

**C3982
OCTOBER 2012**

PRELIMINARY APPRAISAL REPORT (DESK STUDY)

**of land off
WAKEFIELD ROAD, MAPPLEWELL, BARNSELY**

**Prepared for
PIPESTONE LTD**



REPORT NUMBER:	C3982	REPORT STATUS:	FINAL
REPORT TYPE:	Preliminary Appraisal Report (Desk Study)		
REPORT DATE:	October 2012		
SITE:	Land off Wakefield Road, Mapplewell, Barnsley		
PREPARED FOR:	Pipestone Ltd		
PREPARED BY:	Sirius Geotechnical and Environmental Ltd 4245 Park Approach Thorpe Park Leeds LS15 8GB	Tel: 01132 649 960 Fax: 01132 649 962	

This report is written for the sole use of Pipestone Ltd. No other third party may rely on or reproduce the contents of this report without the written approval of Sirius. If any unauthorised third party comes into possession of this report, they rely upon it entirely at their own risk and the authors do not owe them any Duty of Care or Skill.

PRELIMINARY APPRAISAL REPORT (DESK STUDY)**of land off****WAKEFIELD ROAD, MAPPLEWELL, BARNSELY****Prepared for****PIPESTONE LTD****CONTENTS****EXECUTIVE SUMMARY**

1. INTRODUCTION.....	1
2. SITE DETAILS AND DESCRIPTION.....	3
3. ENVIRONMENTAL SETTING	5
3.1. Introduction.....	5
3.2. Site History	5
3.3. Published Geological Information	6
3.4. Hydrology and Hydrogeology	8
3.5. Landfilling and Waste Management	10
3.6. Radon Risk.....	10
3.7. Other	11
4. PREVIOUS INVESTIGATION FINDINGS.....	12
5. PRELIMINARY CONCEPTUAL MODEL.....	13
6. CONCLUSIONS AND RECOMMENDATIONS.....	14
6.1. General.....	14
6.2. Flood Risk	14
6.3. Geotechnical	14
6.4. Contamination Constraints	16
6.5. Invasive Plants	16
7. FURTHER INVESTIGATION	17

TABLES

Table 2.1	Current Site Overview	3
Table 3.1	Site History	5
Table 3.2	Geological Summary	7
Table 3.3	Surface Water Features	8
Table 3.4	Groundwater Occurrence and Abstraction.....	9
Table 3.5	Groundwater Vulnerability Status	9
Table 3.6	Waste Management Activities	10

APPENDICES

APPENDIX A FIGURES AND DRAWINGS

Drawing No.	Title	Scale
C3982/01	Site Location Plan	1:25,000
C3982/02	Site Features	1:1,000
C3982/03	Development Layout and Opencast Extent	1:1,000
C3982/04	Preliminary Conceptual Site Model	NTS
NE328	Abandonment Plan	1:2,500

NTS: Not to Scale

APPENDIX B ENVIROCHECK REPORT

APPENDIX C COAL AUTHORITY REPORT

EXECUTIVE SUMMARY

Introduction	<p>Sirius Geotechnical and Environmental Ltd (Sirius) were commissioned by Johnson Brook, acting on behalf of Pipestone Ltd (Pipestone), to undertake a preliminary appraisal (desk study) of land off Wakefield Road, Mapplewell, South Yorkshire.</p> <p>It is understood that Pipestone are considering developing the site for a low rise residential end use.</p>
Site Details	<p>The site forms an irregularly shaped parcel of land, approximately 9 ha in area, comprising a number of overgrown and disused fields. The fields are covered with long grasses, shrubs and adolescent to mature trees and are crosses by several informal footpaths.</p> <p>Ground levels rise from around 94m above ordnance datum (aod) in the south to 114.5m aod in the north. The rise in levels generally follows a steady gradient, but a slightly steeper banking is present in the north.</p> <p>The site is generally bounded by residential development, although the opposing side of Wakefield Road is mainly undeveloped land and a disused industrial premises further south.</p> <p>To the north of the site is Bleak House Poultry Farm, which comprises a main „L“ shaped stone built farmhouse and associated stone and timber constructed outbuildings. The farm buildings were occupied at the time of the site visit, although no farming activities appeared to be active.</p>
Site History	<p>The available historical plans indicate that the site has remained generally undeveloped since 1854. However, the Coal Authority report and abandonment plans indicate that two areas in the centre and south of the site were subject to opencast coal working. Coal was extracted between February and April 1952 and the site was restored by September 1952.</p>
Anticipated Ground Conditions	<p>The published geological information and other data gathered by this preliminary investigation indicate that the site is underlain by deep made ground in the areas of the opencast extraction. No drift deposits are anticipated.</p> <p>Solid geology comprises Middle Coal Measures strata of mudstones, siltstones and sandstones with subordinate coal, ironstone and fireclay. In the northern tip of the site the Woolley Edge rock is anticipated to be present.</p>
Mining	<p>A large proportion of the site is underlain by backfilled opencast workings in the Abdy (Winter) Coal and the Two Foot Coal. There are narrow strips of shallow coal remaining between the low wall and the conjectured outcrop of each seam that could have been historically worked.</p> <p>Unrecorded mining in the Abdy and Two Foot Coal could affect surface stability.</p> <p>The Meltonfield (Woodmoor) Coal outcrops in the north of the site. Although the Coal Authority have no records of workings in this seam, it may have been historically worked.</p> <p>The Top and Low Beamshaw Coal could be present within influencing depth of the surface beneath the southern part of the site if workings are present.</p> <p>There are no recorded mine entries beneath the site, but given the history of mining activity on site and in the region generally, unrecorded entries may be present.</p>
Foundations	<p>The nature and depth of foundations will be dependent on loadings, layout, the detailed site geology and specific results of intrusive site investigation. At this stage, the following foundation types are anticipated.</p> <ul style="list-style-type: none"> • Piled foundations within, and straddling the edge of, the backfilled opencast areas. • Shallow strip/trench foundations outside the opencast areas and deepened, if

	<p>necessary, within the zone of influence of trees.</p> <p>The presence of underground coal workings within influencing distance of the surface, would require consolidation of old workings (i.e. drilling and pressure grouting) and could, subject to depth, require alternate foundation solutions.</p>
Contamination	<p>The preliminary conceptual site model indicates that pollutant linkages are possible to a variety of receptors. Heavy metals, asbestos fibres, PAH, hydrocarbon and sulphate contaminants may pose potential risks to construction workers, site end users, the built environment and controlled waters.</p> <p>It is recommended that a targeted and non-targeted site investigation is carried out to address these matters.</p>
Gas Risk	<p>Information currently available indicates that there is potential for ground gas generation on site from open cast backfill. There is potential for mine gas migration onto site via worked coal seams. There is one registered landfill site within 250m and therefore potential for landfill gas migration onto site</p> <p>Gas risk should be assessed further via site investigation and monitoring.</p>
Further Works	<p>The following ground investigation works are recommended to allow foundation design, determination of contamination constraints and abnormal costs:</p> <ul style="list-style-type: none"> • Site specific radon report. • Trial pits to investigate near surface soil and groundwater conditions and to allow recovery of soil samples for laboratory testing. • Cable percussive boreholes to investigate deep made ground and to allow recovery of soil samples for geotechnical testing. In situ Standard Penetration Tests (SPTs) to be undertaken within boreholes in order to provide geotechnical data for the underlying made ground / soils / bedrock • Trial pits/trenches and rotary probing to investigate the edge and extent of the opencast workings. • Rotary boreholes to investigate the potential for shallow mineworkings within four seams of coal. • Installation of gas and groundwater monitoring and sampling wells in selected boreholes and subsequent monitoring and sampling. • Chemical and geotechnical laboratory testing to adequately categorise the soils and groundwater.

1. INTRODUCTION

Sirius Geotechnical and Environmental Ltd (Sirius) were commissioned by Johnson Brook, acting on behalf of Pipestone Ltd of the Isle of Man (Pipestone), to undertake a preliminary appraisal (desk study) of land off Wakefield Road, Mapplewell, Barnsley, South Yorkshire (the “site”). The site comprises one large mostly undeveloped parcel of land.

It is understood that Pipestone are considering the development of the site for low rise residential with gardens end use, with associated areas of public open space (POS), hardstanding and access roads, as shown on Drawing No. C3982/03 in Appendix A to this report.

The objectives of the preliminary appraisal were:

- To establish the historical development of the site and immediate surrounding area from a review of historical Ordnance Survey (OS) plans;
- To establish the environmental setting of the site;
- To evaluate whether past mining or other extractive industries could have an influence on the site;
- To determine if historical or current activities could give rise to significant ground contamination;
- To determine the potential risk to the development from hazardous ground gas sources including radon; and,
- To provide recommendations for intrusive works required to determine the ground conditions below the site, the contamination status of the shallow soils, and from this, foundation solutions and measures to deal with any contamination.

This desk study includes an assessment of information provided by Landmark Envirocheck (“Envirocheck”), the Coal Authority (CA) and the British Geological Survey (BGS).

A site inspection (walk over survey) was undertaken by a Sirius Geoenvironmental Engineer on 24th September 2012. This inspection included accessible external areas only, it was noted that some areas were inaccessible due to dense vegetation.

This report presents and interprets the factual information reviewed during this investigation and presents a Preliminary Conceptual Site Model (PCSM) from which ground-related hazards and risks have been assessed.

It has been assumed in the production of this report that the site is to be developed for a low rise residential end use (“residential with plant uptake”). In addition, it is assumed that ground levels will not change significantly from those described in this report. If this is not the case, amendments to the recommendations made in this report may be required.

Where the report refers to the potential presence of invasive plants (such as Japanese knotweed) or asbestos-containing materials, such observations are for information only and should be verified by a suitably qualified expert.

This report has been prepared for the sole use of Pipestone. No other third party may rely upon or reproduce the contents of this report without the written approval of Sirius. If any unauthorised third party comes into possession of this report, they rely on it entirely at their own risk and the authors do not owe them any Duty of Care or Skill.

2. SITE DETAILS AND DESCRIPTION

Table 2.1 Current Site Overview

Location	The site is located to the east of Mapplewell, approximately 3.6km north of Barnsely, South Yorkshire. A site location plan is included as Drawing No. C3982/01 within Appendix A.
National Grid Reference	E 433640, N 410080.
Topography and Features	<p>The site forms one irregularly shaped parcel of land, comprising a number of overgrown and disused fields. The fields are covered with long grasses, shrubs and adolescent to mature trees and are crossed by several informal footpaths. A public footpath is present along part of the western site boundary.</p> <p>Adjacent to the south eastern boundary several of the adjoining residential properties have cultivated small parts of the site as garden „extensions“. Also, toward the south of this easternmost field is a fenced paddock; no livestock were present at the time of the site walkover.</p> <p>A Yorkshire Electricity pylon (ref: PWZ39) is present in the south of the site and carries cables at high level above the site in an approximate south west to north east direction.</p> <p>Ground levels rise from around 94m above ordnance datum (aod) in the south to 114.50 aod in the north. The rise in levels generally follows a steady gradient, but a slightly steeper banking is present.</p>
Access	<p>Pedestrian access to the majority site can be gained through informal paths and breaks in the hedgerow. Vehicular access can be gained to the westernmost field via a gate at the end of an unanmed access track off Paddock Road. No vehicular accessways were observed between any of the other fields.</p> <p>Anecdotal evidence suggests that the public footpath follows the route of historical vehicular entrance to the site off Paddock Road, but it was noted that this access is now grassed over and overgrown.</p>
Approximate Site Area	Approximately 9 hectares.
Site Boundaries	<p>Site boundaries are generally formed by overgrown hedgerows and ad hoc timber fencing.</p> <p>Immediately to the north of the site is Bleak House Poultry Farm, which comprises a main „L“ shaped stone built farmhouse and associated stone and timber constructed outbuildings. Stored oil/chemical drums were noted to be present within the westernmost outbuilding.</p> <p>The site is bounded to the north east by Wakefield Road, and undeveloped agricultural land is generally present beyond this. On the opposing side of Wakefield Road to the east, is Tipsey Court, which comprises a small bus depot and residential properties.</p>

	<p>Further south along Wakefield Road is a disused industrial site.</p> <p>To the south east, north (beyond the Poultry Farm) and south the site are residential properties, and further residential developments are present beyond these. To the south west the site is bounded by allotment gardens.</p> <p>To the west of the site a recreation ground is present, and beyond this Mapplewell Primary School.</p>
Current Land Use	Disused agricultural/mining land.
Invasive Plant Species	None noted, although due to limitations on access it is recommended that a survey is undertaken by an appropriately qualified specialist.
Adjacent Land Uses	Predominantly residential.

The main site features are shown on Drawing No. C3982/02 within Appendix A.

3. ENVIRONMENTAL SETTING

3.1. Introduction

Published environmental, geological and historical data relating to the site has been reviewed. A summary of relevant information is provided below and a copy of the Envirocheck report is enclosed in Appendix B. A copy of the Coal Authority Mining Report is included in Appendix C. It should be noted that the enclosed Envirocheck and Coal Authority reports show the site with an enlarged site boundary, however, the desk study is based on the boundary of the proposed development.

3.2. Site History

Table 3.1 presents a summary of the site history from 1854 to 2010. It is not the intention of this report to describe in detail all of the changes that have occurred on, or adjacent to, the site, only those pertinent to the proposed development.

Table 3.1 Site History

Map Dates	On-Site Features	Off-Site Features (only features within 500m that may affect the site are listed)
1854	The site is undeveloped fields. A spring is present adjacent to the southern site boundary and flows south to a small off site reservoir	An „L” shaped building is present to the north of the site. Wakefield Road is present to the east of the site, but is named Tipsey Hill. A sandstone quarry is present 250m north east. Buildings are established to the north west of the site, forming Staincross. Blackerhill Quarry is present 420m south.
1893	A spring is shown in the central north east part of the site.	Sandstone quarry to the north east is now shown as disused. The Barnsley Coal Railway is developed 230m east. North Gawber Colliery developed 250m to the south west with associated shafts, reservoirs and tipped ground.
1906-1907	A well is shown adjacent to the spring in the south of the site.	No significant changes noted.
1918 - 1948	In 1918 the spring and well in the south of the site are no longer shown. The spring in the north is not labelled,	Tipped ground around North Gawber Colliery expands over this time. Miners Recreation Welfare Ground

Map Dates	On-Site Features	Off-Site Features (only features within 500m that may affect the site are listed)
	but a rectangular feature remains.	shown to west of site.
Feb 1952 to Sept 1952 (Coal Authority Records)	Two large areas are subjected to open cast coal extraction and subsequent backfilling.	
1956 - 1965	By 1965 an electric pylon is present in the south.	Blackerhill Quarry to the south is disused by 1956. By 1962 an unnamed works building is shown to the east of Wakefield Road. By 1965 reservoirs are no longer shown at the colliery, a recreation ground is recorded to the west and allotment gardens are immediately adjacent to the south west boundary.
1967	No significant changes.	The buildings to the north of the site are named as Bleak House Poultry Farm. In 1970 the works building to the east are shown as a moulded rubber works. The railway to the east is disused.
1973 - 1977	Two of the field boundaries are shown as drains.	Tips around the colliery are disused. Residential development to the north, east and south of the site. A silo is shown next to the farm buildings.
1991 - 2010	No significant changes.	By 1993 North Gawber Colliery is no longer present and a second silo is shown between the farm outbuildings.

3.3. Published Geological Information

A summary of available published geological information is provided in Table 3.2 below.

Table 3.2 Geological Summary

Sources of Information	<p>BGS 1:10,000 geological map (Sheet SE30NW) resurveyed 1978-1979.</p> <p>BGS 6 inch geological map (Sheet Yorkshire 262SE) revised 1929-1930.</p> <p>BGS lexicon of named rock units.</p> <p>BGS borehole records.</p> <p>Coal Authority Abandonment Records.</p>
Worked/ Made Ground	<p>Two strips of worked ground are shown on site; one in the south and parallel to the southern site boundary, the second toward the centre of the site and parallel to the first.</p>
Drift Geology	<p>No drift deposits are shown to underlie the site.</p>
Solid Geology	<p>The site is shown to be principally underlain by Middle Coal Measures strata (mudstones, siltstones and sandstones with subordinate coal, ironstone and fireclay).</p> <p>The northern tip of the site is shown to be underlain by the Woolley Edge Rock of the Middle Coal Measures. This is typically a coarse grained massively bedded sandstone.</p> <p>A fault, orientated south west to north east, crosses the site close to the south eastern boundary and is downthrown on its eastern side. Almost perpendicular to this fault are a pair of two parallel faults close to the north eastern site boundary. The northernmost of the pair is indicated to be present in the Barnsley Coal and downthrown 22 feet (6.7m) to the north. The southern fault of the pair is also downthrown to the north but no indication of throw is given.</p>
Mining and Quarrying	<p>Coal Seams: Geological records dated 1929-1930 show the Winter Coal (more recently known as the Abdy Coal) to outcrop along the south western site boundary, the Two Foot Coal to outcrop through the centre of the site, both orientated north west to south east, and, the Woodmoor Coal (also known as the Meltonfield Coal) to outcrop in the north of the site. More recent records show the outcrop positions of the Abdy Coal and the Two Foot Coal artificially repositioned further north indicating open cast working of these seams beneath the site.</p> <p>The next shallowest coal seam beneath the Winter Coal is the Top Beamshaw Coal recorded between 1.21m and 1.84m thick.</p> <p>Coal Mining: The Coal Authority state that <i>'the property is within the zone of likely influence from past underground workings in 8 seams of coal at 50m to 450m, last worked in 1974. In addition the property is an area where the Coal Authority believes there is coal at or close to the surface. This coal may have been worked at some time in the past'</i>.</p> <p>A damage notice or claim for alleged subsidence was made in October 2000 for 64 Paddock Road, adjacent to</p>

	<p>the northern site boundary. The claim was rejected.</p> <p>Mine Entries: The Coal Authority state that none are recorded within the site or within 20m of the boundary.</p> <p>Opencast Coal: The Coal Authority state that the site is within the boundary of an opencast site from which coal has been removed. Abandonment plans show that the site was previously referred to as Tipsey Hill Opencast Site.</p> <p>The Winter Coal (Abdy Coal) seam and the Two Foot Coal were extracted between February 1952 and April 1952 and the site backfilled by September 1952. The abandonment plan indicates the Winter Coal dips at 4.7° (1 in 12) to the north east and is 0.81m thick, and the Two Foot Coal dips at 4.1° (1 in 14) to the north east and is 0.63m thick.</p> <p>The depth of the Winter Coal opencast is recorded as between approximately 1.55m and 11.09m. The depth of the Two Foot Coal opencast is recorded as between approximately 2.26m and 8.53m. The extent of the opencast workings are shown on the Coal Authority Abandonment Plan enclosed in Appendix A, and the approximate extent of the recorded opencast workings have been overlain onto the site features drawing C3982/02 and shown in relation to the development proposals on Drawing No. C3982/03 in Appendix A.</p> <p>Quarries: None indicated on site, but historical sandstone quarries are 250m north east and 420m south. BGS mineral records show that sandstone was extracted at Tipsey Lodge 210m north east and at Blacker Hill Quarry 304m south.</p>
--	--

3.4. Hydrology and Hydrogeology

A summary of available information pertaining to hydrology and hydrogeology is present in Tables 3.3 to 3.5 below.

Table 3.3 Surface Water Features

	Presence / location	Comments
Environment Agency (“EA”) Chemical GQA Classified Watercourses	None present within 1.5km	

	Presence / location	Comments
EA Biological GQA Classified Watercourses	None present within 1.5km.	
Unclassified Watercourses	Closest surface water course is located on site.	These appear to be drains associated with field boundaries.
Surface Water Features (Canals, Ponds, Lakes, etc.) (within 250m)	None recorded.	
Surface Water Abstractions	None recorded within 1km	
Flood Risk Status	The site is not recorded to be located within 250m of an indicative floodplain.	

Environment Agency GQA assessments: A = very good to E = poor

Table 3.4 Groundwater Occurrence and Abstraction

	Presence / location	Comments
Licensed Abstractions (within 1km)	None recorded	
Source Protection Zones (within 500m)	There are no source protection zones within 500m of the site.	
Springs / Potable Water Abstractions (within 2km)	No recorded potable water abstraction licences within 2km of the study site. Two springs and a well were historically present on site.	Springs and well are no longer shown and therefore assumed not in use.

Table 3.5 Groundwater Vulnerability Status

	Environment Agency Classification
Groundwater Classification	The solid Middle Coal Measures strata beneath the site are designated as a Secondary A Aquifer. Secondary A Aquifers are defined as “permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.”

3.5. Landfilling and Waste Management

Table 3.6 Waste Management Activities

	Presence / Location	Comments
Local Authority Recorded Landfills	Landfill site 133m east. Landfill site 370m south.	No further details on status or fill types available for either record.
BGS Recorded Landfills	None recorded.	
EA Recorded Landfills	Historic landfill site 133m east on „waste land to the rear of the Subseal Works“.	Wastes accepted include inert waste, commercial waste, industrial waste and household waste. Operated 1962 - 1994.
	Historic landfill site 370m south at Blacker Hill Quarry.	Wastes accepted include inert waste, commercial waste and industrial waste. Operated 1980 - 1984.
	Registered landfill site 228m east at Suba Seal Works.	Waste accepted include commercial, industrial, soil and subsoil. Licence lapsed in 1983.
	Registered landfill site 458m south at Blacker Hill Quarry.	Waste accepted include construction, demolition, industrial and non-hazardous wastes. Licence lapsed in 1980.
Other Licensed Waste Management Facilities within 250m	Registered waste treatment or disposal site 241m south west at Mapplewell Auto Salvage.	Operational scrapyards.
Evidence of Landfilling On or Within 250m of Site (over and above that described above)	Nature of backfill to opencast workings on site is unknown. Tipped ground developed around North Gawber Colliery when active. Historical quarries to the north and south have been backfilled over time.	
Walkover Evidence of Fly-Tipping on Site?	No evidence noted.	

3.6. Radon Risk

To determine whether the site is at risk from radon gas, the BRE Document “BRE 211 - Radon: Guidance on the protective measures for new dwellings” together with the National Radiological Protection Board (NRPB) “Radon Atlas of England and Wales” have been referenced.

These documents, together with a geological assessment contained within the Envirocheck report, which includes information obtained from the Health Protection Agency (HPA) and British Geological Survey (BGS), identifies that the site straddles the edge of where basic and no radon protection measures are required. At this stage it should be assumed that **basic radon protective measures are required for all plots**. To refine this a site specific radon report should be commissioned.

3.7. Other

Other potentially contaminative activities or environmental constraints as identified from the Envirocheck report are noted below. The entries relate to activities within approximately 250m of the site.

- Contemporary trade directory entry for rubber and plastic products manufacturers 153m south east.
- Contemporary trade directory entry for motorcycle breakers and dismantlers 240m south west.
- Category 3 minor pollution incident to controlled waters relating to diesel oil pollution to a freshwater stream 55m south.
- Land to the east of the site, beyond Wakefield Road, is designated an area of adopted green belt.

4. PREVIOUS INVESTIGATION FINDINGS

No previous desk study or site investigation reports relating to this site have been made available.

5. PRELIMINARY CONCEPTUAL MODEL

Based on the desk study information described above, a combined preliminary conceptual site model and conceptual exposure model (CSM) has been developed for the proposed future land-use (residential with gardens). This summarises the understanding of surface and sub-surface features, the potential contaminant sources, transport pathways and receptors in order to assess potential pollutant linkages. In assessing the likely contaminants present at the site, reference has been made to the Industry Profile report series issued by the Department of the Environment and other relevant supporting documentation.

A qualitative risk assessment has also been made of the likelihood of any pollutant linkage operating and its potential significance.

The preliminary conceptual model is presented in schematic form as Drawing No. C3982/04 in Appendix A.

In summary, the preliminary CSM has identified the following potential pollutant linkages which could result in an unacceptable risk to the proposed end-use, denoted as moderate or higher risk on the CSM:

- Ingestion, inhalation of dust and dermal contact with possible heavy metals, asbestos, PAHs and hydrocarbons in opencast backfill, posing a moderate to high risk to site end-users.
- Sulphate attack from sulphates/ oxidisable sulphides within opencast backfill posing a moderate risk to the built environment.
- Ingestion, inhalation of dust and dermal contact with possible heavy metals, PAHs, hydrocarbons and asbestos fibres in made ground associated with development of the farm immediately adjacent to the site posing a low to moderate risk to site end-users.
- Leaching of heavy metals, PAHs and hydrocarbons in made ground and topsoil's posing a low to moderate risk to controlled waters (on-site surface water features and underlying Secondary A Aquifer).
- Gas risk from on and off site made ground and off site landfills posing a moderate risk to site-end and adjacent site users.
- Gas risk from shallow coal seams beneath the site posing a moderate risk to site-end and adjacent site-users.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1. General

It is understood that Pipestone are considering the development of land off Wakefield Road, Mapplewell (the „site“) for a low rise residential end use (“residential with plant uptake”), as shown on Drawing No. C3982/03, in Appendix A to this report.

In production of this report it has been assumed that ground levels will not change significantly from those described herein. If this is not the case, then amendments to the interpretation and conclusions in this report may be required.

6.2. Flood Risk

According to the Environment Agency the site is not located in an area vulnerable to flooding from rivers.

6.3. Geotechnical

Mining and Quarrying

The key constraints affecting this site are associated with opencast working and potentially shallow underground working of coal. Several seams are shown to outcrop beneath the site and two of these are known to have been opencast.

Abdy (Winter) Coal and Two Foot Coal

Two main areas of opencast coal extraction have been identified within the Abdy (Winter) Coal and the Two Foot Coal as shown on the enclosed drawings. A third small circular opencast area is shown in the Two Foot Coal to the east of the main area. It should be noted that the areas of the development shown to be affected on the enclosed plans represent minimum areas as there are likely to be batters or benching of the high and low walls extending beyond the limits of coal extraction shown on abandonment plans.

The abandonment plan shows that the opencast operations did not extend to the outcrop of either the Abdy (Winter) Coal or the Two Foot Coal and therefore both a high and low wall are likely to be present. This leaves a narrow strip between the outcrop and the low wall where coal is present at shallow depth. The coal may have been either historically worked at the outcrop, or from the low wall as part of the opencast operation. Furthermore, areas of the site exist where opencast extraction of the Abdy (Winter) Coal and the Two Foot Coal has not taken place, and therefore if unrecorded underground workings are present at shallow depth there is a risk of surface instability.

For typical Coal Measures bedrock, it is generally accepted that there is a risk of surface instability where the thickness of competent bedrock above the worked coal seam is less than 10x the seam thickness. Based on a recorded seam thickness of 0.81m for the Abdy (Winter) Coal and 0.63m for the Two Foot Coal, a minimum rock cover of 8.1m and 6.3m is required above the seam in order to mitigate the potential for surface subsidence.

Meltonfield (Woodmoor) Coal

The Meltonfield (Woodmoor) Coal is shown as a known outcrop position in the north of the site, approximately parallel to the Two Foot Coal outcrop. The seam is typically 0.69m to 0.89m thick

according to the BGS generalised vertical section for the area, however, a BGS borehole at Tibsey Court on the opposite side of Wakefield Road, records the Meltonfield (Woodmoor) Coal as 1.07m thick. The coal is known to have been worked by underground methods in other areas of the region. The Meltonfield (Woodmoor) Coal is likely to be present at shallow depth in the north of the site and there is potential for surface instability if underground workings are present in this seam.

Top and Low Beamshaw Coals

The Top Beamshaw Coal is the shallowest seam in the typical Middle Coal Measures succession beneath the Abdy (Winter) Coal. The Top and Low Beamshaw Coals outcrop off site to the south and dip beneath the site. The seam is typically 1.21m to 1.84m thick but the seam is recorded as being variable in thickness and often contains a dirt band, as such it has been little mined. The seam is typically 13m beneath the Abdy (Winter) Coal and as such less than 10x the maximum recorded seam thickness of competent cover exists in the area where the Abdy (Winter) Coal has been extracted. There is potential for surface instability if underground workings are present in this seam.

The underlying Low Beamshaw Coal is of better quality and has been more often mined, although is also variable in thickness between being thin and of little value and 0.91m and good quality. In some areas the Top and Low Beamshaw Coals are close together and have been mined together. There is potential for surface instability if the Top and Low Beamshaw Coals have been mined together.

Mine Entries

There are no recorded mine entries beneath the site, but given the history of mining activity on site and in the region generally, unrecorded entries may be present.

Foundations

Published geological information, and other data gathered by this preliminary investigation, indicates that the site is partially underlain by deep made ground as a result of previous opencast operations, and outside these areas residual coal measures strata are likely to be present.

The nature and depth of foundations will be dependent on loadings, layout and the detailed site geology, including:

- Thickness of made ground;
- Location and extent of any substructures / infilled basements;
- The site-specific nature and extent of underground mine workings;
- The presence of unrecorded mine entries/wells;
- Bearing capacity of the natural strata;
- Groundwater levels;
- Proximity to trees where potentially shrinkable soils are present; and
- Final development levels.

Opencast Areas

At this stage given the presence of deep made ground across significant parts of the site, piled foundations are recommended. These would be taken through the made ground, to found in the underlying Coal Measures strata. Piled foundations may be required beyond the opencast areas shown on the enclosed plans due to the presence of disturbed ground

If underground workings are present within influence of the surface, then the workings will need to be drilled and grouted and the base of piled foundations may need to be taken to below the base of treated workings.

Consideration could be given to stabilisation of the made ground by vibro techniques. However, given the depth of made ground the technical and validation requirements of the NHBC may be too onerous and render this solution uneconomic. Furthermore, piled foundations would still be required where plots straddle the high or low walls, and within the zone of differential settlement associated with the walls.

Outside Opencast Areas

Where plots lie outside the opencast areas, shallow spread foundations are likely to be suitable. If cohesive clay soils are identified beneath the site then foundations will require deepening within the zone of influence of existing or proposed trees in accordance with NHBC Standards Chapter 4.2 and heave protection measures may additionally be required. It is noted that a significant number of trees are present on site and immediately adjacent to the site. Where foundation depths due to trees are in excess of 2.5m, piled foundations may be required.

If underground workings in coal are present outside the opencast areas, the workings will need to be drilled and grouted and house foundations thickened and strengthened. Very shallow treated workings (<5x seam thickness) could necessitate raft foundations.

It is recommended that a site investigation is carried out in order to provide further information regarding these matters and to allow foundations to be designed.

6.4. Contamination Constraints

Risk Evaluation for the Proposed Land Use (Residential)

The preliminary conceptual site model indicates that pollutant linkages are possible to a variety of receptors. Potential heavy metals, asbestos fibres, organic and inorganic contaminants in made ground and shallow soils may pose a potential risk to construction workers, current and future site - users and controlled waters. Risks related to these potential linkages are currently given a qualitative assessment “low” to “high”. The precise nature of the risks should be investigated further through site investigation.

According to the BGS, basic radon protective measures are required for the site.

6.5. Invasive Plants

Invasive plant species were not observed during the site walkover, however as access was limited this should be confirmed by an appropriately qualified specialist.

7. FURTHER INVESTIGATION

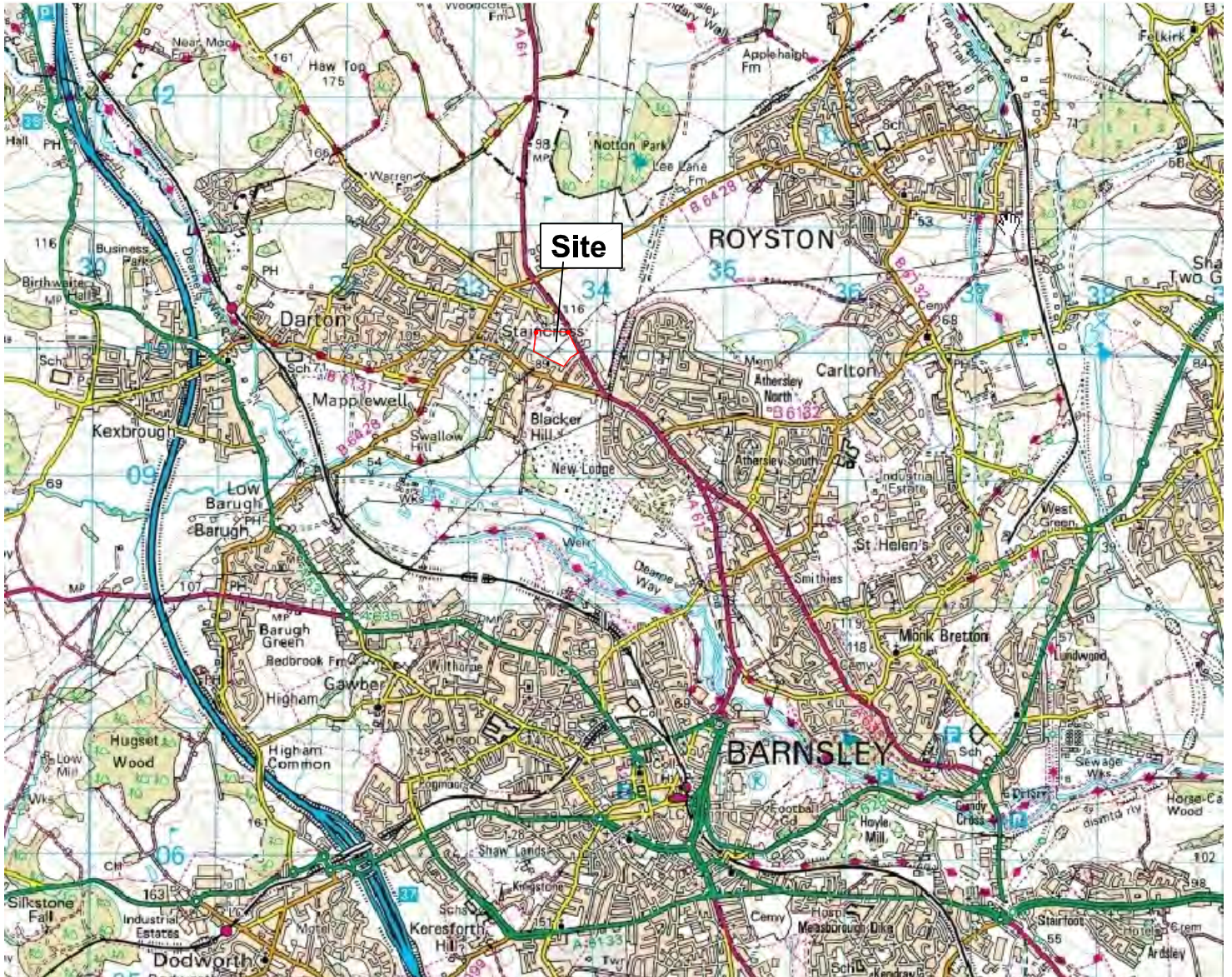
The following ground investigation works are recommended to allow foundation design, determination of contamination constraints and abnormal costs:

- Site specific radon report.
- Trial pits to investigate near surface soil and groundwater conditions and to allow recovery of soil samples for laboratory testing.
- Cable percussive boreholes to investigate deep made ground and to allow recovery of soil samples for geotechnical testing. In situ Standard Penetration Tests (SPTs) to be undertaken within boreholes in order to provide geotechnical data for the underlying made ground / soils / bedrock.
- Trial pits/trenches and rotary probing to investigate the edge and extent of the opencast workings.
- Rotary boreholes to investigate the potential for shallow mineworkings within four seams of coal.
- Installation of gas and groundwater monitoring and sampling wells in selected boreholes and subsequent monitoring and sampling.
- Chemical and geotechnical laboratory testing to adequately categorise the soils and groundwater.





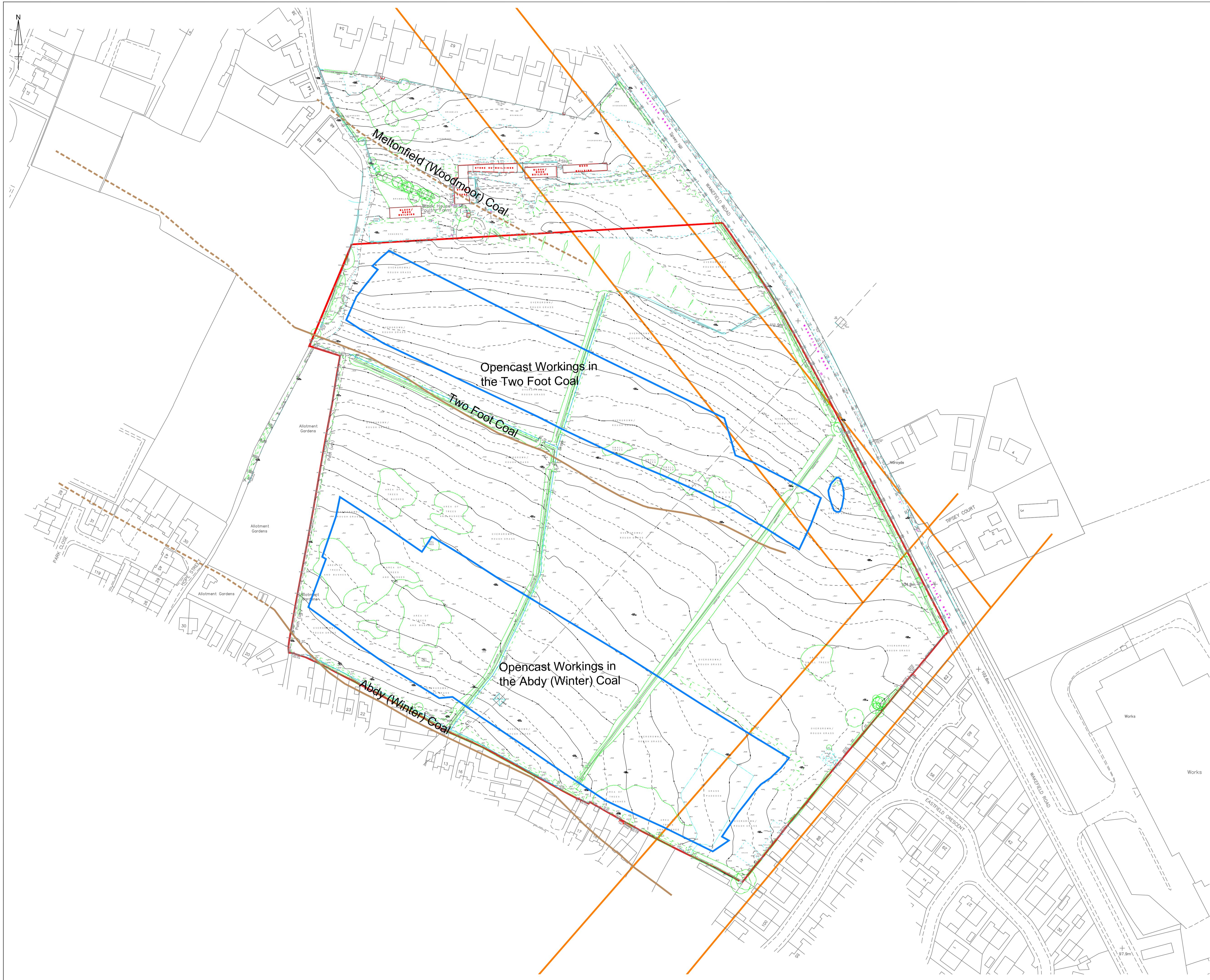
APPENDIX A

FIGURES AND DRAWINGS



Reproduced from the Ordnance Survey 1:50,000 scale Landranger® map with the permission of The Controller of Her Majesty's Stationary Office, © Crown Copyright. All rights reserved. Sirius Geotechnical & Environmental Ltd, Suite 2, Russel House, Mill Road, Langley Moor, Durham DH7 8HJ. Licence No. 100042005

NOTES  Site Location	REVISION		CLIENT Pipestone Ltd	DRAWING NO. C3982/01	REVISION NO. 0				
	0	For Information							
	A	>>							
	B	>>							
	C	>>							
D	>>								
SIRIUS GEOTECHNICAL & ENVIRONMENTAL 4245 Park Approach, Thorpe Park, Leeds, LS15 8GB www.thesiriusgroup.com TEL: 0113 264 9960 FAX: 0113 264 9962			SITE Land off Wakefield Road, Mapplewell, Barnsley	DRAWN BY MS	APPROVED BY RB				
						DRAWING TITLE Site Location Plan	DATE 08/10/12	SCALE 1:50000	A4



NOTES

- Site Boundary
- Area of Opencast Workings
- Coal seam outcrop based on Coal Authority Plans
- Coal seam outcrop based on 1:10,560 Geological Plan
- Location of fault based on 1:10,560 Geological Plan

This drawing is based on:

- Ellam Land Surveys Topographical Survey ref: 6523/1 dated Jan 2012.
- The Coal Authority Abandonment Plan for Tipsey Hill ref: NE328.

REVISION	
0	Information
A	>>
B	>>
C	>>
D	>>

SIRIUS GEOTECHNICAL & ENVIRONMENTAL
 4245 Park Approach,
 Thorpe Park,
 Leeds,
 LS15 8GB
www.thesiriusgroup.com
 TEL: 0113 264 9960
 FAX: 0113 264 9962



CLIENT

Pipestone Ltd

SITE

**Land off Wakefield Road,
 Mappelowell,
 Barnsley**

DRAWING TITLE

Site Features Plan

DRAWING NO. C3982/02	REVISION NO. 0
DRAWN BY MS	APPROVED BY RB
DATE 08/10/12	SCALE 1:1000
PAPER SIZE A1	



- NOTES**
- Area of Opencast (as overlain from The Coal Authority Abandonment Plan ref: NE328)
 - Coal seam outcrop based on Coal Authority Plans
 - Coal seam outcrop based on 1:10,560 Geological Plan

This drawing is based on John R Paley Associates Draft Layout ref: D09 4198 100 dated 23/03/12.

REVISION	
0	Information
A	>>
B	>>
C	>>
D	>>

SIRIUS GEOTECHNICAL & ENVIRONMENTAL
 4245 Park Approach,
 Thorpe Park,
 Leeds,
 LS15 8GB
www.thesiriusgroup.com
 TEL: 0113 264 9960
 FAX: 0113 264 9962



CLIENT

Pipestone Ltd

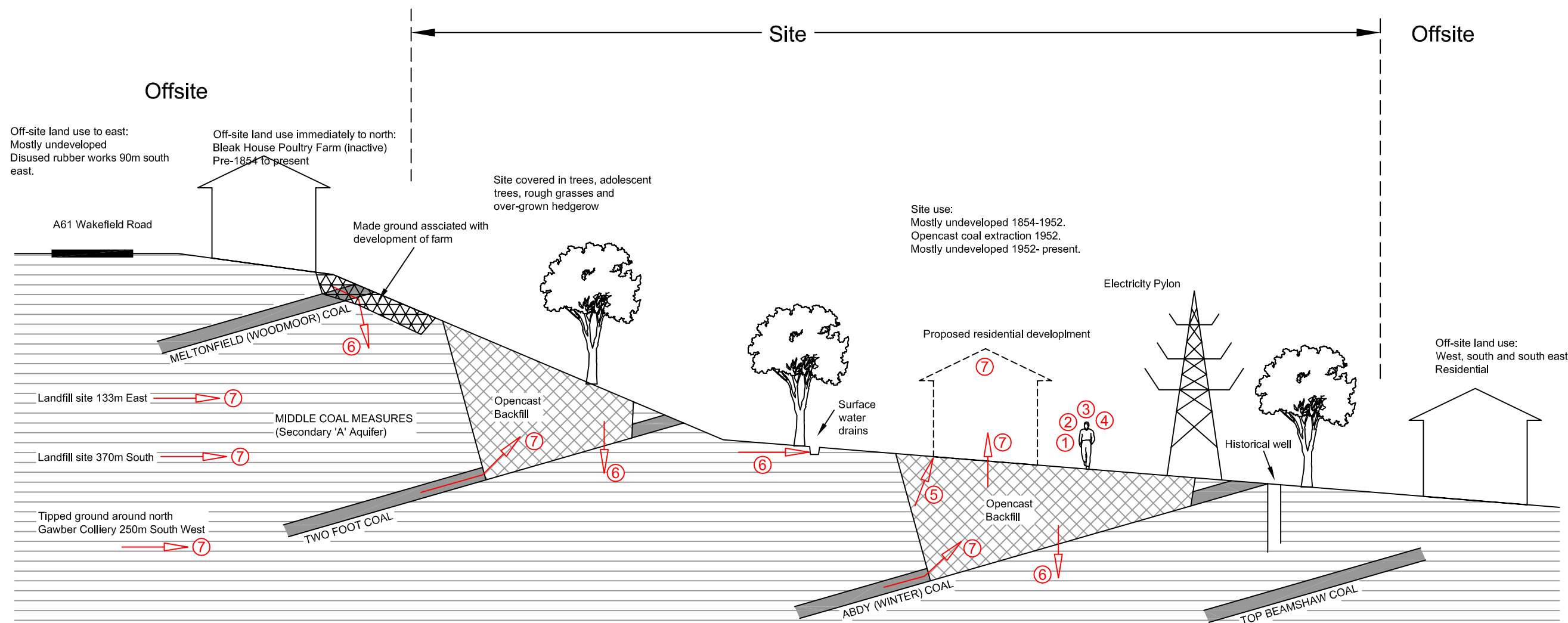
SITE

Land off Wakefield Road,
 Mapplewell,
 Barnsley

DRAWING TITLE

Development Layout
 and Opencast Extent

DRAWING NO. C3982/03		REVISION NO. 0	
DRAWN BY MS		APPROVED BY RB	
DATE 08/10/12	SCALE 1:1000	PAPER SIZE A1	



REVISION	
0	Information
A	>>
B	>>
C	>>
D	>>

SIRIUS GEOTECHNICAL & ENVIRONMENTAL
 4245 Park Approach,
 Thorpe Park,
 Leeds,
 LS15 9GB
www.the-siriusgroup.com
 TEL: 0113 264 9960
 FAX: 0113 264 9962



Contamination Sources	Contamination Pathways	Potential receptors	Likelihood of significant pollutant linkage
Heavy metals, PAHs, asbestos fibres and hydrocarbons in opencast backfill.	① Direct and indirect ingestion ② Dermal contact ③ Inhalation of dust ④ Inhalation of vapours	Construction workers/Future site users and occupants/Adjacent site users	Moderate to high
Sulphates/oxidisable sulphides within made ground and open cast backfill.	⑤ Sulphate attack	Built environment	Moderate
Leachable heavy metals, PAHs and hydrocarbons within topsoil and made ground.	⑥ Lateral and vertical migration	Secondary 'A' Aquifer/Surface water course	Low to moderate
Heavy metals, PAHs, hydrocarbons and asbestos fibres in made ground associated with development of farm immediately adjacent to the site.	① Direct and indirect ingestion ② Dermal contact ③ Inhalation of dust ④ Inhalation of vapours	Construction workers/Future site users and occupants/Adjacent site users	Low to moderate
Ground gas generation from off-site made ground and landfills, and, on-site made ground and coal seams	⑦ Migration and accumulation	Construction workers/Future site users and occupants/Adjacent site users	Moderate

CLIENT

Pipestone Ltd

SITE
Land off Wakefield Road, Mapplewell, Barnsley

DRAWING TITLE
Preliminary Conceptual Site Model

DRAWING NO. C3982/04	REVISION NO. 0
DRAWN BY MS	APPROVED BY RB
DATE 08/10/12	SCALE NTS
	PAPER SIZE A3



APPENDIX B

ENVIROCHECK REPORT



Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

41207480_1_1

Customer Reference:

C3982/RGB/7506

National Grid Reference:

433640, 410080

Slice:

A

Site Area (Ha):

13.23

Search Buffer (m):

1000

Site Details:

Proposed Development off
Wakefield Road
Mapplewell
Barnsley
South Yorkshire
S75 6LE

Client Details:

Ms D Broomfield
Sirius Geotechnical & Environmental Ltd
4245 Park Approach
Thorpe Park
Leeds
LS15 8GB

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	6
Hazardous Substances	-
Geological	9
Industrial Land Use	24
Sensitive Land Use	32
Data Currency	33
Data Suppliers	37
Useful Contacts	38

Introduction

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

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Copyright Notice

© Landmark Information Group Limited 2012. The Copyright on the information and data and its format as contained in this Envirocheck® Report ("Report") is the property of Landmark Information Group Limited ("Landmark") and several other Data Providers, including (but not limited to) Ordnance Survey, British Geological Survey, the Environment Agency and Natural England, and must not be reproduced in whole or in part by photocopying or any other method. The Report is supplied under Landmark's Terms and Conditions accepted by the Customer. A copy of Landmark's Terms and Conditions can be found with the Index Map for this report. Additional copies of the Report may be obtained from Landmark, subject to Landmark's charges in force from time to time. The Copyright, design rights and any other intellectual rights shall remain the exclusive property of Landmark and /or other Data providers, whose Copyright material has been included in this Report.

Natural England Copyright Notice

Site of Special Scientific Interest, National Nature Reserve, Ramsar, Special Protection Area, Special Conservation Area, Marine Nature Reserve data (derived from Ordnance Survey 1:10000 raster) is provided by, and used with the permission of, Natural England who retain the copyright and Intellectual Property Rights for the data.

Ove Arup Copyright Notice

The Data provided in this report was obtained on Licence from Ove Arup & Partners Limited (for further information, contact mining.review@arup.com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The information and data supplied in the product are derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

Peter Brett Associates Copyright Notice

The cavity data presented has been extracted from the PBA enhanced version of the original DEFRA national cavity databases. PBA/DEFRA retain the copyright & intellectual property rights in the data. Whilst all reasonable efforts are made to check that the information contained in the cavity databases is accurate we do not warrant that the data is complete or error free. The information is based upon our own researches and those collated from a number of external sources and is continually being augmented and updated by PBA. In no event shall PBA/DEFRA or Landmark be liable for any loss or damage including, without limitation, indirect or consequential loss or damage arising from the use of this data.

Radon Potential dataset Copyright Notice

Information supplied from a joint dataset compiled by The British Geological Survey and the Health Protection Agency.

Report Version v47.0



Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1				8
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 2		2	3	1
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 3	Yes			
Pollution Incidents to Controlled Waters	pg 3		1	1	3
Prosecutions Relating to Authorised Processes					
Prosecutions Relating to Controlled Waters					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 4			1	
Water Abstractions					
Water Industry Act Referrals					
Groundwater Vulnerability	pg 4	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 4	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 6		1	1	
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 6			2	
Local Authority Recorded Landfill Sites	pg 7		1	1	
Registered Landfill Sites	pg 7		1	1	
Registered Waste Transfer Sites	pg 8			1	
Registered Waste Treatment or Disposal Sites	pg 8		1		



Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 9	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 9	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 19		1	4	4
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
Brine Compensation Area			n/a	n/a	n/a
Coal Mining Affected Areas	pg 21	Yes	n/a	n/a	n/a
Mining Instability	pg 21	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 21	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 21	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 21	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 22	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 22	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 22	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas	pg 23	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures	pg 23	Yes	n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 24		16	50	13
Fuel Station Entries	pg 31			2	



Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Areas of Adopted Green Belt	pg 32		1		1
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves	pg 32				1
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 32	1			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	<p>Discharge Consents</p> <p>Operator: Yorkshire Water Services Ltd Property Type: Sewerage Network - Pumping Station - Water Company Location: No Ngr On Consent-See Comment Below, See Comment Field Below, For Name Of Discharge Site, . Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: S/Cb/8 Permit Version: 1 Effective Date: 29th May 1963 Issued Date: 29th May 1963 Revocation Date: 31st March 2005 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Varies With Outlet Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961 Positional Accuracy: Located by supplier to within 10m</p>	A8NW (SE)	690	1	434344 409448
1	<p>Discharge Consents</p> <p>Operator: Yorkshire Water Services Ltd Property Type: Sewerage Network - Sewers Location: New Lodge, Wakefield Road, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Dearne Reference: S/CB/8 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: 30th June 1993 Revocation Date: Not Supplied Discharge Type: Sewage Effluent Discharge-Storm Effluent Discharge: Unknown Environment: Receiving Water: Not Supplied Status: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A8NW (SE)	692	1	434340 409440
2	<p>Discharge Consents</p> <p>Operator: Yorkshire Water Services Ltd Property Type: Sewerage Network - Sewers Location: Carr Green Lane, MAPPLEWELL, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Dearne Reference: S/UD/51 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: 30th June 1993 Revocation Date: Not Supplied Discharge Type: Sewage Effluent Discharge-Storm Effluent Discharge: Unknown Environment: Receiving Water: Not Supplied Status: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A6SW (SW)	794	1	433100 409280
2	<p>Discharge Consents</p> <p>Operator: Yorkshire Water Services Ltd Property Type: Trade (Unknown/Other) Location: Carr Green Lane, Mapplewell, Barnsley Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: C4139 Permit Version: 2 Effective Date: 31st March 2005 Issued Date: 28th February 2005 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Unnamed Trib Of River Dearne Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p>	A6SW (SW)	795	1	433080 409290



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	<p>Discharge Consents</p> <p>Operator: Yorkshire Water Services Ltd Property Type: Trade (Unknown/Other) Location: Carr Green Lane, Mapplewell, Barnsley Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: C4139 Permit Version: 1 Effective Date: 20th December 1985 Issued Date: 20th December 1985 Revocation Date: 30th March 2005 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Unnamed Trib Of River Dearne Status: Transferred from COPA 1974 Positional Accuracy: Located by supplier to within 100m</p>	A6SW (SW)	795	1	433080 409290
2	<p>Discharge Consents</p> <p>Operator: Yorkshire Water Services Ltd Property Type: Sewerage Network - Sewers Location: Carr Green Lane, MAPPLEWELL, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Dearne Reference: S/UD/51 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: 5th June 1963 Revocation Date: Not Supplied Discharge Type: Sewage Effluent Discharge-Storm Effluent Discharge: Unknown Environment: Receiving Water: Not Supplied Status: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A6SW (SW)	798	1	433100 409275
3	<p>Discharge Consents</p> <p>Operator: Yorkshire Water Services Ltd Property Type: Sewerage Network - Pumping Station - Water Company Location: Staincross Sps, Staincross, Near Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra7908 Permit Version: 1 Effective Date: 6th November 2002 Issued Date: 6th November 2002 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Applehaigh Clough Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p>	A18SE (N)	908	1	433390 411200
4	<p>Discharge Consents</p> <p>Operator: Yorkshire Water Services Ltd Property Type: Sewerage Network - Pumping Station - Water Company Location: Staincross Sps Wakefield Road, Staincross, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wadc397 Permit Version: 1 Effective Date: 2nd November 1989 Issued Date: 2nd November 1989 Revocation Date: 9th November 2002 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Applehaigh Clough Status: Transferred from Water Act 1989 Positional Accuracy: Located by supplier to within 100m</p>	A18SW (N)	925	1	433300 411200
5	<p>Local Authority Pollution Prevention and Controls</p> <p>Name: William Freeman Limited Location: Wakefield Road, Staincross, Barnsley, South Yorkshire, S75 6DH Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards Permit Reference: Epa102 Dated: 6th March 2000 Process Type: Local Authority Air Pollution Control Description: PG6/32 Adhesive coating Status: Site Closed Positional Accuracy: Automatically positioned to the address</p>	A11SE (SE)	153	2	434025 409913



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	<p>Local Authority Pollution Prevention and Controls</p> <p>Name: William Freeman Limited Location: Suba Seal Works, Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6DH Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards Permit Reference: Epa101 Dated: 29th November 1999 Process Type: Local Authority Air Pollution Control Description: PG6/28 Rubber processes Status: Site Closed Positional Accuracy: Automatically positioned to the address</p>	A11SE (SE)	153	2	434025 409913
6	<p>Local Authority Pollution Prevention and Controls</p> <p>Name: A Tyler Ltd Location: Wentworth Road, Mapplewell, Barnsley Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards Permit Reference: PPC/B/109 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG1/1Waste oil burners, less than 0.4MW net rated thermal input Status: Permitted Positional Accuracy: Manually positioned to the road within the address or location</p>	A6NE (SW)	282	2	433449 409673
7	<p>Local Authority Pollution Prevention and Controls</p> <p>Name: Turn Pike Garage Location: Wakefield Road, Mapplewell, BARNSLEY, South Yorkshire, S75 6JX Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards Permit Reference: PPC/B/60 Dated: 24th March 1999 Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station Status: Permitted Positional Accuracy: Automatically positioned to the address</p>	A14SE (N)	296	2	433447 410588
8	<p>Local Authority Pollution Prevention and Controls</p> <p>Name: Walter Franks & Son Ltd Location: Wakefield Road, BARNSLEY, South Yorkshire, S71 3LU Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards Permit Reference: EPA/36/26 Dated: 19th March 1993 Process Type: Local Authority Air Pollution Control Description: PG2/6 Aluminium and aluminium alloy processes Status: Authorised Positional Accuracy: Automatically positioned to the address</p>	A7NE (SE)	370	2	434135 409698
9	<p>Local Authority Pollution Prevention and Controls</p> <p>Name: Wakefield Dry Cleaners Location: 315 Wakefield Road, Barnsley, S71 3lr Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards Permit Reference: ppc/b/84 Dated: 22nd August 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Manually positioned to the address or location</p>	A8SW (SE)	841	2	434491 409390
	Nearest Surface Water Feature	A10SE (S)	0	-	433602 409929
10	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Industrial Premises Location: Mouth/Todmorden Calder Afl Authority: Environment Agency, North East Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 12th March 1991 Incident Reference: 120419 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p>	A11SW (S)	55	1	433700 409800



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	Pollution Incidents to Controlled Waters Property Type: Fire Water Location: Blacker Road, Hepplewell, BARNSELY Authority: Environment Agency, North East Region Pollutant: Unknown Sewage Note: Watercourse :River Dearne; From New Lodge To Old Mill Incident Date: 19th February 1998 Incident Reference: SH980080 Catchment Area: Dearne Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A10SW (SW)	259	1	433300 409800
12	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Foul Sewer Location: Footbridge/Footbridge Dearne 18 Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 14th September 1992 Incident Reference: 136720 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9SE (W)	554	1	432900 409900
13	Pollution Incidents to Controlled Waters Property Type: Industrial Premises Location: Footbridge/Footbridge Dearne 18 Authority: Environment Agency, North East Region Pollutant: Chemicals - Detergents/Surfactant Note: Not Supplied Incident Date: 12th September 1994 Incident Reference: 153128 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A6NW (SW)	640	1	433200 409400
14	Pollution Incidents to Controlled Waters Property Type: Miscellaneous Premises: Unknown Location: Footbridge/Footbridge Dearne 18 Authority: Environment Agency, North East Region Pollutant: Chemicals - Detergents/Surfactant Note: Not Supplied Incident Date: 12th September 1994 Incident Reference: 153431 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A6SW (SW)	776	1	433100 409300
15	Substantiated Pollution Incident Register Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 14th June 2001 Incident Reference: 9372 Water Impact: Category 4 - No Impact Air Impact: Category 2 - Significant Incident Land Impact: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Atmospheric Pollutants And Effects: Smoke Pollutant: Contaminated Water: Firefighting Run-Off	A10SW (SW)	421	1	433094 409822
	Groundwater Vulnerability Soil Classification: Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise Map Sheet: Sheet 11 South Pennines Scale: 1:100,000	A10NE (SE)	0	1	433635 410085
	Drift Deposits None				
	Bedrock Aquifer Designations Aquifer Desination: Secondary Aquifer - A	A10SE (S)	0	3	433635 410001
	Bedrock Aquifer Designations Aquifer Desination: Secondary Aquifer - A	A10NE (SE)	0	3	433635 410085



Agency & Hydrological

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Superficial Aquifer Designations No Data Available				
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	<p>Historical Landfill Sites</p> <p>Licence Holder: W Freeman and Company Location: Subseal Works, Wakefield Road, Staincross Name: On waste land to the rear of Subseal Works Operator Location: Subseal Works, Staincross, Barnsley, South Yorkshire Boundary Accuracy: As Supplied Provider Reference: EAHL04350 First Input Date: 31st December 1962 Last Input Date: 31st December 1994 Specified Waste Type: Deposited Waste included Inert, Industrial, Commercial and Household Waste EA Waste Ref: Not Supplied Regis Ref: Not Supplied WRC Ref: 4400/0484 BGS Ref: Not Supplied Other Ref: WD20 B364, 4400/B364, 20B364(82)</p>	A11SE (E)	133	1	434003 410039
17	<p>Historical Landfill Sites</p> <p>Licence Holder: Blacker Hill Quarry Limited Location: Wentworth Road, Mapplewell, Barnsley Name: Blacker Hill Quarry Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHL04349 First Input Date: 1st April 1980 Last Input Date: 31st December 1984 Specified Waste Type: Deposited Waste included Inert, Industrial and Commercial Waste EA Waste Ref: Not Supplied Regis Ref: Not Supplied WRC Ref: 4400/0422 BGS Ref: Not Supplied Other Ref: WD20 B278</p>	A6NE (S)	370	1	433501 409547
18	<p>Licensed Waste Management Facilities (Locations)</p> <p>Licence Number: 65486 Location: Mapplewell Industrial Park, Mapplewell Drive, Mapplewell, Barnsley, South Yorkshire, S75 6BS Operator Name: Qualter-Smith Paul Anthony Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Vehicle Depollution Facility <5000 tps Licence Status: Modified Issued: 10th September 2007 Last Modified: 14th December 2011 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A10SW (SW)	329	1	433228 409781
19	<p>Licensed Waste Management Facilities (Locations)</p> <p>Licence Number: 60555 Location: Land/premises At, Wentworth Road, Mapplewell, Barnsley, South Yorkshire, S75 6BS Operator Name: Mapplewell Auto Salvage Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Metal Recycling Sites (Vehicle Dismantlers) Licence Status: Issued Issued: 22nd November 1996 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A6NE (S)	459	1	433400 409500
	<p>Local Authority Landfill Coverage</p> <p>Name: Barnsley Metropolitan Borough Council - Has supplied landfill data</p>		0	2	433635 410085
	<p>Local Authority Landfill Coverage</p> <p>Name: Wakefield Metropolitan Borough Council - Has not been able to supply Landfill data</p>		917	10	433887 411193

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	<p>Local Authority Recorded Landfill Sites</p> <p>Location: Not Supplied Reference: 82 Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards</p> <p>Last Reported Status: Unknown Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Positioned by the supplier Boundary Quality: Moderate</p>	A11SE (E)	133	2	434000 410047
21	<p>Local Authority Recorded Landfill Sites</p> <p>Location: Not Supplied Reference: 19 Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards</p> <p>Last Reported Status: Unknown Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Positioned by the supplier Boundary Quality: Moderate</p>	A6NE (S)	371	2	433506 409544
22	<p>Registered Landfill Sites</p> <p>Licence Holder: William Freeman & Co. Licence Reference: WD20 B 364 MOD 1 Site Location: Suba Seal Works, Staincross, Darton, Barnsley, South Yorkshire Licence Easting: 434100 Licence Northing: 409900 Operator Location: As Site Address Authority: Environment Agency - North East Region, Ridings Area Site Category: Landfill Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st April 1983 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Com. + Ind. Waste Soil, Subsoil Prohibited Waste: All Forms Of Asbestos Waste</p>	A11SE (E)	228	1	434100 409900
23	<p>Registered Landfill Sites</p> <p>Licence Holder: Blacker Hill Quarries Ltd Licence Reference: WD20 B 278 Site Location: Blacker Hill Quarry, Mapplewell, Darton, Barnsley, South Yorkshire Licence Easting: 433500 Licence Northing: 409450 Operator Location: As Site Address Authority: Environment Agency - North East Region, Ridings Area Site Category: Landfill Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st April 1980 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Construction And Demolition Wastes Ind. Non-Haz. Waste</p>	A6NE (S)	458	1	433500 409450



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	<p>Registered Waste Transfer Sites</p> <p>Licence Holder: B Eaton Licence Reference: WD20 B 439 MOD 1 Site Location: 114 Wentworth Road, Mapplewell, Darton, BARNSLEY, South Yorkshire, S75 6DU</p> <p>Operator Location: As Site Address Authority: Environment Agency - North East Region, Ridings Area Site Category: Transfer Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year)</p> <p>Waste Source: No known restriction on source of waste Restrictions: Licence Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st October 1984 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the road within the address or location Boundary Quality: Not Supplied Authorised Waste: Com. + Ind. Non-Haz. Waste Ind. Non-Haz. Potentially Combustible Prohibited Waste: Asbestos Liquids In Containers Over 4l Cap. Slurry In Containers Over 4l Cap.</p>	A6NE (S)	414	1	433420 409540
25	<p>Registered Waste Treatment or Disposal Sites</p> <p>Licence Holder: Mapplewell Auto Salvage Licence Reference: WD20 B1126 MOD 2 Site Location: Wentworth Road, Mapplewell, Staincross, BARNSLEY, South Yorkshire, S75 6BS</p> <p>Operator Location: As Site Address Authority: Environment Agency - North East Region, Ridings Area Site Category: Scrapyard Max Input Rate: Very Small (Less than 10,000 tonnes per year)</p> <p>Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 22nd November 1996 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Max.Waste Permitted By Licence Scrap Motor Vehicles Max.Stor Tyres Max.Stor Prohibited Waste: Liquid Wastes Waste N.O.S.</p>	A6NE (SW)	241	1	433454 409718

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Lower Westphalian (mainly Productive Coal Measures)	A10NE (SE)	0	3	433635 410085
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11SW (SE)	0	4	433784 409846
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11SW (SE)	0	4	433753 409903
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11NW (NE)	0	4	433701 410189
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11NW (NE)	0	4	433744 410166
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 90 - 120 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A10NE (SE)	0	4	433635 410085
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 120 - 180 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A10SE (S)	0	4	433635 410000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A11SW (SE)	0	4	433795 409954
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A11SW (SE)	0	4	433835 410000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A11SW (SE)	33	4	433829 409857
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A11SE (E)	115	4	434000 410000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A11NE (E)	117	4	434000 410085
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A11SE (SE)	150	4	434000 409880

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A11NW (E)	155	4	433971 410146
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A11NE (E)	171	4	434000 410124
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A11NE (E)	193	4	434000 410174
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A11SE (SE)	209	4	434000 409788
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A10NW (W)	390	4	433000 410085
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A15SE (NE)	408	4	434000 410565

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A15SE (NE)	408	4	434021 410541
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A10SW (W)	430	4	433000 410000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A7NE (SE)	436	4	434000 409463
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A6NE (S)	472	4	433371 409447
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14SW (NW)	481	4	433000 410528
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A15SE (NE)	513	4	434098 410615

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A7SE (SE)	532	4	434041 409375
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A15NE (NE)	567	4	434000 410772
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12SW (E)	580	4	434465 410000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NW (NW)	584	4	433229 410831
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A15NE (NE)	609	4	434000 410822
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A16SW (NE)	610	4	434414 410433

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A9SE (W)	610	4	432816 410012
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A6NW (SW)	642	4	432997 409567
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A15SE (NE)	650	4	434295 410574
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A16SW (NE)	667	4	434370 410488
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A15NW (N)	671	4	433885 410939
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A6SW (SW)	672	4	433233 409345

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A16SW (NE)	688	4	434396 410485
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A16SW (NE)	692	4	434389 410503
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NE (N)	699	4	433618 411000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A6SE (S)	701	4	433548 409162
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NE (N)	704	4	433635 411000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A6NW (SW)	709	4	433000 409462

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A15NW (N)	715	4	433821 411000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NE (N)	725	4	433324 411000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A15NE (N)	768	4	434000 411000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NW (NW)	789	4	433095 411000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A3NW (S)	829	4	433737 409000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A2NE (S)	830	4	433635 409000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A3NW (S)	831	4	433820 409000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NW (NW)	832	4	433000 411000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A3NE (S)	862	4	434000 409000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A16SW (NE)	862	4	434520 410615
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A19SW (N)	863	4	433675 411159
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A7SE (SE)	866	4	434190 409075

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A15NE (NE)	867	4	434198 411000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A3NE (SE)	900	4	434112 409000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12SE (E)	922	4	434807 410000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18SW (NW)	933	4	433000 411114
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A9SW (W)	942	4	432477 410000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A19SE (N)	944	4	434000 411189

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A3NE (S)	967	4	434000 408892
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 90 - 120 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A2NE (S)	969	4	433312 408957
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A3NE (SE)	975	4	434307 409020
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 120 - 180 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 30 - 45 mg/kg Concentration:	A3NE (S)	980	4	434000 408878
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel 15 - 30 mg/kg Concentration:	A16SW (NE)	984	4	434610 410702
26	BGS Recorded Mineral Sites Site Name: Tipsey Lodge Location: , Darton, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 109960 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Unknown Operator Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A11NW (NE)	210	3	433969 410267

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
27	<p>BGS Recorded Mineral Sites</p> <p>Site Name: Blacker Hill Location: , Mappelowell, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 26005 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Unknown Operator Periodic Type: Carboniferous Geology: Woolley Edge Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m</p>	A6NE (S)	304	3	433607 409568
28	<p>BGS Recorded Mineral Sites</p> <p>Site Name: North Gawber Colliery Location: , Darton, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 16764 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Unknown Operator Periodic Type: Carboniferous Geology: Pennine Coal Measures Group Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m</p>	A10SW (SW)	372	3	433200 409745
29	<p>BGS Recorded Mineral Sites</p> <p>Site Name: Blacker Hill Location: , Mappelowell, Darton, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 16763 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Unknown Operator Periodic Type: Carboniferous Geology: Woolley Edge Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m</p>	A6NE (S)	442	3	433505 409465
30	<p>BGS Recorded Mineral Sites</p> <p>Site Name: Staincross Location: , Royston, Barnsley, Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 103074 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Unknown Operator Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m</p>	A15SW (NE)	458	3	433929 410688
31	<p>BGS Recorded Mineral Sites</p> <p>Site Name: Lane End Location: , Mappelowell, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 26000 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Unknown Operator Periodic Type: Carboniferous Geology: Woolley Edge Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m</p>	A13SE (NW)	539	3	432949 410556
32	<p>BGS Recorded Mineral Sites</p> <p>Site Name: Staincross Plantation Location: , Mappelowell, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 26002 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Unknown Operator Periodic Type: Carboniferous Geology: Woolley Edge Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m</p>	A13SE (NW)	682	3	432806 410593

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	BGS Recorded Mineral Sites Site Name: Muscle Hill Location: , Royston, Barnsley, Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 103075 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Unknown Operator Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A15NE (NE)	928	3	434309 410990
34	BGS Recorded Mineral Sites Site Name: Belle Vue Colliery Location: , Mapplewell, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 25999 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Unknown Operator Periodic Type: Carboniferous Geology: Barnsley Coal (South Yorkshire) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A5NW (W)	999	3	432499 409702
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A10NE (SE)	0	5	433635 410085
	Mining Instability Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A10NE (SE)	0	-	433635 410085
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	3	433753 409904
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A11NW (NE)	0	3	433701 410190
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A10SE (S)	0	3	433635 410001
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A10NE (SE)	0	3	433635 410085
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (S)	0	3	433635 410001
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10NE (SE)	0	3	433635 410085
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A10NE (SE)	0	3	433635 410085
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A10SE (SW)	0	3	433610 410046
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A10SE (S)	0	3	433635 410001
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A11NW (NE)	0	3	433644 410102

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	3	433678 410001
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SE (E)	123	3	434002 409939
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SE (E)	149	3	434032 410001
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (SW)	179	3	433396 409819
	Potential for Ground Dissolution Stability Hazards No Hazard				
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A10NE (NW)	0	3	433559 410190
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10NE (SE)	0	3	433635 410085
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (S)	0	3	433635 410001
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (SW)	0	3	433610 410046
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (S)	0	3	433635 410001
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11NW (NE)	0	3	433644 410102
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A10NE (SE)	0	3	433635 410085
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	3	433678 410001
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	63	3	433804 409780
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A10SE (SW)	106	3	433506 409843
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SE (E)	149	3	434032 410001
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (SW)	179	3	433396 409819
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SE (E)	223	3	434107 410001
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A10SE (SW)	0	3	433558 409915
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10NE (SE)	0	3	433635 410085
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (S)	0	3	433635 410001

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11NW (NE)	0	3	433692 410186
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (SW)	62	3	433519 409883
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	63	3	433804 409780
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	81	3	433400 410001
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11NW (NE)	147	3	433928 410212
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	3	433850 409951
	Radon Potential - Radon Protection Measures Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A11NW (E)	0	3	433675 410101
	Radon Potential - Radon Protection Measures Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	3	433700 409976
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A10NE (SE)	0	3	433635 410085
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A10SE (S)	0	3	433635 410001
	Radon Potential - Radon Affected Areas Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	3	433850 409951
	Radon Potential - Radon Affected Areas Affected Area: The property is in a radon affected area, as between 3 and 5% of homes are above the action level Source: British Geological Survey, National Geoscience Information Service	A11NW (E)	0	3	433675 410101
	Radon Potential - Radon Affected Areas Affected Area: The property is in a radon affected area, as between 3 and 5% of homes are above the action level Source: British Geological Survey, National Geoscience Information Service	A11SW (SE)	0	3	433700 409976
	Radon Potential - Radon Affected Areas Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level Source: British Geological Survey, National Geoscience Information Service	A10NE (SE)	0	3	433635 410085
	Radon Potential - Radon Affected Areas Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level Source: British Geological Survey, National Geoscience Information Service	A10SE (S)	0	3	433635 410001



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
35	<p>Contemporary Trade Directory Entries</p> <p>Name: Barnsley Catering Services Location: Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6DL Classification: Catering Equipment - Servicing & Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A11NW (E)	50	-	433891 410073
36	<p>Contemporary Trade Directory Entries</p> <p>Name: Down 2 Earth Location: 11, Hope Street, Staincross, Barnsley, South Yorkshire, S75 6DA Classification: Pest & Vermin Control Status: Active Positional Accuracy: Automatically positioned to the address</p>	A10SE (SW)	112	-	433389 409951
37	<p>Contemporary Trade Directory Entries</p> <p>Name: Williams & Needham Location: 12, Park View Road, Staincross, Barnsley, South Yorkshire, S75 6LD Classification: Reclaiming - Waste Products Status: Active Positional Accuracy: Automatically positioned to the address</p>	A14SE (N)	143	-	433532 410444
38	<p>Contemporary Trade Directory Entries</p> <p>Name: Pkm Ironing Services Location: 70, Bar Lane, Mapplewell, Barnsley, South Yorkshire, S75 6DE Classification: Ironing & Home Laundry Services Status: Active Positional Accuracy: Automatically positioned to the address</p>	A10SE (S)	151	-	433611 409739
38	<p>Contemporary Trade Directory Entries</p> <p>Name: Evening Shade Blinds Location: 68, Bar Lane, Mapplewell, Barnsley, South Yorkshire, S75 6DE Classification: Blinds, Awnings & Canopies Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A10SE (S)	155	-	433621 409729
39	<p>Contemporary Trade Directory Entries</p> <p>Name: William Freeman Ltd Location: Suba Seal Works, Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6DH Classification: Rubber & Plastic Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A11SE (SE)	153	-	434025 409913
40	<p>Contemporary Trade Directory Entries</p> <p>Name: Anette Cleaning Services Location: 1, Park Close, Staincross, Barnsley, South Yorkshire, S75 6BY Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A10SE (W)	168	-	433318 409954
41	<p>Contemporary Trade Directory Entries</p> <p>Name: Oak Lodge Location: 134, Blacker Road, Mapplewell, Barnsley, South Yorkshire, S75 6DB Classification: Joinery Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A10SE (SW)	172	-	433391 409832
42	<p>Contemporary Trade Directory Entries</p> <p>Name: Roy'S Autos Location: 55a, Blacker Road, Staincross, Barnsley, South Yorkshire, S75 6GS Classification: Breakdown and Recovery Status: Active Positional Accuracy: Automatically positioned to the address</p>	A10NW (W)	181	-	433242 410068
43	<p>Contemporary Trade Directory Entries</p> <p>Name: R B M Ltd Location: Unit 10, Mapplewell Business Park, Blacker Rd, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Builders' Merchants Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location</p>	A10SW (W)	195	-	433258 409980
44	<p>Contemporary Trade Directory Entries</p> <p>Name: Wheel Deliver Collections & Delivery Location: 6, Bar Avenue, Mapplewell, Barnsley, South Yorkshire, S75 6DP Classification: Breakdown and Recovery Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A10SE (S)	196	-	433525 409732



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
45	<p>Contemporary Trade Directory Entries</p> <p>Name: Barnsley Commercial Sales Location: Wentworth Rd, Mapplewell, Barnsley, South Yorkshire, S75 6DZ Classification: Commercial Vehicle Dealers Status: Active Positional Accuracy: Manually positioned to the road within the address or location</p>	A10SE (SW)	218	-	433456 409742
45	<p>Contemporary Trade Directory Entries</p> <p>Name: A Tyre Ltd Location: Wentworth Road, Mapplewell, Barnsley, South Yorkshire, S75 6DZ Classification: Tyre Dealers Status: Active Positional Accuracy: Automatically positioned to the address</p>	A10SE (SW)	221	-	433440 409747
46	<p>Contemporary Trade Directory Entries</p> <p>Name: K J Spares Location: 3, Wentworth Road, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Motor Cycle Breakers & Dismantlers Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A6NE (SW)	240	-	433470 409710
47	<p>Contemporary Trade Directory Entries</p> <p>Name: Flaming Hot Fires Location: 8 Wentworth Rd, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Gas Suppliers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location</p>	A6NE (SW)	240	-	433454 409719
47	<p>Contemporary Trade Directory Entries</p> <p>Name: Aries Motor Engineers Location: Wentworth Road, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A6NE (SW)	279	-	433416 409695
48	<p>Contemporary Trade Directory Entries</p> <p>Name: Oakwell Resprays Location: Unit B/2, Mapplewell Business Park, Blacker Road, Staincross, BARNSELY, S75 6BP Classification: Car Body Repairs Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location</p>	A10SW (W)	250	-	433179 410028
48	<p>Contemporary Trade Directory Entries</p> <p>Name: Radiator Services Location: Blacker Rd, Mapplewell, Barnsley, South Yorkshire, S75 6BS Classification: Car Radiator Servicing & Repairs Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location</p>	A10SW (W)	263	-	433164 410036
48	<p>Contemporary Trade Directory Entries</p> <p>Name: D-Grease Ltd Location: Unit 3 North Gawber Ind Park, Blacker Rd, Mapplewell, Barnsley, South Yorkshire, S75 6BS Classification: Cleaning Materials & Equipment Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location</p>	A10SW (W)	267	-	433159 410038
49	<p>Contemporary Trade Directory Entries</p> <p>Name: Dennis Higgs Transport Ltd Location: Wakefield Rd, Staincross, Barnsley, South Yorkshire, S75 6DJ Classification: Mot Testing Centres Status: Active Positional Accuracy: Manually positioned to the road within the address or location</p>	A11SE (SE)	260	-	434017 409728
50	<p>Contemporary Trade Directory Entries</p> <p>Name: Booth Bros Location: Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6DJ Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address</p>	A7NE (SE)	273	-	434033 409727
51	<p>Contemporary Trade Directory Entries</p> <p>Name: Gd Gaskets & Seals Location: Mapplewell Business Centre, Blacker Road, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Gaskets Status: Inactive Positional Accuracy: Manually positioned within the geographical locality</p>	A10SW (W)	286	-	433164 409963

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
51	<p>Contemporary Trade Directory Entries</p> <p>Name: Mapplewell Autocare Location: Unit 9, Mapplewell Business Centre, Blacker Road, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the address or location</p>	A10SW (W)	313	-	433137 409957
52	<p>Contemporary Trade Directory Entries</p> <p>Name: Imprint Studios Ltd Location: Unit 2-3, Courtyard, 1, Wentworth Road, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address</p>	A6NE (SW)	287	-	433421 409683
52	<p>Contemporary Trade Directory Entries</p> <p>Name: Aries Motor Engineers Location: Unit 2-3, Courtyard, 1, Wentworth Road, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Mot Testing Centres Status: Active Positional Accuracy: Automatically positioned to the address</p>	A6NE (SW)	287	-	433421 409683
52	<p>Contemporary Trade Directory Entries</p> <p>Name: Animal Snap & Tack Location: Unit 11, Wentworth Rd, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Pet Foods & Animal Feeds Status: Active Positional Accuracy: Manually positioned within the geographical locality</p>	A6NE (SW)	291	-	433431 409673
52	<p>Contemporary Trade Directory Entries</p> <p>Name: M & R Precision Engineering Ltd Location: Unit 2, Courtyard 3, Wentworth Road, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A6NE (SW)	295	-	433406 409682
52	<p>Contemporary Trade Directory Entries</p> <p>Name: Mar (Engineering Services) Ltd Location: Unit 2, Courtyard 3, Wentworth Rd, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Gate Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location</p>	A6NE (SW)	295	-	433406 409682
52	<p>Contemporary Trade Directory Entries</p> <p>Name: Gi-Gi Household Products Location: Unit 17a, Courtyard 3, Wentworth Road, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Footwear Manufacturers Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address</p>	A6NE (SW)	296	-	433435 409665
52	<p>Contemporary Trade Directory Entries</p> <p>Name: Flaming Hot Fires Location: Unit 8, Courtyard 3, Wentworth Rd, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Fireplaces & Mantelpieces Status: Inactive Positional Accuracy: Manually positioned within the geographical locality</p>	A6NE (SW)	307	-	433415 409664
52	<p>Contemporary Trade Directory Entries</p> <p>Name: Flaming Hot Fires Location: Courtyard 3, Wentworth Rd, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Fireplaces & Mantelpieces Status: Inactive Positional Accuracy: Manually positioned within the geographical locality</p>	A6NE (SW)	308	-	433420 409660
52	<p>Contemporary Trade Directory Entries</p> <p>Name: Pelland Concast Location: Unit 5, Courtyard 2, Wentworth Road, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Concrete Products Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A6NE (SW)	321	-	433423 409643

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
52	<p>Contemporary Trade Directory Entries</p> <p>Name: Gb Mantels Ltd Location: Units 7-9,Courtyard 3,Wentworth Rd, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Fireplaces & Mantelpieces Status: Active Positional Accuracy: Manually positioned to the road within the address or location</p>	A6NE (SW)	327	-	433443 409626
52	<p>Contemporary Trade Directory Entries</p> <p>Name: Tranzfix Location: Unit 8 The Maple Ind Est,Wentworth Rd, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Gearboxes Status: Active Positional Accuracy: Manually positioned to the road within the address or location</p>	A6NE (SW)	333	-	433442 409620
53	<p>Contemporary Trade Directory Entries</p> <p>Name: Turnpike Garage Ltd Location: Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6JX Classification: Petrol Filling Stations Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A14SE (N)	296	-	433447 410588
54	<p>Contemporary Trade Directory Entries</p> <p>Name: Sorted Location: Mapplewell Business Park,Blacker Rd, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Car Customisation & Conversion Specialists Status: Active Positional Accuracy: Manually positioned to the road within the address or location</p>	A10SW (W)	301	-	433122 410057
54	<p>Contemporary Trade Directory Entries</p> <p>Name: S & S Autos Location: Mapplewell Business Park, Blacker Road, Mapplewell, Barnsley, South Yorkshire, S75 6BP Classification: Car Breakers & Dismantlers Status: Active Positional Accuracy: Automatically positioned in the proximity of the address</p>	A10NW (W)	304	-	433119 410069
54	<p>Contemporary Trade Directory Entries</p> <p>Name: Electrosion Location: Unit 17, Mapplewell Business Park, Blacker Road, Mapplewell, Barnsley, South Yorkshire, S75 6BP Classification: Precision Engineers Status: Active Positional Accuracy: Automatically positioned in the proximity of the address</p>	A10NW (W)	304	-	433119 410069
54	<p>Contemporary Trade Directory Entries</p> <p>Name: Dodworth Plastics Ltd Location: Mapplewell Business Park, Blacker Road, Mapplewell, Barnsley, South Yorkshire, S75 6BP Classification: Recycling Centres Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address</p>	A10NW (W)	304	-	433119 410069
54	<p>Contemporary Trade Directory Entries</p> <p>Name: Sdn Ltd Location: Unit 9,Mapplewell Business Centre,Blacker Rd, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Car Component Manufacturers Status: Active Positional Accuracy: Manually positioned within the geographical locality</p>	A10SW (W)	313	-	433115 410026
55	<p>Contemporary Trade Directory Entries</p> <p>Name: Peter Prest Location: Greenside, Mapplewell, Barnsley, South Yorkshire, S75 6AU Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A10NW (W)	330	-	433076 410132
56	<p>Contemporary Trade Directory Entries</p> <p>Name: Gary'S Autos Location: Unit 4, Mapplewell Business Park, Blacker Road, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Garage Services Status: Active Positional Accuracy: Manually positioned to the address or location</p>	A10SW (W)	334	-	433108 409970

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
56	<p>Contemporary Trade Directory Entries</p> <p>Name: Guest Location: Unit 4, Mapplewell Business Centre, Blacker Rd, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Oil & Gas Exploration Supplies & Services Status: Inactive Positional Accuracy: Manually positioned to the address or location</p>	A10SW (W)	335	-	433108 409969
56	<p>Contemporary Trade Directory Entries</p> <p>Name: P & D Fasteners Ltd Location: Unit 11, Mapplewell Business Park, Blacker Road, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Nuts, Bolts & Fixings Status: Active Positional Accuracy: Automatically positioned to the address</p>	A10SW (W)	342	-	433110 409945
56	<p>Contemporary Trade Directory Entries</p> <p>Name: Barnsley Car Warehouse Location: Unit 2, Mapplewell Business Park, Blacker Road, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Car Dealers - Used Status: Active Positional Accuracy: Automatically positioned to the address</p>	A10SW (W)	343	-	433097 409975
56	<p>Contemporary Trade Directory Entries</p> <p>Name: Spin Print Solutions Location: Unit 2, Mapplewell Business Park, Blacker Rd, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Printers Status: Active Positional Accuracy: Manually positioned to the address or location</p>	A10SW (W)	344	-	433096 409974
56	<p>Contemporary Trade Directory Entries</p> <p>Name: M K Window Film Specialists Location: Unit 1, Mapplewell Business Park, Blacker Road, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Blinds, Awnings & Canopies Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A10SW (W)	348	-	433091 409978
56	<p>Contemporary Trade Directory Entries</p> <p>Name: M K Window Films Specialists Location: Unit 1, Mapplewell Business Park, Blacker Road, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Window Tinting Status: Active Positional Accuracy: Automatically positioned to the address</p>	A10SW (W)	348	-	433091 409978
56	<p>Contemporary Trade Directory Entries</p> <p>Name: M K Window Film Specialists Location: Unit 1, Mapplewell Business Park, Blacker Road, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Window Tinting Status: Active Positional Accuracy: Automatically positioned to the address</p>	A10SW (W)	349	-	433090 409980
56	<p>Contemporary Trade Directory Entries</p> <p>Name: Natural Cement Distribution Ltd Location: 15, Fountain Parade, Mapplewell, Barnsley, South Yorkshire, S75 6FW Classification: Cement Manufacturers & Distributors Status: Active Positional Accuracy: Automatically positioned to the address</p>	A10SW (W)	375	-	433062 409980
56	<p>Contemporary Trade Directory Entries</p> <p>Name: Sleepasafe Location: 15, Fountain Parade, Mapplewell, Barnsley, South Yorkshire, S75 6FW Classification: Railway Equipment Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A10SW (W)	375	-	433062 409980
57	<p>Contemporary Trade Directory Entries</p> <p>Name: Kent Wilfred Ltd Location: Wakefield Rd, Barnsley, South Yorkshire, S71 3LU Classification: Road Haulage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location</p>	A7NE (SE)	351	-	434068 409647
58	<p>Contemporary Trade Directory Entries</p> <p>Name: J S Webster Location: 8, Bourne Court, Mapplewell, Barnsley, South Yorkshire, S75 6JB Classification: Washing Machines - Servicing & Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A14SE (NW)	357	-	433302 410616



Industrial Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
59	Contemporary Trade Directory Entries Name: First Car Location: Unit B/2, Mapplewell Business Park, Blacker Road, Staincross, Barnsley, South Yorkshire, S75 6BP Classification: Car Body Repairs Status: Active Positional Accuracy: Automatically positioned to the address	A10SW (SW)	363	-	433163 409829
60	Contemporary Trade Directory Entries Name: Frank Walter & Sons Ltd Location: 439, Wakefield Road, Barnsley, South Yorkshire, S71 3LU Classification: Firefighting Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SE)	367	-	434135 409703
60	Contemporary Trade Directory Entries Name: Print 'N' Foil Services Location: Unit 5, New Lodge, Barnsley, South Yorkshire, S71 3LU Classification: Printers Status: Active Positional Accuracy: Manually positioned within the geographical locality	A7NE (SE)	367	-	434135 409703
60	Contemporary Trade Directory Entries Name: Top Coat Finishers Location: 439, Wakefield Road, Barnsley, South Yorkshire, S71 3LU Classification: Powder Coatings Status: Inactive Positional Accuracy: Manually positioned to the address or location	A7NE (SE)	367	-	434135 409703
60	Contemporary Trade Directory Entries Name: Lsr Location: 439, Wakefield Road, Barnsley, South Yorkshire, S71 3LT Classification: Testing, Inspection & Calibration Equipment Manufacturers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7NE (SE)	372	-	434137 409698
61	Contemporary Trade Directory Entries Name: Gail Brayshaw Location: Unit 17a, Courtyard 3, Wentworth Road, Mapplewell, Barnsley, South Yorkshire, S75 6DT Classification: Screen Process Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A6NE (SW)	370	-	433412 409593
61	Contemporary Trade Directory Entries Name: G R Motors Location: Edward Street, Mapplewell, Barnsley, South Yorkshire, S75 6BL Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A6NE (SW)	407	-	433378 409570
62	Contemporary Trade Directory Entries Name: Auto Class Location: 25, Greenside, Mapplewell, Barnsley, South Yorkshire, S75 6AU Classification: Classic Car Specialists Status: Inactive Positional Accuracy: Automatically positioned to the address	A10NW (W)	396	-	433008 410127
63	Contemporary Trade Directory Entries Name: D & S Motors Location: 29, Spark Lane, Mapplewell, Barnsley, South Yorkshire, S75 6AA Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A10SW (W)	436	-	433006 409956
63	Contemporary Trade Directory Entries Name: O'Briens Location: The Garage, Spark Lane, Mapplewell, Barnsley, South Yorkshire, S75 6AA Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A10SW (W)	462	-	432980 409952
63	Contemporary Trade Directory Entries Name: Bethel Chapel Garage Location: Spark Lane, Mapplewell, Barnsley, South Yorkshire, S75 6AD Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A10SW (W)	462	-	432980 409952



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
64	<p>Contemporary Trade Directory Entries</p> <p>Name: Bizzy Bees Ironing Services Location: 1, Towngate, Mapplewell, Barnsley, South Yorkshire, S75 6AT Classification: Ironing & Home Laundry Services Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A10SW (W)	451	-	432972 410043
65	<p>Contemporary Trade Directory Entries</p> <p>Name: Denby Dale Shirt Co Ltd Location: The Old School House, Spark Lane, Mapplewell, Barnsley, South Yorkshire, S75 6AB Classification: Shirt Makers Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A9SE (W)	482	-	432958 409952
66	<p>Contemporary Trade Directory Entries</p> <p>Name: Fireside House Ltd Location: Towngate (The Old Clinic), Mapplewell, Barnsley, South Yorkshire, S75 6AS Classification: Fireplaces & Mantelpieces Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location</p>	A9SE (W)	519	-	432905 410042
66	<p>Contemporary Trade Directory Entries</p> <p>Name: Fireside House Location: 41, Towngate, Mapplewell, Barnsley, South Yorkshire, S75 6AS Classification: Fireplaces & Mantelpieces Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A9SE (W)	523	-	432902 410026
67	<p>Contemporary Trade Directory Entries</p> <p>Name: Oakland Location: 39, Staincross Common, Mapplewell, Barnsley, South Yorkshire, S75 6JF Classification: Garden Ornament Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A14SW (NW)	535	-	433019 410641
68	<p>Contemporary Trade Directory Entries</p> <p>Name: H Beachill & Son Location: 115, Towngate, Mapplewell, Barnsley, South Yorkshire, S75 6AS Classification: Road Haulage Services Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A9NE (W)	634	-	432772 410092
69	<p>Contemporary Trade Directory Entries</p> <p>Name: Specialised Aerosols Co Ltd Location: Carr Green Lane, Mapplewell, Barnsley, South Yorkshire, S75 6DY Classification: Chemicals & Allied Products Status: Active Positional Accuracy: Automatically positioned to the address</p>	A6NW (SW)	657	-	433149 409411
70	<p>Contemporary Trade Directory Entries</p> <p>Name: Kerry Utilities Ltd Location: Compound 5 & 6 Wakefield Rd, Barnsley, South Yorkshire, S71 1NU Classification: Asphalt & Coated Macadam Laying Contractors Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location</p>	A8NW (SE)	726	-	434388 409446
71	<p>Contemporary Trade Directory Entries</p> <p>Name: Cleanworld Location: 387, Darton Lane, Mapplewell, Barnsley, South Yorkshire, S75 6AL Classification: Laundries & Launderettes Status: Active Positional Accuracy: Automatically positioned to the address</p>	A9SE (W)	753	-	432657 410060
72	<p>Contemporary Trade Directory Entries</p> <p>Name: Wakefield Road Dry Cleaners Location: 315, Wakefield Road, Barnsley, South Yorkshire, S71 3LR Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address</p>	A8NW (SE)	840	-	434491 409390
73	<p>Contemporary Trade Directory Entries</p> <p>Name: Staincross Coffee Ltd Location: 28, Moorland Avenue, Mapplewell, Barnsley, South Yorkshire, S75 6NJ Classification: Catering Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A13SW (NW)	917	-	432588 410683



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
74	<p>Contemporary Trade Directory Entries</p> <p>Name: Motec Mobile Crypton Tuning Location: 2, Ibberson Avenue, Mapplewell, Barnsley, South Yorkshire, S75 6BJ Classification: Car Engine Tuning & Diagnostic Services Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A9SW (W)	946	-	432494 409903
74	<p>Contemporary Trade Directory Entries</p> <p>Name: M Roberts Location: 253, Darton Lane, Mapplewell, Barnsley, South Yorkshire, S75 6AJ Classification: Electrical goods - servicing & repairs Status: Inactive Positional Accuracy: Automatically positioned to the address</p>	A9SW (W)	988	-	432450 409913
75	<p>Contemporary Trade Directory Entries</p> <p>Name: Global Seals Direct Location: Woodmoor Ct, Wharnccliffe Bsns Pk, Barnsley, South Yorkshire, S71 3AA Classification: Seal & Joint Manufacturers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality</p>	A8NE (SE)	950	-	434676 409450
76	<p>Contemporary Trade Directory Entries</p> <p>Name: Dantone Location: 1 Cliffe Bus Pk, Wharnccliffe Bus Park, Unit 21 Longfields Rd, Laithe Lane, Barnsley, South Yorkshire, S71 3AA Classification: Precision Engineers Status: Active Positional Accuracy: Manually positioned within the geographical locality</p>	A8SE (SE)	993	-	434657 409351
77	<p>Fuel Station Entries</p> <p>Name: Station Garage Location: Wakefield Road, Mapplewell, BARNSELEY, South Yorkshire, S75 6DJ Brand: Obsolete Premises Type: Not Applicable Status: Obsolete Positional Accuracy: Automatically positioned to the address</p>	A11SE (SE)	270	-	434044 409745
78	<p>Fuel Station Entries</p> <p>Name: Turnpike Garage Location: Wakefield Road, Staincross, Barnsley, South Yorkshire, S75 6JX Brand: Jet Premises Type: Petrol Station Status: Open Positional Accuracy: Automatically positioned to the address</p>	A14SE (N)	296	-	433447 410588



Sensitive Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
79	Areas of Adopted Green Belt Authority: Barnsley Metropolitan Borough Council, Planning Department Plan Name: Barnsley Unitary Development Plan Status: Adopted Plan Date: 31st December 2000	A11NW (NE)	9	6	433783 410189
80	Areas of Adopted Green Belt Authority: Wakefield City Metropolitan District Council Plan Name: Wakefield Metropolitan District Unitary Development Plan First Alteration Status: Adopted Plan Date: 17th January 2003	A19SW (N)	914	7	433881 411191
81	Local Nature Reserves Name: Notton Wood Multiple Area: N Area (m2): 452278.72 Source: Natural England Designation Date: 19th May 1992	A19SW (N)	917	8	433883 411193
82	Nitrate Vulnerable Zones Name: Not Supplied Description: NVZ Area Source: Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	A10NE (SE)	0	9	433635 410085













Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Kirklees Metropolitan Borough Council - Planning Services Wakefield City Metropolitan District Council - Environmental Health	July 2012 September 2011 September 2011	Annual Rolling Update Annual Rolling Update Annual Rolling Update
Discharge Consents Environment Agency - North East Region	July 2012	Quarterly
Enforcement and Prohibition Notices Environment Agency - North East Region	June 2012	Quarterly
Integrated Pollution Controls Environment Agency - North East Region	October 2008	Not Applicable
Integrated Pollution Prevention And Control Environment Agency - North East Region	July 2012	Quarterly
Local Authority Integrated Pollution Prevention And Control Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Kirklees Metropolitan Borough Council - Environmental Health Department Wakefield City Metropolitan District Council - Environmental Health	December 2011 October 2011 October 2011	Annual Rolling Update Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Controls Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Kirklees Metropolitan Borough Council - Environmental Health Department Wakefield City Metropolitan District Council - Environmental Health	December 2011 October 2011 October 2011	Annual Rolling Update Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Kirklees Metropolitan Borough Council - Environmental Health Department Wakefield City Metropolitan District Council - Environmental Health	December 2011 October 2011 October 2011	Annual Rolling Update Annual Rolling Update Annual Rolling Update
Nearest Surface Water Feature Ordnance Survey	July 2012	Quarterly
Pollution Incidents to Controlled Waters Environment Agency - North East Region	December 1998	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - North East Region	June 2012	Monthly
Prosecutions Relating to Controlled Waters Environment Agency - North East Region	June 2012	Monthly
Registered Radioactive Substances Environment Agency - North East Region	July 2012	Quarterly
River Quality Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	July 2012 July 2012	Quarterly Quarterly
Water Abstractions Environment Agency - North East Region	July 2012	Quarterly
Water Industry Act Referrals Environment Agency - North East Region	July 2012	Quarterly
Groundwater Vulnerability Environment Agency - Head Office	January 2011	Not Applicable
Drift Deposits Environment Agency - Head Office	January 1999	Not Applicable

Agency & Hydrological	Version	Update Cycle
Bedrock Aquifer Designations British Geological Survey - National Geoscience Information Service	September 2011	Annually
Superficial Aquifer Designations British Geological Survey - National Geoscience Information Service	September 2011	Annually
Source Protection Zones Environment Agency - Head Office	July 2012	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	July 2012	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	July 2012	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	July 2012	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	July 2012	Quarterly
Flood Defences Environment Agency - Head Office	July 2012	Quarterly
Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	July 2012 July 2012	Quarterly Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - North East Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	July 2012 July 2012	Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	July 2012 July 2012	Quarterly Quarterly
Local Authority Landfill Coverage Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Kirklees Metropolitan Borough Council - Planning Services Wakefield City Metropolitan District Council - Environmental Health	May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Kirklees Metropolitan Borough Council - Planning Services Wakefield City Metropolitan District Council - Environmental Health	May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable
Registered Landfill Sites Environment Agency - North East Region - Ridings Area	March 2003	Not Applicable
Registered Waste Transfer Sites Environment Agency - North East Region - Ridings Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency - North East Region - Ridings Area	March 2003	Not Applicable

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	May 2012	Bi-Annually
Explosive Sites Health and Safety Executive	June 2012	Bi-Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements Kirklees Metropolitan Borough Council - Planning Services Wakefield City Metropolitan District Council Barnsley Metropolitan Borough Council - Planning Department	February 2012 February 2012 October 2011	Annual Rolling Update Annual Rolling Update Annual Rolling Update
Planning Hazardous Substance Consents Kirklees Metropolitan Borough Council - Planning Services Wakefield City Metropolitan District Council Barnsley Metropolitan Borough Council - Planning Department	February 2012 February 2012 October 2011	Annual Rolling Update Annual Rolling Update Annual Rolling Update
Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	August 1996	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	January 2010	Variable
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	April 2012	Bi-Annually
Brine Compensation Area Cheshire Brine Subsidence Compensation Board	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Mining Report Service	January 2012	As notified
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	February 2011	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	As notified
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	As notified

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	May 2012	Quarterly
Fuel Station Entries Catalist Ltd - Experian	May 2012	Quarterly
Sensitive Land Use	Version	Update Cycle
Areas of Adopted Green Belt Barnsley Metropolitan Borough Council - Planning Department Kirklees Metropolitan Borough Council Wakefield City Metropolitan District Council	August 2012 August 2012 August 2012	As notified As notified As notified
Areas of Unadopted Green Belt Barnsley Metropolitan Borough Council - Planning Department Kirklees Metropolitan Borough Council Wakefield City Metropolitan District Council	August 2012 August 2012 August 2012	As notified As notified As notified
Areas of Outstanding Natural Beauty Natural England	July 2012	Bi-Annually
Environmentally Sensitive Areas Natural England	February 2012	Annually
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	February 2012	Bi-Annually
Marine Nature Reserves Natural England	August 2012	Bi-Annually
National Nature Reserves Natural England	February 2012	Bi-Annually
National Parks Natural England	August 2012	Bi-Annually
Nitrate Sensitive Areas Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	February 2012	Not Applicable
Nitrate Vulnerable Zones Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	February 2012	Annually
Ramsar Sites Natural England	August 2012	Bi-Annually
Sites of Special Scientific Interest Natural England	August 2012	Bi-Annually
Special Areas of Conservation Natural England	August 2012	Bi-Annually
Special Protection Areas Natural England	August 2012	Bi-Annually

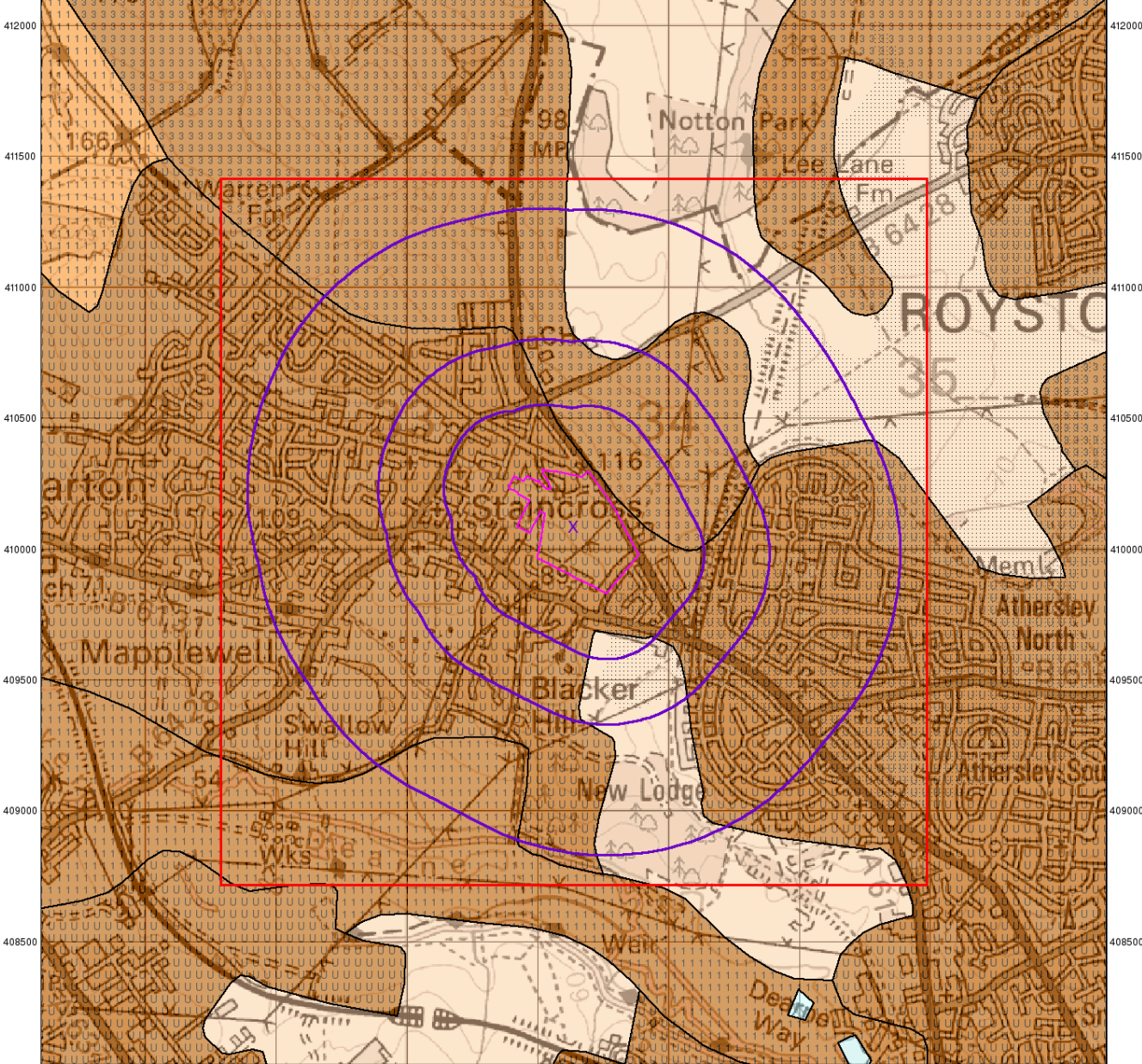
A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 British Geological Survey <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small>
Centre for Ecology and Hydrology	 Centre for Ecology & Hydrology <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small>
Countryside Council for Wales	 CYNGOR CEFN GWLAD CYMRU COUNTRYSIDE COUNCIL FOR WALES
Scottish Natural Heritage	
Natural England	
Health Protection Agency	
Ove Arup	
Peter Brett Associates	

Contact	Name and Address	Contact Details
1	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 08708 506 506 Email: enquiries@environment-agency.gov.uk
2	Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
3	British Geological Survey - Enquiry Service British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
4	Landmark Information Group Limited 5 - 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Telephone: 01392 441761 Fax: 01392 441709 Email: cssupport@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk
5	The Coal Authority - Mining Report Service 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0845 7626848 Email: thecoalauthority@coal.gov.uk
6	Barnsley Metropolitan Borough Council - Planning Department Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
7	Wakefield City Metropolitan District Council Newton Bar, Wakefield, West Yorkshire, WF1 2TX	Telephone: 01924 306090 Fax: 01924 378532 Website: www.wakefield.gov.uk
8	Natural England Northminster House, Northminster Road, Peterborough, Cambridgeshire, PE1 1UA	Telephone: 0845 600 3078 Fax: 01733 455103 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
9	Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) Government Buildings, Otley Road, Lawnswood, Leeds, West Yorkshire, LS16 5QT	Telephone: 0113 2613333 Fax: 0113 230 0879
10	Wakefield City Metropolitan District Council - Environmental Health Newton Bar, Wakefield, West Yorkshire, WF1 2TX	Telephone: 01924 306090 Website: www.wakefield.gov.uk
-	Health Protection Agency - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@hpa.org.uk Website: www.hpa.org.uk
-	Landmark Information Group Limited The Smith Centre, Henley On Thames, Oxfordshire, RG9 6AB	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

432000 432500 433000 433500 434000 434500 435000 435500



© Crown Copyright. All Rights Reserved. License Number: 100022432



Groundwater Vulnerability

General

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

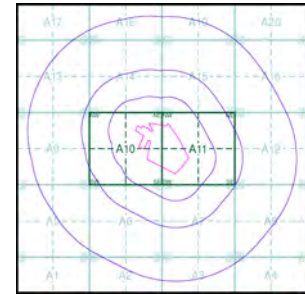
Agency and Hydrological

Geological Classes

- Major Aquifer (Highly Permeable)**
 - High (H) 1, 2, 3, U
 - Intermediate (I) 1, 2
 - Low
- Minor Aquifer (Variably Permeable)**
 - High (H) 1, 2, 3, U
 - Intermediate (I) 1, 2
 - Low
- Non Aquifer (Negligibly Permeable)**
 -
- Water or Sea**
 -
- Drift Deposit**
 -

Soil Classes

Site Sensitivity Context Map - Slice A



Order Details

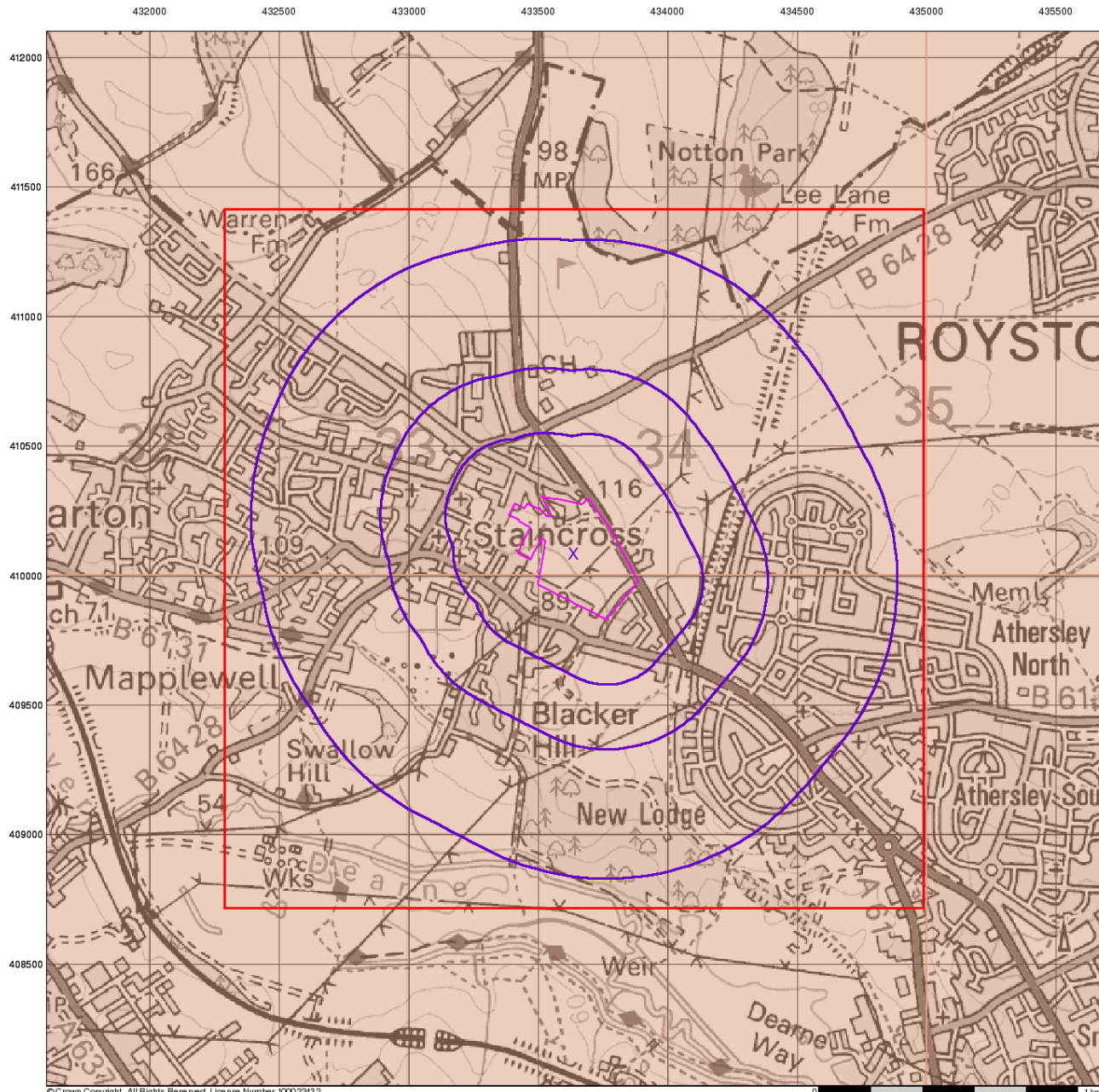
Order Number: 41207480_1_1
 Customer Ref: C3982/RGB/7506
 National Grid Reference: 433640, 410080
 Slice: A
 Site Area (Ha): 13.23
 Search Buffer (m): 1000

Site Details

Proposed Development off, Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6LE



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



© Crown Copyright. All Rights Reserved. License Number 100029432.

0 1 km



Bedrock Aquifer Designation

General

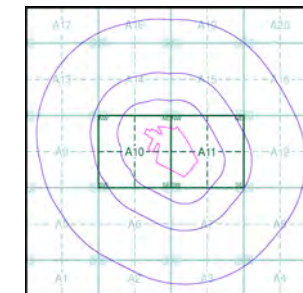
- ◊ Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Slice
- B Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown

Site Sensitivity Context Map - Slice A



Order Details

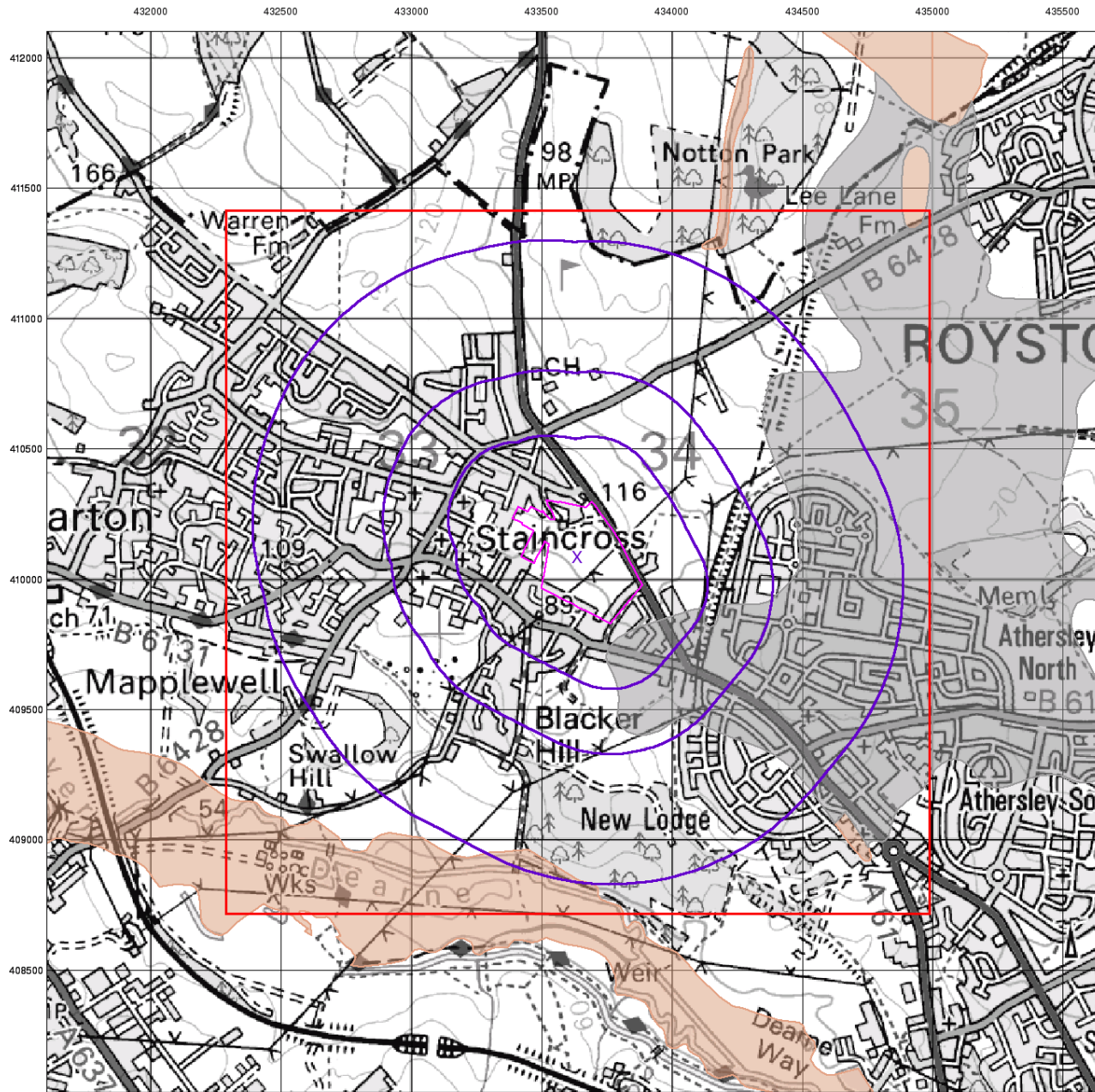
Order Number: 41207480_1_1
 Customer Ref: C3982/RGB/7506
 National Grid Reference: 433640, 410080
 Slice: A
 Site Area (Ha): 13.23
 Search Buffer (m): 1000

Site Details

Proposed Development off, Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6LE



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



© Crown Copyright. All Rights Reserved. License Number 100022932.



Superficial Aquifer Designation

General

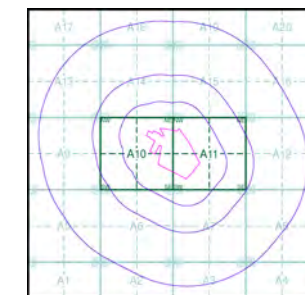
- ▭ Specified Site
- Specified Buffer(s)
- ✕ Bearing Reference Point
- ▭ Slice
- B Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown

Site Sensitivity Context Map - Slice A



Order Details

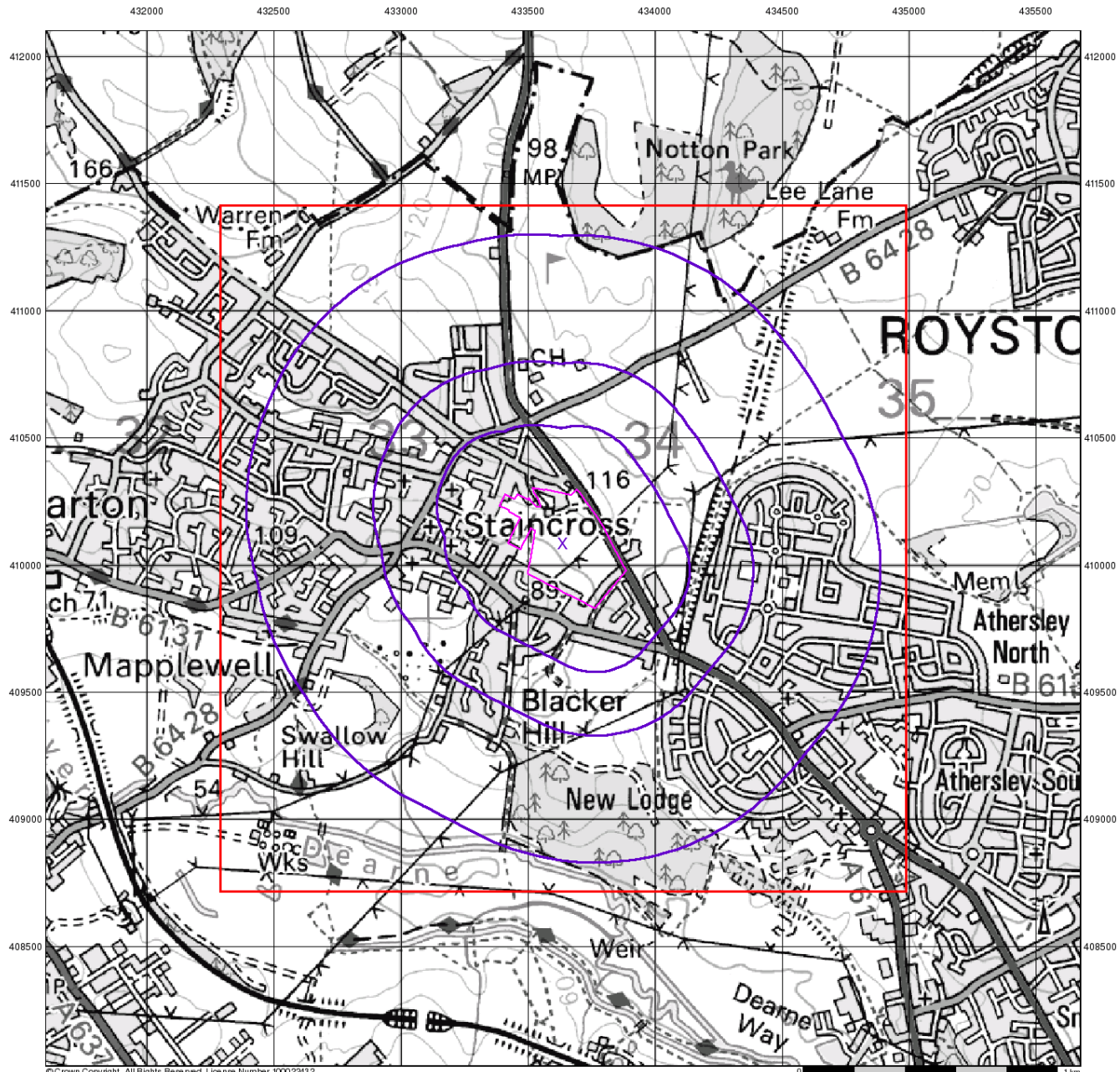
Order Number: 41207480_1_1
 Customer Ref: C3982/RGB/7506
 National Grid Reference: 433640, 410080
 Slice: A
 Site Area (Ha): 13.23
 Search Buffer (m): 1000

Site Details

Proposed Development off, Wakefield Road, Mapplewell,
 Barnsley, South Yorkshire, S75 6LE



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



© Crown Copyright. All Rights Reserved. License Number 100022432.



Source Protection Zones

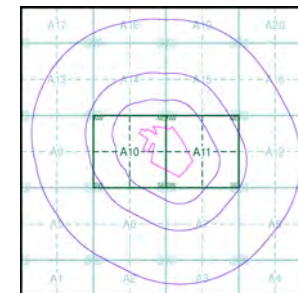
General

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

Agency and Hydrological

- Source Protection Zone I
- Source Protection Zone II
- Source Protection Zone III
- Zone of Special Interest
- Source Protection Zone Borehole

Site Sensitivity Context Map - Slice A



Order Details

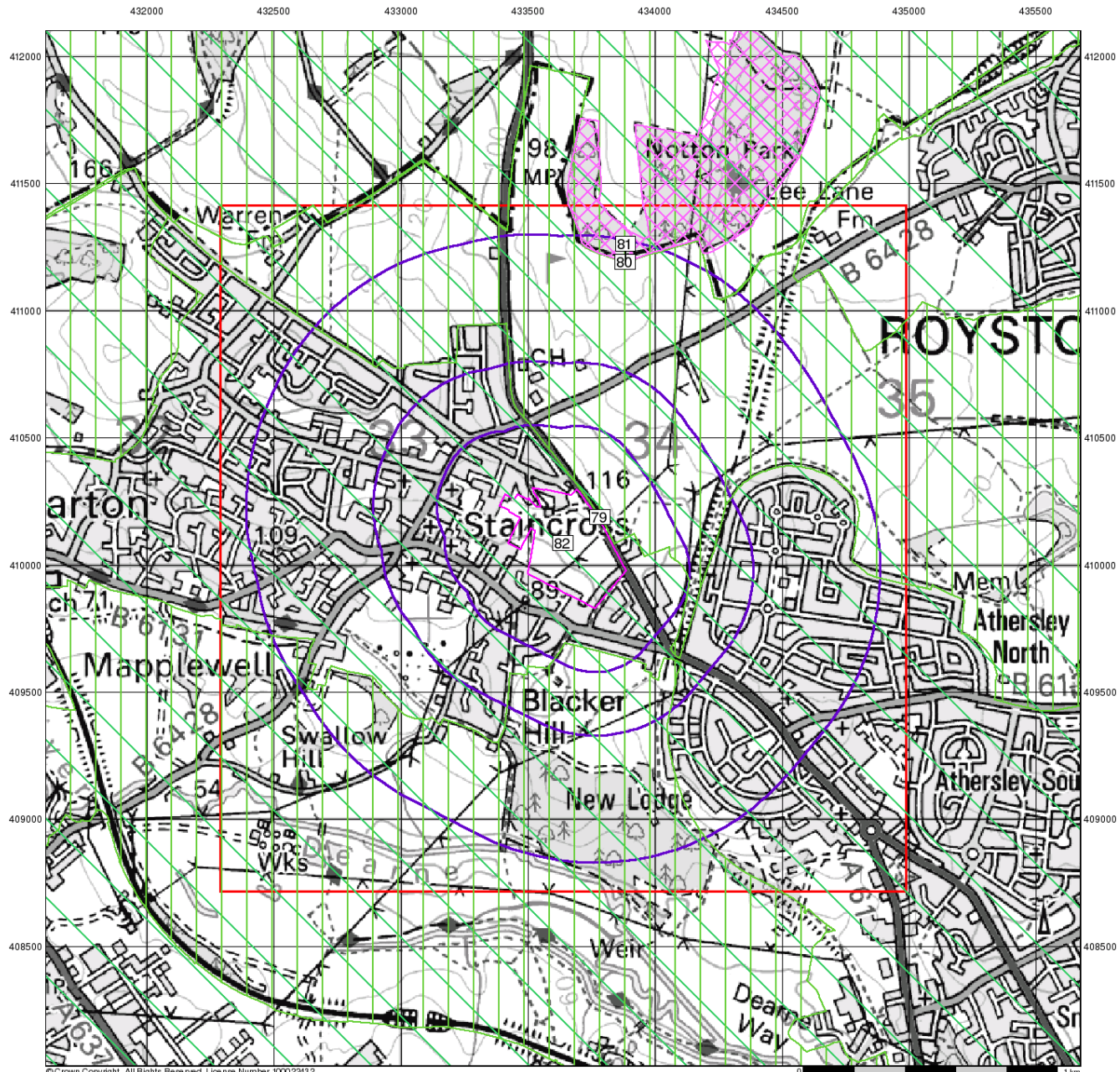
Order Number: 41207480_1_1
 Customer Ref: C3982/RGB/7506
 National Grid Reference: 433640, 410080
 Slice: A
 Site Area (Ha): 13.23
 Search Buffer (m): 1000

Site Details

Proposed Development off, Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6LE



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



© Crown Copyright. All Rights Reserved. License Number 100022432.



Sensitive Land Uses

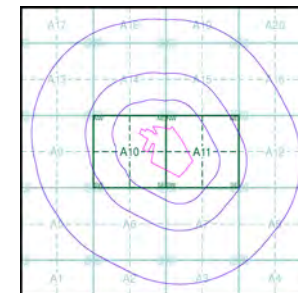
General

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

Sensitive Land Uses

- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area

Site Sensitivity Context Map - Slice A



Order Details

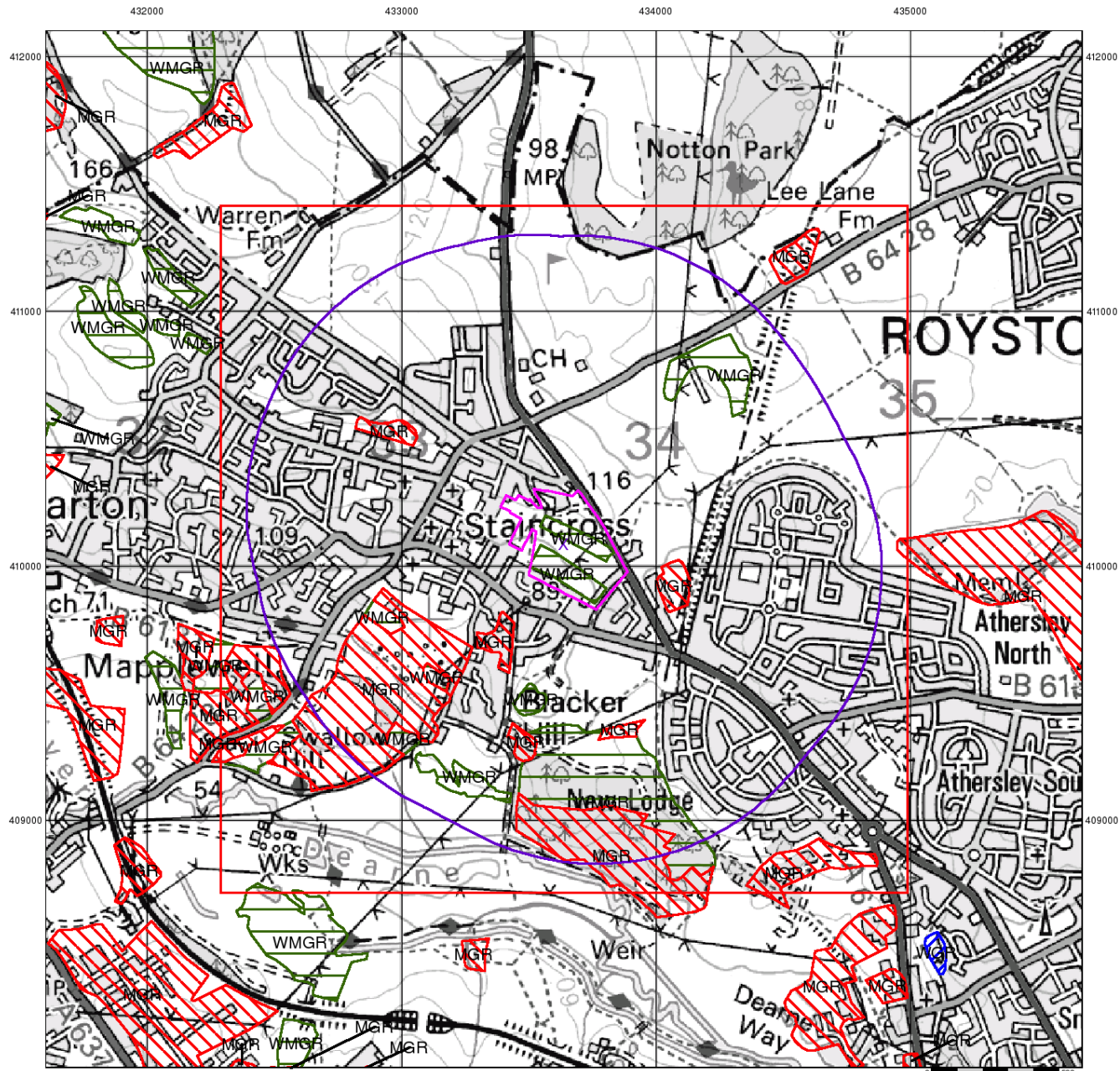
Order Number: 41207480_1_1
 Customer Ref: C3982/RGB/7506
 National Grid Reference: 433640, 410080
 Slice: A
 Site Area (Ha): 13.23
 Search Buffer (m): 1000

Site Details

Proposed Development off, Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6LE



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



© Crown Copyright. All Rights Reserved. License Number 100022432.



Artificial Ground and Landslip

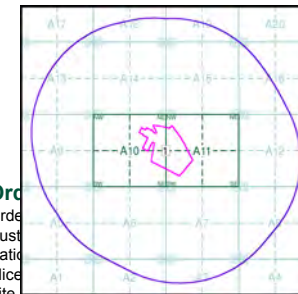
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice A



Order
Order
Custom
National
Slice
Site

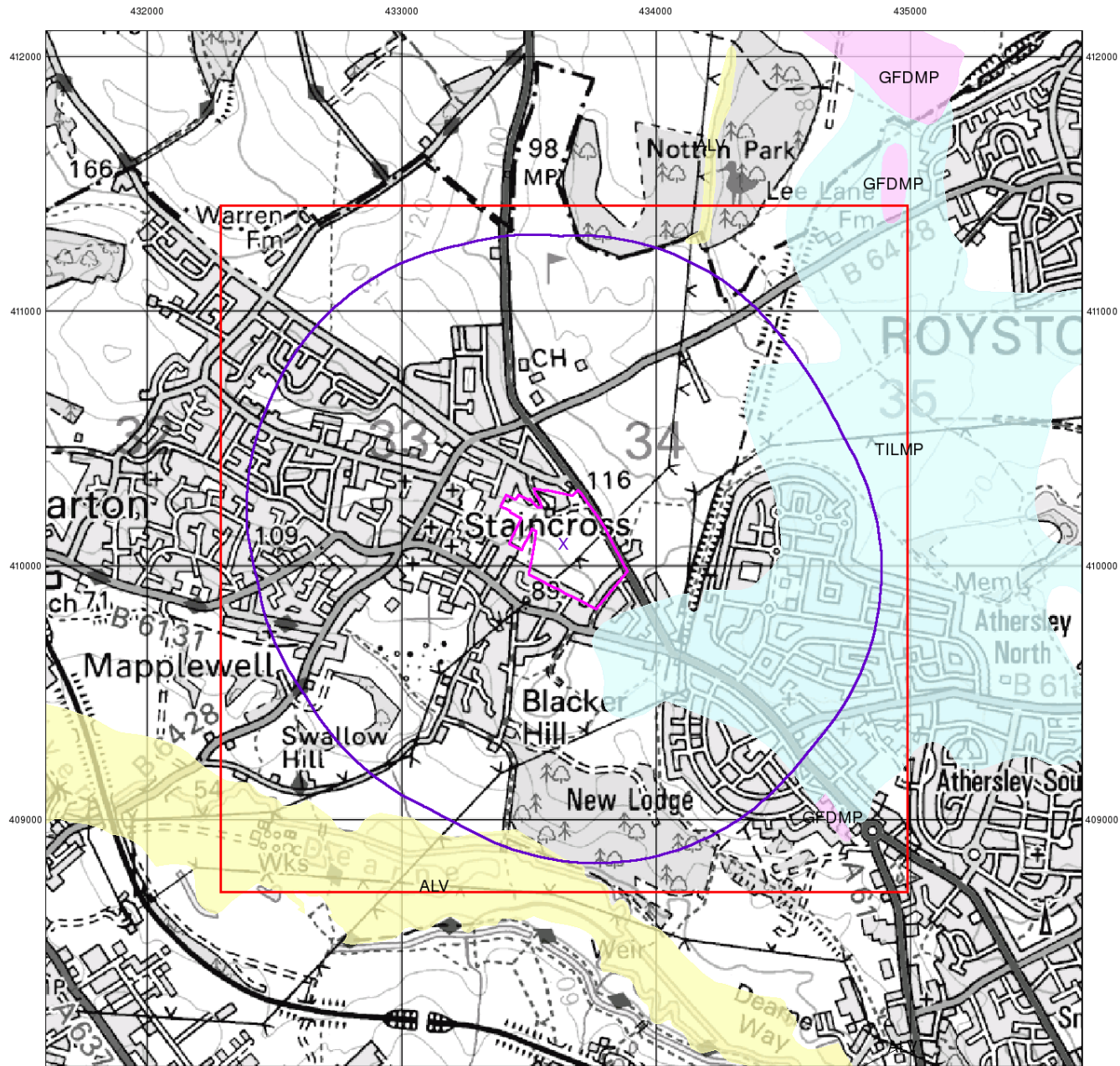
Search Buffer (m): 1000

Site Details:

Proposed Development off, Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6LE



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



© Crown Copyright. All Rights Reserved. License Number 100022432.



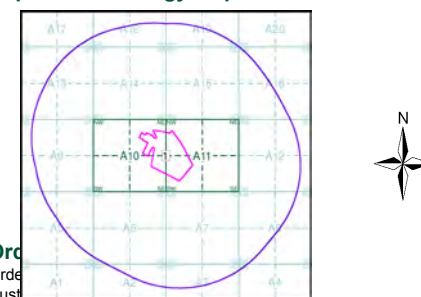
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



Order
Order
Customer

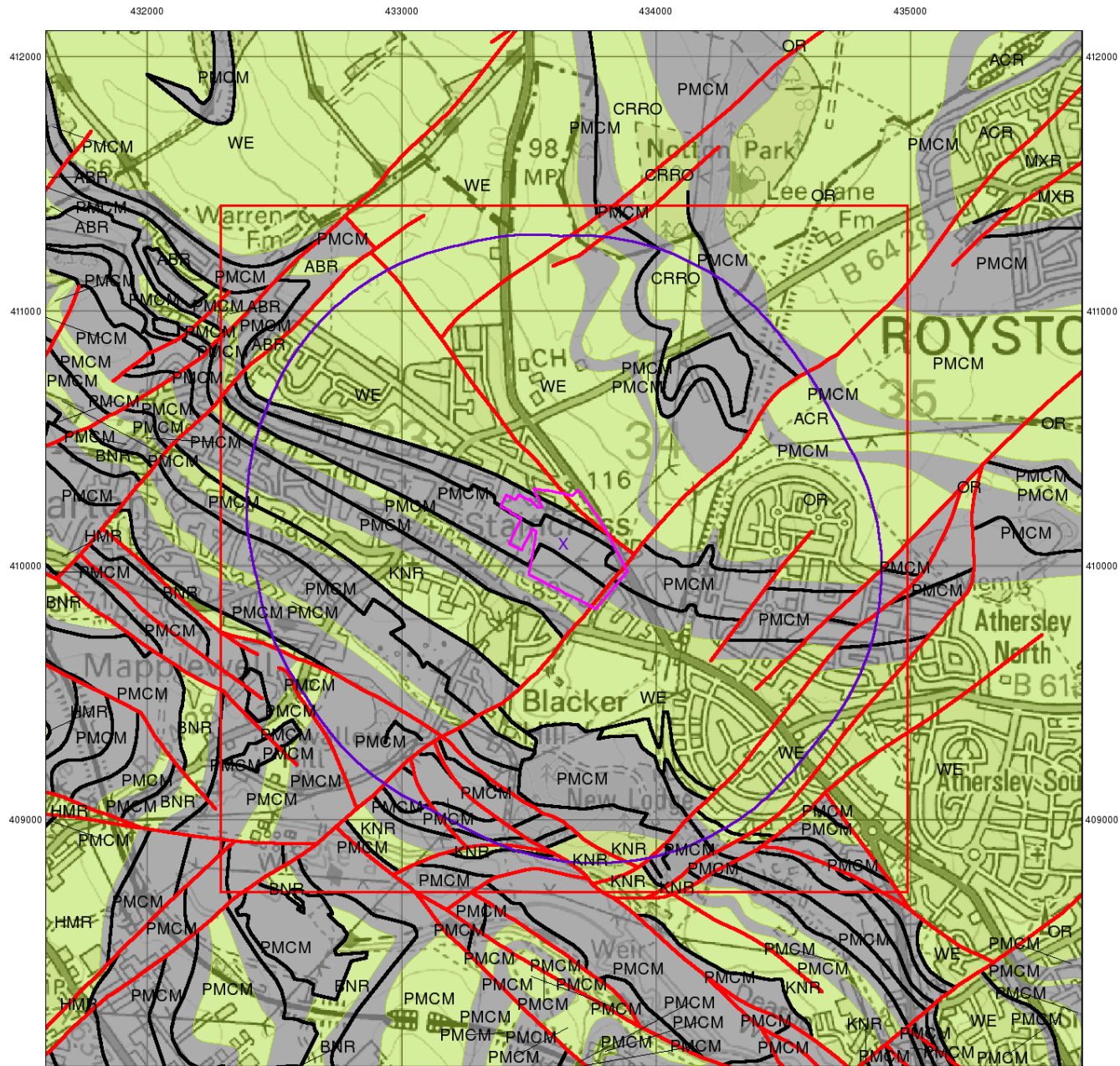
National Grid Reference: 433640, 410080
 Slice: A
 Site Area (Ha): 13.23
 Search Buffer (m): 1000

Site Details:

Proposed Development off, Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6LE



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



© Crown Copyright. All Rights Reserved. License Number 100022432.



Bedrock and Faults

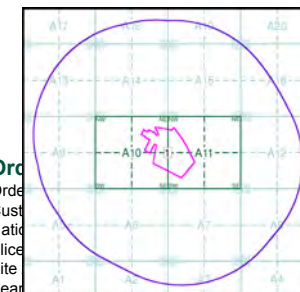
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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

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

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

Bedrock and Faults Map - Slice A



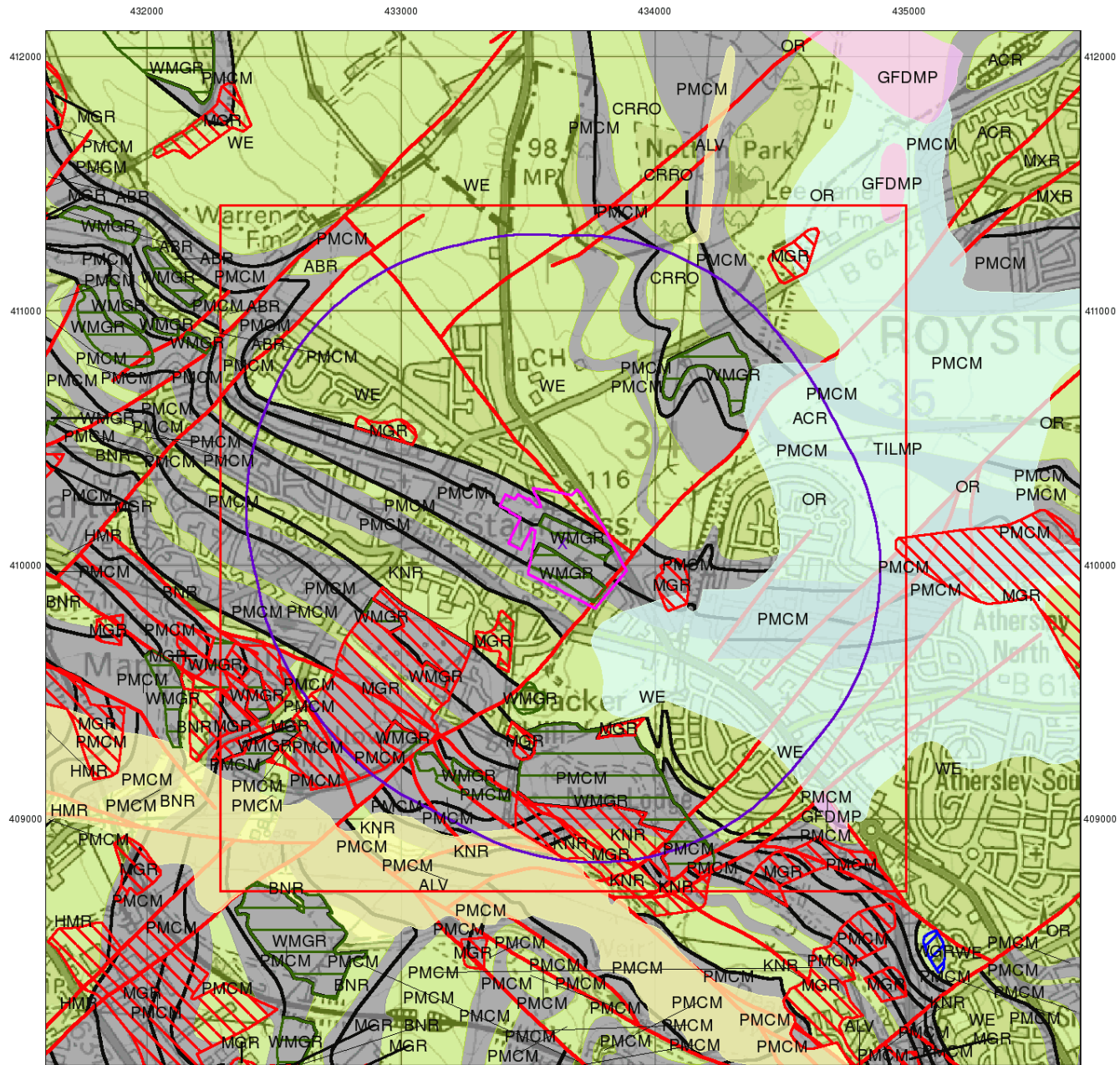
Order
Order
Cust
Natio
Slice
Site
Search

Site Details:

Proposed Development off, Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6LE



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



© Crown Copyright. All Rights Reserved. License Number 100022432.



Combined Surface Geology

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

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

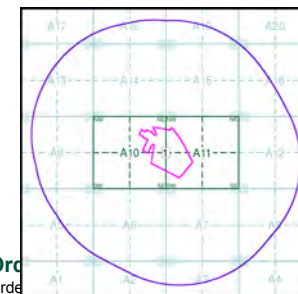
Additional Information

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

Contact

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

Combined Geology Map - Slice A



Ord

Customer Reference: C3982/RGB/7506
 National Grid Reference: 433640, 410080
 Slice: A
 Site Area (Ha): 13.23
 Search Buffer (m): 1000

Site Details:

Proposed Development off, Wakefield Road, Mapplewell,
 Barnsley, South Yorkshire, S75 6LE



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

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

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

Ordnance Survey Plan 1:10,000

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

1:10,000 Raster Mapping

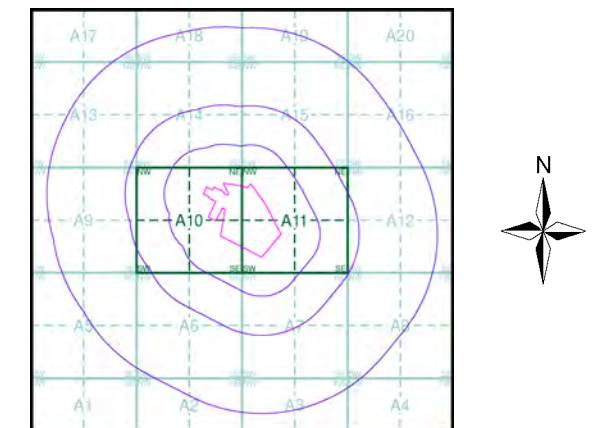
	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil,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



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Yorkshire	1:10,560	1854 - 1855	2
Yorkshire	1:10,560	1894	3
Yorkshire	1:10,560	1907	4
Yorkshire	1:10,560	1930	5
Yorkshire	1:10,560	1932 - 1933	6
Yorkshire	1:10,560	1938	7
Yorkshire	1:10,560	1938 - 1948	8
Yorkshire	1:10,560	1948	9
Ordnance Survey Plan	1:10,000	1956	10
Ordnance Survey Plan	1:10,000	1965 - 1966	11
Ordnance Survey Plan	1:10,000	1973	12
Ordnance Survey Plan	1:10,000	1980 - 1983	13
Ordnance Survey Plan	1:10,000	1991 - 1993	14
10K Raster Mapping	1:10,000	2006	15
10K Raster Mapping	1:10,000	2012	16

Historical Map - Slice A



Order Details

Order Number: 41207480_1_1
 Customer Ref: C3982/RGB/7506
 National Grid Reference: 433640, 410080
 Slice: A
 Site Area (Ha): 13.23
 Search Buffer (m): 1000

Site Details

Proposed Development off, Wakefield Road, Mapplewell, Barnsley, South Yorkshire, S75 6LE



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



Yorkshire

Published 1854 - 1855

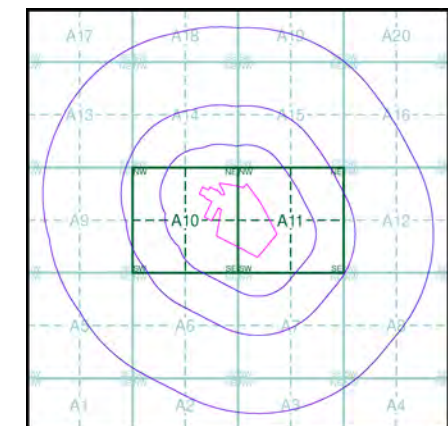
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

26200	1854	1:10,560
27400	1855	1:10,560

Historical Map - Slice A



Order Details

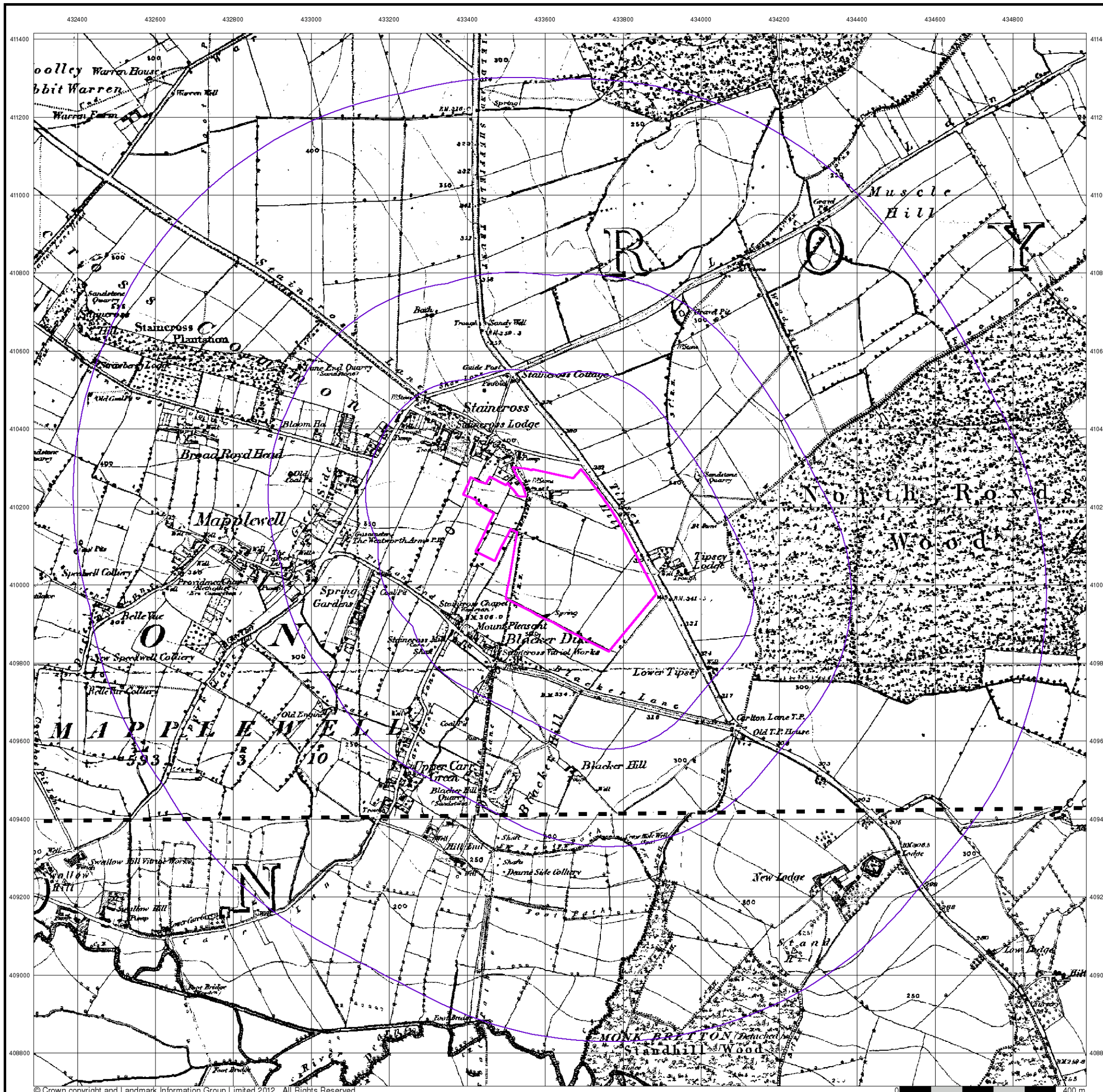
Order Number: 41207480_1_1
 Customer Ref: C3982/RGB/7506
 National Grid Reference: 433640, 410080
 Slice: A
 Site Area (Ha): 13.23
 Search Buffer (m): 1000

Site Details

Proposed Development off, Wakefield Road, Mapplewell,
 Barnsley, South Yorkshire, S75 6LE



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





Yorkshire

Published 1894

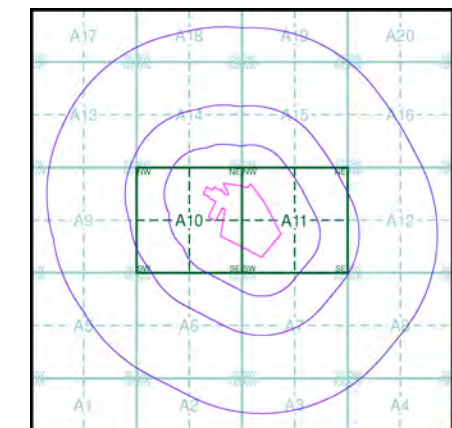
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

262SW 1894 1:10,560	262SE 1894 1:10,560
274NW 1894 1:10,560	274NE 1894 1:10,560

Historical Map - Slice A



Order Details

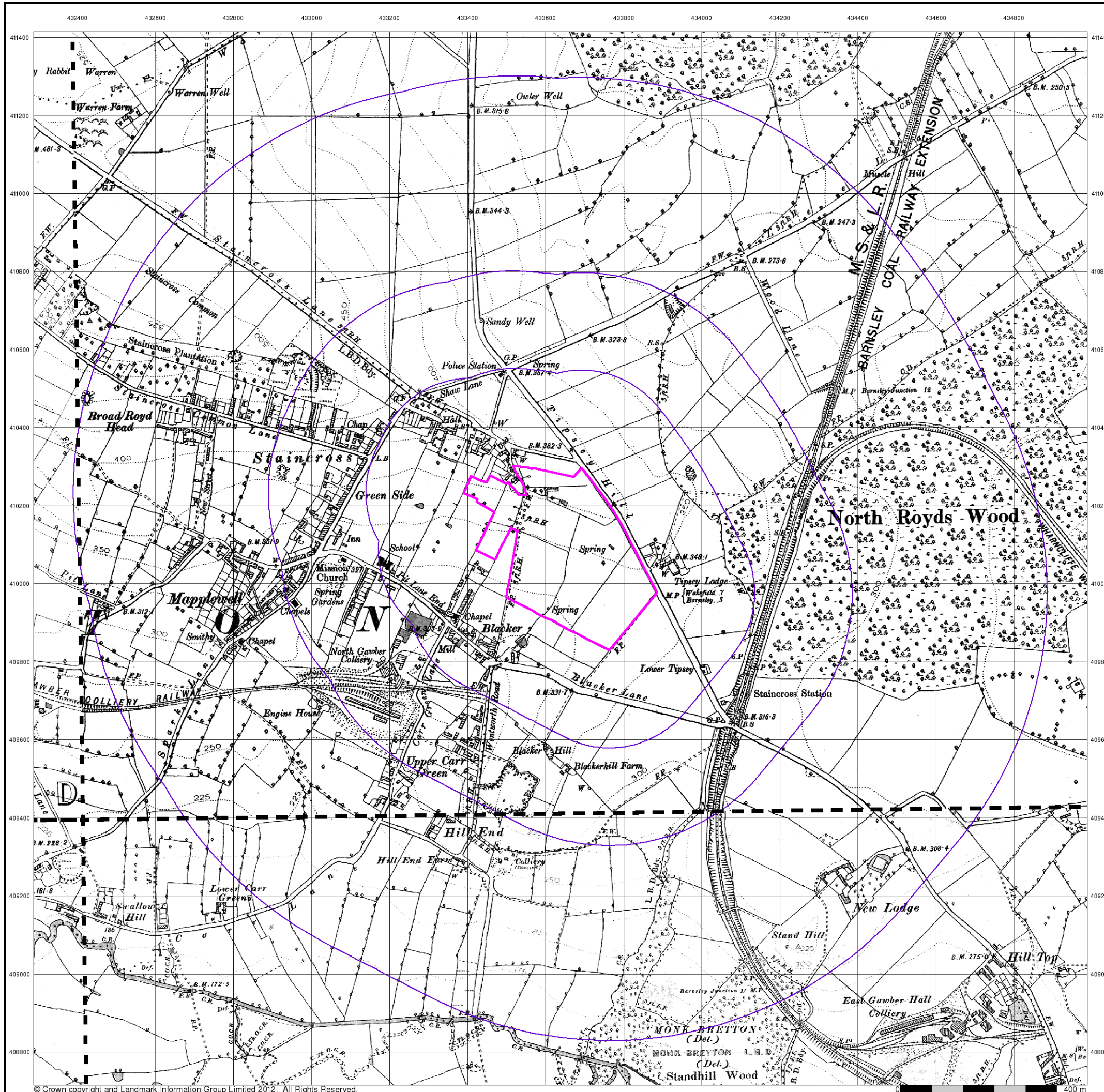
Order Number: 41207480_1_1
 Customer Ref: C3982/RGB/7506
 National Grid Reference: 433640, 410080
 Slice: A
 Site Area (Ha): 13.23
 Search Buffer (m): 1000

Site Details

Proposed Development off, Wakefield Road, Mapplewell,
 Barnsley, South Yorkshire, S75 6LE



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





Yorkshire

Published 1907

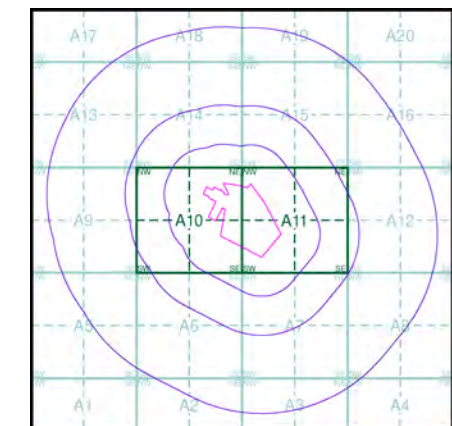
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

262SW 1907 1:10,560	262SE 1907 1:10,560
274NW 1907 1:10,560	274NE 1907 1:10,560

Historical Map - Slice A



Order Details

Order Number: 41207480_1_1
 Customer Ref: C3982/RGB/7506
 National Grid Reference: 433640, 410080
 Slice: A
 Site Area (Ha): 13.23
 Search Buffer (m): 1000

Site Details

Proposed Development off, Wakefield Road, Mapplewell,
 Barnsley, South Yorkshire, S75 6LE



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

