

BARRACK FOLD FARM, BOLTON

PHASE 1: PRELIMINARY RISK ASSESSMENT

Job Number: LKC 23 1054
Date: February 2023
Client: Clifton Dudley



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Document Verification			
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1 Introduction

LK Consult Ltd (LKC) has been commissioned to carry out a Phase 1 Preliminary Risk Assessment (PRA) for Barrack Fold Farm, Bolton.

In accordance with current guidance (including LCRM¹ and the National Planning Policy Framework (NPPF)²), the PRA will include a site reconnaissance, site history, geology, hydrogeology, hydrology, mineral search and a landfill search. Information gathered from the desk study and site reconnaissance will be used to develop a contamination conceptual model for the site.

Based on the findings of this report, an appropriate site investigation can be derived, if required.

Site details are provided in Table 1-1. Figure 1 shows the site location and boundary. Figure 2 shows the proposed development plan.

Site Location	Off Knowsley Road, Ainsworth, Bury, BL2 5PU. Centred at approximate National Grid Reference 376190E, 411070N
Approximate Area	0.68 (Ha)
Topography	171 metres Above Ordnance Datum (AOD). Site slopes downwards toward the east.
Current Site Use	Residential house to the north east, red brick barn to the east, barn to the north, barn conversion central to site, stables to the west.
Purpose of Report	Planning.
Proposed Development	Conversion of 6no. existing barns into residential houses with soft landscaping.

Table 1-1: Summary of site details

¹ Land Contamination Risk Management (LCRM) <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm>

² "National Planning Policy Framework." The Ministry of Housing, Communities and Local Government. Published March 2012, Updated July 2021.

2 Historical Review

2.1 Historical Map Review

In compiling the site history, LKC consulted Envirocheck historical mapping (Appendix A)

Table 2-1 summarises features on site. Table 2-2 summarises potentially contaminative land uses within approximately 50m and potentially infilled features within approximate 250m.

Site Features	Location on Site	Dates Present		Comments
		From	To	
Barrack Fold Farm	Whole site	1850	Present	Several small farm buildings around a central court yard. Road present from 1850. Farm extended in 1992 including small lane/ track, and 2000 mapping. Further extended in 2006 and 2016.

Table 2-1: Summary of site features. Dates based on available historical map editions.

Surrounding Area Features	Distance (m)	Direction	Dates Present		Comments
			From	To	
Well	105	S	1850	1850	
Pond	129	SE	1850	1911	Pond infilled by 1930 mapping.
Pond	178	NW	1893	1894	Infilled by 1910 mapping.
River	181	N	1850	Present	
Pond	239	S	1955	1982	Pond infilled by 1992 mapping.

Table 2-2: Summary of potentially contaminative features within 50m and potentially infilled features with 250m. Dates are based on available historical map editions.

3 Environmental Setting

A summary of environmental settings is presented in Table 3-1, based on a review of available environmental data.

Categories (data sources)		Details
Geology ¹	Artificial	- No BGS recorded artificial.
	Superficial	- No BGS recorded superficial.
	Bedrock	- Pennine Lower Coal Measures formation (Mudstone, siltstone & sandstone) across majority of site. - Old Lawrence Rock (Sandstone) SW of site. - 1 fault in west of the site, striking northwest-southeast with downthrow to the northeast.
	BGS Logs (<50m)	- None.
Hydro-geology ¹	Aquifer Designation	- Superficial - Bedrock
	Source Protection Zone (SPZ)	- Site not within an SPZ.
	Groundwater Abstractions (100m)	- None.
	Surface Water Courses (100m)	- Nearest feature 125m SE.
Hydrology ¹	Flooding risk	- Flood Zone 1.
	Surface Water Abstractions (100m)	- None.
	Discharge Consents (onsite)	- None
	Pollution Incidents (onsite)	- None.
Minerals & Mining ^{1,3}	Coal Mining	- Within a Coal Reporting Area. - Not within a Development High Risk Area.
	Surface Mineral Extractions (250m)	- None.
	Cheshire Brine Compensation District	- Not within Compensation District. - Not within Consultation Area.
	Non-Coal Mining Area	- No Hazard.
Ground Stability ¹	Collapsible Ground	- Very low hazard.
	Compressible Ground	- No hazard.
	Ground Dissolution	- No hazard.
	Landslide	- Very low hazard.
	Running Sand	- No hazard.
	Shrinking / Swelling Clay	- Very low hazard (NE). No hazard (SW).
Landfill Sites (250m) ¹	Known / Registered	- None.
	Potentially Infilled Land (non-water and water), based on Envirocheck Report	- No features within 250m.
	Potentially infilled sites, based on LKC historical review	- 4no. features: See Table 2-1 and Table 2-2.
Radon Potential ¹		- 3-5% of homes above Action Level. Basic radon protective measures are necessary in the construction of new dwellings or extensions.

Table 3-1: Summary of the environmental setting.

Notes: Distance in brackets is the distance from site that features are included. Where no distance given, features relate to on site only.

Data Sources:

1 Envirocheck Report (Appendix A & B)

2 BGS GeoIndex <http://mapapps2.bgs.ac.uk/geoindex/home.html>

3 The Coal Authority Web Mapping Services (WMS) /

Interactive Map Viewer <http://coal.decc.gov.uk/en/coal/cms/publications/data/map/map.aspx>

Categories ^(data sources)		Details
Designated Sites (50m) ¹		- Adopted Green Belt (onsite).
Contemporary Trade Directory (50m) ¹		- None.
Fuel Station Entries (50m) ¹		- None.
Unexploded Ordnance Risk (UXO) – Zetica Risk Map	Zetica Risk Map ⁴	- Bomb Risk: Low. - Strategic Targets: None identified within 100m

Table 3-1(Cont.): Summary of the environmental setting.

Notes: Distance in brackets is the distance from site that features are included. Where no distance given, features relate to on site only.

Data Sources:

1 Envirocheck Report (Appendix A & B)

4 Zetica UXO Unexploded Bomb Risk Map (Appendix C)

4 Site Reconnaissance

A site reconnaissance was carried out on 13th February 2023. Hand dug trial holes were undertaken in accessible areas to confirm the shallow ground conditions.

Relevant features identified on site are summarised below:

- Site entrance through brown electric gate off Knowsley Lane.
- Site slopes downward towards the east.
- Site surfaces consist of tarmacadam lane leading to Knowsley Lane to the south, Gravel track and turning circle running from the south to the east, stone aggregate (MOT type) lane in fair condition running from the west of site to the north of site. Grassed area to the north west and the south east.
- Buildings consist of a stone built residential house to the south, a stone built barn conversion central to site boundary, red brick barn to the east of the site, a barn to the north with a possible corrugated asbestos containing material (ACM) roof, block built stables to the west and a wooden barn to the south west.
- Above ground water tank observed on the east side of the residential house, water bowser to the north and the west of site boundary
- Bunded diesel tank present in the north barn. Small scale container storage and farm machinery (8 tonne excavator, tractor, etc) observed. Localised hydrocarbon staining on concrete in northern barn approximately 1m x 1m in plan around diesel tank.
- Skip being used to burn wood and plant material was observed in the north of site.
- Services include, electric leading to all buildings on site with overhead power lines to the north east, gutters and down pipes on all buildings, gulley's to the east and west. No BT or gas observed on site.
- Storage container observed to the north adjacent to wooden barn.

The surrounding area comprises green field to surrounding the site all adjacent Greenfields Held horses.

Hand dug pits were carried out in 2no. locations and are summarised in Plate 4-1.

HD101	HD102
GL-0.3m Made Ground slightly gravelly slightly sandy clayey silt with brick fragments and coal fragments. 0.3-0.8m firm consistency light brown slightly gravelly sandy silty CLAY with coal fragments.	GL-0.2m Made Ground slightly gravelly slightly sandy clayey silt with plastic and coal fragments. 0.2-0.8m. stiff consistency grey with bands of yellow slightly gravelly sandy silty clay with coal.

Plate 4-1: Hand Dug Pit Logs.

Relevant photographs are provided in Plate 4-2.



Photograph 1: View of site from S showing access road.



Photograph 2: View of building in centre of site.



Photograph 3: View of barns in N of site.



Photograph 4: View of shipping container in NE of site.



Photograph 5: View inside barn NE of site showing bundled diesel tank, plant and small scale storage.



Photograph 6: View looking E taken from centre of site.

Plate 4-2: Site photographs.



Plate 4-2 (cont.): Site photographs.

5 Preliminary Conceptual Model

5.1 Introduction

The aim of the conceptual model is to provide a preliminary assessment of the likelihood of a pollutant linkage for each potential combination of contaminant, pathway and receptor. A conceptual model can be used to make an informed decision on the contamination risks associated with the site and whether further site investigation work is required.

The Sections below are therefore divided into potential contaminant, potential pathway and potential receptor as described in LCRM³, on the premise that, if there is no pollutant linkage, then there will be no risk to the receptor. The final Section provides an assessment of the potential pollutant linkages that may still be present on the site if redevelopment were to occur.

5.2 Potential Contaminants

Potential viable contamination sources are detailed in Table 5-1. These are split into onsite sources, offsite sources and underlying geology.

Potential Source	Contaminants
On Site	
Shallow Made Ground below some or all of site (e.g. site levelling)	- Assuming predominantly reworked natural soils with possible demolition rubble, ash and clinker: Asbestos, heavy metals, sulphates, PAHs⁴. - Not expected to be a significant source of gas given anticipated depth and nature of Made Ground.
Agricultural fields, mixed pastoral (sheep, dairy).	- Possible pesticide use in fields, including organophosphates, organochlorides, chlorophenols, aldrin, dieldrin, atrazine and DDT. - No evidence of bulk storage on site. Widespread and persistent use not anticipated. Not considered a significant source.
Agricultural land (including farmyard and / or barns)	- Use and maintenance of machinery: Fuels, oils. - Above ground fuel storage tank and small scale container storage: Petroleum hydrocarbons. - Old buildings: Asbestos Containing Material (ACM).
Residential property	- Assuming no demolition has occurred: No significant contamination source anticipated.
Surrounding Area	
Surrounding area	- No significant contamination sources within influencing distance of the site.
Landfills / offsite potentially infilled features within 250m	- Given size, distance and age of features, there is not considered to be a significant source of hazardous gas.
Underlying Geology	
Radon Affected Area	- 3-5% of homes above Action Level. Basic radon protective measures are necessary in the construction of new dwellings or extensions.
Superficial / Bedrock	- Old Lawrence Rock and Pennine Lower Coal Measure Formation. - No significant contamination sources identified. - Although not identified as sulphate / sulphide bearing strata⁵ there could be some localised raised concentrations. This is considered further in the geotechnical assessment.

Table 5-1: Potential contamination sources.

³ Land Contamination Risk Management (LCRM) <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm>

⁴ Defra (2002). "Potential Contaminants for the Assessment of Land". R&D Publication CLR 8.

⁵ BRE (2005). "Concrete in Aggressive Ground". SD1.

5.3 Potential Receptors

Potential receptors are detailed in Table 5-2.

Receptors	
Human Health	- Future site users (including residents, visitors and site workers). - Offsite land users.
Controlled Waters	- Secondary A Aquifer. - No surface water within influencing distance.
Buildings.	
Potable water pipes.	

Table 5-2: Potential receptors.

5.4 Potential Pathways

Potential pathways are detailed in Table 5-3.

Pathways		
Soil	Human Health ⁶ (residential land use: houses with private gardens).	- Ingestion of soil. - Ingestion of soil-derived indoor dust. - Ingestion of contaminated home-grown produce. - Ingestion of soil attached to home-grown produce. - Dermal contact with soil. - Dermal contact with soil-derived indoor dust. - Inhalation of soil-derived outdoor dust. - Inhalation of soil-derived indoor dust. - Inhalation of vapours outside. - Inhalation of vapours inside.
		- Windblown dust and fibres to adjacent receptors.
		- Direct contact with receptors (services).
Water		- Surface run-off over impermeable surface. - Site is relatively flat in the north of site and slopes down to the southeast in the south of site; therefore, surface run-off will be variable across site.
		- Infiltration into the ground, through potentially contaminated material (contamination possibly going into solution). - The site is hardstood, gravelled and grassed; therefore, infiltration will be variable across site.
Water and Gas		- Migration through potentially permeable strata and preferential pathways. - No superficial deposits recorded. Direct pathway to bedrock. - Bedrock (mudstone, siltstone, sandstone) likely to variably permeable. - Preferential pathways: fault on site, services.
Gas		- Migration into buildings (e.g. via services) and accumulation of gases in confined spaces (potentially causing explosion if methane is present).

Table 5-3: Potential pathways.

5.5 Preliminary Contamination Conceptual Model

The Preliminary Contamination Conceptual Model is illustrated in Table 5-4 and has identified five generic potential pollutant linkages.

Each linkage is described along with an assessment of the risk based upon guidance on probabilities and consequences outlined in CIRIA C552⁷.

⁶ EA (2008). "Updated Technical Background to the CLEA Model". Science Report – SC050021/SR3.

⁷ CIRIA (2001). "Contaminated Land Risk Assessment: A Guide to Good Practice". C552.

In order to assess the potential risk for each pollutant linkage, an assessment of the magnitude of the potential consequence (severity) of the risk occurring and the magnitude of the probability (likelihood) of the risk occurring has been considered and classified. This is based on the guidance provided in CIRIA C552 and further details including a risk matrix is provided in Appendix D.

Where LKC identified a low to very low risk, targeted or low density intrusive investigation work, a watching brief (during construction work) or no investigation work will be recommended. This will be dependent on the nature of the site and the proposed development.

Where the risk falls into the moderate/low risk, LKC will undertake an assessment to establish what category the pollutant linkage will fall into (i.e. moderate or low risk will be chosen).

Where LKC identifies a moderate or higher risk, intrusive investigation work or precautionary remedial measures will be recommended.

Due to the minor consequence associated with the phytotoxic effect to flora (i.e. loss of plants in a landscaping scheme), the overall risk for the majority of sites will be very low to low. Where soils contain significant concentrations of heavy metals, in general there will other pollutant linkages (i.e. the risk to human health) that will trigger the requirement for remediation (e.g. a clean environmental cover system). As such the risk to flora associated with phytotoxic contaminants will not be considered further.

The risk to buildings associated with elevated sulphate will be considered as part of the geotechnical assessment and will not be included in the contamination risk assessment.

It should be noted that there may be risk from short term exposure from contaminated soil to site workers. The Preliminary Contamination Conceptual Model deals with long term exposure to key receptors. Acute risks can be easily mitigated by good environmental management of the site during site works. Standard health and safety precautions (as per HSE guidance⁸) should be adopted by all workers involved with site enabling and construction works. Therefore, this receptor is not considered in the contamination conceptual model.

⁸ HSE (1991). "Protection of Workers and the General Public During Development of Contaminated Land". London HMSO.

PL	Pathway	Receptor	Contaminants of Concern (CoC)	Probability	Consequence	Risk	Recommendations
1	- Dermal contact. - Inhalation of soil, fibres and dust. - Ingestion of soils, dust, home-grown produce, soil attached to home-grown produce. - Windblown dust.	- Future site users. - Offsite receptors.	- ACM. - Heavy metals. - PAHs. - Petroleum hydrocarbons.	Low Likelihood	Medium	Moderate / Low (moderate risk assumed until ground conditions confirmed).	Low density intrusive investigation required. Soil analysis of CoC, subject to ground conditions encountered.
2	- Inhalation of vapours. - Migration via permeable strata and preferential pathways.	- Future site users. - Offsite receptors.	- Petroleum hydrocarbons. (TPHCWG).	Low Likelihood	Medium	Moderate / Low (moderate risk assumed until ground conditions confirmed).	Low density intrusive investigation required, to include PID testing. Soil analysis of CoC, subject to ground conditions encountered and PID testing.
3	- Inhalation of gas. - Migration via permeable strata and preferential pathways. - Explosion in confined spaces. - Exposure to radon.	- Future site users. - Buildings. - Offsite land users.	- Ground / hazardous gas (carbon dioxide, methane).	Unlikely	Severe	Moderate / Low (moderate risk assumed until ground conditions confirmed).	Intrusive investigation to confirm ground conditions. If significant gas source and pathway identified, gas monitoring or gas protection measures required.
			- Radon	Likely	Medium	Moderate	(3-5%) Basic radon protective measures are necessary in the construction of new dwellings or extensions.
4	- Surface run-off. - Migration via permeable strata and preferential pathways. - Perched waters migration.	- Groundwater (Secondary A Aquifer).	- Mobile contaminants such as metals, PAHs, hydrocarbons, volatile compounds.	Low Likelihood	Medium	Moderate / Low (low risk assumed given anticipated ground conditions).	Low density intrusive investigation required. Groundwater sampling, subject to ground conditions encountered. Analysis of CoC.
5	- Ingestion of tainted water supply.	- Future site users. - Water pipes.	- Organic contaminants such as petroleum hydrocarbons, naphthalene, volatile compounds.	Low Likelihood	Medium	Moderate / Low (low risk assumed given anticipated limited made ground and contamination)	Low density intrusive investigation required. Soil analysis of CoC, subject to ground conditions encountered.

Table 5-4: Preliminary Contamination Conceptual Model.

Notes: PL = Pollutant Linkage. Contaminant of Concern (CoC) - See Table 5-1 for contamination sources. Site conditions based on observations during site reconnaissance.

6 Preliminary Geotechnical Risk Assessment

Table 6-1 summarises the possible geotechnical constraints of the site, based on the site history, environmental settings and site reconnaissance. Investigation work will be required to confirm the risks and provide a detailed geotechnical assessment and foundation design.

Coal Mining	Site is not within a Development High Risk Area. No further assessment required.
Slope Stability	Slope identified on site (site slopes gently to the east). Further assessment may be required to determine the instability risk.
Envirocheck Ground Stability Hazards	No to low hazard identified. No further action required.
Made Ground	Initial information indicates relatively shallow made ground. Possible in-ground structures from previous developments. Unlikely to be a suitable founding strata unless engineering work is undertaken.
Superficial	None recorded.
Bedrock	Possible shallow bedrock below the site. Strength and extent of weathering unknown. May cause difficulty if any deep excavations are required.
Groundwater	Unknown depth and variability of groundwater. Shallow / fluctuating groundwater can affect the strength of the soil, particularly in granular ground. Shallow groundwater can also affect construction works.
Plasticity	Plasticity of clay deposits should be confirmed, particularly where trees are present or proposed, to identify the shrink / swell risk. Clay recorded on site.
Sulphate	Unknown sulphate content of the made ground and natural.
Road / Pavement Design	Unknown CBR values for footpath and road design.

Table 6-1: Summary of geotechnical constraints.

7 Summary Conclusions and Recommendations

7.1 Summary Conclusions

Table 7-1 summarises the site details, historical review, environmental settings and site reconnaissance.

Current Site Use	Residential house to the north east, red brick barn to the east, barn to the north, barn conversion central to site, stables to the west.
Proposed Development	Conversion of 6no. existing barns into residential houses with soft landscaping.
Main Historical Features	Onsite: Path, road, residential buildings, farm building. Surrounding Area: Ponds, river, well.
Geology / Hydrogeology	Artificial: No BGS recorded artificial. Superficial: No BGS recorded superficial. Bedrock: Pennine Lower Coal Measures Formation (Mudstone, siltstone and sandstone) [NE], Old Lawrence Rock (sandstone) [SW]. Secondary A Aquifer.
Landfills / Infilled ground	No recorded landfills. Potentially infilled ground identified.
Site walkover	Site slopes downwards to the east. Site surfaces consist of tarmacadam lane, gravel track and turning circle and MOT lane in fair condition. Grassed area to the north west and the south east. Buildings consist of a stone built residential house, a barn conversion, multiple brick barns, block built stables and a wooden barn. A barn to the north with a potential corrugated asbestos containing material (ACM) roof. Present day potential contaminative activities include diesel tank, small scale fuel storage, agricultural machinery and building materials. Hydrocarbon staining noted in northern barn.

Table 7-1: Summary of site details, historical review, environmental settings and site reconnaissance.

A preliminary contamination conceptual model has been produced by LKC, which is summarised in Table 7-2.

Pollutant Linkage		Risk	Recommendations
PL1: Contaminants posing a risk to future site users via dermal contact, ingestion and inhalation (of soil, dust, fibres and home-grown produce).	ACM, heavy metals, PAHs, Petroleum hydrocarbons	Moderate / Low	Low density intrusive investigation required. Soil analysis of CoC, subject to ground conditions encountered.
PL2: Volatile contaminants posing a risk to future site users via the inhalation of vapours.		Moderate / Low	Intrusive investigation to confirm ground conditions. If significant gas source and pathway identified, gas monitoring or gas protection measures required.
PL3: Gas posing a risk to buildings and future site users via the migration of gas into building causing explosion and asphyxiation. Exposure to radon.	Carbon dioxide & methane	Moderate / Low	Intrusive investigation to confirm ground conditions. If significant gas source and pathway identified, gas monitoring or gas protection measures required.
	Radon	Moderate	(3-5%) Basic radon protective measures are necessary in the construction of new dwellings or extensions.
PL4: Mobile contamination posing a risk to controlled waters via the migration through permeable strata.		Moderate / Low	Low density intrusive investigation required. Groundwater sampling, subject to ground conditions encountered. Analysis of CoC.
PL5: Organic contaminants posing a risk to water pipes.		Moderate / Low	Low density intrusive investigation required. Soil analysis of CoC, subject to ground conditions encountered.

Table 7-2: Summary risk table.

Where moderate / low risk had been identified, the assumed risk is shown in bold.

A preliminary geotechnical assessment has been carried out by LKC. Table 7-3 summarises the geotechnical constraints.

Coal Mining	Site is not within a Development High Risk Area. No further assessment required.
Slope Stability	Further assessment is required to confirm the instability risk.
Made Ground	Unknown depth and constituent of made ground across the site.
Superficial	Unknown strength of soils for foundation design.
Bedrock	Possible shallow bedrock below the site.
Groundwater	Unknown depth and variability of groundwater.
Plasticity	Plasticity of clay deposits should be confirmed.
Sulphate	Unknown sulphate content of the made ground and natural.
Road / Pavement Design	Unknown CBR values for footpath and road design should be calculated.

Table 7-3: Summary of geotechnical constraints.

Plate 7-1 shows the site constraints (contamination and geotechnical).

7.2 Recommendations

Recommendations are provided in Table 7-4.

Contamination status	Given the risks identified in the conceptual model, further assessment is required on the potential contaminative status of the site to allow approval of a planning application, based on the proposed end use detailed in the PRA.
Further assessment recommendations	Phase 2 intrusive investigation required. Phase 2 investigation to be carried out in line with current guidance, including BS10175 ⁹ , BS5930 ¹⁰ CIRIA C665 ¹¹ , RB17 ¹² and BS8485 ¹³ . Either 'exploratory investigation': 1 sample per 25-50m square centres. Or 'detailed investigation': 1 sample per 10-25m square centres. Plus targeted investigation locations in areas of concern (contamination and geotechnical). To be agreed with the local authority.
Type of investigation work	Boreholes and / or trial pits.
PL 1, 2, 5	Intrusive investigation work recommended to confirm ground conditions across the site. Testing of contaminants of concern based on preliminary conceptual model and field observations (PID tests and visual / olfactory evidence).
PL 3	Intrusive investigation to confirm ground conditions. If significant gas source and pathway identified, gas monitoring required.
PL 4	Groundwater sampling, subject to ground conditions encountered.
Reporting	Information from the above can be used to carry out a contamination and geotechnical assessment and provide a remediation strategy for the site.

Table 7-4: Recommendations.

⁹ British Standard (2017). "Investigation of Potentially Contaminated Sites – Code of Practice". BS10175:2017.

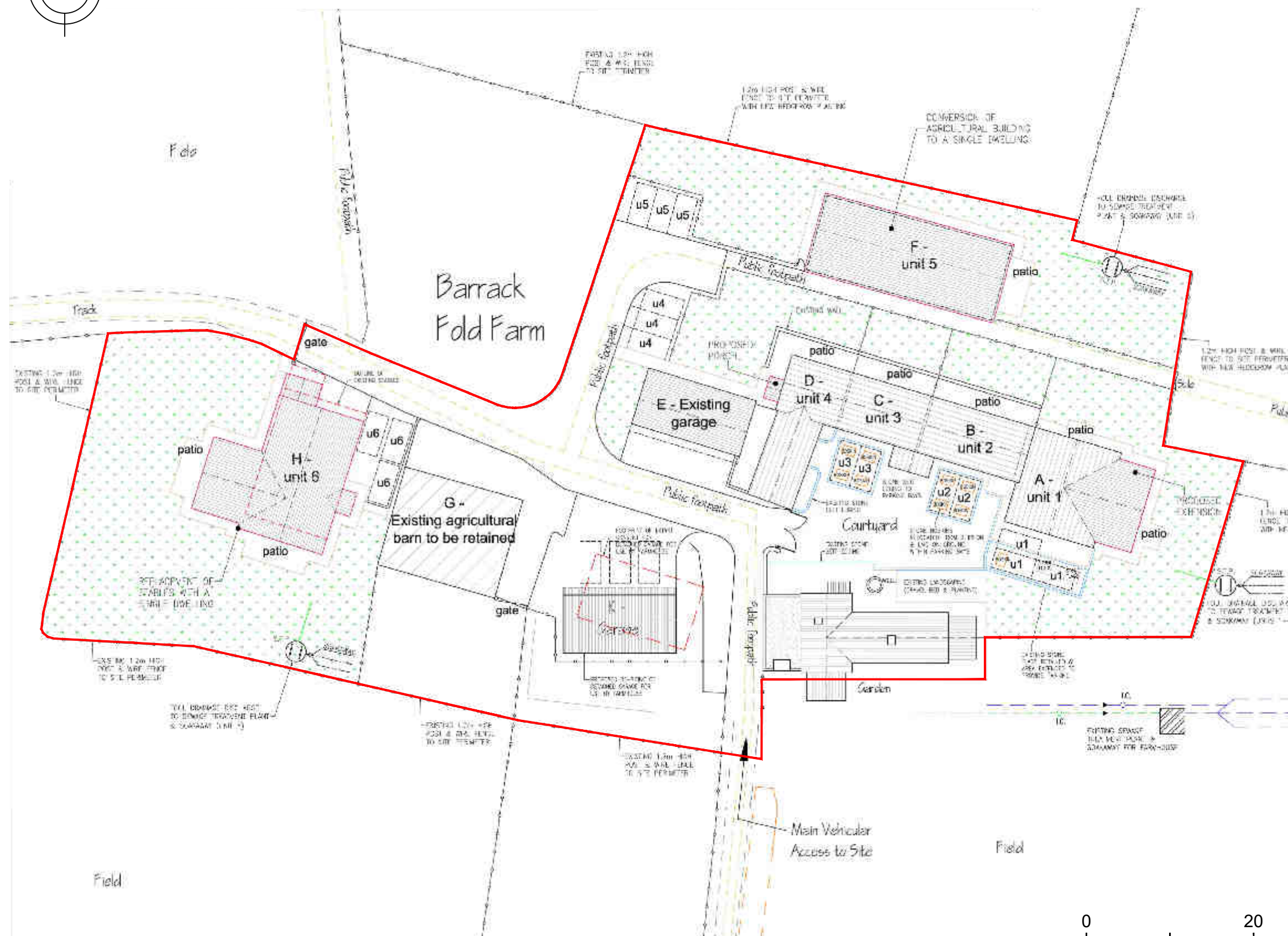
¹⁰ British Standard (2015). "Code of Practice for Ground Investigations". BS5930:2015.

¹¹ CIRIA (2007). "Assessing Risks Posed by Hazardous Ground Gases to Buildings". CIRIA C665.

¹² CL:AIRE Research Bulletin RB17 (November 2012) "A Pragmatic Approach to Ground Gas Risk Assessment".

¹³ BSI (2015). "Code of Practice for the Design of Protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings". BS8485:2015.

Figures

 Site Boundary

- A - MAIN BARN; PROPOSED DWELLING UNIT 1
B - MAIN BARN; PROPOSED DWELLING UNIT 2
C - MAIN BARN; PROPOSED DWELLING UNIT 3
D - MAIN BARN; PROPOSED DWELLING UNIT 4
E - GARAGE; RETAINED AS GARAGE FOR APPLICANT
F - AGRICULTURAL BUILDING; PROPOSED DWELLING UNIT 5
G - AGRICULTURAL BUILDING; RETAINED FOR STORAGE OF MACHINERY/EQUIPMENT.
H - STABLES; PROPOSED DWELLING UNIT 6
J - FARMHOUSE (RETAINED)
K - GARAGE; EXISTANT
L - CONSENT WITH FARMHOUSE

Sampling Locations and features annotated by LK Consult Ltd are approximate and are based upon observed measurements unless otherwise stated. Do not scale from this drawing and work from marked dimensions only. All dimensions and features should be confirmed on site by the Contractor. Where this drawing includes information provided to LK Consult Ltd by others, LK Consult Ltd gives no warranty, representation or assurance as to the accuracy of such information.



Client: **Clifton Dudley**

Site: **Barrack Fold Farm, Bolton**

Title: **Proposed Development Plan**

Job No.: LKC 23 1054	Scale (See Scale Bar): 1:500 @ A3	Figure: 2	Revision:
Drawn By: AC	Checked By: PD	Drawn: Feb 2023	

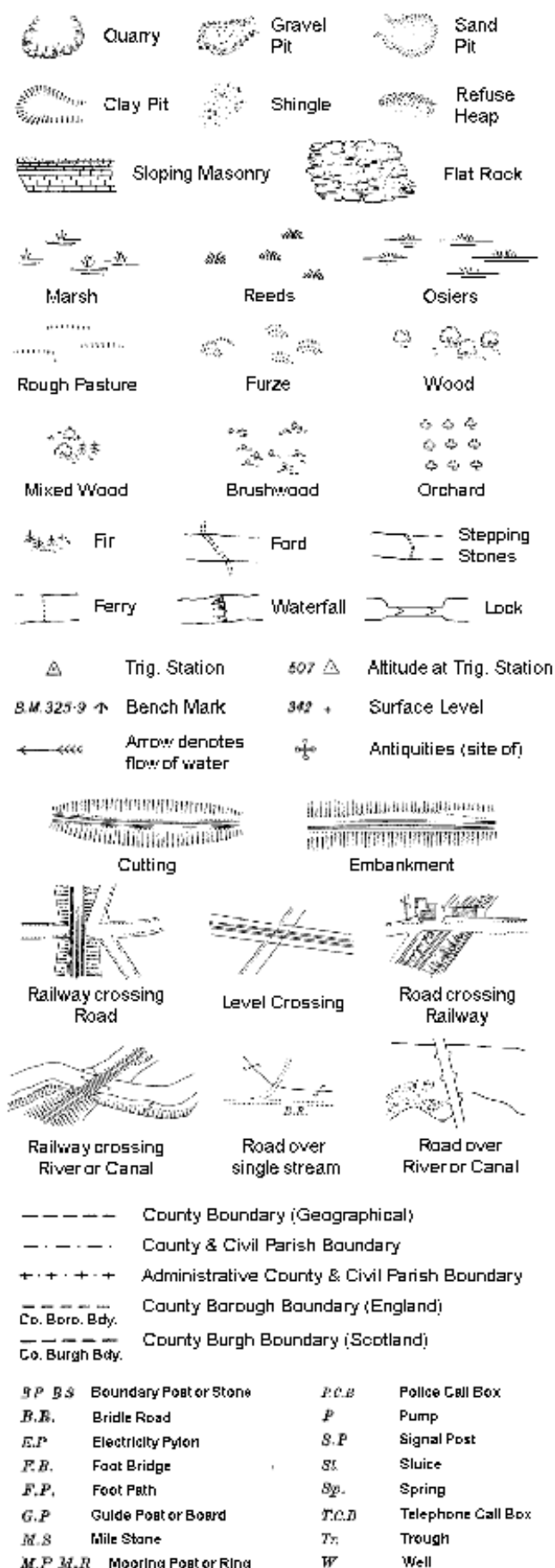
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Drawing Ref: Proposed Site Plan, No.22/1283/703C, Rev:C (18/11/2022)

Appendix A

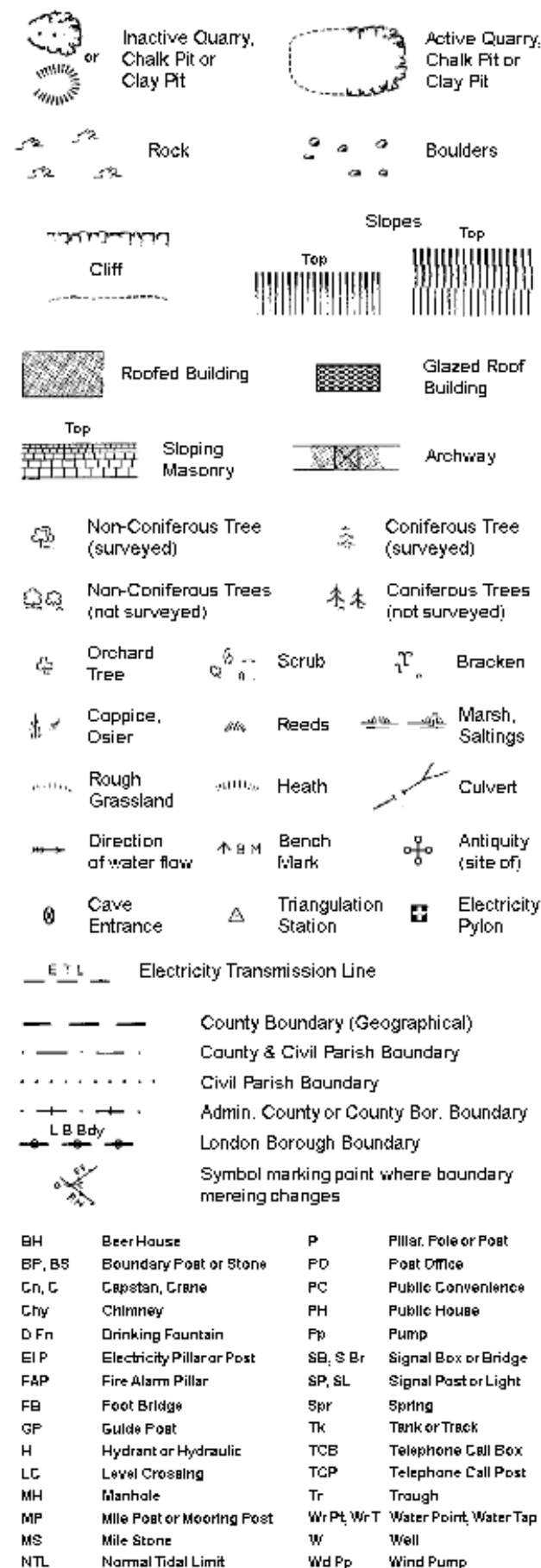
Historical Maps

Historical Mapping Legends

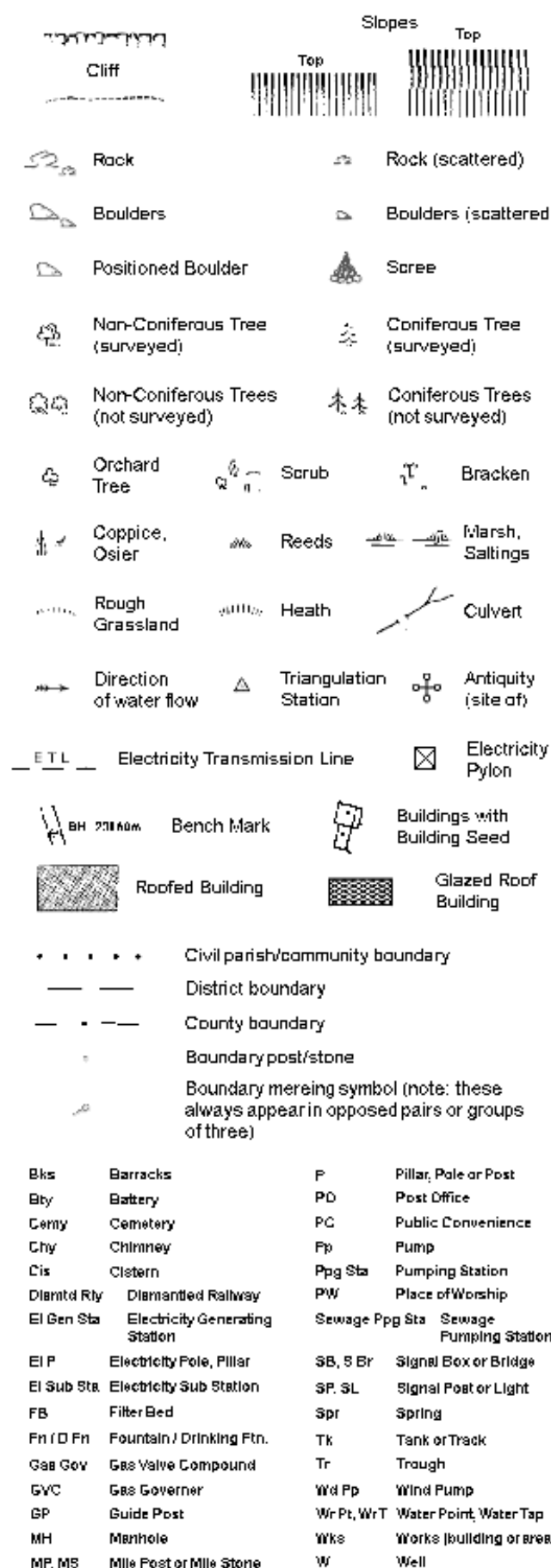
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



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



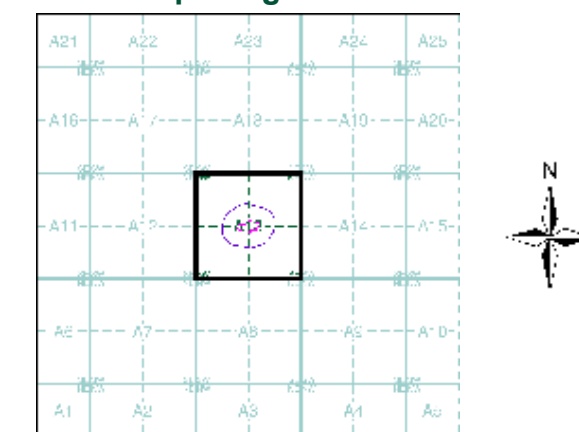
Large-Scale National Grid Data 1:2,500 and 1:1,250



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 - 1939	5
Ordnance Survey Plan	1:1,250	1955	6
Additional SIMs	1:1,250	1955	7
Ordnance Survey Plan	1:2,500	1956 - 1967	8
Large-Scale National Grid Data	1:1,250	1992	9
Large-Scale National Grid Data	1:2,500	1992	10
Large-Scale National Grid Data	1:2,500	1992	11
Historical Aerial Photography	1:2,500	2001	12

Historical Map - Segment A13



Order Details

Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 100

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



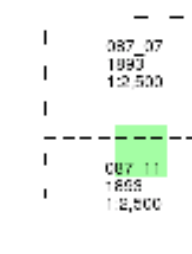
Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk

Published 1893

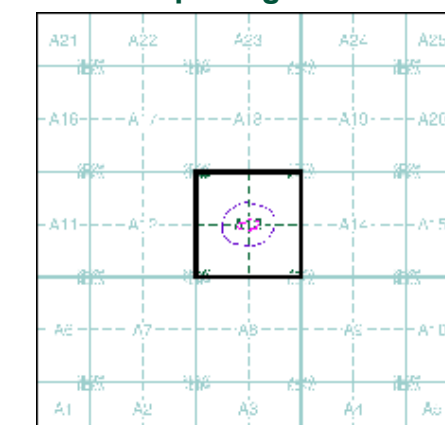
Source map scale - 1:2,500

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

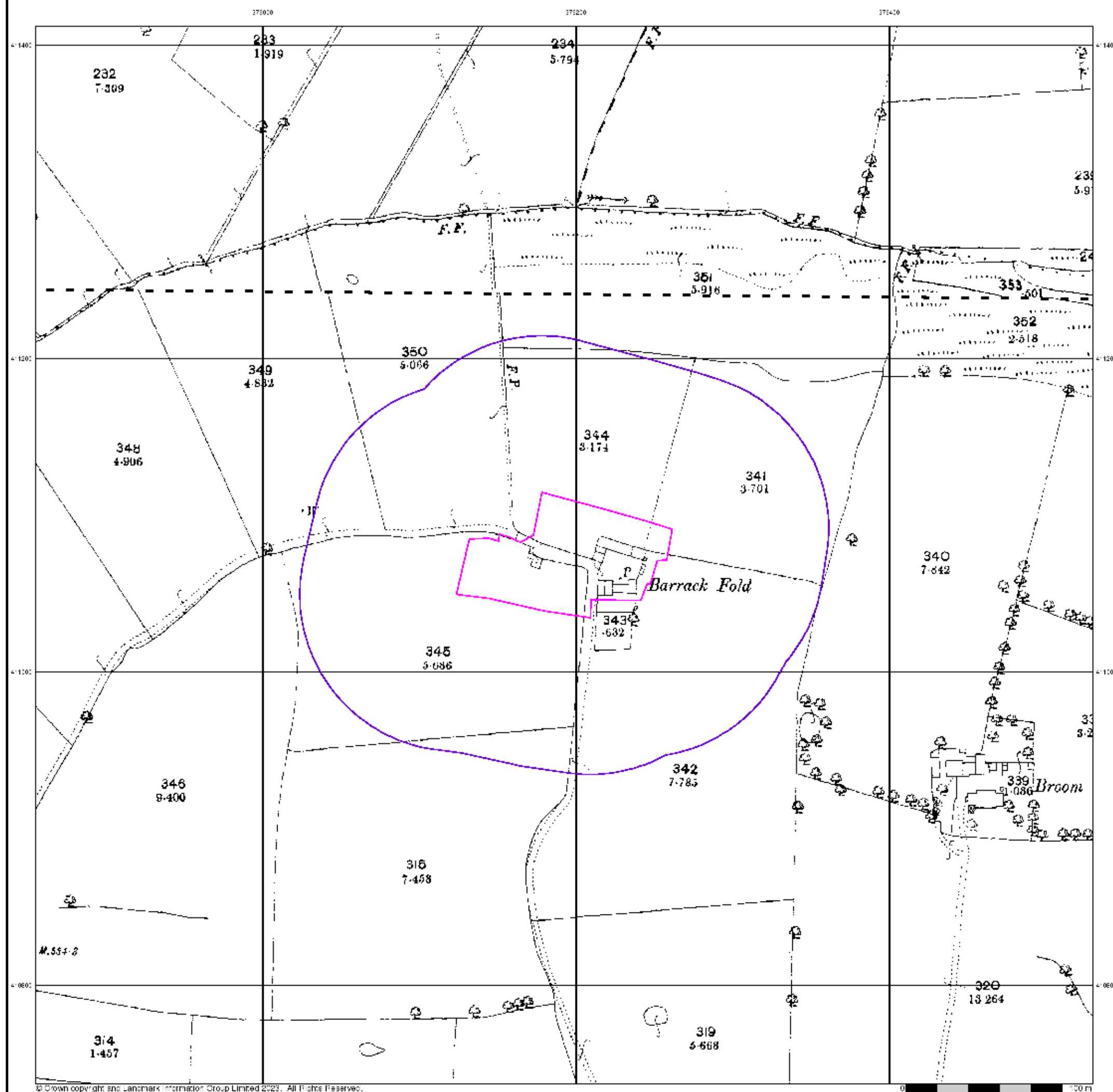


Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 100

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



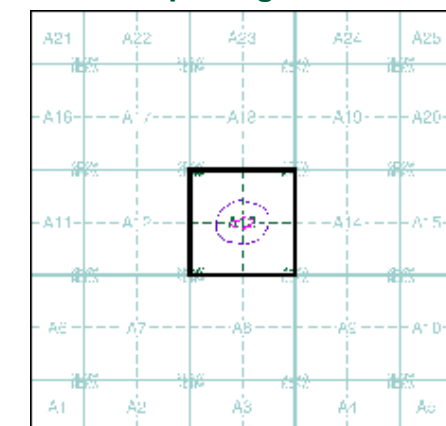


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. 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: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 100

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU

Landmark
INFORMATION GROUP

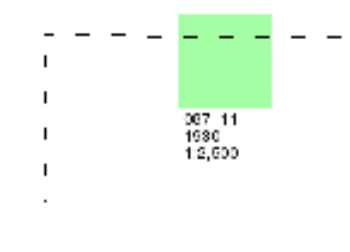
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

Published 1930

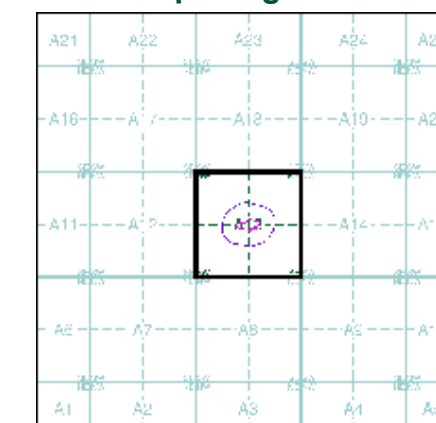
Source map scale - 1:2,500

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

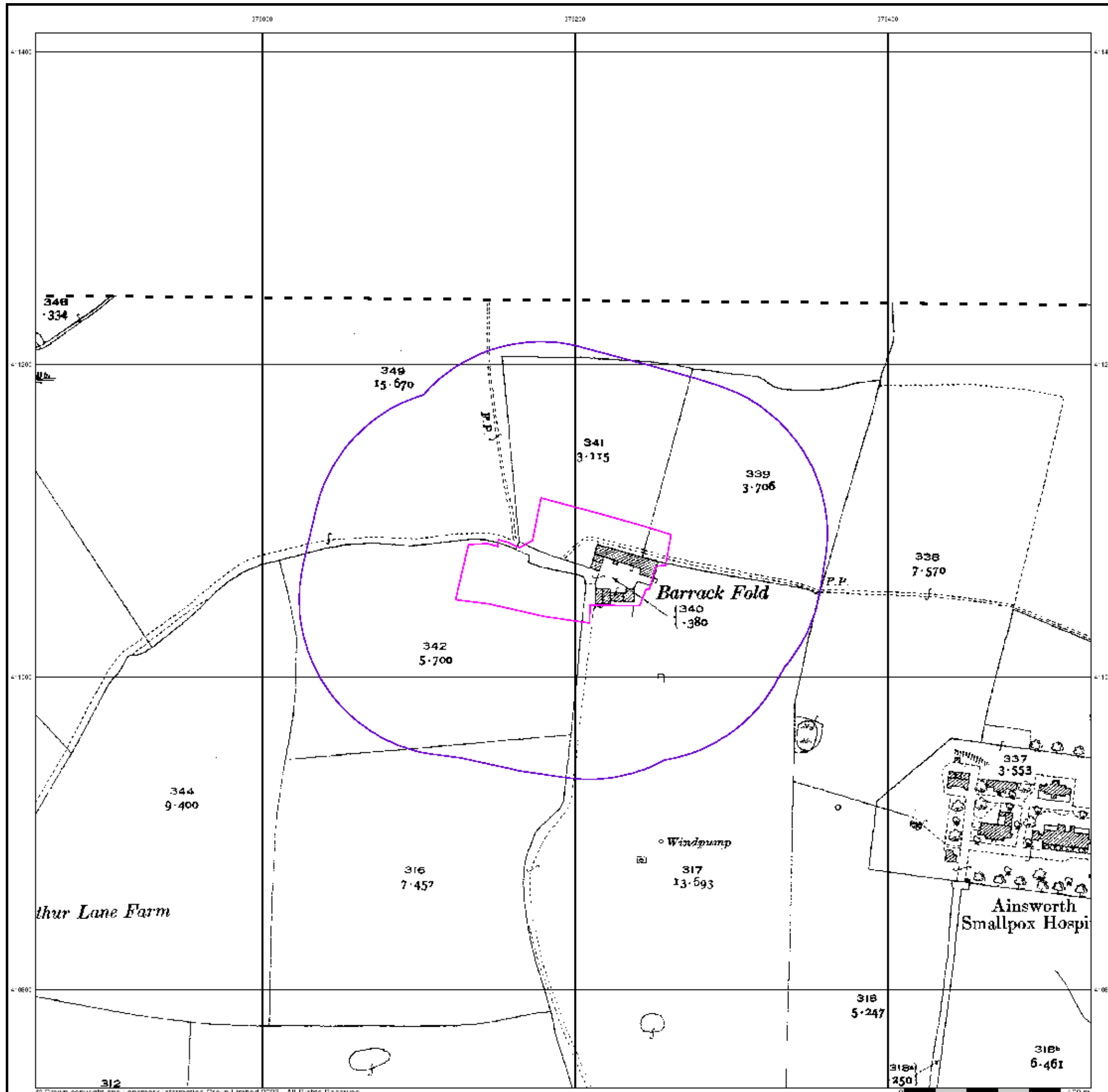


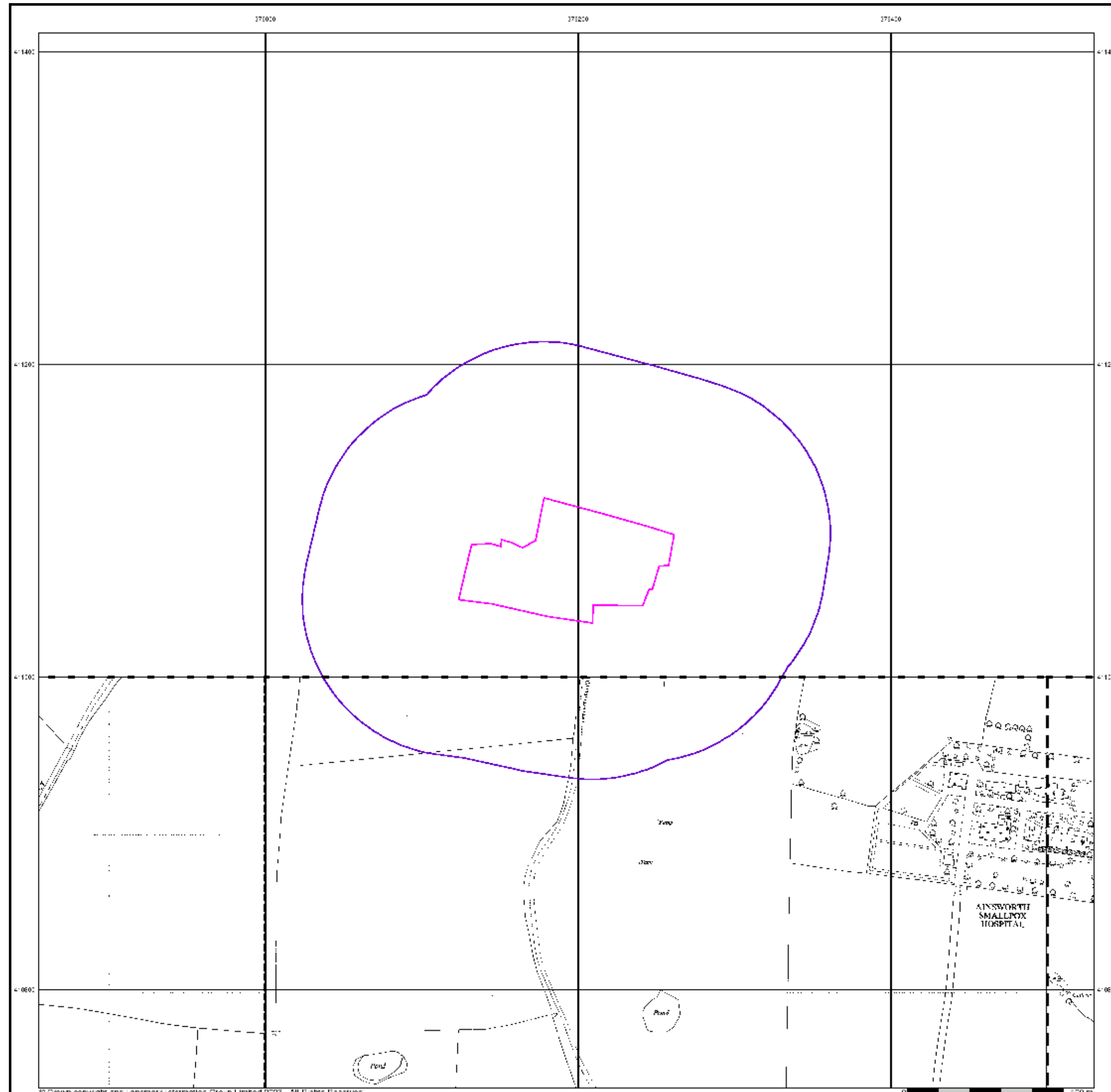
Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 100

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU





GROUP

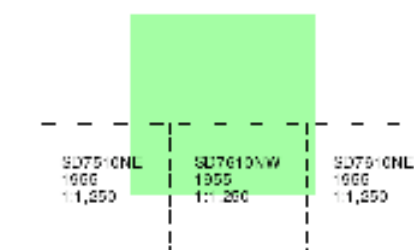
Ordinance Survey Plan

Published 1955

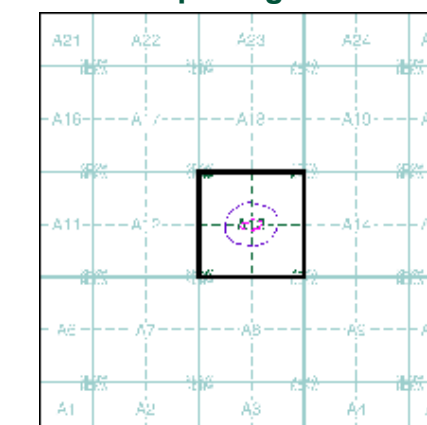
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

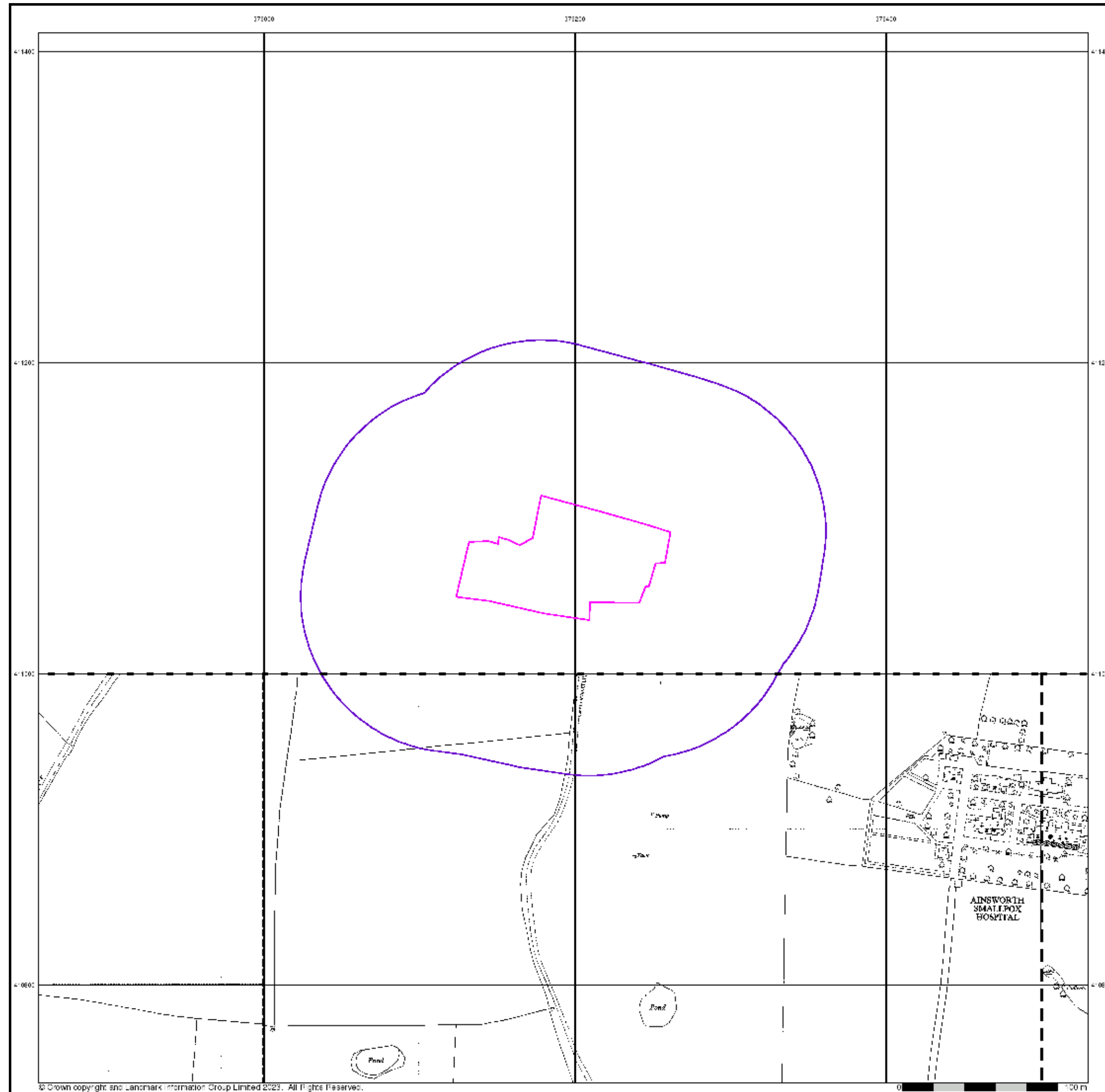
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Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 100

Site Details

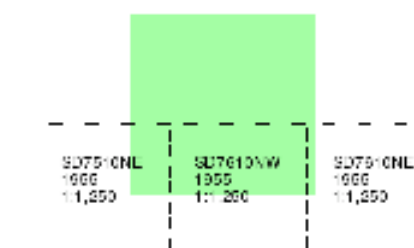
Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



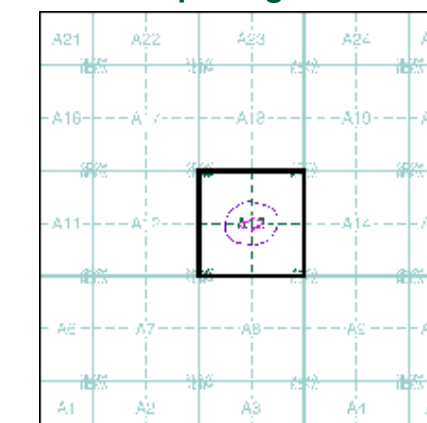
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 100

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



GROUP

Ordnance Survey Plan

Published 1956 - 1967

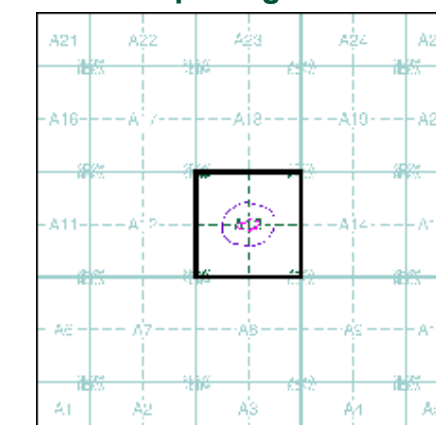
Source map scale - 1:2,500

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)

SD7511 1967 1:2,500	SD7811 1967 1:2,500
SD7510 1958 1:2,500	SD7810 1958 1:2,500

Historical Map - Segment A13



Order Details

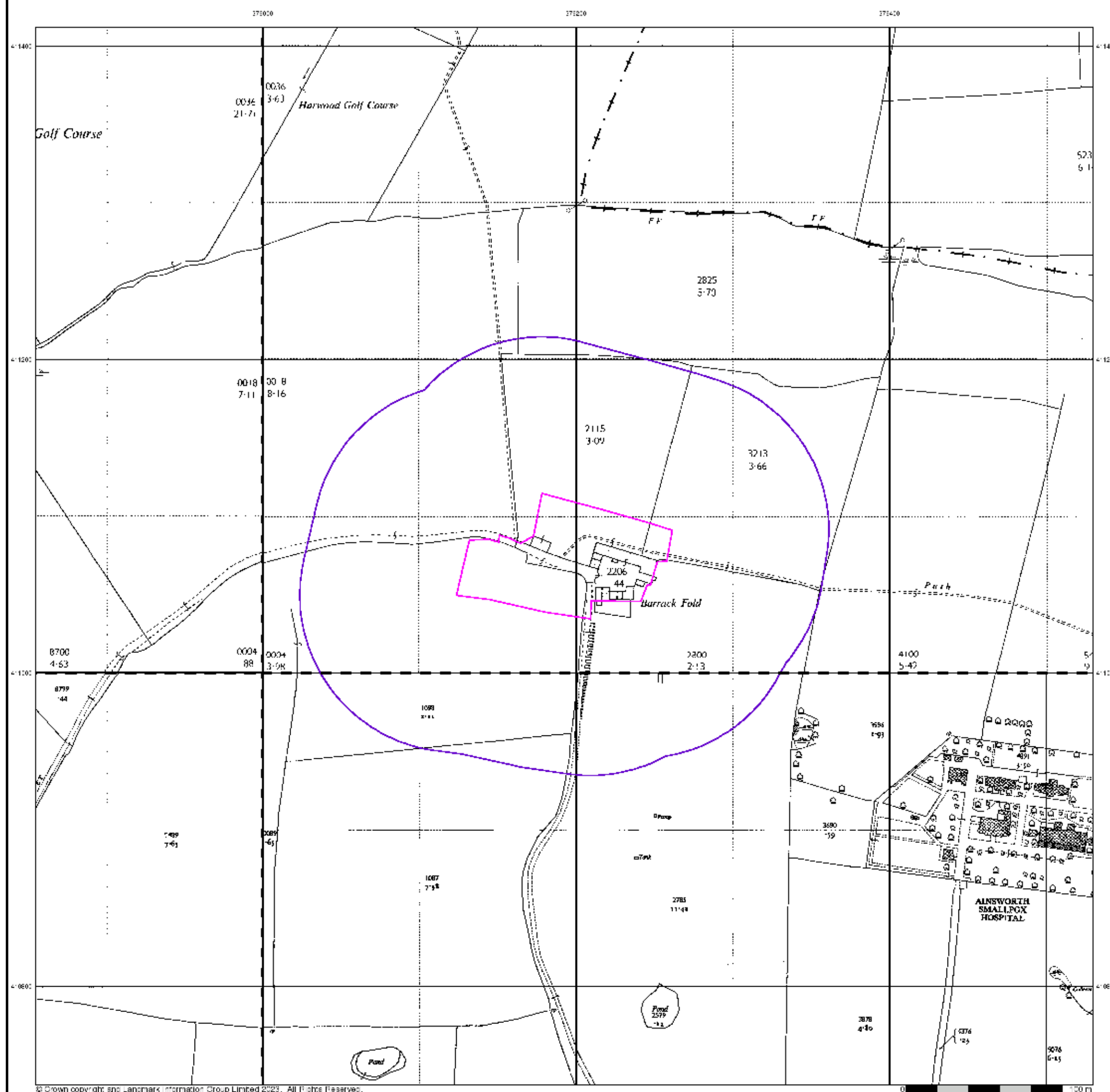
Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 100

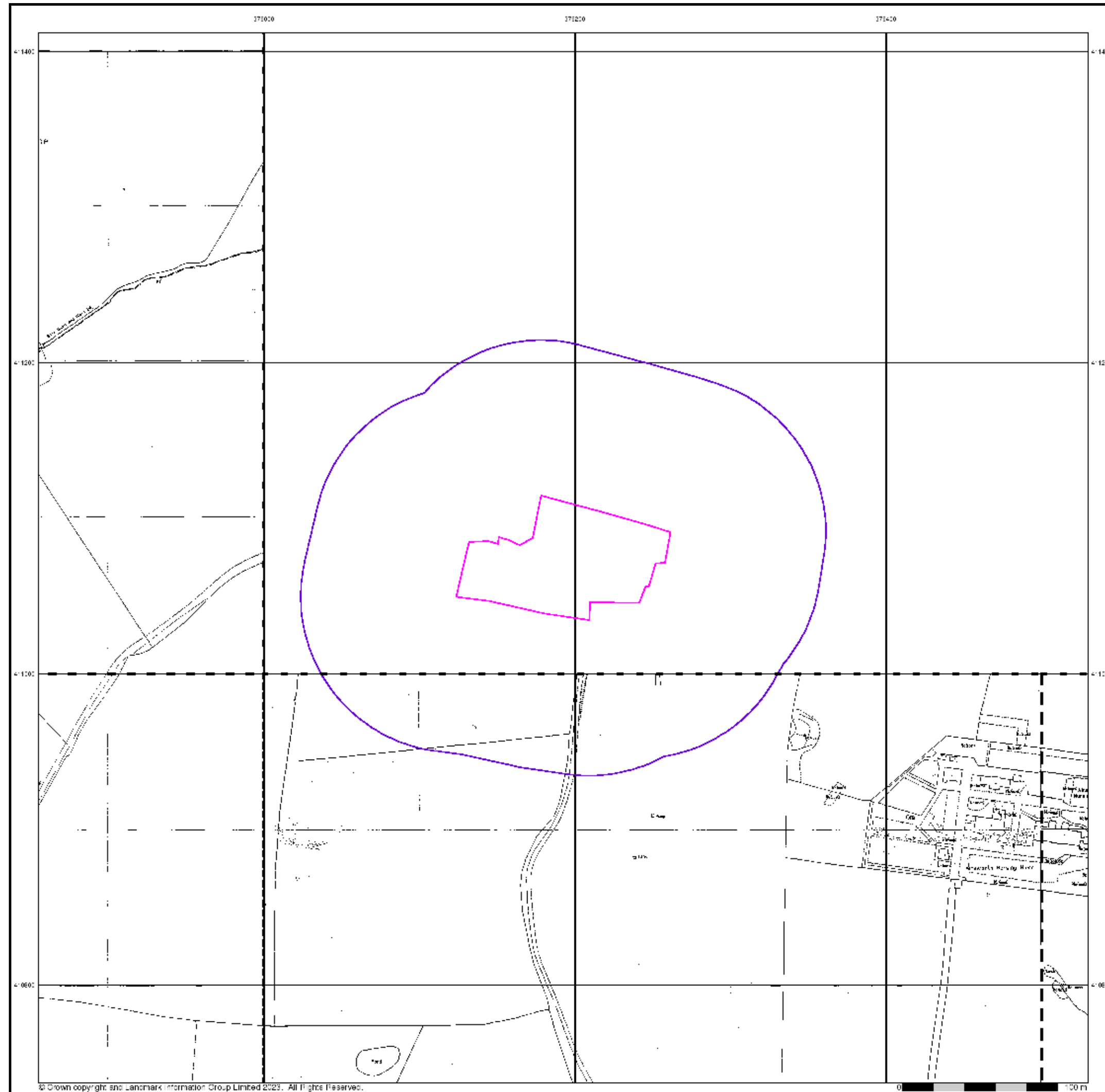
Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU

Landmark
INFORMATION GROUP

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Web: www.envirocheck.co.uk





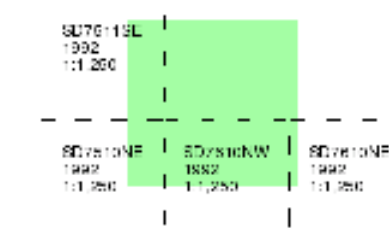
Large-Scale National Grid Data

Published 1992

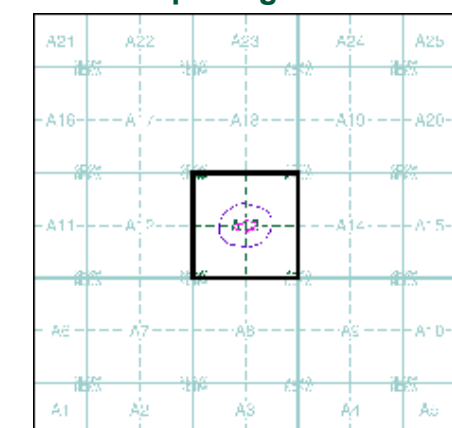
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

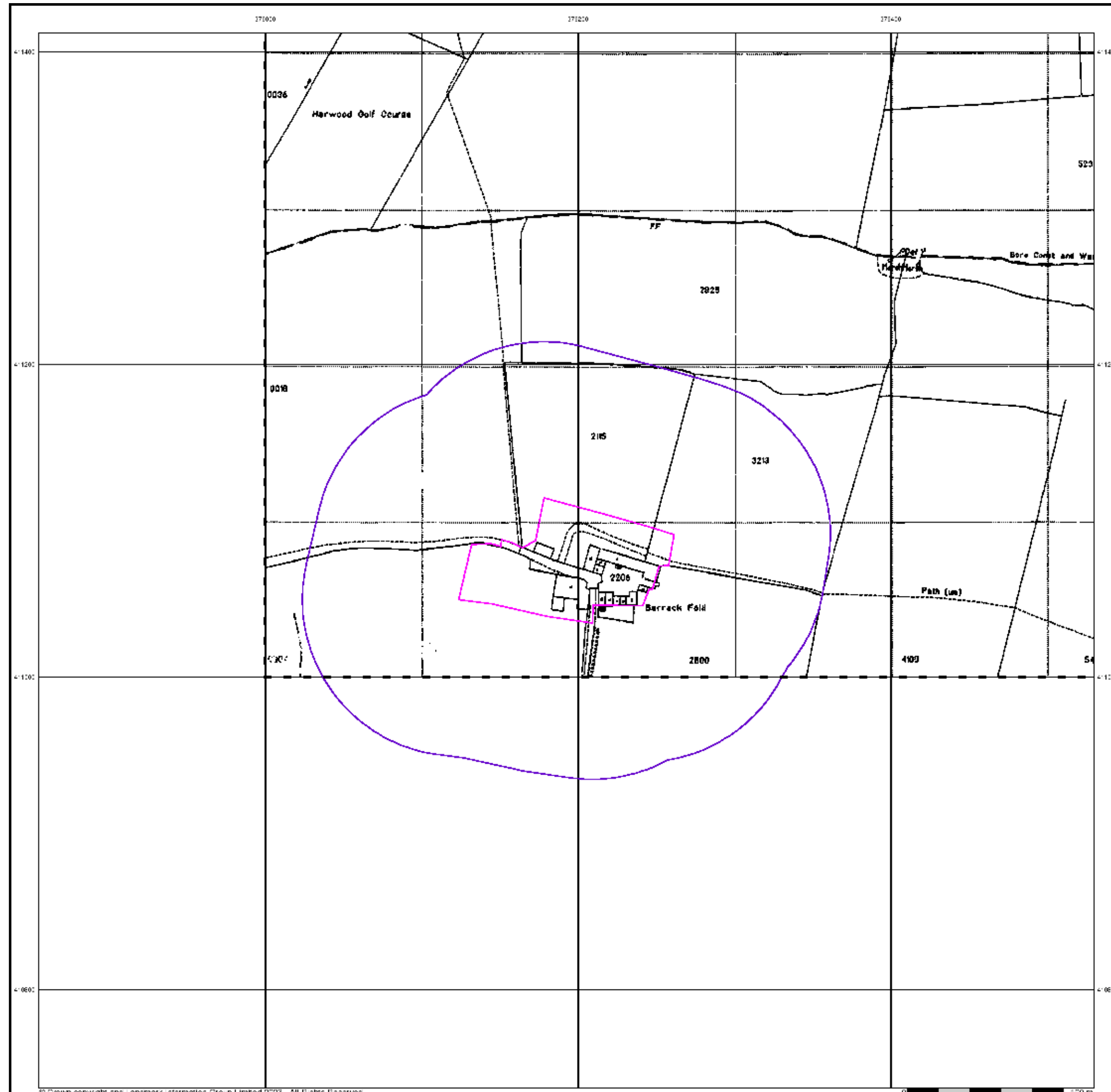
Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 100

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



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 Fax: 0844 844 9951
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LK

GROUP

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)

SC7611

1992

1:2,500

Historical Map - Segment A13

A21A22A23A24A25

A16A17A18A19A20

A11A12A13A14A15

A6A7A8A9A10

A1A2A3A4A5

N

Order Details

Order Number:

306934094_1_1

Customer Ref:

LKC 23 1054

National Grid Reference:

376190, 411070

Slice:

A

Site Area (Ha):

0.68

Search Buffer (m):

100

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU

Landmark

INFORMATION GROUP

Tel:

0844 844 9952

Fax:

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Web:

www.envirocheck.co.uk



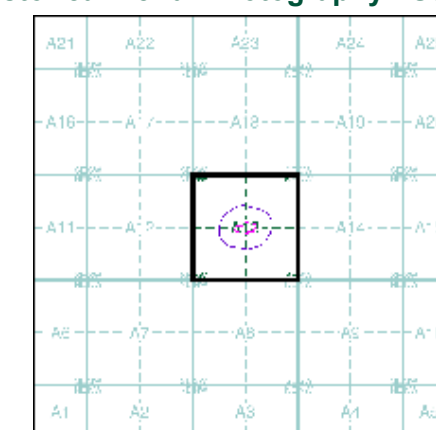
GROUP

Historical Aerial Photography

Published 2001

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A13



Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 100

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



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Fax: 0844 844 9951
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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		
	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

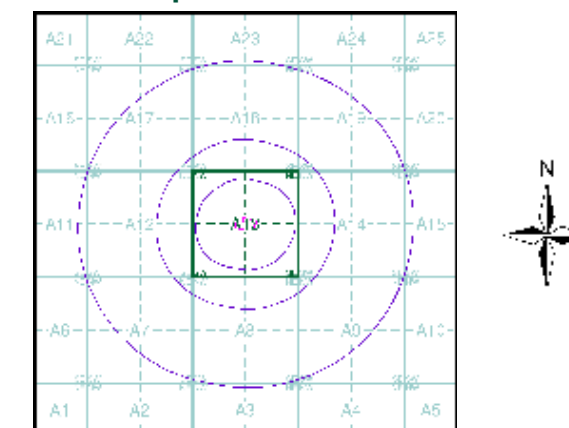
	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil, 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



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1850	3
Lancashire And Furness	1:10,560	1894	4
Lancashire And Furness	1:10,560	1911	5
Lancashire And Furness	1:10,560	1931	6
Lancashire And Furness	1:10,560	1938	7
Ordnance Survey Plan	1:10,000	1955 - 1956	8
Ordnance Survey Plan	1:10,000	1965 - 1969	9
Ordnance Survey Plan	1:10,000	1974 - 1979	10
Manchester	1:25,000	1975	11
Ordnance Survey Plan	1:10,000	1980 - 1987	12
Ordnance Survey Plan	1:10,000	1989	13
Ordnance Survey Plan	1:10,000	1991 - 1992	14
10K Raster Mapping	1:10,000	1999	15
10K Raster Mapping	1:10,000	2006	16
VectorMap Local	1:10,000	2022	17

Historical Map - Slice A



Order Details

Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU

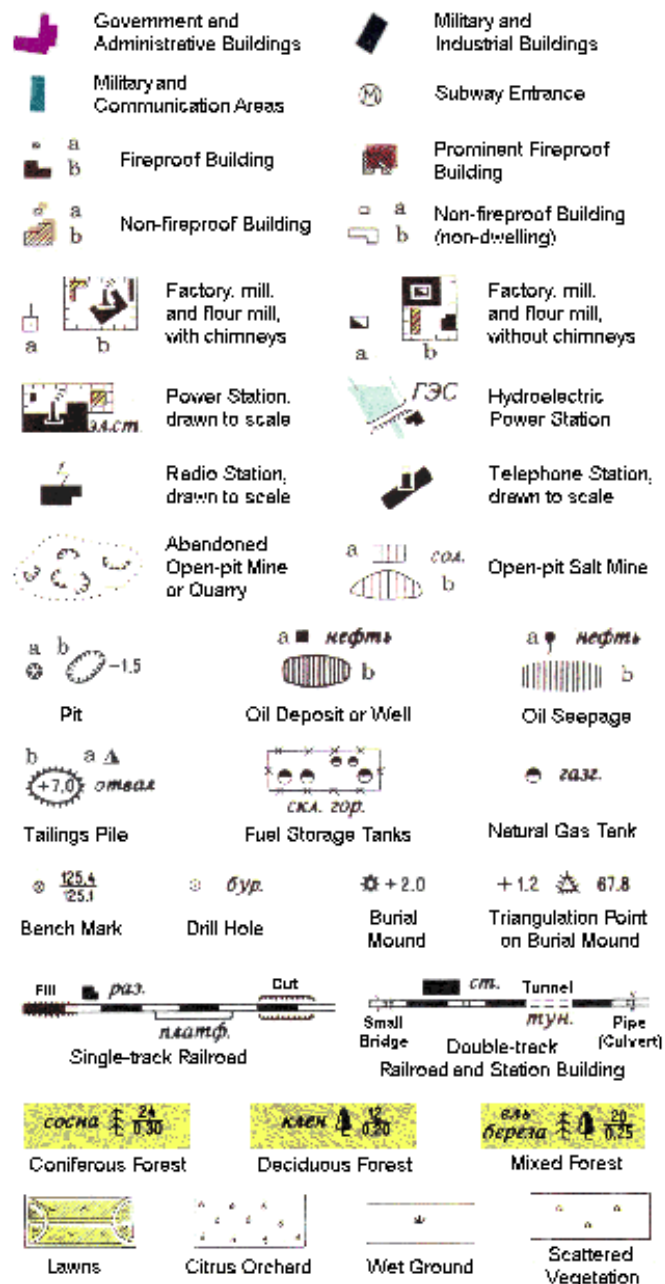


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Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale



243.8 Values for prominent elevations

186.0 Numbers for spot elevations, depth soundings, contour lines, etc.

0.2 Velocity of the current, width of river bed, depth of river

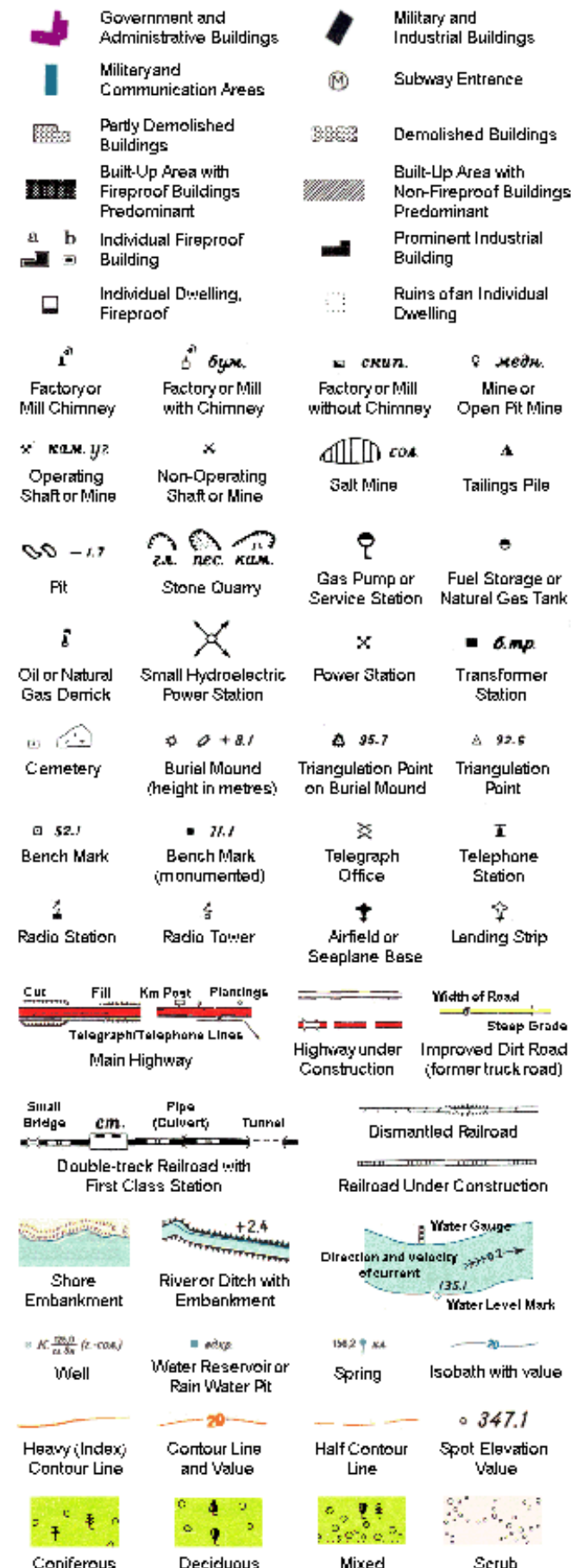
Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	Ъ (-)
Д д (D)	Л л (L)	У у (U)	Ы (Y)
Е е (E)	М м (M)	Ф ф (F)	Ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale



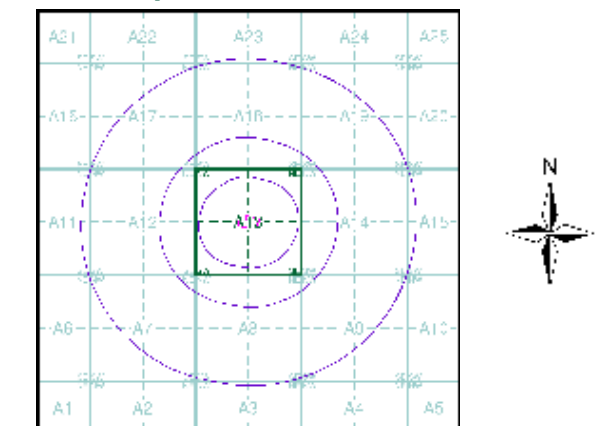
Key to Numbers on Mapping



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1850	3
Lancashire And Furness	1:10,560	1894	4
Lancashire And Furness	1:10,560	1911	5
Lancashire And Furness	1:10,560	1931	6
Lancashire And Furness	1:10,560	1938	7
Ordnance Survey Plan	1:10,000	1955 - 1956	8
Ordnance Survey Plan	1:10,000	1965 - 1969	9
Ordnance Survey Plan	1:10,000	1974 - 1979	10
Manchester	1:25,000	1975	11
Ordnance Survey Plan	1:10,000	1980 - 1987	12
Ordnance Survey Plan	1:10,000	1989	13
Ordnance Survey Plan	1:10,000	1991 - 1992	14
10K Raster Mapping	1:10,000	1999	15
10K Raster Mapping	1:10,000	2006	16
VectorMap Local	1:10,000	2022	17

Russian Map - Slice A



Order Details

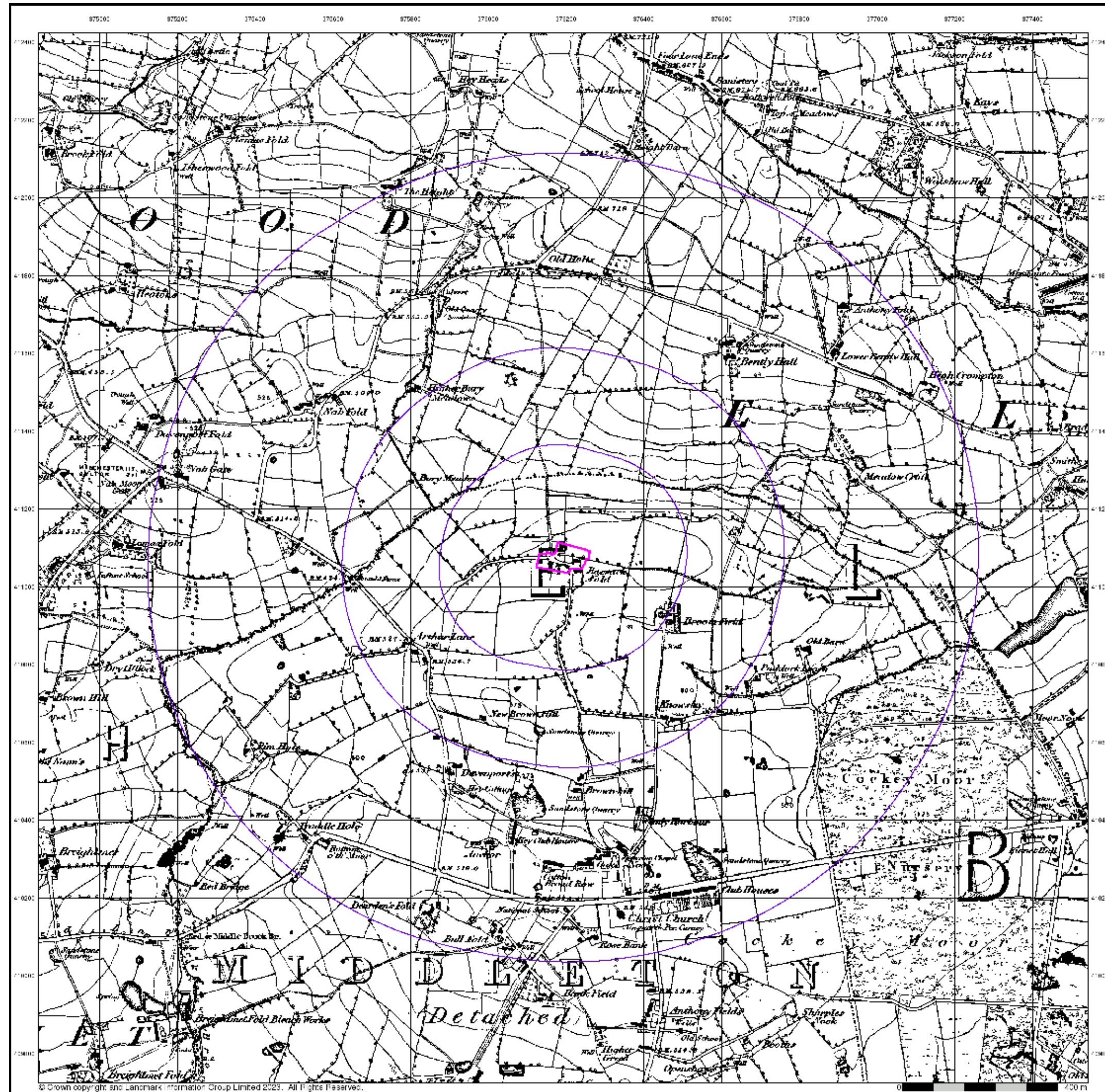
Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



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



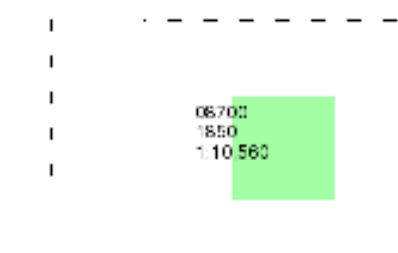
LK GROUP Lancashire And Furness

Published 1850

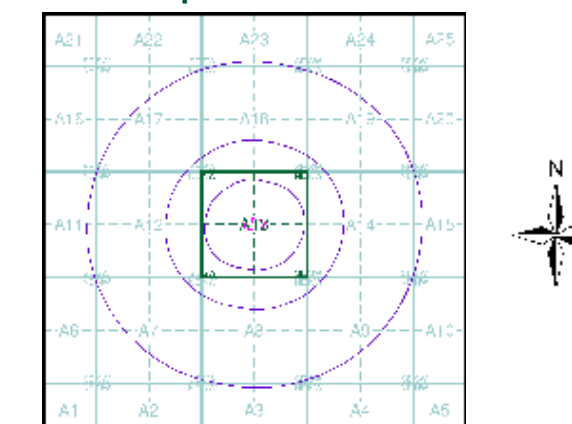
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 1000

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU

Landmark
INFORMATION GROUP

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

Published 1894

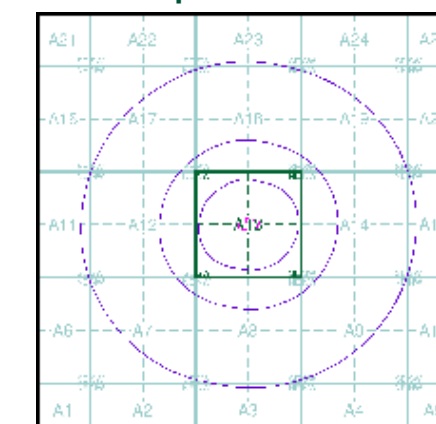
Source map scale - 1:10,560

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)

067NW 1884 1:10,560	067NE 1894 1:10,560
067SW 1894 1:10,560	067SE 1884 1:10,560

Historical Map - Slice A

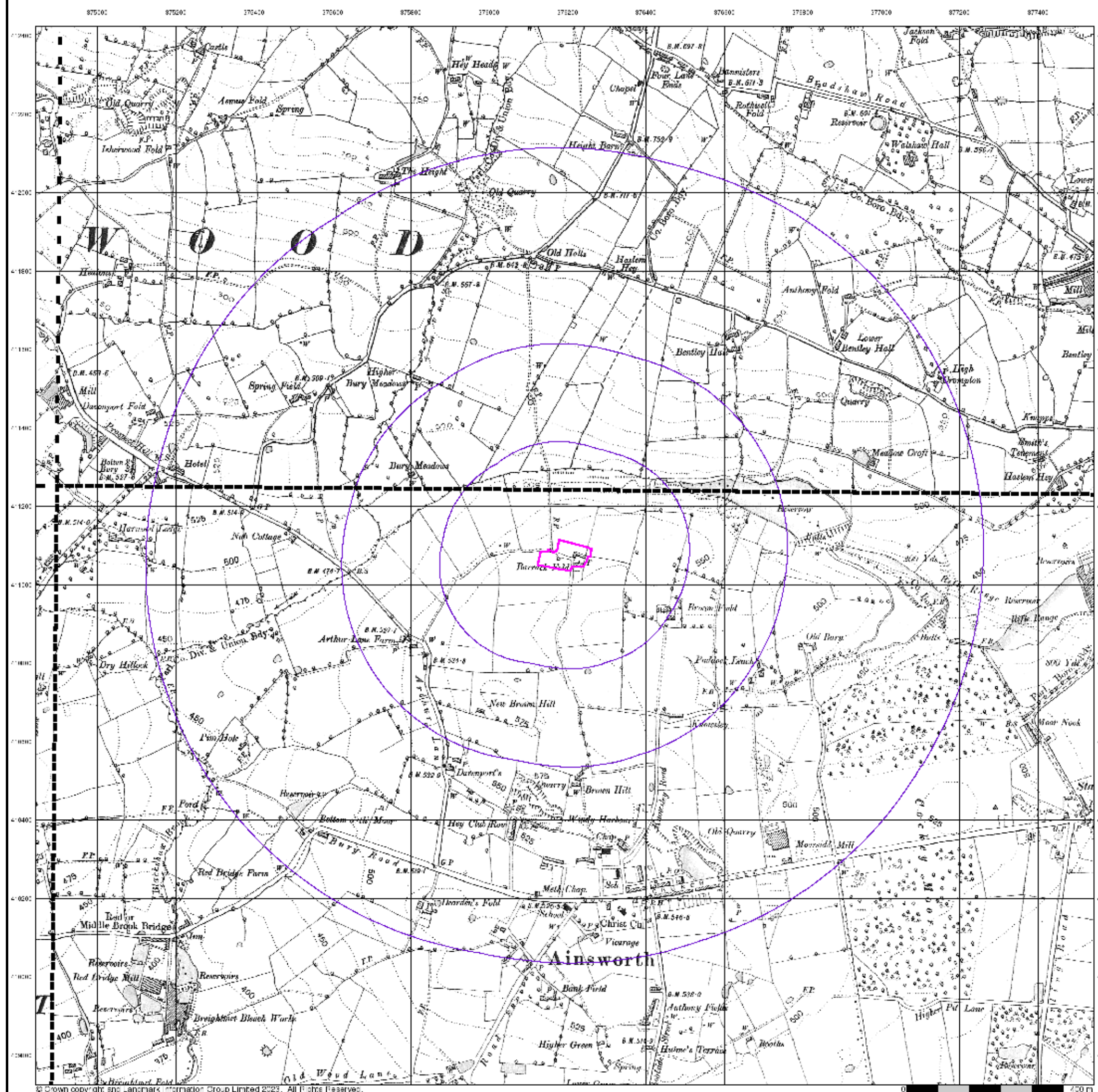


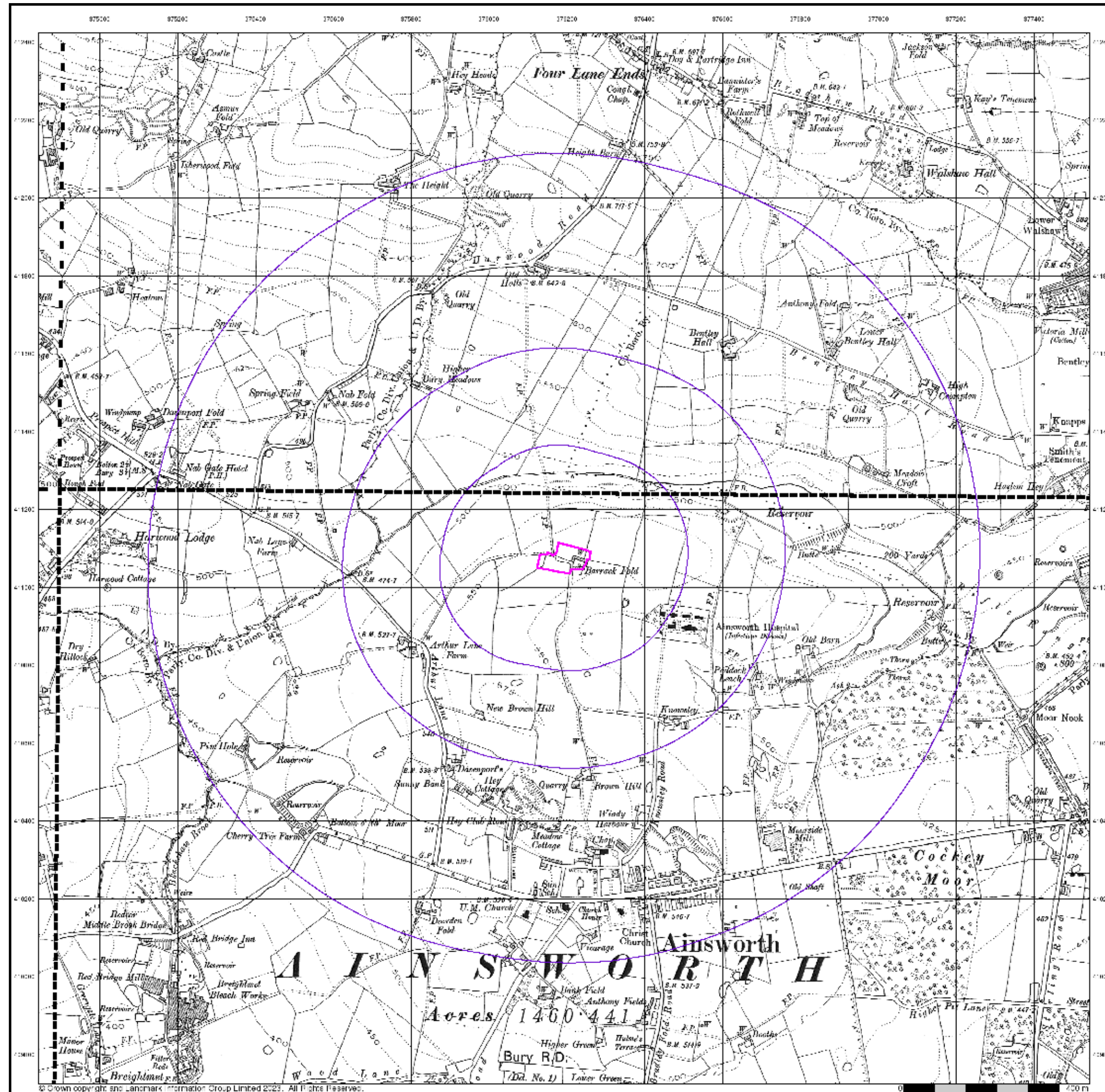
Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 1000

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU





LK GROUP Lancashire And Furness

Published 1911

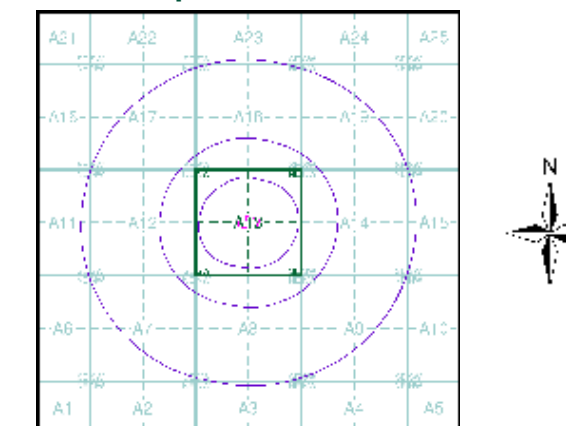
Source map scale - 1:10,560

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)

067NW 1911 1:10,560	067NE 1911 1:10,560
067SW 1911 1:10,560	067SE 1911 1:10,560

Historical Map - Slice A



Order Details

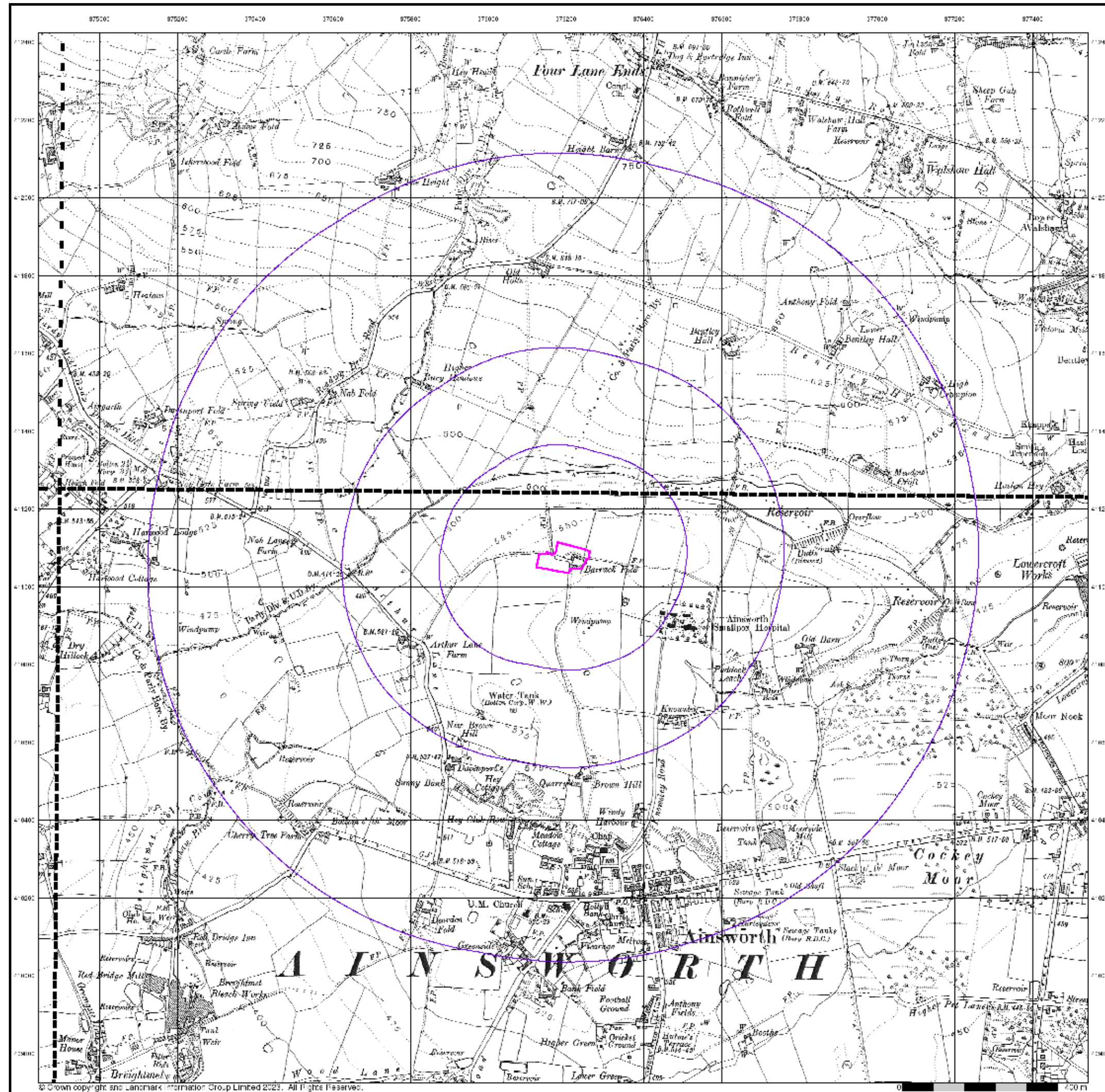
Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 1000

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU

Landmark
INFORMATION GROUP

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LK GROUP Lancashire And Furness

Published 1931

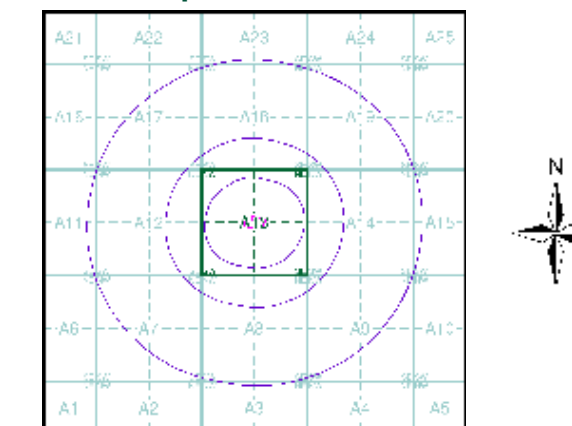
Source map scale - 1:10,560

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)

067NW 1931 1:10,560	067NE 1931 1:10,560
067SW 1931 1:10,560	067SE 1931 1:10,560

Historical Map - Slice A



Order Details

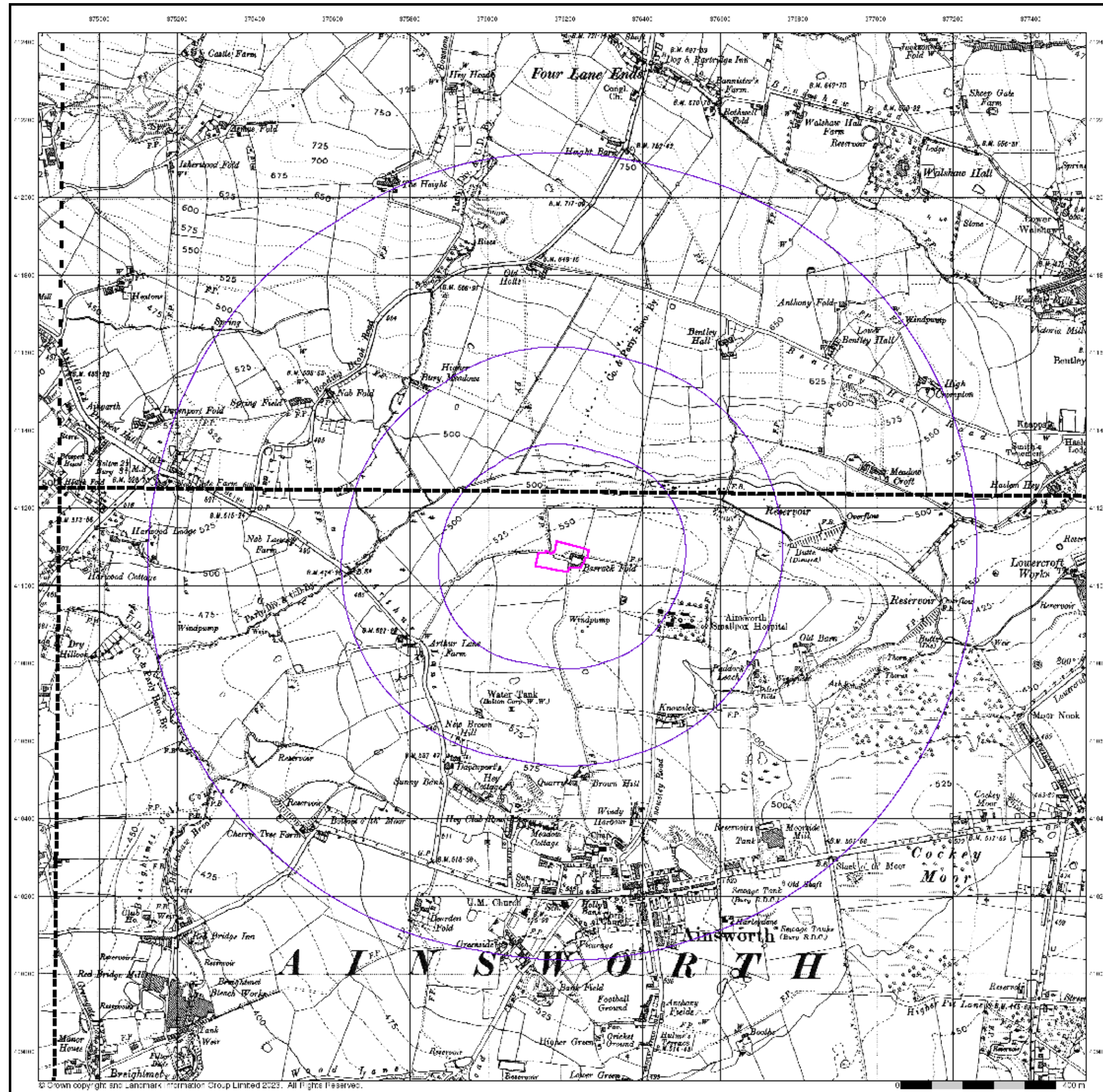
Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 1000

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GROUP

Lancashire And Furness

Published 1938

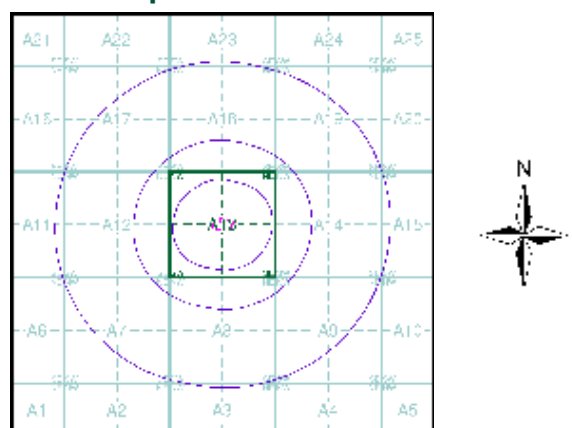
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

067NW 1938 1:10,560	067NE 1939 1:10,560
067SW 1938 1:10,560	067SE 1936 1:10,560

Historical Map - Slice A



Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
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Site Area (Ha): 0.68
Search Buffer (m): 1000

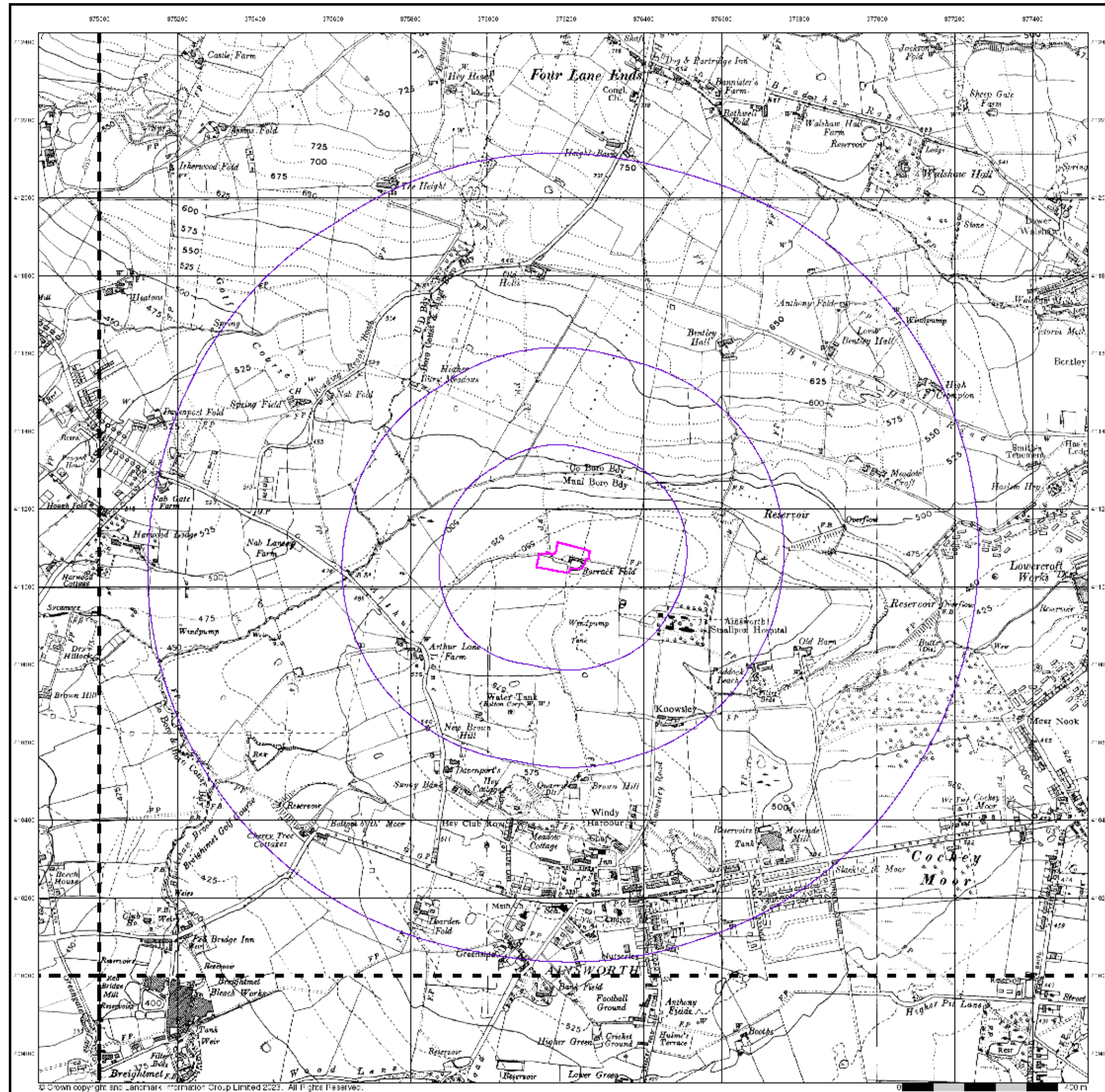
Site Details

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A Landmark Information Group Service v50.0 08-Feb-2023 Page 7 of 17



GROUP Ordnance Survey Plan

Published 1955 - 1956

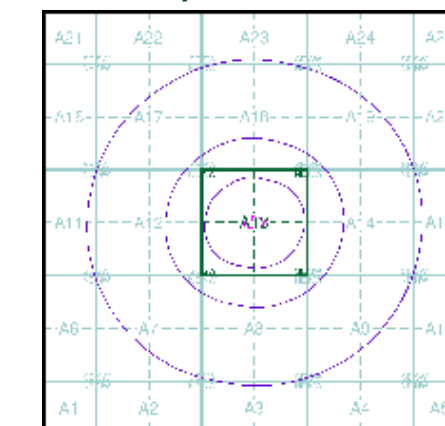
Source map scale - 1:10,000

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)

SD71SW 1956 1:10,560	SD71SE 1956 1:10,560
SD70NW 1956 1:10,560	SD70NE 1956 1:10,560

Historical Map - Slice A



Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 1000

Site Details

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GROUP

Ordnance Survey Plan

Published 1965 - 1969

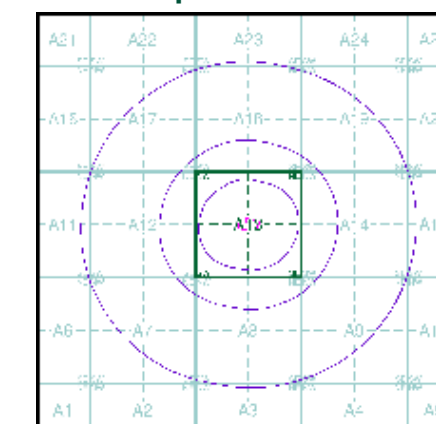
Source map scale - 1:10,000

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)

SD71SW	SD71SE
1969	1969
1:10,560	1:10,560
SD70NW	SD70NE
1967	1965
1:10,560	1:10,560

Historical Map - Slice A



Order Details

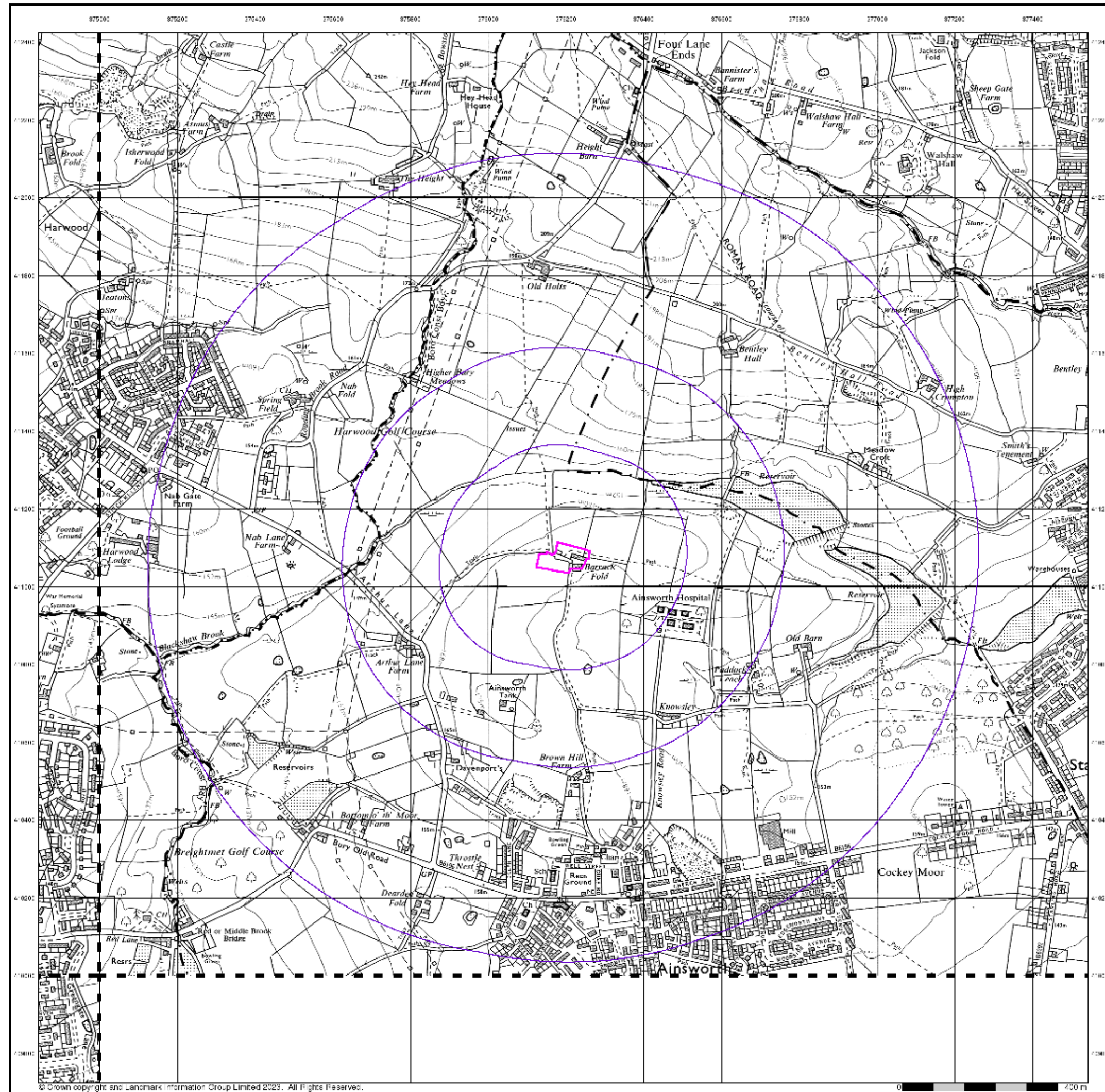
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National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 1000

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Ordnance Survey Plan

Published 1974 - 1979

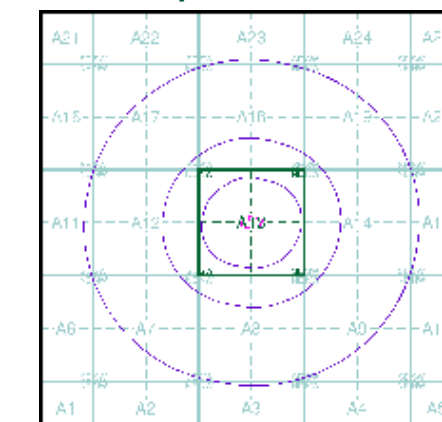
Source map scale - 1:10,000

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)

SD71SW 1976 1:10,000	SD71SE 1974 1:10,000
SD70NW 1979 1:10,000	

Historical Map - Slice A



Order Details

Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

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LK
GROUP
Manchester

Published 1975

Source map scale - 1:25,000

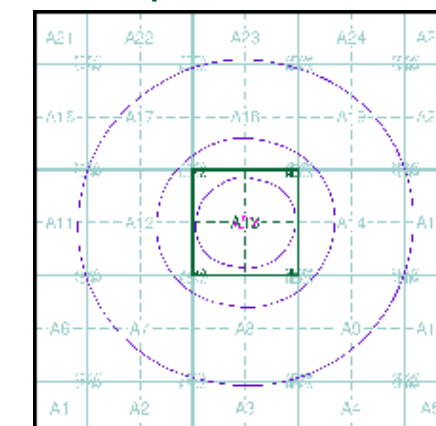
These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.

They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

Map Name(s) and Date(s)

SD71
1975
1:25,000
SD70
1975
1:25,000

Russian Map - Slice A



Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
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INFORMATION GROUP

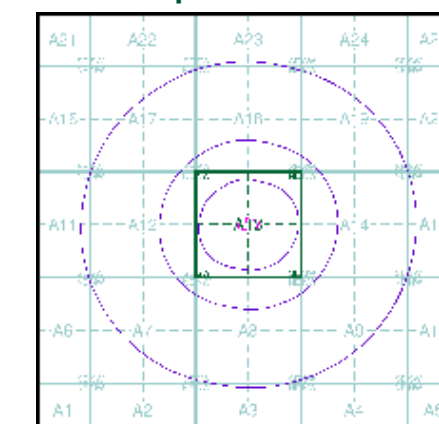
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Fax: 0844 844 9951
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

SD71SW	SD71SE
1987	1982
1:10,000	1:10,000
	SD70NE
	1980
	1:10,000

Historical Map - Slice A

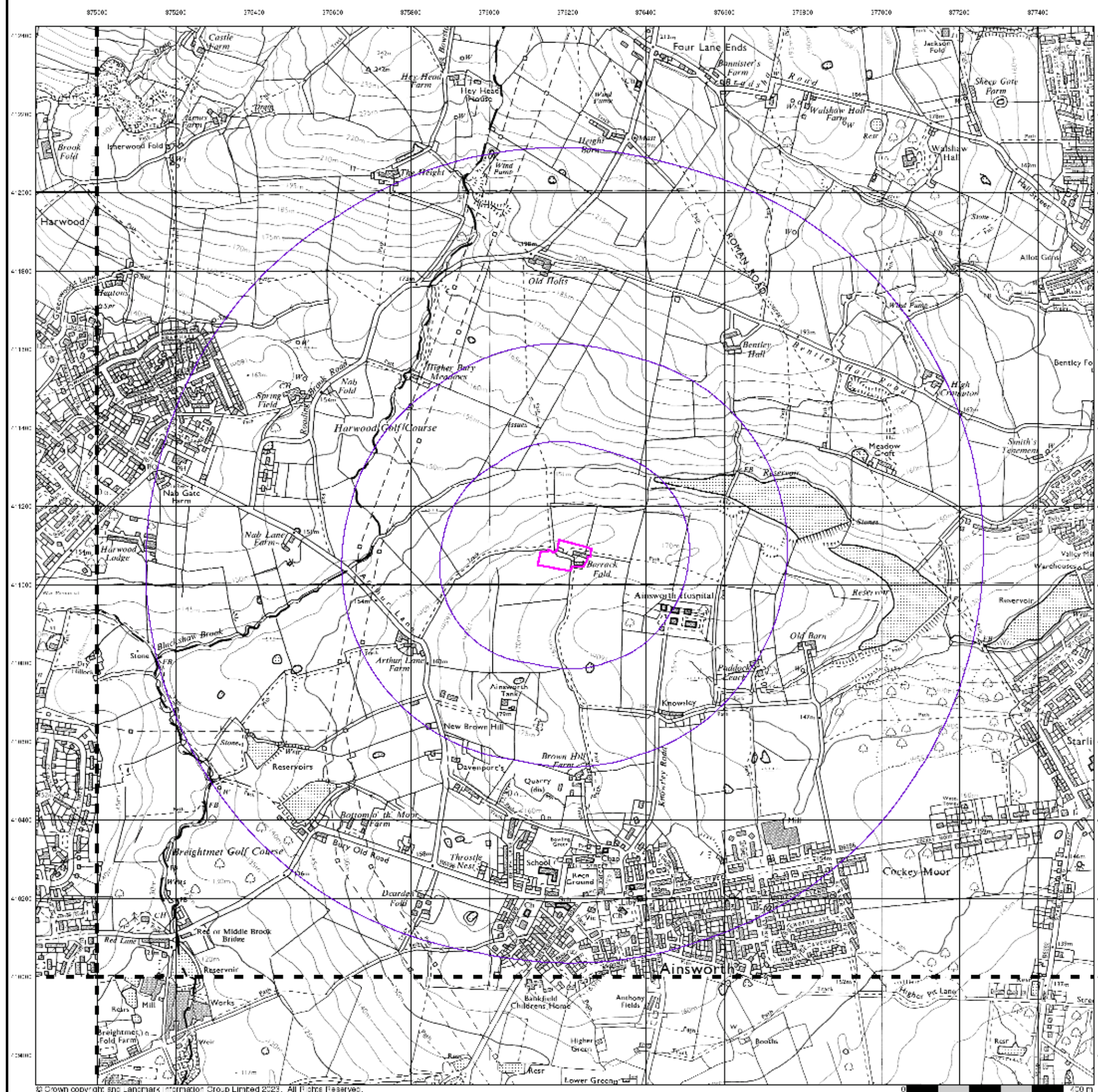


Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 1000

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU





GROUP

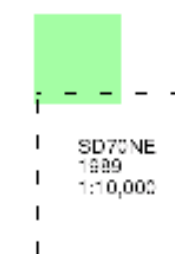
Ordnance Survey Plan

Published 1989

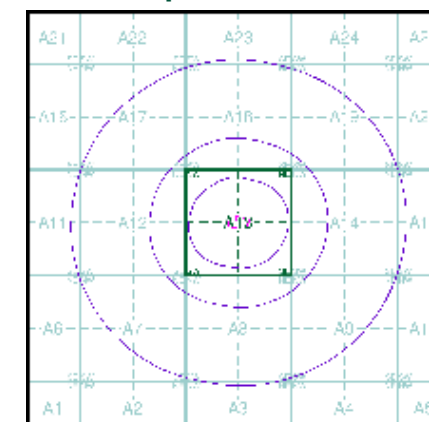
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
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Site Details

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GROUP

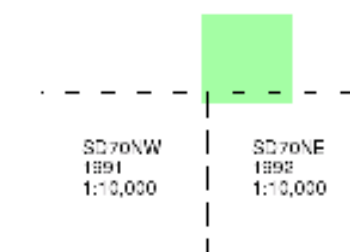
Ordnance Survey Plan

Published 1991 - 1992

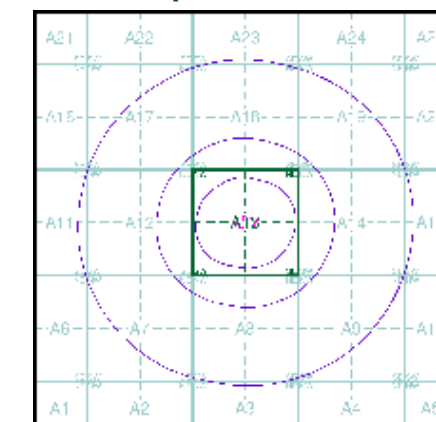
Source map scale - 1:10,000

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: 306934094_1_1
Customer Ref: LKC 23 1054
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Slice: A
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Search Buffer (m): 1000

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LK GROUP 10k Raster Mapping

Published 1999

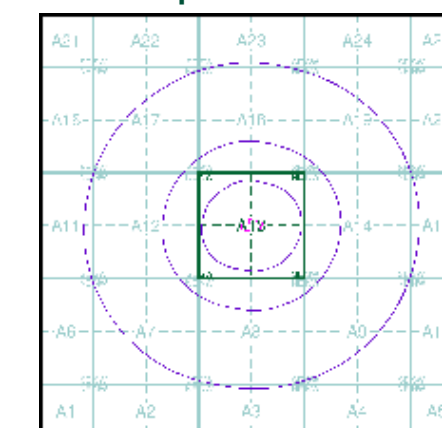
Source map scale - 1:10,000

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)

SD71SW 1999 1:10,000	SD71SE 1999 1:10,000
SD70NW 1999 1:10,000	SD70NE 1999 1:10,000

Historical Map - Slice A



Order Details

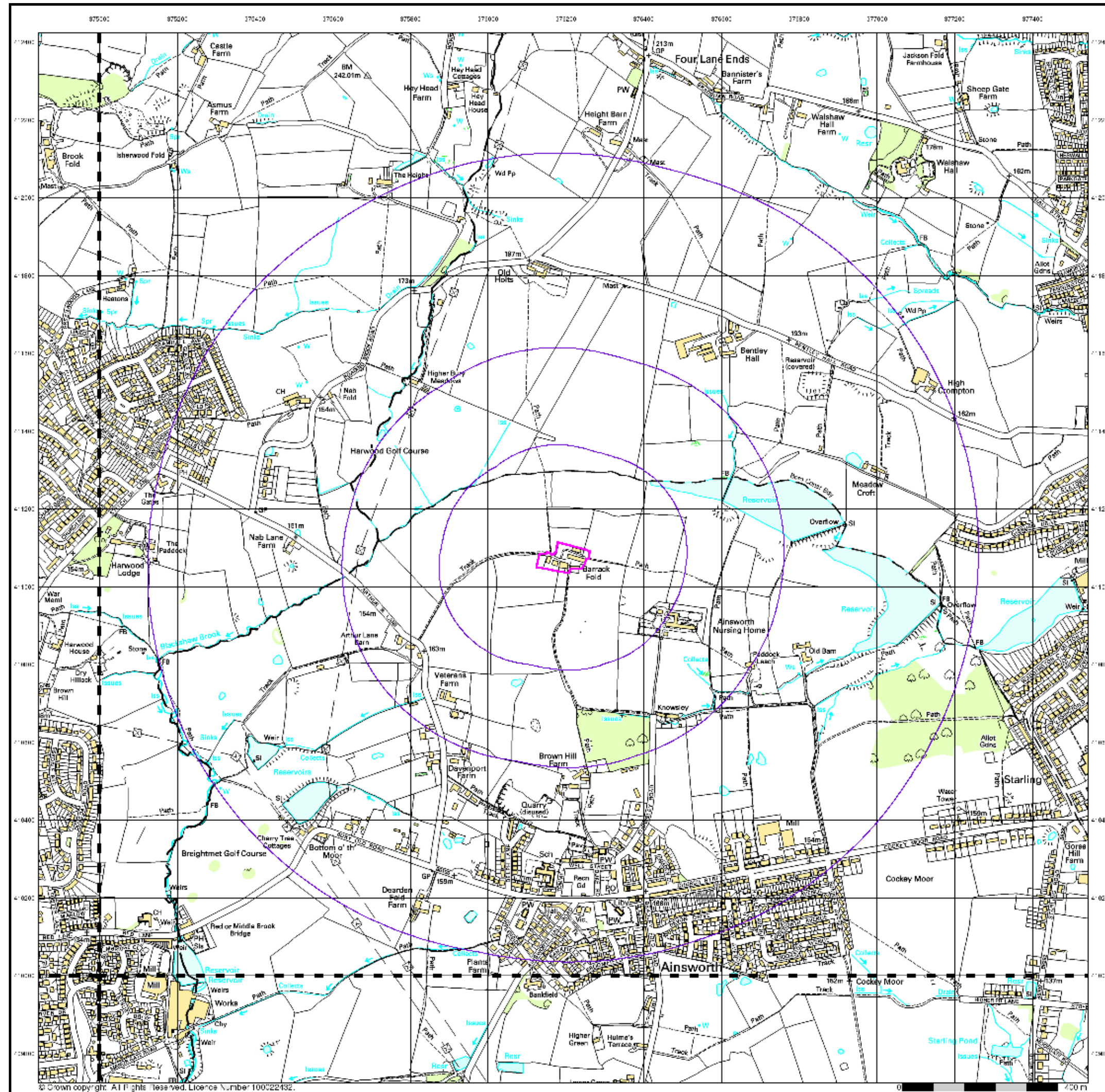
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Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 1000

Site Details

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INFORMATION GROUP

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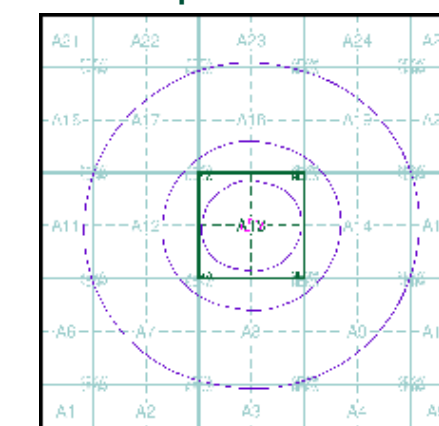


The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks 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)

SD71SW 2006 1:10,000	SD71SE 2006 1:10,000
SD70NW 2006 1:10,000	SD70NE 2006 1:10,000

Historical Map - Slice A

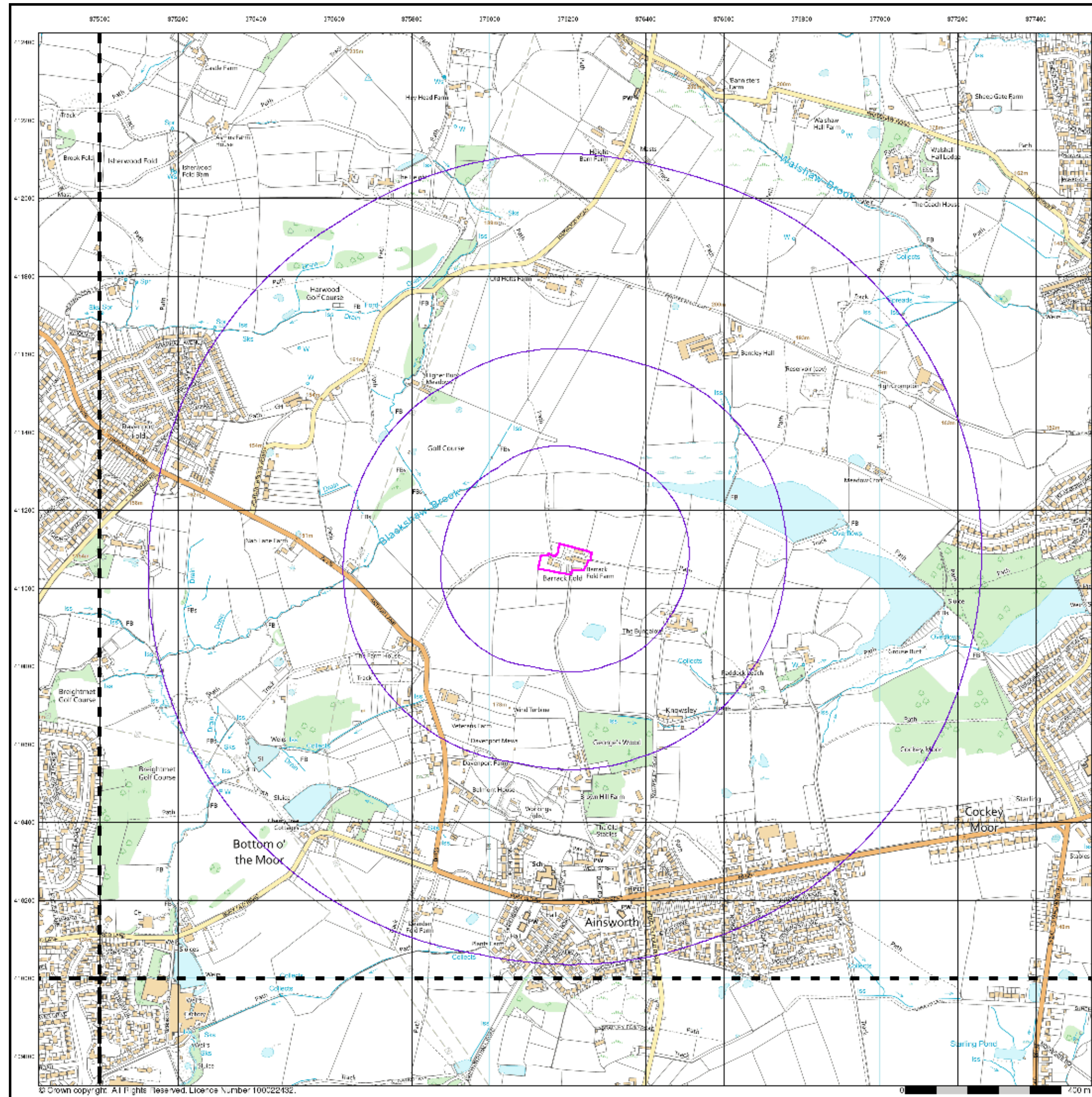


Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 1000

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



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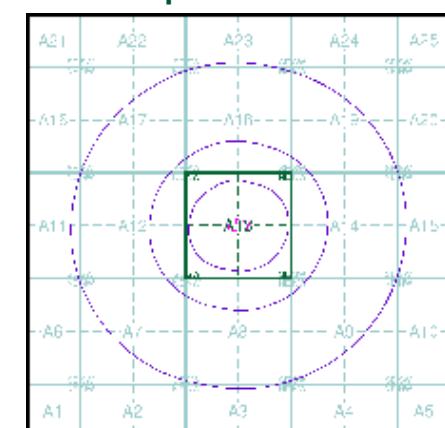
Published 2022
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

SD71SW 2022 Variable	SD71SE 2022 Variable
SD70NW 2022 Variable	SD70NE 2022 Variable

Historical Map - Slice A



Order Details

Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



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 Fax: 0844 844 9951
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Appendix B

Envirocheck Report

Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

306934094_1_1

Customer Reference:

LKC 23 1054

National Grid Reference:

376190, 411070

Slice:

A

Site Area (Ha):

0.68

Search Buffer (m):

1000

Site Details:

Barrack Fold Farm
Knowsley Road
Ainsworth
Bolton
BL2 5PU

Client Details:

L Consult
LK Consult Ltd
Unit 29 Eton Business Park
Eton Hill Road
Radcliffe
Greater Manchester
M26 2ZS

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	28
Hazardous Substances	-
Geological	30
Industrial Land Use	40
Sensitive Land Use	44
Data Currency	45
Data Suppliers	51
Useful Contacts	52

Introduction

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

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Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 3				6
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 5				2
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 5		Yes		
Pollution Incidents to Controlled Waters	pg 5			1	4
Prosecutions Relating to Authorised Processes	pg 6	1			
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 6				2
Water Abstractions	pg 7			2	13 (*22)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 16	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 16	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 16		3	15	82

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	pg 28				2
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					
Potentially Infilled Land (Non-Water)	pg 28			3	5
Potentially Infilled Land (Water)	pg 29				13
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					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 30	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 30	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 37			2	8
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 38	Yes	n/a	n/a	n/a
Mining Instability	pg 38	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 38	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 39	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 39		Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 39	Yes		n/a	n/a
Radon Potential - Radon Affected Areas	pg 39	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures	pg 39	Yes	n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 40				11
Fuel Station Entries	pg 41				1
Points of Interest - Commercial Services	pg 41				3
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 41		1	1	8
Points of Interest - Public Infrastructure	pg 42			1	10
Points of Interest - Recreational and Environmental	pg 43				2
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland					
Areas of Adopted Green Belt	pg 44	1		1	
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	A13SW (NE)	0	1	376192 411072
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	73	1	376100 411150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	84	1	376050 411100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (N)	86	1	376192 411200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	90	1	376150 411200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	105	1	376050 411150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	116	1	376100 411200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (W)	124	1	376000 411072
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	132	1	376000 411100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (N)	136	1	376192 411250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (N)	138	1	376200 411250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (NW)	142	1	376050 411200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (W)	147	1	376000 411150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (W)	174	1	375950 411072
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (W)	174	1	375950 411050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	181	1	375950 411100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	187	1	376200 411300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	190	1	376250 410850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	212	1	376300 411300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	216	1	376400 410900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (W)	224	1	375900 411072
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (W)	224	1	375900 411050

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	A13SW (W)	229	1	375900 411000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (W)	230	1	375900 411100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	235	1	376200 410800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	236	1	376192 411350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	237	1	376200 411350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	247	1	376250 411350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	251	1	376400 411300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	252	1	376400 410850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	260	1	376300 411350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	263	1	376500 411200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	274	1	376350 411350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A12SE (W)	274	1	375850 411072
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	274	1	375850 411050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	286	1	376192 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	287	1	376150 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	287	1	376200 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	294	1	376400 411350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	295	1	376250 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	328	1	375800 411000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (N)	336	1	376192 411450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (N)	337	1	376150 411450
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SE (N)	337	1	376200 411450

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 (SE)	357	1	376500 410800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	377	1	375750 411000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	387	1	376200 411500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	387	1	375750 410950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (SE)	404	1	376450 410700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A12SE (W)	424	1	375700 411050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A14SW (SE)	428	1	376550 410750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	436	1	375700 410950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SE (N)	442	1	376250 411550
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NE (SE)	448	1	376450 410650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (SE)	473	1	376500 410650
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NE (SE)	474	1	376400 410600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A12SE (W)	474	1	375650 411050
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	489	1	376750 411072
1	Discharge Consents Operator: Mr Gordon H. Hartley Property Type: FARMS (NOT HOUSE)/CROP + ANIMAL REARING/PLANT NURSERY Location: Septic Tank & Soakaway Davenport Stables, Arthur Lane, Bolton, Lancashire, BL2 5pw Authority: Environment Agency, North West Region Catchment Area: Middle Book (Off River Croal) Reference: 016993467 Permit Version: 1 Effective Date: 12th March 2003 Issued Date: 12th March 2003 Revocation Date: Not Supplied Discharge Type: Sewage And Trade Combined - Unspecified Discharge Environment: Land/Soakaway Receiving Water: 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	A8NW (S)	520	2	376020 410540

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	Discharge Consents Operator: Ainsworth Nursing Home Ltd Property Type: DENTIST/HOSPITAL/NURSING HOME (MEDICAL)/HUMAN HEALTH Location: Ainsworth Nursing Home Knowsley Road, Ainsworth, Bolton, Lancashire, BL2 5pt Authority: Environment Agency, North West Region Catchment Area: Middle Book (Off River Croal) Reference: 016993924 Permit Version: 1 Effective Date: 2nd March 2007 Issued Date: 2nd March 2007 Revocation Date: 13th October 2020 Discharge Type: Sewage And Trade Combined - Unspecified Discharge: Lake/Reservoir - with outlet Environment: Receiving Water: Trib To Lower Croft Reservoir Status: Authorisation revoked Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	563	2	376700 410720
3	Discharge Consents Operator: Marjorie Constantine Cort Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Nab Fold Roading Brook Rd, Harwood, Bolton, Lancashire, BL2 4jq Authority: Environment Agency, North West Region Catchment Area: Middle Book (Off River Croal) Reference: 01m/181 Permit Version: 1 Effective Date: 22nd October 1963 Issued Date: 22nd October 1963 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Blackshaw Brook Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989 Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	676	2	375593 411493
4	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Church Street West Cso Rear Of 87 Church Street, Ainsworth, Radcliffe, Bury, BL2 5rd Authority: Environment Agency, North West Region Catchment Area: Middle Book (Off River Croal) Reference: 016993584 Permit Version: 2 Effective Date: 25th September 2018 Issued Date: 25th September 2018 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Lake/Reservoir - with outlet Environment: Receiving Water: Unnamed Pond Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	698	2	376620 410460
4	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Church Street West Cso Rear Of 87 Church Street, Ainsworth, Radcliffe, Bury, BL2 5rd Authority: Environment Agency, North West Region Catchment Area: Middle Book (Off River Croal) Reference: 016993584 Permit Version: 1 Effective Date: 31st May 2006 Issued Date: 31st May 2006 Revocation Date: 24th September 2018 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Lake/Reservoir - with outlet Environment: Receiving Water: Unnamed Pond 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	A9NW (SE)	698	2	376620 410460

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Church Street West Cso Rear Of 87 Church Street, Ainsworth, Radcliffe, Bury, BL2 5rd Authority: Environment Agency, North West Region Catchment Area: Middle Book (Off River Croal) Reference: 01BRY0019 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: 1st January 1995 Revocation Date: 30th May 2006 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Pond Status: Consent revoked or revised: New Consent issued (Section 37(1)) Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	698	2	376620 410460
5	Local Authority Pollution Prevention and Controls Name: Masterbuild Products Ltd Location: Moorside Mill, Church Street, AINSWORTH, BL2 5RD Authority: Bury Metropolitan Borough Council, Environmental Health Department Permit Reference: Lappc04-09 Dated: 1st July 2004 Process Type: Local Authority Pollution Prevention and Control Description: PG6/44 Manufacture of coating materials Status: Authorised Positional Accuracy: Manually positioned to the address or location	A9SW (SE)	819	3	376722 410383
6	Local Authority Pollution Prevention and Controls Name: Ainsworth Service Station Location: 81 Church Street, Ainsworth, BURY, Lancashire, BL2 5RD Authority: Bury Metropolitan Borough Council, Environmental Health Department Permit Reference: Ps26 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station Status: Authorised Positional Accuracy: Automatically positioned to the address	A9SW (SE)	918	3	376806 410323
	Nearest Surface Water Feature	A13SE (SE)	125	-	376340 410970
7	Pollution Incidents to Controlled Waters Property Type: Private Sewage (Non-PLC): Sewerage Systems Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Crude Sewage Note: Tributary Lowercroft Bk Incident Date: 7th October 1995 Incident Reference: 95622487 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Blocked Sewer Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SE (SE)	357	2	376500 410800
8	Pollution Incidents to Controlled Waters Property Type: Stables Location: Sewage Debris In Brook, Ainsworth , BURY Authority: Environment Agency, North West Region Pollutant: Unknown Sewage Note: Irwell; Sewage Debris And Unknown Incident Date: 2nd June 1997 Incident Reference: 97620970 Catchment Area: Irwell Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A14SW (SE)	607	2	376800 410800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: Lowercroft Lodges; No Pollution Found Incident Date: 10th June 1995 Incident Reference: 95621375 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14NE (NE)	710	2	376900 411400
10	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Foul Sewer Location: Old Barn Farm, Ainsworth, BOLTON Authority: Environment Agency, North West Region Pollutant: Sewage - Storm Overflow Note: Sewage In Stream Incident Date: 27th January 1998 Incident Reference: SO980176 Catchment Area: Irwell Receiving Water: Freshwater Stream/River Cause of Incident: Blocked Sewer Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	715	2	376800 410600
11	Pollution Incidents to Controlled Waters Property Type: Private Sewage (Non-PLC): Sewerage Systems Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Storm Sewage Note: Tributary River Irwell Incident Date: 24th July 1995 Incident Reference: 95611846 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Sewer Maintenance Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SE (NE)	897	2	377000 411600
12	Prosecutions Relating to Authorised Processes Location: Barrack Fold Farm, Arthur Lane, Ainsworth, Bolton, B12 5ps Prosecution Text: Spreading pulped paper waste on land without a license Prosecution Act: Epr07 R12 & R38(1)(A) Hearing Date: 14th July 2010 Verdict: Guilty Fine: 19500 Costs: 5865 Positional Accuracy: Manually positioned to the address or location	A13SE (S)	0	2	376195 411059
13	Substantiated Pollution Incident Register Authority: Environment Agency - North West Region, South Area Incident Date: 7th December 2001 Incident Reference: 47091 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Crude Sewage	A14SW (E)	577	2	376788 410844
14	Substantiated Pollution Incident Register Authority: Environment Agency - North West Region, South Area Incident Date: 15th July 2003 Incident Reference: 173939 Water Impact: Category 4 - No Impact Air Impact: Category 2 - Significant Incident Land Impact: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Crude Sewage	A9NW (SE)	692	2	376740 410567

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Water Abstractions Operator: D M Lord Licence Number: 2569003089 Permit Version: 100 Location: Borehole At Arthur Lane Nurseries Ainsworth 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): 110 Yearly Rate (m3): 9092 Details: Land & Prems-Arthur Lane Nurseries Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st May 1995 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	429	2	375790 410780
16	Water Abstractions Operator: Harwood Golf Club Licence Number: 2569003078 Permit Version: 100 Location: Unnamed Trib Of Blackshaw Brk At Harwood Golf Club And Re Authority: Environment Agency, North West Region Abstraction: Golf Courses: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 11 Yearly Rate (m3): 455 Details: Harwood Golf Club Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th April 1980 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	483	2	375700 411300
17	Water Abstractions Operator: D F Marsden Licence Number: 2569001177 Permit Version: 100 Location: B/Hole , Old Holts Farmroading Brook Rd, Harwood, Bolton 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): 1591 Details: Premises, Old Holts Farm, Harwood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 24th February 1969 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A18NE (N)	686	2	376200 411800
18	Water Abstractions Operator: Fibermark Red Bridge International Ltd Licence Number: 2569003051 Permit Version: 102 Location: Cherry Tree And Pimhole Reservoirs Fed By Surface Drainage 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): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Ainsworth, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th June 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7NW (SW)	852	2	375400 410600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	Water Abstractions Operator: Fibermark Red Bridge International Ltd Licence Number: 2569003051 Permit Version: 101 Location: Cherry Tree And Pimhole Reservoirs Fed By Surface Drainage 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): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Ainsworth, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 18th April 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	852	2	375400 410600
18	Water Abstractions Operator: Brightmet Golf Club Limited Licence Number: 2569003098 Permit Version: 1 Location: Pimhole Reservoir At Redbridge, Bolton Authority: Environment Agency, North West Region Abstraction: Golf Courses: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Brightmet Golf Club Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	874	2	375400 410560
18	Water Abstractions Operator: Neenah Red Bridge International Limited Licence Number: 2569003051 Permit Version: 103 Location: Cherry Tree And Pimhole Reservoirs Fed By Surface Drainage 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): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Ainsworth, Bolton Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 20th January 2022 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	881	2	375397 410552
19	Water Abstractions Operator: Neenah Red Bridge International Limited Licence Number: 2569003051 Permit Version: 103 Location: Cherry Tree & Pimhole R/Voires Fed By Surface Drainage 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): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Ainsworth, Bolton Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 20th January 2022 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	876	2	375484 410451

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	Water Abstractions Operator: Neenah Red Bridge International Limited Licence Number: 2569003051 Permit Version: 103 Location: Cherry Tree & Pimhole R/Voires Fed By Surface Drainage 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): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Ainsworth, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 20th January 2022 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7NW (SW)	901	2	375500 410400
20	Water Abstractions Operator: Fibermark Red Bridge International Ltd Licence Number: 2569003051 Permit Version: 102 Location: Cherry Tree & Pimhole R/Voires Fed By Surface Drainage 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): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Ainsworth, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th June 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7NW (SW)	901	2	375500 410400
20	Water Abstractions Operator: Fibermark Red Bridge International Ltd Licence Number: 2569003051 Permit Version: 101 Location: Cherry Tree & Pimhole R/Voires Fed By Surface Drainage 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): 218 Yearly Rate (m3): 54600 Details: Land At Ainsworth, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 18th April 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7NW (SW)	901	2	375500 410400
20	Water Abstractions Operator: Rexham Cfp Ltd. Licence Number: 2569003051 Permit Version: 101 Location: Cherry Tree & Pimhole R/Voires Fed By Surface Drainage \$114 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): 0 Yearly Rate (m3): 0 Details: Land At Ainsworth, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st June 1999 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7NW (SW)	901	2	375500 410400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
21	Water Abstractions Operator: The Trustees Of Harwood Golf Club Licence Number: 2569003095/R02 Permit Version: 1 Location: Borehole At Harwood Golf Club Authority: Environment Agency, North West Region Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Harwood Golf Club Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 1st April 2015 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	912	2	375450 411690
21	Water Abstractions Operator: Mr J S Fairhurst And Mr B G Green And Mr J Fish And Mr C Wood Licence Number: 2569003095/R1 Permit Version: 1 Location: Borehole At Harwood Golf Club Authority: Environment Agency, North West Region Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Harwood Golf Club Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	912	2	375450 411690
21	Water Abstractions Operator: The Secretary Licence Number: 2569003095 Permit Version: 100 Location: Borehole At Harwood Golf Club Authority: Environment Agency, North West Region Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 50 Yearly Rate (m3): 10000 Details: Land At Harwood Golf Club Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 26th February 1999 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	912	2	375450 411690
	Water Abstractions Operator: Anthony Millward Rogers Licence Number: 2569001248 Permit Version: 100 Location: Borehole At Heights Barn, Four Lane Ends, Tottington 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): 343 Details: Land & Premises At Heights Barn Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th September 1995 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A23SE (N)	1049	2	376260 412160

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: The Elton Cop Dyeing Co Ltd Licence Number: 2569001160 Permit Version: 100 Location: Reservoirs Fed By Elton Brk At 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: Surface Daily Rate (m3): 3400 Yearly Rate (m3): 852000 Details: Premises At Walshaw Road, Bury Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th February 1975 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A15SW (E)	1254	2	377500 410900
	Water Abstractions Operator: E Joule & Sons Licence Number: 2569003068 Permit Version: 100 Location: Borehole At Premises, High Barn Farmharwood, Bolton 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): 3319 Details: High Barn Farm At Harwood, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 1967 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A22SE (N)	1340	2	375800 412400
	Water Abstractions Operator: Dussek Campbell Ltd Licence Number: 2569001206 Permit Version: Not Supplied Location: Reservoir Fed By Walshaw Brook, Walshaw, BURY Authority: Environment Agency, North West Region Abstraction: Cooling Abstraction Type: Not Supplied Source: River Daily Rate (m3): 2637 Yearly Rate (m3): 818280 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	A20SE (NE)	1469	2	377600 411695
	Water Abstractions Operator: Dussek Campbell Ltd Licence Number: 2542 Permit Version: Not Supplied Location: Walshaw, BURY Authority: Environment Agency, North West Region Abstraction: Cooling Abstraction Type: Not Supplied Source: Reservoir/Pond Daily Rate (m3): 580000 Yearly Rate (m3): 18000000 Details: Reservoir Fed By Walshaw Brook; Status: Revoked; Lapsed Or 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	A20SE (NE)	1471	2	377600 411700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: J Houghton Licence Number: 2569001019 Permit Version: 100 Location: Borehole At Isherwoods Farm, Walshaw 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): 3410 Details: Isherwoods Farm, Walshaw Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 12th January 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A23NW (N)	1488	2	376100 412600
	Water Abstractions Operator: Ainsworth Finishing Company Ltd Licence Number: 2569003042 Permit Version: 102 Location: Borehole At Premises, Ainsworth Millbrightmet, Bolton 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: At Ainsworth Mill, Brightmet Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 23rd February 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2SW (SW)	1578	2	375500 409600
	Water Abstractions Operator: C.V. Home Furnishings Ltd Licence Number: 2569003042 Permit Version: 101 Location: Borehole At Premises, Ainsworth Millbrightmet, Bolton 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): 436 Yearly Rate (m3): 0 Details: At Ainsworth Mill, Brightmet Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A2SW (SW)	1578	2	375500 409600
	Water Abstractions Operator: Pcn Properties Llp Licence Number: 2569003042/R1 Permit Version: 104 Location: Borehole At Premises, Ainsworth Mill Brightmet, Bolton 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 Ainsworth Mill, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 6th August 2010 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2SE (S)	1602	2	375560 409550

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Pnc Properties Llp Licence Number: 2569003042 Permit Version: 104 Location: Borehole At Premises, Ainsworth Mill Brightmet, Bolton 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 Ainsworth Mill Brightmet Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 15th October 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2SE (S)	1602	2	375560 409550
	Water Abstractions Operator: Ainsworth Finishing Company Ltd Licence Number: 2569003042 Permit Version: 103 Location: Borehole At Premises, Ainsworth Mill Brightmet, Bolton 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 Ainsworth Mill Brightmet Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th August 2005 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2SE (S)	1602	2	375560 409550
	Water Abstractions Operator: Ainsworth Finishing Company Ltd. Licence Number: 2569003043 Permit Version: 102 Location: Reservoir Fed By Surface Drainage Atpremises, Ainsworth Mill 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: Ainsworth Mill, Brightmet, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 23rd February 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2SW (SW)	1671	2	375500 409500
	Water Abstractions Operator: Ainsworth Finishing Company Ltd Licence Number: 2569003043 Permit Version: 103 Location: Reservoir Fed By Surface Drainage Atpremises, Ainsworth Mill 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: Ainsworth Mill, Brightmet, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 23rd February 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A2SW (SW)	1671	2	375500 409500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Ainsworth Finishing Company Licence Number: 2569003043 Permit Version: 101 Location: Reservoir Fed By Surface Drainage At premises, Ainsworth Mill 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): 755 Yearly Rate (m3): 236392 Details: Ainsworth Mill, Breightmet, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 20th September 1999 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A2SW (SW)	1671	2	375500 409500
	Water Abstractions Operator: Ainsworth Finishing Company Ltd Licence Number: 2569003043 Permit Version: 104 Location: Reservoir Fed By Surface Drainage At Premises Ainsworth Mill 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: Lands Ainsworth Mill Breightmet Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th August 2005 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2SE (S)	1729	2	375520 409430
	Water Abstractions Operator: Ainsworth Finishing Company Ltd Licence Number: 2569003043 Permit Version: 103 Location: Reservoir Fed By Surface Drainage At Premises Ainsworth Mill 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: Ainsworth Mill, Breightmet, Bolton Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 23rd February 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2SE (S)	1729	2	375520 409430
	Water Abstractions Operator: J Calderbank Licence Number: 2569003037 Permit Version: 100 Location: Borehole At Hoyles Fold Farm, Harwood, Bolton, 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): 2 Yearly Rate (m3): 750 Details: Hoyles Fold And Castle Farms 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	(NW)	1948	2	375400 412900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: C.V. Home Furnishings Ltd Licence Number: 2569003012 Permit Version: 101 Location: Borehole At Premises, Ainsworth Millbrightmet, Bolton 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): 27 Yearly Rate (m3): 8183 Details: At Ainsworth Mill, Brightmet Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1952	2	375500 409200
	Water Abstractions Operator: Pcn Properties Llp Licence Number: 2569003012/R1 Permit Version: 104 Location: Borehole At Premises, Ainsworth Millbrightmet, Bolton 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 Ainsworth Mill Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 6th August 2010 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1975	2	375460 409190
	Water Abstractions Operator: Pnc Properties Llp Licence Number: 2569003012 Permit Version: 104 Location: Borehole At Premises, Ainsworth Millbrightmet, Bolton 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 Ainsworth Mill Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 15th October 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1975	2	375460 409190
	Water Abstractions Operator: Ainsworth Finishing Company Ltd Licence Number: 2569003012 Permit Version: 103 Location: Borehole At Premises, Ainsworth Millbrightmet, Bolton 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 Ainsworth Mill Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th August 2005 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1975	2	375460 409190

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Ainsworth Finishing Company Ltd Licence Number: 2569003012 Permit Version: 102 Location: Borehole At Premises, Ainsworth Millbroughtmet, Bolton 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: At Ainsworth Mill, Broughtmet Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 23rd February 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1975	2	375460 409190
	Groundwater Vulnerability Map Combined Secondary Bedrock Aquifer - Medium Vulnerability Classification: Medium Combined Vulnerability: Productive Bedrock Aquifer, No Superficial Aquifer Combined Aquifer: Low Pollutant Speed: Well Connected Fractures Bedrock Flow: >550 mm/year Dilution: <40% Baseflow Index: <90% Superficial Patchiness: <3m Superficial Thickness: No Data Superficial Recharge:	A13SW (NE)	0	4	376192 411072
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13SW (NE)	0	4	376192 411072
	Superficial Aquifer Designations No Data Available				
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
22	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 208.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NE (NE)	237	5	376418 411268
23	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 143.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A13NW (NW)	244	5	375966 411264

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.9 Watercourse Level: Underground Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A13NW (NW)	250	5	375972 411277
25	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 140.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A13NW (NW)	252	5	375974 411281
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 177.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A13NW (W)	303	5	375856 411208
27	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 257.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (W)	303	5	375856 411208
28	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.5 Watercourse Level: Underground Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A13NW (NW)	318	5	376044 411402
29	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 19.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A13NW (NW)	320	5	376047 411406
30	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 99.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	367	5	376513 410799
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 195.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NE (S)	382	5	376328 410672
32	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 234.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (NE)	406	5	376622 411276

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 402.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (NE)	406	5	376622 411276
34	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 152.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NE (W)	412	5	375717 411117
35	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 447.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A12NE (W)	412	5	375717 411117
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 316.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	439	5	375839 410716
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NE (SE)	457	5	376501 410670
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 124.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NE (SE)	462	5	376505 410667
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 50.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NW (SE)	463	5	376582 410732
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NW (SE)	503	5	376631 410728
41	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NW (SE)	505	5	376634 410728

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 15.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NE (W)	506	5	375653 411248
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 14.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NW (SE)	513	5	376644 410728
44	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.5 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	516	5	375743 411423
45	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 128.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NE (W)	517	5	375646 411262
46	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 73.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	517	5	375751 411433
47	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 13.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NW (SE)	526	5	376659 410726
48	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 73.0 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NW (SE)	536	5	376672 410726
49	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	550	5	375754 411484
50	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 523.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	550	5	375773 411501

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
51	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 29.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	554	5	375750 411485
52	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	581	5	375721 411495
53	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 25.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	585	5	375718 411497
54	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 76.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NW (SE)	591	5	376744 410736
55	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 31.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	603	5	376864 411091
56	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (SE)	626	5	376807 410771
57	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 115.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (SE)	633	5	376816 410773
58	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 226.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NE (E)	634	5	376895 411085
59	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 71.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NW (SE)	695	5	376840 410691

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
60	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 216.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	704	5	376914 410819
61	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 14.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	719	5	375754 410433
62	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	A7NE (SW)	719	5	375738 410443
63	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 11.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (SW)	723	5	375883 410368
64	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 142.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NE (SE)	729	5	376874 410680
65	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 325.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NE (SE)	729	5	376900 410728
66	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	736	5	375559 410578
67	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 80.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	736	5	375557 410580
68	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 15.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	741	5	375636 410492

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
69	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 29.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A12SW (W)	742	5	375399 410893
70	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 672.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17NE (NW)	751	5	375814 411771
71	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 14.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	755	5	375623 410485
72	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 97.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A12SW (W)	760	5	375382 410885
73	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 129.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	766	5	375610 410483
74	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 8.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	788	5	375479 410597
75	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 79.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	792	5	375527 410530
76	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 12.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	792	5	375479 410590
77	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 80.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	794	5	375338 410943

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
78	OS Water Network Lines Watercourse Form: Reservoir Watercourse Length: 2.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	803	5	375466 410590
79	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 133.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	804	5	375470 410582
80	OS Water Network Lines Watercourse Form: Reservoir Watercourse Length: 7.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	804	5	375470 410582
81	OS Water Network Lines Watercourse Form: Reservoir Watercourse Length: 63.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	805	5	375465 410588
82	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 92.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	823	5	377073 410959
83	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	838	5	375306 410872
84	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 75.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A12SW (W)	840	5	375305 410861
85	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 70.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	841	5	375284 411033
86	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 246.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	849	5	376032 411950

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
87	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 197.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (W)	862	5	375265 411127
88	OS Water Network Lines Watercourse Form: Reservoir Watercourse Length: 37.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	865	5	375404 410569
89	OS Water Network Lines Watercourse Form: Reservoir Watercourse Length: 26.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	865	5	375404 410569
90	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 30.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	866	5	375262 410969
91	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 27.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	871	5	375438 410513
92	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 69.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	871	5	375347 410657
93	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	875	5	375418 410532
94	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 80.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SW (NW)	882	5	375511 411711
95	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 93.5 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	885	5	375394 410548

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
96	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 18.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SW (NW)	890	5	375499 411710
97	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	894	5	375235 410956
98	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 99.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	894	5	375303 410696
99	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 189.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SW (NW)	900	5	375481 411706
100	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 110.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A12SW (W)	902	5	375244 410851
101	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 103.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	902	5	375244 410851
102	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 92.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	914	5	376951 411689
103	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 102.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	914	5	377155 410896
104	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 104.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17NE (NW)	925	5	375584 411829

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
105	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17NE (NW)	928	5	375588 411836
106	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 41.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17NE (NW)	929	5	375590 411839
107	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 61.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	933	5	375306 410600
108	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	933	5	375306 410600
109	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 11.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17NW (NW)	937	5	375502 411778
110	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	939	5	377172 410857
111	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	942	5	377175 410855
112	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 62.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	947	5	377179 410853
113	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 112.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	967	5	376981 411736

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
114	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 185.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	970	5	377036 411675
115	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 15.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	978	5	375312 410504
116	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 57.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A7NW (SW)	983	5	375295 410522
117	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 290.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A7NW (SW)	984	5	375278 410548
118	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 486.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A7NW (SW)	994	5	375298 410496
119	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 144.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	995	5	377066 411674
120	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 119.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	999	5	375935 410069
121	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blackshaw Brook Catchment Name: Mersey Primacy: 1	A11SE (W)	1000	5	375152 410814

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
122	Historical Landfill Sites Licence Holder: T J Murphy Location: Simister, Ainsworth, Bury, Greater Manchester Name: Delph Lane Quarry / Land at Egypt Lane Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15800 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste: Deposited Waste included Household Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: C122, 01140	A8NW (S)	548	2	376060 410504
123	Historical Landfill Sites Licence Holder: Not Supplied Location: Ainsworth, Greater Manchester Name: Delph Lodge Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15806 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste: Deposited Waste included Industrial and Household Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: C086	A8SE (S)	696	2	376474 410390
	Local Authority Landfill Coverage Name: Bury Metropolitan Borough Council - Has not been able to supply Landfill data		0	6	376192 411072
	Local Authority Landfill Coverage Name: Bolton Metropolitan Borough Council - Has supplied landfill data		411	7	375719 411120
124	Potentially Infilled Land (Non-Water) Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1982	A14NW (E)	364	-	376611 411192
125	Potentially Infilled Land (Non-Water) Bearing Ref: S Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1982	A8NW (S)	414	-	376131 410628
126	Potentially Infilled Land (Non-Water) Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1982	A14NW (E)	452	-	376712 411083
127	Potentially Infilled Land (Non-Water) Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1982	A19SW (NE)	655	-	376646 411621
128	Potentially Infilled Land (Non-Water) Bearing Ref: S Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1982	A8NE (S)	667	-	376411 410400
129	Potentially Infilled Land (Non-Water) Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1982	A18SW (NW)	689	-	375880 411735
130	Potentially Infilled Land (Non-Water) Bearing Ref: N Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1982	A18NW (N)	834	-	376030 411935
131	Potentially Infilled Land (Non-Water) Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1982	A9SW (SE)	960	-	376760 410238

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
132	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A8SW (S)	670	-	376087 410376
133	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A12NW (W)	744	-	375435 411345
134	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1931	A8SE (S)	779	-	376411 410283
135	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A9NW (SE)	798	-	376777 410454
136	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A8SE (S)	802	-	376235 410234
137	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1850	A8SW (S)	814	-	376132 410225
138	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A9SW (SE)	826	-	376721 410374
139	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A8SW (S)	903	-	375871 410183
140	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1931	A8SE (S)	932	-	376234 410104
141	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1850	A15NW (E)	962	-	377217 411198
142	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A12NW (W)	985	-	375184 411349
143	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1955	A3NW (S)	987	-	376141 410051
144	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A11SE (W)	996	-	375128 411061

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)	A13SW (NE)	0	1	376192 411072
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic: <15 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel: 15 - 30 mg/kg Concentration:	A13SW (NE)	0	1	376192 411072
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic: 15 - 25 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel: 15 - 30 mg/kg Concentration:	A13NW (N)	0	1	376191 411085
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic: <15 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel: 15 - 30 mg/kg Concentration:	A13NW (N)	122	1	376163 411235
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic: 15 - 25 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel: 15 - 30 mg/kg Concentration:	A13SE (S)	151	1	376199 410884
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic: 15 - 25 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel: 15 - 30 mg/kg Concentration:	A13NE (N)	164	1	376207 411277
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic: <15 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel: 15 - 30 mg/kg Concentration:	A13SE (SE)	201	1	376305 410856

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A13NE (NE)	222	1	376412 411254
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A13SE (S)	263	1	376216 410773
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A13NE (NE)	315	1	376386 411380
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18SE (N)	423	1	376290 411522
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18SE (N)	423	1	376290 411522
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A8NE (S)	475	1	376369 410588

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NW (E)	485	1	376740 411161
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A8NE (SE)	604	1	376500 410500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A17SE (NW)	606	1	375848 411622
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18SE (N)	614	1	376353 411704
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A17SE (NW)	662	1	375831 411678
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14SW (SE)	666	1	376858 410784

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A8NE (SE)	676	1	376500 410422
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18NE (N)	678	1	376334 411775
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A17SE (NW)	699	1	375664 411604
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A8SE (SE)	725	1	376500 410369
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14SE (E)	739	1	377000 411072
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14SE (E)	740	1	377000 411056

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14SE (E)	744	1	377000 411005
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NE (E)	755	1	377000 411244
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14SE (E)	756	1	377000 410929
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14SE (E)	758	1	377000 410921
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A9SW (SE)	762	1	376548 410348
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NE (E)	773	1	377000 411319

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A7SE (SW)	781	1	375736 410371
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A9NE (SE)	826	1	377000 410709
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A8SE (S)	832	1	376500 410255
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A19SE (NE)	835	1	377000 411480
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A9NE (SE)	854	1	376897 410500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NE (E)	867	1	377108 411274

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A19SE (NE)	878	1	377000 411564
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A7SE (SW)	880	1	375719 410269
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18NE (N)	940	1	376500 412000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A19NW (NE)	979	1	376700 411967
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A19NW (NE)	985	1	376639 412000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A7NW (SW)	993	1	375246 410584

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
145	BGS Recorded Mineral Sites Site Name: Old Hols Location: Walshaw, Bury, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96458 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	A18SW (N)	371	1	376171 411485
146	BGS Recorded Mineral Sites Site Name: New Brown Hill Quarry Location: Ainsworth, Bury, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96463 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	A8NW (S)	398	1	376128 410645
147	BGS Recorded Mineral Sites Site Name: Ainsworth Quarry Location: Ainsworth, Bury, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 9806 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	A8NW (S)	591	1	376090 410455
148	BGS Recorded Mineral Sites Site Name: Bently Hall Location: Walshaw, Bury, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96457 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	A19SW (NE)	670	1	376641 411643
149	BGS Recorded Mineral Sites Site Name: Higher Bury Meadows Location: Tottington, Bury, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96474 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Old Lawrence Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A18SW (NW)	696	1	375877 411742
150	BGS Recorded Mineral Sites Site Name: Ainsworth Quarry Location: Ainsworth, Bury, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 256384 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Old Lawrence Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SE (S)	723	1	376431 410347

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
151	BGS Recorded Mineral Sites Site Name: Ainsworth Quarry Location: Ainsworth, Bury, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 256383 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Old Lawrence Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SE (S)	797	1	376505 410294
152	BGS Recorded Mineral Sites Site Name: Ainsworth Quarry Location: Ainsworth, Bury, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 15301 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	A9SW (SE)	805	1	376555 410305
153	BGS Recorded Mineral Sites Site Name: Lower Bently Hall Location: Walshaw, Bury, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96456 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	A19SE (NE)	825	1	376977 411501
154	BGS Recorded Mineral Sites Site Name: The Height Location: Tottington, Bury, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96449 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Old Lawrence Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A18NW (N)	921	1	375961 412009
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13SW (NE)	0	8	376192 411072
	Mining Instability Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13SW (NE)	0	-	376192 411072
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (NE)	0	1	376192 411072
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (NE)	0	1	376192 411072

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (NE)	0	1	376192 411072
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (NE)	0	1	376192 411072
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	5	1	376157 411111
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	57	1	376251 411153
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (NE)	0	1	376192 411072
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	36	1	376129 411127
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (NE)	0	1	376192 411072
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	0	1	376167 411050
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	22	1	376175 411136
	Radon Potential - Radon Affected Areas Affected Area: The property is an Intermediate probability radon area (3 to 5% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13SW (NE)	0	1	376192 411072
	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	A13SW (SW)	0	1	376150 411050
	Radon Potential - Radon Protection Measures Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SW (NE)	0	1	376192 411072
	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	A13SW (SW)	0	1	376150 411050

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
155	Contemporary Trade Directory Entries Name: Webbing Winders Location: 12, Arthur Lane, Ainsworth, Bolton, BL2 5PW Classification: Road Haulage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (SW)	505	-	375938 410581
156	Contemporary Trade Directory Entries Name: Caramedic Location: 37, Delph Lane, Bolton, BL2 5PP Classification: Caravans - Servicing & Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SW (S)	666	-	376059 410384
157	Contemporary Trade Directory Entries Name: Holts Turf & Natural Paving Location: Old Holts, Roding Brook Road, Bolton, BL2 4JD Classification: Builders' Merchants Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NW (N)	708	-	376108 411819
157	Contemporary Trade Directory Entries Name: Holts Turf & Natural Paving Location: Unit 1-2, Old Holts Farm, Roding Brook Road, Bolton, Lancashire, BL2 4JD Classification: Builders' Merchants Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18NW (N)	720	-	376122 411832
158	Contemporary Trade Directory Entries Name: Master Build Products Ltd Location: Moorside Mill, Church Street, Ainsworth, Bolton, BL2 5RD Classification: Paint Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	824	-	376723 410377
159	Contemporary Trade Directory Entries Name: Roofline Location: 42, Church Street, Ainsworth, Bolton, BL2 5RT Classification: Cladding Suppliers & Installers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	868	-	376492 410214
159	Contemporary Trade Directory Entries Name: Bolton Enamellers Location: 50, Church Street, Ainsworth, Bolton, BL2 5RT Classification: Enamelling Status: Active Positional Accuracy: Automatically positioned to the address	A8SE (S)	871	-	376511 410218
159	Contemporary Trade Directory Entries Name: Bolton Enamellers Location: 50, Church Street, Ainsworth, Bolton, BL2 5RT Classification: Enamelling Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	871	-	376511 410218
160	Contemporary Trade Directory Entries Name: Ainsworth Service Station Ltd Location: 81, Church Street, Ainsworth, Bolton, BL2 5RD Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	918	-	376806 410323
160	Contemporary Trade Directory Entries Name: George Nightingale & Son Location: Church St, Ainsworth, Bolton, Lancashire, BL2 5RD Classification: Car Body Repairs Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A9SW (SE)	946	-	376811 410291
161	Contemporary Trade Directory Entries Name: Arrows Fletcher Packaging Services Location: 4, Fellside, Bolton, BL2 4HB Classification: Packaging Materials Manufacturers & Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	970	-	375204 411368

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
162	Fuel Station Entries Name: Ainsworth Service Station Location: Church Street , Ainsworth , Bolton, Greater Manchester, BL2 5RD Brand: Bfl Premises Type: Not Applicable Status: Obsolete Positional Accuracy: Automatically positioned to the address	A9SW (SE)	918	-	376806 410323
163	Points of Interest - Commercial Services Name: Webbing Winders Location: 12 Arthur Lane, Ainsworth, Bolton, BL2 5PW Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A8NW (SW)	505	9	375938 410581
163	Points of Interest - Commercial Services Name: Webbing Winders Location: 12 Arthur Lane, Ainsworth, Bolton, BL2 5PW Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A8NW (SW)	505	9	375938 410581
164	Points of Interest - Commercial Services Name: A C Rosbottom Location: Bentley Hall Road, Bury, BL8 3PH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	642	9	376605 411632
165	Points of Interest - Manufacturing and Production Name: Tank Location: BL2 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A13SE (S)	155	9	376239 410883
166	Points of Interest - Manufacturing and Production Name: Wind Turbine Location: BL2 Category: Industrial Features Class Code: Energy Production Positional Accuracy: Positioned to an adjacent address or location	A8NW (S)	380	9	376050 410677
167	Points of Interest - Manufacturing and Production Name: Tank Location: BL2 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14SW (SE)	537	9	376684 410742
168	Points of Interest - Manufacturing and Production Name: Quarry (Disused) Location: BL2 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A8NW (S)	616	9	376106 410428
168	Points of Interest - Manufacturing and Production Name: Quarry (Disused) Location: BL2 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A8NW (S)	620	9	376113 410423
169	Points of Interest - Manufacturing and Production Name: Tank Location: BL2 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A7NE (SW)	758	9	375617 410486
170	Points of Interest - Manufacturing and Production Name: Tank Location: BL2 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8SW (S)	763	9	376166 410273
171	Points of Interest - Manufacturing and Production Name: Tanks Location: BL8 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	932	9	377091 411515

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
171	Points of Interest - Manufacturing and Production Name: Tank Location: BL8 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SE (NE)	936	9	377096 411514
171	Points of Interest - Manufacturing and Production Name: Tank Location: BL8 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SE (NE)	940	9	377100 411515
172	Points of Interest - Public Infrastructure Name: Tip Location: BL2 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A8NW (S)	401	9	376121 410643
173	Points of Interest - Public Infrastructure Name: Filter Bed Location: BL2 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A14SW (SE)	554	9	376705 410744
173	Points of Interest - Public Infrastructure Name: Filter Bed Location: BL2 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A14SW (SE)	560	9	376713 410745
174	Points of Interest - Public Infrastructure Name: Sluice Location: BL8 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A14NE (E)	672	9	376930 411156
175	Points of Interest - Public Infrastructure Name: Weir Location: BL2 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	812	9	375458 410586
175	Points of Interest - Public Infrastructure Name: Weir Location: BL2 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	813	9	375456 410587
175	Points of Interest - Public Infrastructure Name: Sluice Location: BL2 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	878	9	375401 410552
176	Points of Interest - Public Infrastructure Name: Sluice Location: BL2 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	873	9	375491 410449
176	Points of Interest - Public Infrastructure Name: Sluice Location: BL2 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	876	9	375487 410449
177	Points of Interest - Public Infrastructure Name: Sluice Location: BL8 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	904	9	377155 410956

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
177	Points of Interest - Public Infrastructure Name: Sluice Location: BL8 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	909	9	377160 410956
178	Points of Interest - Recreational and Environmental Name: Playground Location: Tommy Lane, BL2 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A8SE (S)	812	9	376202 410223
178	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8SE (S)	814	9	376203 410221

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
179	Areas of Adopted Green Belt Authority: Bury Metropolitan Borough Council Plan Name: Bury Unitary Development Plan Status: Adopted Plan Date: 29th August 1997	A13SW (NE)	0	6	376192 411072
180	Areas of Adopted Green Belt Authority: Bolton Metropolitan Borough Council Plan Name: Allocations Status: Adopted Plan Date: 3rd December 2014	A12NE (W)	414	7	375717 411125

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Environment Agency - Head Office Salford City Council - Environmental Health Department Rochdale Metropolitan Borough Council - Environmental Health Department Blackburn with Darwen Borough Council - Environmental Health Department Bolton Metropolitan Borough Council - Environmental Health Department Bury Metropolitan Borough Council - Environmental Health Department	June 2020 October 2017 October 2017 September 2017 September 2017 September 2017	Annually Annual Rolling Update Annually Annual Rolling Update Annual Rolling Update Annual Rolling Update
Discharge Consents Environment Agency - North West Region	October 2022	Quarterly
Enforcement and Prohibition Notices Environment Agency - North West Region	March 2013	
Integrated Pollution Controls Environment Agency - North West Region	January 2009	
Integrated Pollution Prevention And Control Environment Agency - North West Region	October 2022	Quarterly
Local Authority Integrated Pollution Prevention And Control Blackburn with Darwen Borough Council - Environmental Health Department Bury Metropolitan Borough Council - Environmental Health Department Bolton Metropolitan Borough Council - Environmental Health Department Rochdale Metropolitan Borough Council - Environmental Health Department Salford City Council - Environmental Health Department	February 2015 February 2015 July 2014 July 2014 March 2015	Variable Variable Variable Variable Variable
Local Authority Pollution Prevention and Controls Blackburn with Darwen Borough Council - Environmental Health Department Bury Metropolitan Borough Council - Environmental Health Department Rochdale Metropolitan Borough Council - Environmental Health Department Bolton Metropolitan Borough Council - Environmental Health Department Salford City Council - Environmental Health Department	February 2015 February 2015 July 2014 July 2014 March 2015	Not Applicable Not Applicable Annual Rolling Update Not Applicable Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Blackburn with Darwen Borough Council - Environmental Health Department Bury Metropolitan Borough Council - Environmental Health Department Bolton Metropolitan Borough Council - Environmental Health Department Rochdale Metropolitan Borough Council - Environmental Health Department Salford City Council - Environmental Health Department	February 2015 February 2015 July 2014 July 2014 March 2015	Variable Variable Variable Variable Variable
Nearest Surface Water Feature Ordnance Survey	December 2022	
Pollution Incidents to Controlled Waters Environment Agency - North West Region	January 2000	
Prosecutions Relating to Authorised Processes Environment Agency - North West Region	July 2015	
Prosecutions Relating to Controlled Waters Environment Agency - North West Region	March 2013	
Registered Radioactive Substances Environment Agency - North West Region	June 2016	As notified
River Quality Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points Environment Agency - Head Office	April 2012	
River Quality Chemistry Sampling Points Environment Agency - Head Office	April 2012	
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 2022 October 2022 October 2022	Quarterly Quarterly Quarterly

Agency & Hydrological	Version	Update Cycle
Water Abstractions Environment Agency - North West Region	October 2022	Quarterly
Water Industry Act Referrals Environment Agency - North West Region	October 2017	
Groundwater Vulnerability Map Environment Agency - Head Office	June 2018	As notified
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	September 2022	Bi-Annually
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	August 2022	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	August 2022	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	August 2022	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	August 2022	Quarterly
Flood Defences Environment Agency - Head Office	August 2022	Quarterly
OS Water Network Lines Ordnance Survey	January 2023	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water Suitability Environment Agency - Head Office	February 2016	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	As notified

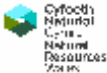
Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	November 2002	As notified
Historical Landfill Sites Environment Agency - Head Office	November 2022	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - North West Region	January 2009	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 2022 October 2022 October 2022	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	July 2022 July 2022 July 2022	Quarterly Quarterly Quarterly
Local Authority Landfill Coverage Blackburn with Darwen Borough Council Bolton Metropolitan Borough Council Bury Metropolitan Borough Council Rochdale Metropolitan Borough Council - Environmental Health Department Salford City Council - Environmental Health Department	February 2003 February 2003 February 2003 February 2003 February 2003	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Blackburn with Darwen Borough Council Bolton Metropolitan Borough Council Bury Metropolitan Borough Council Rochdale Metropolitan Borough Council - Environmental Health Department Salford City Council - Environmental Health Department	October 2018 October 2018 October 2018 October 2018 October 2018	
Potentially Infilled Land (Non-Water) Landmark Information Group Limited	December 1999	
Potentially Infilled Land (Water) Landmark Information Group Limited	December 1999	
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 2006 March 2006 March 2006	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	April 2018 April 2018 April 2018	
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	June 2015 June 2015 June 2015	

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	January 2022	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements Blackburn with Darwen Borough Council Bolton Metropolitan Borough Council - Planning Department Bury Metropolitan Borough Council Rochdale Metropolitan Borough Council Salford City Council	February 2016 February 2016 February 2016 February 2016 June 2016	Variable Variable Variable Variable Variable
Planning Hazardous Substance Consents Blackburn with Darwen Borough Council Bolton Metropolitan Borough Council - Planning Department Bury Metropolitan Borough Council Rochdale Metropolitan Borough Council Salford City Council	February 2016 February 2016 February 2016 February 2016 June 2016	Variable Variable Variable Variable Variable
Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	As notified
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	December 2015	As notified
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	November 2022	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
Coal Mining Affected Areas The Coal Authority - Property Searches	February 2023	Annual Rolling Update
Mining Instability Ove Arup & Partners	June 1998	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	As notified
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	September 2022	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	September 2022	Annually

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	January 2023	Quarterly
Fuel Station Entries Catalist Ltd - Experian	January 2023	Quarterly
Gas Pipelines National Grid	October 2021	Bi-Annually
Points of Interest - Commercial Services PointX	December 2022	Quarterly
Points of Interest - Education and Health PointX	December 2022	Quarterly
Points of Interest - Manufacturing and Production PointX	December 2022	Quarterly
Points of Interest - Public Infrastructure PointX	December 2022	Quarterly
Points of Interest - Recreational and Environmental PointX	December 2022	Quarterly
Underground Electrical Cables National Grid	May 2021	Bi-Annually

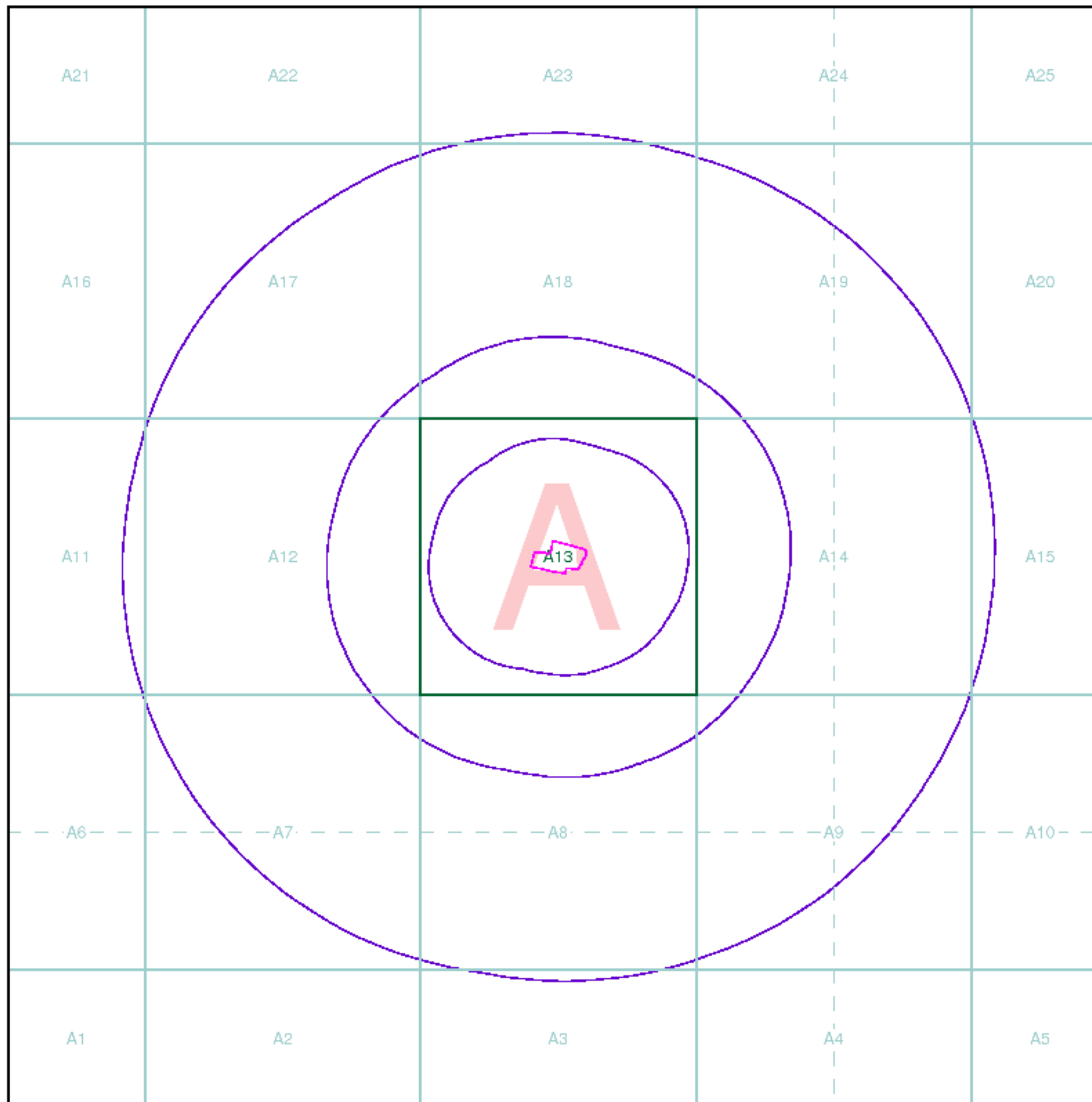
Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural England	February 2021	Bi-Annually
Areas of Adopted Green Belt Blackburn with Darwen Borough Council Bolton Metropolitan Borough Council Bury Metropolitan Borough Council Rochdale Metropolitan Borough Council Salford City Council	July 2022 July 2022 July 2022 July 2022 July 2022	Quarterly Quarterly Quarterly Quarterly Quarterly
Areas of Unadopted Green Belt Blackburn with Darwen Borough Council Bolton Metropolitan Borough Council Bury Metropolitan Borough Council Rochdale Metropolitan Borough Council Salford City Council	July 2022 July 2022 July 2022 July 2022 July 2022	Quarterly Quarterly Quarterly Quarterly Quarterly
Areas of Outstanding Natural Beauty Natural England	August 2022	Bi-Annually
Environmentally Sensitive Areas Natural England	January 2017	
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	February 2021	Bi-Annually
Marine Nature Reserves Natural England	July 2019	Bi-Annually
National Nature Reserves Natural England	January 2021	Bi-Annually
National Parks Natural England	February 2018	Bi-Annually
Nitrate Sensitive Areas Natural England	April 2016	Not Applicable
Nitrate Vulnerable Zones Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) Environment Agency - Head Office	April 2016 June 2017	Bi-Annually
Ramsar Sites Natural England	August 2020	Bi-Annually
Sites of Special Scientific Interest Natural England	February 2021	Bi-Annually
Special Areas of Conservation Natural England	July 2020	Bi-Annually
Special Protection Areas Natural England	February 2021	Bi-Annually

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 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	Bury Metropolitan Borough Council - Environmental Health Department 3 Knowsley Place, Duke Street, Bury, Lancashire, BL9 0EJ	Telephone: 0161 253 5000 Fax: 0161 253 5563 Website: www.bury.gov.uk
4	Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
5	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	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
7	Bolton Metropolitan Borough Council Town Hall, The Wellsprings, Bolton, Lancashire, BL1 1US	Telephone: 01204 522311 Fax: 01204 392808 Website: www.bolton.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	PointX 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
10	Natural England County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.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.



LK GROUP

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

L Consult, LK Consult Ltd, Unit 29 Eton Business Park,
Eton Hill Road, Radcliffe, Greater Manchester, M26 2ZS

Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Site Area (Ha): 0.68
Search Buffer (m): 1000

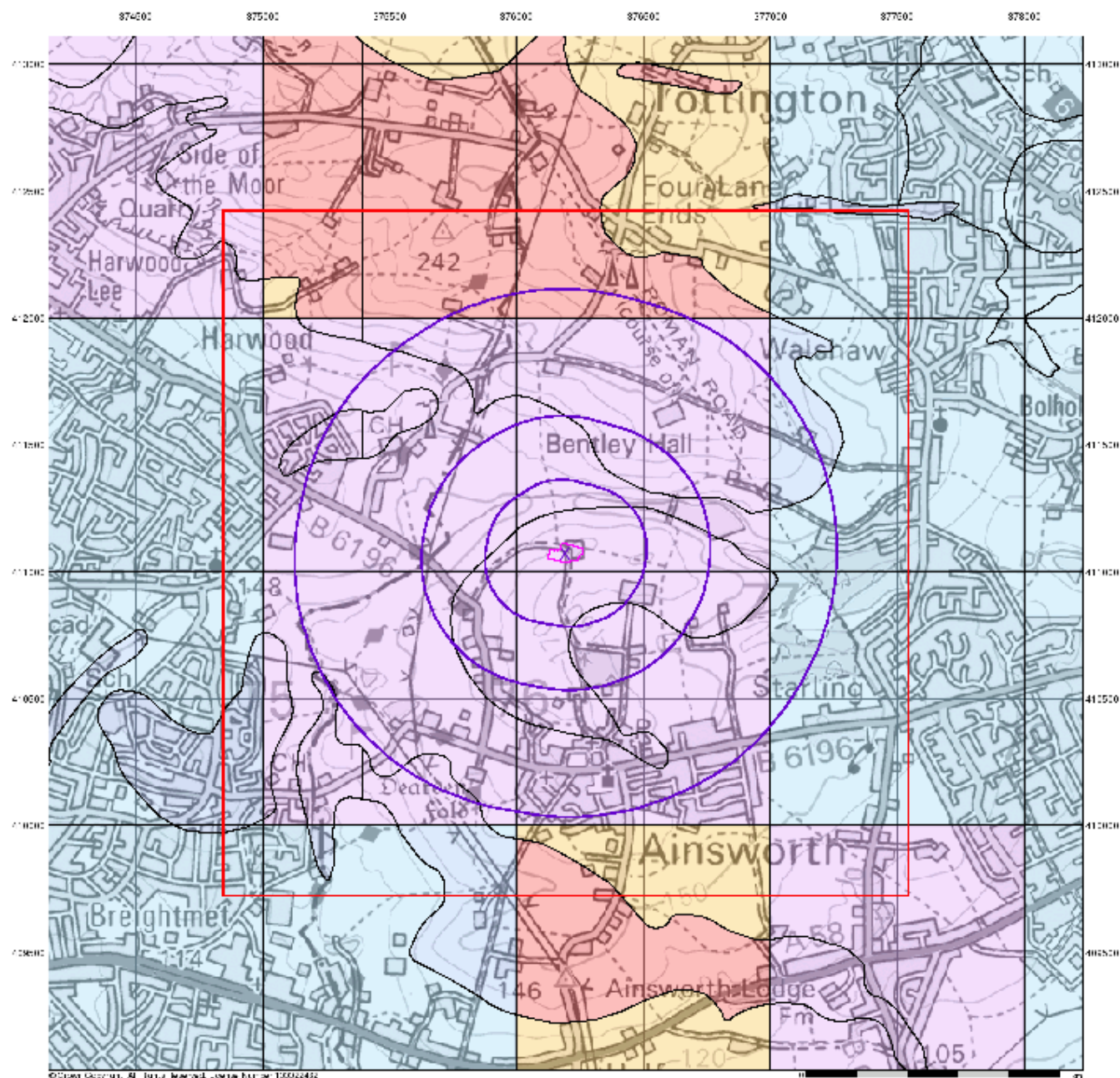
Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU

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



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GROUP

Groundwater Vulnerability

General

Boundary Line
 Search Buffer Line
 Existing Reference Point
 Slice
 Road

Agency and Hydrological

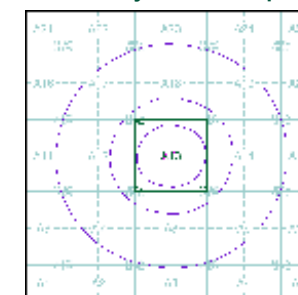
Bedrock Aquifers

High Vulnerability, Principal Aquifer
 High Vulnerability, Secondary Aquifer
 Medium Vulnerability, Principal Aquifer
 Medium Vulnerability, Secondary Aquifer
 Low Vulnerability, Principal Aquifer
 Low Vulnerability, Secondary Aquifer
 Unproductive Aquifer
 Soluble Rock

Superficial Aquifers

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

Site Sensitivity Context Map - Slice A



Order Details

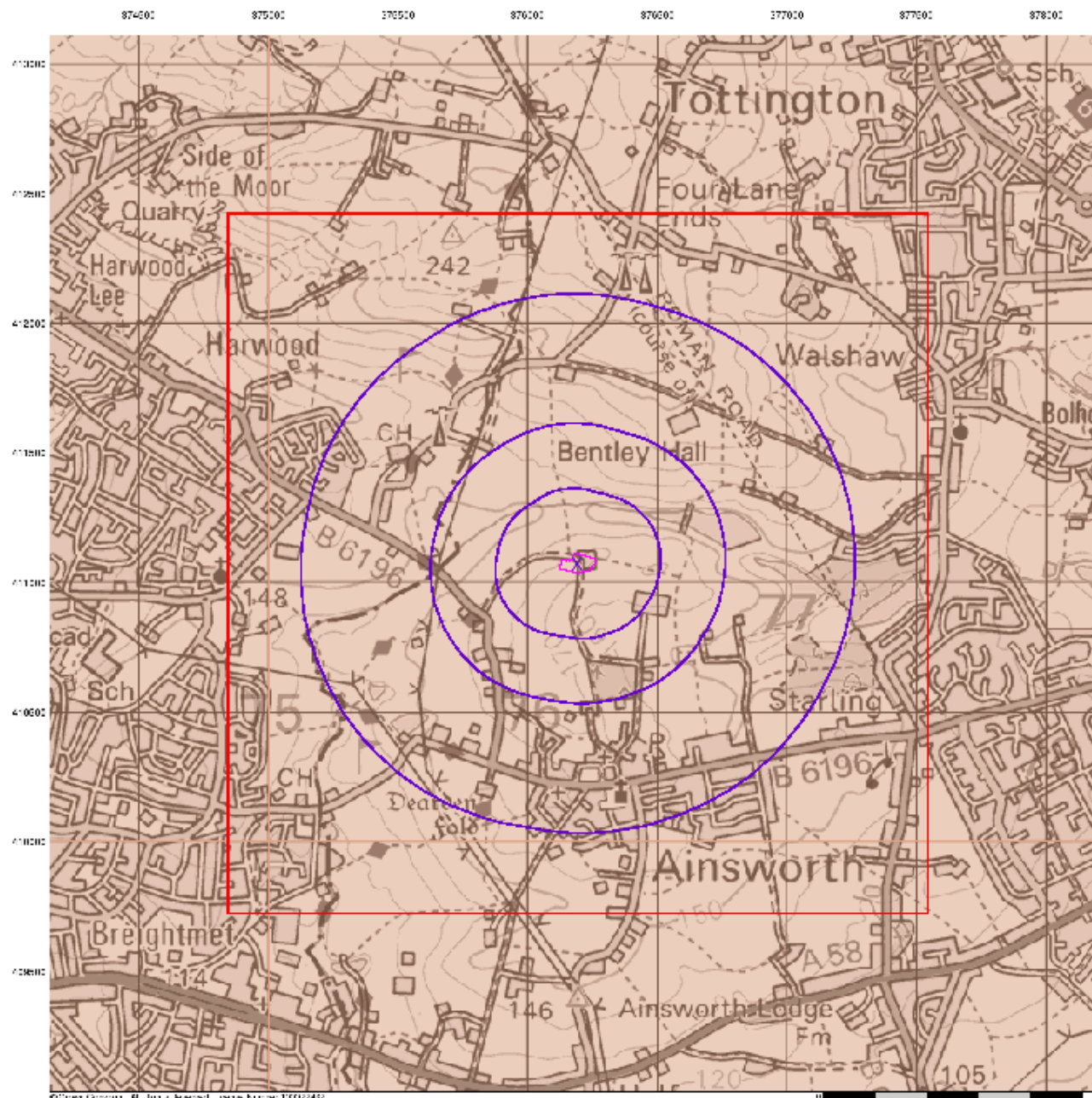
Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

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LKG GROUP

Bedrock Aquifer Designation

General

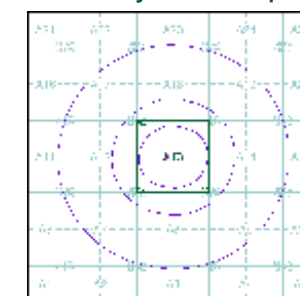
- ✱ Location of Site
- Search Buffer (m)
- ✱ Bedrock Reference Point
- Site
- Road

Agency and Hydrological

Geological Classes

- Fractured Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (lakes and ponds)

Site Sensitivity Context Map - Slice A



Order Details

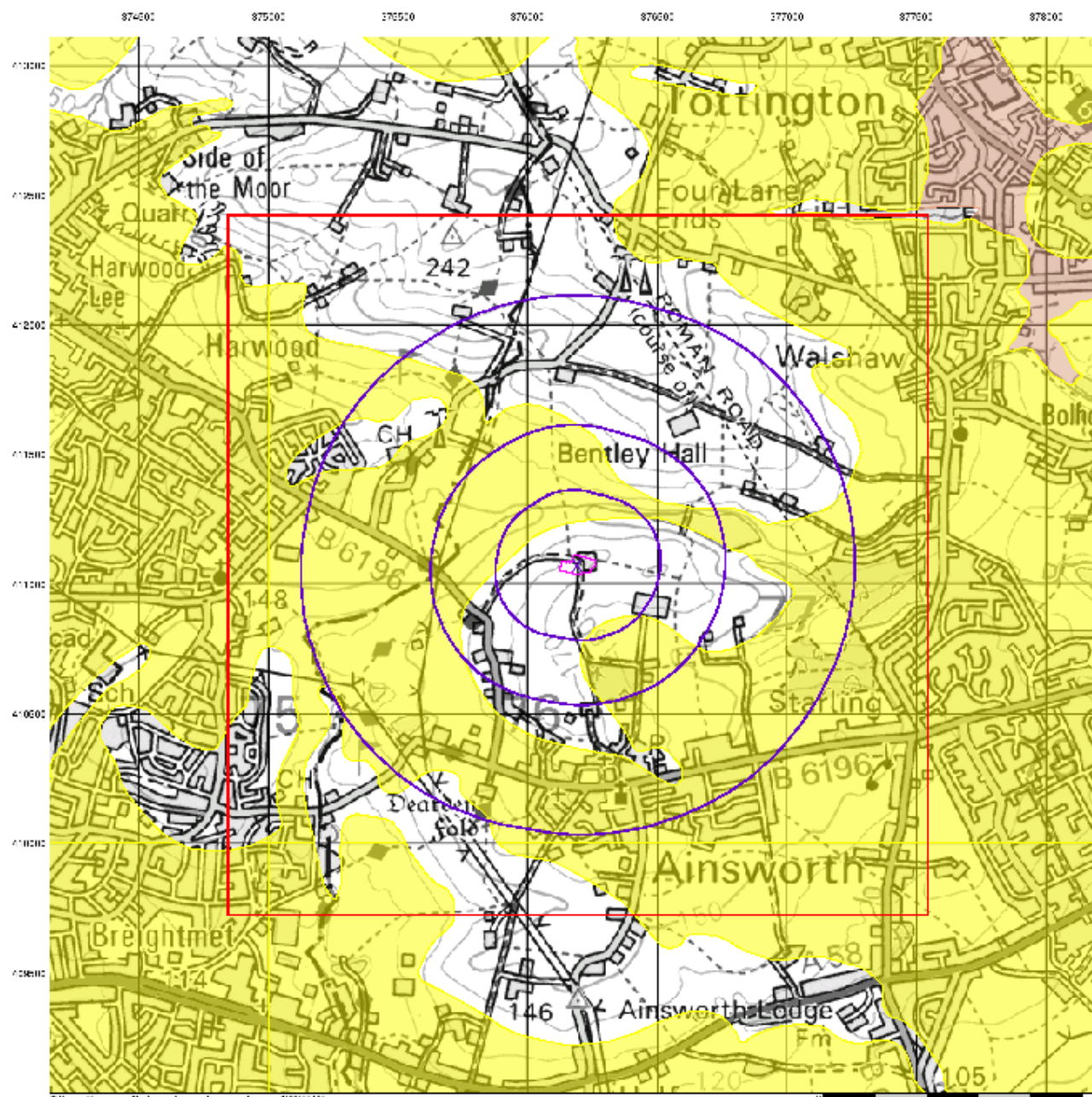
Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

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GROUP

Superficial Aquifer Designation

General

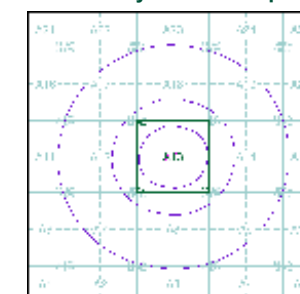
- Bearing Ref. Point
- Search Buffer
- Slice
- Pond

Agency and Hydrological

Geological Classes

- Productive Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (lakes and ponds)

Site Sensitivity Context Map - Slice A



Order Details

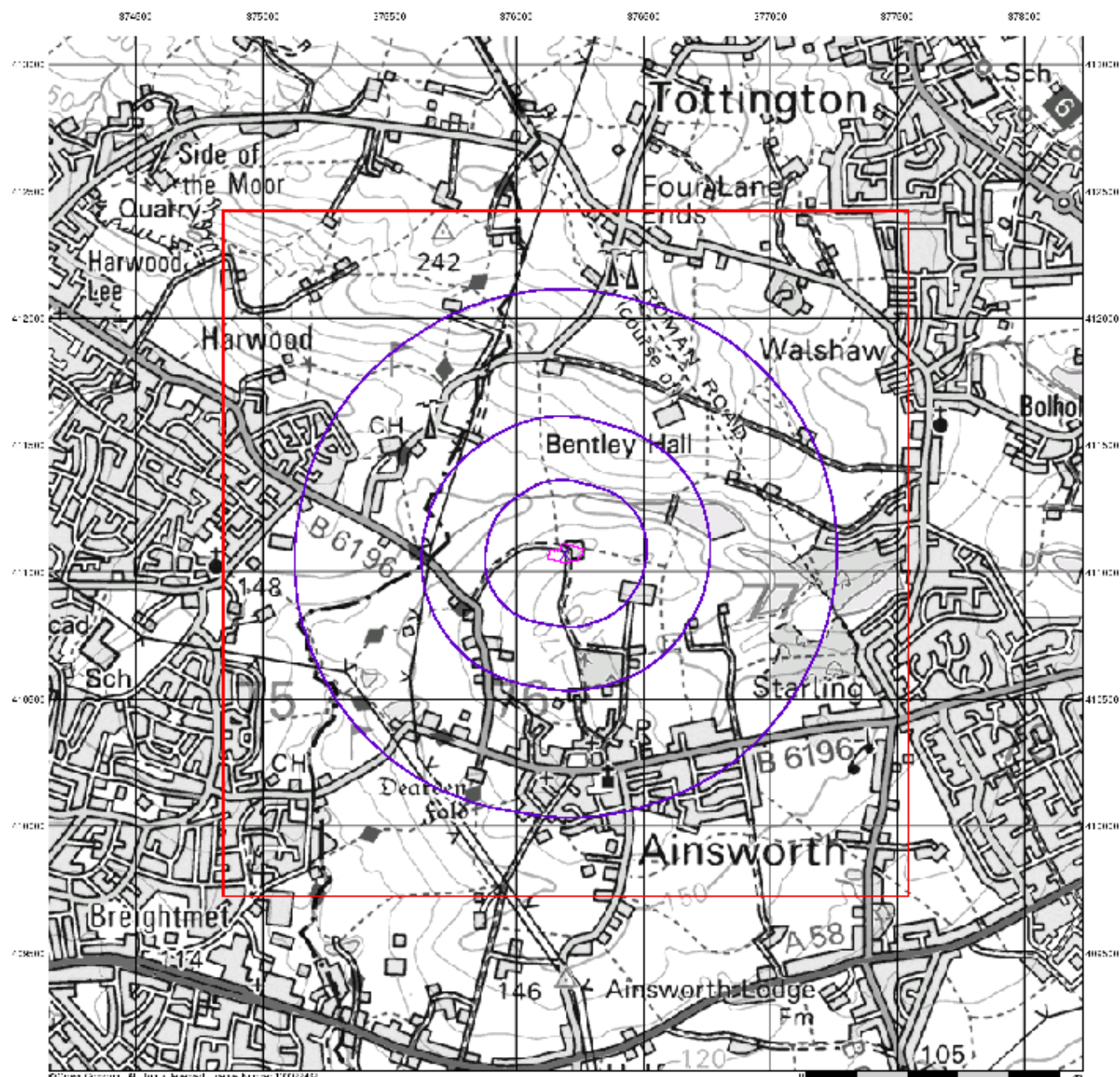
Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

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GROUP

Source Protection Zones

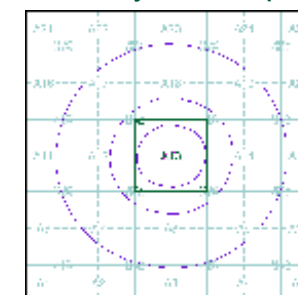
General

- ◆ Bentley Ref. Pt.
- SPZ Buffer (100m)
- ✕ Bentley Reference Point
- ▭ Slice
- Road

Agency and Hydrological

- Flood (1 in 100 years)
- ▨ Increased subsurface acidity (any 100 years)
- Other (any 100 years)
- ▨ Other zone - subsurface acidity (any 100 years)
- Flood (all 1 in 100 years)
- ▨ Flood (all 1 in 100 years) - any 100 years
- Special interest land (1)

Site Sensitivity Context Map - Slice A



Order Details

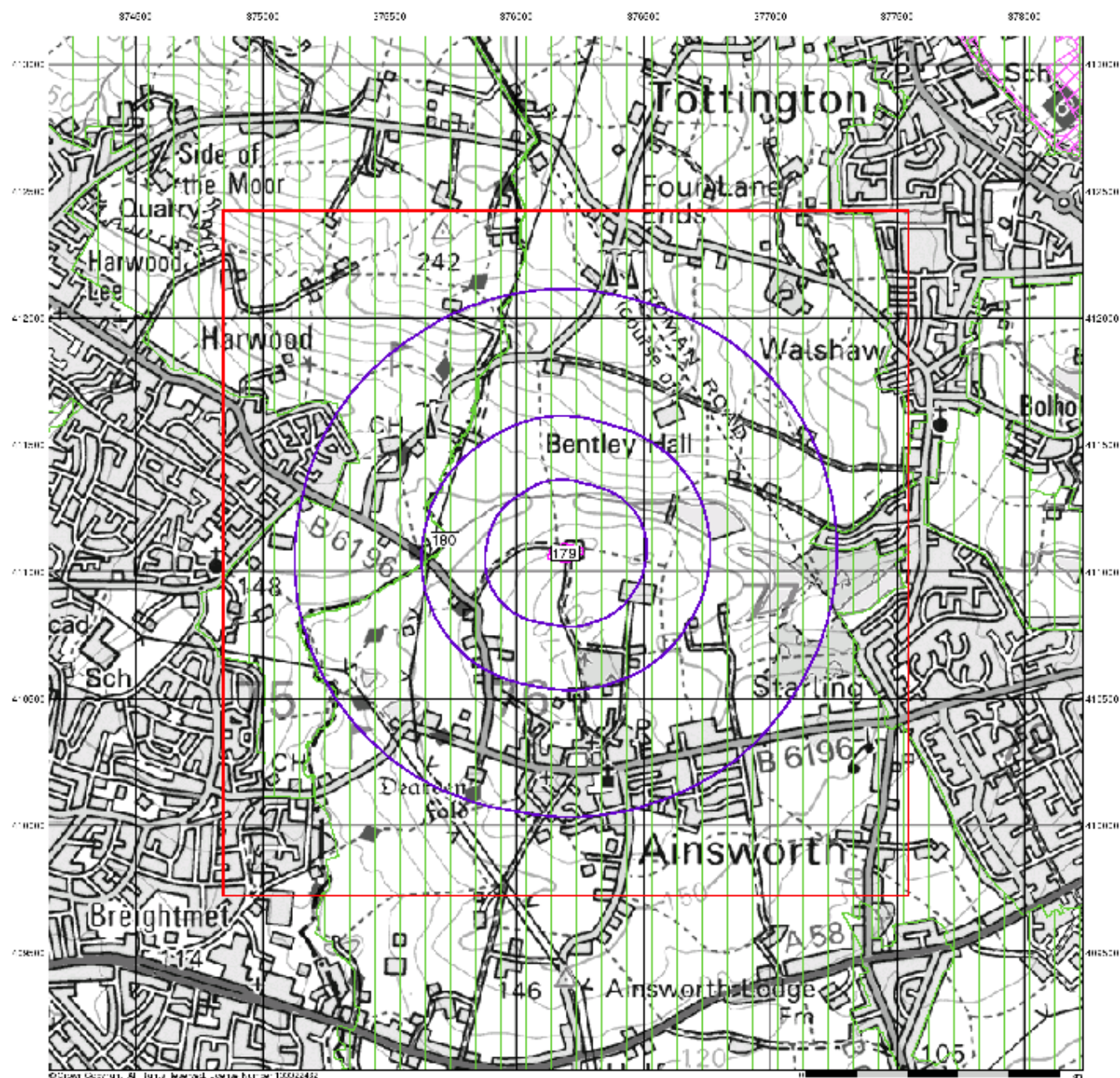
Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

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GROUP

Sensitive Land Uses

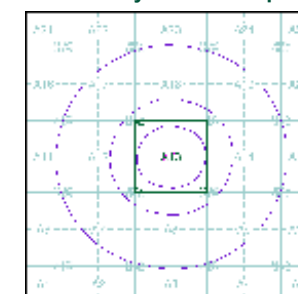
General

- Boundary Line
- Search Buffer
- Existing Reference Point
- Slice
- Road

Sensitive Land Uses

- Ancient Woodland
- Ancient Woodland Green Line
- Ancient Land (not in Red)
- Ancient Woodland (not in Red)
- Environmentally Sensitive Area
- Forest Park
- In a Nature Reserve
- Marine Nature Reserve
- Nature Nature Reserve
- Natural Park
- Possible Sensitive Area
- Sensitive Area (not in Red)
- Sensitive Area
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Tree or Wood
- World Heritage Site

Site Sensitivity Context Map - Slice A



Order Details

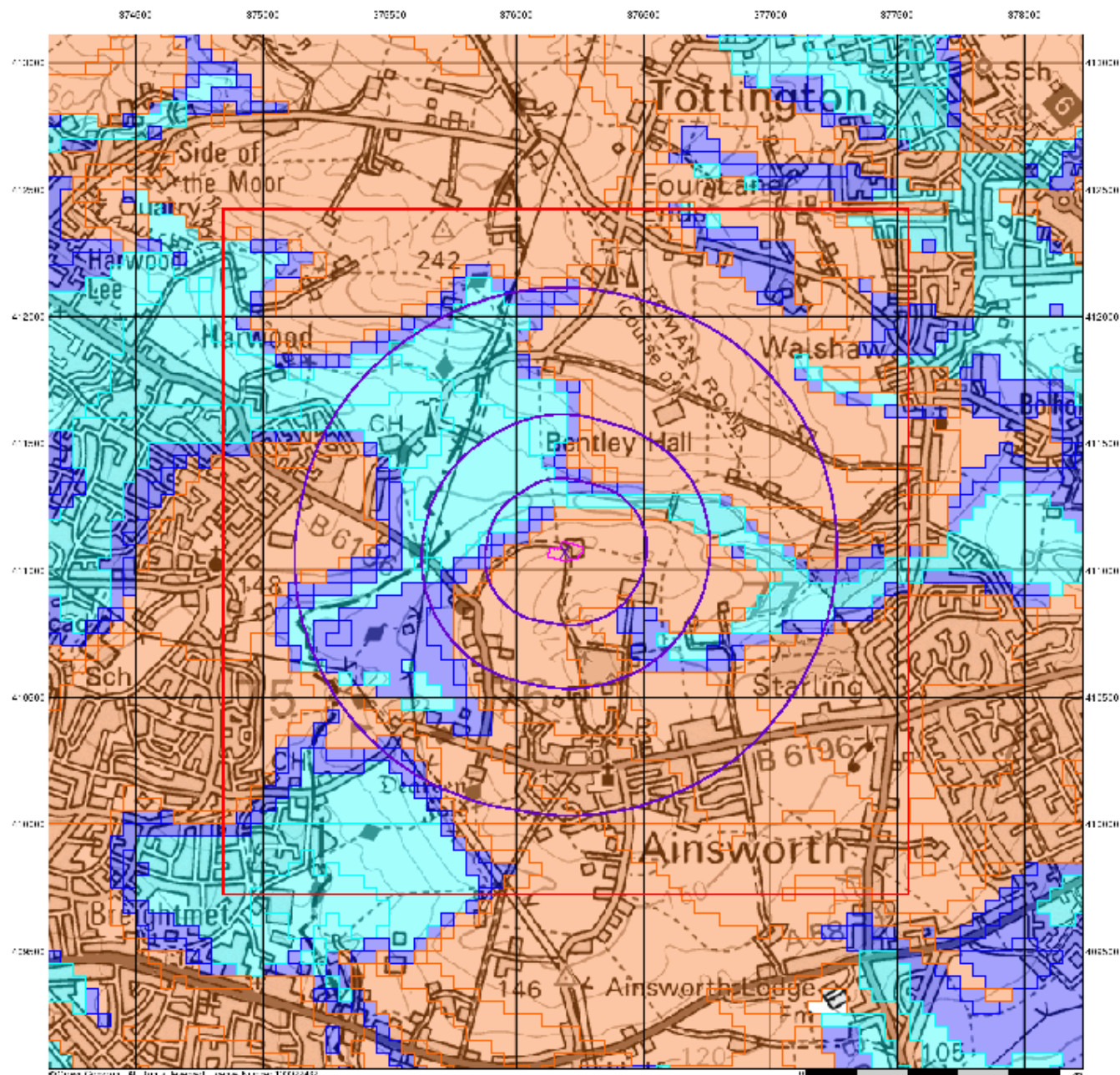
Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

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GROUP

BGS Flood GFS Data

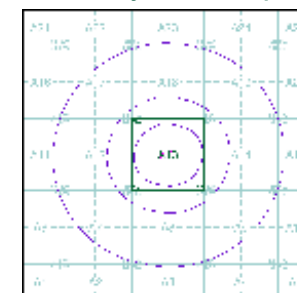
General

- Boundary line
- Search Buffer line
- Bearing Point and Point
- Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding - Green
- Potential for Groundwater Flooding of Trenches Situated Below Ground Level - Blue
- Potential for Groundwater Flooding of Ground Surfaces - Cyan

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

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Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WGR	Worked Ground (Undivided)	Void	Not Supplied - Holocene
	SLIP	Landslide Deposit	Unknown/Unclassified Entry	Not Supplied - Quaternary

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	TILLD	Till, Devensian	Diamicton	Not Supplied - Devensian
	GFDUD	Glaciofluvial Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	PMCM	Pennine Middle Coal Measures Formation	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
	PMCM	Pennine Middle Coal Measures Formation	Sandstone	Not Supplied - Westphalian
	PR	Peel Hall Rock	Sandstone	Not Supplied - Westphalian
	OL	Old Lawrence Rock	Sandstone	Not Supplied - Westphalian
	PLCM	Pennine Lower Coal Measures Formation	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
	PLCM	Pennine Lower Coal Measures Formation	Sandstone	Not Supplied - Westphalian
	CAR	Cannel Rock (South Lancashire)	Sandstone	Not Supplied - Westphalian
	MLRS	Milnrow Sandstone	Sandstone	Not Supplied - Westphalian
	HER	Helpet Edge Rock	Sandstone	Not Supplied - Westphalian
	GAS	Great Arc Sandstone	Sandstone	Not Supplied - Westphalian
	TRBR	Trencherbone Rock	Sandstone	Not Supplied - Westphalian
	GNR	Ganister Rock	Sandstone	Not Supplied - Westphalian

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WH	Woodhead Hill Rock	Sandstone	Not Supplied - Westphalian
		Faults		
		Rock Segments		



Geology 1:50,000 Maps

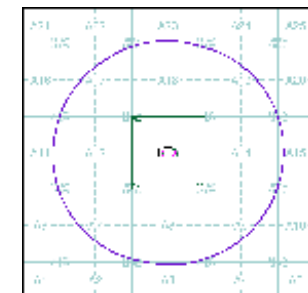
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID:	1
Map Sheet No:	085
Map Name:	Manchester
Map Date:	2010
Bedrock Geology:	Available
Superficial Geology:	Not Available
Artificial Geology:	Not Available
Faults:	Not Supplied
Landslip:	Not Available
Rock Segments:	Not Supplied

Geology 1:50,000 Maps - Slice A



Order Details:

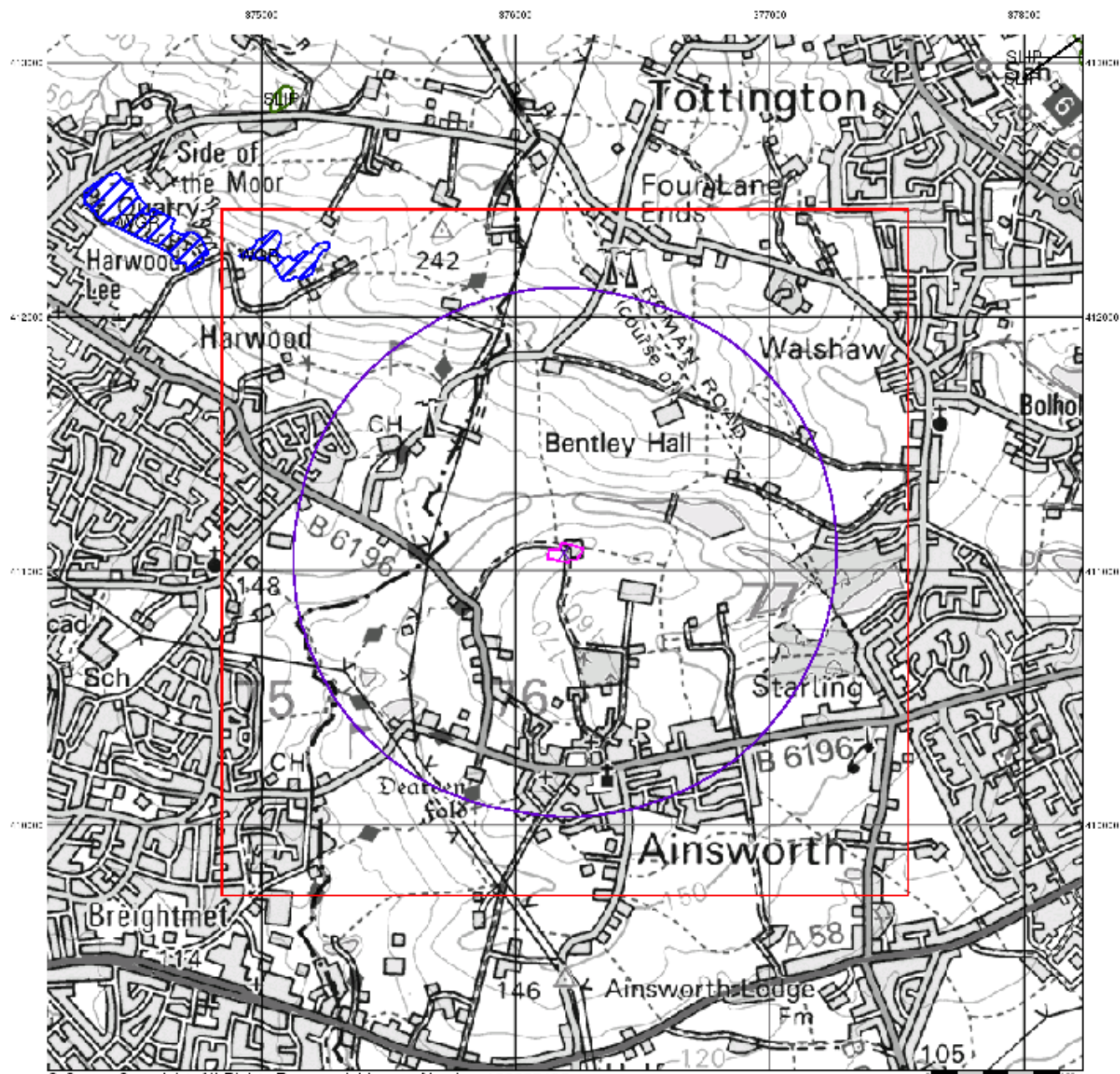
Order Number:	306934094_1_1
Customer Reference:	LKC 23 1054
National Grid Reference:	376190, 411070
Slice:	A
Site Area (Ha):	0.68
Search Buffer (m):	1000

Site Details:

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



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Artificial Ground and Landslip

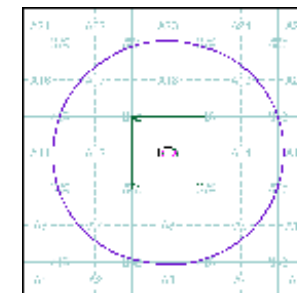
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions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

Artificial ground includes:

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

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

Artificial Ground and Landslip Map - Slice A



Order Details:

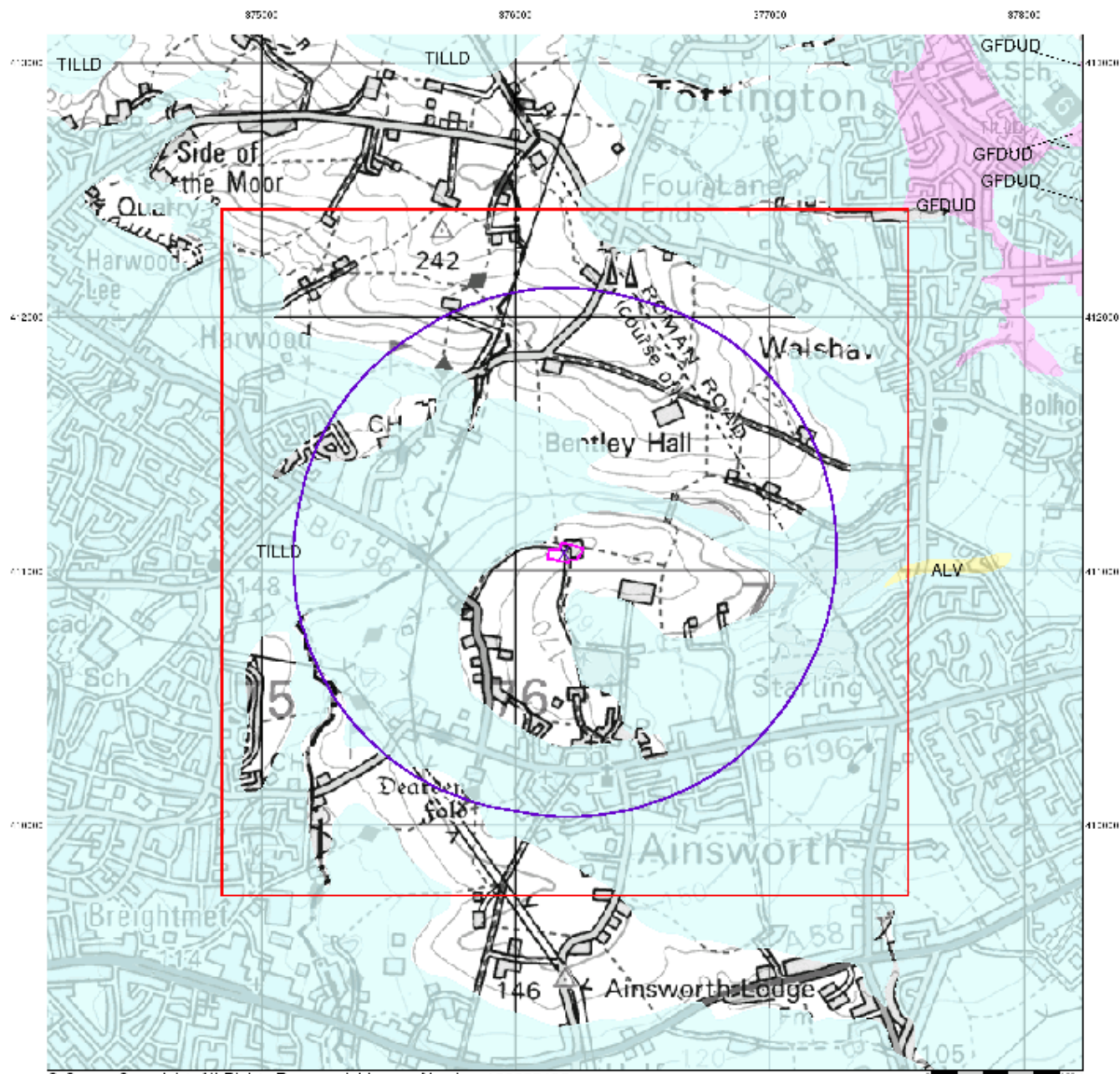
Order Number: 306934094_1_1
 Customer Reference: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details:

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



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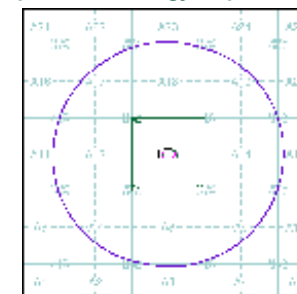
Superficial Geology

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

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

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

Superficial Geology Map - Slice A



Order Details:

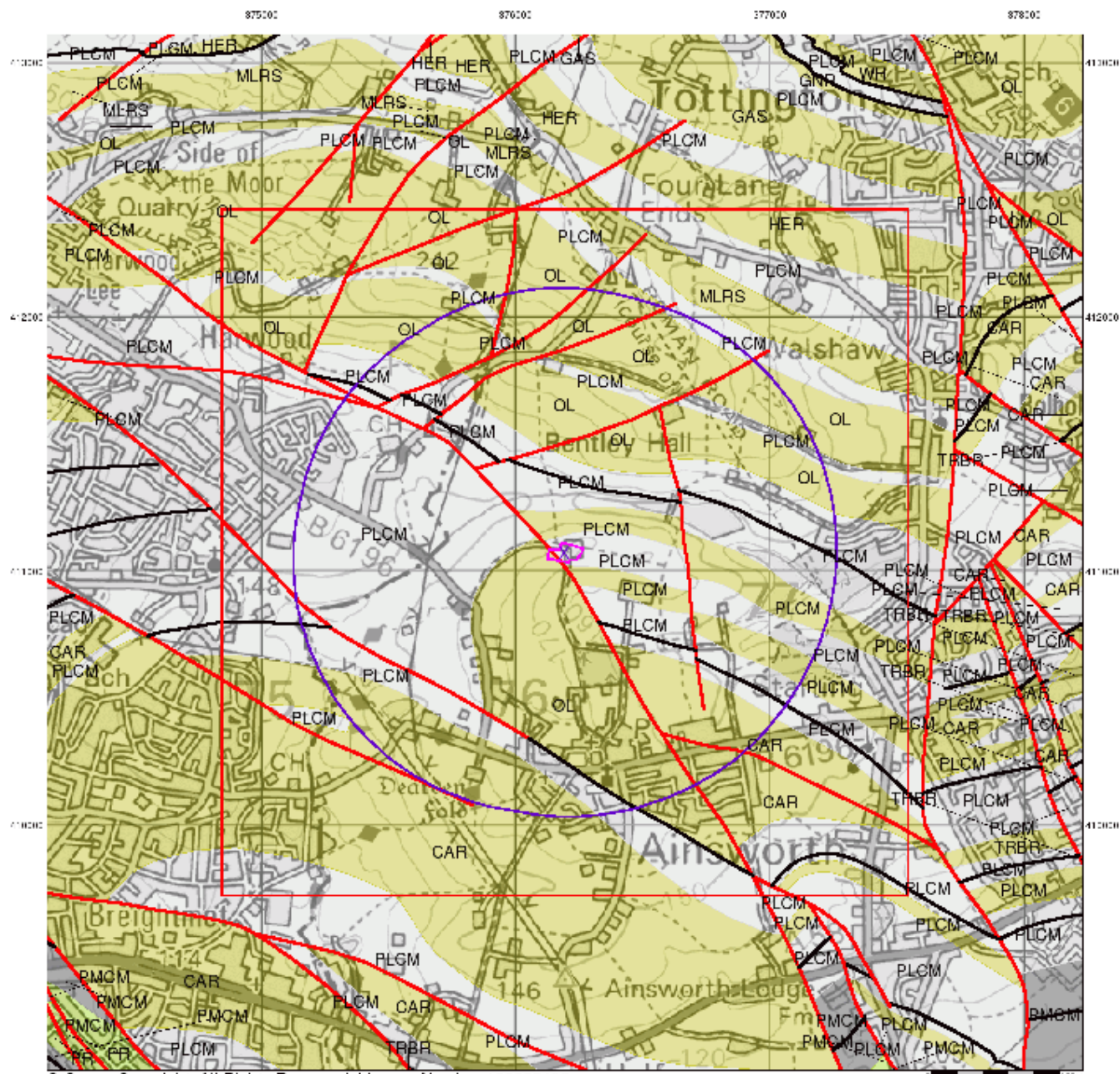
Order Number: 306934094_1_1
 Customer Reference: LKC 23 1054
 National Grid Reference: 376190, 411070
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Bedrock and Faults

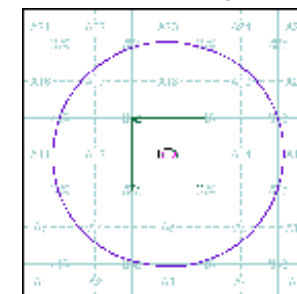
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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

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

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

Bedrock and Faults Map - Slice A



Order Details:

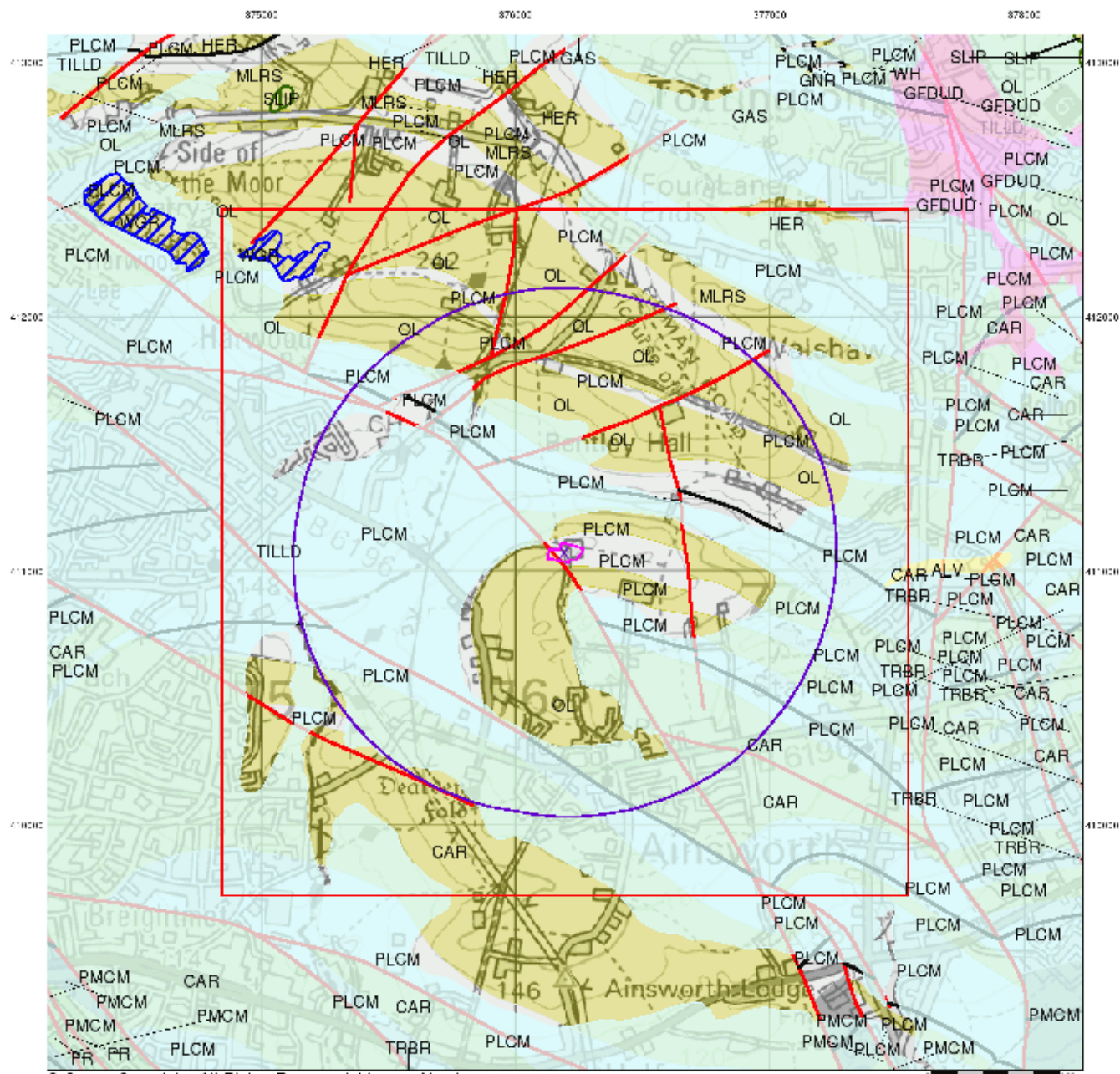
Order Number: 306934094_1_1
Customer Reference: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
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Combined Surface Geology

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

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

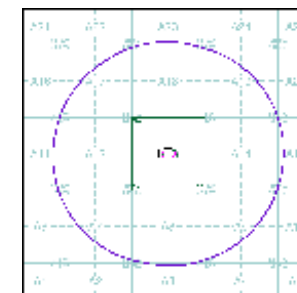
Additional Information

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

Contact

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

Combined Geology Map - Slice A



Order Details:

Order Number: 306934094_1_1
Customer Reference: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 1000

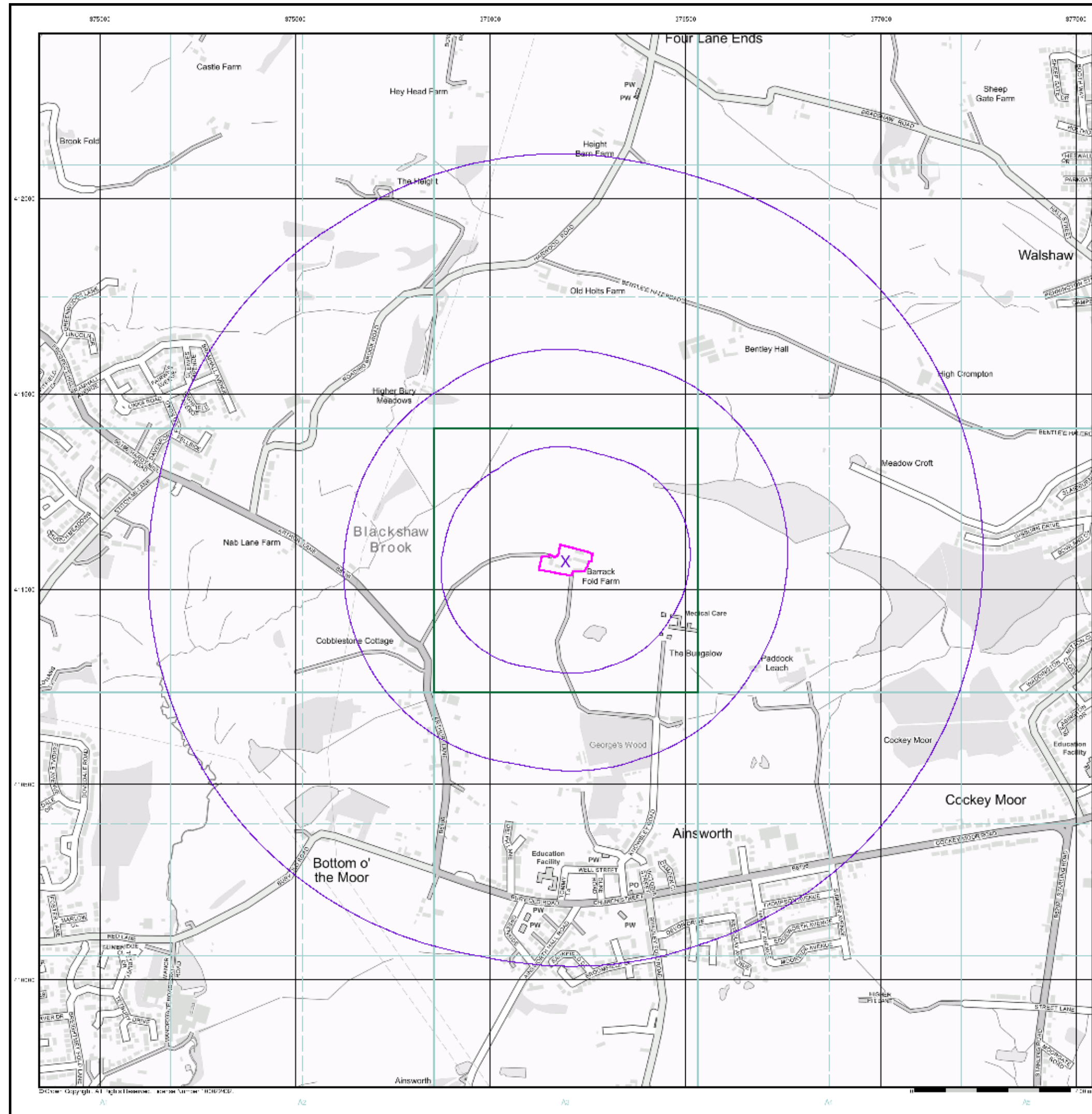
Site Details:

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



v15.0 08-Feb-2023

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



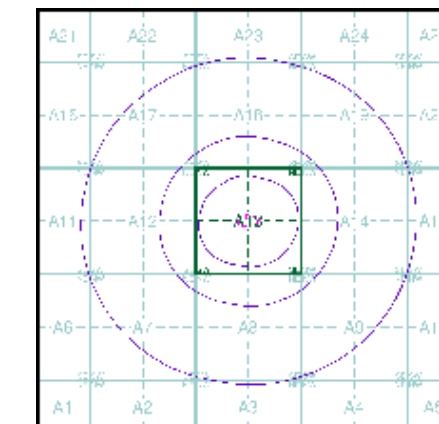
General

- X Site Location
- Search Buffer (m)
- X Flood Defence Point

Agency and Hydrological (Flood)

- Flooded from River or Lake or Sea within 100m (200m)
- Flooded from River or Lake or Sea within 100m (200m)
- Area Benefiting from Flood Defence
- Floodable along Road
- Flood Defence

Flood Map - Slice A



Order Details

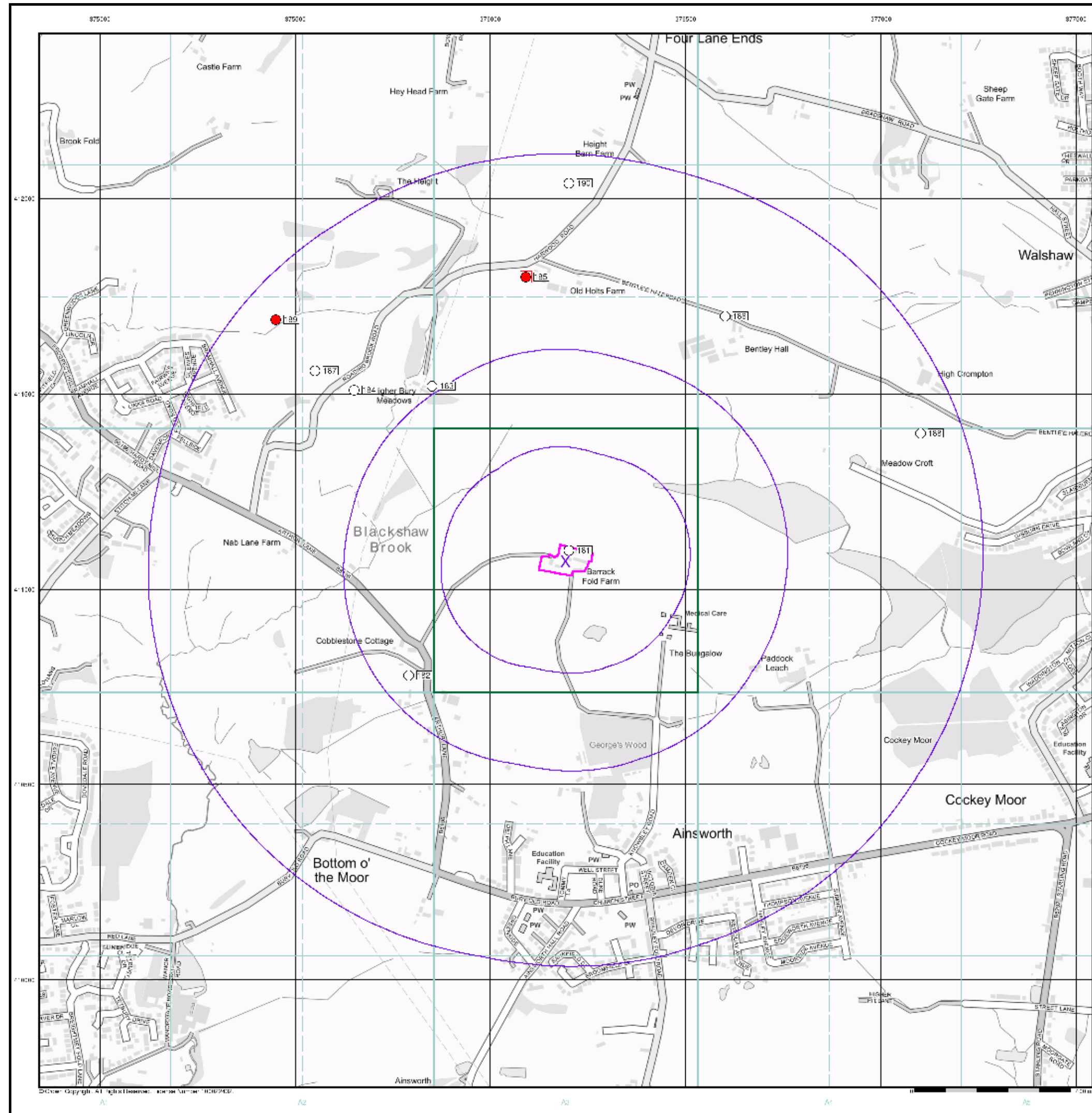
Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

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General

- Study Area
- Search Buffer
- X Barrack Fold Farm
- Map 1
- | Study Area Boundary

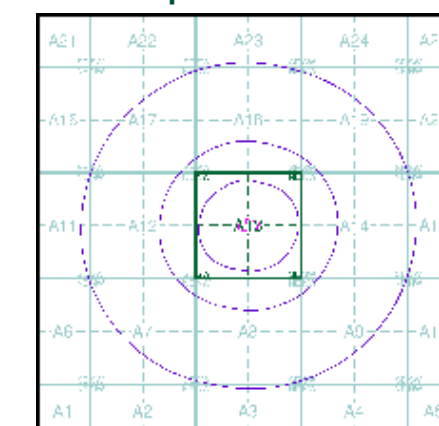
Agency and Hydrological (Boreholes)

- Borehole (Depth 1-10m)
- Borehole (Depth 10-20m)
- Borehole (Depth 20-30m)
- Contaminant
- 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

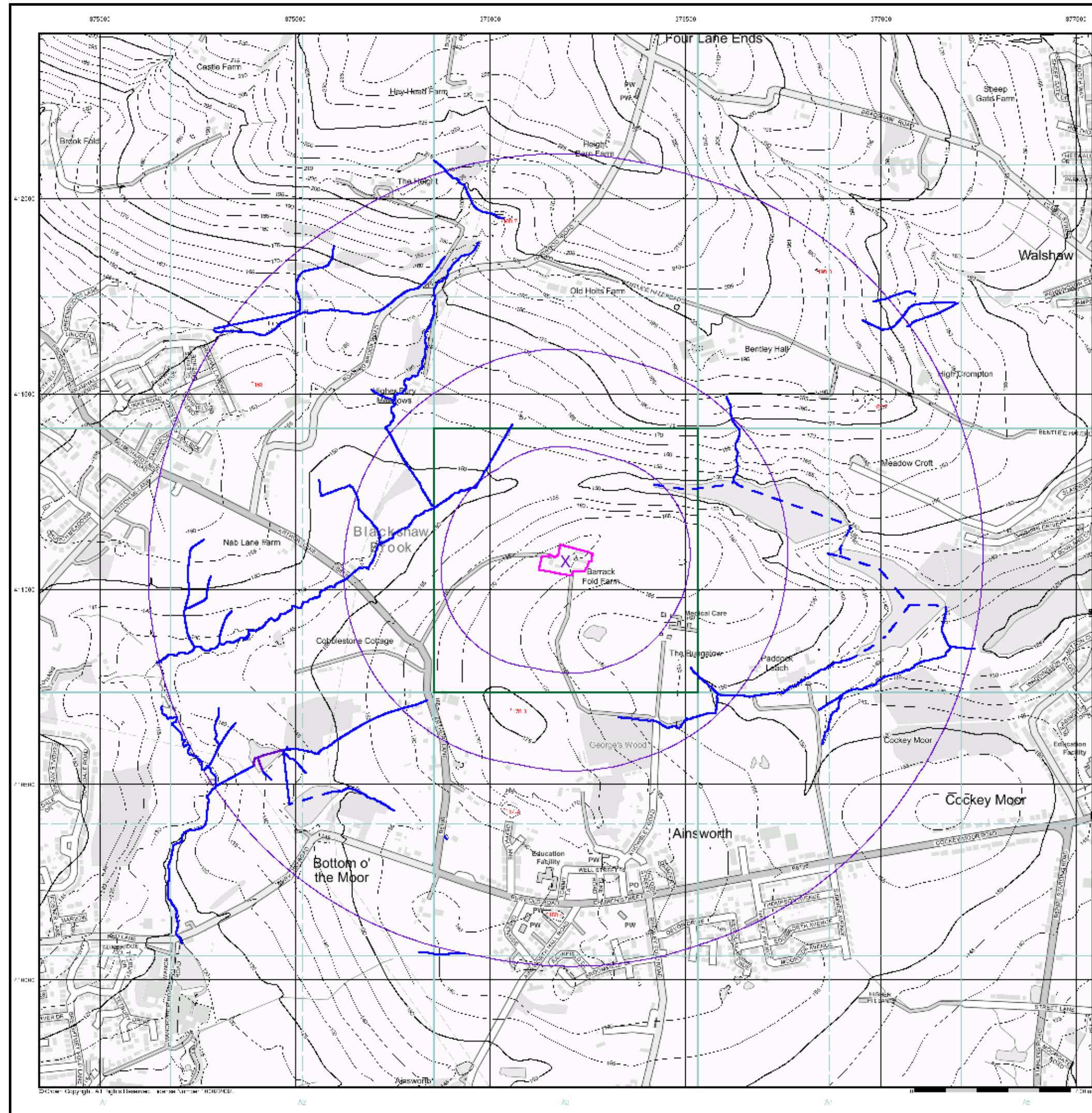
Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

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General

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

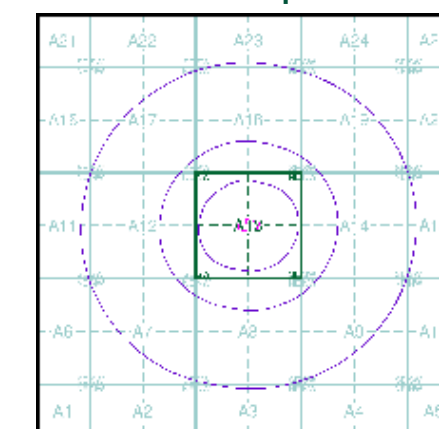
OS Water Network Data

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

Contours (height in meters)

- Standard Contour 105 100 95
- Master Contour 105 100 95
- Spot Height 167.3
- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

Order Number: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

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General

- Study Area
- Search Buffer
- Flow to Drainage Point

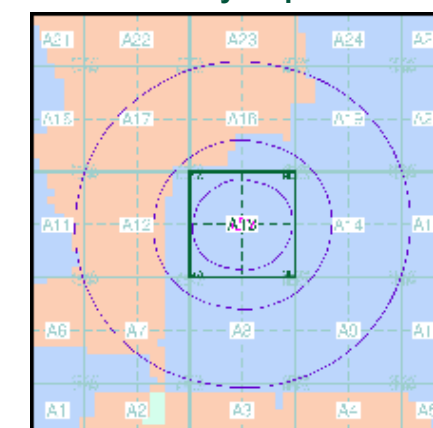
Risk of Flooding from Surface Water

- High - 50 Year Return Period
- Medium - 100 Year Return Period
- Low - 200 Year Return Period

Suitability

- Overall Suitability Map Legend
- Adverse to Growth
- Neutral to Low
- Medium to High
- Good to Excellent
- Barren

EANRW Suitability Map - Slice A

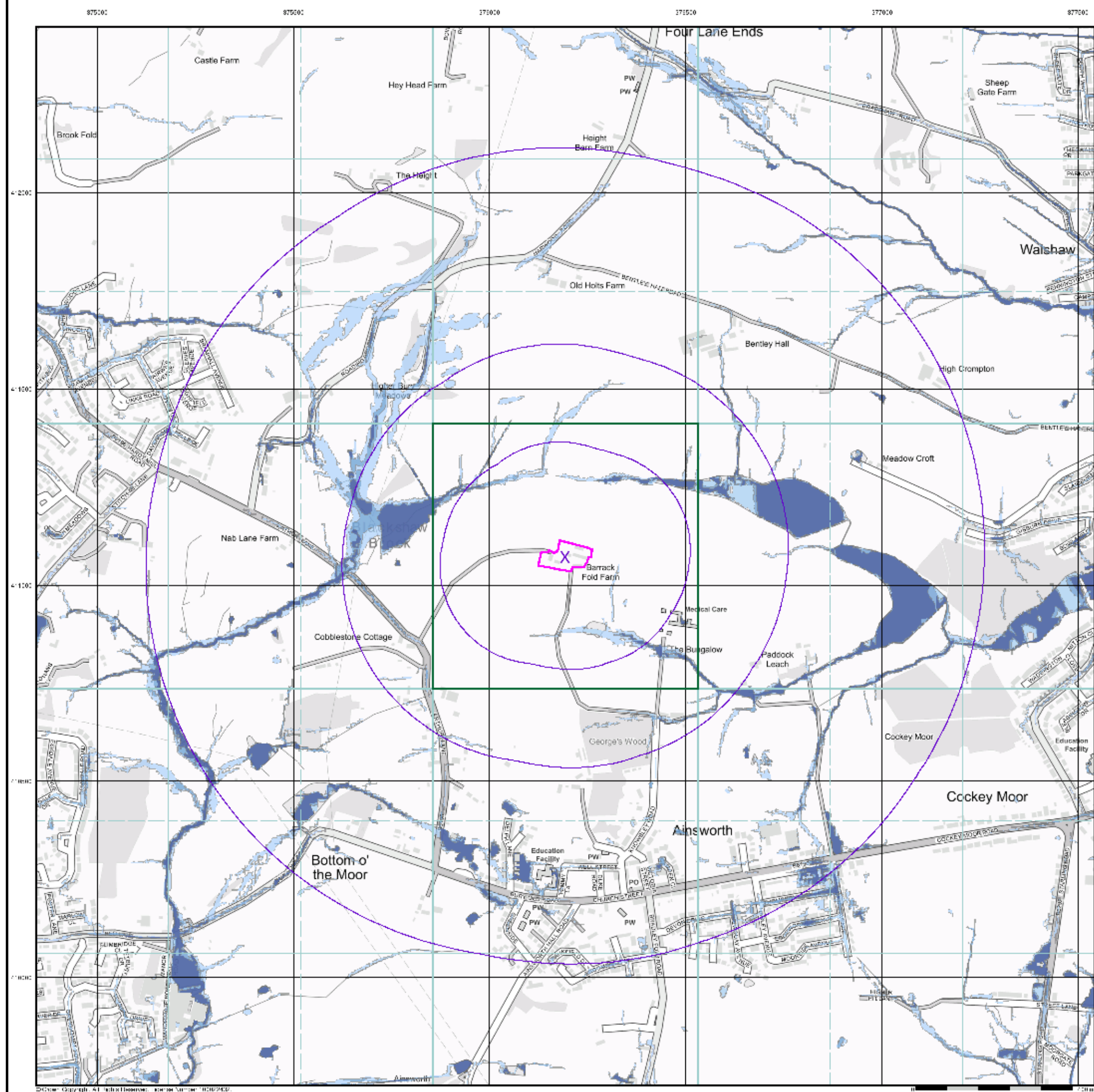


Order Details

Order Number: 306934094_1_1
Customer Ref: LKC 23 1054
National Grid Reference: 376190, 411070
Slice: A
Site Area (Ha): 0.68
Search Buffer (m): 1000

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU

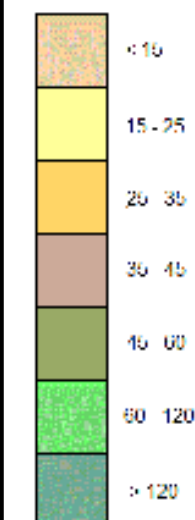


General

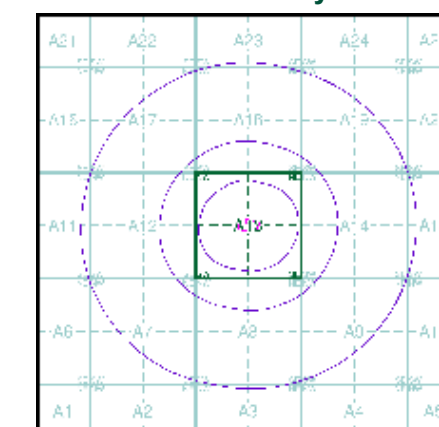
X Specimen ID: X Value: 1.000000 X Working Reference: 1.000000

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg



Estimated Soil Chemistry Arsenic - Slice A

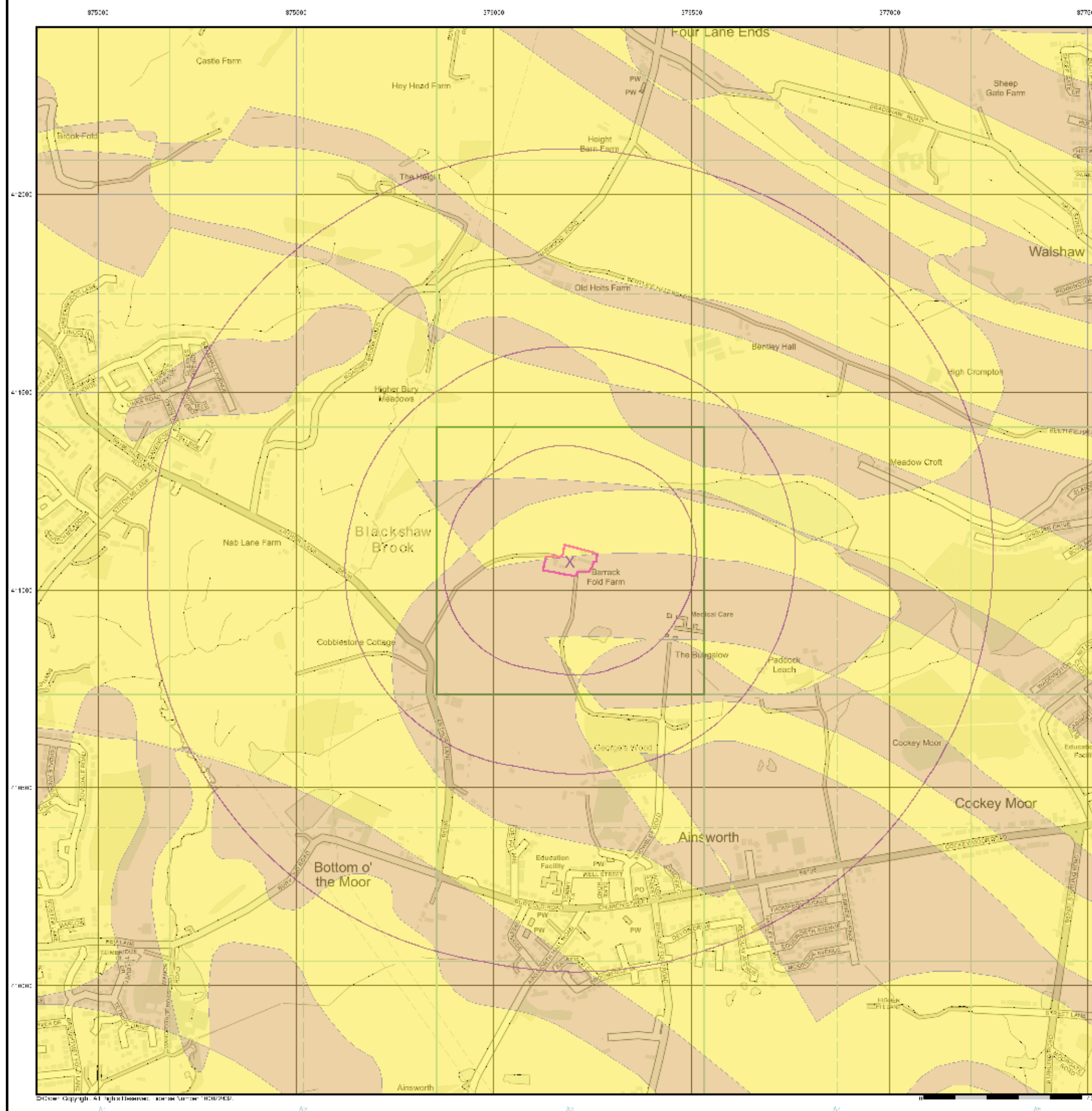


Order Details

Order Details: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU

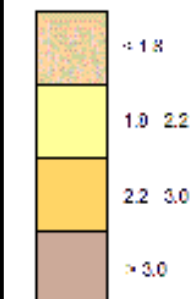


General

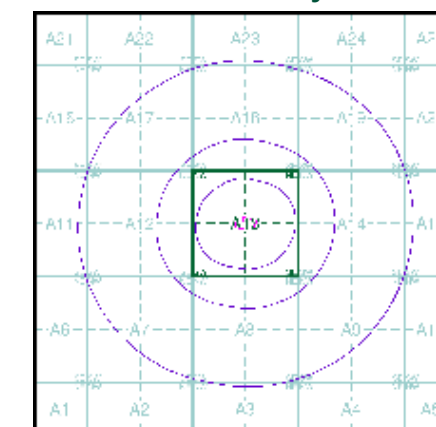
X Specimen site
 ○ Specimen sub-site
 X Showing the location

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg



Estimated Soil Chemistry Cadmium - Slice A

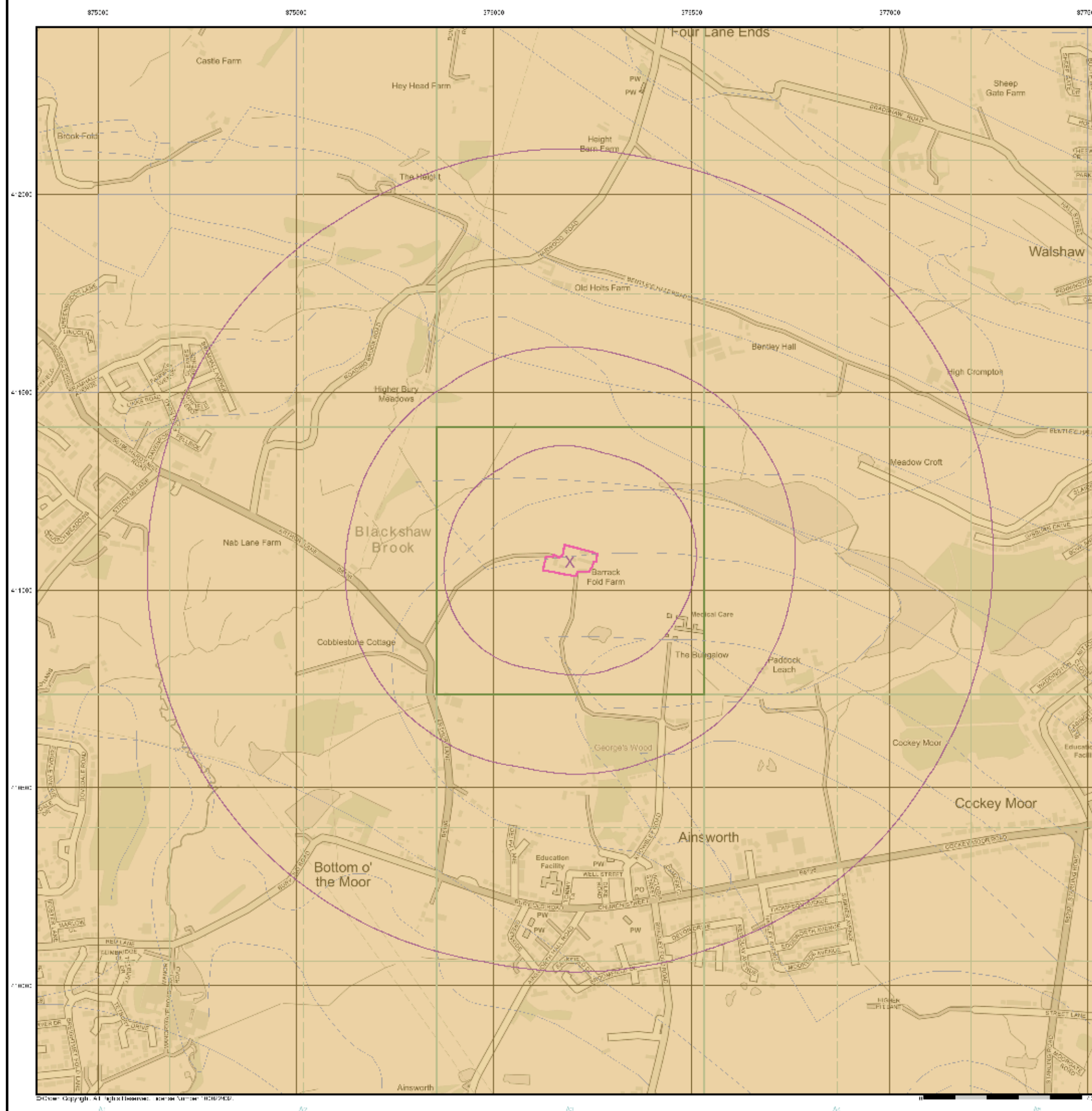


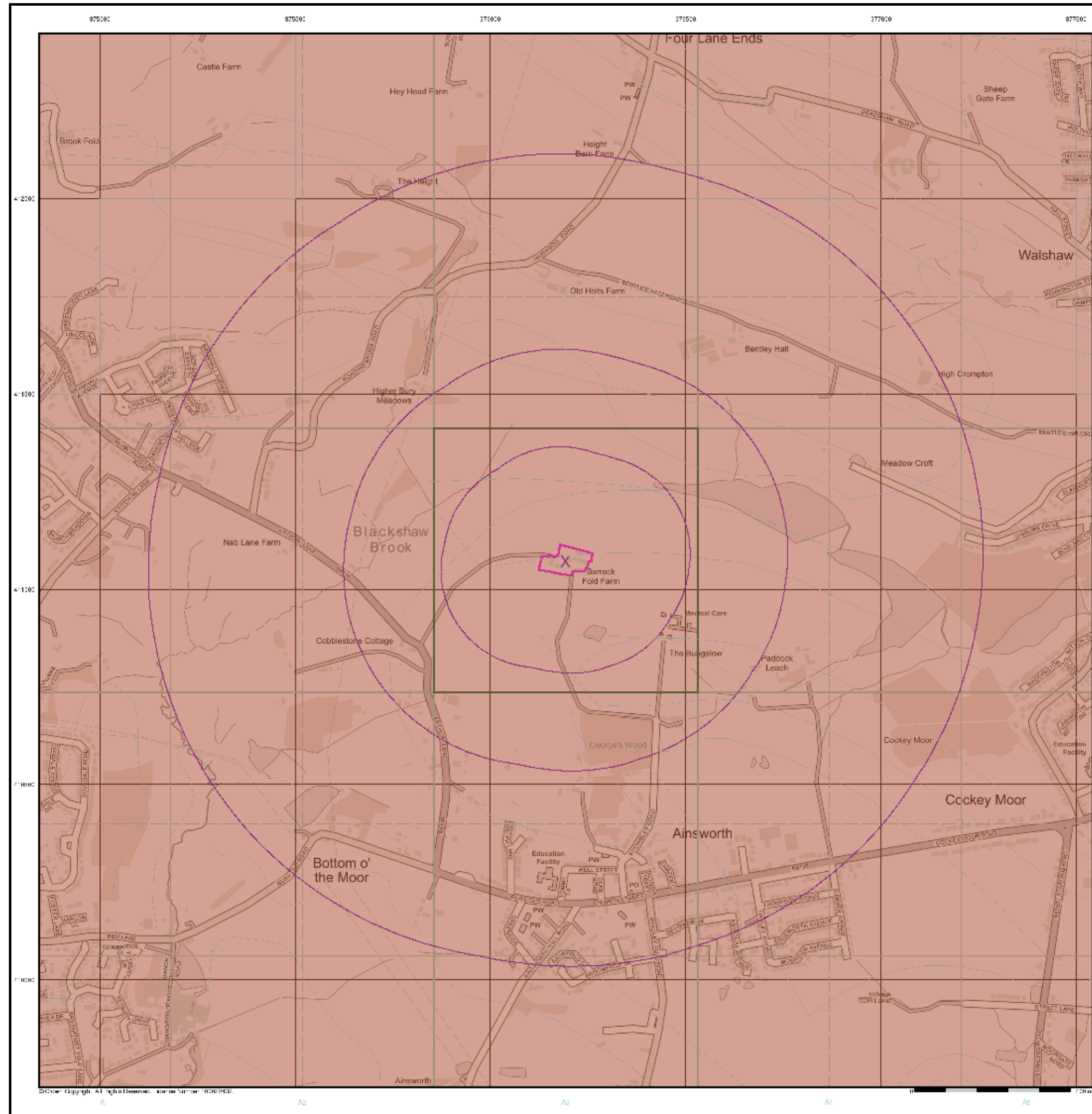
Order Details

Order Details: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

Barrack Fold Farm, Knowsley Road, Ainsworth, Bolton, BL2 5PU



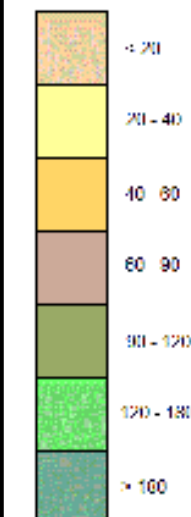


General

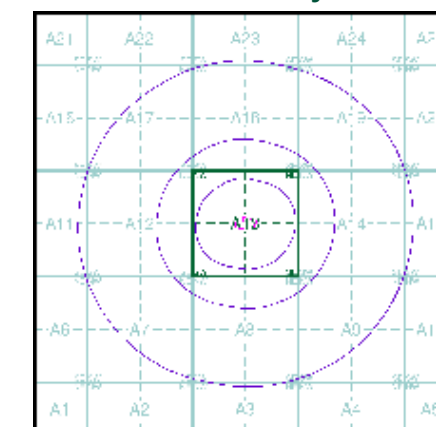
X Specimen ID
X Specimen ID (copy)
X Flag - No Data or No Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg



Estimated Soil Chemistry Chromium - Slice A



Order Details

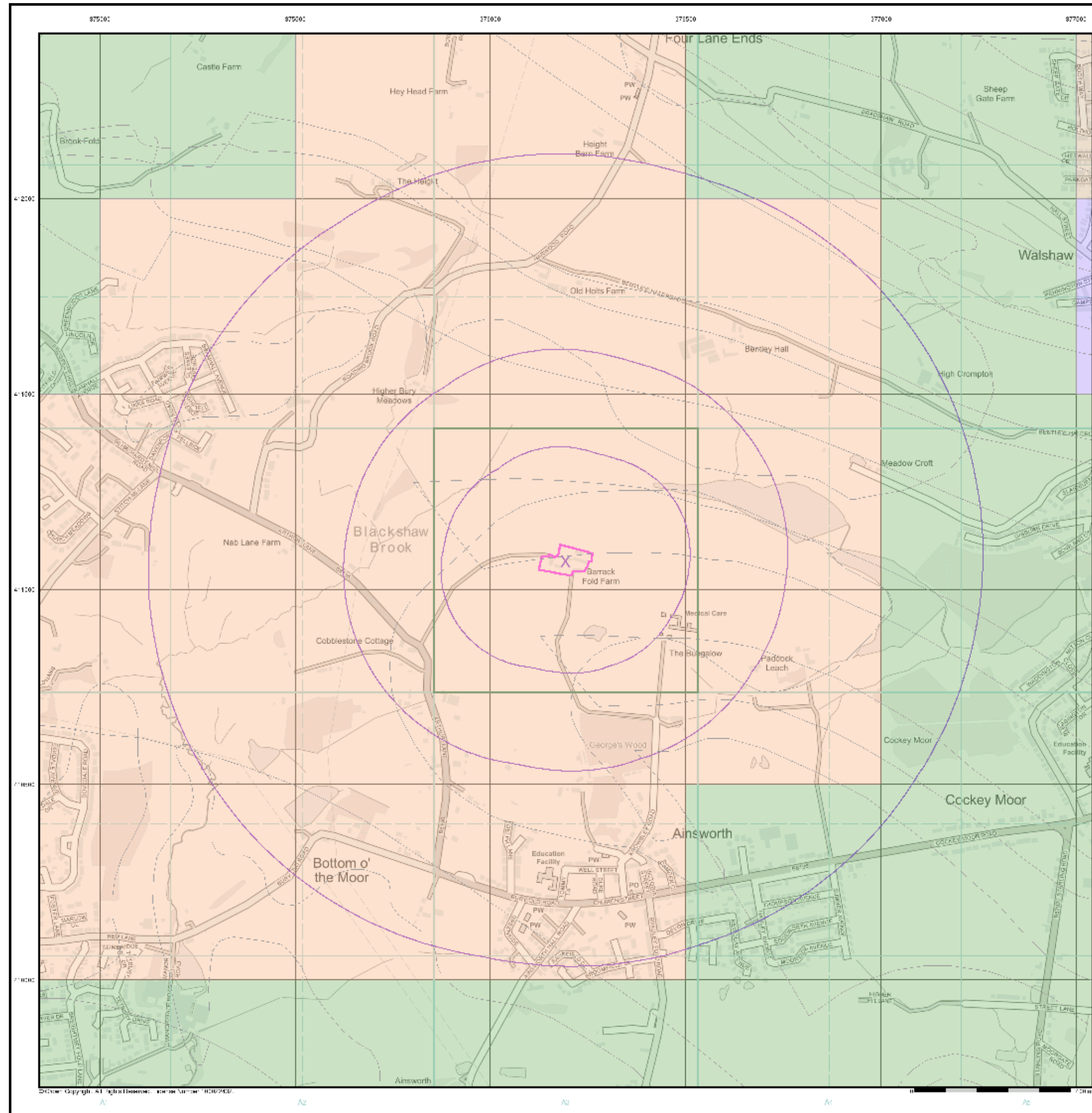
Order Details: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

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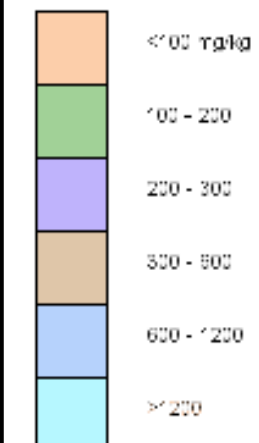


General

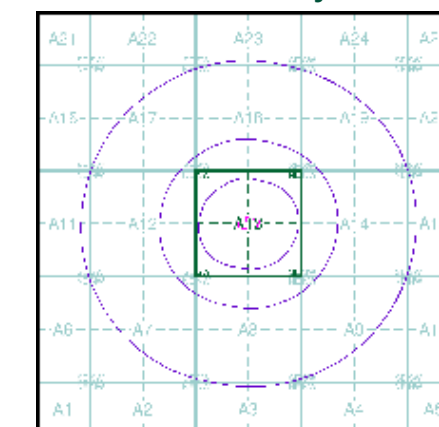
X Specified Site
 X Specified Parameter
 X Estimated Soil Chemistry Lead

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg



Estimated Soil Chemistry Lead - Slice A



Order Details

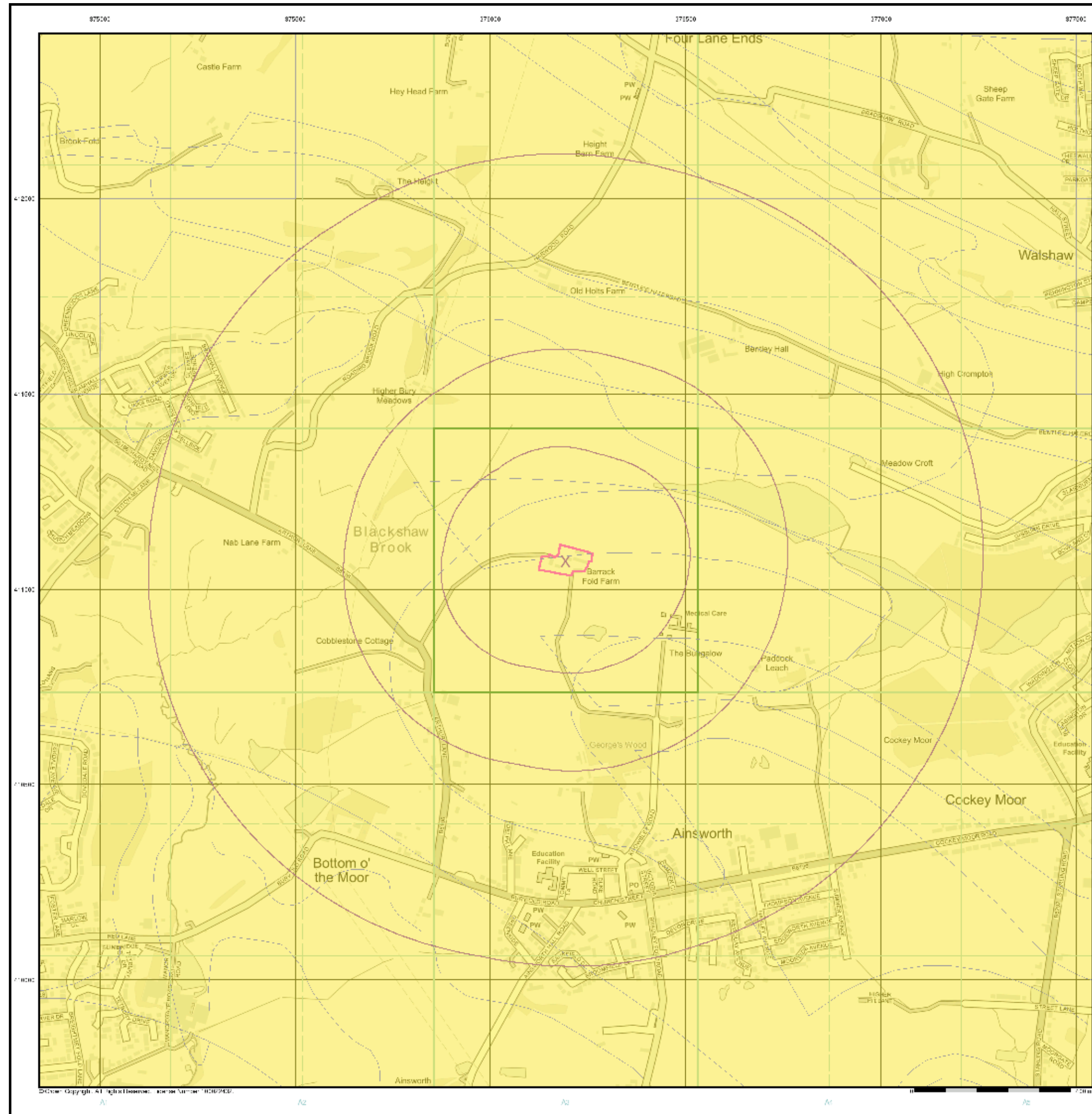
Order Details: 306934094_1_1
 Customer Ref: LKC 23 1054
 National Grid Reference: 376190, 411070
 Slice: A
 Site Area (Ha): 0.68
 Search Buffer (m): 1000

Site Details

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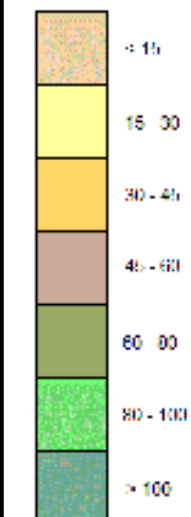


General

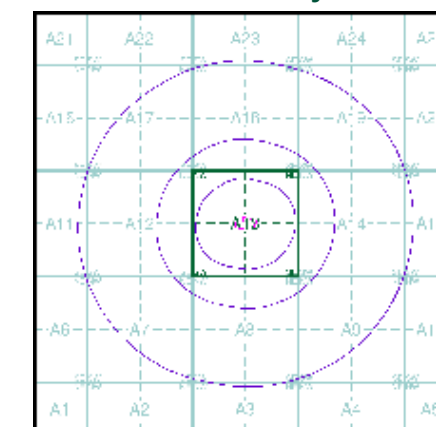
X Barrack Fold Farm
 X Sheep Gate Farm
 X Brook Fold Farm

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg



Estimated Soil Chemistry Nickel - Slice A



Order Details

Order Details: 306934094_1_1
 Customer Ref: LKC 23 1054
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Site Details

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Appendix C

Zetica UXO Unexploded Bomb Risk Map

UNEXPLODED BOMB RISK MAP



SITE LOCATION

Location: BL2 5PU,
Map Centre: 376441,410668



LEGEND

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

- military**
- industry**
- UXO find**
- transport**
- dock**
- Luftwaffe targets**
- utilities**
- Bombing decoy**
- other**

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

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

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

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

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

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

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

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

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

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

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

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

If I have any questions, who do I contact?

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

email: **uxo@zetica.com**

web: **www.zeticauxo.com**

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

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

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

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

Appendix D

Risk Evaluation

Risk Evaluation

The method for risk evaluation is a qualitative method of interpreting the output from the risk estimation stage of the assessment, based on CIRIA 552¹⁴. It involves the classification of the:

- Magnitude of the potential consequence (severity) of the risk occurring (Table A).
- Magnitude of the probability (likelihood) of the risk occurring (Table B).

Consequence (Severity)		
Classification	Definition	Example
Severe	- Short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. - Short term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource. - Catastrophic damage to buildings/properties. - A short term risk to a particular ecosystem, or organism forming part of such ecosystem (note: the definition of ecological systems within the Draft Circular on Contaminated Land, DETR, 2000).	- High concentrations of cyanide on the surface of an informal recreation area. - Major spillage of contaminants from site into controlled waters. - Explosion, causing building collapse (can also equate to short term human health risk if buildings are occupied).
Medium	- Chronic damage to Human Health ('significant harm' as defined in DETR, 2000). - Pollution of sensitive water resources (note Water Resources Act contains no scope for considering significance of pollution). - A significant change in a particular ecosystem, or organism forming part of such ecosystem.	- Concentrations of a contaminant from site exceed generic, or site specific assessment criteria. - Leaching of contaminants from a site to a major or minor aquifer (Principal and Secondary). - Death of a species within a designated nature reserve.
Mild	- Pollution of non-sensitive water resources. - Significant damage to crops, buildings, structures and services ('significant harm' as defined in DETR, 2000). - Damage to sensitive buildings / structures / services or the environment.	- Pollution of non-classified groundwater. - Damage to building rendering it unsafe to occupy (e.g. foundation damage resulting in instability).
Minor	- Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. - Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc.). - Easily repairable damage to buildings, structures and services.	- The presence of contaminants at such concentrations that protective equipment is required during site works. - The loss of plants in a landscaping scheme. - Discoloration of concrete.

Table A: Classification of consequence.

Probability (Likelihood)	
Classification	Definition
High likelihood	- There is a pollutant linkage and an event that either appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution.
Likely	- There is a pollutant linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. - Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.
Low likelihood	- There is a pollutant linkage and circumstances are possible under which an event could occur. - However it is by no means certain that even over a longer period such event would take place, and is less likely in the shorter term.
Unlikely	- There is a pollutant linkage but circumstances are such that it is improbable that an event would occur in the very long term.

Table B: Classification of probability.

¹⁴ CIRIA (2001). "Contaminated Land Risk Assessment: A Guide to Good Practice". C552.

These classifications are then compared to indicate the risk presented by each pollutant linkage (Table C). It is important that this classification is only applied where there is a possibility (which can range from high likelihood to unlikely) of a pollutant linkage existing.

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High likelihood	Very High Risk	High Risk	Moderate Risk	Moderate / Low Risk
	Likely	High Risk	Moderate Risk	Moderate / Low Risk	Low Risk
	Low likelihood	Moderate Risk	Moderate / Low Risk	Low Risk	Very Low Risk
	Unlikely	Moderate / Low Risk	Low Risk	Very Low Risk	Very Low Risk

Table C: Comparison of consequence against probability.

Once the risk has been determined the corresponding action can be assessed (Table D).

Risk	Action Required
Very High Risk	- There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. - This risk, if realised, is likely to result in a substantial liability. - Urgent investigation (if not already undertaken) and remediation are likely to be required.
High Risk	- Harm is likely to arise to a designated receptor from an identified hazard. - Realisation of the risk is likely to present a substantial liability. - Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the longer term.
Moderate Risk	- It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. - Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.
Low Risk	- It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very Low Risk	- There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

Table D: Description of the classification and likely action required.

Where LKC identified a low to very low risk either limited intrusive investigation work, a watching brief (during construction work) or no investigation work will be recommended. This will be dependent on the nature of the site and the proposed development.

Where the risk falls into the moderate/low risk, LKC will undertake an assessment to establish what category the pollutant linkage will fall into (i.e. moderate or low risk will be chosen).

Where LKC identifies a moderate or higher risk intrusive work or precautionary remedial measures will be recommended.

Based across the UK with
offices in Manchester,
London, Liverpool and Glasgow.

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e: info@thelkgroup.com



- » Geotechnical
- » Contaminated Land
- » Flood Risk and Drainage
- » Asbestos
- » Invasive Species
- » Land Remediation
- » Project Management
- » Land Drilling