at risk of contact with contaminants.

Table 4: Potential Pathways and Receptors

Potential Pathway	Potential Receptor	Comment
Dermal contact with soil.	Site residents following redevelopment.	Garden areas are proposed for the houses.
Intake via direct ingestion of soil.	Site residents following redevelopment.	See above.
Intake via inhalation of vapours or dust from soil.	Site residents following redevelopment.	See above.
Intake via ingestion of site grown vegetables	Site residents following redevelopment.	See above.
Underground services.	Site residents following redevelopment.	Organic contaminants can affect water quality in unprotected plastic water mains.
Direct contact with soil.	Building foundations.	Building foundations may be affected by some contaminants.
Migration through soil/ groundwater.	Controlled waters: groundwater.	Infiltration and leaching may occur through unsurfaced areas of the site. The site is located over a minor aquifer.
	Controlled waters: surface water.	Contaminants may migrate to surface water via groundwater or the site drainage system.

3.4 Conceptual Model

3.4.1 The conceptual model for the site following development identifies all of the potential pollutant linkages based on the information collated in this Phase 1 Site Investigation, and an understanding of the way that the potential contaminants at the site are likely to behave in the environment. The conceptual model relates to all areas of the site.

3.4.2 For the purpose of the conceptual model, groups of contaminants that (in most circumstances) behave in a similar way in the environment have been chosen and linked to potential pathways and receptors. Table 5 shows the identified potential organic contaminants. Table 6 shows the identified potential inorganic contaminants. It should be noted that not all the potential contaminants have been included in the conceptual model, only those that are considered potentially significant at this stage.

Table 5: Summary Conceptual Model and Risk Assessment - Organic Contaminants

Receptors and pathways	Petroleum Hydrocarbons	BTEX, Phenol	Cyanides	PAH	Carbon Dioxide and Methane	Notes
Human health						
Dermal contact with soil	HIGH	HIGH	HIGH	HIGH	N/A	
Ingestion of soil	HIGH	HIGH	HIGH	HIGH	N/A	
Inhalation of soil dust trailed indoors	MOD	MOD	HIGH	HIGH	N/A	Direct contact of site residents with soil in garden areas is likely.
Ingestion of garden grown vegetables and attached soils	HIGH	HIGH	HIGH	HIGH	N/A	
Indoor inhalation of soil vapours and ground gases	HIGH	HIGH	LOW	HIGH	HIGH	
Underground services	HIGH	HIGH	N/A	HIGH	N/A	
Buildings						
Concrete foundations	LOW	LOW	N/A	N/A	N/A	Organic compounds can affect building materials only if they are present in very high concentrations.
Controlled Waters						
Migration to groundwater	LOW	LOW	LOW	LOW	N/A	The site is underlain by clay soils and a minor aquifer. Migration to Controlled Waters is therefore considered unlikely.
Migration to surface water	LOW	LOW	LOW	LOW	N/A	

KEY: LOW – potential risks associated with the presence of the contaminant linkage are low and further assessment / remediation is not considered necessary.

MOD – potential risks associated with the presence of the contaminant linkage are moderate and further assessment / remediation should be considered.

HIGH – potential risks associated with the presence of the contaminant linkage are high and further assessment / remediation is considered necessary.

N/A – the contaminant has no potential to affect the receptor.

Table 6: Summary Conceptual Model and Risk Assessment – Inorganic Contaminants

Receptors and pathways	Heavy metals	Sulphates	Acids / alkalis	Asbestos	Notes
Human health					
Dermal contact with soil	HIGH	LOW	MOD	N/A	
Ingestion of soil	HIGH	LOW	HIGH	N/A	
Inhalation of soil dust trailed indoors	HIGH	LOW	HIGH	HIGH	Direct contact of site residents with soil in garden areas is likely.
Ingestion of garden grown vegetables and attached soils	HIGH	LOW	HIGH	N/A	
Indoor inhalation of soil vapours and ground gases	N/A	N/A	N/A	N/A	
Underground services	N/A	N/A	N/A	N/A	
Buildings					Acids and sulphates can degrade buried concrete structures including foundations and floor slabs.
Concrete foundations	N/A	HIGH	HIGH	N/A	
Controlled Waters					The site is underlain by clay soils and a minor aquifer. Migration to Controlled Waters is therefore considered unlikely.
Migration to groundwater	LOW	LOW	LOW	N/A	
Migration to surface water	LOW	LOW	LOW	N/A	

KEY: LOW – potential risks associated with the presence of the contaminant linkage are low and further assessment / remediation is not considered necessary.

MOD – potential risks associated with the presence of the contaminant linkage are moderate and further assessment / remediation should be considered.

HIGH – potential risks associated with the presence of the contaminant linkage are high and further assessment / remediation is considered necessary.

N/A – the contaminant has no potential to affect the receptor.

4 Conclusions and Recommendations

4.1 Conclusions

4.1.1 The Desk Study and Preliminary Environmental Risk Assessment has revealed that:

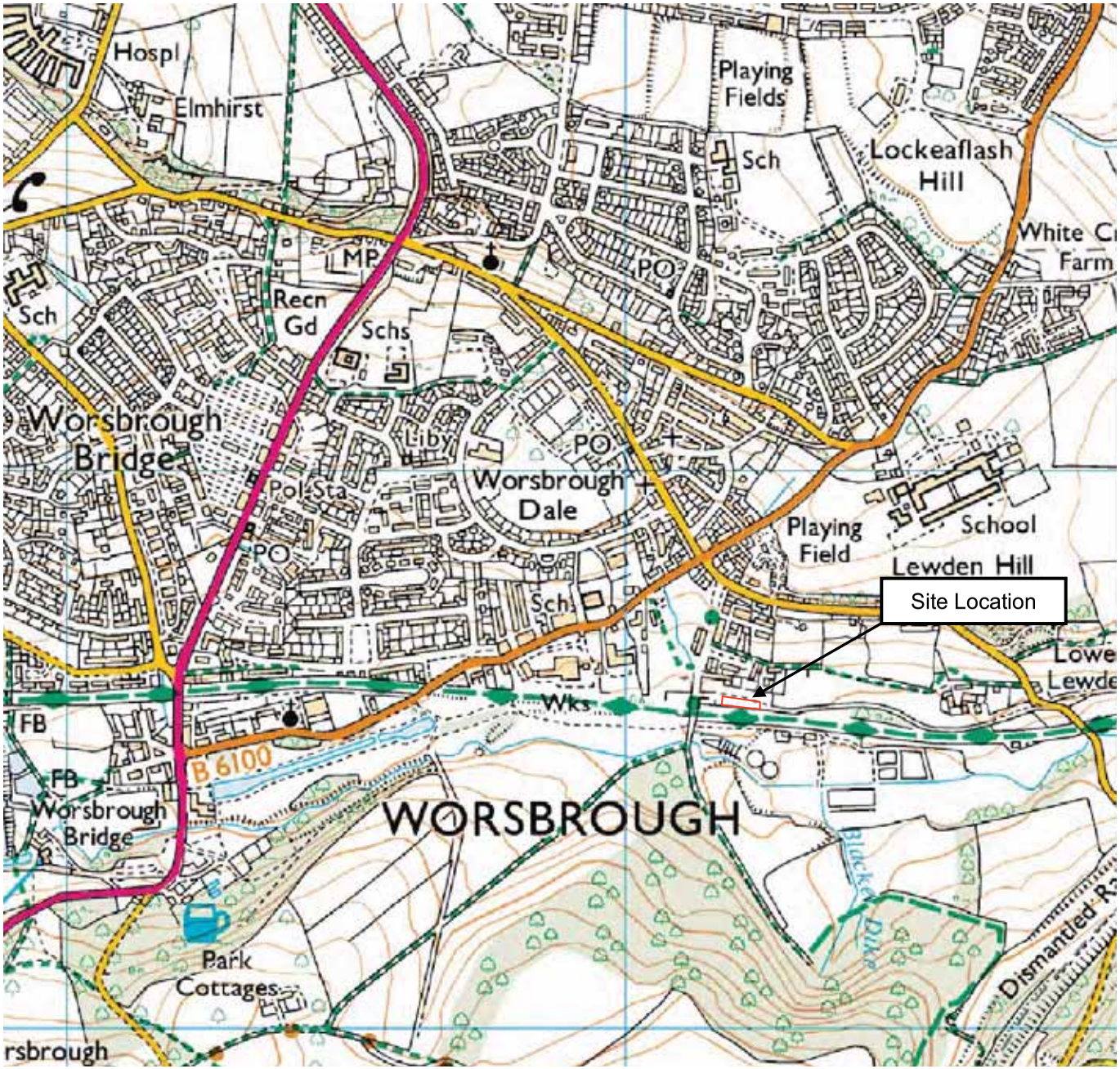
- The site was part of a gas works since before 1891 until the 1960s. Following clearance of the site, it has remained undeveloped until the present day. Some evidence of the former gas works structures is still visible on the ground surface.
- It is intended to redevelop the site for residential use.
- The former presence of gas works on the site gives rise to a high probability that a wide range of organic and inorganic contaminants are present within the ground.
- There have also been a number of potentially contaminating site uses in the area surrounding the site, most significantly a backfilled canal immediately north of the site and a landfill site within 250m.
- The site is located over undifferentiated coal measures, expected to comprise clay and mudstone. No shallow coal seams are shown to affect the site on the geological map.
- The site is not located in an area affected by radon gas.
- The site is underlain by a minor aquifer, with clay soils likely to be present. Therefore, the risk of contaminants migrating to Controlled Waters is considered low.

4.2 Recommendations

4.2.1 Due to the high probability of contaminants being present on the site, and the proposed site end use for residential occupation, a Phase 2 site investigation is considered necessary in order to produce satisfactory risk assessments and to design remedial works, if shown to be necessary.

Appendix A: Site Location and Layout Plans

Reproduced from the original Ordnance Survey Map.
With the permission of Her Majesty's Stationary Office.
Crown Copyright. Licence no.100018619



ENVIRONMENTAL CONSULTANCY
Endcliffe Holt
343 Fulwood Road
Sheffield. S10 3BQ
Tel : (0114) 2669292
Fax : (0114) 2668243
www.ecusltd.co.uk

Job: Phase 1 Site Investigation

Site: Edmunds Road, Worsbrough

Ref: 2096

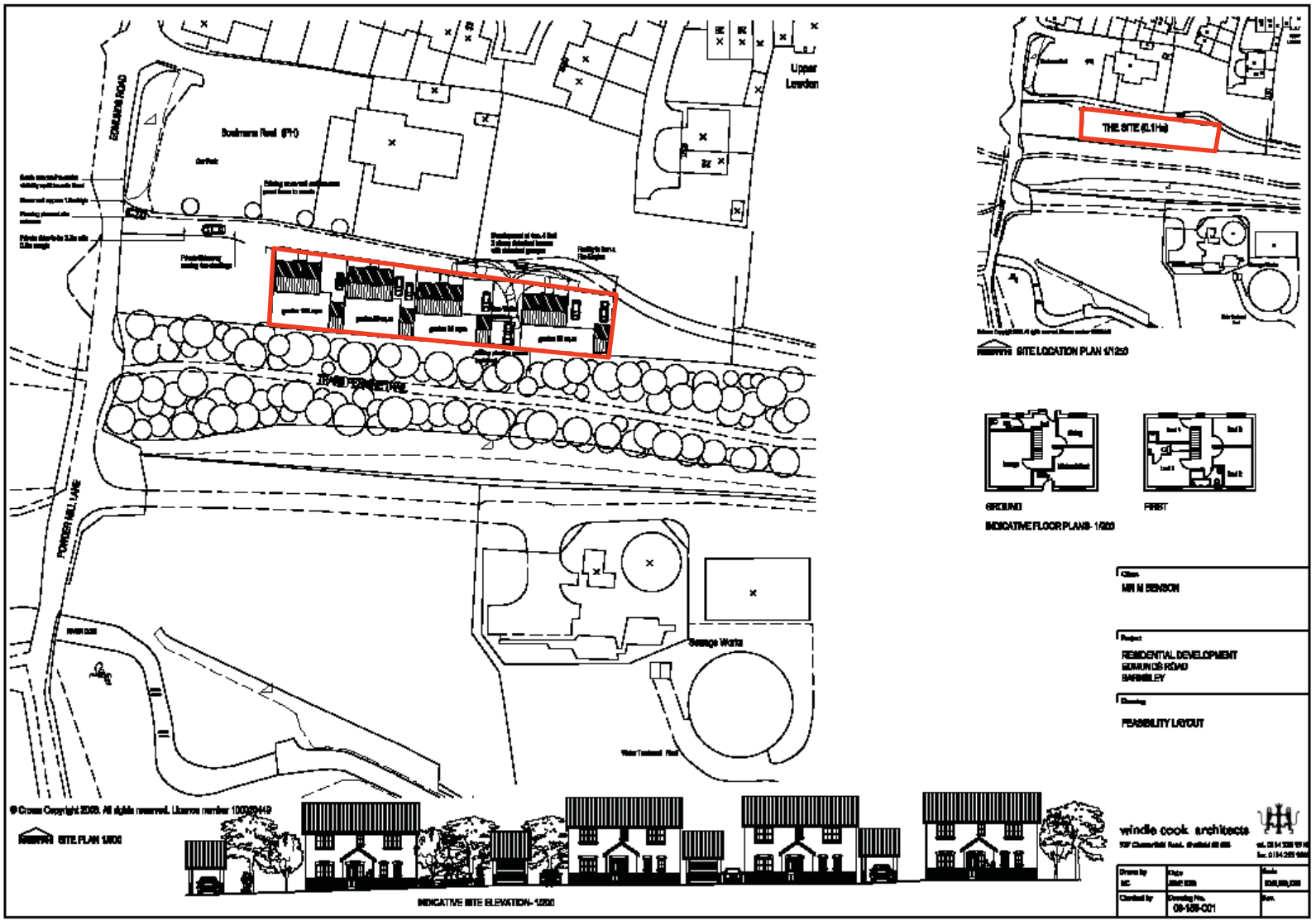
Figure A1

Site Location Plan

Scale: Not to Scale

Site Boundary

N (indicative)



ENVIRONMENTAL CONSULTANCY
Endcliffe Holt
343 Fulwood Road
Sheffield. S10 3BQ
Tel : (0114) 2669292
Fax : (0114) 2668243
www.ecusltd.co.uk

Job: Phase 1 Site Investigation

Site: Edmunds Road, Worsbrough

Ref: 2096

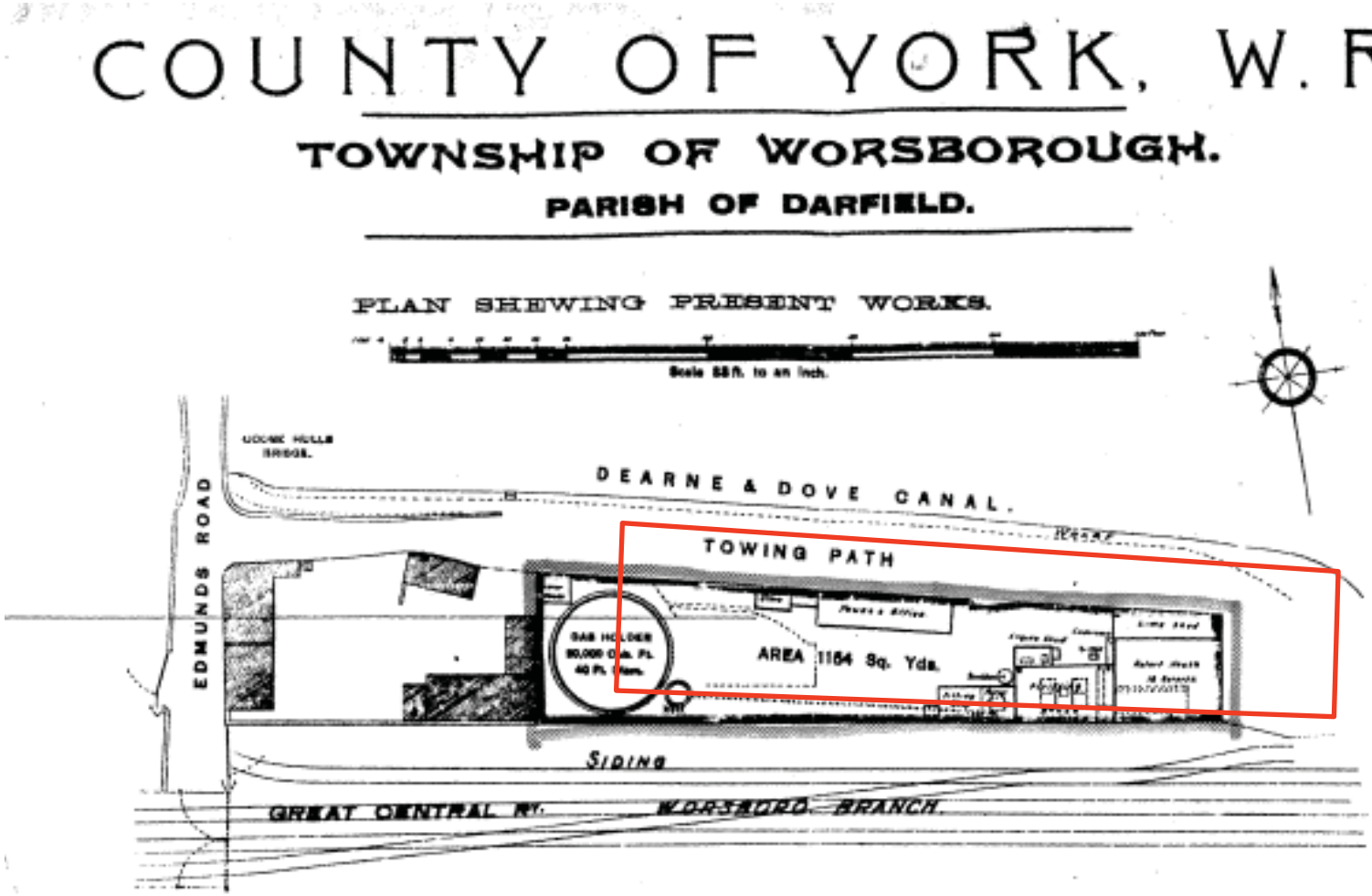
Figure A2

Plan Showing Current Site Layout and Proposed Layout

Scale: Not to Scale

Site Boundary

N (indicative)



ENVIRONMENTAL CONSULTANCY
Endcliffe Holt
343 Fulwood Road
Sheffield. S10 3BQ
Tel : (0114) 2669292
Fax : (0114) 2668243
www.ecusltd.co.uk

Job: Phase 1 Site Investigation

Site: Plan Showing Layout of Former Gas Works

Ref: 2096

Figure A3

Plan Showing Layout of Former Gas Works

Scale: Not to Scale

Approximate Site Boundary

This page has been left intentionally blank.

Appendix B: Site Photographs



Site: Edmunds Road, Worsbrough **Ref:** 2096	**Photograph 1: General view of site, facing west.**



Site: Edmunds Road, Worsbrough **Ref:** 2096	**Photograph 2: General view of northern site boundary, facing east.**

ECUS Ltd
Endcliffe Holt
343 Fulwood Road
Sheffield. S10 3BQ

Tel : (0114) 2669292
Fax : (0114) 2668243
www.ecusltd.co.uk



Site: Edmunds Road, Worsbrough **Ref:** 2096	**Photograph 3: Site Access from Edmunds Road, facing West.**



Site: Edmunds Road, Worsbrough **Ref:** 2096	**Photograph 4: Facing the western site boundary (fence) from the site access.**

ECUS Ltd
Endcliffe Holt
343 Fulwood Road
Sheffield. S10 3BQ

Tel : (0114) 2669292
Fax : (0114) 2668243
www.ecusltd.co.uk

This page has been left intentionally blank.

Appendix C: GroundSure Report

ECUS Ltd
Endcliffe Holt, 343 Fulwood Road,
Sheffield, S10 3BQ

GroundSure Reference:	HMD-260-239315
Your Reference:	2096
Report Date:	Sep 25, 2008
Report Delivery Method:	**xml**
Client Email:	adrian.grant@ecusltd.co.uk

GroundSure EnviroInsight

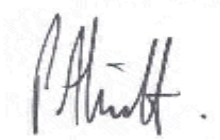
Address: **Land off Edmunds Road, Worsbrough, Barnsley**

Dear Sir/Madam,

Thank you for placing your order with GroundSure. Please find enclosed the GroundSure EnviroInsight as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 01273 819700 quoting the above GroundSure reference number.

Yours faithfully,



Chairman
Groundsure Limited

Enc.
GroundSure EnviroInsight

GroundSure EnviroInsight

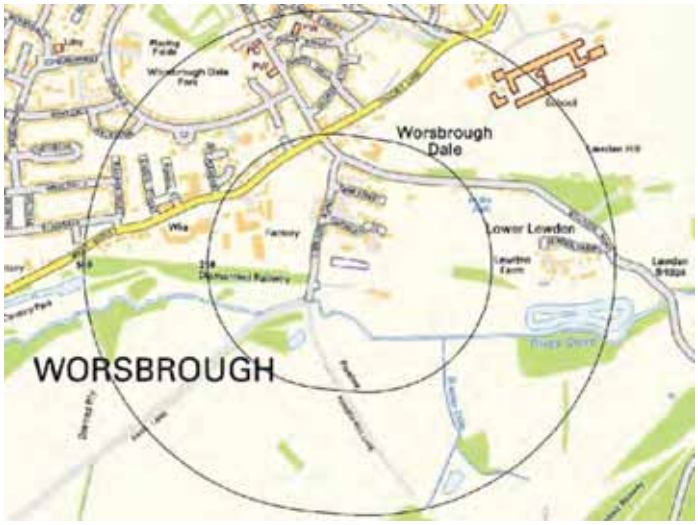
Address: Land off Edmunds Road, Worsbrough, Barnsley

Date: Sep 25, 2008

GroundSure Reference: HMD-260-239315

Your Reference: 2096

Client: ECUS Ltd



Brought to you by GroundSure

If you would like any further assistance regarding this report then please contact
GroundSure on (T) 01273 819700, [F] 01273 377902, email: info@groundsure.com

Aerial Photograph of Study Site

NW ▲ N NE

◄W



E►

SW S ▼ SE

Aerial photography supplied by Getmapping PLC.
© Copyright Getmapping PLC 2003. All Rights Reserved.

Site Name: Land off Edmunds Road, Worsbrough, Barnsley
Grid Reference: 436191,403692

Overview of Findings

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

Report Section	Number of records found within (X) m of the study site boundary					
1. Authorisations, Incidents and Registers	on-site	0-50	51-250	251-500	501-1000	1000-1500
1.1 Industrial Sites Holding Licences and/or Authorisations						
Records of IPC Authorisations	0	0	0	0	-	-
Records of IPPC Authorisations	0	2	0	0	-	-
Records of Water Industry Referrals (potentially harmful discharges to the public sewer)	0	0	0	0	-	-
Records of Red List Discharge Consents (potentially harmful discharges to controlled waters)	0	0	0	0	-	-
Records of List 1 Dangerous Substances Inventory sites	0	0	0	0	-	-
Records of List 2 Dangerous Substances Inventory sites	0	0	0	1	-	-
Records of LAPPC Authorisations	0	0	0	0	-	-
Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0	-	-
Records of Licensed Discharge Consents	0	0	5	0	-	-
Records of Planning Hazardous Substance Consents	0	0	0	0		
1.2 Records of COMAH and NIHHS sites	0	0	0	0	-	-
1.3 Environment Agency Recorded Pollution Incidents						
National Incidents Recording System, List 2	0	0	5	-	-	-
National Incidents Recording System, List 1	0	0	0	-	-	-
1.4 Sites Determined as Contaminated Land under Part IIA EPA 1990	0	0	0	0	-	-
1.5 Planning Hazardous Substance Enforcements	0	0	0	0	-	-
2. Landfill and Other Waste Sites	on-site	0-50	51-250	251-500	501-1000	1000-1500
2.1 Landfill Sites						
Environment Agency Registered landfill Sites	0	0	0	0	0	-
Landfill Data – Operational Landfill Sites	0	0	0	0	0	-
Environment Agency Historic Landfill Sites	0	0	1	0	2	2
Landfill Data – Non-Operational Landfill Sites	0	0	0	0	0	-
BGS/DoE Landfill Site Survey	0	0	0	0	0	1
GroundSure Local Authority Landfill Sites Data	0	0	0	0	0	0
2.2 Landfill and Other Waste Sites Findings						
Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	-	-
Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	-	-
Environment Agency (REGIS) Waste Sites	0	0	0	0	2	2
3. Current Land Uses	on-site	0-50	51-250	251-500	501-1000	1000-1500
3.1 Current Industrial Sites Data	0	0	11	-	-	-
3.2 Records of Petrol and Fuel Sites	0	0	0	0	-	-

3.3 Underground High Pressure Oil and Gas Pipelines	0	0	2	0	-	-

4. Geology

	Description
4.1 Are there any records of Artificial Ground and Made Ground present beneath the study site? *	No
4.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site? *	Yes
4.3 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	

Source: Scale: 1:50,000 BGS Sheet 087

* This includes an automatically generated 50m buffer zone around the site.

5. Hydrogeology and Hydrology

	on-site	0-50	51-250	251-500	501-1000	1001-2000
5.1 Environment Agency Groundwater Vulnerability and Soil Classification						
Is a Minor Aquifer present on site?	Yes	-	-	-	-	-
Is a Major Aquifer present on site?	No	-	-	-	-	-
Are there any Soil Classification records present on site?	Yes	-	-	-	-	-
5.2 Groundwater Abstraction Licences (within 1000m of the study site).	0	0	0	0	0	-
5.3 Surface Water Abstraction Licences (within 1000m of the study site).	0	0	0	1	1	-
5.4 Potable Water Abstraction Licences (within 2000m of the study site).	0	0	0	0	0	0
5.5 Are there any Source Protection Zones within 500m of the study site?			No			
5.6 River Quality						
Is there any Environment Agency information on river quality within 500m of the study site?	No	No	Yes	No	-	-
5.7 Main Rivers within 500m of the study site.	0	0	0	0	-	-
5.8 Surface water features within 250m of the study site	No	No	Yes	-	-	-

6. Flooding

6.1 Are there any Environment Agency indicative Zone 2 floodplains within 250m of the study site?	Yes
6.2 Are there any Environment Agency indicative Zone 3 floodplains within 250m of the study site?	Yes
6.3 Are there any Flood Defences within 250m of the study site?	No
6.4 Are there any areas benefiting from Flood Defences within 250m of the study site?	No
6.5 Are there any areas used for Flood Storage within 250m of the study site?	No
6.6 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	High
6.7 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?	Moderately High

7. Designated Environmentally Sensitive Sites

	on-site	0-50	51-250	251-500	501-1000	1001-1500
7.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	-	-
7.2 Records of National Nature Reserves (NNR)	0	0	0	0	-	-
7.3 Records of Local Nature Reserves (LNR)	0	1	0	0	-	-
7.4 Records of Special Areas of Conservation (SAC)	0	0	0	0	-	-
7.5 Records of Special Protection Areas (SPA)	0	0	0	0	-	-
7.6 Records of Ramsar sites	0	0	0	0	-	-
7.7 Records of World Heritage Sites	0	0	0	0	-	-
7.8 Records of Environmentally Sensitive Areas	0	0	0	0	-	-
7.9 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	-	-
7.10 Records of National Parks	0	0	0	0	-	-

7.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	-	-
7.11 Records of Nitrate Sensitive Areas	0	0	0	0	-	-
7.12 Records of Nitrate Vulnerable Zones	1	0	0	0	-	-

8. Natural Hazards

8.1 What is the maximum risk of natural ground subsidence?	Moderate

9. Mining

9.1 Are there any coal mining areas within 75m of the study site?	Yes
9.2 What is the risk of subsidence relating to shallow mining within 150m of the study site?	Low-Moderate
9.3 Are there any brine affected areas within 75m of the study site?	No

Using this Report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between GroundSure and the Client. The document contains the following sections:

1. Authorisations, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

2. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

3. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure underground oil and gas pipelines.

4. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

5. Hydrogeology and Hydrology

Provides information on groundwater vulnerability, soil leaching potential, abstraction licenses, Source Protection Zones (SPZ) and river quality. These searches are conducted using radii of up to 2000m.

6. Flooding

Provides information on surface water flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

7. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites. These searches are conducted using radii of up to 500m.

8. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence.

9. Mining

Provides information on areas of coal and shallow mining.

10. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, GroundSure provide a free Technical Helpline (01273 819700) for further information and guidance.

Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

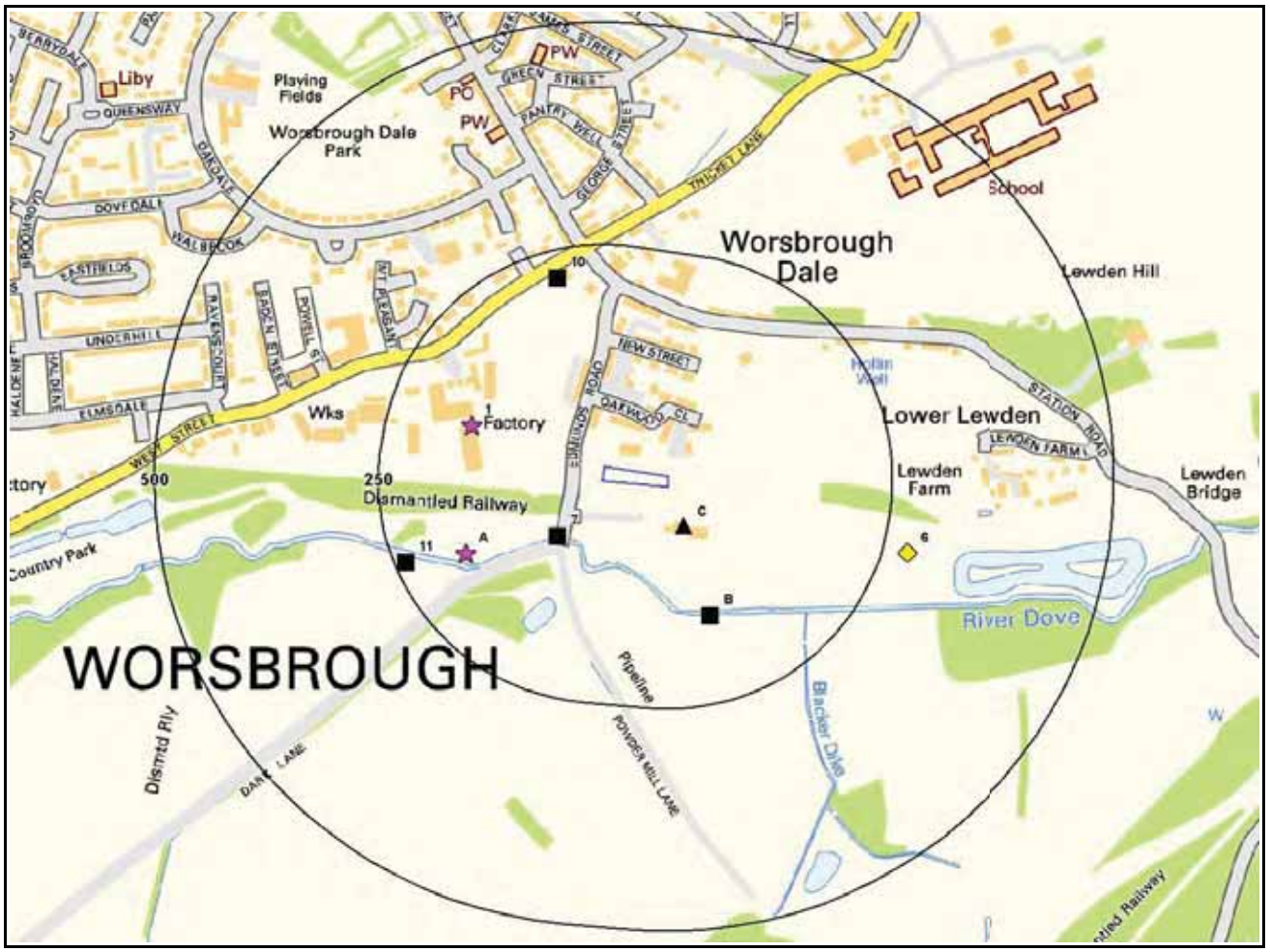
All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

1. Authorisations, Incidents and Registers Map

NW ▲ N NE

◄W E►

SW ▼ S SE



Authorisations,Incidents and Registers Legend

Enabled by Ordnance Survey
Crown Copyright. All Rights Reserved
Licence Number: 100035207

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

1.Authorisations, Incidents and Registers

1.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency and Local Authorities reveal the following information:

Records of IPC Authorisations within 500m of the study site: **0**

Database searched and no data found.

Records of IPPC Authorisations within 500m of the study site: **2**

The following IPPC Authorisations are represented as points on the Authorisations, Incidents and Registers map:

ID	Distance	Direction	NGR	Details	
12C	48.0	S	436250, 403530	Operator: Yorkshire Water Services Limited Installation Name: Worsbrough Sludge Treatment Facility Process: Other Waste Disposal; Non-hazardous Waste →50t/d By Physico-chemical Treatment	Permit Number: EP3537UK Original Permit Number: KP3136LR Issue Date: - Effective Date: - Status: Determination
13C	48.0	S	436250, 403530	Operator: Yorkshire Water Services Limited Installation Name: Worsbrough Sludge Treatment Facility Process: Other Waste Disposal; Non-hazardous Waste →50t/d By Physico-chemical Treatment	Permit Number: KP3136LR Original Permit Number: KP3136LR Issue Date: 23/2/2007 Effective Date: 23/2/2007 Status: Effective

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

Database searched and no data found.

Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site: **0**

Database searched and no data found.

Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site: **0**

Database searched and no data found.

Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site: **1**

The following List 2 Dangerous Substance Inventory Site records are represented as points on the Authorisations, Incidents and Registers map:

ID	Distance	Direction	NGR	Details	
6	277.0	E	436500, 403500	Name: Worsborough Stw Status: Not Active Receiving Water: River Dearne	Authorised Substances: -

Records of LAPPC Authorisations within 500m of the study site: **0**

Database searched and no data found.

Records of Category 3 or 4 Radioactive Substance Licences within 500m of the study site: **0**

Database searched and no data found.

Records of Licensed Discharge Consents within 500m of the study site: **5**

The following Licensed Discharge Consents records are represented as points on the Authorisations, Incidents and Registers map:

ID	Distance	Direction	NGR	Details	
7	80.0	SW	436110, 403520	Address: Edmunds Road Combined Sewer Overflw, Worsbrough Dale, Barnsley, South Yorkshire Effluent Type: Sewage Discharges - Sewer Storm Overflow - Water Company Permit Number: C4961 Permit Version: 2	Receiving Water: River Dove Status: Varied By Application - (wra 91 Sched 10 - As Amended By Env Act 1995) Issue date: - Effective Date: - Revocation Date: -
8B	152.0	S	436280, 403430	Address: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire Effluent Type: Sewage Discharges - Stw Storm Overflow/storm Tank - Water Company Permit Number: WRA7404 Permit Version: 2	Receiving Water: River Dove Status: Modified - (wra 91 Sched 10 - As Amended By Env Act 1995) Issue date: - Effective Date: 1/4/1999 Revocation Date: 30/3/2010
9B	152.0	S	436280, 403430	Address: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire Effluent Type: Sewage Discharges - Final/treated Effluent - Water Company Permit Number: WRA7404 Permit Version: 2	Receiving Water: River Dove Status: Modified - (wra 91 Sched 10 - As Amended By Env Act 1995) Issue date: - Effective Date: 1/4/1999 Revocation Date: 30/3/2010
10	219.0	N	436110, 403810	Address: West Street Worsbrough Cso, West Street (opp No.22), Worsbrough Dale, Barnsley, South Yorkshire Effluent Type: Sewage Discharges - Sewer Storm Overflow - Water Company Permit Number: WRA9239 Permit Version: 1	Receiving Water: River Dove Status: New Consent (wra 91, S88 & Sched 10 As Amended By Env Act 1995) Issue date: 3/9/2007 Effective Date: 3/9/2007 Revocation Date: -
11	238.0	SW	435940, 403490	Address: Birdwell Cso, Land Adjacent To River Dove, Dark Lane, Worsbrough, Barnsley Effluent Type: Sewage Discharges - Sewer Storm Overflow - Water Company Permit Number: WRA7252 Permit Version: 1	Receiving Water: River Dove Status: New Consent, By Application (wra 91, Section 88) Issue date: 2/1/1997 Effective Date: 2/1/1997 Revocation Date: -

Records of Planning Hazardous Substance Consents within 500m of the study site **0**

Database searched and no data found.

1.2 Dangerous or Hazardous Sites

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

Database searched and no data found.

1.3 Environment Agency Recorded Pollution Incidents

Records of National Incidents Recording System, List 2 within 250m of the study site: **5**

The following NIRS List 2 records are represented as points on the Authorisations, Incidents and Registers Map:

ID	Distance	Direction	NGR	Details	
1	156.0	W	436014,403644	Incident Date: 22/1/2003 Incident Identification: 132758 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
2A	174.0	SW	436007,403500	Incident Date: 2/4/2003 Incident Identification: 148061 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
3A	174.0	SW	436007,403500	Incident Date: 2/4/2003 Incident Identification: 148061 Pollutant: Specific Waste Materials Pollutant Description: Asbestos	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

4A	174.0	SW	436007,403500	Incident Date: 2/4/2003 Incident Identification: 148061 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
5A	174.0	SW	436007,403500	Incident Date: 2/4/2003 Incident Identification: 148061 Pollutant: Inert Materials and Wastes:Specific Waste Materials:Other Pollutant Pollutant Description: Construction and Demolition Materials and Wastes:Asbestos:Other	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

Records of National Incidents Recording System, List 1 within 250m of the study site: **0**

Database searched and no data found.

1.4 Sites Determined as Contaminated Land under Part IIA EPA 1990[1]

How many records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site? **0**

Database searched and no data found.

1.5 Planning Hazardous Substance Enforcements

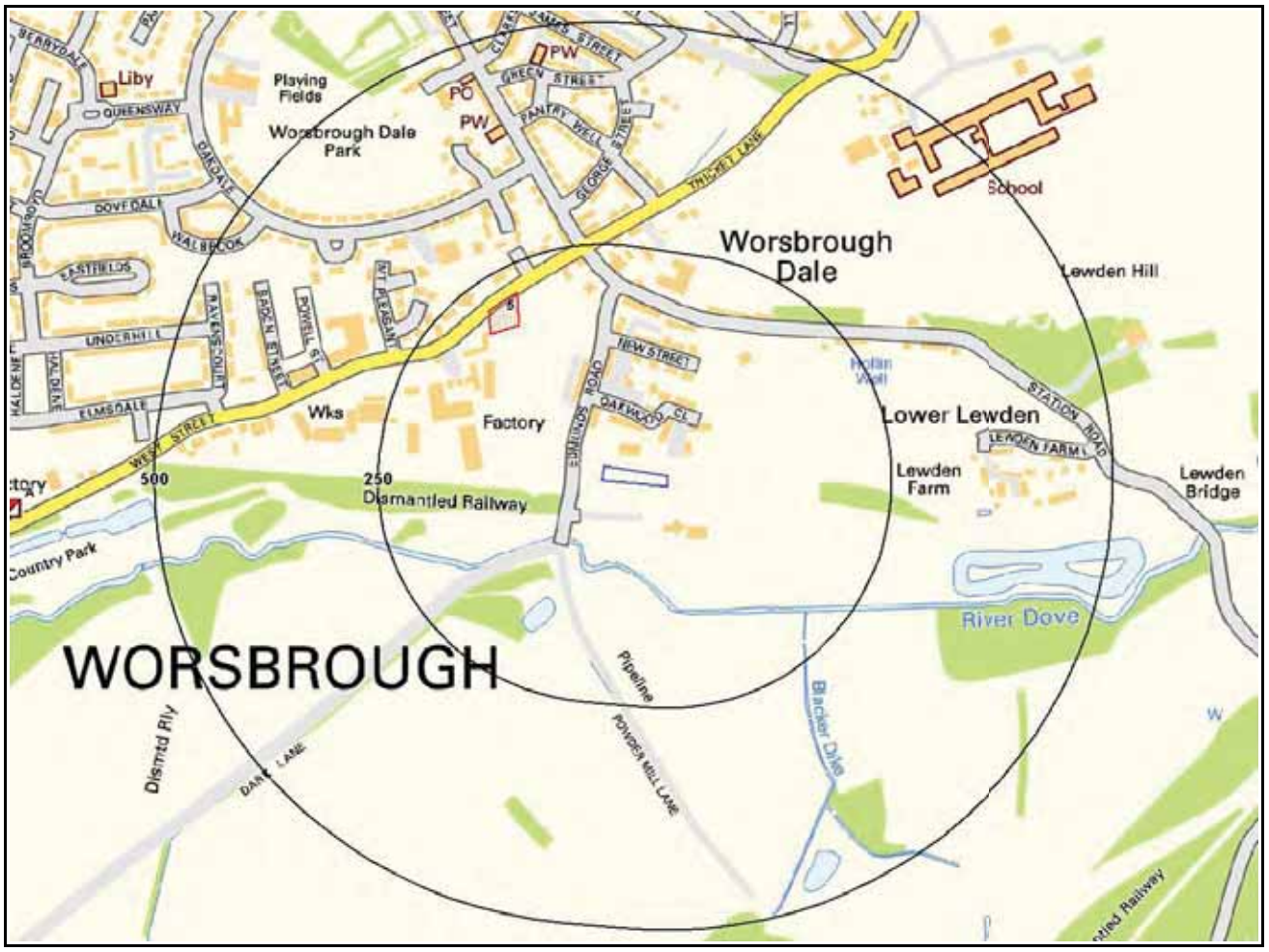
Records of planning hazardous substance enforcements within 500m of the study site: **0**

Database searched and no data found.

[1]Further information on sites that have been determined under the Contaminated Land Regime is maintained by Local Authorities under Section 78R of the Environmental Protection Act 1990. Information should be available on both sites currently determined as Contaminated Land and Special Sites.

2. Landfill and Other Waste Sites Map

NW ▲ N NE



◄W E►

SW ▼ S SE

Landfill & Other Waste Sites Legend

Enabled by Ordnance Survey
Crown Copyright. All Rights Reserved
Licence Number: 100035207



2. Landfill and Other Waste Sites

2.1 Landfill Sites

Records from Environment Agency landfill data within 1000m of the study site: **0**

Database searched and no data found.

Records of operational landfill sites sourced from Landmark within 1000m of the study site: **0**

Database searched and no data found.

Records of Environment Agency historic landfill sites within 1500m of the study site: **5**

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance	Direction	NGR	Details	
5	185.0	NW	436000,403700	Site Address: Stallite Batteries, West Street, Worsbrough Waste Licence: - Site Reference: 4400/(147) Waste Type: - Regis Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: Mr A Smith
Not shown	820.0	SE	437100,403200	Site Address: Dovecliffe Quarry, Wombwell Wood, Blacker Hill, Barnsley Waste Licence: Yes Site Reference: 4400/B2, 2B2(8), WD2 B2 Waste Type: Inert, Industrial, Commercial, Household, Liquid sludge Regis Reference: -	Licence Issue: 03-Nov-1976 Licence Surrendered: 31-Dec-1982 Licence Hold Address: - Operator: Barnsley Metropolitan Borough Council
Not shown	995.0	E	437400,403900	Site Address: C E Medlam, Swaithe House Farm, Worsbrough Dale, Barnsley, South Yorkshire Waste Licence: Yes Site Reference: WD20 B89, 60599, NE4239 Waste Type: Inert, Industrial, Commercial, Household Regis Reference: -	Licence Issue: 28-Feb-1979 Licence Surrendered: 31-Dec-1990 Licence Hold Address: - Operator: Mr C E Medlam
Not shown	1138.0	E	437500,403900	Site Address: Swaithe Tip, Warsborough Dale, Barnsley, Yorkshire Waste Licence: - Site Reference: - Waste Type: Commercial Regis Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: Worsbrough Urban District Council
Not shown	1202.0	N	435600,404700	Site Address: Highfield Farm, Knowle Road, Barnsley Waste Licence: Yes Site Reference: WD20 B311, 4400/B311, 20B311(78) Waste Type: Inert Regis Reference: -	Licence Issue: 16-Jan-1981 Licence Surrendered: Licence Hold Address: Highfield Farm, Knowle Road, Barnsley Operator: R J Norman

Records of non-operational landfill sites sourced from Landmark within 1000m of the study site: **0**

Database searched and no data found.

Records of BGS/DoE non-operational landfill sites within 1500m of the study site: **1**

The following landfill records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance	Direction	NGR	Details

Not shown	1304.0	E	437500,403900	Address: Swaithe Tip, Warsborough Dale, Barnsley, Yorks BGS Number: 2630.0	Risk: No risk to aquifer Waste Type: N/A

Records of Local Authority landfill sites within 1500m of the study site: **0**

Database searched and no data found.

2.2 Other Waste Sites

Records of operational waste treatment, transfer or disposal sites within 500m of the study site: **0**

Database searched and no data found.

Records of non-operational waste treatment, transfer or disposal sites within 500m of the study site: **0**

Database searched and no data found.

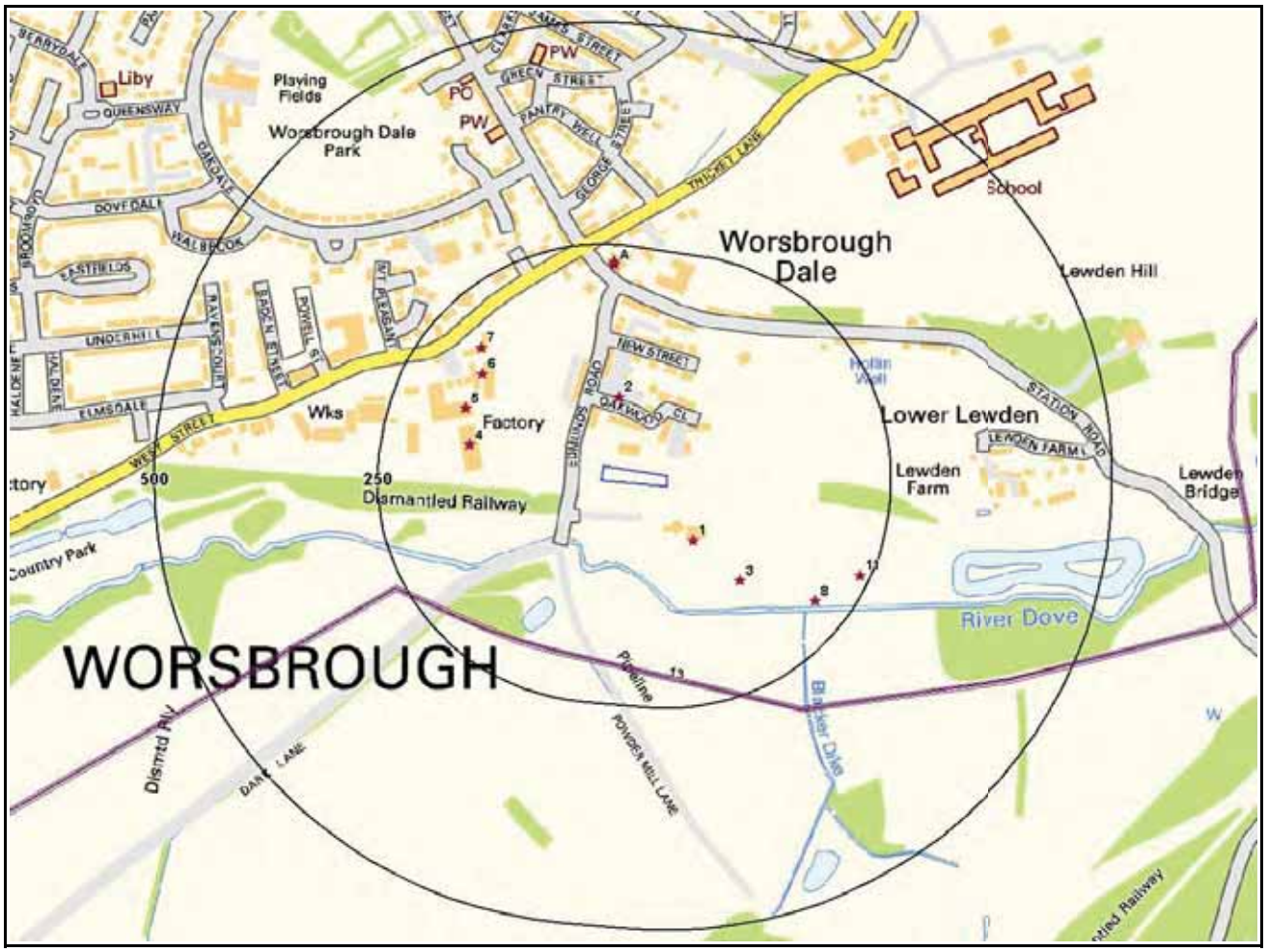
Records of Environment Agency (REGIS) waste sites within 1500m of the study site: **4**

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

ID	Distance	Direction	NGR	Details	
10A	661.0	W	435500,403550	Site Address: West Street, Worsbrough, Barnsley, S Yorks Type: Special waste transfer stations Size: ← 25000 tonnes Regis Licence Number: BDR010 Operator: South Herts Waste Management Ltd Surrendered Date: - Waste Management licence No: 60606 Annual Tonnage: 0.0	Issue Date: 18/08/1993 Expiry Date: - Effective Date: - Status: Issued Modified: - Site Name: West Street Civic Amenity Site Cancelled Date: - Correspondence Address: 48, Cardigan Road, Stanion, Northants, NN14 1BY
11A	661.0	W	435500,403550	Site Address: West Street, Worsbrough, Barnsley, S Yorks Type: Special waste transfer stations Size: ← 25000 tonnes Regis Licence Number: REG007 Operator: Regional Waste Recycling Plc Surrendered Date: - Waste Management licence No: 60606 Annual Tonnage: 5000.0	Issue Date: 18/08/1993 Expiry Date: - Effective Date: 08/12/2006 Status: Transferred Modified: - Site Name: West Street Civic Amenity Site Cancelled Date: - Correspondence Address: 2 Cecil Court, 49-55, London Road, Enfield, Middlesex, EN2 6DE
Not shown	1290.0	S	436430,402300	Site Address: Blacker Hill, Barnsley, S Yorks, S74 ORE Type: Metal recycling sites (vehicle dismantlers) Size: ← 25000 tonnes Regis Licence Number: WAR001 Operator: Warwick Ward Machinery Ltd Surrendered Date: - Waste Management licence No: 60613 Annual Tonnage: 0.0	Issue Date: 09/09/1993 Expiry Date: - Effective Date: - Status: Issued Modified: - Site Name: Warwick Ward (machinary) Ltd Cancelled Date: - Correspondence Address: Blacker Hill Sidings, Blacker Hill, Barnsley, S Yorks, S74 0RE
Not shown	1459.0	E	437600,404100	Site Address: Swaithe House Farm, Worsbrough Dale, Barnsley, S Yorks, S70 3QF Type: Household, Commercial and industrial waste landfills Size: →= 75000 tonnes Regis Licence Number: MED001 Operator: Medlam C E Surrendered Date: - Waste Management licence No: 60599 Annual Tonnage: 0.0	Issue Date: 28/02/1979 Expiry Date: - Effective Date: - Status: Issued Modified: - Site Name: C E Medlam Cancelled Date: - Correspondence Address: Swaithe House Farm, Worsbrough Dale, Barnsley, S Yorks, S70 3QF

3. Current Land Use Map

NW ▲ N NE



◄W E►

SW S ▼ SE

Current Land Use Legend

Enabled by Ordnance Survey
Crown Copyright. All Rights Reserved
Licence Number: 100035207

Site Outline

250
500
Search Buffers (m)

Current Industrial Sites

Petrol & Fuel Sites

Underground High Pressure Oil & Fuel Pipelines

3. Current Land Uses

3.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 11

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

ID	Distance	Direction	Company	Address	Activity	Category
1	68.0	SE	Sewage Works	-	Waste Storage, Processing and Disposal	Infrastructure And Facilities
2	80.0	N	Gas Governor Station	-	Gas Features	Infrastructure And Facilities
3	134.0	SE	Sludge Beds	-	Waste Storage, Processing and Disposal	Infrastructure And Facilities
4	153.0	W	Factory	-	Unspecified Works Or Factories	Industrial Features
5	168.0	NW	Factory	-	Unspecified Works Or Factories	Industrial Features
6	171.0	NW	Factory	-	Unspecified Works Or Factories	Industrial Features
7	192.0	NW	Barnsley Tyre Centre	West Street, Worsbrough, Barnsley, S70 5PG	Vehicle Parts and Accessories	Motoring
8	210.0	SE	Sewage Works	-	Waste Storage, Processing and Disposal	Infrastructure And Facilities
9A	227.0	N	Warehouse	-	Container and Storage	Transport, Storage And Delivery
10A	230.0	N	Lowerdale Autos	Thicket Lane, Worsbrough Dale, Barnsley, South Yorkshire, S70 4ST	New Vehicles	Motoring
11	238.0	SE	Sludge Beds	-	Waste Storage, Processing and Disposal	Infrastructure And Facilities

3.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: 0

Database searched and no data found.

3.3 Underground High Pressure Oil and Gas Pipelines

Records of high pressure underground pipelines within 500m of the study site: 2

The following Underground High Pressure Oil and Gas pipeline records provided by Linewatch are represented as linear features on the Current Land Use map:

ID	Distance	Direction	Address	Operator	Telephone
12	196.0	S	Including CP Cables	3m Pipelines Easement	n/a
13	199.0	S	GPSS, PO Box 7273, Ashby De La Zouch, LE65 2BY	GPSS Aldermaston pipelines	0845 070 1245

4. Geology

4.1 Artificial Ground and Made Ground

Database searched and no data found.

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

4.2 Superficial Ground and Drift Geology

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

Lex Code	Description	Rock Type
ALV-CSSG	Alluvium	Clay, Silt, Sand and Gravel

(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

4.3 Bedrock and Solid Geology

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

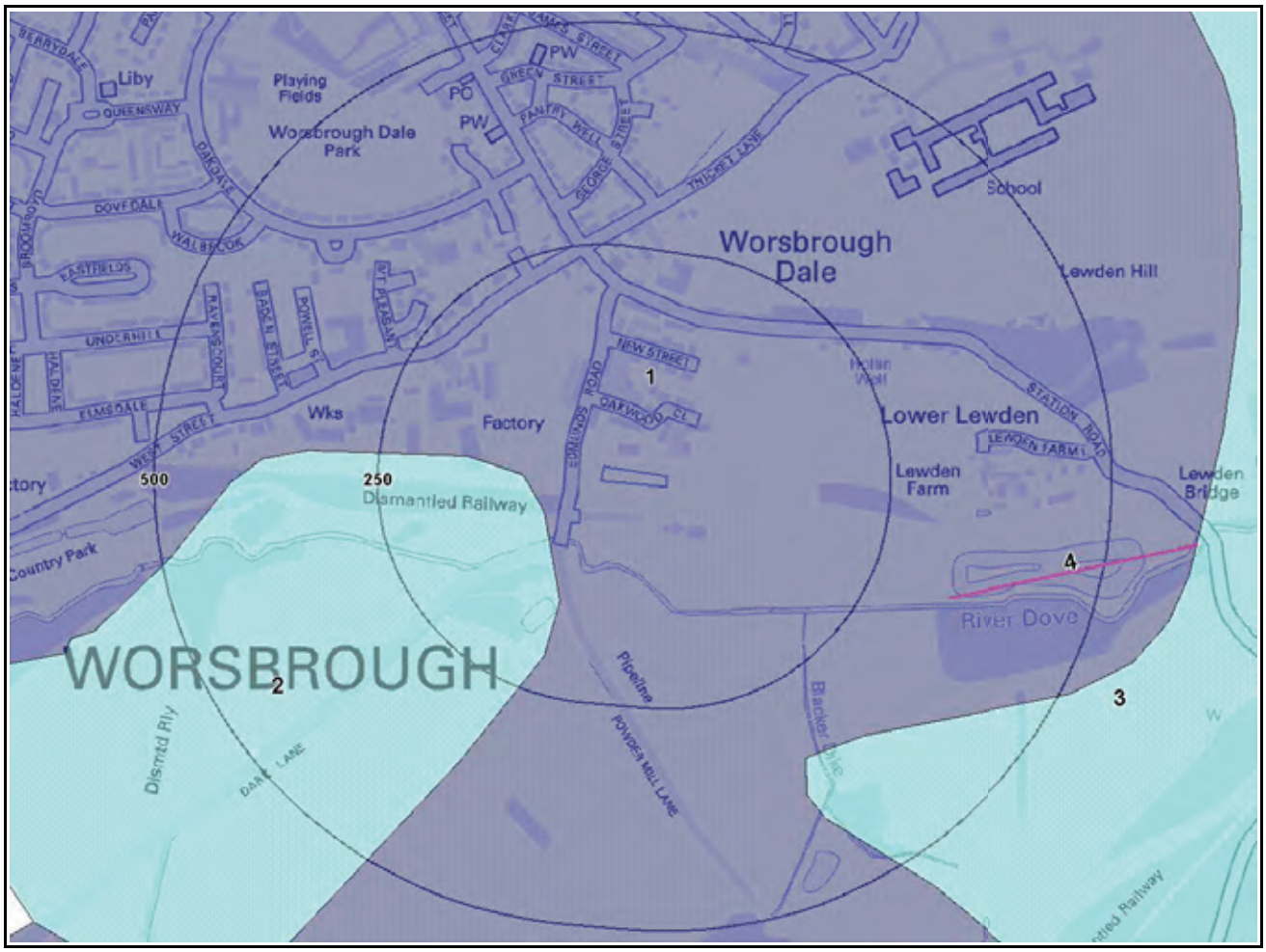
LEX Code	Description	Rock Type
PMCM-MDSS	Pennine Middle Coal Measures Formation	Mudstone, Siltstone and Sandstone

(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

For more detailed geological and ground stability data please refer to the "GroundSure GeoInsight". Available from our website.

5. Hydrogeology and Hydrology - Aquifer and Abstraction Licence Map

NW ▲ N NE

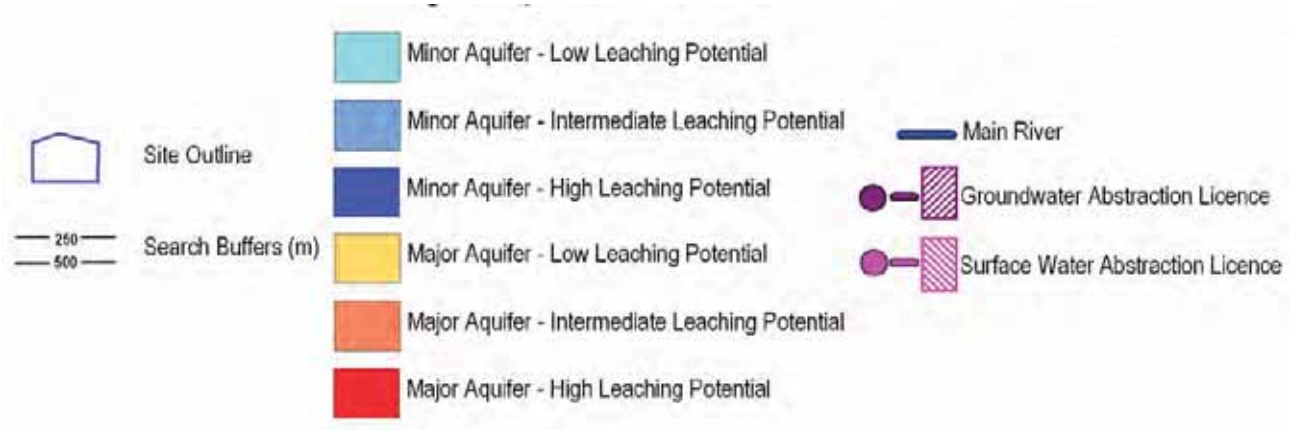


◄W E►

SW ▼ S SE

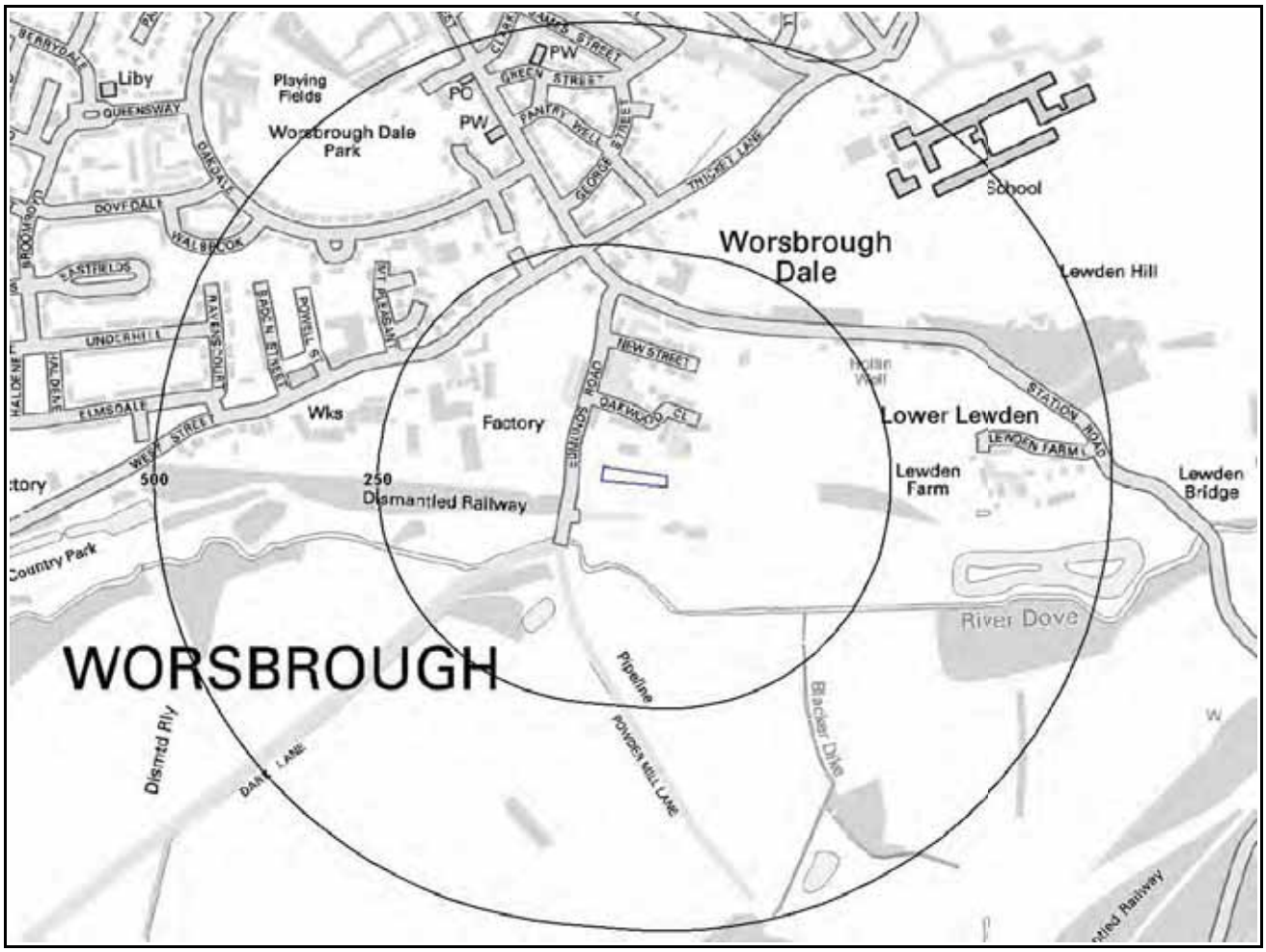
Hydrogeology and Hydrology Legend

Enabled by Ordnance Survey
Crown Copyright. All Rights Reserved
Licence Number: 100035207



5b. Hydrogeology and Hydrology - SPZ and Potable Water Abstraction Map

NW ▲ N NE



◄W E►

SW ▼ S SE

Hydrogeology and Hydrology Legend

Enabled by Ordnance Survey

Crown Copyright. All Rights Reserved
Licence Number: 100035207



5. Hydrogeology and Hydrology

5.1 Groundwater Vulnerability and Soil Classification

Records of aquifer and soil classification within 200m of the study site: **Yes**

The following groundwater information is represented as polygons on the Aquifer and Abstraction Licence Map:

ID	Distance	Direction	Classification
1	0.0	On Site	Minor Aquifer/High Leaching Potential
2	72.0	SW	Minor Aquifer/Low Leaching Potential

5.2 Groundwater Abstraction Licences

Are there any Groundwater Abstraction Licences within 1000m of the study site? **No**

Database searched and no data found.

5.3 Surface Water Abstraction Licences

Are there any Surface Water Abstraction Licences within 1000m of the study site? **Yes**

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer and Abstraction Licence Map:

ID	Distance	Direction	NGR	Details	
4	341.0	E	436550,403450	Licence No: 2/27/08/128 Details: Make-Up or Top Up Water Direct Source: Surface Water Point: Inland Water - River Dove Data Type: Line	Application No: Original Start Date: 13/9/2002 Expiry Date: 31/3/2017 Issue No: 1 Version Start Date: 13/9/2002 Version End Date: -
Not shown	998.0	W	435000,403300	Licence No: 2/27/08/129 Details: Spray Irrigation - Direct Direct Source: Surface Water Point: Inland Water - River Dove Data Type: Line	Application No: Original Start Date: 4/9/2002 Expiry Date: 31/3/2017 Issue No: 1 Version Start Date: 4/9/2002 Version End Date: -

5.4 Potable Water Abstraction Licences

Are there any Potable Water Abstraction Licences within 2000m of the study site? **No**

Database searched and no data found.

5.5 Source Protection Zones

Are there any Source Protection Zones within 500m of the study site? **No**

Database searched and no data found.

5.6 River Quality

Is there any Environment Agency information on river quality within 500m of the study site? **Yes**

The following river quality records are not represented on mapping:

Distance	Direction	River	Reach	Chemical Grade	Biological Grade
104.0	S	Dove	Worsbrough Reservoirblacker Dyke	C	C
201.0	SE	Blacker Dike	Rockingham Colliery River Dove	C	D
203.0	SE	Dove	Wombwell Stw River Dearne	C	D
203.0	SE	Dove	Blacker Dyke Wombwell Stw	B	D

5.7 Main Rivers

Are there any Main Rivers within 500m of the study site? **No**

Database searched and no data found.

5.8 Surface Water Features

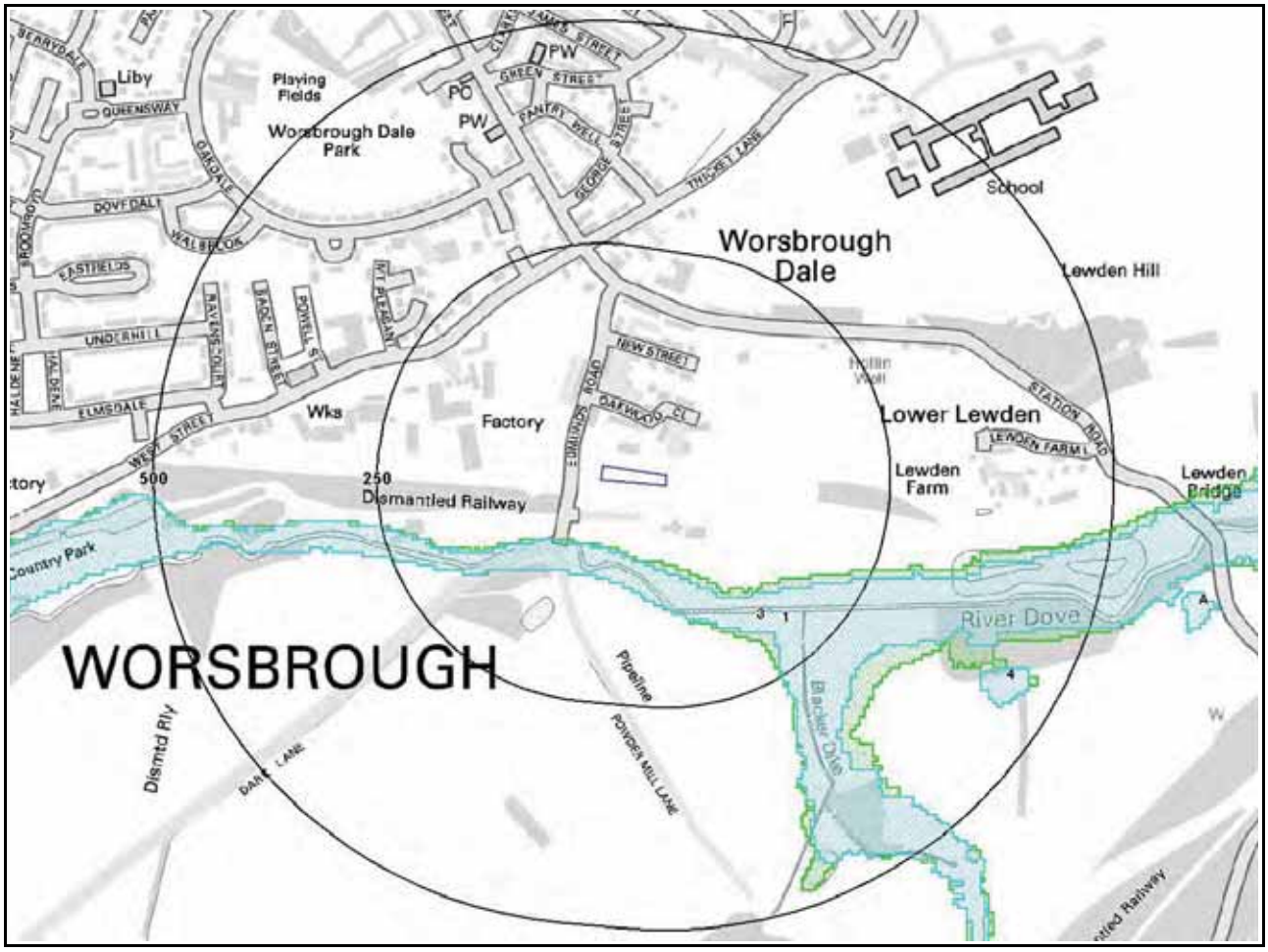
Are there any surface water features within 250m of the study site? **Yes**

The following surface water records are not represented on mapping:

Distance to Surface Water (m)	on-site	0-50	51-250
Surface water features within 250m of the study site	No	No	Yes

6. Surface Water Flood Map

NW ▲ N NE



◄W E►

SW ▼ S SE

Surface Water Flood Legend

Enabled by Ordnance Survey

Crown Copyright. All Rights Reserved
Licence Number: 100035207

Site Outline

250
500
Search Buffers (m)

Zone 2 Floodplain

Zone 3 Floodplain

Flood Storage Area

Area Benefiting from Flood Defences

Flood Defences

6. Flooding

6.1 Zone 2 Flooding

Zone 2 floodplain estimates the annual probability of flooding as one in one thousand (0.1%) or greater from rivers and the sea but less than 1% from rivers or 0.5% from the sea. Alternatively, where information is available they may show the highest known flood level.

Is the site within 250m of an Environment Agency indicative Zone 2 floodplain? **Yes**

Guidance: More detailed information may be available from the Environment Agency through their floodline (0845 988 1188) or by ordering an Environment Agency Flood Report from the local Environment Agency Office.

The following floodplain records are represented as green shading on the Flood Map:

ID	Distance	Direction	Update	Type
1	72.0	S	03-Jul-2008	Zone 2 - (Fluvial)

6.2 Zone 3 Flooding

Zone 3 estimates the annual probability of flooding as one in one hundred (1%) or greater from rivers and a one in two hundred (0.5%) or greater from the sea. Alternatively, where information is available they may show the highest known flood level.

Is the site within 250m of an Environment Agency indicative Zone 3 floodplain? **Yes**

Guidance: More detailed information may be available from the Environment Agency through their floodline (0845 988 1188) or by ordering an Environment Agency Flood Report from the local Environment Agency Office.

The following floodplain records are represented as blue shading on the Flood Map:

ID	Distance	Direction	Update	Type
3	73.0	S	03-Jul-2008	Zone 3 - (Fluvial)

6.3 Flood Defences

Are there any Flood Defences within 250m of the study site ? **No**

6.4 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site? **No**

Guidance: More detailed information may be available from the Environment Agency through their floodline (0845 988 1188) or by ordering an Environment Agency Flood Report from the local Environment Agency Office.

6.5 Areas used for Flood Storage

Are there any areas used for Flood Storage within 250m of the study site? **No**

Guidance: More detailed information may be available from the Environment Agency through their floodline (0845 988 1188) or by ordering an Environment Agency Flood Report from the local Environment Agency Office.

6.6 Groundwater Flooding Susceptibility Areas

Are there any British Geological Survey groundwater flooding susceptibility flood areas within 50m of the boundary of the study site?	**Yes**
What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions?	**High**

Guidance: Where high groundwater flooding susceptibility is indicated, this means that given the geological conditions in the area groundwater flooding hazard should be considered in all land-use planning decisions. It is recommended that other relevant information e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

6.7 Groundwater Flooding Confidence Areas

What is the British Geological Survey confidence rating in this result?	**Moderately High**

Notes:

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

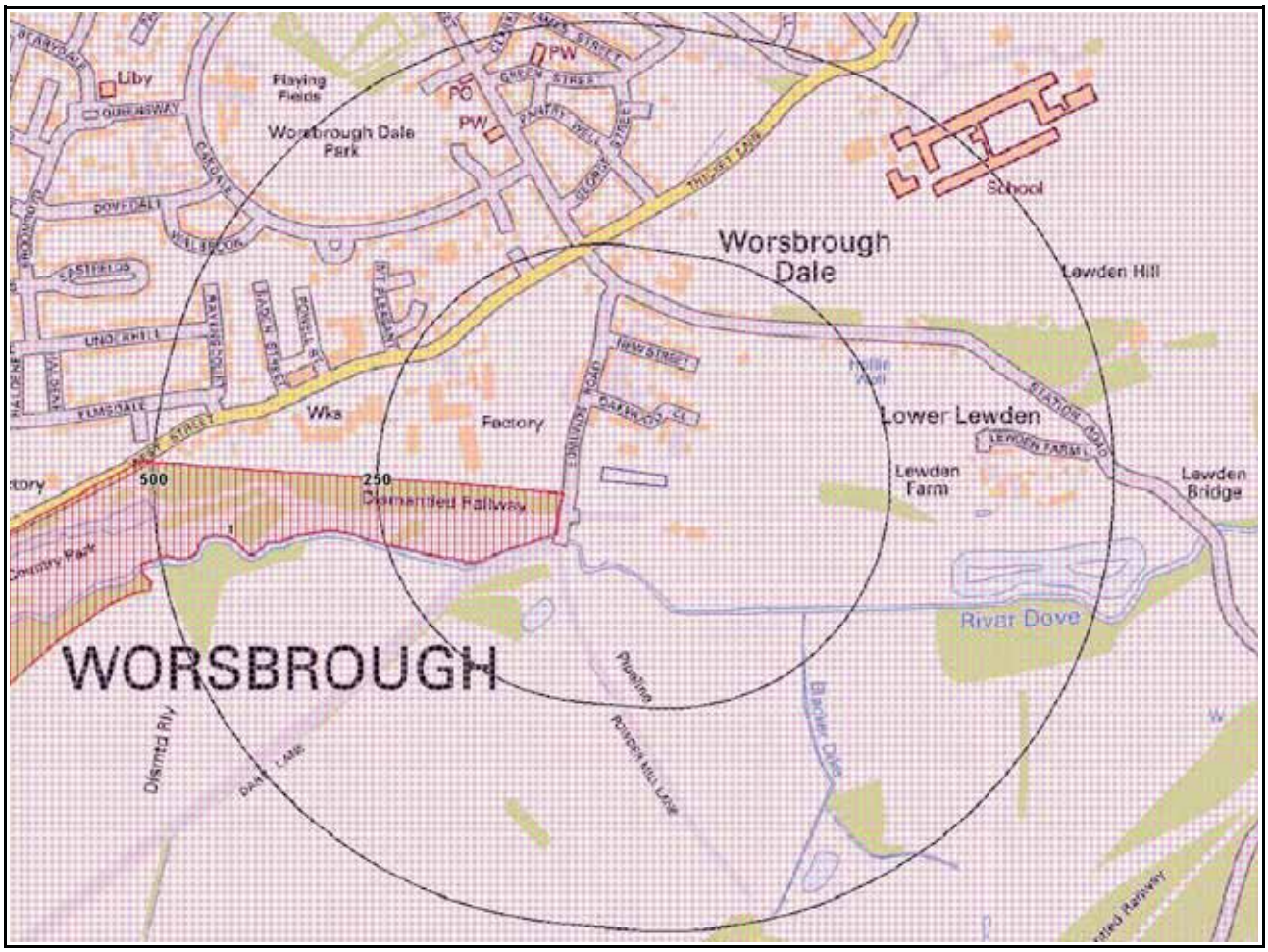
The confidence rating is on a fivefold scale - Low, Moderately Low, Moderate, Moderately High and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in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

7.Designated Environmentally Sensitive Sites Map

NW ▲ N NE

◄W E►

SW ▼ S SE



Designated Environmentally Sensitive Sites Legend

Enabled by Ordnance Survey

Crown Copyright. All Rights Reserved
Licence Number: 100035207

Site Outline

250
500
Search Buffers (m)

SAC
SSSI
NNR
World Heritage Sites
SPA
Ramsar
LNR
Environmentally Sensitive Areas
Areas of Outstanding Natural Beauty
Nitrate Vulnerable Zones
Nitrate Sensitive Areas
National Parks

7.Designated Environmentally Sensitive Sites

Presence of Designated Environmentally Sensitive Sites within 500m of the study site? **Yes**

Records of Sites of Special Scientific Interest (SSSI) within 500m of the study site: **0**

Database searched and no data found.

Records of National Nature Reserves (NNR) within 500m of the study site: **0**

Database searched and no data found.

Records of Special Areas of Conservation (SAC) within 500m of the study site: **0**

Database searched and no data found.

Records of Special Protection Areas (SPA) within 500m of the study site: **0**

Database searched and no data found.

Records of Ramsar sites within 500m of the study site: **0**

Database searched and no data found.

Records of Local Nature Reserves (LNR) within 500m of the study site: **1**

The following Local Nature Reserve (LNR) records provided by Natural England/Countryside Council for Wales and Scottish Natural Heritage are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance	Direction	LNR Name	Data Source
1	44.0	W	Worsborough Country Park	Natural England

Records of World Heritage Sites within 500m of the study site: **0**

Database searched and no data found.

Records of Environmentally Sensitive Areas within 500m of the study site: **0**

Database searched and no data found.

Records of Areas of Outstanding Natural Beauty (AONB) within 500m of the study site: **0**

Database searched and no data found.

Records of National Parks (NP) within 500m of the study site: **0**

Database searched and no data found.

Records of Nitrate Sensitive Areas within 500m of the study site: **0**

Database searched and no data found.

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

ID	Distance	Direction	NVZ Name	Data Source
2	0.0	On Site	No place name provided	DEFRA

8. Natural Hazards Findings

8.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information, please obtain a GroundSure GeoInsight. Available from our website. The following information has been found:

8.1.1 Shrink Swell

What is the maximum Shrink-Swell* hazard rating identified on the study site? **Very Low**

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

Hazard
Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

8.1.2 Landslides

What is the maximum Landslide* hazard rating identified on the study site? **Low**

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

Hazard
Possibility of slope instability problems after major changes in ground conditions. Consideration should be given to stability if changes to drainage or excavations take place. Possible increase in construction cost to reduce potential slope stability problems. Existing property – no significant increase in insurance risk due to natural slope instability problems.

8.1.3 Soluble Rocks

What is the maximum Soluble Rocks* hazard rating identified on the study site? **Null - Negligible**

Database searched and no data found.

8.1.4 Compressible Ground

What is the maximum Compressible Ground* hazard rating identified on the study site? **Moderate**

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

Hazard
Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build – consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property –possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.

8.1.5 Collapsible Rocks

What is the maximum Collapsible Rocks* hazard rating identified on the study site? **Null - Negligible**

Database searched and no data found.

8.1.6 Running Sand

What is the maximum Running Sand* hazard rating identified on the study site? **Low**

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

Hazard
Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build – consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property – no significant increase in insurance risk due to running sand problems is likely.

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

9.Mining

9.1 Coal Mining

Are there any coal mining areas within 75m of the study site? **Yes**

The following coal mining information provided by the Coal Authority is not represented on Mapping:

Distance	Direction	Details
0.0	On Site	The study site is located within the specified search distance of an identified mining area. Further details concerning this can be obtained from the Coal Authority Helpline on 0845 762 6848.

9.2 Shallow Mining

What is the hazard of subsidence relating to shallow mining on-site (including a 150m buffer) ? **Low-Moderate**

Guidance: Where low-moderate potential is indicated, this means that the rocks underlying the area are of a type known to have been mined at shallow depth in some parts of the UK, and that such working may be possible in your area. In these cases it is recommended that you seek further advice from a Royal Institute Chartered Surveyor (RICS), the local Building Control Officer, or by ordering a Geological Report from the BGS. It is also recommended that you obtain a Coal Authority mining search, which will provide a comprehensive search of former mining activity, including coal mining at deeper levels.

9.3 Brine Affected Areas

Are there any brine affected areas within 75m of the study site? **No**

Database searched and no data found.

10.Contacts

GroundSure Helpline
Telephone: 01273 819700
info @ groundsure.com

British Geological Survey (England & Wales)
Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143. Fax: 0115 936 3276. Email: enquiries@bgs.ac.uk
Web: www.bgs.ac.uk
BGS Geological Hazards Reports and general geological enquiries

Environment Agency
National Customer Contact Centre
PO Box 544
Rotherham
S60 1BY
Tel: 08708 506 506
Web: www.environment-agency.gov.uk
Email: enquiries@environment-agency.gov.uk

Health Protection Agency
Chilton, Didcot, Oxon, OX11 0RQ
Tel: 01235 822622 www.hpa.org.uk/radiation
Radon measures and general radon information and guidance

The Coal Authority
200 Lichfield Lane, Mansfield, Notts NG18 4RG
Tel: 0845 762 6848. DX 716176 Mansfield 5
www.coal-authority.co.uk
Coal mining reports and related enquiries

Ordnance Survey
Romsey Road
Southampton SO16 4GU
Tel: 08456 050505

Local Authority
Authority: Barnsley Metropolitan Borough Council
Phone: 01226 770770
Web: www.barnsley.gov.uk/index.asp
Address: Town Hall, Barnsley, South Yorkshire, S70 2TA

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

Acknowledgements
This product includes map data licensed from Landmark Information Group Limited®.

© Crown Copyright 2003 and Landmark Information Group Limited® 2003. All Rights Reserved.

Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, English Nature who retain the Copyright and Intellectual Property Rights for the data.

PointX © Database Right/Copyright, Thomson Directories Limited © Copyright Link Interchange Network Limited © Database Right/Copyright and Ordnance Survey © Crown Copyright and/or Database Right. All Rights Reserved. Licence Number [03421028].
This report has been prepared in accordance with the GroundSure Ltd standard Terms and Conditions of business for work of this nature.

1 Definitions

In these conditions unless the context otherwise requires:

"Beneficiary" means the Customer or the client of the Customer for whom the Customer has procured the Services.

"Consultancy Services" mean consultancy services provided by GroundSure including, without limitation, carrying out interpretation of third party and in-house environmental data, provision of environmental consultancy advice, undertaking environmental audits and assessments, site investigation, site monitoring and related items.

"Content" means any data, database or other information contained in a Report or Mapping which is provided to GroundSure by a Data Provider.

"Contract" means the contract between GroundSure and the Customer for the performance of the Services which shall incorporate these conditions, the relevant GroundSure user guide, proposal by GroundSure and the content of any subsequent report, and any agreed amendments in accordance with condition 12.

"Customer" means the party that submits an Order or commissions GroundSure further to a written proposal for environmental consultancy services.

"Data Provider" means any third party providing Content to GroundSure.

"Data Report" means reports comprising factual data with no professional interpretation in respect of the level of likely risk and/or liability available from GroundSure.

"GroundSure" means GroundSure Limited, a company registered in England and Wales under number 03421028 and whose registered office is at Greater London House, Hampstead Road, London NW1 7EJ.

"Intellectual Property" means any patent, copyright, registered design rights, service marks, moral rights, data protection rights, know-how, trade mark or other intellectual property rights.

"Mapping" an historical map or a combination of historical maps of various ages, time periods and scales available from GroundSure;

"Order" means an order form submitted by or for the Beneficiary requiring Services from GroundSure in respect of a specified site.

"Report" means a Risk Screening or Data Report for commercial or residential property available from GroundSure relating to a site identified in the Order prepared in accordance with the specifications set out in the relevant user guide.

"Risk Screening" means one of GroundSure's risk screening reports such as GroundSure Homebuyers; GroundSure Home Environmental GroundSure SiteGuard, GroundSure Screening, GroundSure Review, GroundSure Developer Review, or any other risk screening report available from GroundSure.

"Services" means the provision of any Report, Mapping and Consultancy Services which GroundSure has agreed to carry out for the Customer/Beneficiary on these terms and conditions in respect of a site detailed in the Order.

2Scope of Services

2.1GroundSure agrees to carry out the Services in accordance with the Contract and to the extent set out therein.

2.2GroundSure shall exercise all reasonable skill, care and diligence in the performance of the Services.

2.3The Customer acknowledges that it has not relied on any statement or representation made by or on behalf of GroundSure which is not set out and expressly agreed in the Contract.

2.4Terms and conditions appearing on a Customer's order form, printed stationery or other communication, including invoices, to GroundSure, its employees, servants, agents or other representatives shall be of no effect and these terms and conditions shall prevail over all others.

2.5In the event that a Customer/Beneficiary opts to take out insurance in conjunction with or as a result of the Services, such insurance shall be subject solely to the terms of any policy issued to it in that respect and GroundSure will have no liability therefore.

3The Customer's obligations

3.1The Customer shall be solely responsible for ensuring that the Report/Mapping ordered is appropriate and suitable for the Beneficiary's needs.

3.2The Customer shall (or shall procure that the Beneficiary shall) supply to GroundSure as soon as practicable and without charge all information necessary and accurate relevant data including any specific and/or unusual environmental information relating to the site known to the Customer/Beneficiary which may pertain to the Services and shall give such assistance as GroundSure shall reasonably require in the performance of the Services (including, without limitation, access to a site, facilities and equipment as agreed in the Contract).

3.3Where Customer/Beneficiary approval or decision is required, such approval or decision shall be given or procured in reasonable time as not to delay or disrupt the performance of any other part of the Services.

3.4The Customer shall not and shall procure that the Beneficiary shall not, save as expressly permitted by these terms and conditions, re-sell, alter, add to, amend or use out of context the content of any Report, Mapping,or in respect of any service or information given by GroundSure. For the avoidance of doubt, the Customer and Beneficiary may make the Report, Mapping or GroundSure's findings available to a third party, but such third party cannot rely on the same unless expressly permitted under condition 4.

3.5The Customer is responsible for maintaining the confidentiality of its user name and password if using GroundSure's internet ordering service and accepts responsibility for all activity that occurs under such account and password.

4Reliance

4.1Upon full payment of all relevant fees and subject to the provisions of these terms and conditions, the Customer and Beneficiary are granted an irrevocable royalty-free licence to use the information contained in the Report, Mapping or in a report prepared by GroundSure in respect of or arising out of the Consultancy Services. The Services may only be used for the benefit of the Customer and those persons listed in conditions 4.2 and 4.3.

4.2 In relation to Data Reports, Mapping and Risk Screening, reliance shall be limited to the Customer, Beneficiary and subsequent first purchaser or first tenant of the site including the professional advisers and lenders of each. For the avoidance of doubt, such persons shall include any entity necessary under the Housing Act 2004 or as legally required because of the Home Information Pack.

4.3 In relation to Consultancy Services, reliance shall be limited to the Customer, Beneficiary and named parties on the GroundSure proposal and subsequent report.

4.4 No party referred to in conditions 4.2 and 4.3 shall assign any rights or obligations under these terms and conditions without the prior written consent of GroundSure. GroundSure reserves the right to charge an assignment fee which will be no higher than 15% of the original fee or £250 whichever is the highest. GroundSure may assign its rights and obligations under these terms.

4.5Save as set out in conditions 4.2 and 4.3, unless otherwise agreed in writing with GroundSure, any other party considering the information within a Report, Mapping or proposal and subsequent report in respect of Consultancy Services, including insurance underwriters, does so at their own risk and GroundSure has no legal obligations to such party unless otherwise agreed in writing.

4.6The Customer shall not and shall procure that any person (including the Beneficiary) who is provided with a copy of any Report shall not: (a) remove, suppress or modify any trade mark, copyright or other proprietary marking from the Report or Mapping; (b) create any product which is derived directly or indirectly from the data contained in the Report or Mapping; (c) combine the Report or Mapping with, or incorporate the Report or Mapping into any other information data or service; or (d) re-format or otherwise change (whether by modification, addition or enhancement) data or images contained in the Report or Mapping save to the extent that the Customer is adding its assessment to the Report or Mapping solely for the purposes of providing its services to the Beneficiary.

4.7Without prejudice to any other right or remedy available to GroundSure including without limitation any claim for infringement of copyright, breach of confidence or contract or otherwise howsoever arising if the Customer or a person to whom a Report or Mapping is provided, breaches any of the provisions of this condition 4, the Customer shall fully and effectually indemnify GroundSure and hold it harmless against any claim by any third party who may claim to have sustained injury loss or damage by reason of their reliance upon any report or document which GroundSure may have prepared for the Customer or upon the contents thereof.

5Fees and Disbursements

5.1GroundSure shall charge the Customer fees at the rate and frequency specified in the Contract together with all proper disbursements made in performing the Services. The Customer shall in addition pay all value added tax or other tax payable on such fees and disbursements in the country concerned in relation to the provision of the Services.

5.2Unless GroundSure requires prepayment, the Customer shall promptly pay all fees disbursements and other monies due to GroundSure in full without deduction, counterclaim or set off together with such Value Added Tax or equivalent local tax as may be required within 30 days from the date of GroundSure's invoice. GroundSure reserves the right to charge interest which shall accrue on a daily basis from the date of invoice until the date of payment (whether before or after judgment) at the rate of two per cent per month.

5.3In the event that the Customer disputes the amount payable in respect of GroundSure's invoice it shall notify GroundSure no later than 28 days after the date thereof that it is in dispute. In default of such notification the Customer shall be deemed to have agreed the amount thereof which shall thereupon be due and payable. As soon as reasonably practicable following receipt of any disputed invoice, a member of the management team at GroundSure shall contact the Customer and the parties shall use all reasonable endeavours to resolve the dispute.

6 Intellectual Property

6.1Unless expressly agreed in writing to the contrary GroundSure and its Data Providers (where relevant) retain all Intellectual Property rights and proprietary rights in all information, Content and data reproduced in a Report or as part of the Consultancy Services.

6.2Data Providers may enforce any breach of condition 6.1 against the Customer or Beneficiary.

7 Liability

7.1GroundSure shall not be liable to pay compensation to the Customer or any person to whom the Customer provides a copy of the Report, Mapping or results of the Consultancy Services in any circumstances whatsoever unless arising out of a breach on its part of the obligations set out in the Contract.

7.2GroundSure shall not be liable if the Services are used otherwise than as provided or referred to in these conditions

7.3Where any person is engaged whether by the Customer or by GroundSure on the Customer or Beneficiary's behalf in the performance of the Services or any part thereof GroundSure shall not be liable for acts of negligence, default or omission by such person.

7.4GroundSure makes no representation, warranties, express or implied, as to the accuracy, reliability, completeness, validity or fitness for purpose of the Content shall not be liable for any omission, error or inaccuracy in relation thereto.

7.5GroundSure shall not be liable for any inaccurate statement or risk rating in a Report which resulted from a reasonable interpretation of the Content.

7.6GroundSure shall not be liable for any indirect losses, loss of profit nor consequential loss caused by the suspension or reduction of activity on the site.

7.7 Notwithstanding anything to the contrary contained elsewhere in the Contract, and irrespective of whether multiple parties make use of the same Services, the total liability of GroundSure under or in connection with the Contract, whether in contract in tort for breach of statutory duty or otherwise shall not exceed the amount of GroundSure's insurance as provided for below.

7.8GroundSure shall maintain professional indemnity insurance in respect of its liabilities in respect of the Services (provided it is available at reasonable commercial rates) giving cover of not less than £5 million in the aggregate which amount shall first include the whole of any sum payable for death or personal injury. GroundSure shall produce evidence of such insurance if requested by the Customer. A greater level of cover may be available upon request and agreement with the Customer.

7.9The Customer shall be liable to indemnify GroundSure where any loss arises as a result of any breach on the part of the Customer of its obligations under these terms and conditions.

7.10GroundSure's liability under the Contract shall cease upon the expiry of six years from the date when the Customer/Beneficiary became aware that it may have a claim against GroundSure in respect of the Services provided always that there shall be no liability at the expiration of twelve years from the completion of the Contract.

7.11Whilst GroundSure will use all reasonable endeavours to maintain operability of its internet ordering service it will not be liable for any loss or damages caused by a delay or loss of use of such service. The Customer shall use GroundSure's internet ordering service at its own risk. GroundSure shall not be responsible for any damage to a Customer or permitted assignee's computer, software, modem, telephone or other property resulting from the use of GroundSure's internet ordering service.

7.12The Customer accepts, and shall procure that anyone who is provided with a copy of the Report accepts, that it has no claim or recourse to any Data Provider or to GroundSure in respect of the acts or omissions of such Data Providers including Content supplied by them.

7.13Nothing in these terms and conditions shall limit GroundSure's liability for causing death or personal injury through negligence or wilful default.

7.14GroundSure accepts no liability for use of any residential Reports or any data or information contained therein for development or other commercial property purposes in respect of which a commercial Report should have been obtained.

8 Remediation

8.1 For the purpose of this condition 8, 'Claimant' shall mean one of: (a) the Beneficiary, (b) the purchaser of the site from the Beneficiary or (c) the funder of (a) or (b) as applicable.

8.2 This condition 8 shall apply solely to GroundSure Homebuyers and GroundSure Home Environmental with passed rather than failed status.

8.3 GroundSure may, at its sole discretion without any admission of liability, make a contribution to the Claimant towards the costs of any clean up works required to be carried out under a notice served on a Claimant in respect of a site under Part II (A) Environmental protection Act 1990 ("Remediation Notice") on the terms of this condition 8 ("Clean up Award").

8.4 The Clean up Award:

(a) is only available once in respect of a site and to one Claimant only;(b) shall only apply where the site is a single residential dwelling house or a single residential flat within a block of flats. For the avoidance of doubt, a Clean up Award will not be considered in respect of commercial property or to any site being developed or redeveloped whether for residential purposes or otherwise; and (c) shall only apply to contamination or a pollution occurring as at or prior to the date of GroundSure Homebuyers.

8.5 The Clean up Award will not be paid in respect of any of the following, including without limitation:

(a) asbestos; (b) radioactive contamination arising directly or indirectly from or in connection with ionising radiations or contamination by radioactivity from any nuclear waste or fuel; from the combustion of nuclear fuel or the radioactive toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof; (c) naturally occurring materials or their removal except where such materials are present in excess of their natural concentration; (d) any condition caused by acts of war or an act of terrorism;(e) any condition which is known or ought reasonably to have been known to the Claimant prior to the purchase of GroundSure Homebuyers; (f) non-compliance by the Claimant or any other person with respect to the site with any statute, regulation, byelaws complaint, or notice from any regulatory authority; (g) any property belonging to or in the custody or control of the Claimant which does not form a fixed part of the site or the structure; (h)any losses incurred following a material change in use of, alteration or development of the site; or (i) financial loss in respect of loss of rental, profit, revenue, savings, business or any consequential, indirect or economic loss, damages or expenses, including the cost of temporary accommodation or business interruption.

8.6 In the event the Claimant wishes to apply for a Clean up Award, it shall notify GroundSure in writing within 3 months of the date of the Remediation Notice. The Claimant shall comply with all reasonable requirements of GroundSure with regard to the commission and conduct of the clean up works to be carried out under the Remediation Notice. In the event that the Claimant breaches this provision including, without limitation, failing to obtain GroundSure's prior written consent in respect of estimates for such works GroundSure shall not be required to pay a Clean up Award.

8.7 GroundSure shall only pay a Clean up Award where a Remediation Notice is served within 36 months of the date of GroundSure Homebuyers.

8.8 The maximum sum of any Clean up Award shall be £60,000 and shall be paid subject to the Claimant having paid to GroundSure an excess in respect of its claim of £5,000.

8.9 GroundSure reserves the right at any time to withdraw the offer of payment of a Clean up Award.

8.10 The Claimant shall take all reasonable steps to appeal such Remediation Notice and mitigate any costs incurred in connection with the remediation works required under the terms of any Remediation Notice. GroundSure reserves the right to withhold or reduce the amount of its Clean up Award in the event of a breach of this condition or an appeal is still active.

9 GroundSure right to suspend or terminate

9.1In the event that GroundSure reasonably believes that the Customer or Beneficiary as applicable has not provided the information or assistance required to enable the proper performance of the Services, GroundSure shall be entitled on fourteen days written notice to suspend all further performance of the Services until such time as any such deficiency has been made good.

9.2 GroundSure may additionally terminate the Contract immediately on written notice in the event that:

(i)the Customer shall fail to pay any sum due to GroundSure within 28 days of the due date for payment; or (ii) the Customer (being an individual) has a bankruptcy order made against him or (being a company) shall enter into liquidation whether compulsory or voluntary or have an Administration Order made against it or if a Receiver shall be appointed over the whole or any part of its property assets or undertaking or if the Customer is struck off the Register of Companies or dissolved; or(iii) the Customer being a company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 or being an individual appears unable to pay his debts within the meaning of Section 268 of the Insolvency Act 1986 or if the Customer shall enter into a composition or arrangement with the Customer's creditors or shall suffer distress or execution to be levied on his goods; or (iv)the Customer breaches any material term of the Contract (including, but not limited to, the obligations in condition 4) incapable of remedy then and in any such case GroundSure shall be entitled to a fair and reasonable amount on account of the fees due commensurate with the services performed to the date of such termination and any outstanding expenses or other disbursements that it may have incurred in respect of the Contract including without limitation equipment hire costs for the remainder of any lease, storage costs, transportation costs, labour costs or sub-contractor fees.

10 Customer's Right to Terminate and Suspend

10.1Subject to condition 11.2, the Customer may at any time after commencement of the Services by notice in writing to GroundSure require GroundSure to terminate or suspend immediately performance of all or any of the Services.

10.2 The Customer waives all and any right of cancellation it may have under the Consumer Protection (Distance Selling) Regulations 2000 (as amended) in respect of the Order of a Report/Mapping.

11 Consequences of Withdrawal, Termination or Suspension

11.1 Upon termination or any suspension of the Services, GroundSure shall take steps to bring to an end the Services in an orderly manner, vacate any site with all reasonable speed and shall deliver to the Customer/Beneficiary any property of the Customer/Beneficiary in GroundSure's possession or control.

11.2 The Customer shall pay to GroundSure all and any fees as are due in respect of the Services performed up to or in respect of such termination or suspension.

12General

12.1GroundSure and the Customer agree not to rescind or vary these terms and conditions to Ordnance Survey's or its successor's detriment without obtaining Ordnance Survey's or its successor's prior written consent.

12.2Subject to condition 12.1, GroundSure reserves the right to amend these terms and conditions. No variation to these terms shall be valid unless signed by GroundSure or made in accordance with condition 12.1.

12.3No failure on the part of GroundSure to exercise and no delay in exercising, any right, power or provision under these terms and conditions shall operate as a waiver thereof.

12.4 Save as expressly provided in conditions 6.2 and 12.5, no person other than the Customer, Beneficiary and GroundSure shall have any right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of these terms and conditions.

12.5 The Secretary of State for Communities and Local Government acting through Ordnance Survey, may enforce breach of conditions 6.1 or 12.1 of these terms and conditions against the Customer in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999.

12.6 GroundSure shall not be liable to the Customer if the provision of the Services is delayed or prevented by any circumstance which is beyond GroundSure's reasonable control including without limitation one or more of the following circumstances:

(i) the Customer or Beneficiary's failure to provide facilities, access or information; (ii)fire, storm, flood, tempest or epidemic; (iii)process shutdown; (iv) Acts of God or the public enemy; (v)riot, civil commotion or war; (vi)strikes, labour disputes or industrial action; (vii) acts or regulations of any governmental or other agency; (viii)suspension or delay of services at public registries by Data Providers; or (ix) changes in law.

12.7Any notice provided for shall be in writing and shall be deemed to be properly given if delivered by hand or sent by first class post, facsimile or by email to the address, facsimile number or email address of the relevant party as may have been notified by each party to the other for such purpose or in the absence of such notification the last known address.

12.8Such notice shall be deemed to have been received on the day of delivery if delivered by hand, facsimile or email and on the second working day after the day of posting if sent by first class post.

12.9The Contract constitutes the entire contract between the parties and shall supersede all previous arrangements between the parties.

12.10Each of the provisions of the Contract is severable and distinct from the others and if one or more provisions is or should become invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions shall not in any way be tainted or impaired.

12.11 These terms and conditions shall be governed by and construed in accordance with English law and any proceedings arising out of or connected with these terms and conditions shall be subject to the exclusive jurisdiction of the English courts.

12.12These terms and conditions were produced on 28 May 2008.



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: MasterMap

Map date: **2007**

Scale: 1:2,500

Printed at: 1:2,500



Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: National Grid

Map date: 1994

Scale: 1:1,250

Printed at: 1:2,500

Surveyed ?
Revised ?
Edition NA
Copyright NA
Levelled NA

Surveyed ?
Revised ?
Edition NA
Copyright NA
Levelled NA

Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: National Grid

Map date: 1990

Scale: 1:1,250

Printed at: 1:2,500

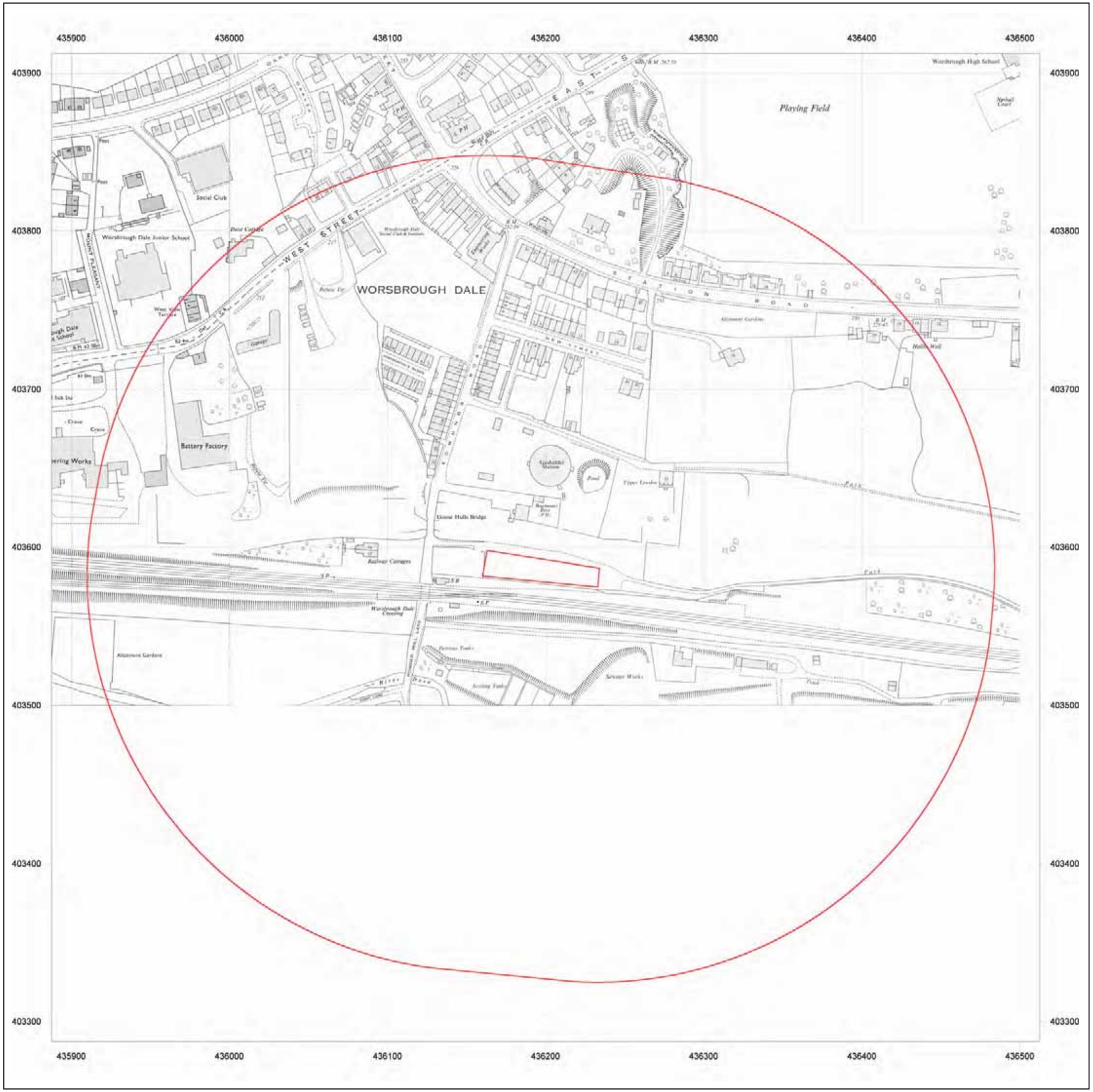
Surveyed 1963
Revised 1990
Edition NA
Copyright 1990
Levelled 1963

Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: National Grid

Map date: 1967-1971

Scale: 1:1,250

Printed at: 1:2,500

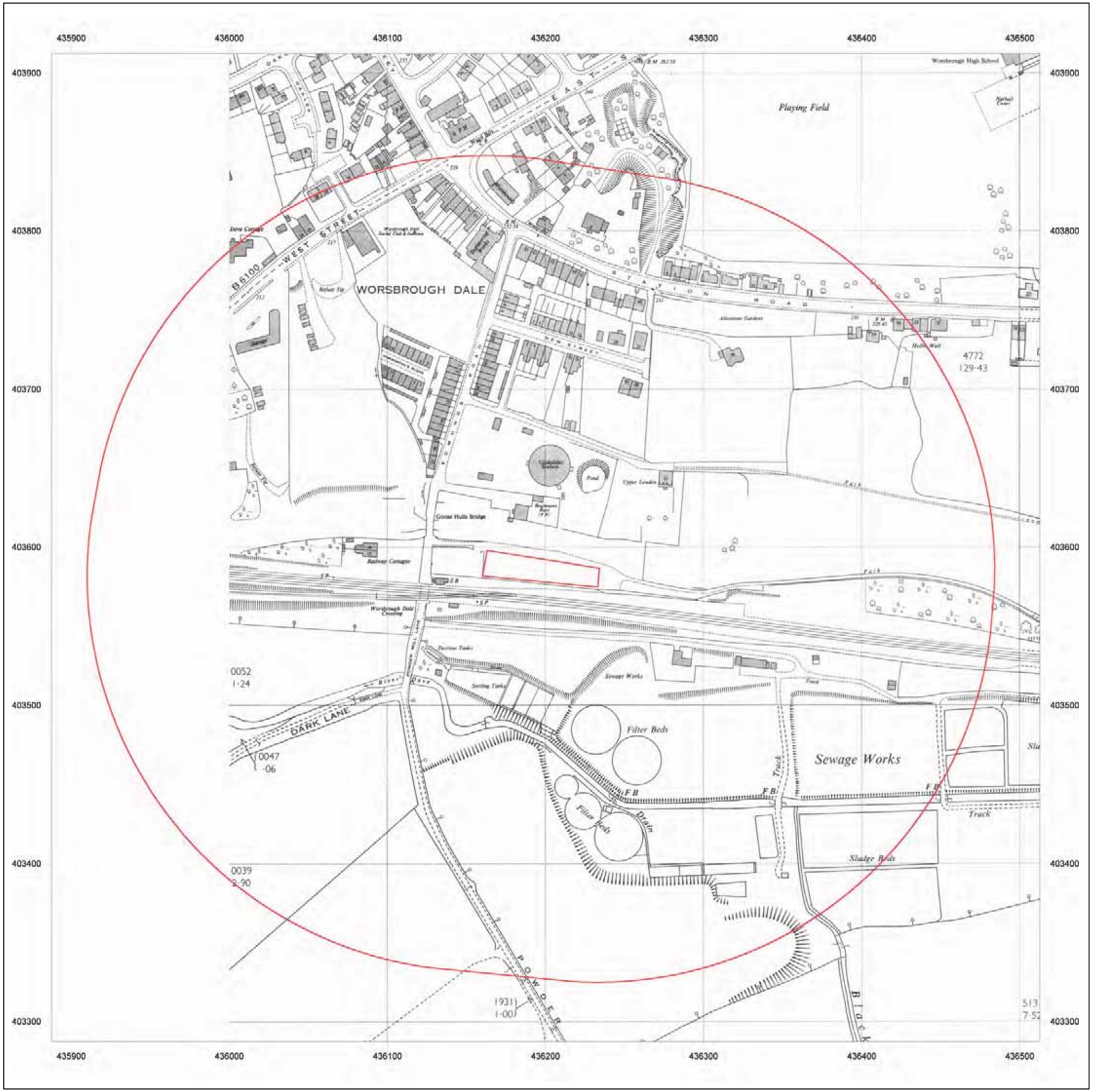
Surveyed 1959	Surveyed 1959
Revised 1970	Revised 1967
Edition NA	Edition NA
Copyright 1971	Copyright 1967
Levelled 1963	Levelled 1963

Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: National Grid

Map date: 1967

Scale: 1:2,500

Printed at: 1:2,500

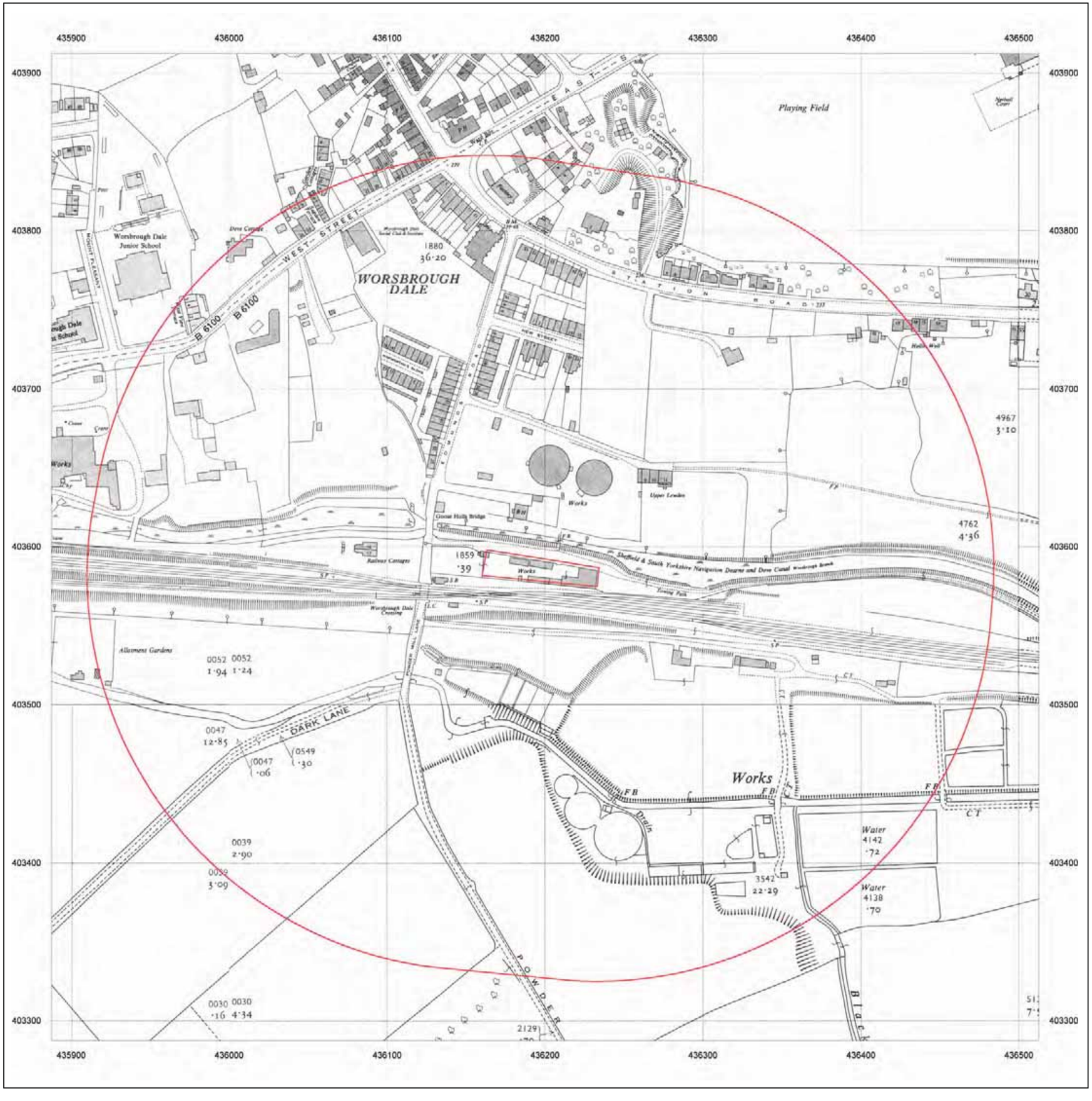
Surveyed 1967
Revised 1967
Edition NA
Copyright 1968
Levelled 1963

Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

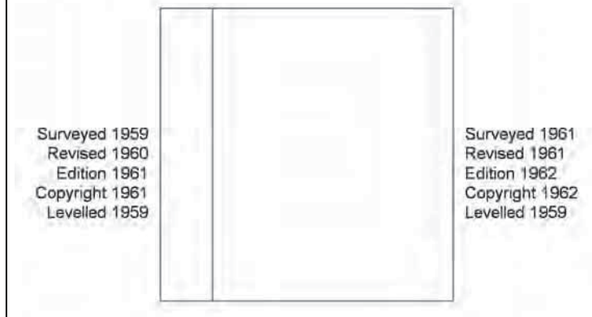
Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: National Grid

Map date: 1960-1961

Scale: 1:2,500

Printed at: 1:2,500

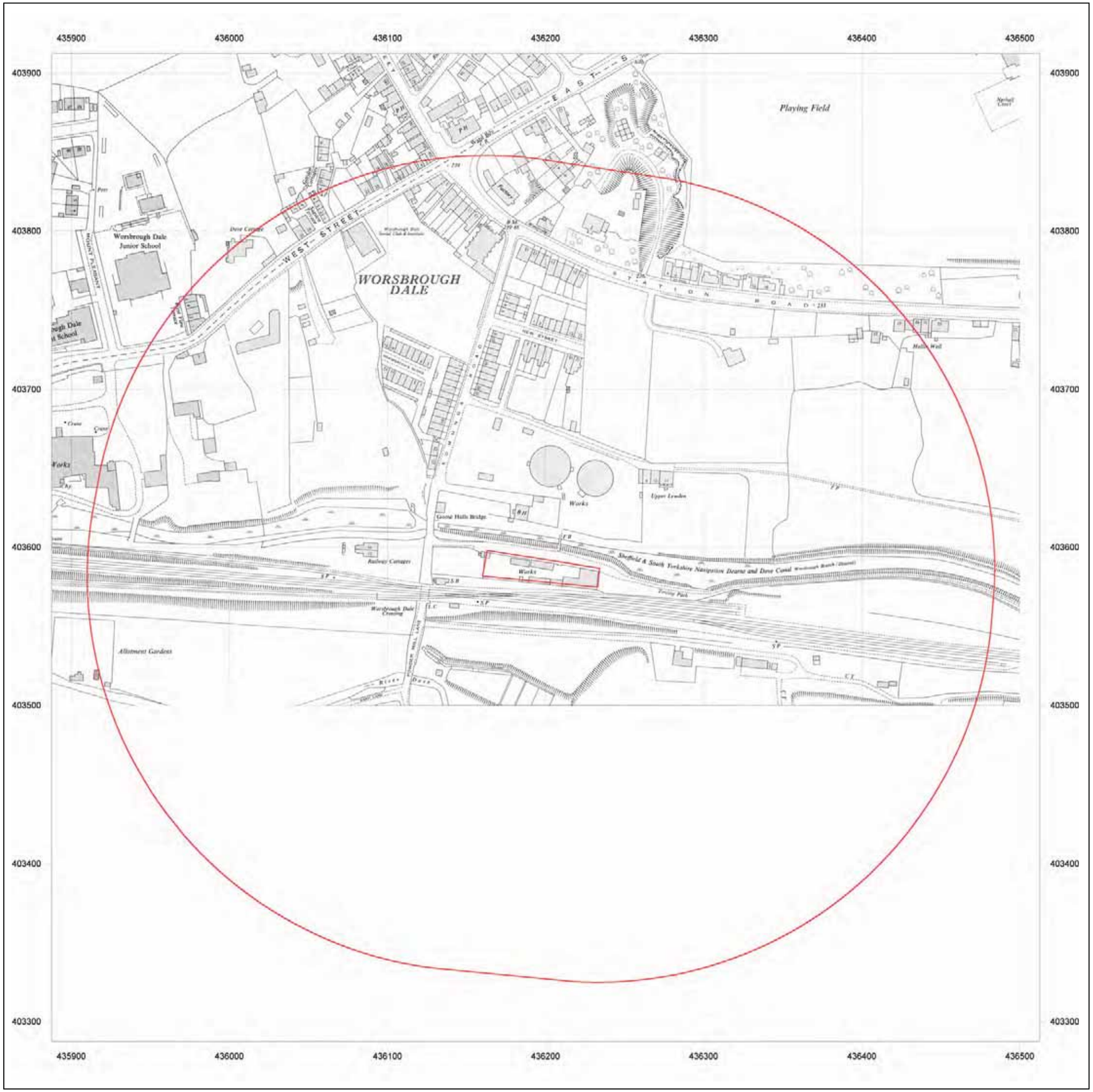


Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: National Grid

Map date: 1960

Scale: 1:1,250

Printed at: 1:2,500

Surveyed 1959
Revised 1959
Edition NA
Copyright 1960
Levelled 1930

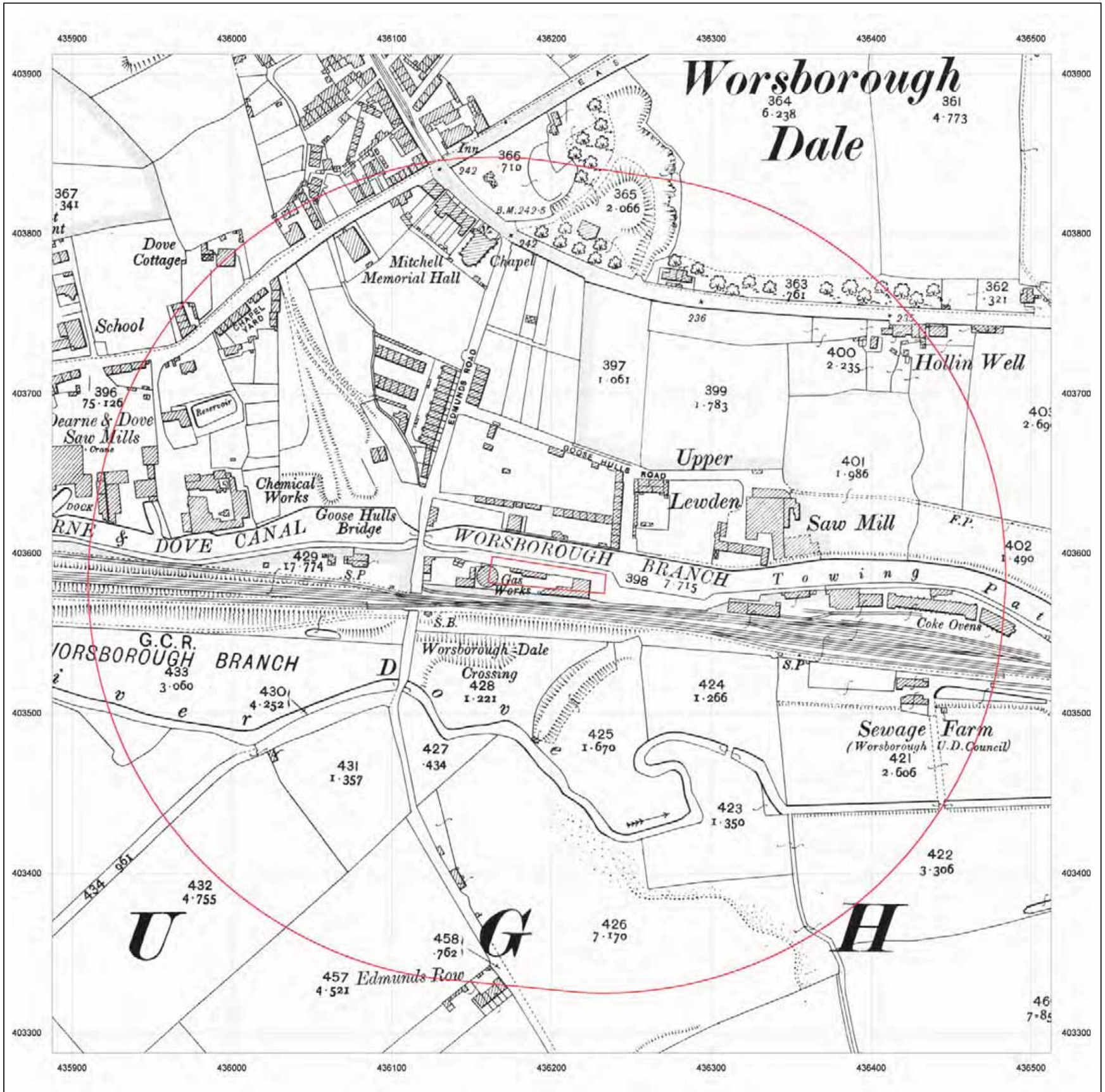
Surveyed 1959
Revised 1959
Edition NA
Copyright 1960
Levelled 1930

Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: County Series

Map date: 1906

Scale: 1:2,500

Printed at: 1:2,500

Surveyed 1906
Revised 1906
Edition NA
Copyright NA
Levelled NA

Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: County Series

Map date: 1892

Scale: 1:2,500

Printed at: 1:2,500

Surveyed 1892
Revised 1892
Edition NA
Copyright NA
Levelled NA

Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: National Grid

Map date: 2005

Scale: 1:10,000

Printed at: 1:10,000

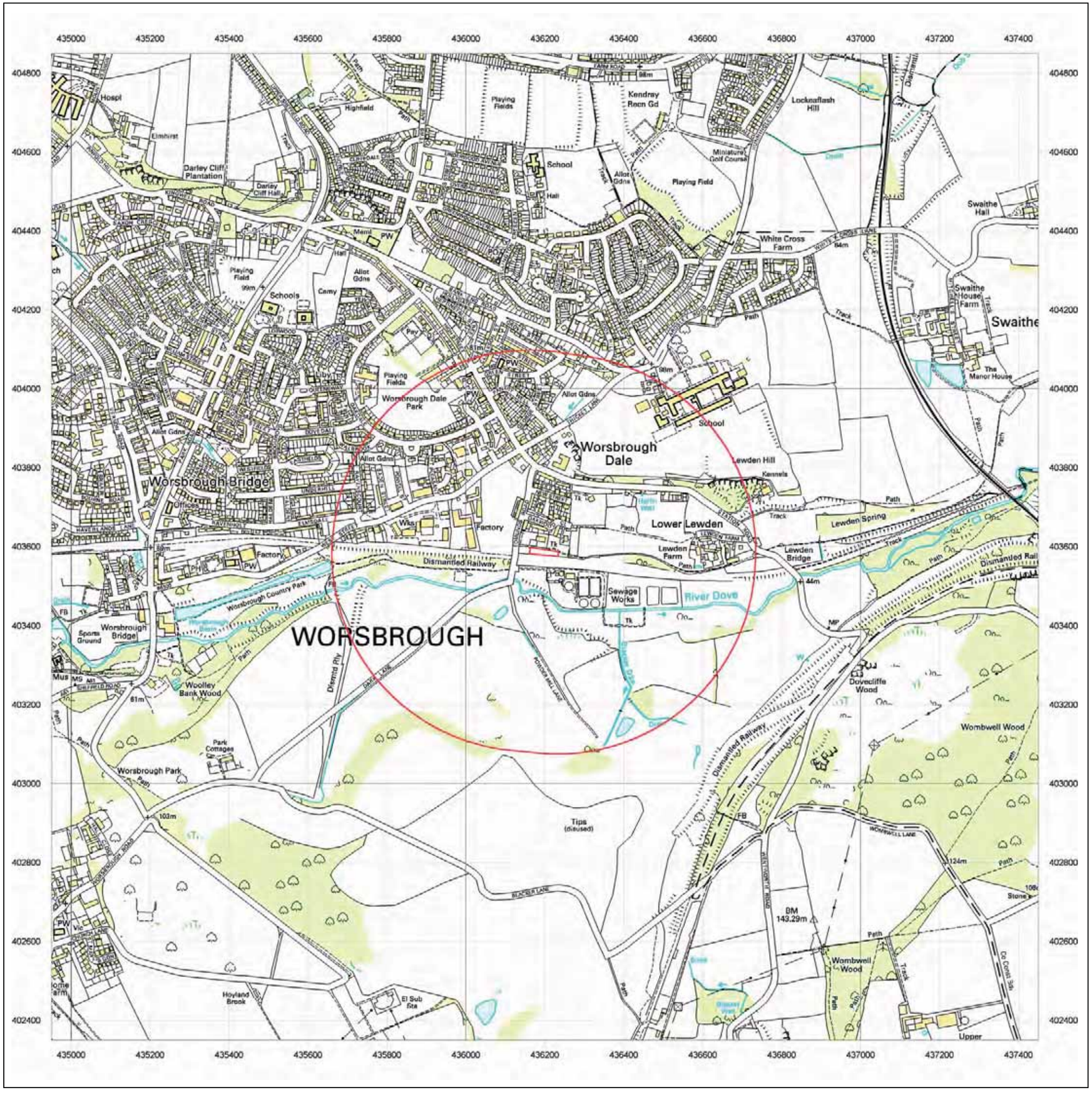


Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000

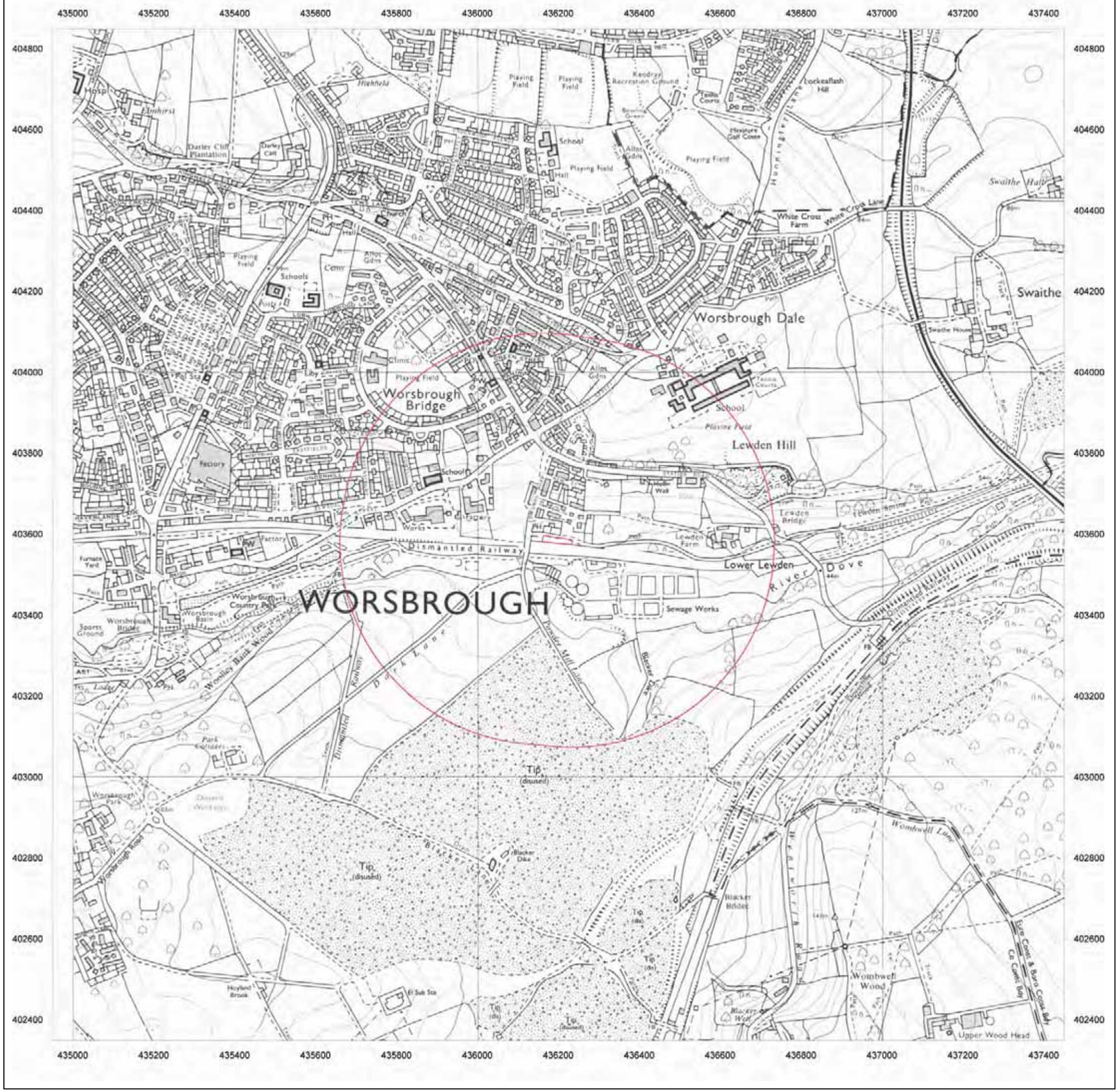


Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: National Grid

Map date: 1987

Scale: 1:10,000

Printed at: 1:10,000

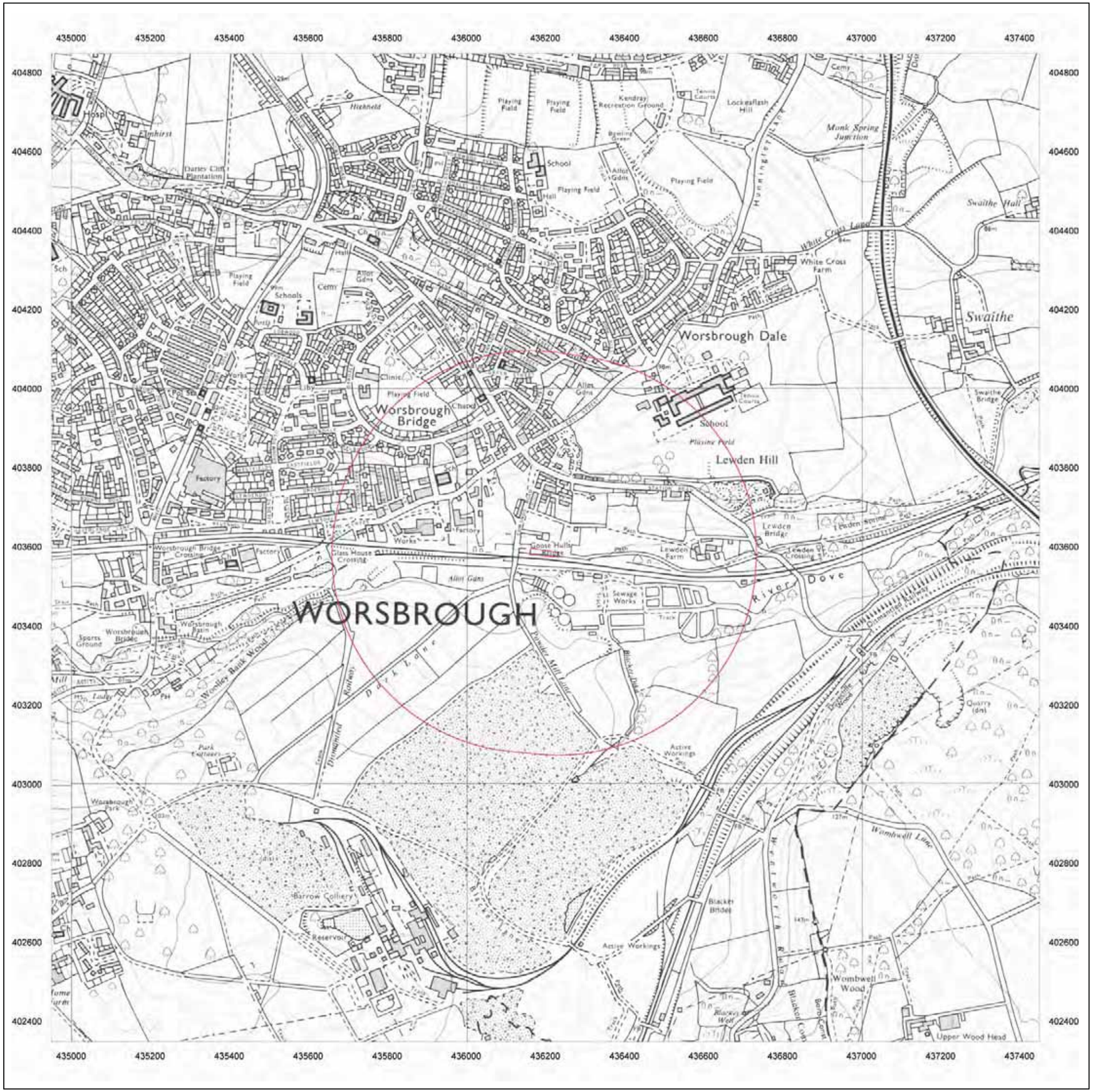
Surveyed 1986
Revised 1987
Edition NA
Copyright NA
Levelled NA

Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: National Grid

Map date: 1977

Scale: 1:10,000

Printed at: 1:10,000

Surveyed 1973
Revised 1977
Edition NA
Copyright NA
Levelled NA

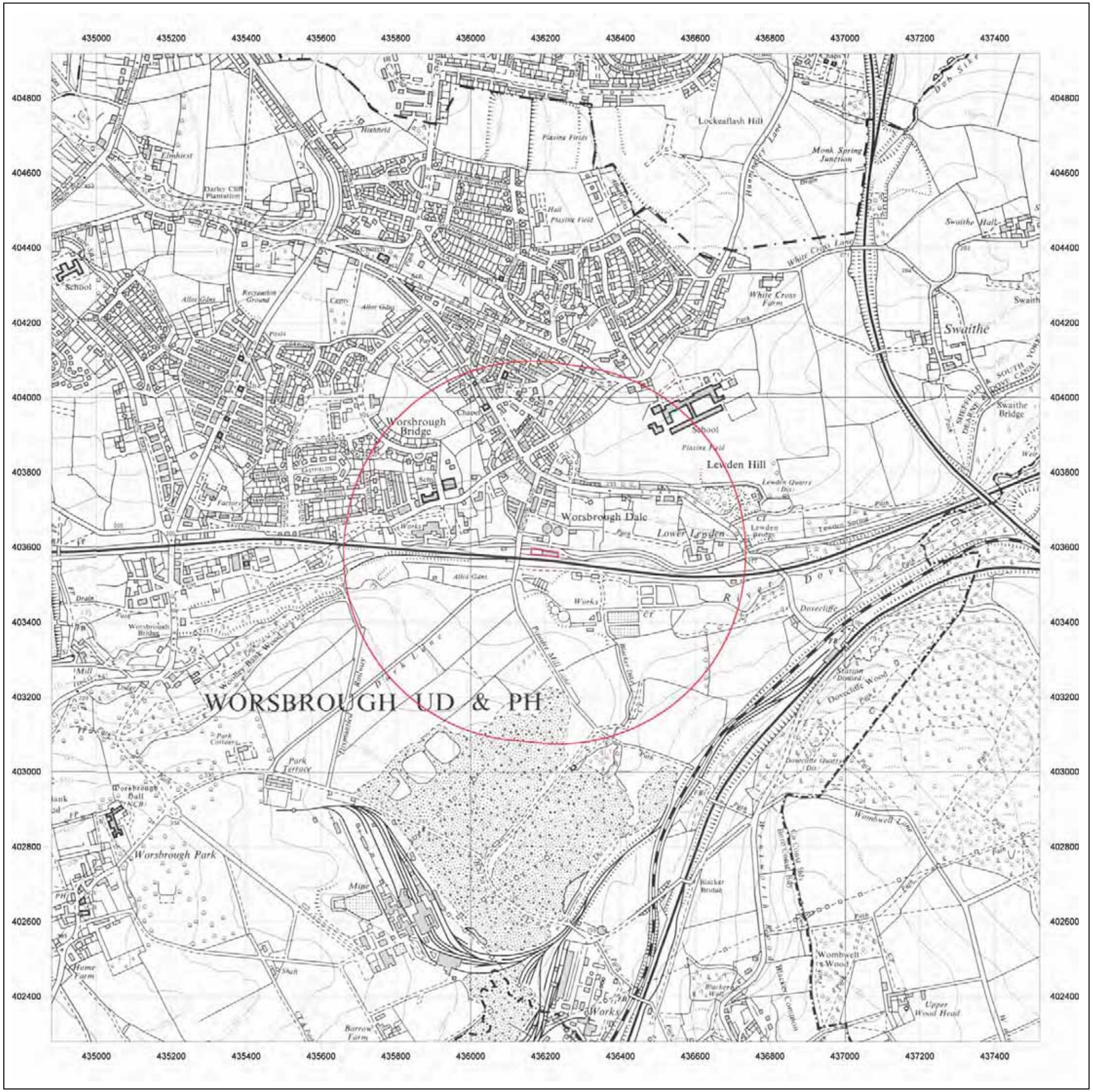
Surveyed 1976
Revised 1977
Edition NA
Copyright NA
Levelled NA

Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

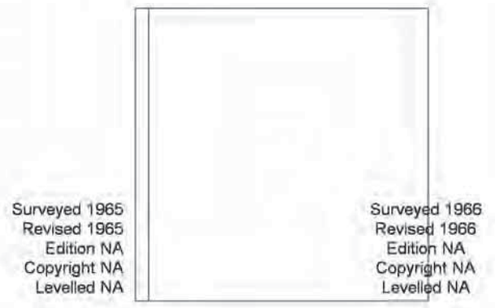
Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: Provisional

Map date: 1965-1966

Scale: 1:10,560

Printed at: 1:10,560

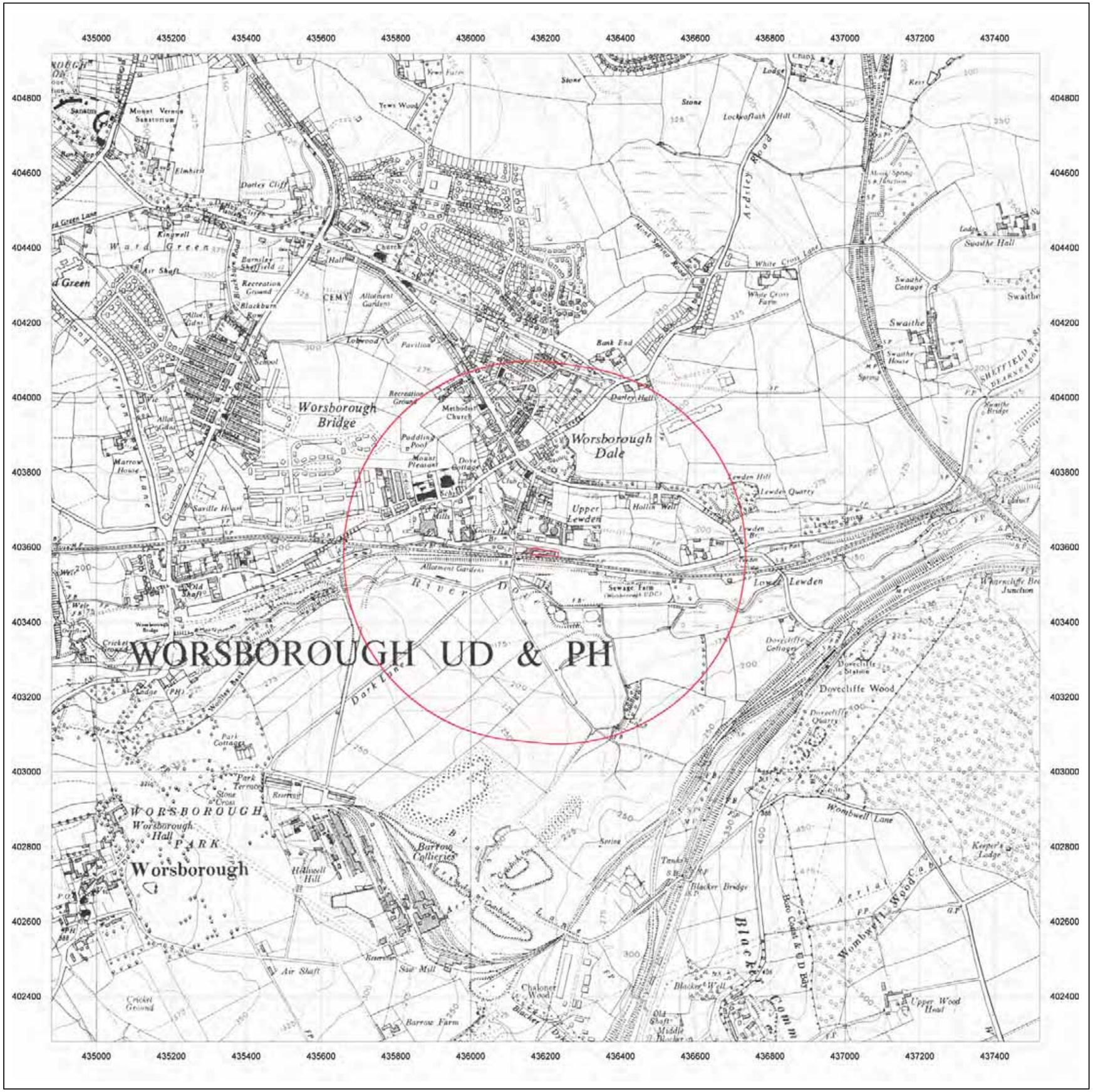


Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: Provisional

Map date: 1951

Scale: 1:10,560

Printed at: 1:10,560

Surveyed 1951
Revised 1951
Edition NA
Copyright NA
Levelled NA

Surveyed 1951
Revised 1951
Edition NA
Copyright NA
Levelled NA

Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

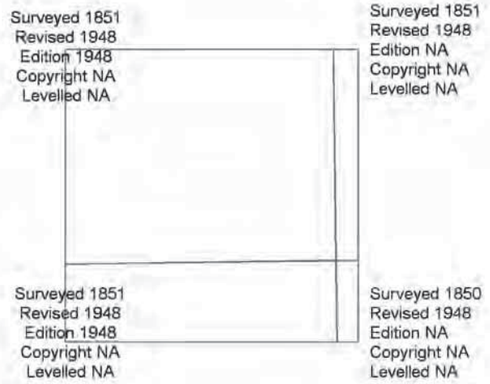
Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: County Series

Map date: 1948

Scale: 1:10,560

Printed at: 1:10,560



Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

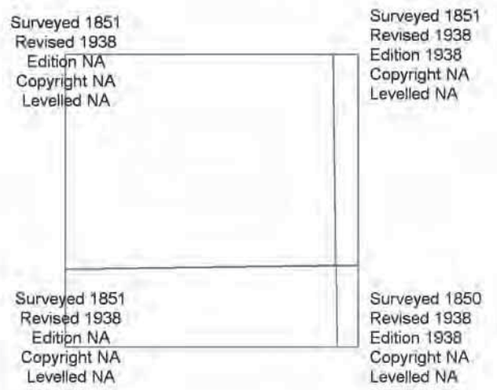
Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560

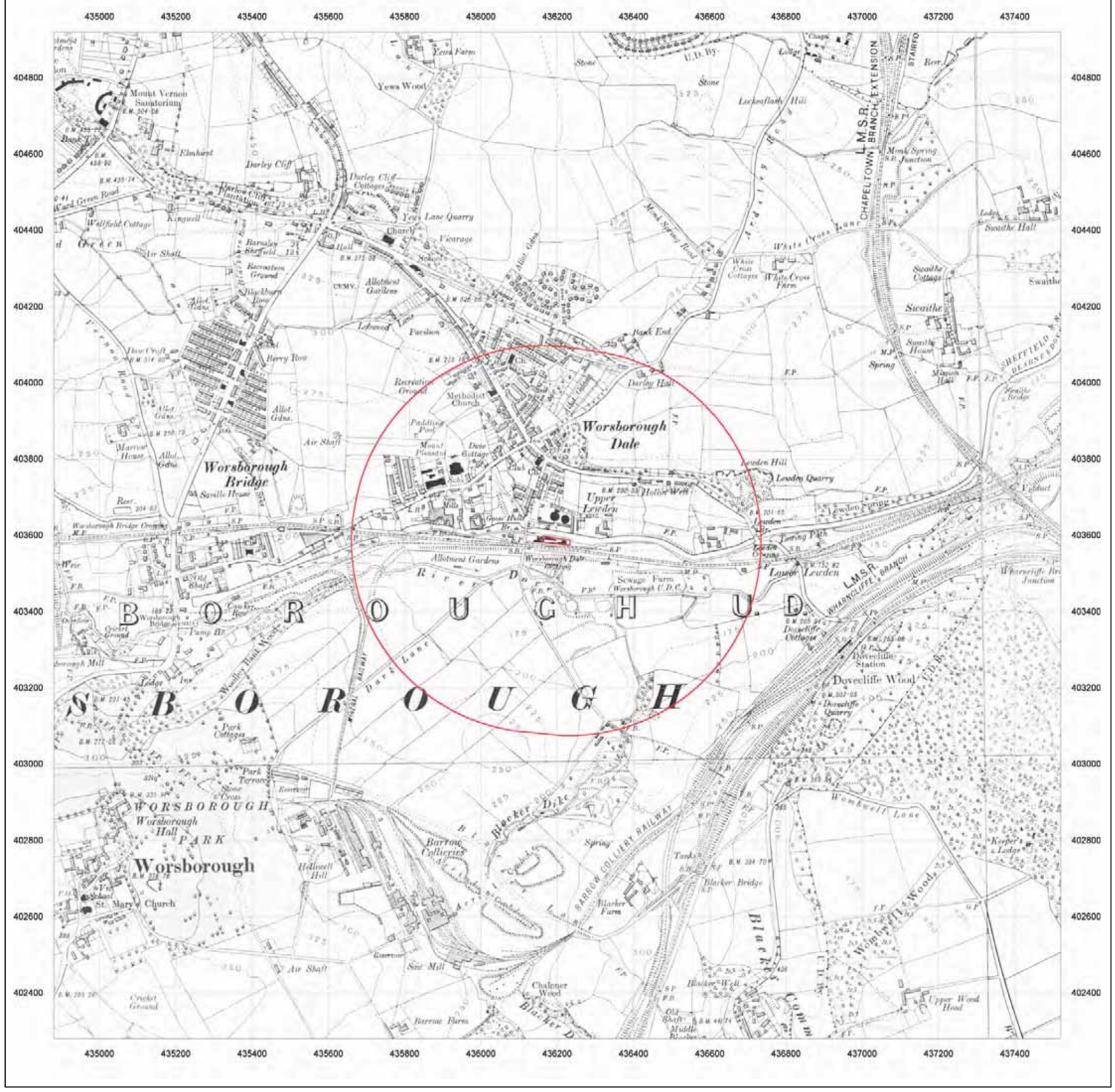


Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

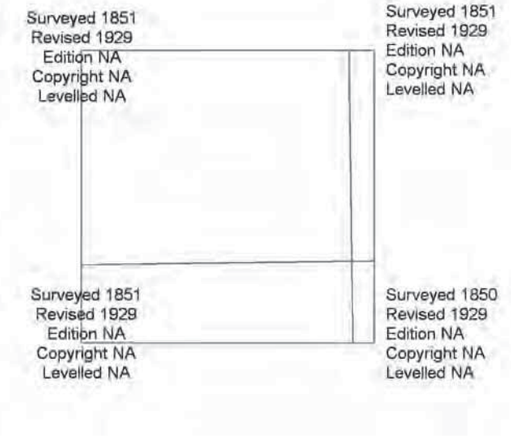
Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: County Series

Map date: 1929

Scale: 1:10,560

Printed at: 1:10,560



Ordnance Survey Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

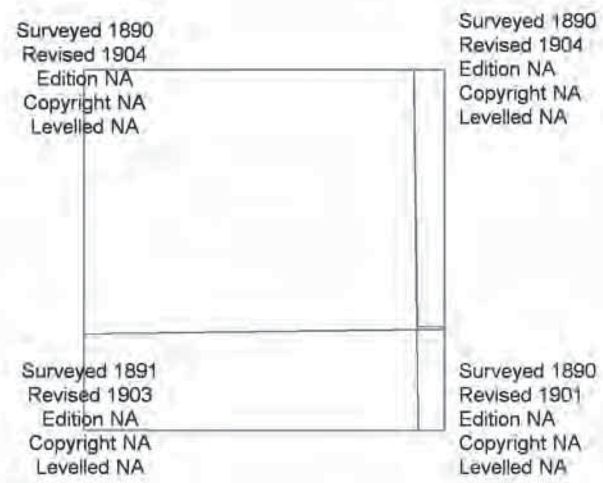
Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: County Series

Map date: 1901-1904

Scale: 1:10,560

Printed at: 1:10,560



Ordnance Survey® Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008



GroundSure

Site Details:

Land off Edmunds Road,
Worsbrough, Barnsley

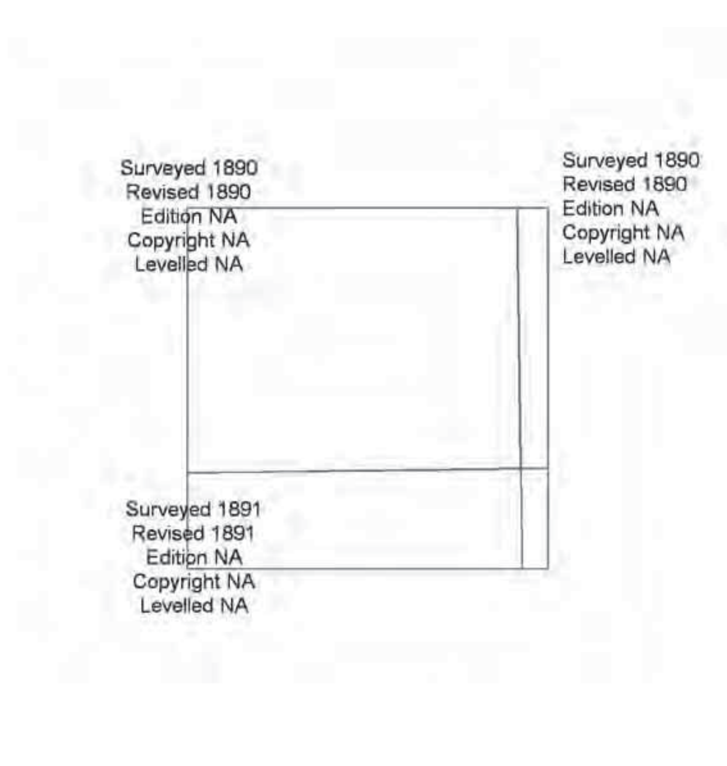
Client Ref: 2096
Report Ref: HMD-260-239314
Grid Ref: 436200, 403600

Map Name: County Series

Map date: 1890-1891

Scale: 1:10,560

Printed at: 1:10,560



Ordnance Survey® Licensed Partner

Produced by GroundSure Ltd.
T: 01273 819500
E: groundsureinsight@groundsure.com
W: www.groundsureinsight.com

Crown copyright all rights reserved. Licence No: 10001511162

Production date:26 September 2008

This page has been left intentionally blank.