

PRELIMINARY CONTAMINATION AND MINING RISK ASSESSMENT ON LAND AT SHEPHERD HEY BARN, ASHWORTH ROAD, HEYWOOD

FWS Consultants Ltd
Unit 2 City West Business Park
St Johns Road
Meadowfield Ind. Est.
Durham
DH7 8ER
Company Registration No. 3944252

3934OR01/December 2020

admin@fwsconsultants.com
www.fwsconsultants.com
01388 420 633



PROJECT NUMBER	3934	
PROJECT TITLE	Shepherd Hey Barn, Ashworth Road, Heywood	
CLIENT	Edus Limited 8 St George’s Street Douglas Isle of Mann IM1 1AH	
REPORT TITLE	Preliminary Contamination and Mining Risk Assessment on land at Shepherd Hey Barn, Ashworth Road, Heywood	
REPORT REFERENCE	3934OR01	
REVISION	Date	Checked
Rev00	15/12/2020	ML

CONTENTS

1	INTRODUCTION	1
2	SITE LOCATION AND DESCRIPTION	1
3	HISTORICAL DEVELOPMENT OF THE SITE	2
4	ENVIRONMENTAL SETTING	2
4.1	Geology	2
4.2	Mining and Quarrying	3
4.3	Hydrology and Flooding	3
4.4	Hydrogeology	4
4.5	Licensed Authorisations, Health & Safety Executive/Planning Department Information and Fuel Stations	4
4.6	Landfill Sites	4
4.7	Radon	4
4.8	Ecological Receptors and Sensitive Landuse	4
5	PREVIOUS INVESTIGATIONS	4
6	ENVIRONMENTAL ASSESSMENT AND CONCEPTUAL SITE MODEL	4
6.1	Conceptual Site Model	4
6.2	Receptor Characterisation	5
6.3	Pathway Characterisation	6
7	PRELIMINARY CONTAMINATION RISK ASSESSMENT	6
8	IDENTIFICATION AND ASSESSMENT OF SITE SPECIFIC COAL MINING RISK	6
8.1	Assessment of Mineral Instability	6
8.2	Assessment of Mine Gas Risk	7
9	PRELIMINARY COMMENTS ON ENGINEERING DESIGN	7
9.1	Foundation Design	7
9.2	Infiltration Drainage	7
10	RECOMMENDATIONS FOR GROUND INVESTIGATION	8
11	REFERENCES	9

APPENDICES

- 1 DRAWINGS
 - FWS DRAWINGS
 - 3934OD01 SITE LOCATION PLAN
 - 3934OD02 CURRENT SITE FEATURES
 - 3934OD03 CONCEPTUAL SITE MODEL
 - THIRD PARTY DRAWINGS
 - 256:3 PROPOSED PLANS ELEVATIONS AND SITE
- 2 RECENT AND HISTORICAL OS MAPS
- 3 LANDMARK ENVIROCHECK REPORT
- 4 COAL AUTHORITY REPORT
- 5 SITE WALKOVER PHOTOGRAPHS
- 6 PRINCIPLES OF CONTAMINATION RISK ASSESSMENT
- 7 NOTES ON LIMITATIONS

PRELIMINARY CONTAMINATION AND MINING RISK ASSESSMENT ON LAND AT SHEPHERD HEY BARN, ASHWORTH ROAD, HEYWOOD

1 INTRODUCTION

FWS Consultants Ltd (FWS) carried out a Preliminary Contamination and Mining Risk Assessment on land at Shepherd Hey Barn, Ashworth Road, Heywood (the 'site') for Edus Limited (the 'Client') to provide information for the conversion of an agricultural barn to a residential development. The site location is shown on Drawing 3934OD01, Appendix 1.1.

This Preliminary Contamination Risk Assessment has been undertaken in accordance with the principles of current guidance including BS10175:2011+A1:2013 "Code of Practice for the Investigation of Potentially Contaminated Sites" (Ref. 1) and BS5930:2015 "Code of Practice for Ground Investigations" (Ref. 2). This risk assessment forms the Preliminary Risk Assessment in accordance with Environment Agency guidance document Land Contamination: Risk Management Guidance 2020 (Ref. 3), the NHBC "Guidance of Land Quality" (2017) (Ref. 4) and DEFRA "Environmental Protection Act 1990: Part 2A, Contaminated Land Statutory Guidance" (2012) (Ref. 5).

The objectives of this desk study for the residential development were to:-

- assess the historical landuse, geological and hydrogeological setting;
- assess the likelihood and impact of subsurface mining;
- assess the potential for contamination and ground gas;
- provide a qualitative contamination risk assessment and preliminary comment on mitigation measures;
- provide preliminary comment on ground conditions in relation to foundation design; and,
- provide recommendations on further investigations.

The following sources of information were utilised in the preparation of this report:-

- Historical Ordnance Survey Maps (Appendix 2)
- British Geological Survey, Sheet 76. Rochdale, 1:50,000 Solid and Drift Edition (Ref. 6)
- British Geological Survey, Sheet 76. Rochdale, 1:50,000 Solid Edition (Ref. 7)
- Envirocheck Report (Appendix 3)
- Coal Authority Mining Report, dated 08/12/2020 (Appendix 4)
- Coal Authority Interactive Map Viewer (Ref. 8)
- Site Walkover Inspection undertaken on 08/12/2020 (Photographs included in Appendix 5)

2 SITE LOCATION AND DESCRIPTION

The 0.41 ha site at National Grid Reference 383860E, 413970N is situated 2.6 km from Norden village as shown in Drawing 3934OD01, Appendix 1.

The site slopes from around 237 m AOD in the northwest to around 227 m AOD in the southeast.

The site is roughly rectangular in shape, with a two storey derelict farmhouse and associated structures in the northwest of the site, the structures were in a poor state of repair, with collapsed roofs and unstable walls.

The farmhouse area is Herras fenced and most of the site comprises a field of rough grass to the southeast of the farmhouses.

The site boundaries currently comprise timber fences and dry stone walls to the east, west and south with an existing residential building to the north.

A horse trailer was noted to the west of the farmhouses and is currently used as a container for domestic rubbish including plastic, televisions, electronics, scrap metal, timber, cardboard, straw baskets and lashing straps. More domestic rubbish was also noted to the east of the farmhouse comprising plastic chairs, plastic bags, timber, soil and scrap metal.

Several mature trees were noted across the site, mainly along the southern boundary comprising birch and ash trees and were no more than 10 m tall. A tree less than 5 m tall was present to the southeast side of the farmhouse buildings.

Areas of vegetation were noted to the south and east of the farmhouse buildings. Two surface drains were noted at the farmhouse area, one in the centre and the other at the southeast corner partially covered by a stone floor slab.

There was no evidence of invasive species on site at the time of the site inspection (December 2020).

3 HISTORICAL DEVELOPMENT OF THE SITE

The site is recorded as agricultural land with farm buildings in the north and a track/road in the west of the site, and a well in the south of the site since at least 1851. By 1893 the well is no longer marked, and since then there have been no changes to the land onsite.

The surrounding land has comprised agricultural land from the mid-1800s, with Leaches Farm 100 m to the west, and an 'old shaft' noted approximately 130 m to the west of the site. There have been no further changes to the land surrounding the site.

4 ENVIRONMENTAL SETTING

4.1 Geology

4.1.1 Made Ground and Superficial Geology

Thin made ground is anticipated in the northwest of the site associated with the previous and current buildings and the small road onsite. There is a potential for made ground within the well in the southwest of the site.

Elsewhere onsite, due to the past agricultural use of the site, made ground is not anticipated.

The site is underlain by Glacial Till of between 5 and 10 m in depth.

4.1.2 Solid Geology

The site is underlain by mudstone, siltstone, and sandstone with coal seams of the Pennine Lower Coal Measures Formation that dips to the southeast at an angle of around 8 to 10°.

The Lower Mountain Coal seam outcrops around 200 m to the north and is anticipated to be at 212 m AOD (25 m bgl) below the site and up to 0.50 m thick.

The Lower Foot (Little) Coal seam does not outcrop in the vicinity of the site. Based on the geological sequence, this seam is potentially 20 m below the Lower Mountain Coal, or 192 m AOD (45 m bgl) and is up to 0.3 m thick.

4.2 Mining and Quarrying

The table below provides a summary of the Coal Authority Mining Report (Appendix 4) and the principal coal mining legacy issues.

Table 1: Summary of Mining Legacy Issues

COAL MINING ISSUE	YES	NO	SUMMARY RECORDS
Underground coal mining (recorded at shallow depth)		✓	The property is not in the likely zone of influence of historical underground coal workings.
Underground coal mining (probable at shallow depth)		✓	No unrecorded workings are anticipated beneath the site.
Mine entries (shaft or adits)		✓	There are no reported mine entries on or within 20 m of the site.
Coal mining geology (fissures)		✓	There is a NW-SE trending fault 80 m to the south east of the site.
Record of past mine gas emissions or potential		✓	There is no record of a mine gas emission requiring action by the Coal Authority within the boundary of the site.
Recorded coal mining surface hazard		✓	The Coal Authority has no records of coal mining surface hazards relating to the site or immediate surrounding area.
Surface mining (opencast workings)		✓	The site is not located within the boundary of a historical opencast site and does not lie within 200 m of a current opencast site, nor within 800 m of a known future opencast site.
Other potential shallow worked minerals		✓	There is no evidence of quarrying having been carried out on site.

4.3 Hydrology and Flooding

The nearest surface water body is an unnamed lake 155 m to the south of the site.

There are no recorded surface water abstractions within 500m of the site.

There are no discharge consents within 200 m of the site boundaries. The closest is located 235 m to the northeast of the site which is held by E.T. & B Tomlinson and relates to treated effluent from a farm.

There have been no pollution incidents to controlled waters between within 250 m of the site.

The site does not fall into an area of extreme flooding from rivers or sea without defences or flooding from rivers or sea without defences.

4.4 Hydrogeology

It is anticipated that shallow perched groundwater will be present within granular lenses in the cohesive superficial deposits. The main water table is expected at a depth of around 10 m within the underlying bedrock.

The Environment Agency classify the Glacial Till (superficial deposits) as secondary undifferentiated and the Lower Pennine Coal Measures (solid geology) as Secondary Aquifer - A.

There are no groundwater Source Protection Zones, or groundwater abstractions within 1 km of the site.

The site is within an area with limited potential for groundwater flooding to occur.

4.5 Licenced Authorisations, Health & Safety Executive/Planning Department Information and Fuel Stations

There are no Licenced Authorisations and H&S Executive/Planning Department Information entries within 1 km that could impact the development site.

The site is located within a rural area and there are no fuel stations within 250 m of the site.

4.6 Landfill Sites

The Envirocheck Report does not report any historical or active landfills onsite, or within 200 m of the site boundary.

4.7 Radon

Current guidance (Ref. 9) on protective measures for new buildings indicates that the site does not fall within an area for which basic or full radon protection measures should be provided. The property is in a lower probability radon area, as less than 1% of buildings are above the action level.

4.8 Ecological Receptors and Sensitive Landuse

The site is within an area of adopted Green Belt.

There are no other sensitive ecological receptors or landuse within 250 m of the site.

5 PREVIOUS INVESTIGATIONS

No records of previous ground investigation are available for this site.

6 ENVIRONMENTAL ASSESSMENT AND CONCEPTUAL SITE MODEL

6.1 Conceptual Site Model

The approach to contamination risk assessment is detailed in Appendix 6. Presented below is a Preliminary Conceptual Site Model (CSM) for the proposed development (conversion of an

agricultural barn to residential use), that has been prepared in accordance with current guidance (Ref. 3). A schematic CSM of the site is presented in Drawing 3934OD03, Appendix 1.1.

Development

The agricultural structures in the northwest of the site are to be subject to a change of use from agricultural to residential in nature, and the demolition of outbuildings, as shown in Client's Drawing 256:3, Appendix 1.2.

Previous Land Use and Potential Contamination

The site has been agriculture in nature since the 1850s, with no significant development onsite.

In view of the agricultural land, including the extant structures onsite, only thin made ground is expected in the northwest of the site (if present) and no significant contaminants are anticipated. As the adjacent area has comprised agricultural land prior to residential development, no significant contamination is expected adjacent to the site. There is no reported risk from landfill or mine gas on, or adjacent to, the site and a low risk of radon gas.

Ground and Groundwater Conditions

Thin made ground is expected beneath the road in the west of the site and in the vicinity of the property onsite. The superficial deposits underlying the site consist of firm to stiff glacial till which are expected to extend to a depth of around 10m. Bedrock is expected to comprise the mudstone, siltstone, and sandstone of Pennine Lower Coal Measures.

It is anticipated that shallow perched groundwater may be locally present within granular lenses in the deeper cohesive superficial deposits. The main water table is expected at depth within the underlying bedrock.

Environmental Considerations

The superficial deposits below the site are classed as a secondary undifferentiated strata and the underlying Pennine Lower Coal Measures are classified as a Secondary A Aquifer.

There are no surface water courses on or within 150 m of the site.

There are no Groundwater Source Protection Zones within 1 km of the site.

6.2 Receptor Characterisation

The following potential receptors are anticipated for the proposed development, as illustrated in the schematic CSM Drawing 3934OD03, Appendix 1.1:-

Table 2: Receptor Characterisation

Part 2A Classification	Group		Receptor
Part 2A Receptors	R1	Human Health	Future site endusers
	R2	Property	Proposed development (modification of an agricultural barn to a residential property)

Part 2A Classification	Group		Receptor
			Existing buildings
			Services
	R3	Controlled	Rivers/Surface water – unnamed lake 155 m to the south east.
	R4	Waters	Superficial deposits classified as Secondary Undifferentiated. Lower Coal Measures Formation is classified as a 'Secondary A Aquifer' Groundwaters in the Secondary A Aquifer are likely to be of poor quality due to extensive mining in the area.
Non Part 2A Receptors	R5	Construction workers	
	R6	Plants and landscaped areas	

6.3 Pathway Characterisation

This desk study has identified the following potential pathways, which are illustrated in the schematic CSM Drawing 3934OD03, Appendix 1.1:-

Table 3: Pathway Characterisation

Pathway		Receptor
P1	Inhalation, ingestion and dermal contact	Human Health
P2	Direct contact	Plants
P3	Soil gas or soil vapours pooling within the structures	Buildings, Property and Services
	Contact with aggressive or acidic soils or hydrocarbon contaminated soils	
P4	Leaching of contaminants from the soil migrating vertically or laterally to groundwater	Controlled Waters
	Movement of contaminants via groundwater to surface water bodies	
	Surface water runoff into surface water bodies	

7 PRELIMINARY CONTAMINATION RISK ASSESSMENT

Based on this CSM, no potential contaminant linkages have been identified.

8 IDENTIFICATION AND ASSESSMENT OF SITE SPECIFIC COAL MINING RISK

8.1 Assessment of Mineral Instability

The coal mining risk assessment has been undertaken in accordance with the principles of current guidance including the Coal Authority's guidance document "Risk Based Approach to Development Management - Resources for Developers Version 4" (2017) (Ref. 10) and CIRIA "C758 Abandoned Mine Workings Manual" (2019) (Ref. 11).

The principal factors influencing mineral instability for this site are summarised below.

8.1.1 Underground Coal Workings

Surface settlement above areas of total coal extraction (goaf) is typically rapid and can generally be assumed to be complete after a certain period. Settlement above pillar and stall workings, or old roadways, can be sudden and abrupt; and can occur long after abandonment, sometimes creating surface features known as crown-holes. It is generally considered that a cover of competent rock strata equivalent to ten times the height of the working provides adequate protection against crown-hole development (Ref. 11). Less rock cover can be adequate in certain circumstances (e.g. if the rock cover is particularly strong). Drift deposits give less protection

than competent rock, and depending on the nature of the drift material (e.g. whether stiff boulder clay or running sand) considerably more cover may be needed to minimise the risk of surface ground movement. Where mining is identified within seams of less than 1 m thickness, it has been assumed that the minimum working height will be 1 m, otherwise the working height is assumed to be the seam thickness unless otherwise identified.

Table 4: Mineral Instability Risk Assessment

Seam Name	Seam Description	Workings	Assessment of Risk
Lower Mountain Coal ('LM')	This seam is shown to outcrop 200 m to the north. It is anticipated at a depth of 212 m AOD (25 m bgl) and up to 0.5 m thick.	The Coal Authority interactive map viewer indicates this seam to have been probably worked to the north of the site, however, there are no recorded workings in this seam below the site. Underground coal mine workings in seams of less than 0.5 m thick are unlikely.	As underground coal mine workings are unlikely, this seam will not present a significant risk of mineral instability to the proposed development.
Lower Foot (Little) Coal ('LF')	This seam does not outcrop in the vicinity of the site, and is anticipated at an elevation of around 192 m AOD (45 m bgl), and is up to 0.3 m thick.	Underground coal mine workings in seams of less than 0.5 m thick are unlikely.	As underground coal mine workings are unlikely, this seam will not present a risk of mineral instability to the proposed development.

8.2 Assessment of Mine Gas Risk

Based on the Coal Authority report (Appendix 4), there is a low risk of mine gas emission within the site boundary.

9 PRELIMINARY COMMENTS ON ENGINEERING DESIGN

9.1 Foundation Design

Should further structures be required/proposed; The site is expected to be underlain by thin made ground in the northwest of the site and then Glacial Till and, therefore, normal shallow strip foundations may be suitable for lightly loaded structures.

Consideration should be given to the areas of existing trees along the southern boundary and in the proximity of the derelict farmhouses. Close proximity of buildings to any areas of retained trees would require individually designed foundation depths in accordance with NHBC guidance (Ref. 4)

The site is not in an area that could be potentially affected by shallow mine workings or opencast workings.

9.2 Infiltration Drainage

Cohesive Glacial Till deposits, of potentially low permeability, are expected across the site. These soils are unlikely to be suitable for infiltration/sustainable drainage systems

10 RECOMMENDATIONS FOR GROUND INVESTIGATION

From the results of the Preliminary Risk Assessment this greenfield site, which has had no significant industrial or mining land use, has no significant contamination issues. In accordance with current guidance, NHBC Chapter 4.1 Land Quality – Managing Ground Conditions, a basic geotechnical and basic chemical investigation is required.



J DANN
GEO-ENVIRONMENTAL SCIENTIST



M LAKEY
DIRECTOR

11 REFERENCES

- 1 British Standard, 2011. BS10175:2011+A1:2013 Code of Practice for Investigation of Potentially Contaminated Sites
- 2 British Standard, 2010. BS5930:2015 Code of Practice for Ground Investigations
- 3 Environment Agency, 2020. Land Contamination: Risk Management.
- 4 NHBC, 2017. Guidance of Land Quality
- 5 DEFRA, 2012. Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance
- 6 British Geological Survey, 2008. Sheet 76 Rochdale, 1:50,000 Solid and Drift Edition.
- 7 British Geological Survey, 2008. Sheet 76 Rochdale, 1:50,000 Solid Edition.
- 8 Coal Authority Interactive Map Viewer.
<https://mapapps2.bgs.ac.uk/coalauthority/home.html>
- 9 IHS BRE Press, 2015. Radon: Guidance on Protective Measures for New Buildings, BR 211
- 10 Coal Authority, 2012. Risk Based Approach to Development Management Resources for Developers
- 11 CIRIA, 2019. C758 Abandoned Mine Workings Manual.

APPENDIX 1

DRAWINGS

APPENDIX 1.1

FWS DRAWINGS



NOTES / KEY

SITE LOCATION —

[© OpenStreetMap contributors](#)



DRAWING TITLE

SITE LOCATION PLAN

PROJECT TITLE

PRELIMINARY CONTAMINATION RISK ASSESSMENT
ON LAND AT SHEPHERD HEY BARN, ASHWORTH
ROAD, HEYWOOD

CLIENT

Edus Limited

STATUS

FINAL

DRAWN BY

ID

SCALE

AS SHOWN

PROJECT NUMBER

3934

DATE

December 2020

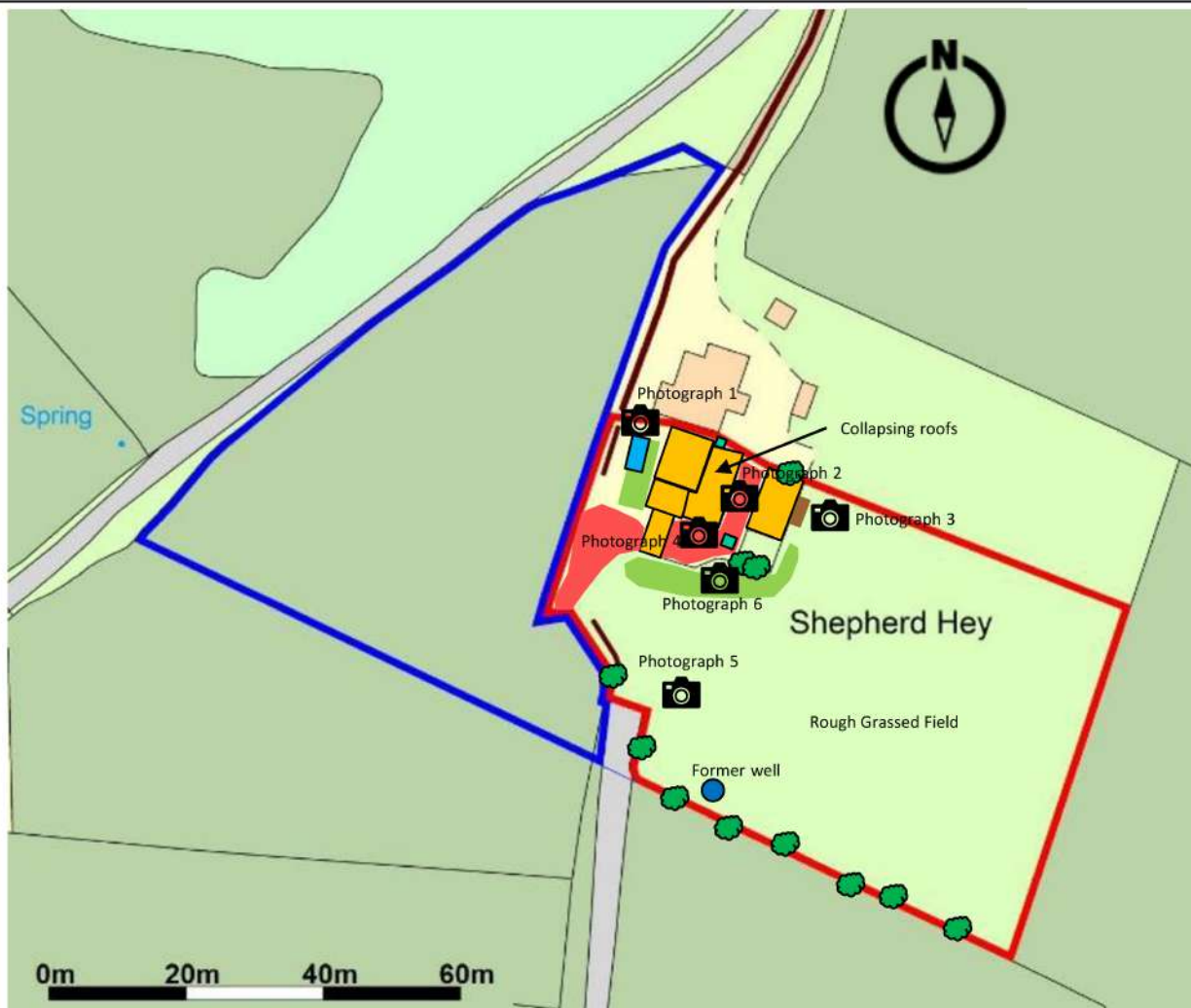
DRG. No.

3934OD01

FWS Geotechnical & Environmental Consultants

Unit 2 City West Business Park
St Johns Road
Meadowfield Industrial Estate
Durham
County Durham
DH7 8ER

Tel: 01388 420633
admin@fwsconsultants.com www.fwsconsultants.com



NOTES / KEY

	Site Boundary		Horse trailer with rubbish		Trees
	Derelict Farmhouses		Vegetation		Rubbish
	Drains		Hardstanding made ground		

DRAWING TITLE

SITE FEATURES

PROJECT TITLE

PRELIMINARY CONTAMINATION RISK ASSESSMENT
ON LAND AT SHEPHERD HEY BARN, ASHWORTH
ROAD, HEYWOOD

CLIENT

Edus Limited

STATUS

FINAL

DRAWN BY

PH

SCALE

AS SHOWN

PROJECT NUMBER

3934

DATE

December 2020

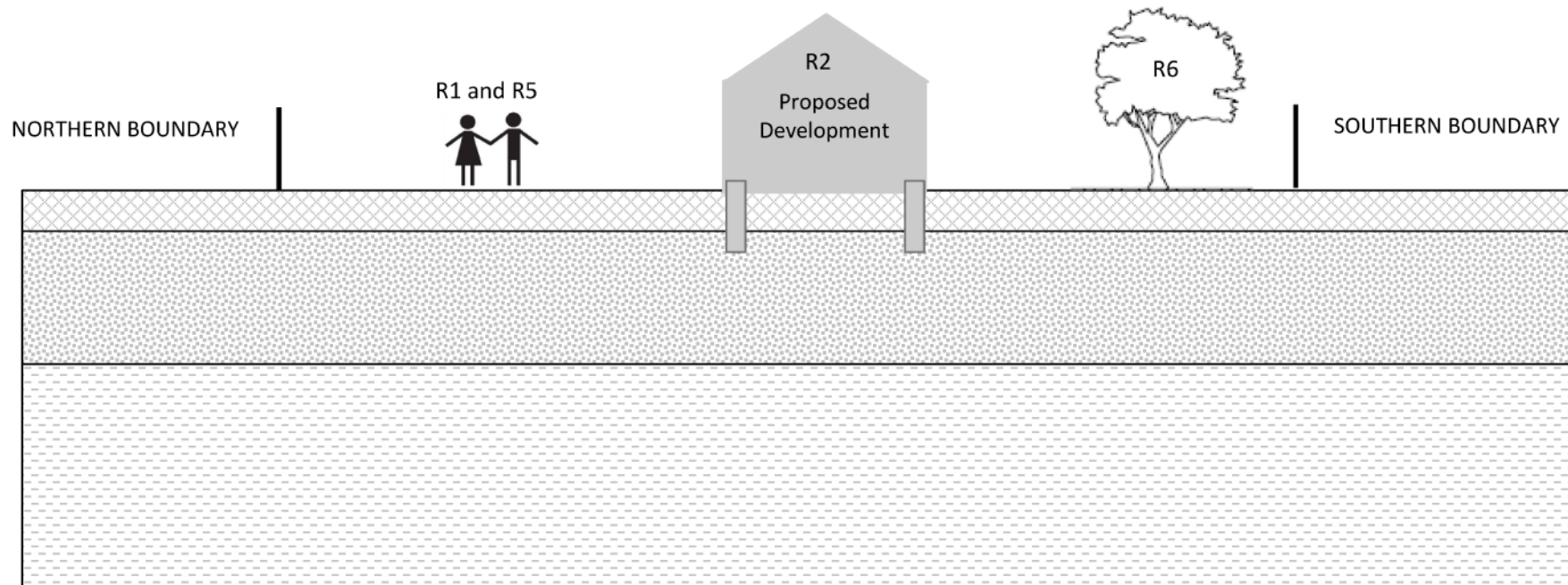
DRG. No.

3934OD02

FWS Geotechnical & Environmental Consultants

Unit 2 City West Business Park
St Johns Road
Meadowfield Industrial Estate
Durham
County Durham
DH7 8ER

Tel: 01388 420633
admin@fwsconsultants.com www.fwsconsultants.com



NOTES / KEY



TOPSOIL / THIN MADE GROUND



SUPERFICIAL DEPOSITS (GLACIAL TILL)



BEDROCK STRATA (LOWER COAL MEASURES)

DRAWING TITLE

CONCEPTUAL SITE MODEL

PROJECT TITLE

PRELIMINARY CONTAMINATION RISK ASSESSMENT
ON LAND AT SHEPHERD HEY BARN, ASHWORTH
ROAD, HEYWOOD

CLIENT

Edus Limited

STATUS

FINAL

DRAWN BY

ID

SCALE

N/A

PROJECT NUMBER

3934

DATE

December 2020

DRG. No.

3934OD03

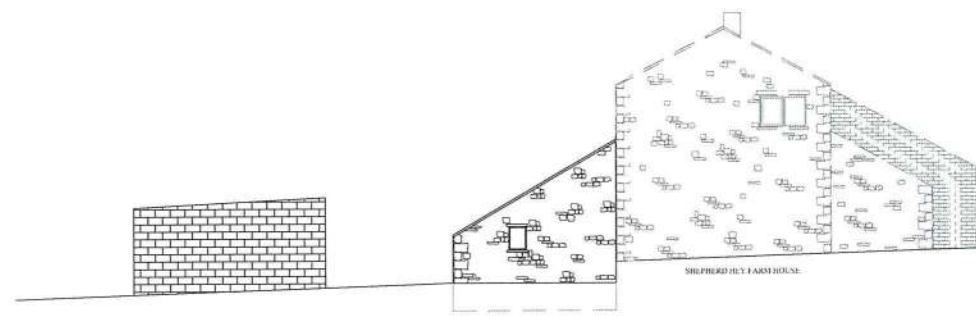
FWS Geotechnical & Environmental Consultants

Unit 2 City West Business Park
St Johns Road
Meadowfield Industrial Estate
Durham
County Durham
DH7 8ER

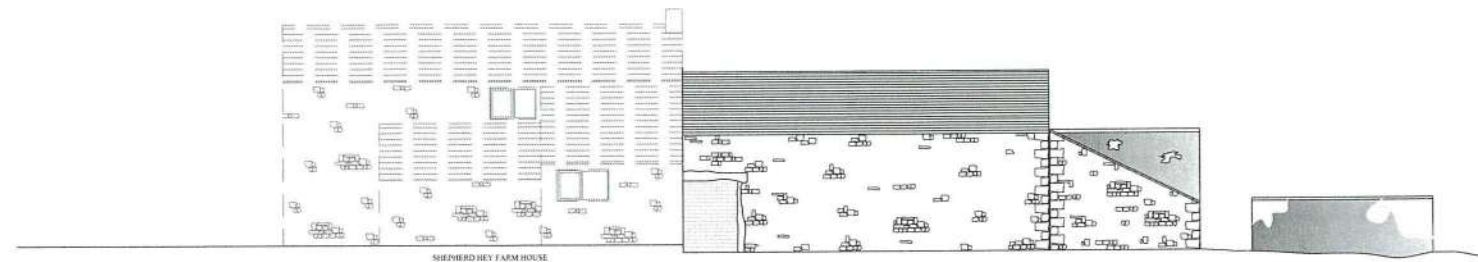
Tel: 01388 420633
admin@fwsconsultants.com www.fwsconsultants.com

APPENDIX 1.2

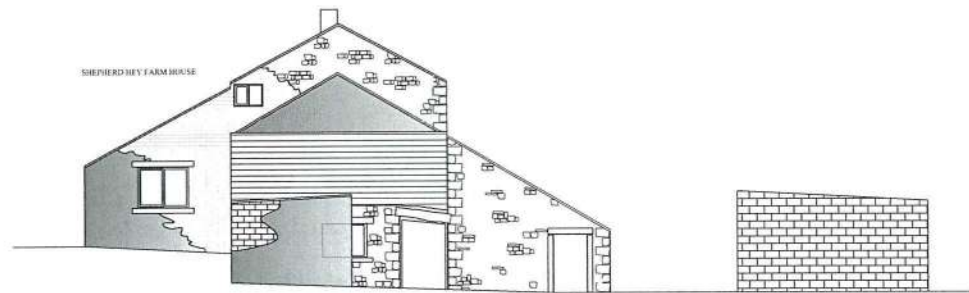
THIRD PARTY DRAWINGS



EXISTING NORTH ELEVATION



EXISTING WEST ELEVATION



EXISTING SOUTH ELEVATION



EXISTING EAST ELEVATION

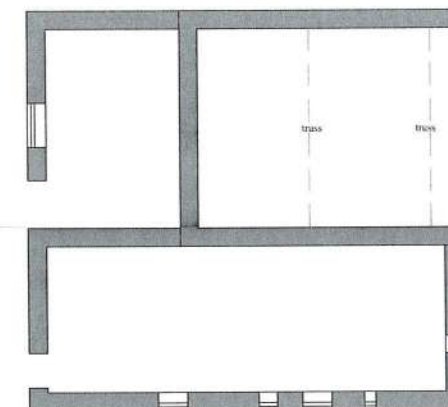


ACCESS TRACK

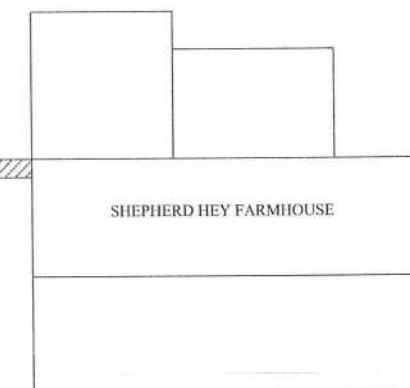


EXISTING ROOF PLAN (BARNs SHOWN IN RED)

CONCRETE AND BRICK
OUTBUILDING TO BE
DEMOLISHED



EXISTING GROUND FLOOR PLAN



SHEPHERD HEY FARMHOUSE



CONCRETE BLOCK BARN TO BE
DEMOLISHED


J M A
ARCHITECTS

CLIENT
Edus Ltd

PROJECT
Planning drawing for prior
approval and change of use under
permitted development of existing
stone barn to 3 bed property.
Shepherd Hey Barn, Ashworth Rd

TITLE
Existing plans and elevations
and site

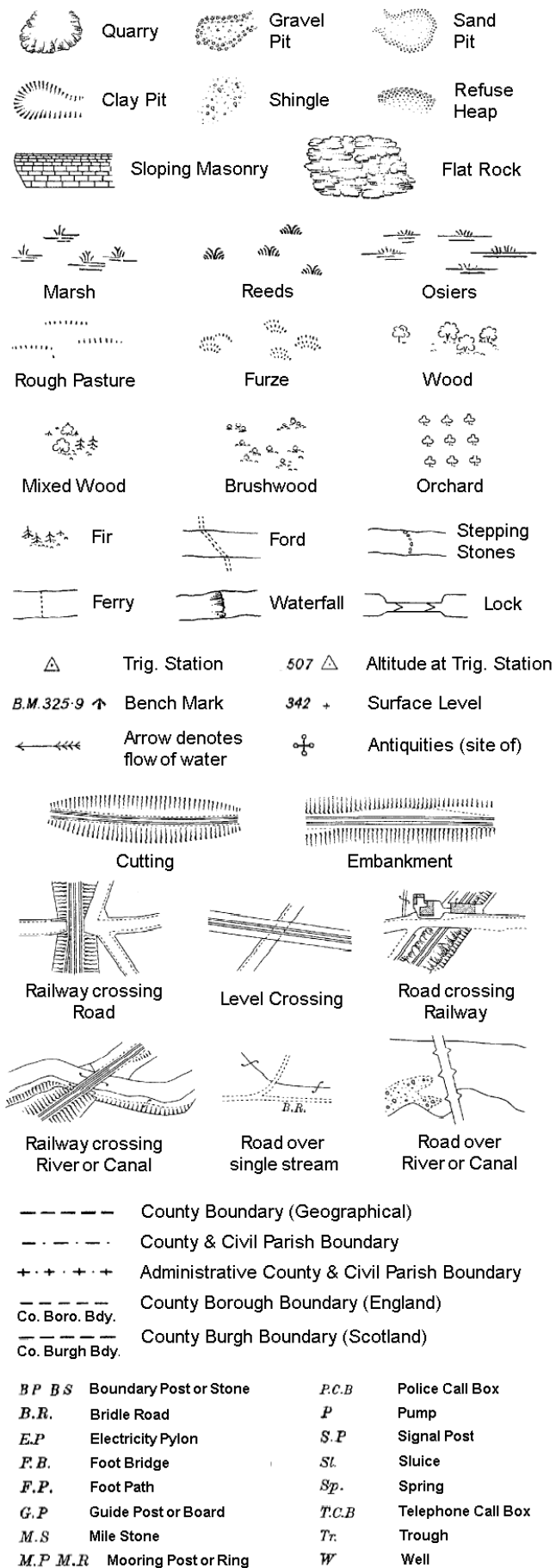
scale 1:100
drawing no 256:1
date 30/6/2016

APPENDIX 2

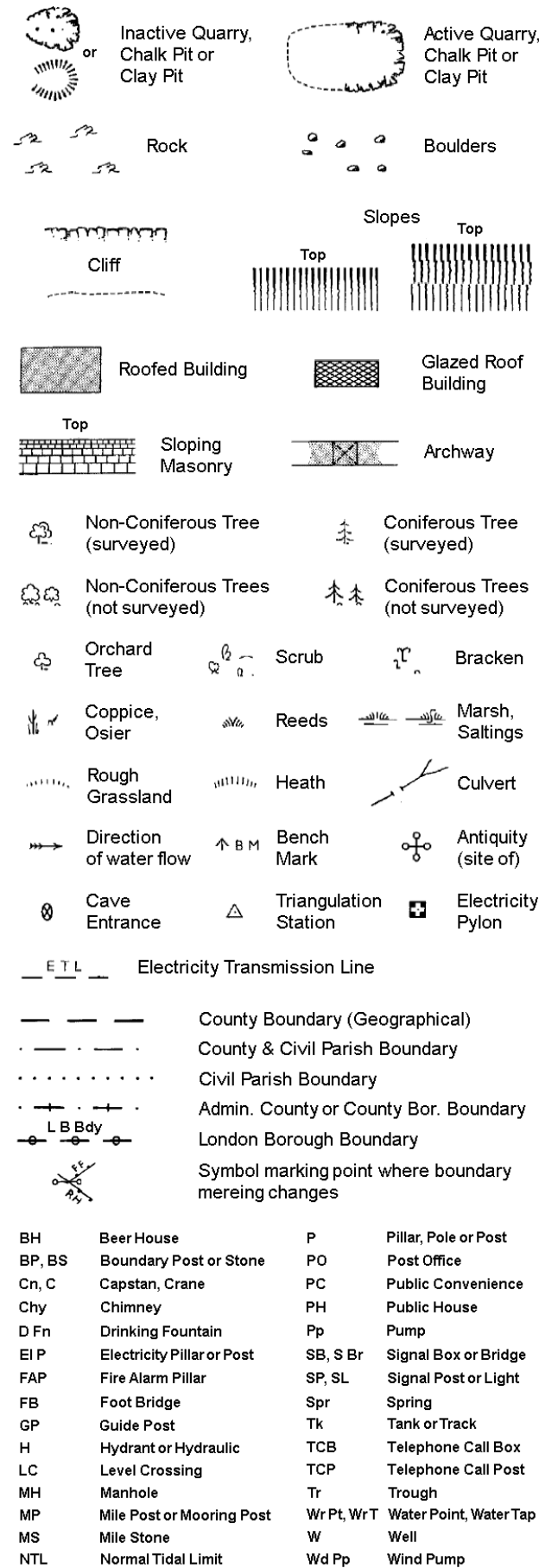
RECENT AND HISTORICAL OS MAPS

Historical Mapping Legends

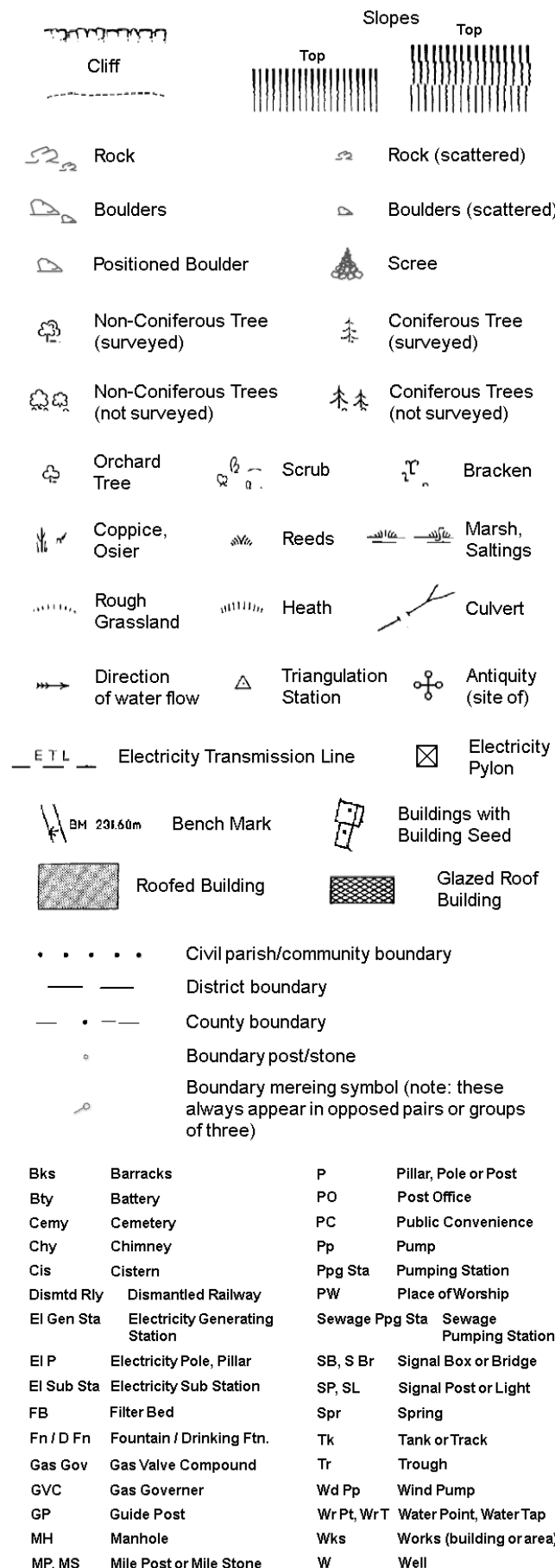
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information



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



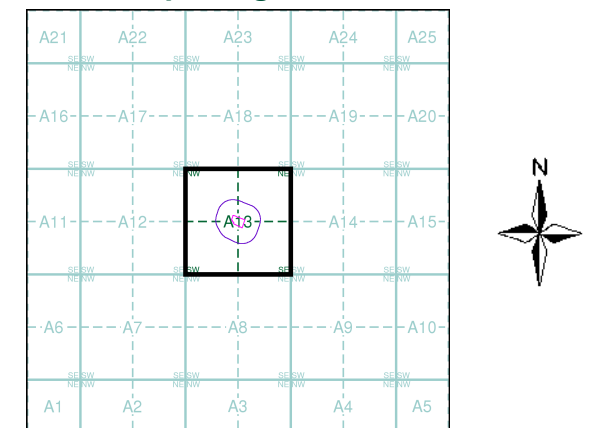
Envirocheck®

LANDMARK INFORMATION GROUP®

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:2,500	1893	2
Lancashire And Furness	1:2,500	1910	3
Lancashire And Furness	1:2,500	1930	4
Lancashire And Furness	1:2,500	1937	5
Ordnance Survey Plan	1:2,500	1963	6
Additional SIMs	1:2,500	1963 - 1991	7
Large-Scale National Grid Data	1:2,500	1992	8

Historical Map - Segment A13



Order Details

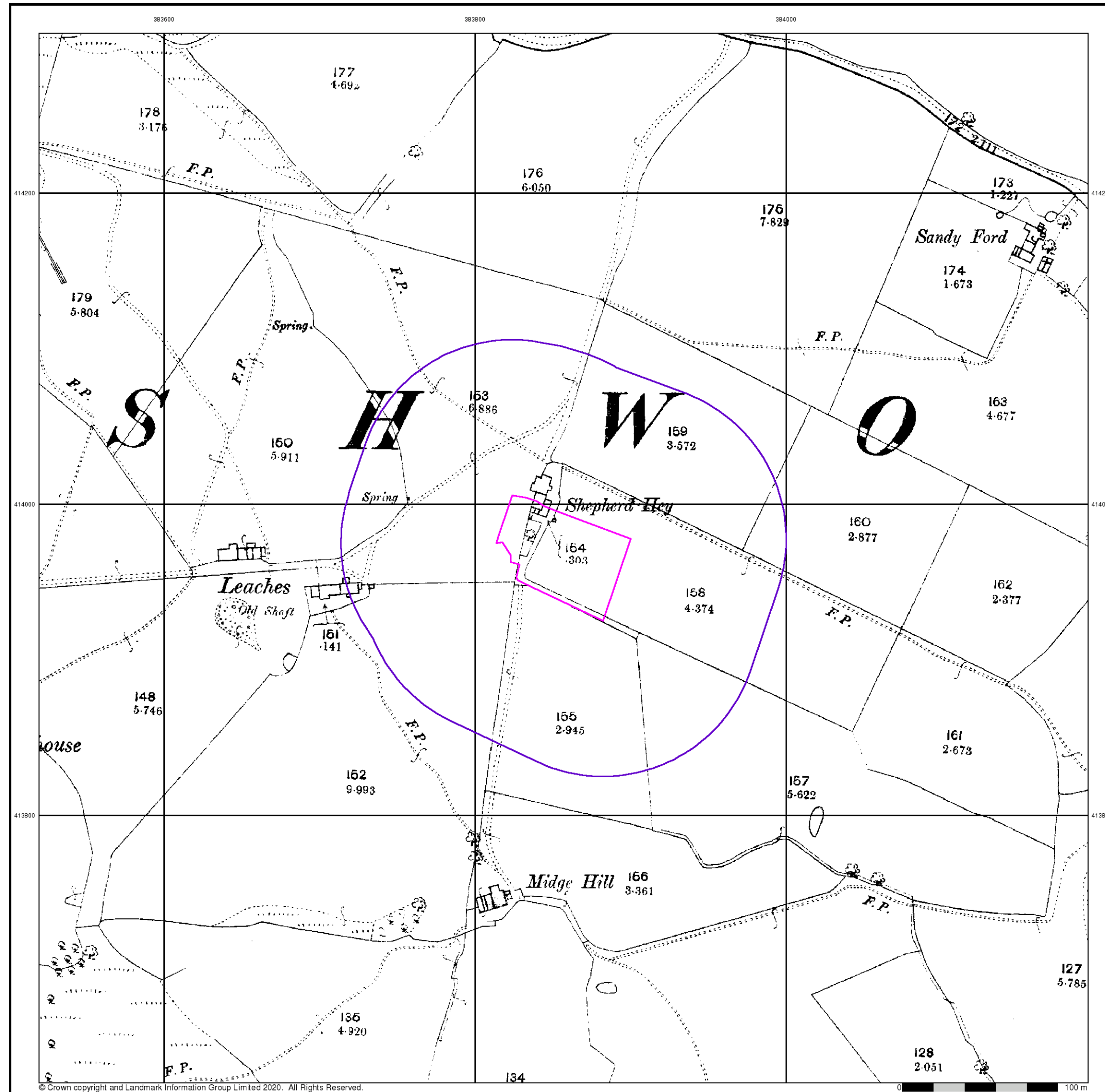
Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 100

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark[®]
INFORMATION GROUP

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



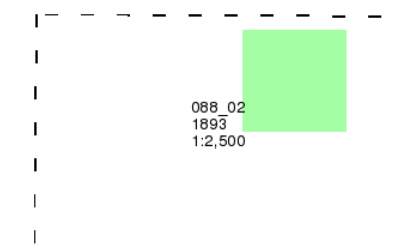
Lancashire And Furness

Published 1893

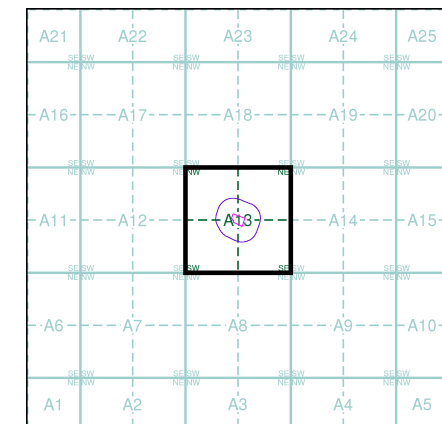
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13

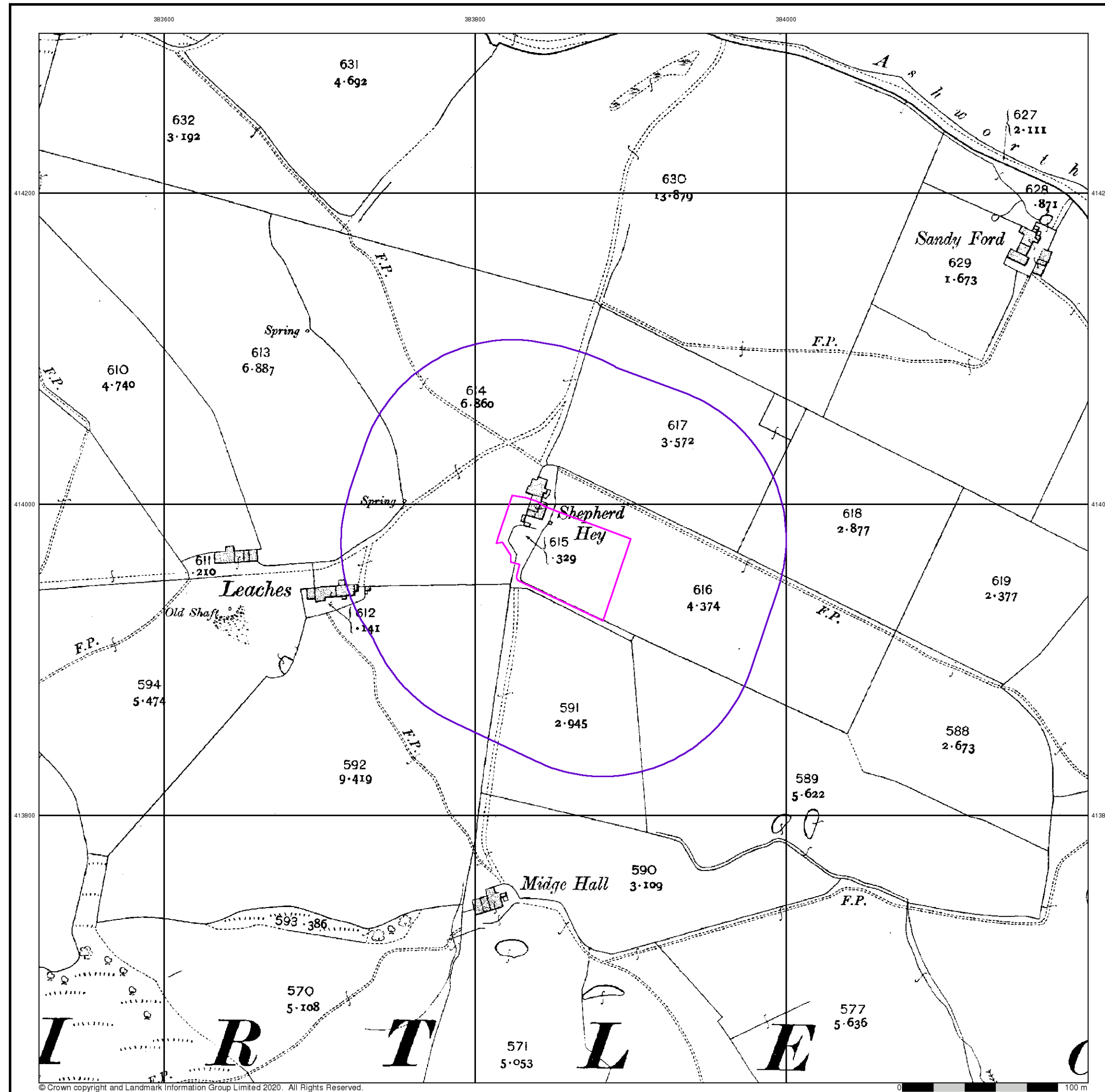


Order Details

Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 100

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN



© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.

Envirocheck[®]

LANDMARK INFORMATION GROUP[®]

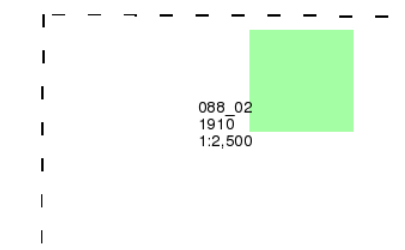
Lancashire And Furness

Published 1910

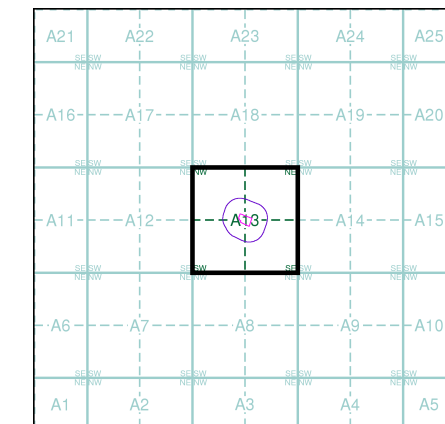
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

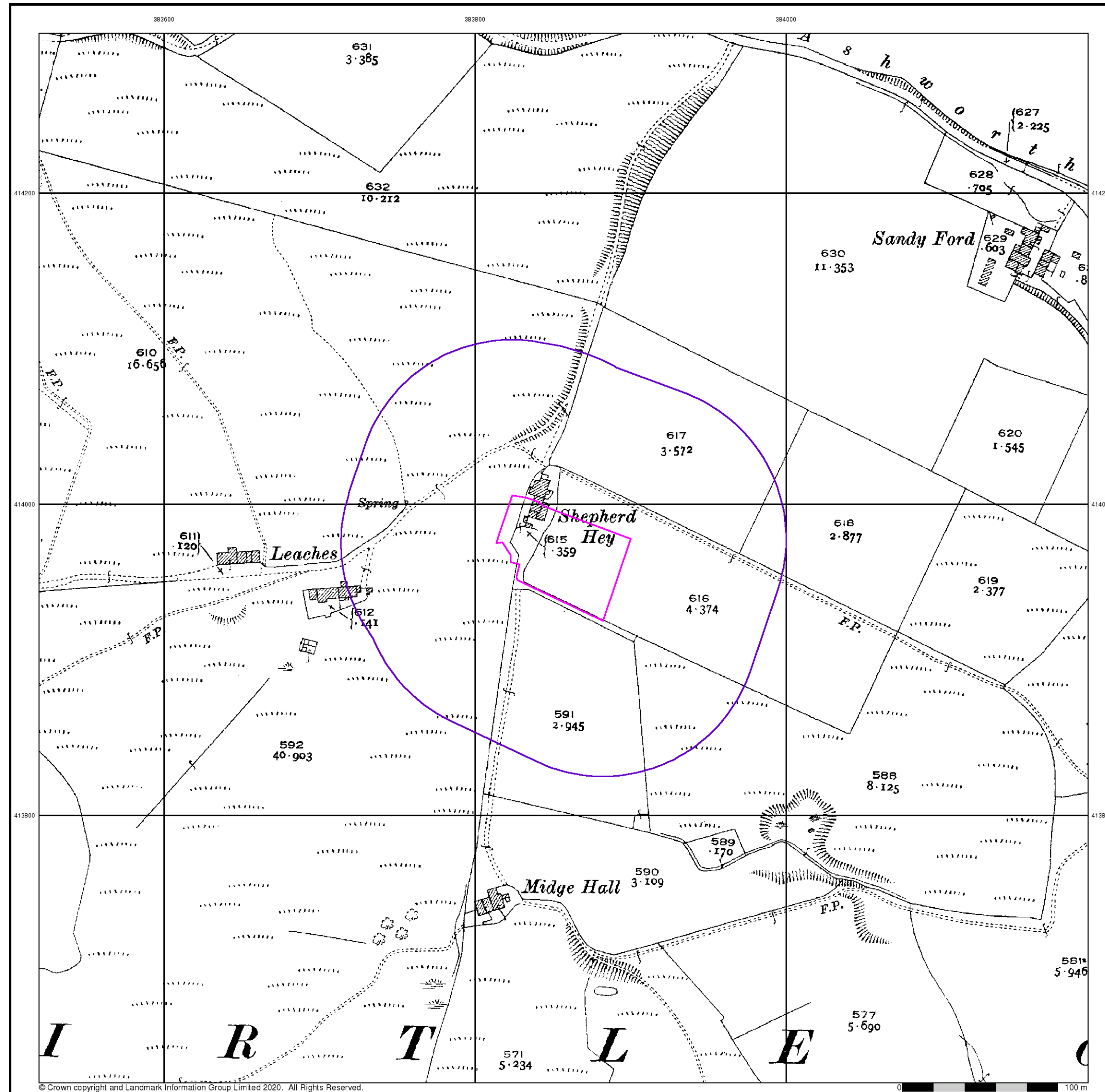
Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 100

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark[®]
INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.

Envirocheck[®]

LANDMARK INFORMATION GROUP[®]

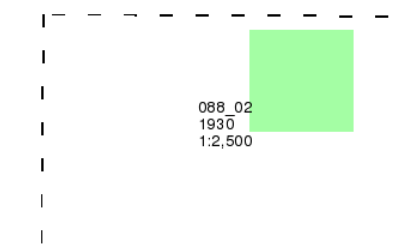
Lancashire And Furness

Published 1930

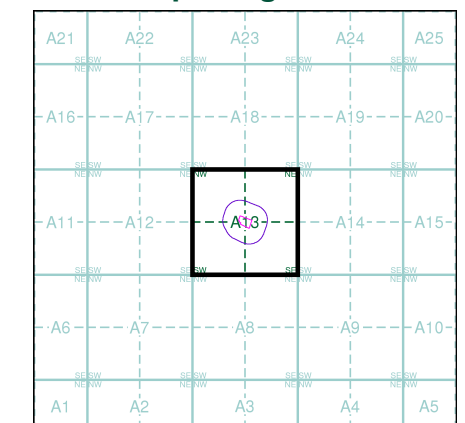
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

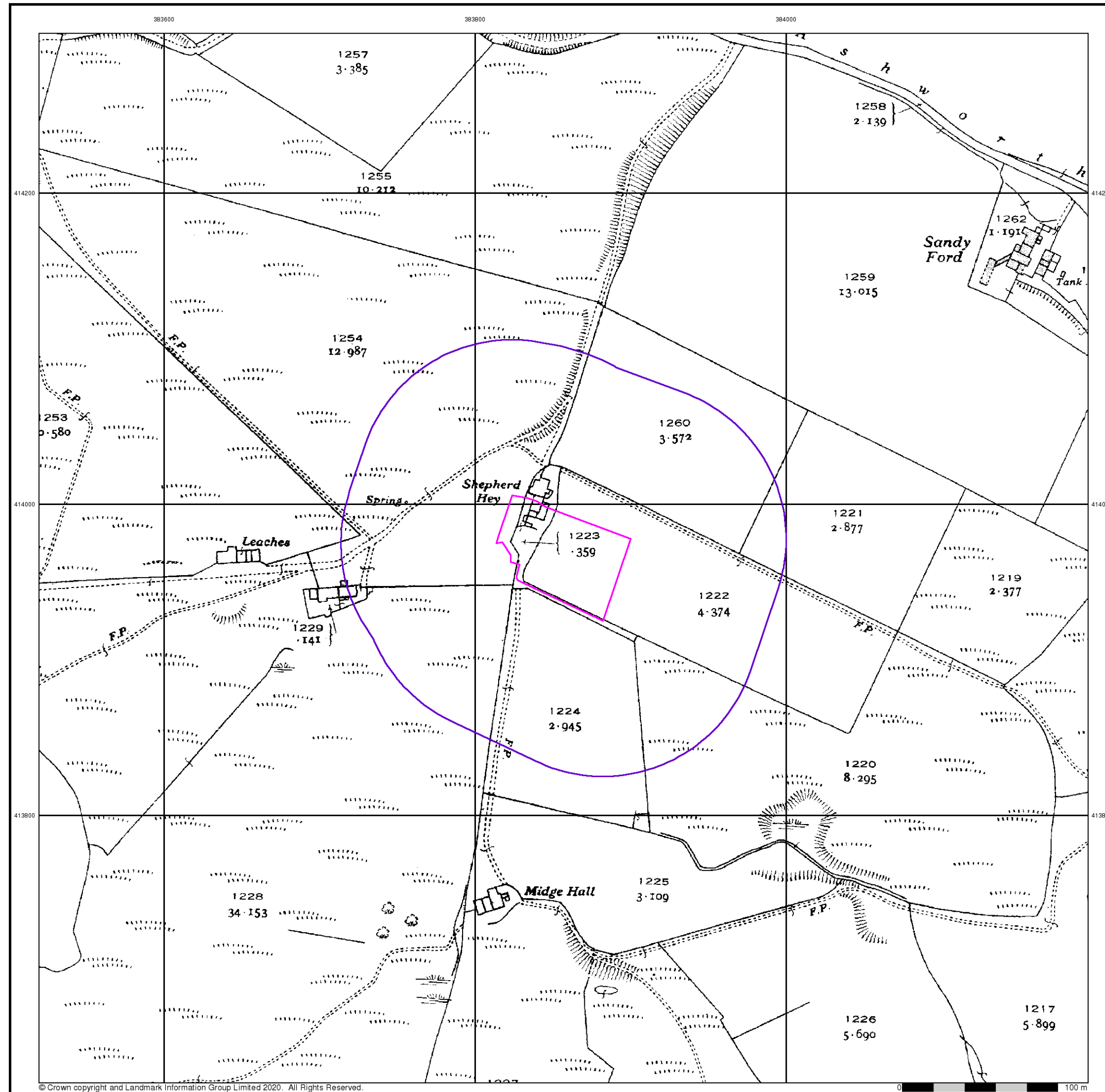
Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 100

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark[®]
INFORMATION GROUP

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



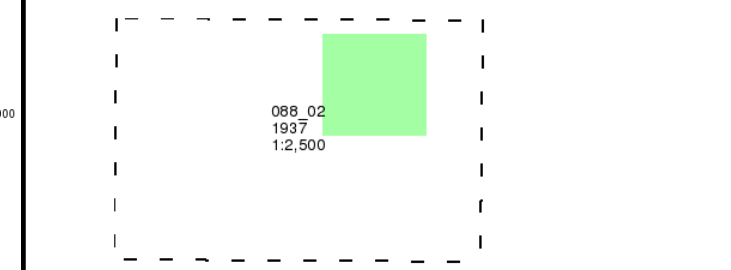
Lancashire And Furness

Published 1937

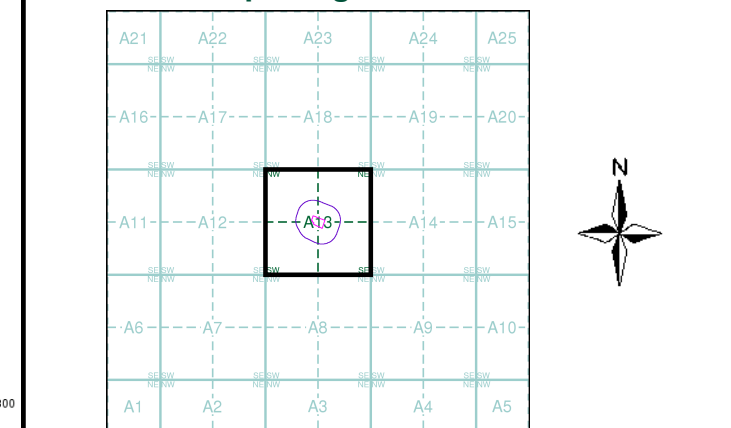
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

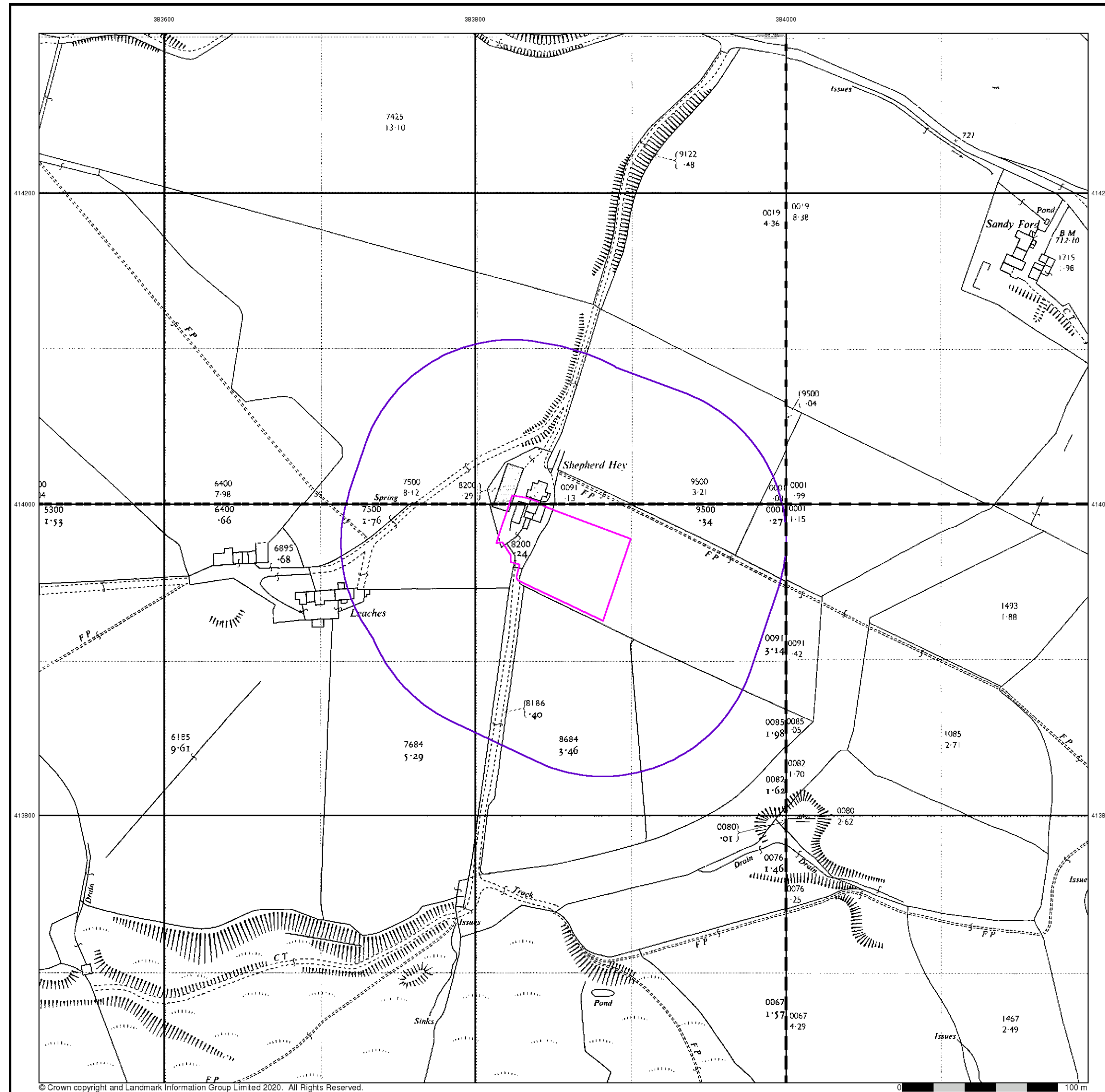


Historical Map - Segment A13



Order Details	
Order Number:	270249888_1_1
Customer Ref:	3934
National Grid Reference:	383860, 413970
Slice:	A
Site Area (Ha):	0.41
Search Buffer (m):	100

Site Details
Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN



Ordnance Survey Plan

Published 1963

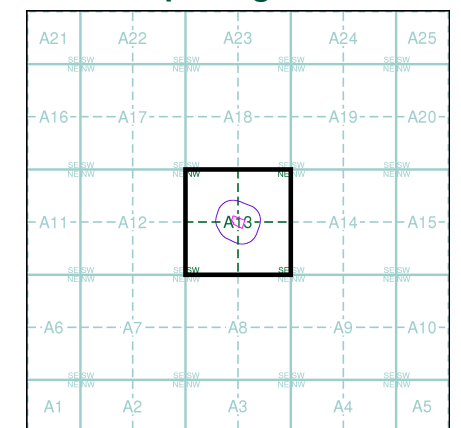
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

SD8314 1963 12,500	SD8414 1963 12,500
SD8313 1963 12,500	SD8413 1963 12,500

Historical Map - Segment A13

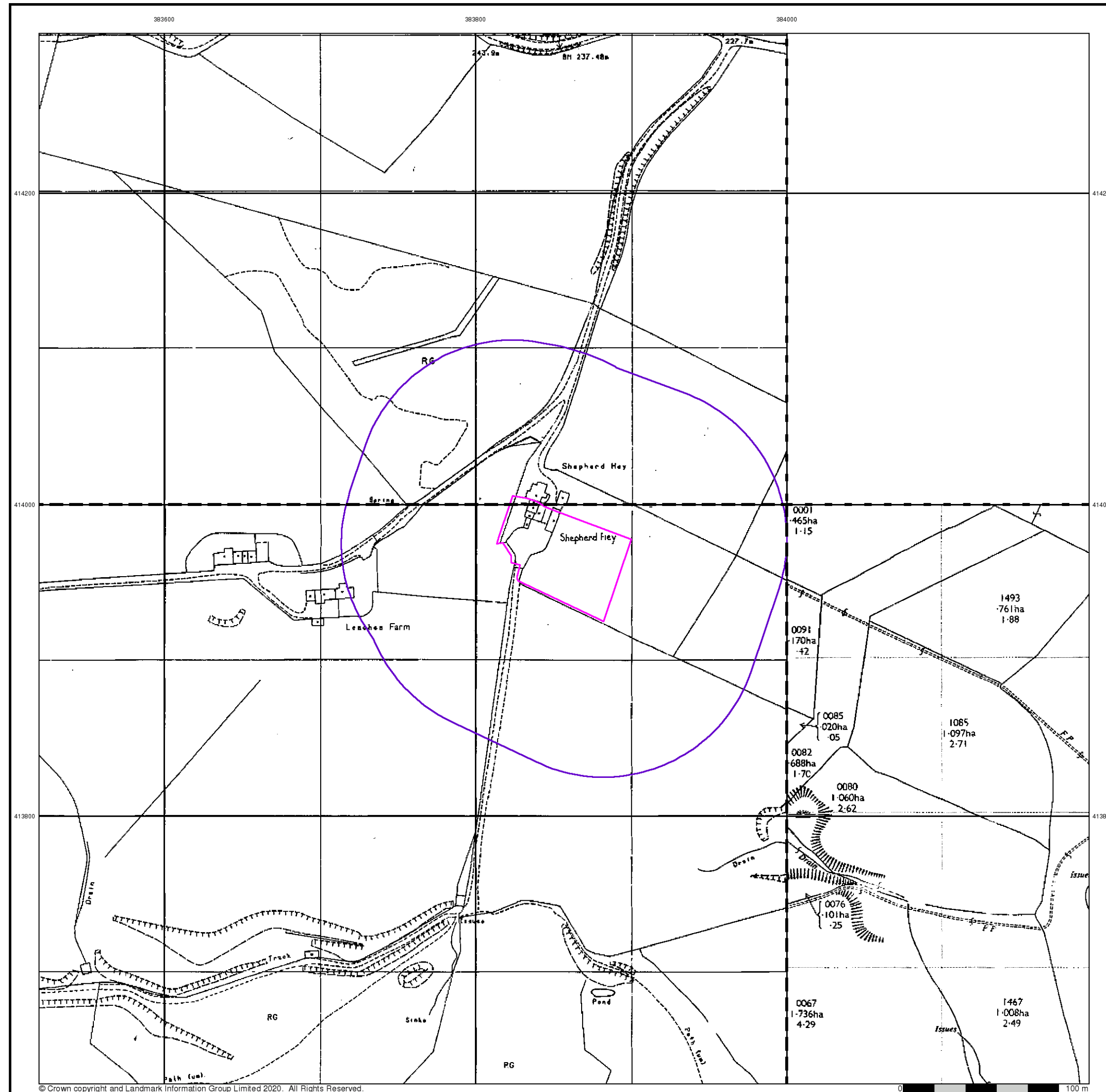


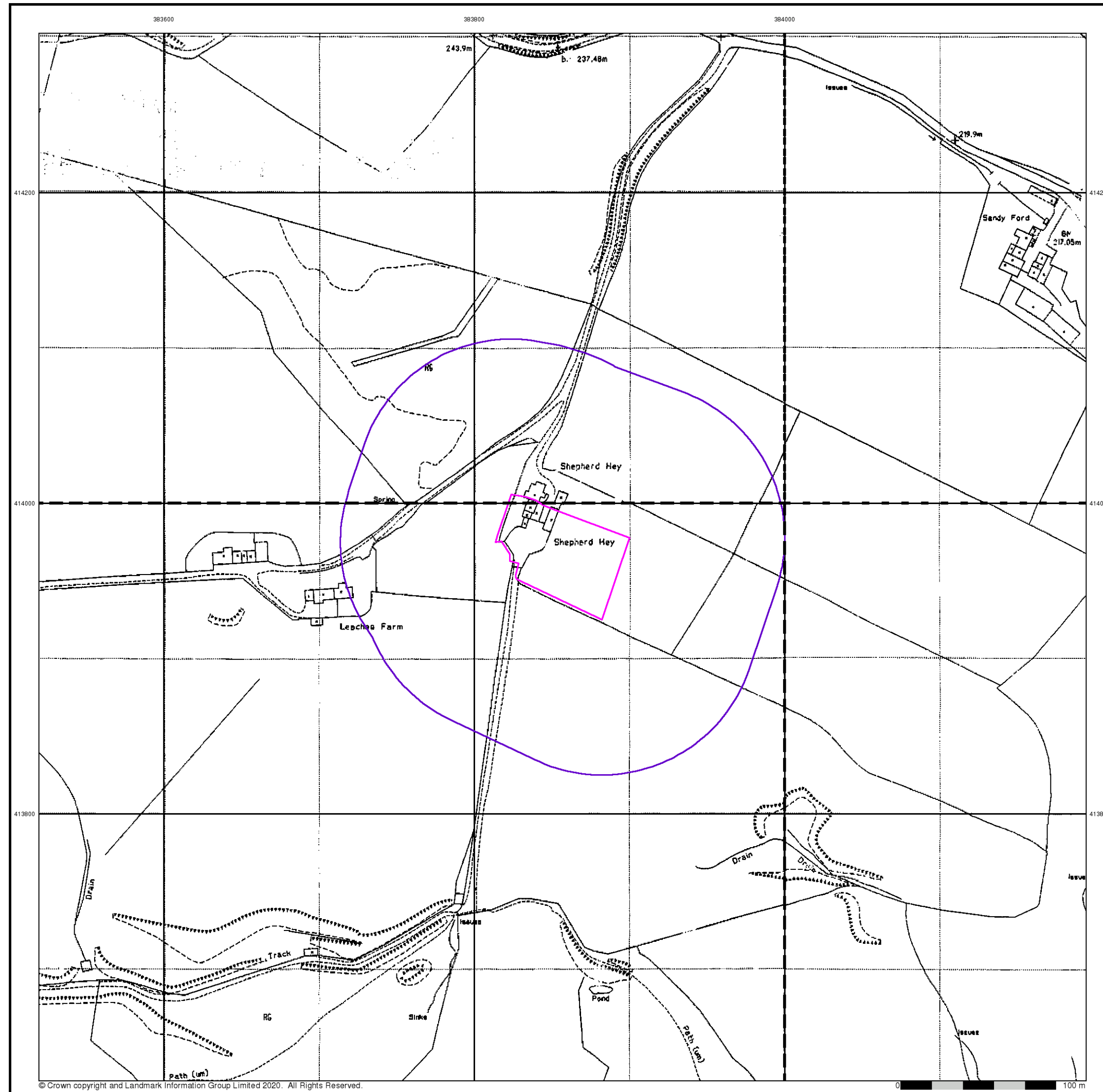
Order Details

Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 100

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN





© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.

Large-Scale National Grid Data

Published 1992

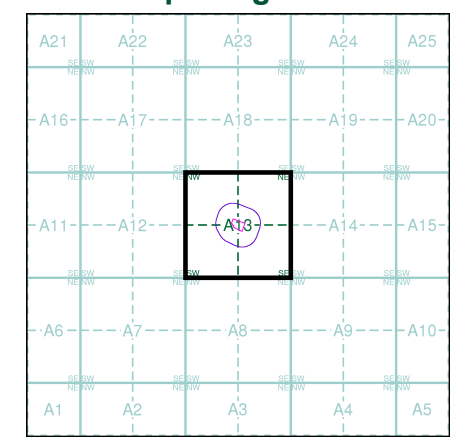
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

SD8314	SD8414
1992	1992
12,500	12,500
SD8313	SD8413
1992	1992
12,500	12,500

Historical Map - Segment A13



Order Details

Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 100

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

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
	Bracken		Heath
	Marsh		Reeds
	Building		Glasshouse
	Sloping Masonry		Pylon
	Cutting		Embankment
	Road Under		Road Over
	Level Crossing		Foot Bridge
	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
	Civil Parish		
	BP, BS Boundary Post or Stone		Police Station
	Church		Post Office
	Club House		Public Convenience
	Fire Engine Station		Public House
	Foot Bridge		Signal Box
	Fountain		Spring
	Guide Post		Telephone Call Box
	Mile Post		Telephone Call Post
	Mile Stone		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
	Mean high water (springs)		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

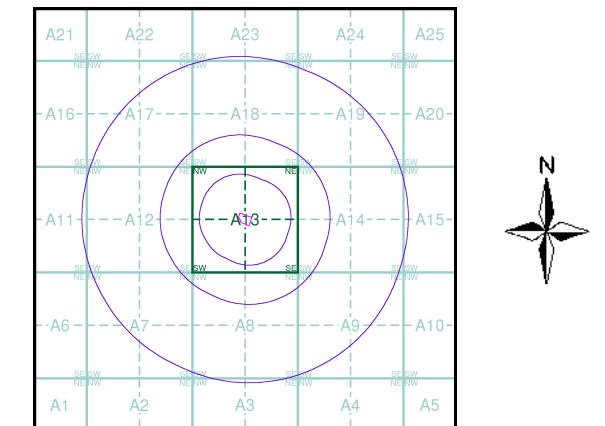
Envirocheck®

LANDMARK INFORMATION GROUP®

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1851	2
Lancashire And Furness	1:10,560	1894	3
Lancashire And Furness	1:10,560	1911 - 1912	4
Lancashire And Furness	1:10,560	1930 - 1932	5
Lancashire And Furness	1:10,560	1938 - 1939	6
Ordnance Survey Plan	1:10,000	1956	7
Ordnance Survey Plan	1:10,000	1967 - 1968	8
Ordnance Survey Plan	1:10,000	1977	9
Ordnance Survey Plan	1:10,000	1981 - 1988	10
Ordnance Survey Plan	1:10,000	1993	11
10K Raster Mapping	1:10,000	1999	12
Street View	Variable		13

Historical Map - Slice A



Order Details

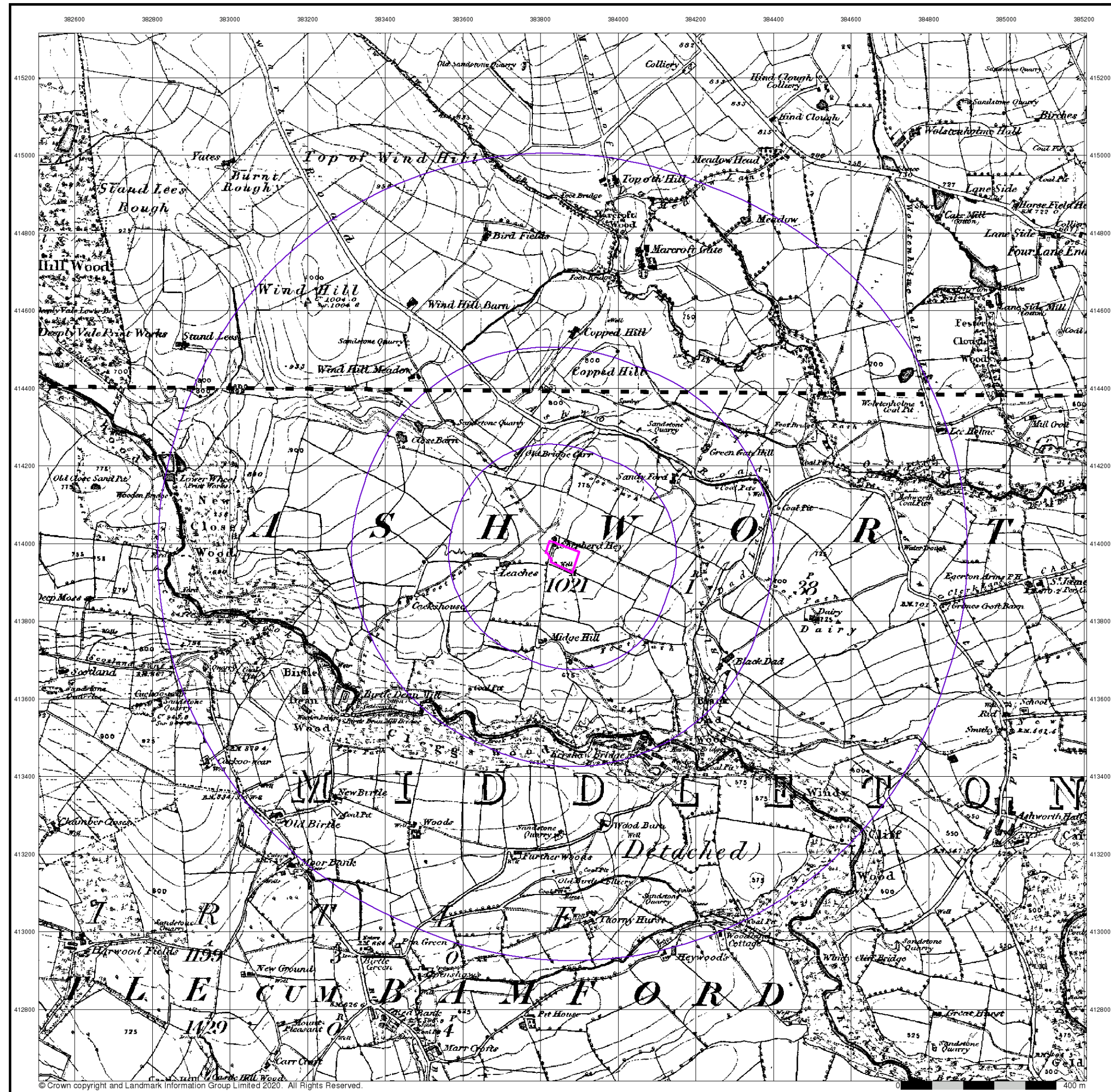
Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark®
INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Lancashire And Furness

Published 1851

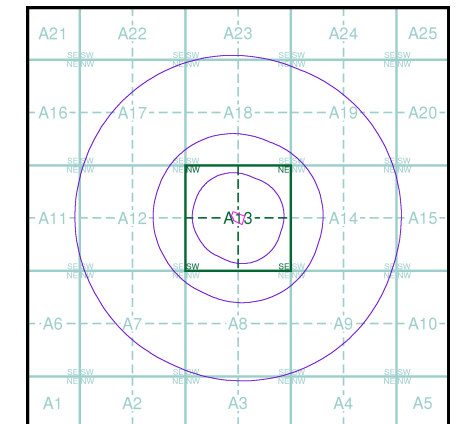
Source map scale - 1:10,560

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)

08000
1851
1:10,560
08800
1851
1:10,560

Historical Map - Slice A



Order Details

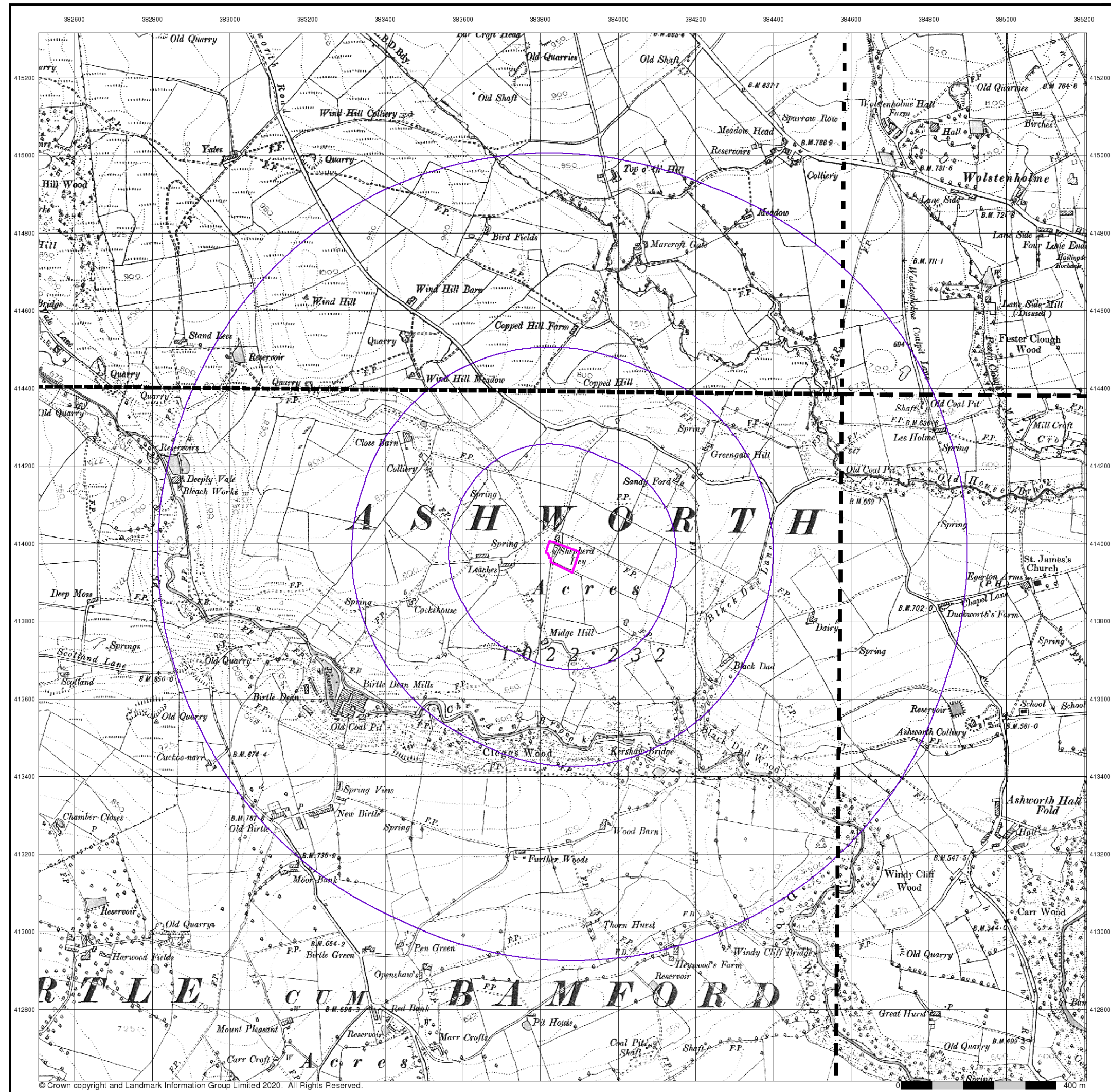
Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark®
LANDMARK INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Lancashire And Furness

Published 1894

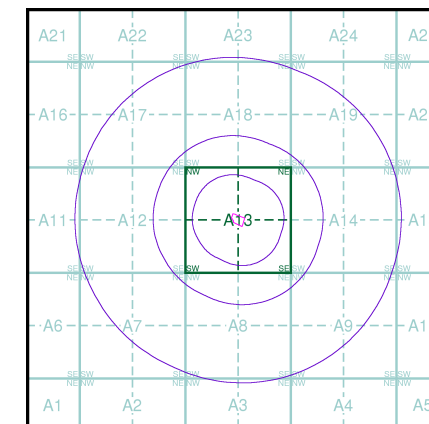
Source map scale - 1:10,560

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)

080SW 1894 1:10,560	080SE 1894 1:10,560
088NW 1894 1:10,560	088NE 1894 1:10,560

Historical Map - Slice A



Order Details

Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark®
INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Lancashire And Furness

Published 1911 - 1912

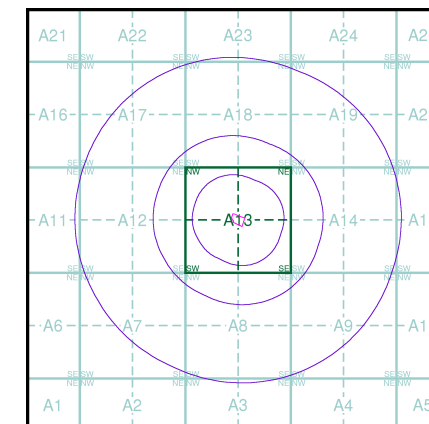
Source map scale - 1:10,560

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)

080SW 1912 1:10,560	080SE 1911 1:10,560
088NW 1911 1:10,560	088NE 1911 1:10,560

Historical Map - Slice A



Order Details

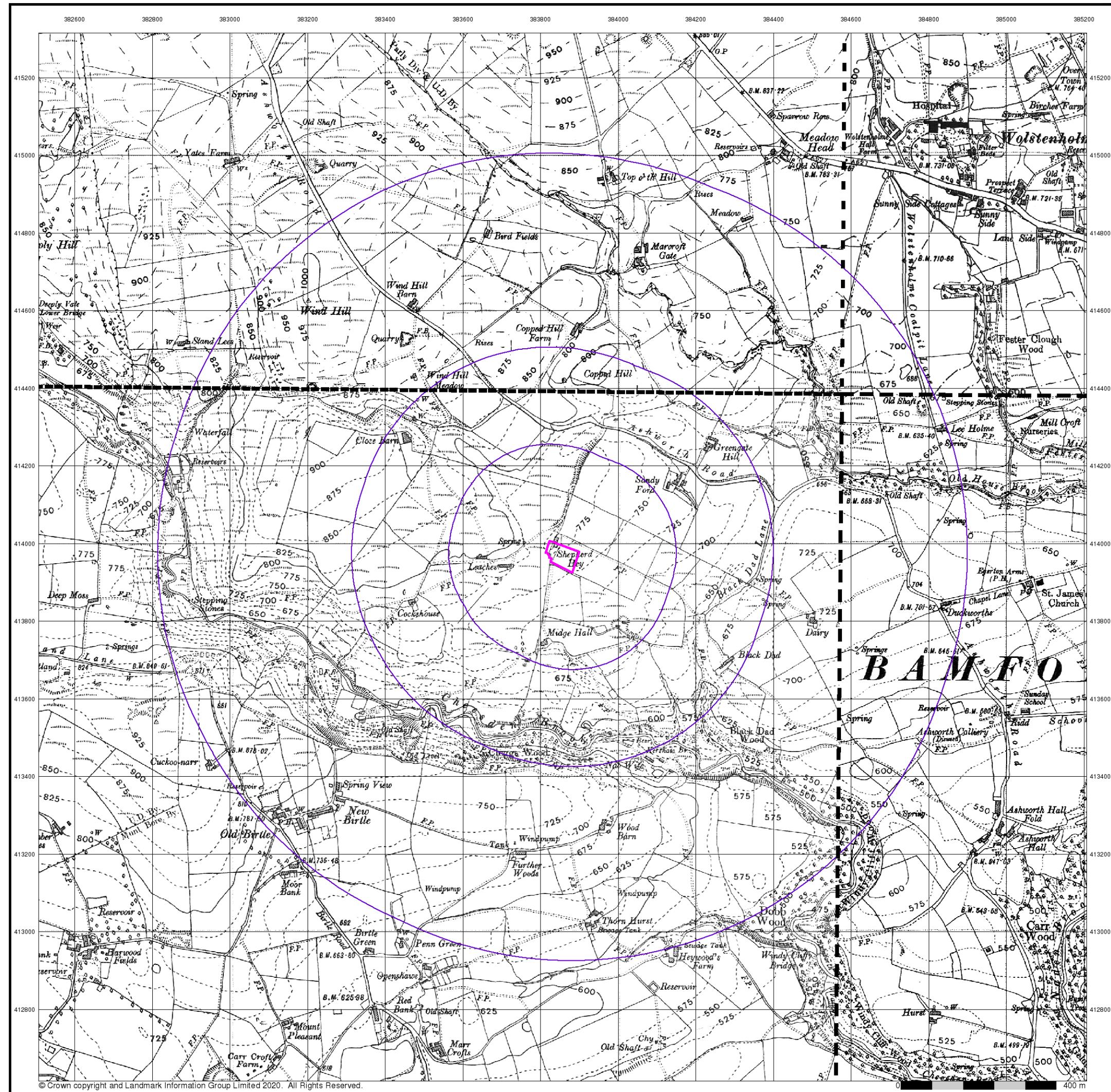
Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark
INFORMATION GROUP

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



Envirocheck[®]

LANDMARK INFORMATION GROUP[®]

Lancashire And Furness

Published 1938 - 1939

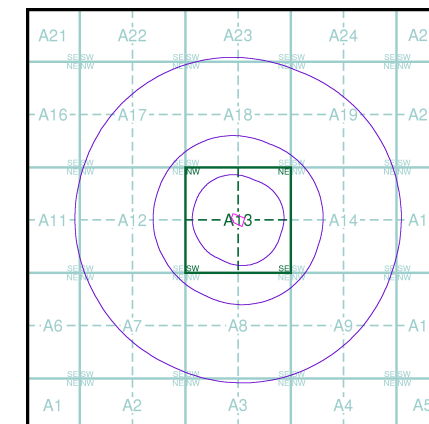
Source map scale - 1:10,560

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)

080SW 1938 1:10,560	080SE 1938 1:10,560
088NW 1939 1:10,560	088NE 1938 1:10,560

Historical Map - Slice A



Order Details

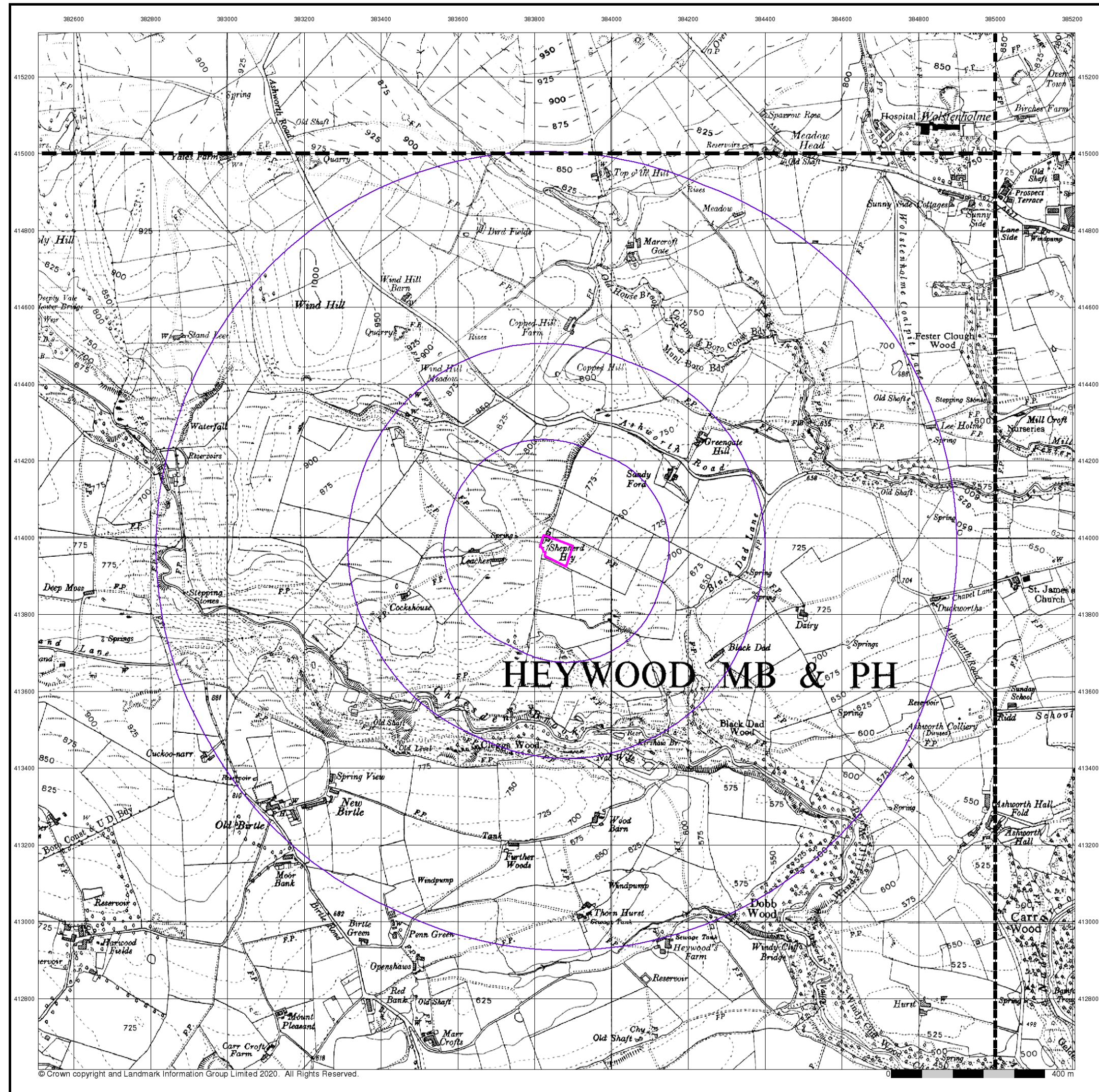
Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark[®]
INFORMATION GROUP

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



Envirocheck[®]

LANDMARK INFORMATION GROUP[®]

Ordnance Survey Plan

Published 1956

Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SD81NW	SD81NE
1956	1956
1:10,560	1:10,560
SD81SW	SD81SE
1956	1956
1:10,560	1:10,560

Historical Map - Slice A

Order Details

Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

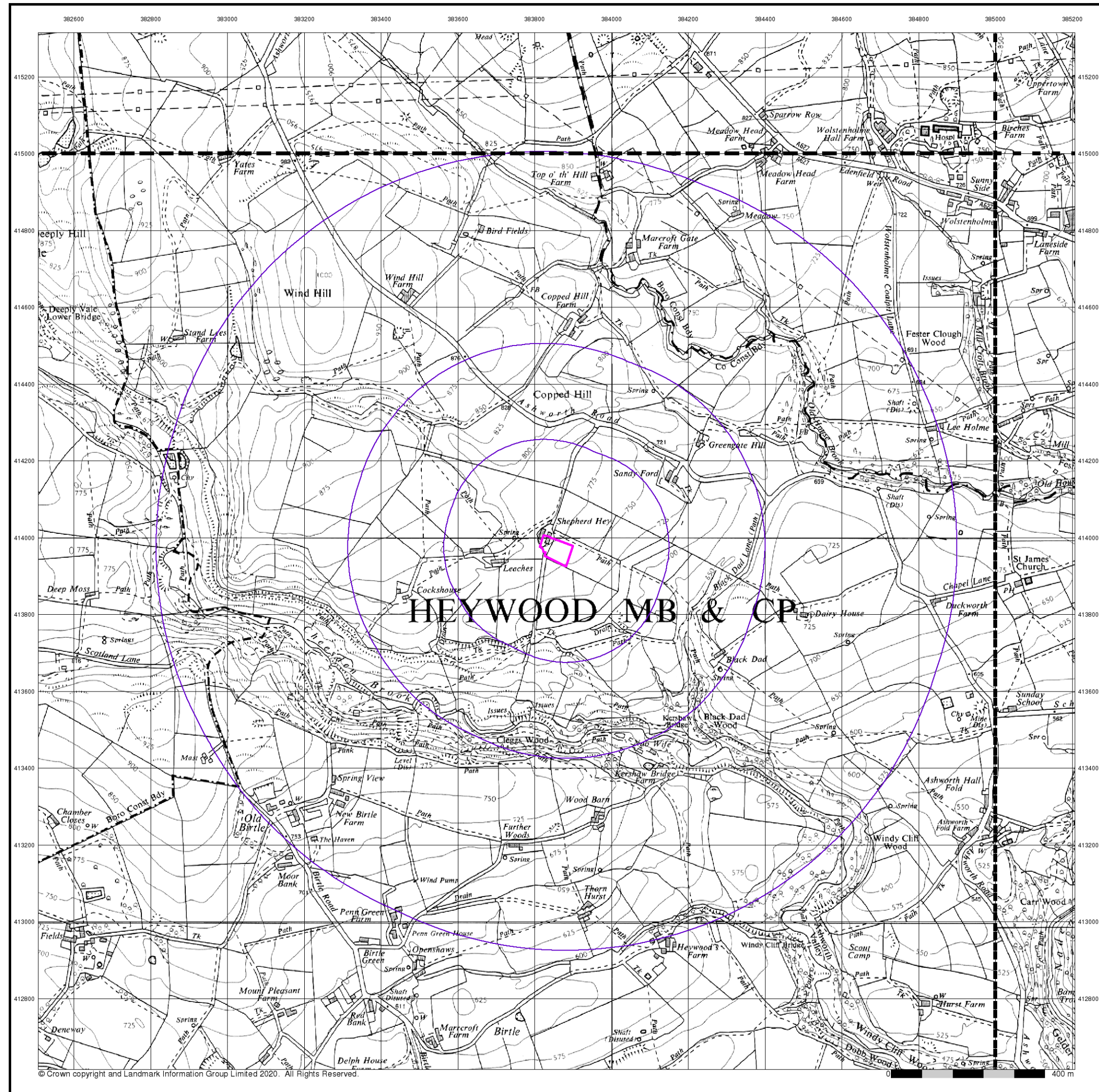
Landmark[®]

INFORMATION GROUP

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

© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.

A Landmark Information Group Service v50.0 08-Dec-2020 Page 7 of 13



Ordnance Survey Plan

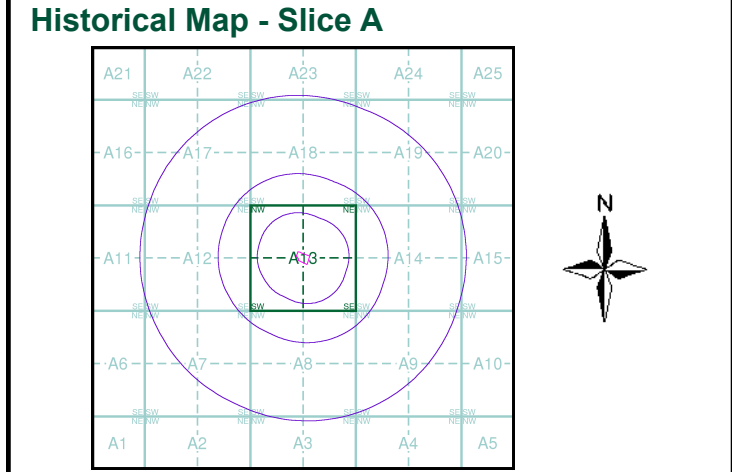
Published 1967 - 1968

Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SD81NW	SD81NE
1967	1967
1:10,560	1:10,560
SD81SW	SD81SE
1967	1968
1:10,560	1:10,560

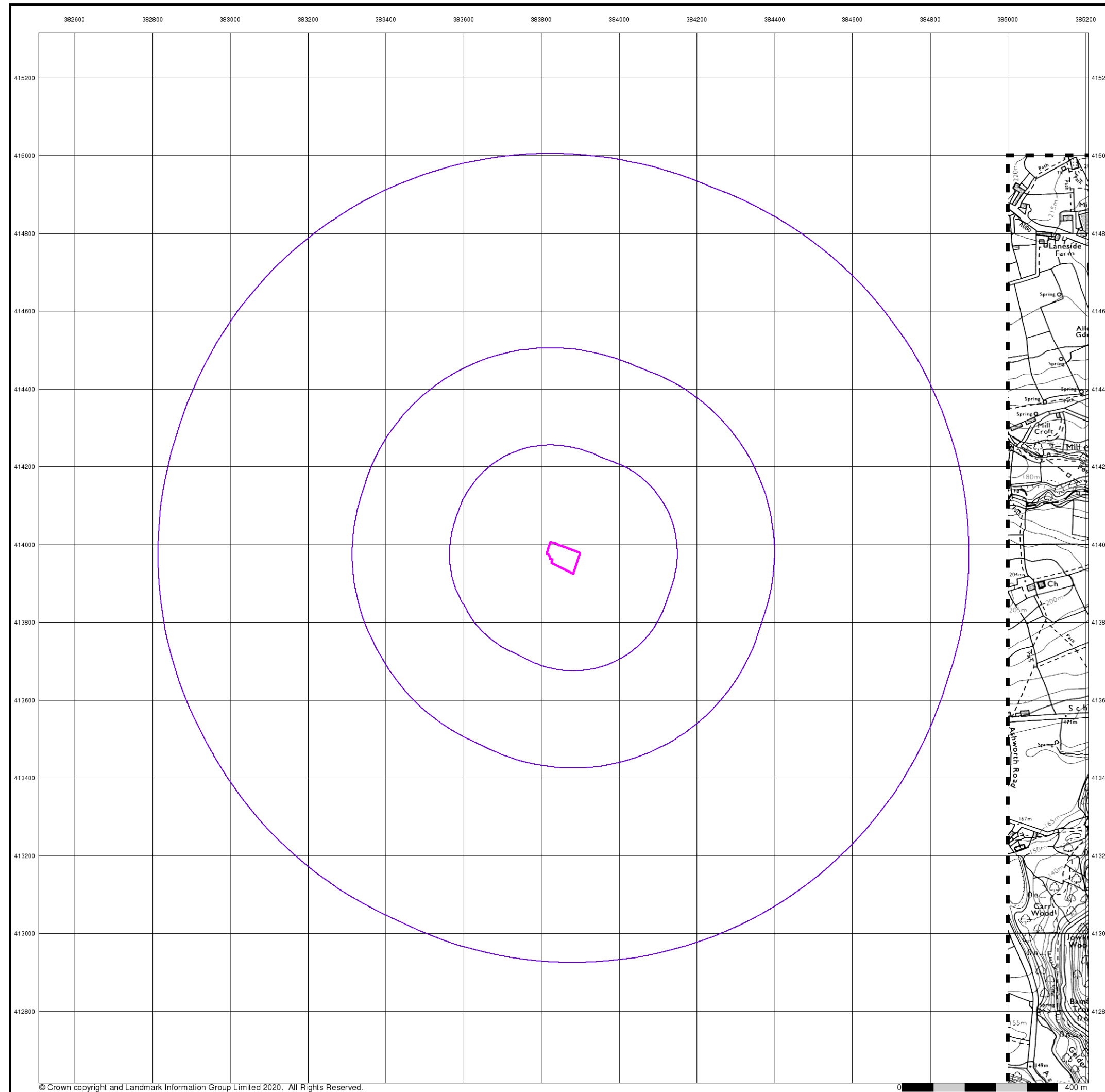


Order Details

Order Number:	270249888_1_1
Customer Ref:	3934
National Grid Reference:	383860, 413970
Slice:	A
Site Area (Ha):	0.41
Search Buffer (m):	1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN



© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.

0 400 m

Envirocheck®

LANDMARK INFORMATION GROUP®

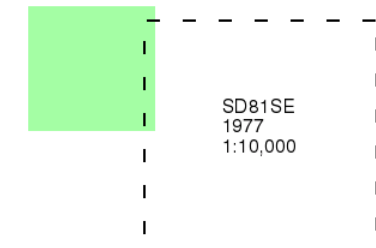
Ordnance Survey Plan

Published 1977

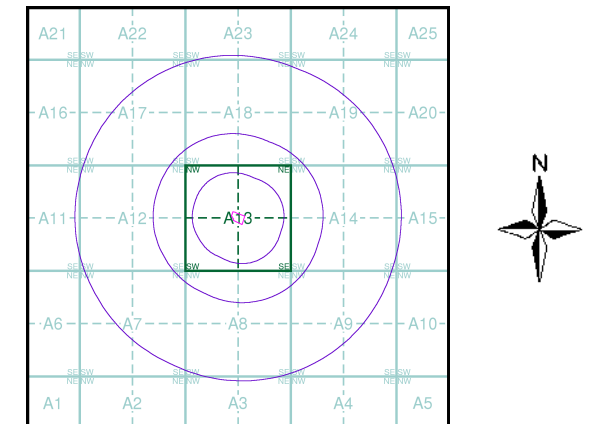
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

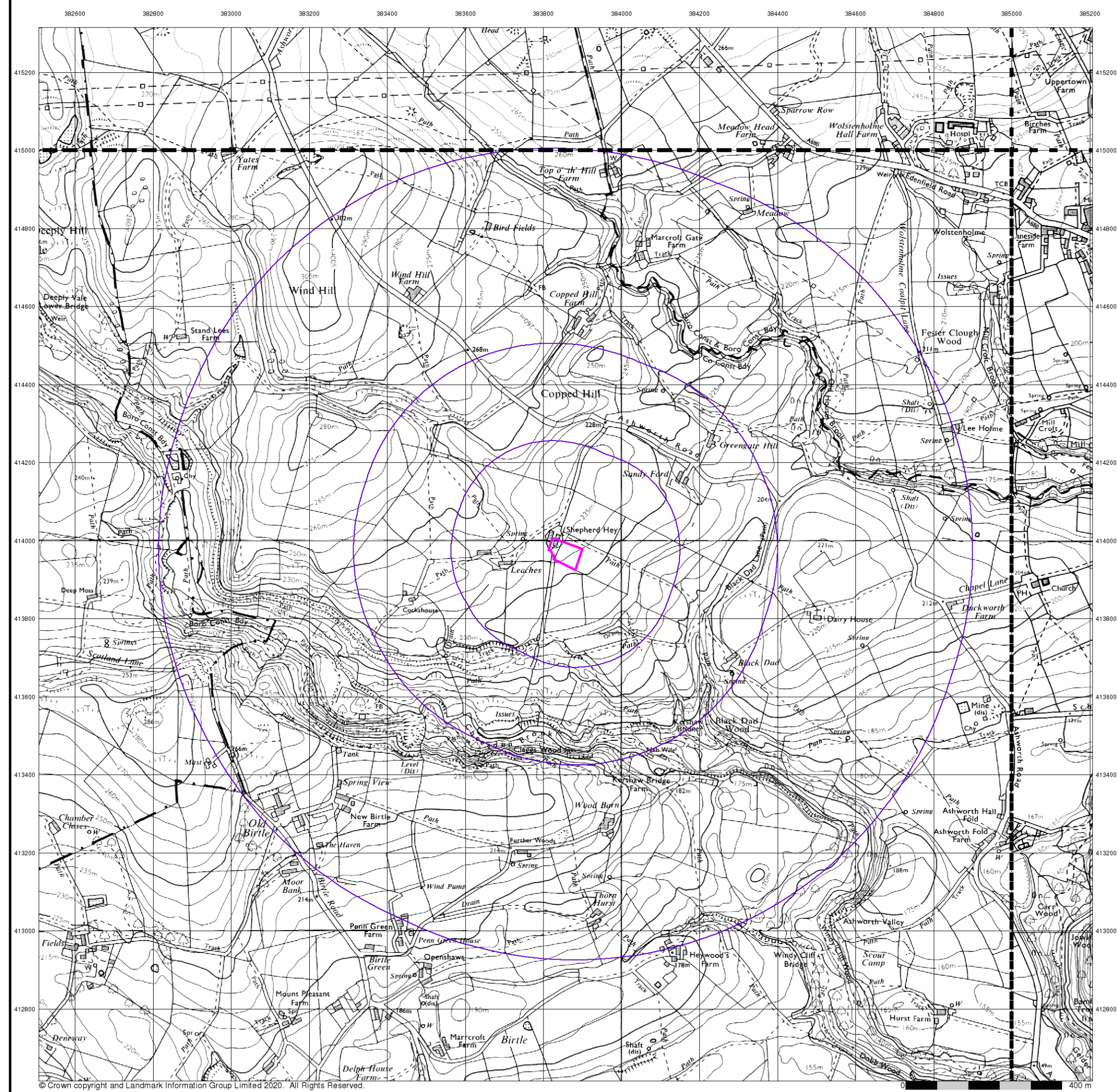
Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark®
INFORMATION GROUP

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



Envirocheck[®]

LANDMARK INFORMATION GROUP[®]

Ordnance Survey Plan

Published 1981 - 1988

Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SD81NW 1987 1:10,000	SD81NE 1981 1:10,000
SD81SW 1984 1:10,000	SD81SE 1988 1:10,000

Historical Map - Slice A

Order Details

Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

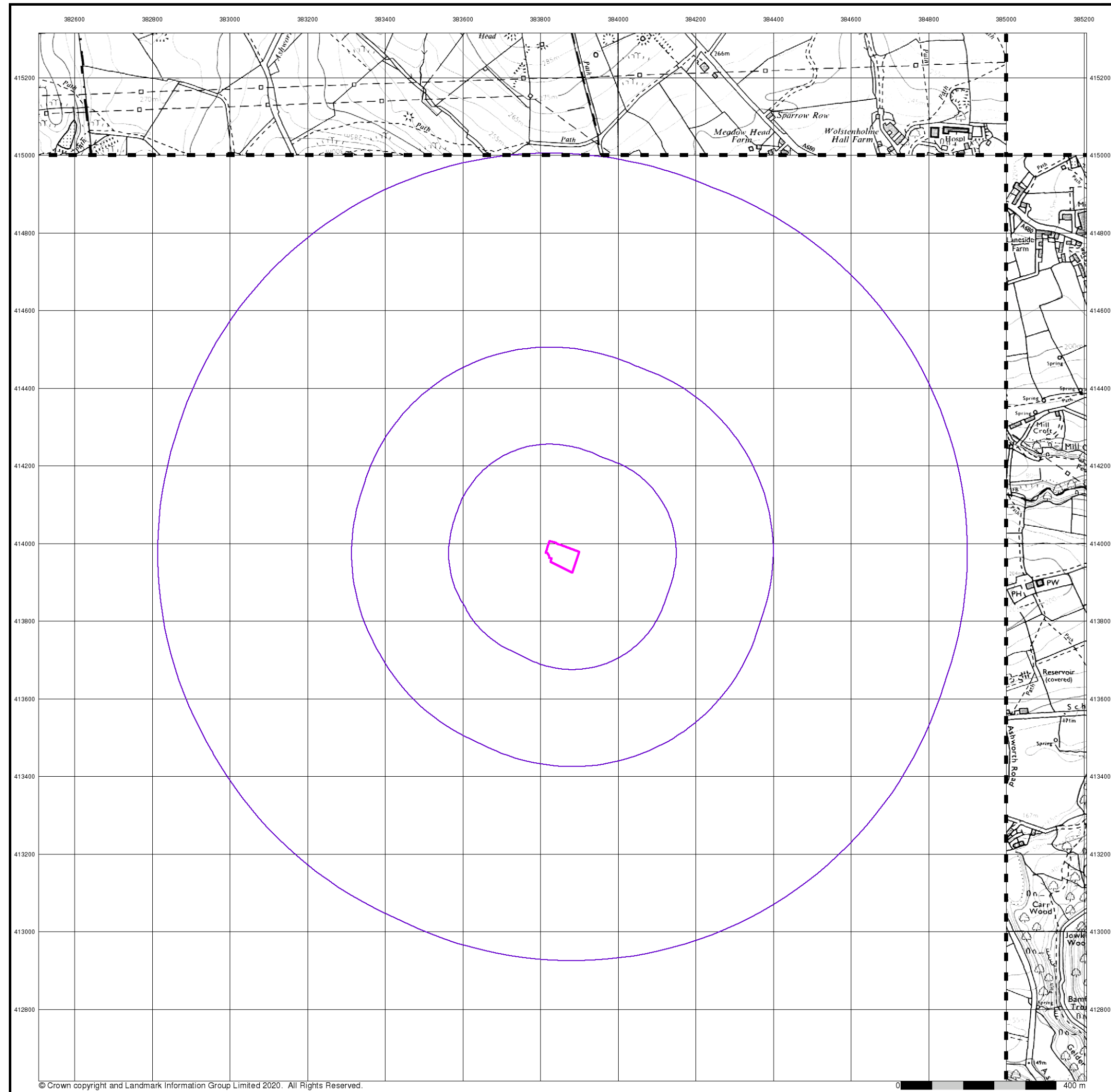
Landmark[®]

INFORMATION GROUP

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

© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.

A Landmark Information Group Service v50.0 08-Dec-2020 Page 10 of 13



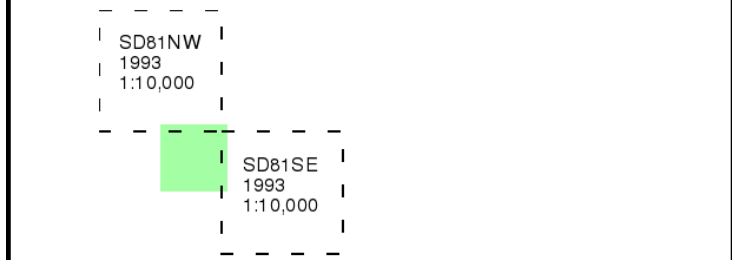
Ordnance Survey Plan

Published 1993

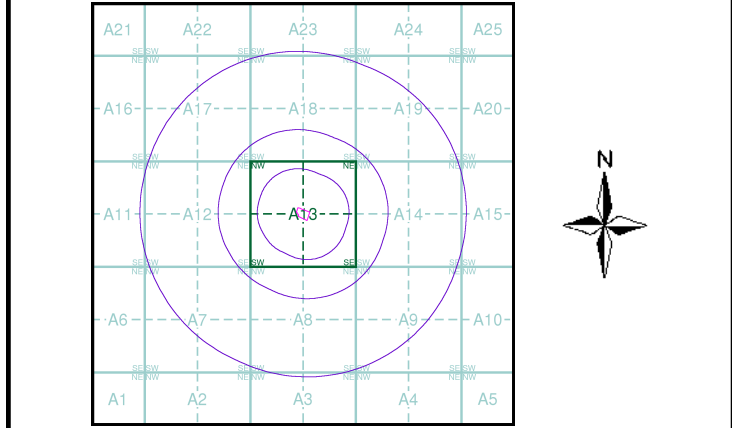
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A

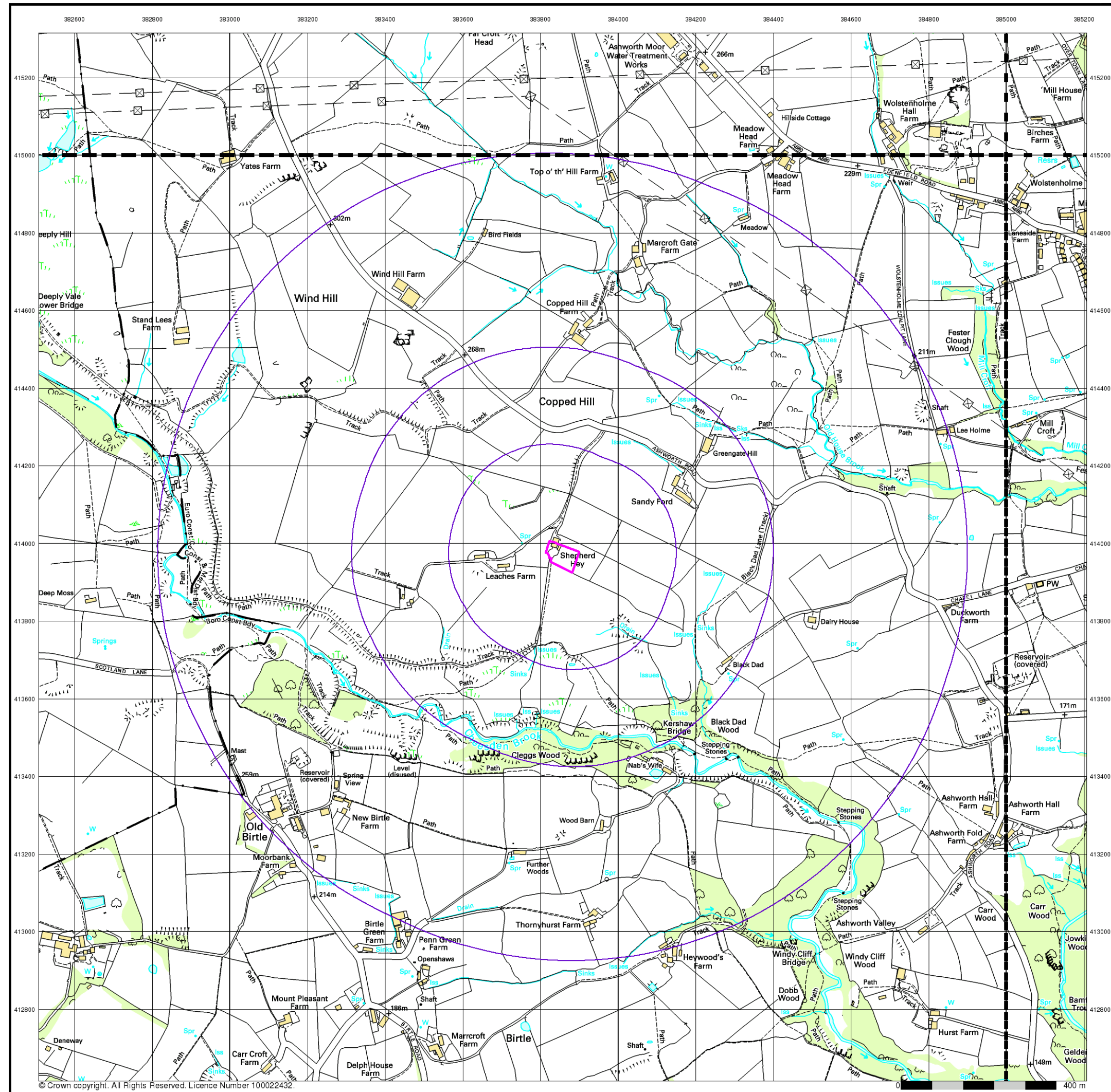


Order Details

Order Number:	270249888_1_1
Customer Ref:	3934
National Grid Reference:	383860, 413970
Slice:	A
Site Area (Ha):	0.41
Search Buffer (m):	1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN



Envirocheck®

LANDMARK INFORMATION GROUP®

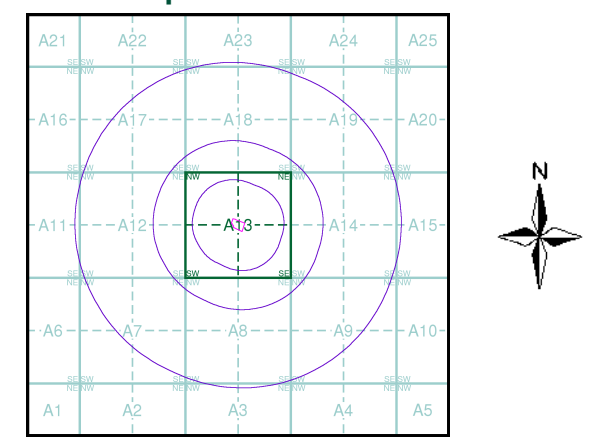
10k Raster Mapping
Published 1999
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

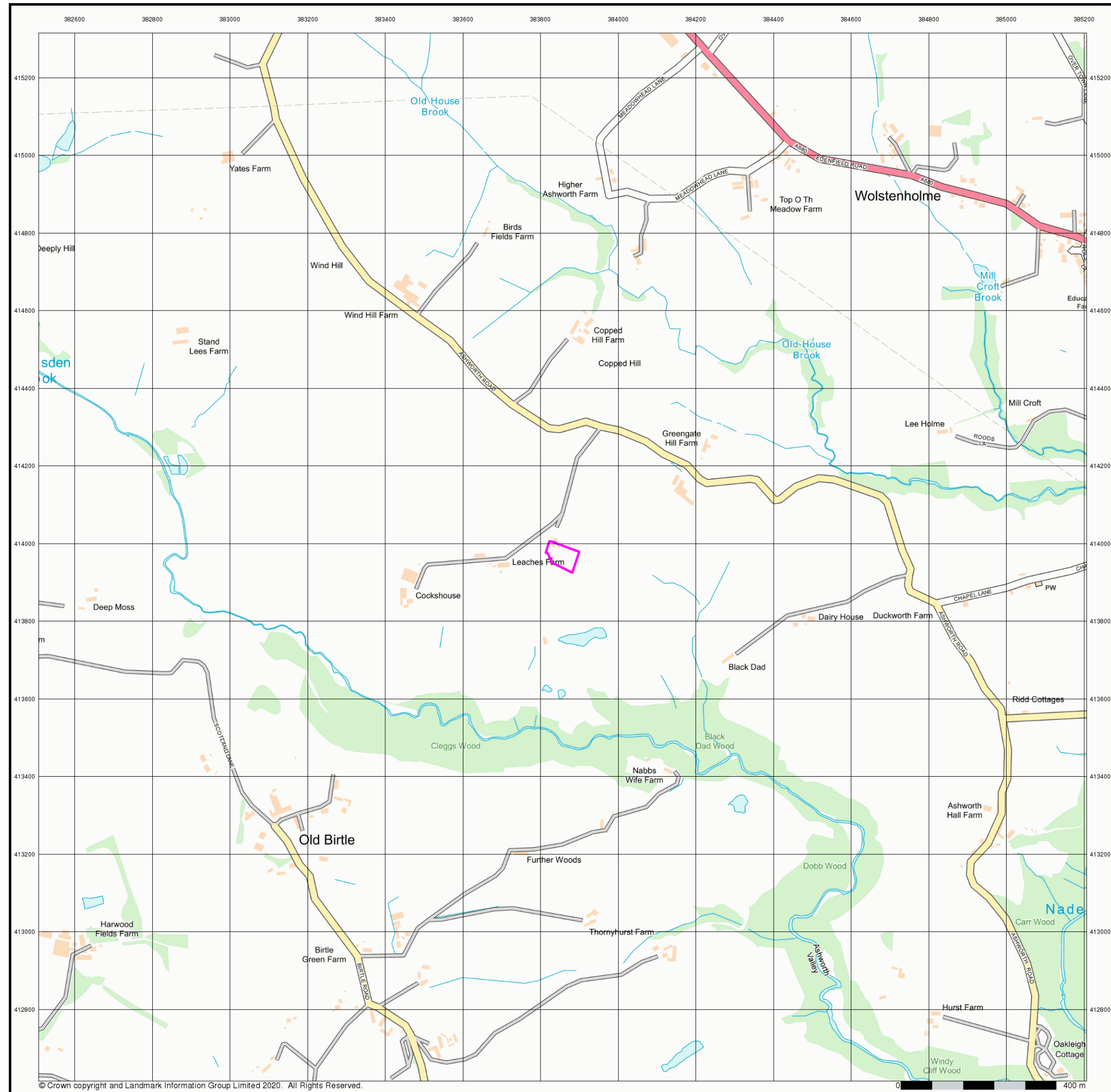
SD81NW	SD81NE
1999	1999
1:10,000	1:10,000
SD81SW	SD81SE
1999	1999
1:10,000	1:10,000

Historical Map - Slice A



Order Details
Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details
Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN



Envirocheck[®]

LANDMARK INFORMATION GROUP[®]

Street View

Published 2020

Source map scale - 1:10,000

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

Map Name(s) and Date(s)

Street View Map - Slice A

Order Details

Order Number:	270249888_1_1
Customer Ref:	3934
National Grid Reference:	383860, 413970
Slice:	A
Site Area (Ha):	0.41
Search Buffer (m):	1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark[®]

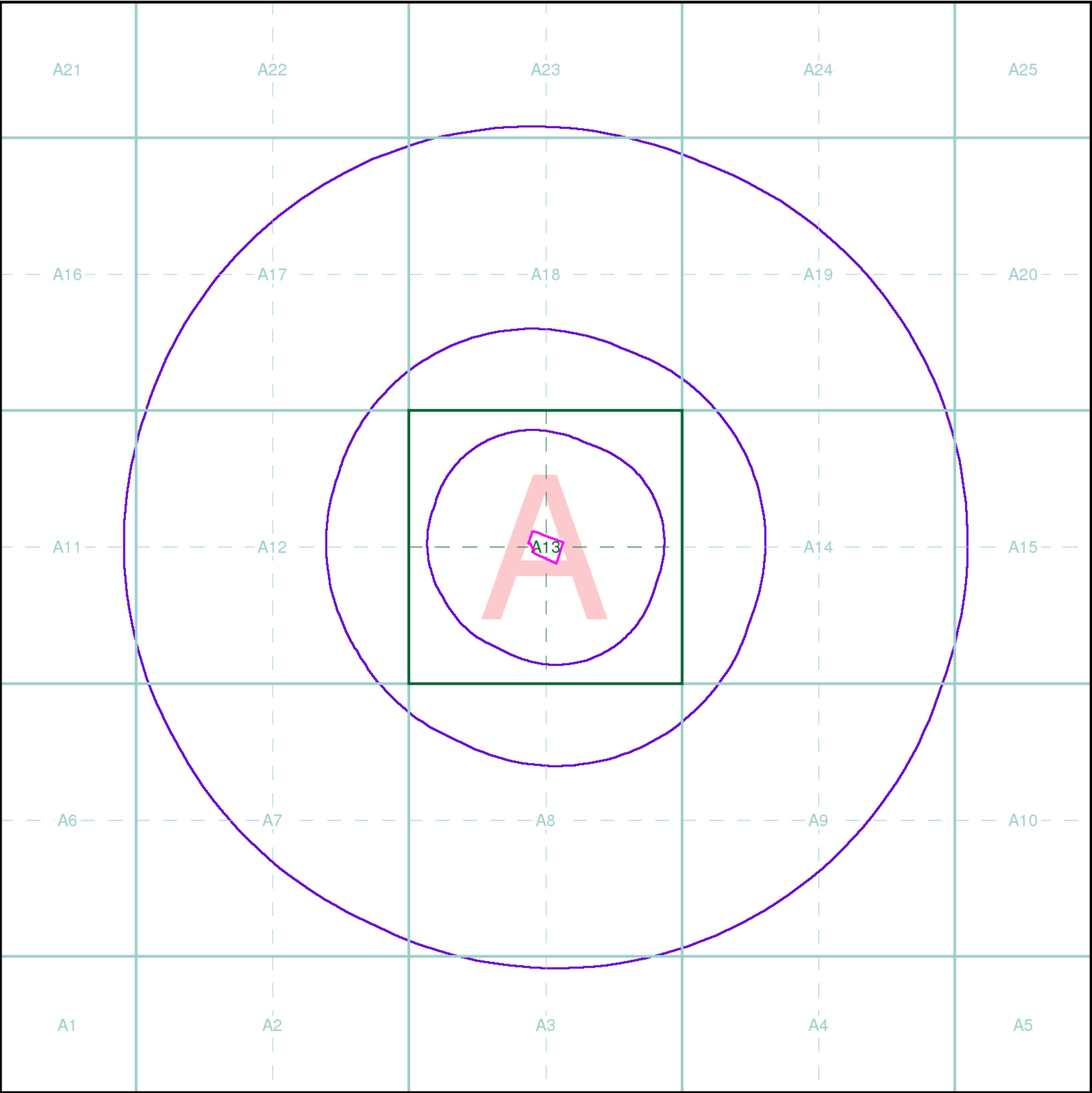
INFORMATION GROUP

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

A Landmark Information Group Service v50.0 08-Dec-2020 Page 13 of 13

APPENDIX 3

LANDMARK ENVIROCHECK REPORT



Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice

Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment

A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant

A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:



Envirocheck reports are compiled from 136 different sources of data.

Client Details

Ms L Ellis, FWS Consultants Ltd, Unit 2 City West Business Park, St Johns Road, Meadowfield Industrial Estate, Durham, County Durham, DH7 8ER

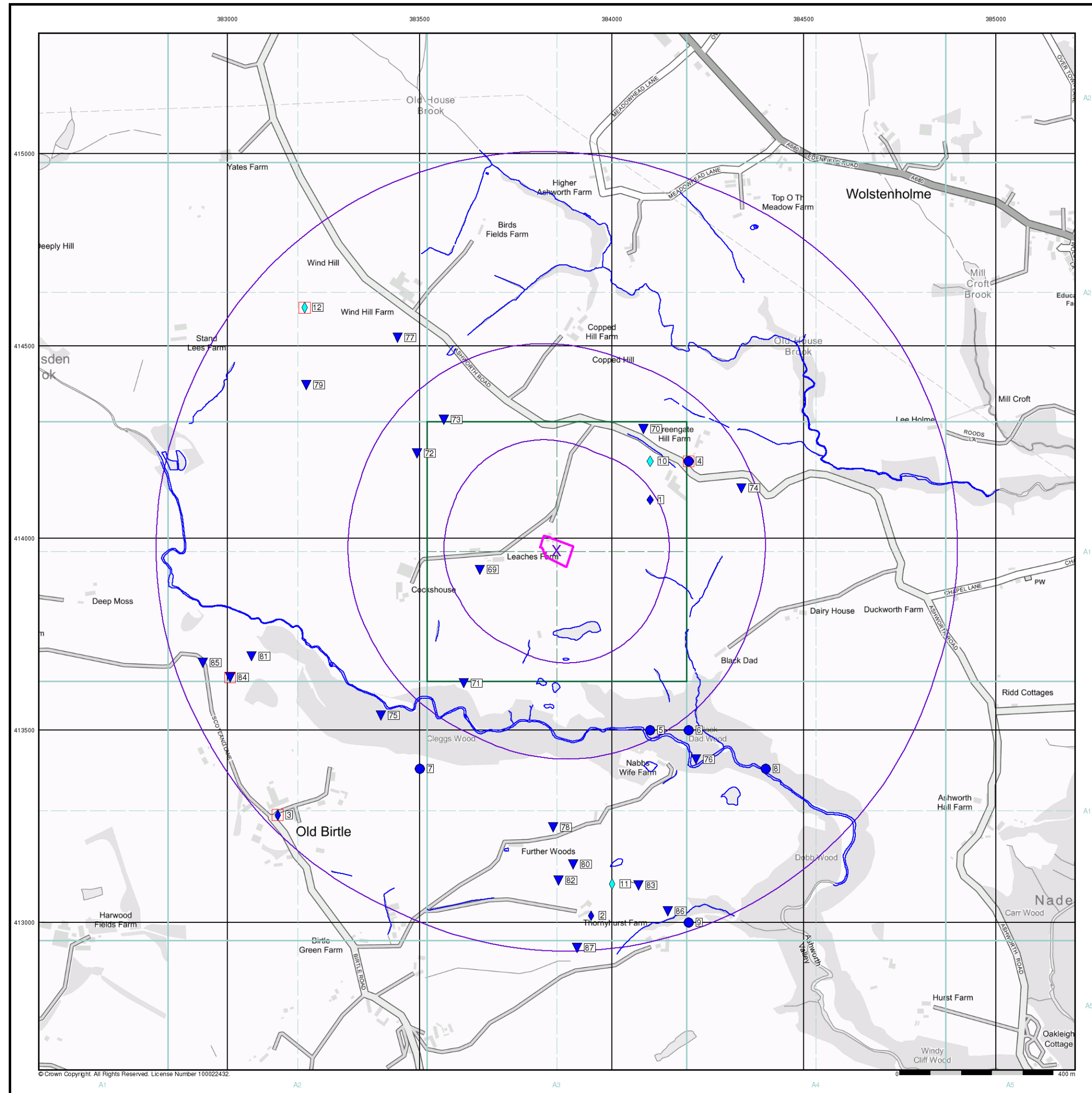
Order Details

Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Full Terms and Conditions can be found on the following link:
<http://www.landmarkinfo.co.uk/Terms/Show/515>



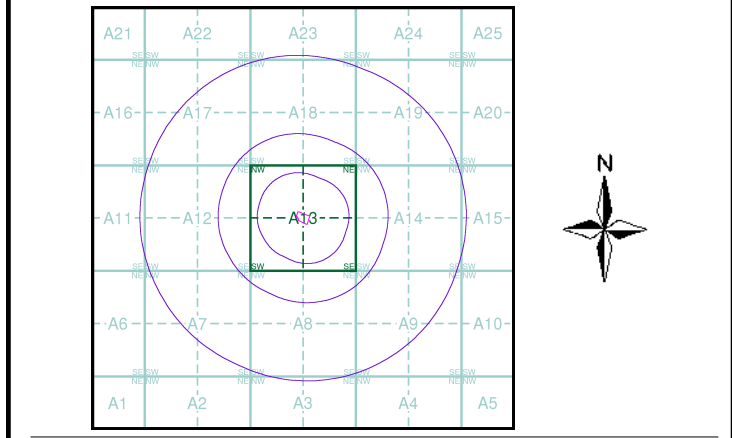
© Crown Copyright. All Rights Reserved. License Number 100022432.

Envirocheck®

LANDMARK INFORMATION GROUP®

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

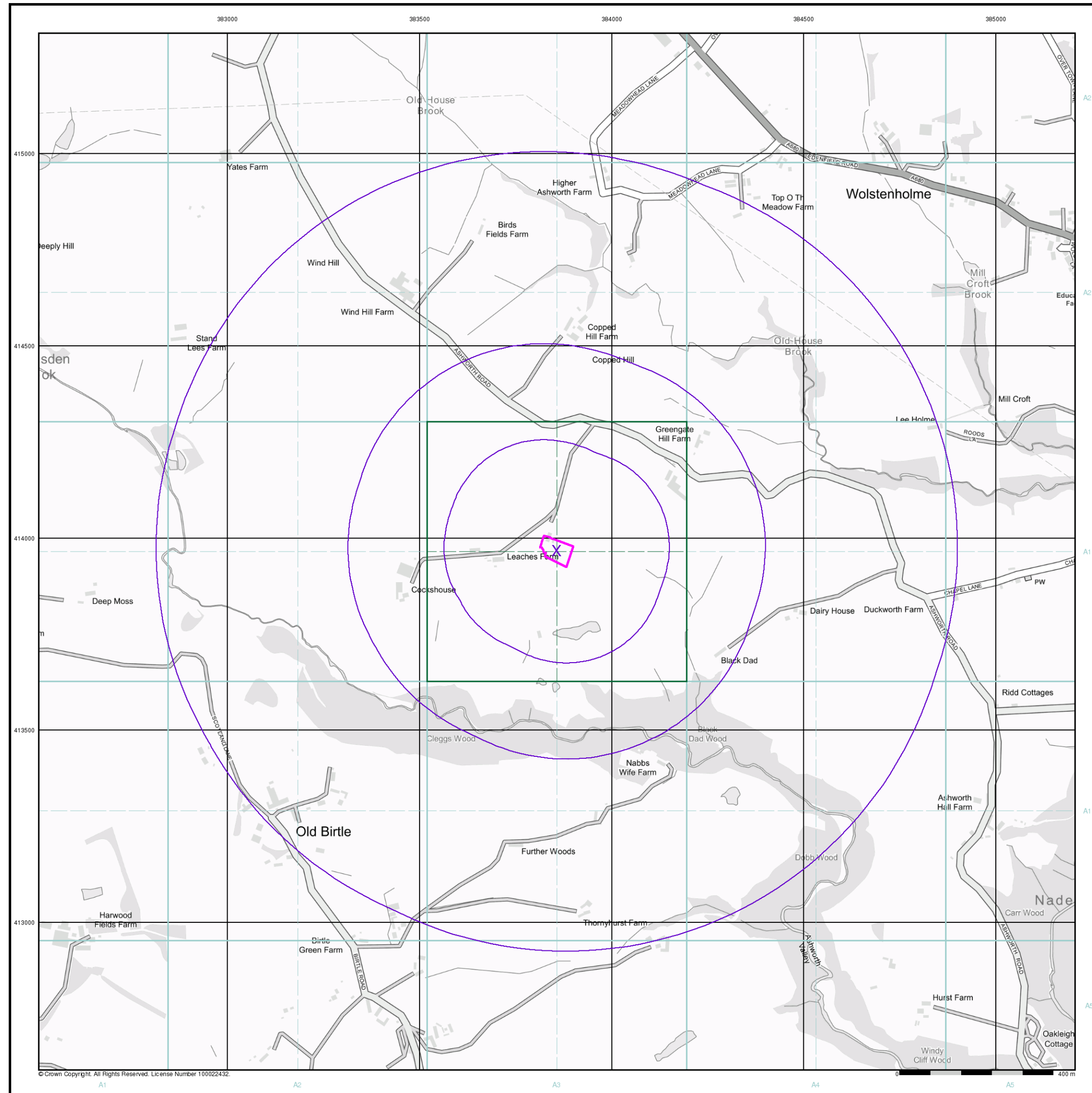
Site Sensitivity Map - Slice A



Order Details
Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details
Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

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



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

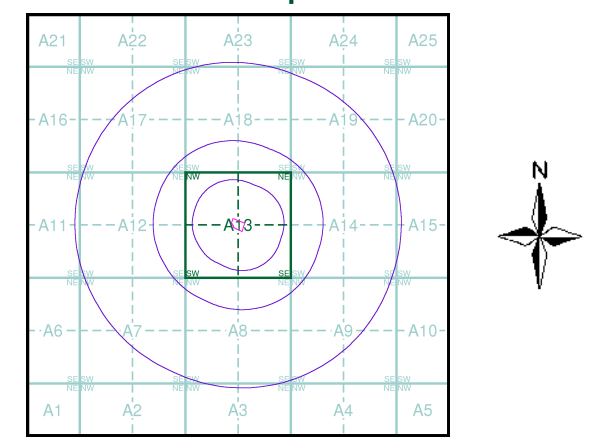
Envirocheck®

LANDMARK INFORMATION GROUP®

Industrial Land Use Map

- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Slice
 - Map ID
- Industrial Land Use**
- Contemporary Trade Directory Entry
 - Fuel Station Entry
 - Gas Pipeline
 - Underground Electrical Cables

Industrial Land Use Map - Slice A



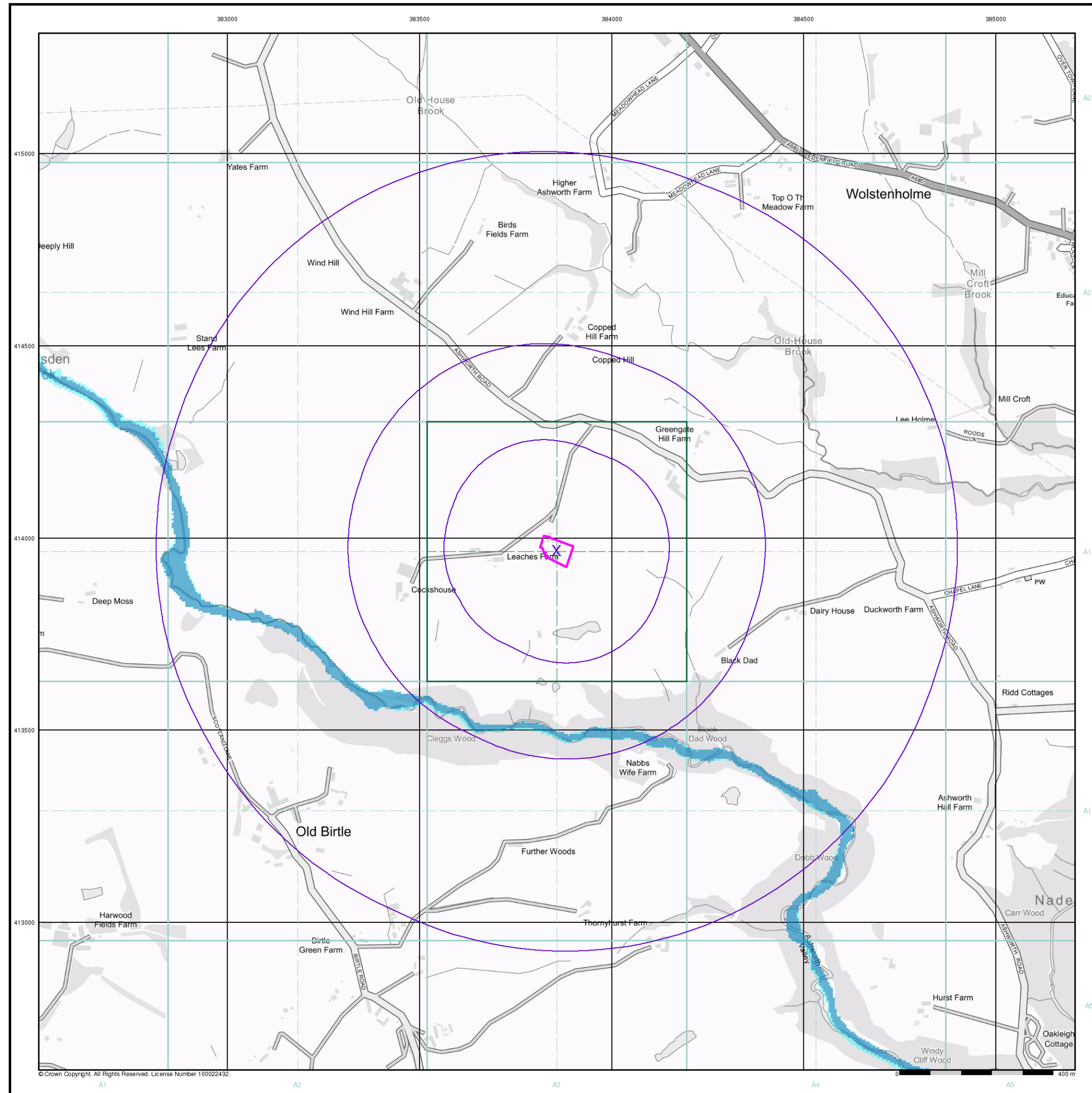
Order Details

Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details
Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark®
INFORMATION GROUP

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



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

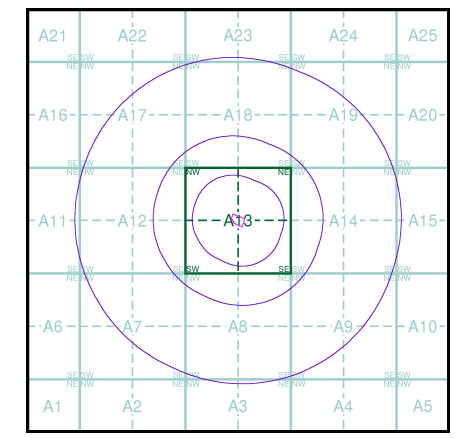
General

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

Agency and Hydrological (Flood)

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

Flood Map - Slice A

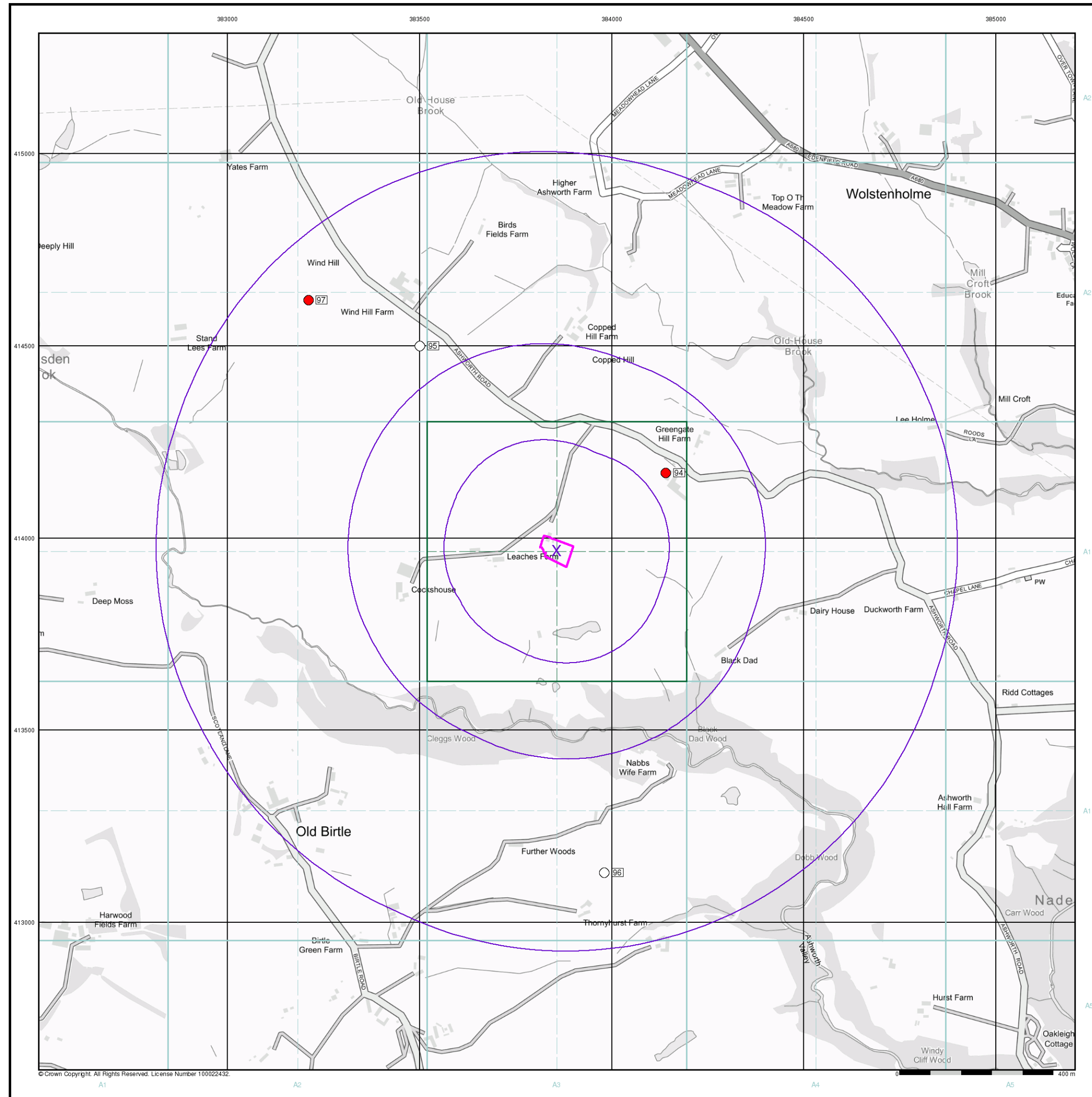


Order Details

Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN



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

General

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

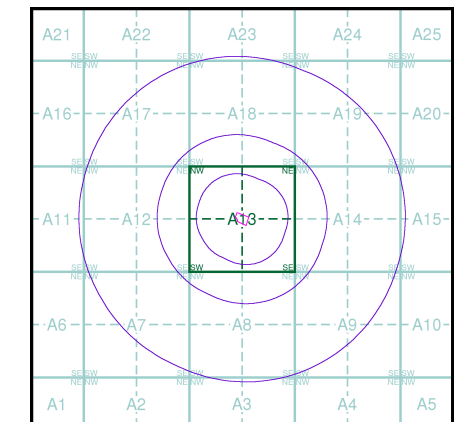
Agency and Hydrological (Boreholes)

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

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

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A

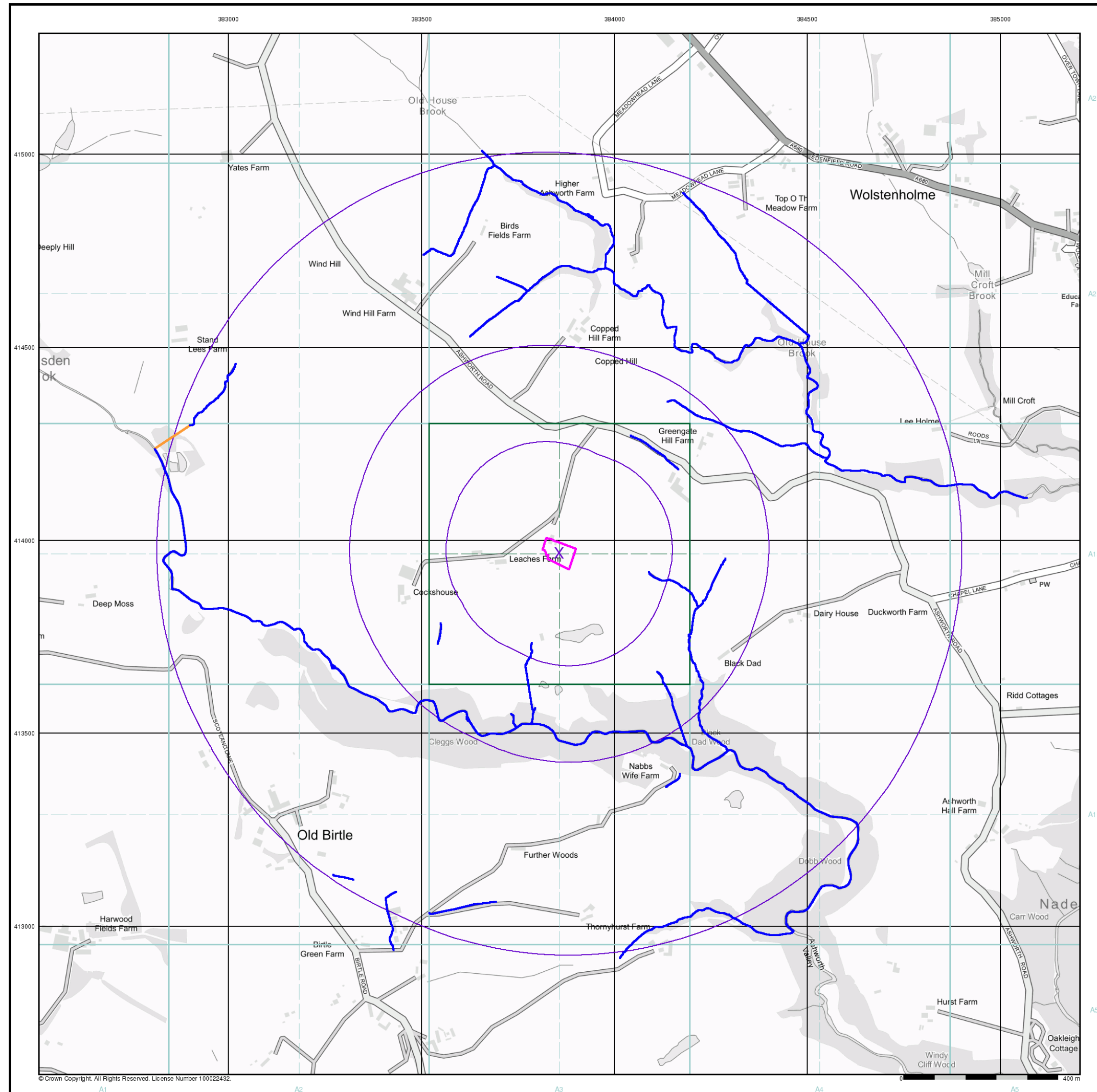


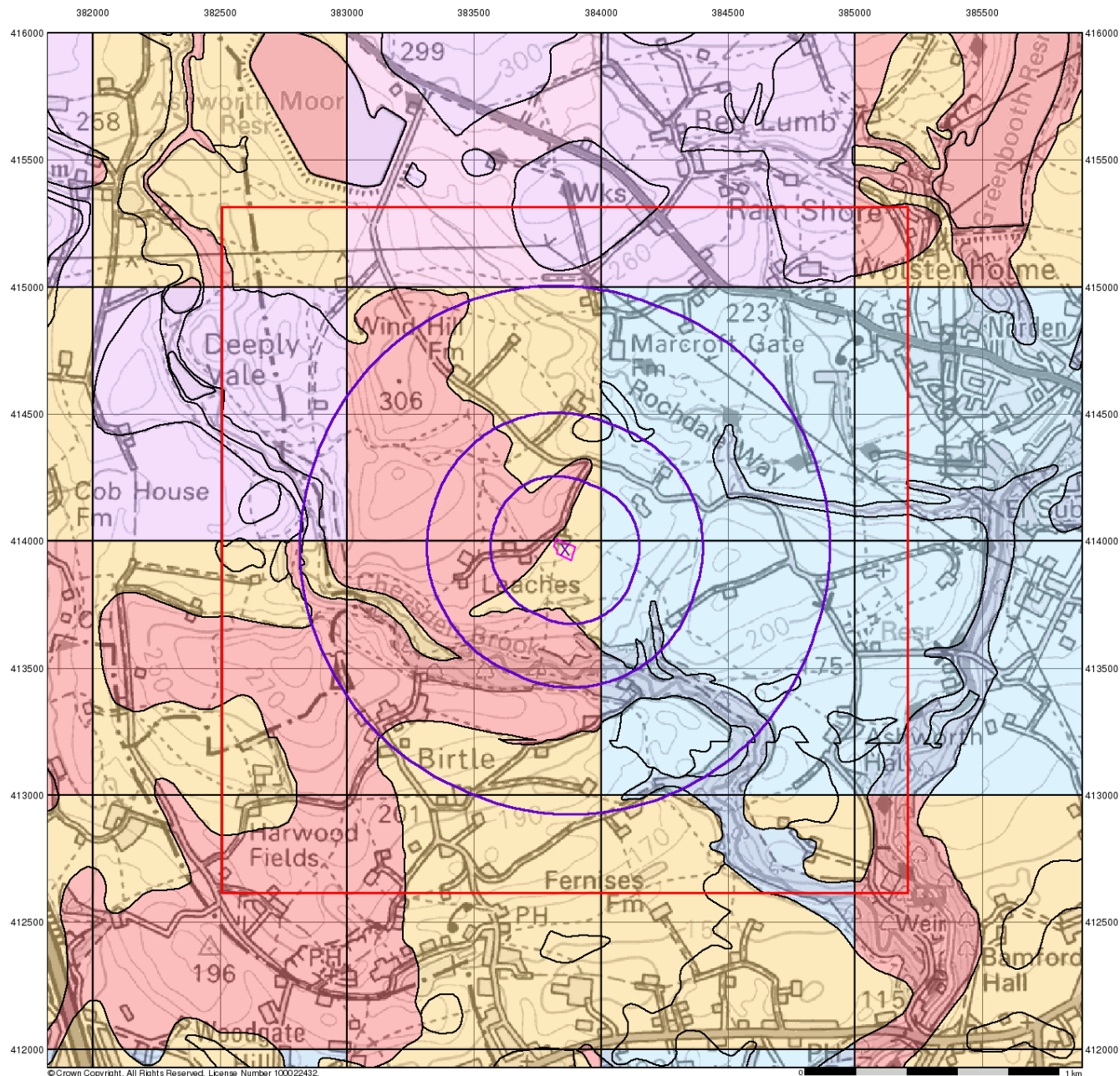
Order Details

Order Number: 270249888_1_1
Customer Ref: 3934
National Grid Reference: 383860, 413970
Slice: A
Site Area (Ha): 0.41
Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN





Envirocheck[®]

LANDMARK INFORMATION GROUP[®]

Groundwater Vulnerability

General

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

Agency and Hydrological

Bedrock Aquifers

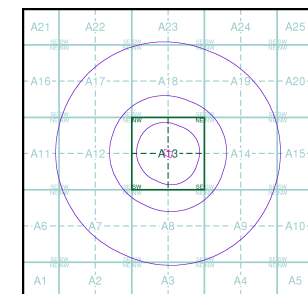
- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer

Superficial Aquifers

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

- Unproductive Aquifer
- Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

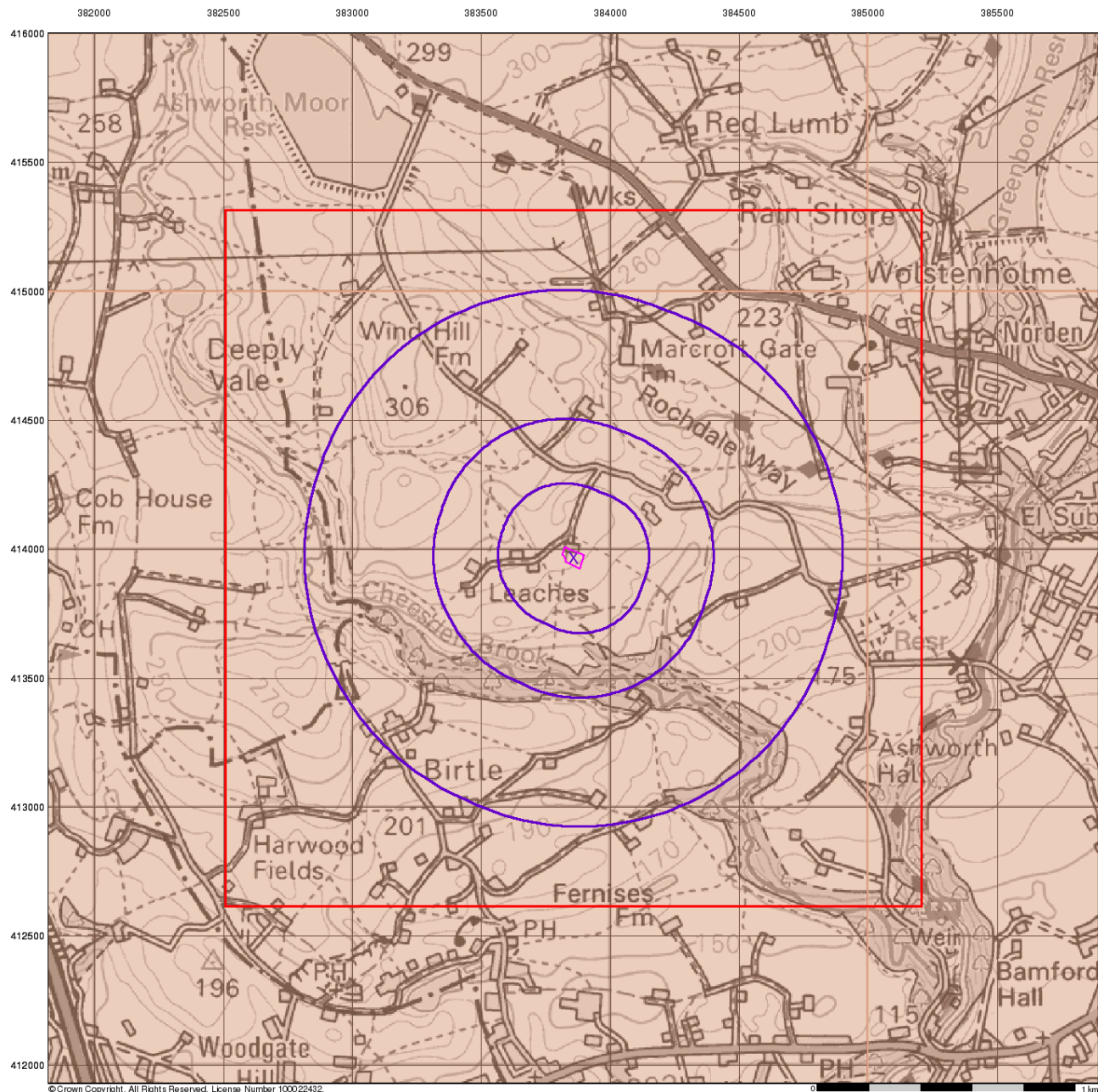
Order Number: 270249888_1_1
 Customer Ref: 3934
 National Grid Reference: 383860, 413970
 Slice: A
 Site Area (Ha): 0.41
 Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark[®]
 INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Bedrock Aquifer Designation

General

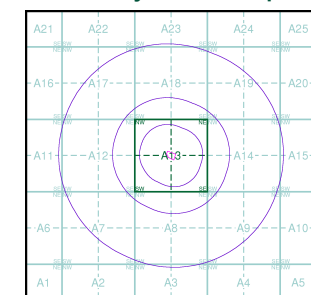
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice A



Order Details

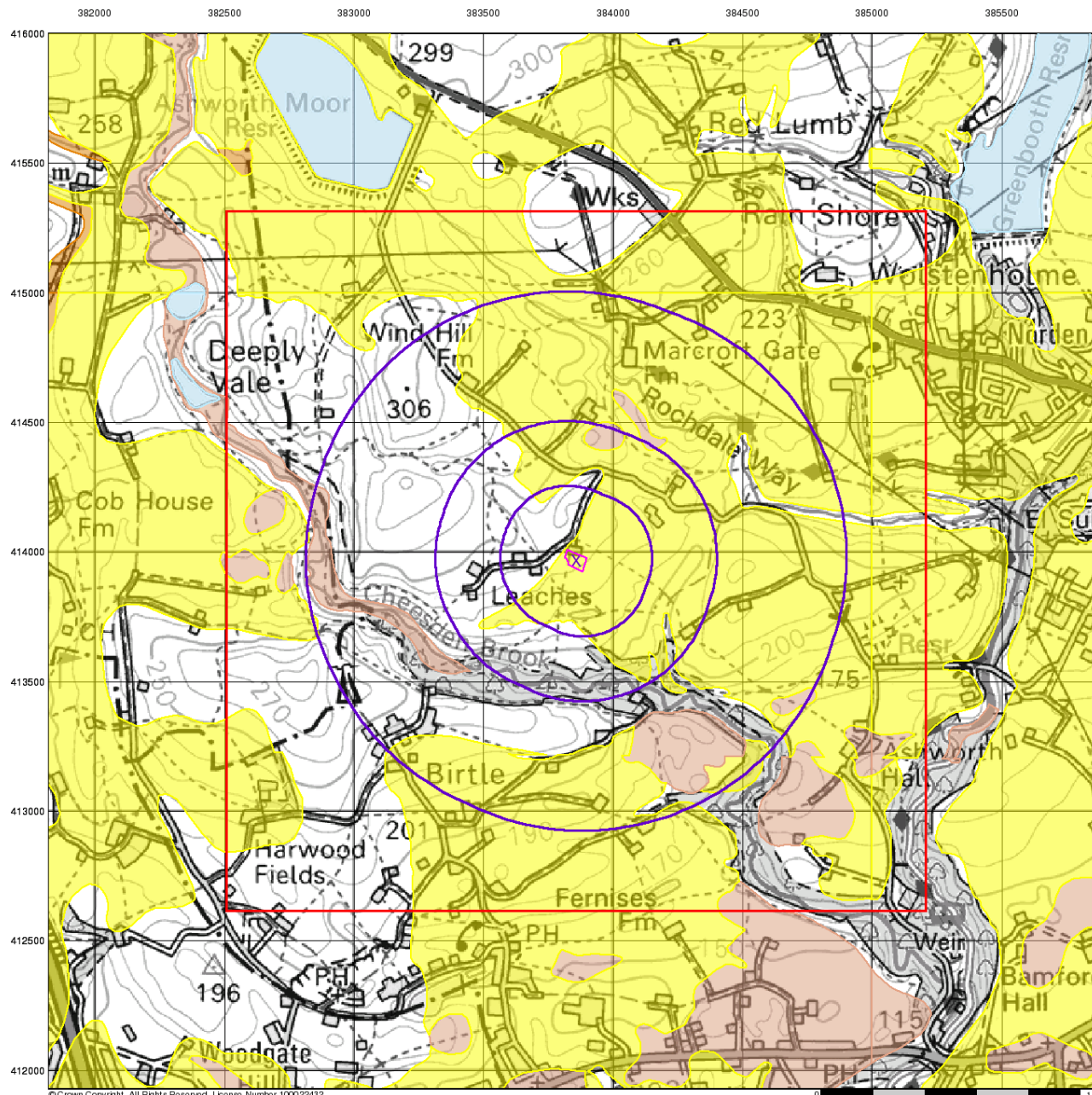
Order Number: 270249888_1_1
 Customer Ref: 3934
 National Grid Reference: 383860, 413970
 Slice: A
 Site Area (Ha): 0.41
 Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark®
 LANDMARK INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432

0 1 km

Envirocheck®

LANDMARK INFORMATION GROUP®

Superficial Aquifer Designation

General

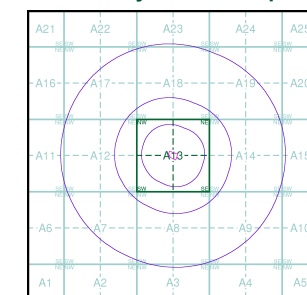
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice A



Order Details

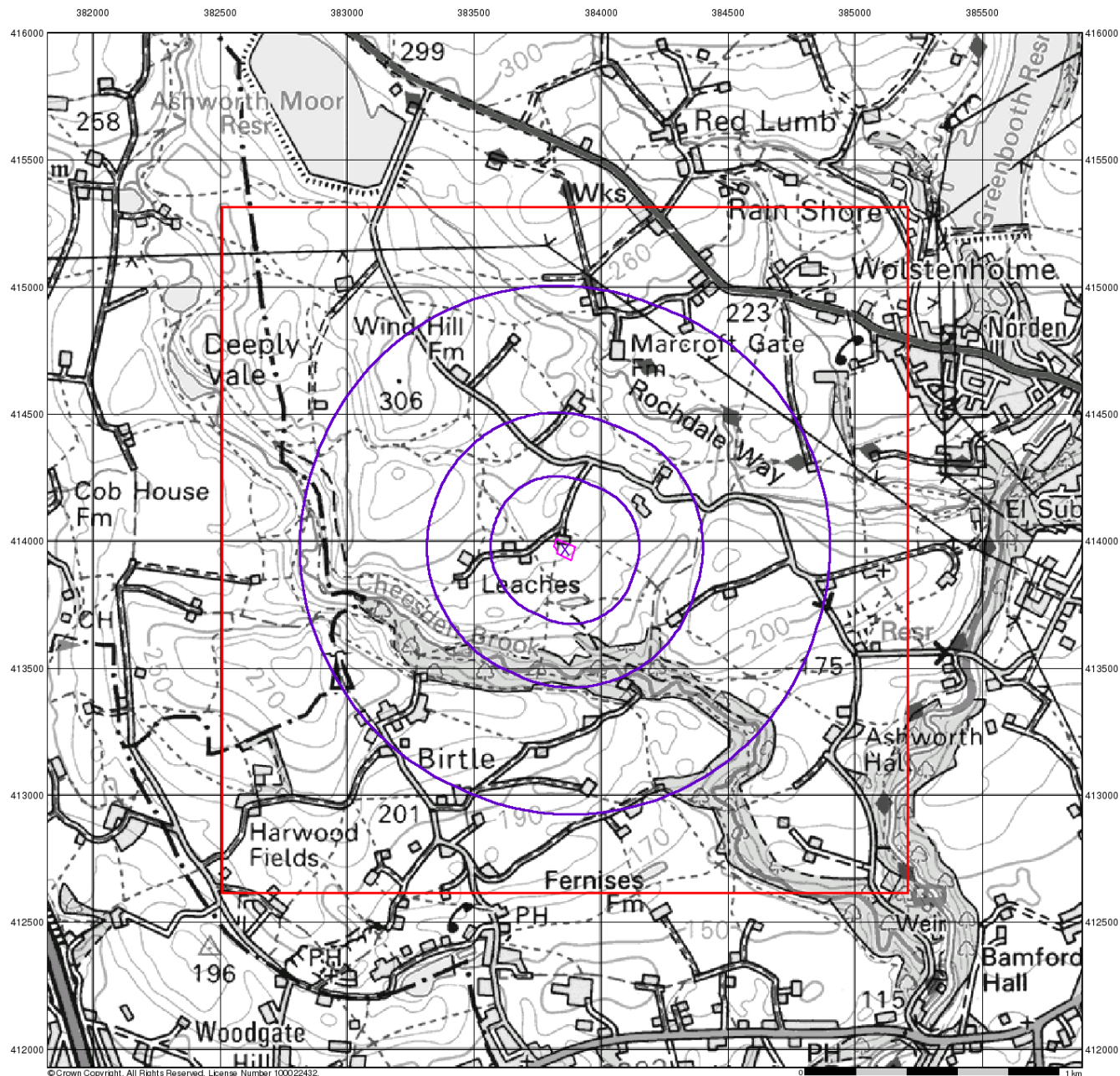
Order Number: 270249888_1_1
 Customer Ref: 3934
 National Grid Reference: 383860, 413970
 Slice: A
 Site Area (Ha): 0.41
 Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark®
 LANDMARK INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Source Protection Zones

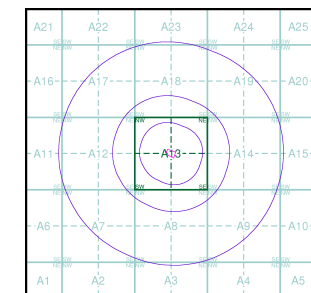
General

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

Agency and Hydrological

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

Site Sensitivity Context Map - Slice A



Order Details

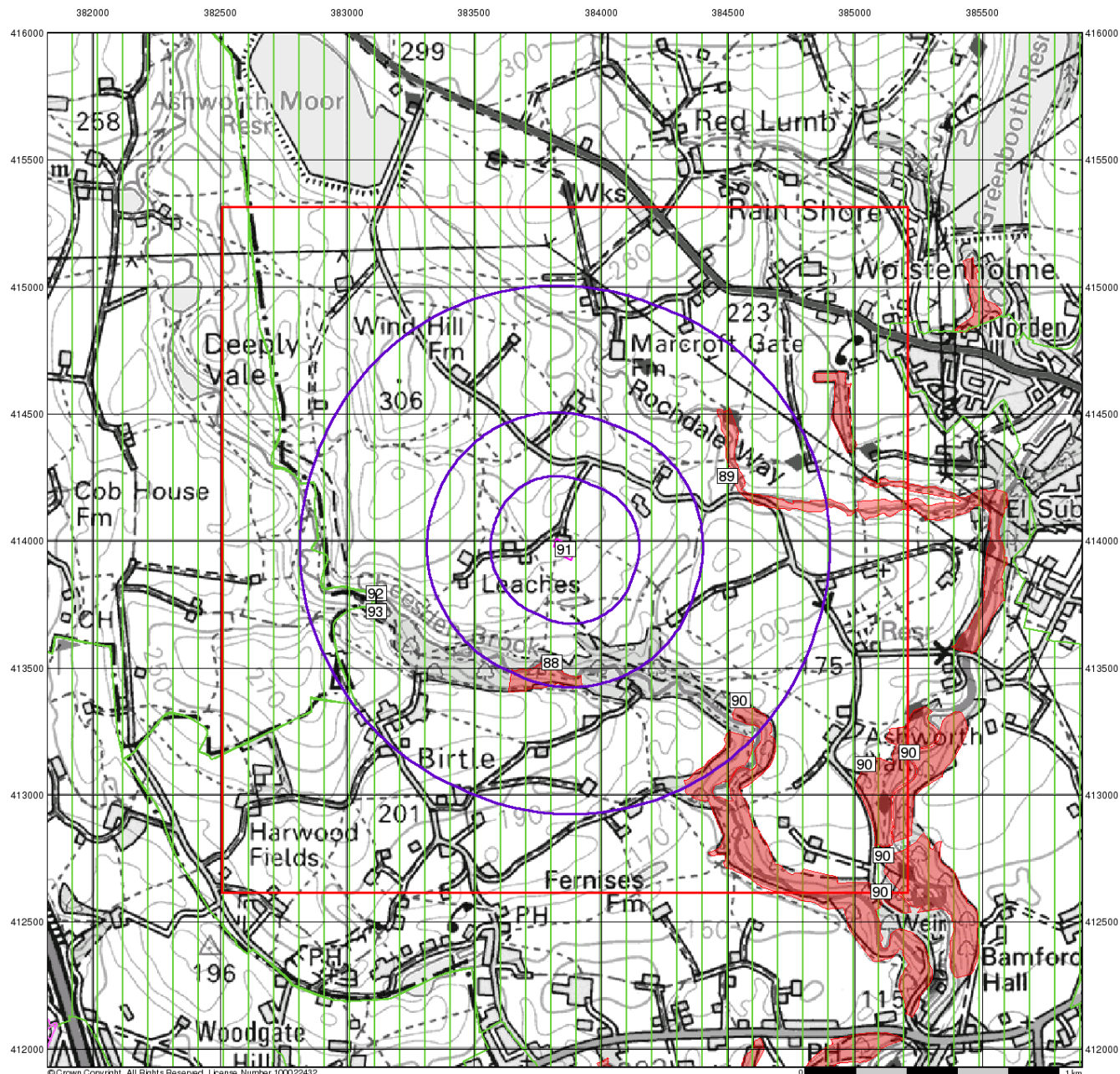
Order Number: 270249888_1_1
 Customer Ref: 3934
 National Grid Reference: 383860, 413970
 Slice: A
 Site Area (Ha): 0.41
 Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark®
 LANDMARK INFORMATION GROUP

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



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

Envirocheck®

LANDMARK INFORMATION GROUP®

Sensitive Land Uses

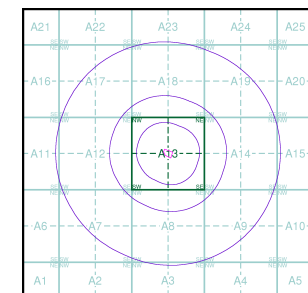
General

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

Sensitive Land Uses

- Ancient Woodland
- 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
- World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

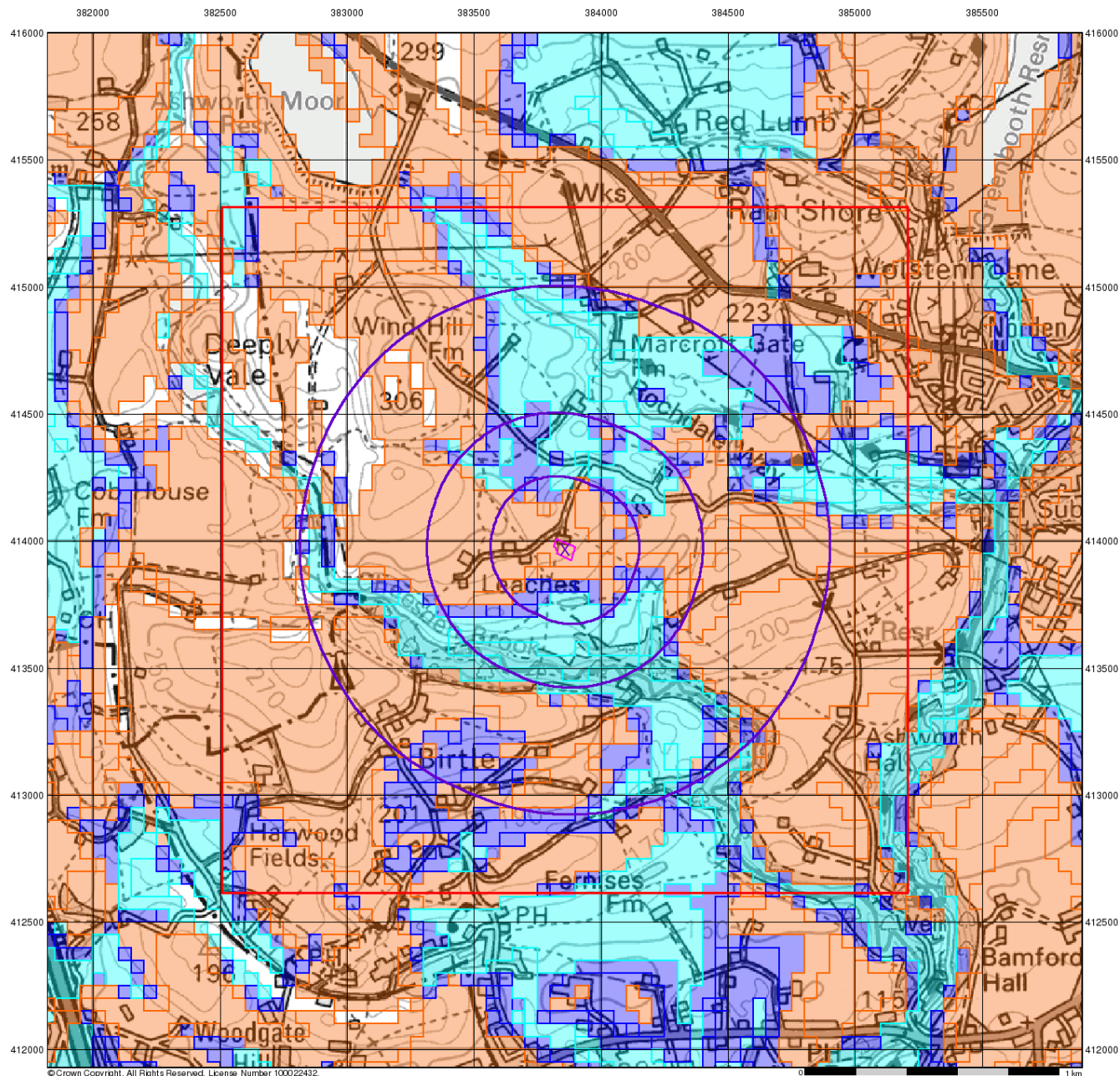
Order Number: 270249888_1_1
 Customer Ref: 3934
 National Grid Reference: 383860, 413970
 Slice: A
 Site Area (Ha): 0.41
 Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark®
 INFORMATION GROUP

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



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

Envirocheck®

LANDMARK INFORMATION GROUP®

BGS Flood GFS Data

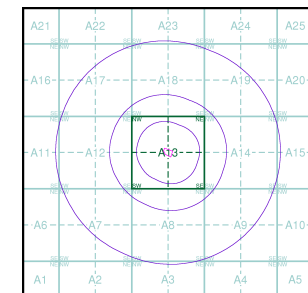
General

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

Agency and Hydrological (Flood)

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

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 270249888_1_1
 Customer Ref: 3934
 National Grid Reference: 383860, 413970
 Slice: A
 Site Area (Ha): 0.41
 Search Buffer (m): 1000

Site Details

Shepherd Hey, Ashworth Road, ROCHDALE, OL11 5UN

Landmark®
 LANDMARK INFORMATION GROUP

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

Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

270249888_1_1

Customer Reference:

3934

National Grid Reference:

383860, 413970

Slice:

A

Site Area (Ha):

0.41

Search Buffer (m):

1000

Site Details:

Shepherd Hey, Ashworth Road
ROCHDALE
OL11 5UN

Client Details:

Ms L Ellis
FWS Consultants Ltd
Unit 2 City West Business Park
St Johns Road
Meadowfield Industrial Estate
Durham
County Durham
DH7 8ER

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	25
Hazardous Substances	-
Geological	26
Industrial Land Use	-
Sensitive Land Use	31
Data Currency	32
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/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Copyright Notice

© Landmark Information Group Limited 2020. 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/Natural Resources Wales 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. © Environment Agency & United Kingdom Research and Innovation 2020. © Natural Resources Wales & United Kingdom Research and Innovation 2020.

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.

Scottish Natural Heritage Copyright

Contains SNH information licensed under the Open Government Licence v3.0.

Ove Arup Copyright Notice

The Mining Instability data 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 supplied Mining Instability data is 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.

Stantec Copyright Notice

The cavity data presented has been extracted from the PBA (now Stantec UK Ltd) enhanced version of the original DEFRA national cavity databases. Stantec UK Ltd 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 Stantec UK Ltd. In no event shall Stantec UK Ltd 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 Public Health England.

Natural Resources Wales Copyright Notice

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number 100019741. Crown Copyright and Database Right. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2020. Land & Property Services © Crown copyright and database right.

Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 5		1		4
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 6		Yes		
Pollution Incidents to Controlled Waters	pg 6			4	4
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 7			1	1
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 8			1	3 (*34)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 17	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 17	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 17	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 18		2	22	32

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
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 26	Yes	n/a	n/a	n/a
BGS Recorded Mineral Sites	pg 26		1	5	14
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 29	Yes	n/a	n/a	n/a
Mining Instability	pg 29	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 29		Yes	n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 29	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 29	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 30	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 30	Yes		n/a	n/a
Radon Potential - Radon Affected Areas	pg 30	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Industrial Land Use					
Contemporary Trade Directory Entries					
Fuel Station Entries					
Gas Pipelines					
Underground Electrical Cables					
Sensitive Land Use					
Ancient Woodland	pg 31			1	2
Areas of Adopted Green Belt	pg 31	1			2
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (W)	0	1	383857 413968
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	25	1	383857 413900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (W)	27	1	383800 413950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	55	1	383900 414050
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	57	1	383950 413950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	75	1	383857 413850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	77	1	383900 413850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	93	1	383750 413900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (NW)	98	1	383800 414100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	101	1	383950 413850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	101	1	384000 413968
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	103	1	383800 413850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	104	1	384000 413950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	120	1	384000 413900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (S)	125	1	383857 413800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	140	1	384000 413850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	145	1	383850 414150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (S)	149	1	383800 413800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	151	1	384050 413968
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	152	1	384050 414000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	158	1	384000 414100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	163	1	383700 413850

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (NW)	163	1	383750 414150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	167	1	384050 414050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (E)	167	1	384050 413900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	184	1	384050 413850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	191	1	383700 414150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	194	1	384050 414100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (N)	195	1	383857 414200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	200	1	384000 414150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	202	1	384100 413950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	208	1	383750 414200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	208	1	383900 414200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	210	1	384050 413800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	211	1	384000 413750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	213	1	384100 414050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	215	1	383750 413750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (E)	215	1	384100 413900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	226	1	383950 414200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	229	1	384050 414150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	231	1	384100 413850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	235	1	384100 414100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	244	1	384000 414200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (NW)	261	1	383650 414200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (E)	262	1	384150 413900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (N)	264	1	383950 414250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	269	1	383650 413750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (E)	278	1	384150 413850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	295	1	383850 414300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (SE)	296	1	384150 413800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	304	1	383600 413750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (N)	304	1	383900 414300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NE (S)	326	1	383900 413600
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (NW)	336	1	383550 414200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	337	1	384000 414300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (NW)	342	1	383650 414300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	343	1	383550 413750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	370	1	383600 414300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	373	1	384250 413850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	384	1	384000 414350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (SE)	389	1	384250 413800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (NE)	402	1	384050 414350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (NW)	406	1	383500 414250
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	408	1	384300 413900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (NW)	411	1	383600 414350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	413	1	383950 414400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	420	1	384300 413850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SE (N)	430	1	384000 414400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SW (SE)	432	1	384250 413700
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	436	1	384300 413800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A12NE (NW)	438	1	383500 414300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (NW)	440	1	383550 414350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (NE)	444	1	384250 414250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (NE)	449	1	384150 414350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (NE)	449	1	384050 414400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	451	1	384350 413950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (N)	451	1	383750 414450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	462	1	383950 414450
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	468	1	384350 413850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (SW)	471	1	383400 413750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (NW)	476	1	383450 414300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A19SW (NE)	479	1	384200 414350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A9NW (SE)	491	1	384250 413600
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (S)	494	1	383750 413450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	496	1	383350 413800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	Discharge Consents Operator: E. T. & B Tomlinson Property Type: FARMS (NOT HOUSE)/CROP + ANIMAL REARING/PLANT NURSERY Location: Sandyford Farm Ashworth Road, Ashworth, Rochdale, Lancashire, OL11 5un Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 0172/1852 Permit Version: 1 Effective Date: 16th October 1972 Issued Date: 16th October 1972 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Cheesden Brook Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989 Positional Accuracy: Located by supplier to within 100m	A13NE (NE)	235	2	384100 414100
2	Discharge Consents Operator: Mr Peter Marsden & Mrs Gwyneth Marsden Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Thornyhurst Farm, Birtle Road, Bury, Lancashire, BL9 6uu Authority: Environment Agency, North West Region Catchment Area: Roch Reference: 016993818 Permit Version: 1 Effective Date: 22nd December 2005 Issued Date: 22nd December 2005 Revocation Date: 22nd December 2017 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Groundwater Via A Soakaway 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	A8SE (S)	910	2	383946 413018
3	Discharge Consents Operator: The Rhyddings Management Co Ltd. Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: The Rhyddings Birtle Road, Old Birtle, Bury, Lancashire, BL9 6ut Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016993418 Permit Version: 1 Effective Date: 23rd November 2001 Issued Date: 23rd November 2001 Revocation Date: 11th June 2004 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Unnamed Trib. Tack Lee Brook 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	A7SW (SW)	968	2	383130 413280
3	Discharge Consents Operator: The Rhyddings Management Co Ltd. Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: The Rhyddings, Birtle Old Road, Old Birtle, Nr Rochdale, BL9 6ut Authority: Environment Agency, North West Region Catchment Area: Roch Reference: 016993531 Permit Version: 2 Effective Date: 30th November 2012 Issued Date: 30th November 2012 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Groundwater Via A Soakaway Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A7SW (SW)	975	2	383150 413250

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	Discharge Consents Operator: The Rhyddings Management Co Ltd. Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: The Rhyddings, Birtle Old Road, Old Birtle, Nr Rochdale, B19 6ut Authority: Environment Agency, North West Region Catchment Area: Roch Reference: 016993531 Permit Version: 1 Effective Date: 1st June 2004 Issued Date: 19th April 2004 Revocation Date: 29th November 2012 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Land/Soakaway Environment: Receiving Water: Groundwater Via A Soakaway 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	A7SW (SW)	975	2	383150 413250
	Nearest Surface Water Feature	A13SE (SE)	155	-	383939 413781
4	Pollution Incidents to Controlled Waters Property Type: Mixed Agricultural Location: High Amonia Levels In , Cheeden Brook Authority: Environment Agency, North West Region Pollutant: Organic Wastes: Cattle slurry Note: Cheesden Brook; Cattle Slurry And Straw Beddin Incident Date: 8th May 1997 Incident Reference: 97620807 Catchment Area: Roch Receiving Water: Freshwater Stream/River Cause of Incident: Land Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	371	2	384200 414195
4	Pollution Incidents to Controlled Waters Property Type: Farm Drainage Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Organic Wastes: Cattle slurry Note: Tributary Cheesden Bk Incident Date: 8th July 1994 Incident Reference: 94621512 Catchment Area: Roch Receiving Water: Not Given Cause of Incident: Land Runoff Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	374	2	384200 414200
4	Pollution Incidents to Controlled Waters Property Type: Boats/Ships Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: No Pollution Seen Incident Date: 2nd August 1994 Incident Reference: 94621774 Catchment Area: Roch Receiving Water: Groundwater Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	375	2	384205 414195
5	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Other Note: Tributary Cheesden Bk; Poss Farm Drainage Incident Date: 15th September 1994 Incident Reference: 94622073 Catchment Area: Roch Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NE (SE)	478	2	384100 413500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Foam Note: Not Supplied Incident Date: 6th October 1994 Incident Reference: 94622219 Catchment Area: Roch Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	531	2	384200 413500
7	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Sewage - Wrong Connection Note: Not Supplied Incident Date: 12th April 1995 Incident Reference: 95620802 Catchment Area: Roch Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	641	2	383500 413400
8	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: Cheesdon Brook; None Pollution Found Incident Date: 27th October 1994 Incident Reference: 94622373 Catchment Area: Roch Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	738	2	384400 413400
9	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: Cheesden Brook; None Pollution Found Incident Date: 24th May 1995 Incident Reference: 95621226 Catchment Area: Roch Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9SW (S)	978	2	384200 413000
	River Quality Name: Cheesden Bk GQA Grade: River Quality A Reach: Qsl At Deeply Vale To Naden Bk Estimated Distance (km): 5.1 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A8NE (S)	497	2	383857 413428
	River Quality Name: Oldhouse Bk GQA Grade: River Quality B Reach: Qsl At Ashworth Moor Resvr. To Naden Bk Estimated Distance (km): 3.2 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A19SW (NE)	516	2	384198 414398

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	Water Abstractions Operator: E T Tomlinson Licence Number: 2569002224 Permit Version: 100 Location: Borehole At Premises, Ashworth Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 14 Yearly Rate (m3): 4978 Details: Premises At Ashworth, Nr Rochdale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st November 1982 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A13NE (NE)	300	2	384100 414200
11	Water Abstractions Operator: B & J Ovenden Licence Number: 2569002189 Permit Version: 100 Location: Borehole At Thornhurst Farm, Heywood Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 9 Yearly Rate (m3): 3032 Details: Thornhurst And Heywood Farms Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 21st February 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8SE (S)	834	2	384000 413100
12	Water Abstractions Operator: Edus Ltd Licence Number: 2569002220 Permit Version: 100 Location: Borehole At Premises, Ashworth, Nearrochdale, Lancashire Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 62 Yearly Rate (m3): 22733 Details: Premises At Ashworth, Rochdale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	862	2	383200 414600
12	Water Abstractions Operator: Edus Ltd Licence Number: 2569002220 Permit Version: 100 Location: Borehole At Premises, Ashworth, Nearrochdale, Lancashire Authority: Environment Agency, North West Region Abstraction: Private Water Undertaking: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Ashworth, Rochdale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	862	2	383200 414600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Nwwa Eastern Division Licence Number: 2569002196 Permit Version: Not Supplied Location: Borehole, Ridd Pitt, HEYWOOD Authority: Environment Agency, North West Region Abstraction: Public Water Supply Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 2273 Yearly Rate (m3): 454600 Details: Licence Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A10NW (E)	1069	2	384900 413600
	Water Abstractions Operator: B & J Ovenden Licence Number: 2569002116 Permit Version: 100 Location: Spring Fed Catchpit At Deep Moss Farm, Shuttleworth, Rams Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 2 Yearly Rate (m3): 582 Details: Deep Moss Farm, Shuttleworth Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 3rd March 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A11SE (W)	1148	2	382700 413700
	Water Abstractions Operator: R Chadwick Licence Number: 2569002057 Permit Version: 100 Location: Spring Fed Interconnected Tanks (2), At Mount Pleasant Farm, Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 6 Yearly Rate (m3): 2159 Details: Mount Pleasant Farm, Birtle, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th February 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A2NW (SW)	1362	2	383100 412800
	Water Abstractions Operator: J Chadwick Licence Number: 2569002056 Permit Version: 100 Location: Spring Fed Storage Tank And Catchpit At Carrcroft Farm, Birt Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 2 Yearly Rate (m3): 664 Details: Carrcroft Farm, Birtle, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th February 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A2NW (SW)	1448	2	383100 412700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Mr R Thompson Licence Number: 2569002248 Permit Version: 100 Location: Borehole At Fernises Farm , Grifel Hurst Lane Authority: Environment Agency, North West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 9 Yearly Rate (m3): 3319 Details: Land/Premises-Fernises Farm,Birtle Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 12th June 1991 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A4SW (S)	1460	2	384200 412500
	Water Abstractions Operator: Mr R Thompson Licence Number: 2569012144 Permit Version: Not Supplied Location: Borehole, Fernises Farm , Grifel Hurst Lane Authority: Environment Agency, North West Region Abstraction: General Agriculture & Private Water Supply (Domestic) Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 9 Yearly Rate (m3): 3319 Details: Additional Purpose: Domestic - household; Licence Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A4SW (S)	1465	2	384200 412495
	Water Abstractions Operator: Wills Fabrics Ltd Licence Number: 2569002142 Permit Version: 100 Location: Borehole At Premises, Birtle Bury Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Boiler Feed Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 218 Yearly Rate (m3): 12729 Details: Birtle Bleach Works, Birtle, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 29th March 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A3SW (S)	1536	2	383700 412400
	Water Abstractions Operator: Wills Fabrics Ltd Licence Number: 2569002142 Permit Version: 100 Location: Borehole At Premises, Birtle Bury Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Birtle Bleach Works, Birtle, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 29th March 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A3SW (S)	1536	2	383700 412400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Rochdale M. B. C. Licence Number: 2569002235 Permit Version: Not Supplied Location: Naden Brook, HEYWOOD Authority: Environment Agency, North West Region Abstraction: Amenity Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 327 Yearly Rate (m3): 119469 Details: Licence Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A10NE (E)	1547	2	385400 413600
	Water Abstractions Operator: Mr J B Robinson Licence Number: 2569001195 Permit Version: 100 Location: Borehole On Premises At Birtle, Bury Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 18 Yearly Rate (m3): 727 Details: Harwood Field Farm, Birtle, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 27th November 1974 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6SE (SW)	1553	2	382600 413000
	Water Abstractions Operator: United Utilities Water Ltd Licence Number: 2569002197 Permit Version: 100 Location: Ashworth Moor, Naden And Greenbooth Reservoirs, Rochdale Authority: Environment Agency, North West Region Abstraction: Public Water Supply: Potable Water Supply - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 40914 Yearly Rate (m3): 9092000 Details: Ashworth Moor Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th March 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A22NW (NW)	1571	2	383100 415400
	Water Abstractions Operator: Wills Fabrics Ltd Licence Number: 2569002141 Permit Version: 100 Location: Reservoirs (3) Fed By Springs And Surface Drainage At Authority: Environment Agency, North West Region Abstraction: Textiles & Leather: Boiler Feed Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Birtle Bleach Works, Birtle, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th February 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A2SE (S)	1573	2	383500 412400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Wills Fabrics Ltd Licence Number: 2569002141 Permit Version: 100 Location: Reservoirs (3) Fed By Springs And Surface Drainage At Authority: Environment Agency, North West Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Birtle Bleach Works, Birtle, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th February 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2SE (S)	1573	2	383500 412400
	Water Abstractions Operator: Edus Ltd Licence Number: 2569002094 Permit Version: 100 Location: Spring Fed Collecting Chamber At Dunham Farm, Shuttlewort Authority: Environment Agency, North West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 2 Yearly Rate (m3): 750 Details: Dunham & Chamber Closes Farms & Holidayhse Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 7th July 1989 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A11SW (W)	1616	2	382200 413900
	Water Abstractions Operator: Wills Fabrics Ltd Licence Number: 2569002141 Permit Version: 100 Location: Reservoirs (3) Fed By Springs And Surface Drainage At Prem Authority: Environment Agency, North West Region Abstraction: Textiles & Leather: Boiler Feed Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 1659 Yearly Rate (m3): 414822 Details: Birtle Bleach Works, Birtle, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th February 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A2SE (S)	1696	2	383400 412300
	Water Abstractions Operator: Wills Fabrics Ltd Licence Number: 2569002141 Permit Version: 100 Location: Reservoirs (3) Fed By Springs And Surface Drainage At Prem Authority: Environment Agency, North West Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Birtle Bleach Works, Birtle, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th February 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2SE (S)	1696	2	383400 412300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: A Cleasby Ltd Licence Number: 2569002267 Permit Version: 100 Location: Borehole At Lower Tack Lea Farm Bury Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 16 Yearly Rate (m3): 5913 Details: Land At Lower Tack Lea Farm, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd May 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1705	2	383890 412220
	Water Abstractions Operator: A Cleasby Limited Licence Number: 2569014032 Permit Version: Not Supplied Location: Borehole; Lower Tack Lea Farm, Bury & Rochdale Old Road, BURY Authority: Environment Agency, North West Region Abstraction: General Agriculture & Private Water Supply (Domestic) Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 16 Yearly Rate (m3): 5913 Details: Additional Purpose: Domestic - household; Licence Status: Cancelled Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1727	2	383800 412200
	Water Abstractions Operator: Mr H E Smith Licence Number: 2569001197 Permit Version: 100 Location: Borehole On Premises At Bury, Lancs Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 5 Yearly Rate (m3): 1659 Details: Cob House Nab, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th December 1975 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1766	2	382100 414400
	Water Abstractions Operator: Melba Products Limited Licence Number: 2569002149 Permit Version: Not Supplied Location: Four Reservoirs Fed By Spring, & Surface Drainage Authority: Environment Agency, North West Region Abstraction: Boiler Feed & Manufacturing Abstraction Type: Not Supplied Source: River Daily Rate (m3): 273 Yearly Rate (m3): 68190 Details: Additional Purpose: Boiler feed; Licence Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1827	2	383800 412100

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Alexander Drew & Sons Ltd Licence Number: 2569002187 Permit Version: 100 Location: Boreholes (2) At Premises, Norden, Rochdale Authority: Environment Agency, North West Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Premises At Norden, Rochdale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 30th May 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A25NW (NE)	1858	2	385100 415395
	Water Abstractions Operator: United Utilities Water Ltd Licence Number: 2569002197 Permit Version: 100 Location: Ashworth Moor, Naden & Greenbooth Reservoirs, Rochdale Authority: Environment Agency, North West Region Abstraction: Public Water Supply: Potable Water Supply - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Ashworth Moor Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th March 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A25SE (NE)	1859	2	385300 415200
	Water Abstractions Operator: Alexander Drew & Sons Ltd Licence Number: 2569002188 Permit Version: 100 Location: Reservoir Fed By Royds Brk At Premises, Norden, Rochda Authority: Environment Agency, North West Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 1318 Yearly Rate (m3): 329585 Details: Premises At Norden, Rochdale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 30th May 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A25NW (NE)	1861	2	385100 415400
	Water Abstractions Operator: Alexander Drew & Sons Ltd Licence Number: 2569002187 Permit Version: 100 Location: Boreholes (2) At Premises, Norden, Rochdale Authority: Environment Agency, North West Region Abstraction: Textiles & Leather: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Norden, Rochdale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 30th May 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1861	2	385100 415400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Tacklea Works Ltd Licence Number: 2569002221 Permit Version: 100 Location: Naden Brk At Norderm, Nr Rochdale Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 591 Yearly Rate (m3): 150018 Details: Woodhouse Mill, Norderm, Nr Rochdale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th February 1988 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(NE)	1887	2	385600 414795
	Water Abstractions Operator: Tack Lea Works Ltd Licence Number: 2569002225 Permit Version: Not Supplied Location: Norden, ROCHDALE, Lancashire Authority: Environment Agency, North West Region Abstraction: Not Supplied Abstraction Type: Not Supplied Source: Unknown Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Naden Brook Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(NE)	1889	2	385600 414800
	Water Abstractions Operator: Walmersley Golf Club Licence Number: 2569001191 Permit Version: 100 Location: Borehole At Premises, Walmersley, Bury, Lancashire Authority: Environment Agency, North West Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 4 Yearly Rate (m3): 1364 Details: Premises,Walmersley,Bury,Lancashire Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st July 1985 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1934	2	381900 413700
	Water Abstractions Operator: Walmersley Golf Club Licence Number: 2569001191 Permit Version: 100 Location: Borehole At Premises, Walmersley, Bury, Lancashire Authority: Environment Agency, North West Region Abstraction: Commercial/Industrial/Public Services: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises,Walmersley,Bury,Lancashire Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st July 1985 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1934	2	381900 413700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: W H S Blackburn Licence Number: 2569002180 Permit Version: 100 Location: Well At Moor Edge Farm, Bamford, Rochdale Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 5 Yearly Rate (m3): 1659 Details: Moor Edge Farm, Bamford Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 21st February 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(SE)	1954	2	385600 412995
	Water Abstractions Operator: Mrs E E Mills Licence Number: 2569002183 Permit Version: 100 Location: Well At Moor Edge Farm, Bamford, Rochdale Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 7 Yearly Rate (m3): 2489 Details: Lower And Higher Jowkin Farms Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 21st February 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(SE)	1958	2	385605 412995
	Water Abstractions Operator: Rochdale Metropolitan B C Licence Number: 2569002226 Permit Version: Not Supplied Location: Norden, ROCHDALE, Lancashire Authority: Environment Agency, North West Region Abstraction: Transfer Water Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 2300 Yearly Rate (m3): 841024 Details: Naden Brook Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1970	2	385800 414495
	Water Abstractions Operator: Rochdale Metropolitan B C Licence Number: 2569002227 Permit Version: Not Supplied Location: Norden, ROCHDALE, Lancashire Authority: Environment Agency, North West Region Abstraction: Not Supplied Abstraction Type: Not Supplied Source: Unknown Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Impoundment Of Naden Brook Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1971	2	385800 414500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Alexander Drew & Sons Ltd Licence Number: 2569002187 Permit Version: 100 Location: Boreholes (2) At Premises, Norden, Rochdale Authority: Environment Agency, North West Region Abstraction: Textiles & Leather: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 23 Yearly Rate (m3): 6819 Details: Premises At Norden, Rochdale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 30th May 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A25NE (NE)	1996	2	385300 415400
	Water Abstractions Operator: Alexander Drew & Sons Ltd Licence Number: 2569002187 Permit Version: 100 Location: Boreholes (2) At Premises, Norden, Rochdale Authority: Environment Agency, North West Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Norden, Rochdale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 30th May 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NE (NE)	1996	2	385300 415400
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: >550 mm/year Baseflow Index: >70% Superficial: <90% Patchiness: <3m Superficial Thickness: No Data Recharge:	A13NE (W)	0	3	383857 413968
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: >550 mm/year Baseflow Index: >70% Superficial: <90% Patchiness: <3m Superficial Thickness: No Data Recharge:	A13NE (N)	0	3	383857 414000
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13NE (W)	0	3	383857 413968
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	A13NE (W)	0	3	383857 413968
	Extreme Flooding from Rivers or Sea without Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
13	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 170.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (E)	199	4	384089 413918
14	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 65.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SW (S)	214	4	383786 413734
15	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 113.4 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SW (S)	276	4	383769 413674
16	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 55.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SW (SW)	324	4	383549 413785
17	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 106.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NE (NE)	326	4	384043 414270
18	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 37.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NE (NE)	331	4	384137 414208
19	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 8.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NE (NE)	331	4	384137 414208
20	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 437.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (SE)	344	4	384207 413814

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
21	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 149.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (E)	349	4	384216 413825
22	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 95.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	351	4	384111 413660
23	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 8.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NW (S)	371	4	383794 413565
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NW (S)	376	4	383786 413562
25	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 35.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NW (S)	379	4	383790 413558
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 41.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NW (S)	404	4	383733 413550
27	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 460.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cheesden Brook Catchment Name: Mersey Primacy: 1	A8NW (S)	409	4	383806 413523
28	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 41.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cheesden Brook Catchment Name: Mersey Primacy: 1	A8NW (S)	414	4	383784 413523
29	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 146.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cheesden Brook Catchment Name: Mersey Primacy: 1	A8NW (S)	433	4	383747 413514

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
30	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 114.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NE (SE)	442	4	384150 413575
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 463.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cheesden Brook Catchment Name: Mersey Primacy: 1	A8NW (SW)	449	4	383613 413557
32	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 119.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SE (NE)	449	4	384137 414359
33	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 13.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cheesden Brook Catchment Name: Mersey Primacy: 2	A8NW (SW)	458	4	383618 413544
34	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 16.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cheesden Brook Catchment Name: Mersey Primacy: 1	A8NW (SW)	458	4	383618 413544
35	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 13.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	481	4	384242 414315
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 327.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	487	4	384255 414311
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 170.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cheesden Brook Catchment Name: Mersey Primacy: 1	A8NE (SE)	550	4	384186 413467
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 193.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	559	4	383625 414528

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 781.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Old House Brook Catchment Name: Mersey Primacy: 1	A18SE (NE)	582	4	384169 414493
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 53.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NE (SE)	603	4	384169 413396
41	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 13.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cheesden Brook Catchment Name: Mersey Primacy: 1	A12SE (SW)	618	4	383275 413673
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 17.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cheesden Brook Catchment Name: Mersey Primacy: 2	A12SE (SW)	619	4	383276 413669
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 942.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cheesden Brook Catchment Name: Mersey Primacy: 1	A12SE (SW)	622	4	383264 413685
44	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 825.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cheesden Brook Catchment Name: Mersey Primacy: 1	A9NW (SE)	625	4	384292 413454
45	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 88.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	643	4	383776 414646
46	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 231.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	643	4	383776 414646
47	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 163.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Old House Brook Catchment Name: Mersey Primacy: 1	A14NE (E)	685	4	384545 414205

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
48	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 369.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Old House Brook Catchment Name: Mersey Primacy: 1	A14NW (NE)	688	4	384514 414286
49	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 168.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Old House Brook Catchment Name: Mersey Primacy: 1	A18NE (N)	717	4	383977 414706
50	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 109.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	772	4	383576 414737
51	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Old House Brook Catchment Name: Mersey Primacy: 1	A19SW (NE)	783	4	384472 414512
52	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 36.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	785	4	384478 414508
53	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	791	4	383590 414760
54	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 233.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	795	4	383592 414765
55	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 209.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	812	4	384406 414613
56	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 187.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Old House Brook Catchment Name: Mersey Primacy: 1	A14NE (E)	814	4	384690 414171

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
57	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 296.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (NE)	819	4	384342 414667
58	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 26.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Old House Brook Catchment Name: Mersey Primacy: 1	A18NE (N)	835	4	383945 414831
59	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 21.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Old House Brook Catchment Name: Mersey Primacy: 2	A18NE (N)	835	4	383945 414831
60	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 282.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Old House Brook Catchment Name: Mersey Primacy: 1	A18NE (N)	844	4	383927 414843
61	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 175.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	882	4	383692 413064
62	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 214.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SW (NW)	920	4	382989 414391
63	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 515.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9SW (S)	946	4	384219 413042
64	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 172.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7SE (SW)	948	4	383434 413089
65	OS Water Network Lines Watercourse Form: Marsh Watercourse Length: 110.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (W)	968	4	382901 414298

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
66	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 232.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Old House Brook Catchment Name: Mersey Primacy: 1	A14NE (E)	970	4	384856 414140
67	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 54.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7SE (SW)	972	4	383323 413121
68	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 51.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Old House Brook Catchment Name: Mersey Primacy: 1	A18NW (N)	976	4	383689 414972

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: Rochdale Metropolitan Borough Council - Has no landfill data to supply		0	5	383857 413968
	Local Authority Landfill Coverage Name: Rossendale Borough Council - Has supplied landfill data		725	6	383112 413794
	Local Authority Landfill Coverage Name: Lancashire County Council - Had landfill data but passed it to the relevant environment agency		725	7	383112 413794

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Pennine Lower Coal Measures Formation And South Wales Lower Coal Measures Formation (Undifferentiated)	A13NE (W)	0	1	383857 413968
69	BGS Recorded Mineral Sites Site Name: Close Barn Colliery Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106035 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Sand Rock Coal (South Lancashire) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SW (W)	167	1	383656 413922
70	BGS Recorded Mineral Sites Site Name: Green Gate Hill Location: Wolstenholme, Rochdale, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96495 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	360	1	384082 414288
71	BGS Recorded Mineral Sites Site Name: Midge Hill Coal Pit Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106039 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	388	1	383614 413627
72	BGS Recorded Mineral Sites Site Name: Close Barn Colliery Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106034 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Sand Rock Coal (South Lancashire) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	398	1	383492 414225
73	BGS Recorded Mineral Sites Site Name: Close Barn Location: Wolstenholme, Rochdale, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96494 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A18SW (NW)	403	1	383562 414312

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
74	BGS Recorded Mineral Sites Site Name: Ashworth Colliery Location: Ashworth, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106044 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A14NW (E)	465	1	384337 414134
75	BGS Recorded Mineral Sites Site Name: Birtle Dean Mills Coal Pit Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106042 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	593	1	383398 413543
76	BGS Recorded Mineral Sites Site Name: Nab Wife Colliery Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106043 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	600	1	384219 413429
77	BGS Recorded Mineral Sites Site Name: Wind Hill Location: Deeply Vale, Rochdale, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96121 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	646	1	383442 414526
78	BGS Recorded Mineral Sites Site Name: Further Woods Location: Hookey Bridge, Rochdale, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96512 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Great Arc Sandstone Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SW (S)	674	1	383847 413252
79	BGS Recorded Mineral Sites Site Name: Wind Hill Meadow Location: Deeply Vale, Rochdale, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96163 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	737	1	383204 414403

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
80	BGS Recorded Mineral Sites Site Name: Old Birtle Colliery Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106041 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A8SE (S)	771	1	383899 413155
81	BGS Recorded Mineral Sites Site Name: Birtle Dean Coal Pits Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106038 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12SW (W)	802	1	383062 413697
82	BGS Recorded Mineral Sites Site Name: Old Birtle Colliery Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106040 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A8SE (S)	813	1	383861 413113
83	BGS Recorded Mineral Sites Site Name: Thorny Hurst Location: Hooley Bridge, Rochdale, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96511 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SE (S)	837	1	384050 413105
84	BGS Recorded Mineral Sites Site Name: Birtle Dean Coal Pits Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106037 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12SW (W)	845	1	383035 413648
84	BGS Recorded Mineral Sites Site Name: Birtle Dean Coal Pits Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106036 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12SW (W)	874	1	383006 413642

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
85	BGS Recorded Mineral Sites Site Name: Close Wood Location: Birtle, Rochdale, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96492 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12SW (W)	927	1	382935 413680
86	BGS Recorded Mineral Sites Site Name: Thorny Hurst Coal Pits Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106045 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A8SE (S)	930	1	384145 413033
87	BGS Recorded Mineral Sites Site Name: Thorny Hurst Coal Pits Location: Birtle, Rochdale, Greater Manchester Source: British Geological Survey, National Geoscience Information Service Reference: 106046 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A3NE (S)	988	1	383909 412938
	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.	A13NE (W)	0	8	383857 413968
	Mining Instability Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13NE (W)	0	-	383857 413968
	Non Coal Mining Areas of Great Britain Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	73	1	383749 413941
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (W)	0	1	383857 413968
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	197	1	383831 413734
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (W)	0	1	383857 413968
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (W)	0	1	383857 413968
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	383863 413968
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (W)	0	1	383857 413968
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	46	1	383773 413955

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	172	1	383800 414176
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	197	1	383831 413734
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	197	1	383777 414197
	Potential for Landslide Ground Stability Hazards Hazard Potential: High Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	234	1	383776 413717
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	243	1	383741 413723
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	247	1	383901 413679
	Potential for Landslide Ground Stability Hazards Hazard Potential: High Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	249	1	383901 413677
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (W)	0	1	383857 413968
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	9	1	383813 414007
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (W)	0	1	383857 413968
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	9	1	383813 414007
	Radon Potential - Radon Affected Areas Affected Area: The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	0	1	383857 413976
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NE (W)	0	1	383857 413968
	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	A13NE (N)	0	1	383857 413976
	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	A13NE (W)	0	1	383857 413968

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
88	Ancient Woodland Name: Not Supplied Reference: 1415977 Area(m²): 20798.55 Type: Ancient and Semi-Natural Woodland	A8NW (S)	413	9	383805 413520
89	Ancient Woodland Name: Naden Brook Wood Reference: 1105602 Area(m²): 111017.38 Type: Ancient and Semi-Natural Woodland	A14NW (NE)	660	9	384498 414255
90	Ancient Woodland Name: Jowkin Wood Reference: 1105601 Area(m²): 417585.77 Type: Ancient and Semi-Natural Woodland	A9NE (SE)	863	9	384546 413373
91	Areas of Adopted Green Belt Authority: Rochdale Metropolitan Borough Council Plan Name: Rochdale Unitary Development Plan Status: Adopted Plan Date: 30th June 2006	A13NE (W)	0	10	383857 413968
92	Areas of Adopted Green Belt Authority: Rossendale Borough Council, Planning Department Plan Name: Proposal Map Status: Adopted Plan Date: 9th November 2011	A12SW (W)	724	11	383114 413793
93	Areas of Adopted Green Belt Authority: Rossendale Borough Council, Planning Department Plan Name: Proposal Map Status: Adopted Plan Date: 9th November 2011	A12SW (W)	724	11	383114 413793

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Environment Agency - Head Office Rossendale Borough Council - Environmental Health Department Bury Metropolitan Borough Council - Environmental Health Department Rochdale Metropolitan Borough Council - Environmental Health Department	June 2020 November 2015 October 2013 October 2017	Annually Annual Rolling Update Annual Rolling Update Annually
Discharge Consents Environment Agency - North West Region	October 2020	Quarterly
Enforcement and Prohibition Notices Environment Agency - North West Region	March 2013	Annual Rolling Update
Integrated Pollution Controls Environment Agency - North West Region	October 2008	Variable
Integrated Pollution Prevention And Control Environment Agency - North West Region	October 2020	Quarterly
Local Authority Integrated Pollution Prevention And Control Bury Metropolitan Borough Council - Environmental Health Department Rochdale Metropolitan Borough Council - Environmental Health Department Rossendale Borough Council - Environmental Health Department	February 2015 July 2014 May 2016	Variable Variable Variable
Local Authority Pollution Prevention and Controls Bury Metropolitan Borough Council - Environmental Health Department Rochdale Metropolitan Borough Council - Environmental Health Department Rossendale Borough Council - Environmental Health Department	February 2015 July 2014 May 2016	Not Applicable Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Bury Metropolitan Borough Council - Environmental Health Department Rochdale Metropolitan Borough Council - Environmental Health Department Rossendale Borough Council - Environmental Health Department	February 2015 July 2014 May 2016	Variable Variable Variable
Nearest Surface Water Feature Ordnance Survey	September 2020	
Pollution Incidents to Controlled Waters Environment Agency - North West Region	January 2000	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - North West Region	March 2013	Annual Rolling Update
Prosecutions Relating to Controlled Waters Environment Agency - North West Region	March 2013	Annual Rolling Update
Registered Radioactive Substances Environment Agency - North West Region	June 2016	
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 West Region - Central Area Environment Agency - North West Region - North Area Environment Agency - North West Region - South Area	October 2020 October 2020 October 2020	Quarterly Quarterly Quarterly
Water Abstractions Environment Agency - North West Region	October 2020	Quarterly
Water Industry Act Referrals Environment Agency - North West Region	October 2017	Quarterly
Groundwater Vulnerability Map Environment Agency - Head Office	June 2018	As notified

Agency & Hydrological	Version	Update Cycle
Bedrock Aquifer Designations Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations Environment Agency - Head Office	January 2018	Annually
Source Protection Zones Environment Agency - Head Office	October 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	September 2020	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	September 2020	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	September 2020	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	September 2020	Quarterly
Flood Defences Environment Agency - Head Office	September 2020	Quarterly
OS Water Network Lines Ordnance Survey	September 2020	Quarterly
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites Environment Agency - Head Office	October 2019	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - North West Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - North West Region - Central Area Environment Agency - North West Region - North Area Environment Agency - North West Region - South Area	October 2020 October 2020 October 2020	Quarterly Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency - North West Region - Central Area Environment Agency - North West Region - North Area Environment Agency - North West Region - South Area	October 2020 October 2020 October 2020	Quarterly Quarterly Quarterly
Local Authority Landfill Coverage Bury Metropolitan Borough Council Lancashire County Council - Waste Management Group Rochdale Metropolitan Borough Council - Environmental Health Department Rossendale Borough Council - Environmental Health Department	May 2000 May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Bury Metropolitan Borough Council Lancashire County Council - Waste Management Group Rochdale Metropolitan Borough Council - Environmental Health Department Rossendale Borough Council - Environmental Health Department	May 2000 May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable Not Applicable
Registered Landfill Sites Environment Agency - North West Region - Central Area Environment Agency - North West Region - North Area Environment Agency - North West Region - South Area	March 2003 March 2003 March 2003	Not Applicable Not Applicable Not Applicable
Registered Waste Transfer Sites Environment Agency - North West Region - Central Area Environment Agency - North West Region - North Area Environment Agency - North West Region - South Area	March 2003 March 2003 March 2003	Not Applicable Not Applicable Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency - North West Region - Central Area Environment Agency - North West Region - North Area Environment Agency - North West Region - South Area	March 2003 March 2003 March 2003	Not Applicable Not Applicable Not Applicable

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements Bury Metropolitan Borough Council Lancashire County Council Rochdale Metropolitan Borough Council Rossendale Borough Council - Planning Department	February 2016 February 2016 February 2016 February 2016	Variable Variable Variable Variable
Planning Hazardous Substance Consents Bury Metropolitan Borough Council Lancashire County Council Rochdale Metropolitan Borough Council Rossendale Borough Council - Planning Department	February 2016 February 2016 February 2016 February 2016	Variable Variable Variable Variable
Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	November 2020	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	October 2020	Quarterly
Fuel Station Entries Catalist Ltd - Experian	September 2020	Quarterly
Gas Pipelines National Grid	September 2020	
Underground Electrical Cables National Grid	August 2020	
Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural England	April 2020	Bi-Annually
Areas of Adopted Green Belt Bury Metropolitan Borough Council Rochdale Metropolitan Borough Council Rossendale Borough Council - Planning Department	June 2020 June 2020 June 2020	As notified As notified As notified
Areas of Unadopted Green Belt Bury Metropolitan Borough Council Rochdale Metropolitan Borough Council Rossendale Borough Council - Planning Department	June 2020 June 2020 June 2020	As notified As notified As notified
Areas of Outstanding Natural Beauty Natural England	June 2019	Bi-Annually
Environmentally Sensitive Areas Natural England	January 2017	
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	April 2020	Bi-Annually
Marine Nature Reserves Natural England	July 2019	Bi-Annually
National Nature Reserves Natural England	July 2019	Bi-Annually
National Parks Natural England	April 2017	Bi-Annually
Nitrate Sensitive Areas Natural England	April 2016	Not Applicable
Nitrate Vulnerable Zones Environment Agency - Head Office Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	December 2017 October 2015	Bi-Annually
Ramsar Sites Natural England	August 2020	Bi-Annually
Sites of Special Scientific Interest Natural England	May 2020	Bi-Annually
Special Areas of Conservation Natural England	July 2020	Bi-Annually
Special Protection Areas Natural England	September 2020	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 NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	 Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
4	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	Rochdale Metropolitan Borough Council - Environmental Health Department P O Box 32, Telegraph House, Ballie Street, Rochdale, Greater Manchester, OL16 1JH	Telephone: 01706 864139 Fax: 01706 864185 Website: www.rochdale.gov.uk
6	Rossendale Borough Council - Environmental Health Department Town Hall, Rawtenstall, Rossendale, Lancashire, BB4 7LZ	Telephone: 01706 217777 Fax: 01706 224958 Website: www.rossendale.gov.uk
7	Lancashire County Council - Waste Management Group Environment Directorate, Guild House, Cross Street, Preston, Lancashire, PR1 8RD	Website: www.lancashire.gov.uk
8	The Coal Authority - Property Searches 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
9	Natural England County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
10	Rochdale Metropolitan Borough Council PO Box 15, Town Hall, Rochdale, Greater Manchester, OL16 1AB	Telephone: 01706 647474 Fax: 01706 59475 Website: www.rochdale.gov.uk
11	Rossendale Borough Council - Planning Department Town Hall, Rawtenstall, Lancashire, BB4 7LZ	Telephone: 01706 217777 Fax: 01706 224958 Website: www.rossendale.gov.uk
12	Bury Metropolitan Borough Council Craig House, Bank Street, Bury, Lancashire, BL9 0DN	Telephone: 0161 253 5000 Fax: 0161 705 5290 Website: www.bury.gov.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

APPENDIX 4

COAL AUTHORITY REPORT



The Coal
Authority

CON29M

coal mining report

SHEPHERD HEY, ASHWORTH ROAD, HEYWOOD, ROCHDALE, OL11 5UN



Known or potential coal mining risks

Future underground coal mining

Page 3



Further action

No further reports from the Coal Authority are required. Further information on any next steps can be found in our Professional opinion.

For more information on our reports please visit
www.groundstability.com



Professional opinion

According to the official mining information records held by the Coal Authority at the time of this search, evidence of, or the potential for, coal mining related features have been identified. It is unlikely that these features will impact on the stability of the enquiry boundary.

Your reference: **3934**
Our reference: **51002342977001**
Date: **8 December 2020**

Client name:
FWS CONSULTANTS LTD

If you require any further assistance please
contact our experts on:
0345 762 6848
groundstability@coal.gov.uk



The Law
Society

Enquiry boundary

Key

Approximate position of enquiry boundary shown



We can confirm that the location is
on the coalfield



Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2018. All rights reserved.
Ordnance Survey Licence number: 100020315.

This report is prepared in accordance with the latest Law Society's Guidance Notes 2018, the User Guide 2018 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.



Accessibility

If you would like this information in an alternative format, please contact our communications team on **0345 762 6848** or email communications@coal.gov.uk.

Detailed findings

Information provided by the Coal Authority in this report is compiled in response to the Law Society's CON29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL.

The Coal Authority owns the copyright in this report and the information used to produce this report is protected by our database rights. All rights are reserved and unauthorised use is prohibited. If we provide a report for you, this does not mean that copyright and any other rights will pass to you. However, you can use the report for your own purposes.

1 Past underground coal mining

The property is not within a surface area that could be affected by any past recorded underground coal mining.

2 Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3 Future underground coal mining

The property is not in an area where the Coal Authority has received an application for, and is currently considering whether to grant a licence to remove or work coal by underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

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

4 Mine entries

There are no recorded coal mine entries known to the Coal Authority within, or within 20 metres, of the boundary of the property.

5 Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

6 Past opencast coal mining

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

7 Present opencast coal mining

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

8 Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

9 Coal mining subsidence

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

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

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

10 Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

11 Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Hazard Call Out procedures.

12 Withdrawal of support

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

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

13 Working facilities order

The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

14 Payments to owners of former copyhold land

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

Statutory cover



Coal mining subsidence

In the unlikely event of any coal mining related subsidence damage, the Coal Authority or the mine operator has a duty to take remedial action in respect of subsidence caused by the withdrawal of support from land or property in connection with lawful coal mining operations.

When the works are the responsibility of the Coal Authority, our dedicated public safety and subsidence team will manage the claim. The house or land owner ("the owner") is covered for these works under the terms of the Coal Mining Subsidence Act 1991 (as amended by the Coal Industry Act 1994). Please note, this Act does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

If you believe your land or property is suffering from coal mining subsidence damage and you need more information on what to do next, please use the following link to our website which sets out what your rights are and what you need to consider before making a claim.

www.gov.uk/government/publications/coal-mining-subsidence-damage-notice-form



Coal mining hazards

Our public safety and subsidence team provide a 24 hour a day, 7 days a week hazard reporting service, to help protect the public from hazards caused by past coal workings, such as a mine shaft or shallow working collapse. To report any hazards please call **01623 646 333**. Further information can be found on our website: www.gov.uk/coalauthority.

Glossary



Key terms

adit - horizontal or sloped entrance to a mine

coal mining subsidence - ground movement caused by the removal of coal by underground mining

Coal Mining Subsidence Act 1991 - the Act setting out the duties of the Coal Authority to repair damage caused by coal mining subsidence

coal mining subsidence damage - damage to land, buildings or structures caused by the removal of coal by underground mining

coal seams - bed of coal of varying thickness

future opencast coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal from the surface

future underground coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal underground. Although it is unlikely, remaining coal reserves could create a possibility for future mining, which would be licensed by the Coal Authority

mine entries - collective name for shafts and adits

payments to owners of former copyhold land - historically, copyhold land gave rights to coal to the copyholder. Legislation was set up to allow others to work this coal, but they had to issue a notice and pay compensation if a copyholder came forward

shaft - vertical entry into a mine

site investigation - investigations of coal mining risks carried out with the Coal Authority's permission

stop notice - a delay to repairs because further coal mining subsidence damage may occur and it would be unwise to carry out permanent repairs

subsidence claim - a formal notice of subsidence damage to the Coal Authority since it was established on 31 October 1994

withdrawal of support - a historic notice informing landowners that the coal beneath their property was going to be worked

working facilities orders - a court order which gave permission, restricted or prevented coal mine workings

APPENDIX 5

SITE WALKOVER RECORD



Photograph 1



Photograph 2



Photograph 3

NOTES / KEY

Refer to Drawing 3934OD02, Appendix 1 for location and orientation of photographs

DRAWING TITLE

PHOTOGRAPHIC RECORD

PROJECT TITLE

PRELIMINARY CONTAMINATION RISK ASSESSMENT
ON LAND AT SHEPHERD HEY BARN, ASHWORTH
ROAD, HEYWOOD

CLIENT

Edus Limited

STATUS

FINAL

DRAWN BY

PH

SCALE

AS SHOWN

PROJECT NUMBER

3934

DATE

December 2020

DRG. No.

3934 PLATE 1

FWS Geotechnical & Environmental Consultants

Unit 2 City West Business Park
St Johns Road
Meadowfield Industrial Estate
Durham
County Durham
DH7 8ER

Tel: 01388 420633
admin@fwsconsultants.com www.fwsconsultants.com



Photograph 4



Photograph 5



Photograph 6

NOTES / KEY

Refer to Drawing 3934OD02, Appendix 1 for location and orientation of photographs

DRAWING TITLE

PHOTOGRAPHIC RECORD

PROJECT TITLE

PRELIMINARY CONTAMINATION RISK ASSESSMENT
ON LAND AT SHEPHERD HEY BARN, ASHWORTH
ROAD, HEYWOOD

CLIENT

Edus Limited

STATUS

FINAL

DRAWN BY

PH

SCALE

AS SHOWN

PROJECT NUMBER

3934

DATE

December 2020

DRG. No.

3934 PLATE 1

FWS Geotechnical & Environmental Consultants

Unit 2 City West Business Park
St Johns Road
Meadowfield Industrial Estate
Durham
County Durham
DH7 8ER

Tel: 01388 420633
admin@fwsconsultants.com www.fwsconsultants.com

APPENDIX 6

PRINCIPLES OF CONTAMINATION RISK ASSESSMENT

PRINCIPLES OF CONTAMINATION RISK ASSESSMENT

The Environmental Protection Act 1990, Part II A Contaminated Land (Section 57 of the Environment Act 1995) and the Contaminated Land Regulations 1999 provide a basis on which to determine the unacceptable risks and liabilities presented by a contaminated site. Contaminated Land is defined within Section 78A(2) and in all those Sections mentioned as:-

“Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that-

- a) **SIGNIFICANT HARM** is being caused, or there is significant possibility of such harm being caused; or
- b) **SIGNIFICANT POLLUTION OF CONTROLLED WATERS** is being caused, or there is a significant possibility of such pollution being caused.”

Section 57 of the Environment Act 1995 requires that any site identified as being “contaminated” by the Local Authority will be registered by them and remediation will be required to render the site fit for use.

The presence of contamination is not the sole factor for deciding whether a site is contaminated. Relevant parties should identify site-specific unacceptable risks and provide objective, cost-effective methods to manage the contamination in a manner which satisfies the proposed end-use.

The Environment Agency “Land contamination and Risk Management” guidance defines “risk” as the combination of:-

PROBABILITY OF RISK: or frequency, of occurrence of a defined hazard; and

MAGNITUDE/POTENTIAL SEVERITY: (including the seriousness) of the consequences.

A risk-based approach, which takes both technical and non-technical aspects into consideration when making decisions on contamination resulting from past, present or future human activities, is advocated.

The assessment of unacceptable risks generally relies on the identification of three principal elements forming a ‘contaminant linkage’:-

SOURCE: is a contaminant or pollutant that is in, on or under the land and that has the potential to cause harm or pollution

RECEPTOR: something that could be adversely affected by a contaminant eg. a person, controlled waters, an organism, an ecosystem, or Part 2A receptors such as buildings, crops or animals

PATHWAY: a route by which a receptor is, or could be, affected by a contaminant

In the absence of any one of these elements, on any given site, there is no risk. Where all three elements are present, a risk assessment is required to determine the significance of the harm or pollution that is being or may be caused. During the risk assessment phase, ‘potential contaminant linkages’ are used, until they are confirmed. Once confirmed, they are referred to as ‘relevant contaminant linkages’. As outlined above, the terms of the Contaminated Land regime specify that remediation need only be implemented where a site is causing, or there is a significant possibility that it will cause, significant harm, or that pollution of controlled waters is being, or is likely to be caused.

Development of contaminated land is usually addressed through the application of planning and development legislation and guidance (i.e. Planning Guidance Note PPS23 Planning and Pollution Control in England). The suitable for use approach is seen as the most appropriate basis to deal with contaminated land, taking account of

environmental, social and economic objectives. The assessment is made in the context of the proposed land use (e.g. residential, commercial, industrial and public open-space).

Definition of Severity of Consequence

The risk assessment has been undertaken by assessing the severity of the potential consequence, taking into account both the potential severity of the hazard and the sensitivity of the target, based on the categories given below.

Category	Definition
Severe	Acute risks to human health, catastrophic damage to buildings/property, major pollution of controlled waters
Medium	Chronic risk to human health, pollution of sensitive controlled waters, significant effects on sensitive ecosystems or species, significant damage to buildings or structures
Mild	Pollution of non-sensitive waters, minor damage to buildings or structures
Minor	Requirements for protective equipment during site works to mitigate health effects, damage to non-sensitive ecosystems or species

Definition of Probability of Occurrence

The likelihood of an event (probability) takes into account the linkage between a hazard and target and the integrity of this pathway, and has been assessed based on the categories given below.

Category	Definition
High Likelihood	Pollutant linkage may be present, and risk is almost certain to occur in long term, or there is evidence of harm to the receptor
Likely	Pollutant linkage may be present, and it is probable that the risk will occur over the long term
Low Likelihood	Pollutant linkage may be present, and there is a possibility of the risk occurring, although there is no certainty that it will do so
Unlikely	Pollutant linkage may be present, but the circumstances under which harm would occur are improbable

Risk Matrix

The potential severity of the consequence and the probability of the occurrence have been combined in accordance with the following matrix in order to give a level of risk for each potential hazard.

		Severity of Consequence			
		Severe	Medium	Mild	Minor
Probability of Occurrence	High Likelihood	Very high	High	Moderate	Low
	Likely	High	Moderate	Low	Very Low
	Low Likelihood	Moderate	Low	Very Low	Negligible
	Unlikely	Low	Very Low	Negligible	Negligible

APPENDIX 7

NOTES ON LIMITATIONS

NOTES ON LIMITATIONS

- 1 FWS Consultants Ltd (“FWS”) has prepared this report solely for the use of the client and/or his agent (the “Client”) on the basis of exchange(s) of written proposals and instructions, and FWS accepts no responsibility or liability:-
 - a) for use of this report by any party other than the person for whom it was commissioned, or;
 - b) for the consequences of the report being used for any purpose other than that for which FWS was instructed to prepare it.

Should any third party wish to use or rely upon the contents of the report, written approval from FWS must be sought.

- 2 All information supplied by the Client, the Client’s staff and professional advisers, local authorities, other statutory bodies, investigation agencies and publicly accessible databases, shall be provided to FWS in writing, and is accepted as being correct unless otherwise specified in writing by the discloser of the information.
- 3 The conclusions and recommendations in this report represent the professional opinions of FWS derived from currently accepted industry practices, and through the exercising of reasonable skill and care to be expected of a professional geosciences and environmental consultancy of similar size and experience. The assessments and judgments given in this report are directed by and limited to both the finite data on which they are based and the proposed works to which they are addressed.
- 4 Environmental and geotechnical desk studies comprise a study of available information obtained from various identified sources, authorities and parties. The information reviewed cannot be exhaustive and has been accepted in good faith as providing representative and true data pertaining to site conditions. For clarity, no independent verification of this data is carried out by FWS and it is accepted at face value. Any identified risks in desk study reports are perceived risks based on the information available at the time. Actual risks can only be assessed after carrying out a thorough physical investigation of the site that serves to validate such identified risks.
- 5 Data acquisition during site investigations is subject to the limitations of the methods of investigation used, site conditions and access constraints. Exploratory holes undertaken during fieldwork, particularly boreholes and/or trial pits, investigate a small volume of ground in relation to the size of the site and thus can only provide an indication of site conditions. The opinions provided and recommendations given in this report are based on the desk study information and ground conditions apparent at the site of each of the exploratory holes. There may be ground conditions elsewhere onsite that have not been disclosed by the investigation and which therefore have not been taken into account in this report. FWS will take all due care and make commentary on the adequacy of data collection and therefore the ability to highlight the presence or otherwise of exceptional conditions.
- 6 Owing to the natural variation of the systems that are being investigated, and the anthropological impact similarly changing through time, the findings and opinions in this report are relevant to the dates of the site works and should not be relied upon to represent conditions after a reasonable passing of time. Site conditions will change over time due to natural variations and human activities. The comments made on groundwater, surface water and soil gas conditions are based on observations made at the time that the site work was carried out. It should be noted that these conditions will vary owing to seasonal, tidal and meteorological effects. Variation in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, or subsequent developments or activities on the site or adjacent area.
- 7 The scope of the investigation, as agreed between FWS and the Client, was undertaken based on the specific development proposals of the Client and may be inappropriate to another form of development or scheme.
- 8 The opinions expressed in this report regarding contamination, geotechnical and/or waste assessments are based on simple statistical analysis and comparison with available guidance values. No liability can be accepted for the retrospective effects of any changes or amendments to these values.