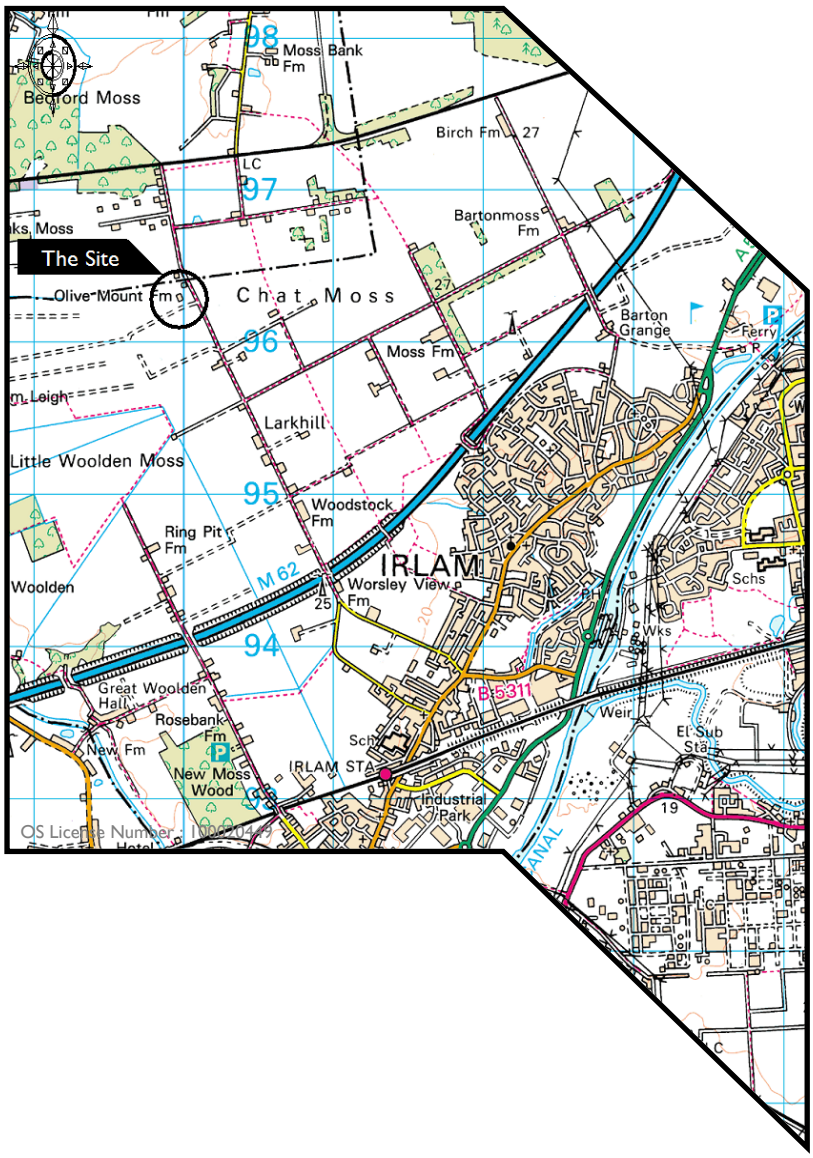
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Desk Study



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Olive Mount Farm

for
Ms Rachel Pike

Engineer : SALT Architects Limited

Project Number PN224461

October 2022

Issuing Office
North West Office
The Geotechnical Centre
Unit 1, Borders Industrial Park
River Lane, Saltney
Chester
CH4 8RJ
Tel: 01244 671117
mail@chester.geotechnics.co.uk

Head Office
The Geotechnical Centre
203 Torrington Avenue
Tile Hill
Coventry
CV4 9UT
Tel: 02476 694664
mail@geotechnics.co.uk

South West Office
The Geotechnical Centre
Unit 5, Orchard Court
Heron Road, Sowton
Exeter
EX2 7NR
Tel: 01392 463110
mail@exeter.geotechnics.co.uk

North East Office
The Geotechnical Centre
Unit 1, Bypass Park Estate
Sherburn-in-Elmet
Leeds
LS25 6EP
Tel: 01977 525030
mail@yorkshire.geotechnics.co.uk

Geotechnics Limited, Registered in England No. 1757790 at 203 Torrington Avenue, Tile Hill, Coventry CV4 9UT

Desk Study on a Site
at

Desk Study

Olive Mount Farm

for
Ms Rachel Pike

Engineer :
SALT Architects Limited

Project No:
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Signatures

	Name	Position	Signature
Author	Tom Birch BSc (Hons), MSc, FGS	Senior Engineer	
Authoriser	Nick Frost BSc (Hons), MSc, CSci, CGeol, FGS	Principal Engineer	

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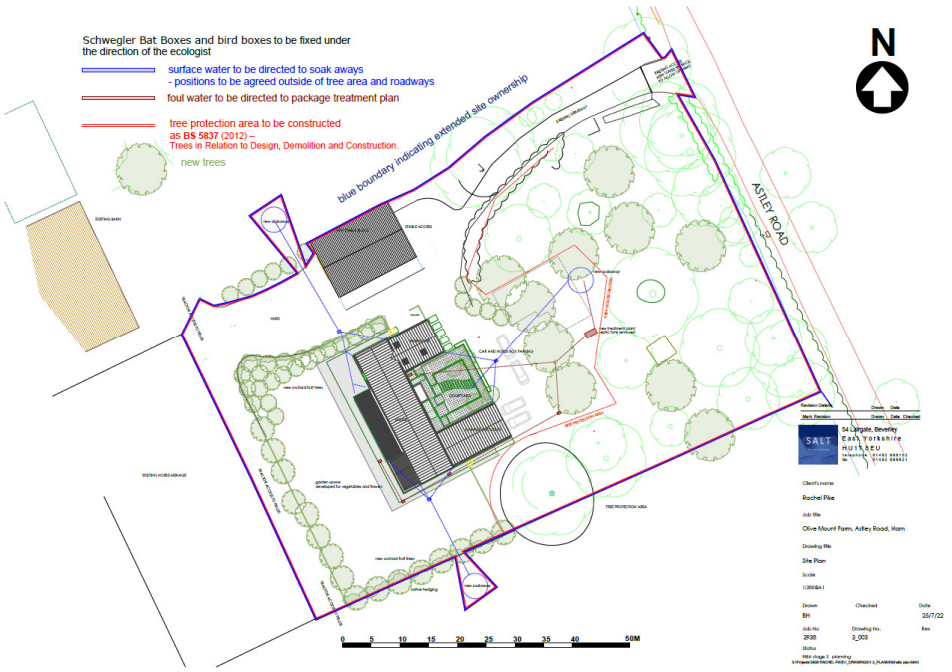
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1.0 INTRODUCTION AND CLIENT'S BRIEF

This Phase I Desk Study was carried out to the instruction of the Engineer, SALT Architects Limited, who are acting as architects on behalf of the Client, Ms Rachel Pike. The purpose of the Desk Study is to provide a geotechnical and geo-environmental assessment for the proposed new buildings to be constructed at the existing Olive Mount Farm off Astley Road, near Irlam, Manchester. The proposed developments, at the time of writing, consists of the construction of a new residential dwelling / office including a living area, consultation rooms and office space, a new stable block and associated garage/utility spaces and infrastructure.

Site Layout	Description
 Image from Drawing 2938 3_003 Site Plan Included in Appendix 2.	The proposed development of the site is understood to comprise: • Demolition of existing site buildings (including exiting dwelling and timber framed barns) • Construction of new combined residential dwelling / office building with garages and utility space, and construction of a new stables / barn

This report is designed to comply with the requirements of National Planning Policy Framework (July 2021) and is intended to be used by the developer to assess any potential significant contaminant linkages that may require further investigation and to aid in discharging any planning conditions associated with the planning application. In addition, this report has been devised to generally comply with the relevant principles and requirements of a range of guidance and statutory instruments including:

- Part IIA of the Environment Protection Act, 1990;
- Contaminated Land (England) (Amendment) Regulations 2012 and Contaminated Land Statutory Guidance (DEFRA, April 2012);
- National Planning Policy Framework (HCA, July 2021);
- BS EN 1997-1:2004+A1:2013: "Eurocode 7. Geotechnical Design"
- BS5930:2015+A1:2020: "Code of Practice for Ground Investigations";
- BS10175: 2011 +A2:2017 "Investigation of Potentially Contaminated Sites - Code of Practice";
- The Building Regulations 2010. Part C (HM Government 2013);
- Environment Agency (2020) "Land Contamination Risk Management";
- Environment Agency (2011) Report GPLC1 "Guiding Principles for Land Contamination";
- Environment Agency (2017) "The Environment Agency's Approach to Groundwater Protection" November 2017 Version 1.1; and
- Sustainable Remediation Forum UK (SuRF) Framework

2.0 THE SITE

Site Location

A Site Location Plan is presented in Appendix 1 and the site location is summarised in the table below.

Location	Olive Mount Farm
Grid Reference	369990, 396300
Post Code	M44 5LU
Site Area	Approximately 0.4 Ha.
Site Shape	The site is roughly rectangular in shape with maximum plan dimensions of 50m from north to south and 100m from east to west.
Topography	The site is generally flat with some localised depressions in ground level. The topography of the surrounding site is also fairly flat.

Site Description

A site visit was for the purposes of this report was undertaken on 12th October 2022. Photographs of the site are included in Appendix 3. A summary of the observations made is presented in the table below.

Current Use	The site is currently used as a working farm which specialises in the care of native and non-native animal breeds. The site features an existing residential dwelling as well as various barns and storage containers.
Access	Vehicle access onto the site is from the east via an access road leading from Astley Road.
Existing Buildings & Structures	There is an existing residential dwelling on site, understood to be of Victorian age, and has suffered significant subsidence damage. Additionally there is an existing two-storey timber framed barn and a newer steel portal framed "Dutch" barn structure.
Site Surface	The northern and western areas of the site comprise concrete/cobblestone hard standing and a road/turning area. The south-eastern part of the site mostly comprises grass and rough shrubs.
Evidence of surface staining	Some evidence of surface staining from burning of waste materials was observed. A slight sheen was observed to the rear of the dutch barn.
Ecology / Vegetation	The site features various grassed areas and many mature and semi-mature trees, with some hedgerows noted around the site boundary. NB – These observations should not be considered as an ecological survey. It is understood that a detailed ecological survey has been commissioned separately.
Storage Tanks	A 2500 Litre, horizontal bunded above ground fuel storage tank was noted on the site during the walkover. It is assumed the fuel tank is filled with Kerosene (domestic heating oil fuel). Additionally, plan included in the Design and Access Statement (produced by SALT Architects Limited) indicates a septic tank to be present on site, the brick cover to which was also observed on site.
Services	No overhead services were observed on site. Evidence of underground services was observed in the form of drain covers and some above-ground pipes/cables going below ground.
Asbestos	No potential Asbestos Containing Materials (ACMs) were noted on the ground surface or on the external surfaces of buildings or tanks. NB - The inside of the existing buildings/structures have not been assessed by Geotechnics Limited for the possibility of ACMs. These areas should be surveyed separately by a suitable qualified Asbestos Surveyor.

Waste Disposal/ Materials Storage	Some waste and signs of burning were observed during the walkover to the rear of the barns in the western part of the site. Equipment, materials and consumables (such as animal feed and bedding) are stored in the barns and in the storage container. Additionally, some waste materials were observed within the barns, such as empty fuel containers, domestic appliances, scrap metal, timber etc.
Surrounding Area	A small drainage ditch is situated east of the site entrance, running parallel to Astley Road. The wider area surrounding the site is occupied by agricultural land.
Local Water Features	No surface water features were observed on site. However, there was evidence of a possible infilled pond in the south of the site.
Potential Off-Site Receptors	There are some drainage ditches situated adjacent to the site boundary, running parallel to Astley Road.
Potential Off-Site Sources	None observed during the walkover.
Local / Background Knowledge	Homeowner anecdotally indicated that there is an existing issue with seepage of groundwater into the building basement causing flooding. It was also remarked that a nearby site was being used for stockpiling / storage of waste materials being moved by skip wagons and HGVs. The site is understood to be located approximately 1.5 miles away and is situated within the buffer zone of an existing designated Site of Special Scientific Interest (SSSI).

3.0 SITE HISTORY

A search of available historic maps was undertaken to establish the previous land uses of the site. The maps discussed below are presented in Appendix 4 of this report.

Summary of Site History

On Site

The following table summarises the significant changes in historical use on site:

On Site		
Feature & description	Date Appears on OS mapping	Date No longer shown on OS Mapping
Trees	1848	-
Buildings; assumed Farmhouse ("L" shaped building) and Barns	1848	-
Additional Building; assumed Barn – west of site	1951	-

Surrounding Area

The following table summarises the significant changes in historical use on land surrounding the site:

Off Site				
Feature & description	Distance from site (m)	Direction from site	Date Appears on OS mapping	Date No longer shown on OS Mapping
Woodland	10	North	1890	1928
Woodland	20	South	1890	1928
Road	5	East	1890	-
Agricultural Land	10	West	1890	-
Agricultural Land	15	East	1890	-
Cottage	100	East	1890	1908
Cottage	60	North	1928	-
Pond	150	Northwest	1890	2006
Track	60	South	1928	-
Building/Structure	10	South	1962	2006

4.0 GEOLOGY

The following section details information published by the British Geological Survey (BGS) on their GeoIndex website (https://mapapps2.bgs.ac.uk/geoindex/home.html). Where readily available and relevant, Geological memoirs and other literature have been consulted along with the BGS website (*www.bgs.ac.uk*) and BGS Geological Maps.

Published Geology

The documented geology of the site is summarised below:

	Source Reference	Geology
Drift	BGS GeoIndex 1:50,000 Scale Superficial Geology Mapping And BGS Lexicon of Named Rock Units Accessed on 6th October 2022	Peat (Quaternary age) – *Partially decomposed mass of semi-carbonised vegetation which has grown under waterlogged, anaerobic conditions, usually in bogs or swamps*
Solid	BGS GeoIndex 1:50,000 Scale Bedrock Geology Mapping And BGS Lexicon of Named Rock Units Accessed on 6th October 2022	Wilmslow Sandstone Formation (Triassic age) – *red-brown to brick-red, fine to medium grained, generally pebble free, cross bedded sandstones, with sporadic siltstones.*
Structural	BGS GeoIndex 1:625,000 Scale Geological Fault Mapping Accessed on 6th October 2022	There are no faults shown to be present within the immediate vicinity of site.

Historical Boreholes

Two (2 No.) Historical Boreholes were available to view on the BGS GeoIndex website, which are summarised below:

BGS Borehole Reference SJ79NW15 – Chat Moss Well (790m SSE of site) – Dated 1980		
Strata Description	Depth to Top (m bgl)	Thickness (m)
Fill and Peat	GL	3.00
Boulder Clay	3.00	11.00
Sandstone	14.00	188.00

BGS Borehole Reference SJ69NE352 – Woolden Moss (930m SSW of site) – Dated 1986		
Strata Description	Depth to Top (m bgl)	Thickness (m)
Peat	GL	2.00
Clay and Sand	2.00	10.00
Sandstone	12.00	<200

No groundwater strikes were noted on the historical borehole records consulted.

Geological Features

The presence of recorded geological features such as BGS Mineral Sites, Man Made Mining Cavities or natural cavities within 250m of site are summarised below. Where entries are present at a radius wider than 250m from the site, further details can be found in Appendix 5.

Data type	Entries (On site)	Entries (0-250m)
BGS Recorded Mineral Sites	None	None
Man Made Mining Cavities	None	None
Natural Cavities	None	None
Artificial Ground / Made Ground	None	None.
Mining instability	None	None
Coal Authority Interactive Map – Mine entries	None	None

Radon

The property is in a Lower Probability Radon Area (less than 1% of homes are estimated to be at or above the Action Level). No radon protective measures are necessary in the construction of new dwellings or extensions.

Coal

A check of the Coal Authority Interactive Map (https://mapapps2.bgs.ac.uk/coalauthority/home.html) indicates the site lies within a Coal Mining reporting area. As such, a CON29M Coal Mining Report was obtained and is included in Appendix 6.

The Coal Authority Mining Report indicates that the site does not lie within an area that could be affected by past or present underground coal mining, and does not lie in an area where the Coal Authority has received an application for or is currently considering granting a licence to remove or work coal by underground mining methods. Additionally, the site does not lie within an area that could be affected by past or present opencast coal mining.

The Coal Authority has not received any damage notices or claims for coal mining related subsidence within 50m of the site since 31st October 1994.

The Coal Authority has no record of any mine gas emissions requiring action on the site.

Brine

The site does not lie within an area affected by Brine subsidence and as such, a Brine report was not obtained.

5.0 HYDROLOGY & HYDROGEOLOGY

Hydrology

The presence of any hydrological licences and incidents within 250m of the proposed site is summarised below. If entries are present at a radius than 250m wider of the site then further details can be found in Appendix 5.

Data type	Entries (On site)	Entries (0-250m)
Discharge Consents	None	None
Pollution Incidents to Controlled Waters	None	None
Water Abstractions	None	None
Nearest Surface Water Feature	None	Drainage ditch, 16m northeast of site
Flooding	The site is shown to be at low risk of flooding from surface water. The site is shown to be within a Zone 1 flood risk area associated with river flooding.	The surrounding area also lies within an area at low risk of flooding from surface water. The surrounding land is shown to be within a Zone 1 flood risk area associated with river flooding.

Hydrogeology

The Groundwater Vulnerability map is summarised in the table below:

Geology	Formation	Aquifer Type	Permeability
Drift	Peat	Unproductive Strata	Unknown
Solid	Wilmslow Sandstone Formation	Principal Aquifer	Unknown

6.0 ENVIRONMENTAL DATA

The following section details environmental data available for the site and the surrounding area. Full details can be found in the Envirocheck Report located in Appendix 5.

The tables below summarises the presence/absence of any waste, hazardous substance sites and/or industrial land uses within 250m of the site with details provided. Where there are entries present at a radius wider than 250m, then further details are provided in Appendix 5.

	Data Source	Data Summary
Environmental Database Information	Industrial Processes	There are no registered Integrated Pollution Control (IPC) Sites, Registered Radioactive Substances sites, Control of Major Accident sites (COMAH), Explosives Sites or Notification of Installations Handling Hazardous Substances (NIHHS) within 250m of the site.
Landfill & Waste Sites Search	Landfills: Ordnance Survey Historical Mapping	There are no records of historical landfills within 250m of the site. There is a single record of potentially infilled land (water) situated roughly 22m northwest of the site, regarding an unknown area of filled ground shown on OS mapping dated 1984.
	Other Waste Sites	There are no other recorded entries within 250m of the site.
Trade Directories	Trade Directory Entries recorded in 250m radius	There are no entries within 250m of the site.
Fuel Stations	Fuel Stations recorded in 250m radius	There are no recorded fuel stations within 250m of the site.
Radon Potential	Building Research Establishment, 2015, 'Radon: Guidance on protective measures for new buildings'	The site is situated in an area where radon protective measures are not necessary in the construction of new buildings.
Other Radiation		No reasonable grounds for believing land to be radioactively contaminated (in accordance with 2005 extension of Part IIA of The Environment Protection Act 1990).
Unexploded Ordnance	Zetica UXO Risk Map	Interactive map indicates the site lies in a "Low" bomb risk area. N.B. It should be noted that this free mapping tool is indicative only and does not constitute a detailed UXO assessment for the site
Ecology	Sites of Ecological Importance	There are no Sites of Special Scientific Interest (SSSI), National Nature Reserves, National Parks, Local Nature Reserves, Areas of Outstanding Natural Beauty or RAMSAR (wetlands) within 250m of the site. However, the site lies within an area of Adopted Greenbelt Land.

Buried and overhead Services	Site Walkover	A septic tank and above ground fuel storage tank were observed on site. It is assumed the pipework connecting these to the property are buried below ground. Additionally, several drain covers were also observed on site during the site walkover. No overhead services were observed at the site.
Archaeological & Building Heritage	Historic England website accessed on 6th October 2022 https://www.historicengland.org.uk	None on site or within 250m of the site.
		None on site or within 250m of the site.

7.0 PREVIOUS REPORTS / INVESTIGATIONS

No previous reports or investigations have been provided to Geotechnics Limited during the preparation of this report.

8.0 POTENTIAL CONTAMINANT LINKAGES & PRELIMINARY CONCEPTUAL SITE MODEL

Assumptions relating to the Proposed Development

The geo-environmental assessment is based on the assumptions presented below:

- The site will comprise a combined residential dwelling / office space with garages and utility space and new stables/barns with associated infrastructure.

Potential Sources of Contamination

For the purpose of this assessment the potential contaminants of concern have been considered according to whether they are likely to have originated from on-site or off-site sources.

Potential On-site Sources of Contamination

- Any buried construction / demolition wastes, including asbestos, or shallow Made Ground relating to the construction of the existing on-site structures.
- Sources from the former/current works and processes on the site, including hydrocarbon and chemical spillages, and pesticides/herbicides.
- Possible leaks of effluent from buried pipework or buried septic tank due to settlement.
- Possible leaks of hydrocarbons from above ground fuel storage tank.
- Burning of waste materials on site.

Potential Off-site Sources of Contamination

- Materials used to backfill nearby pond identified on historical maps.
- Sources from the former/current agricultural processes on land surrounding the site, including hydrocarbon and chemical spillages, and pesticides/herbicides.
- Any contaminants contained in road construction materials.

Potential Receptors of Contamination

Based on the data previously discussed, the following potential receptors to contamination have been identified:

- Humans – Pre-development completion, i.e. working on site during demolition and construction.
- Humans – site end users (residents and visitors) following development.
- Surface Waters – off-site drainage ditch
- Groundwater – Groundwater within the bedrock Principal aquifer.
- Building structure and services following development.

The possible contaminant linkages are discussed below. It should be noted not all may be formed between all sources and receptors.

Identification of Pathways

Pathways to Human Health

A potential contaminant may reach a receptor by various routes. For example, in areas where contaminated material is exposed, dermal contact with the material, inhalation or ingestion of dust may occur.

Inhalation or ingestion of dust and water could occur during the construction and development phase at the site. Pathways from dermal contact with soil and groundwater may also arise.

It is considered that the risk of short term exposure for ground workers and other construction workers is moderate, since there is a possibility for the presence of asbestos fibres in any Made Ground.

Post construction, the surface of the development area will predominantly comprise soft landscaped areas or gravel hardstanding. Whilst the construction of floor slabs for the new combined dwelling / office space and stables will break a significant number of potential contaminant pathways, such as long-term direct contact and dust inhalation/ingestion, several potential pathways will remain where excavations into the ground can be carried out, such as gardening and planting etc.

Ground Gas and Vapour related Pathways

Ground gas and vapour entry into buildings is considered to be a potential pathway for the proposed development due to the possibility of advection and diffusion into buildings, which may occur regardless of the presence of hard standing across the site.

Pathways to Controlled Waters

Groundwater is anticipated to be present within the Sherwood Sandstone Formation. Whilst the Peat deposits are shown on the maps/websites consulted as an unproductive strata, groundwater may be present in the superficial deposits in hydraulically isolated lenses of relatively permeable strata (such as bands of sand or gravel).

The vertical leaching of contaminants from any Made Ground or hydrocarbon spills into the groundwater is a potential pathway for contaminants to impact groundwater. The potential presence of Glacial Till (shown to underlie the Peat deposits in the historical boreholes) would create a barrier (aquiclude) between any Made Ground contaminated materials, if present, and the bedrock Principal Aquifer. Groundwater in drift deposits is suspected to occur in hydraulically isolated lenses and the downward migration of any contaminants through the Drift deposits is likely to be very slow.

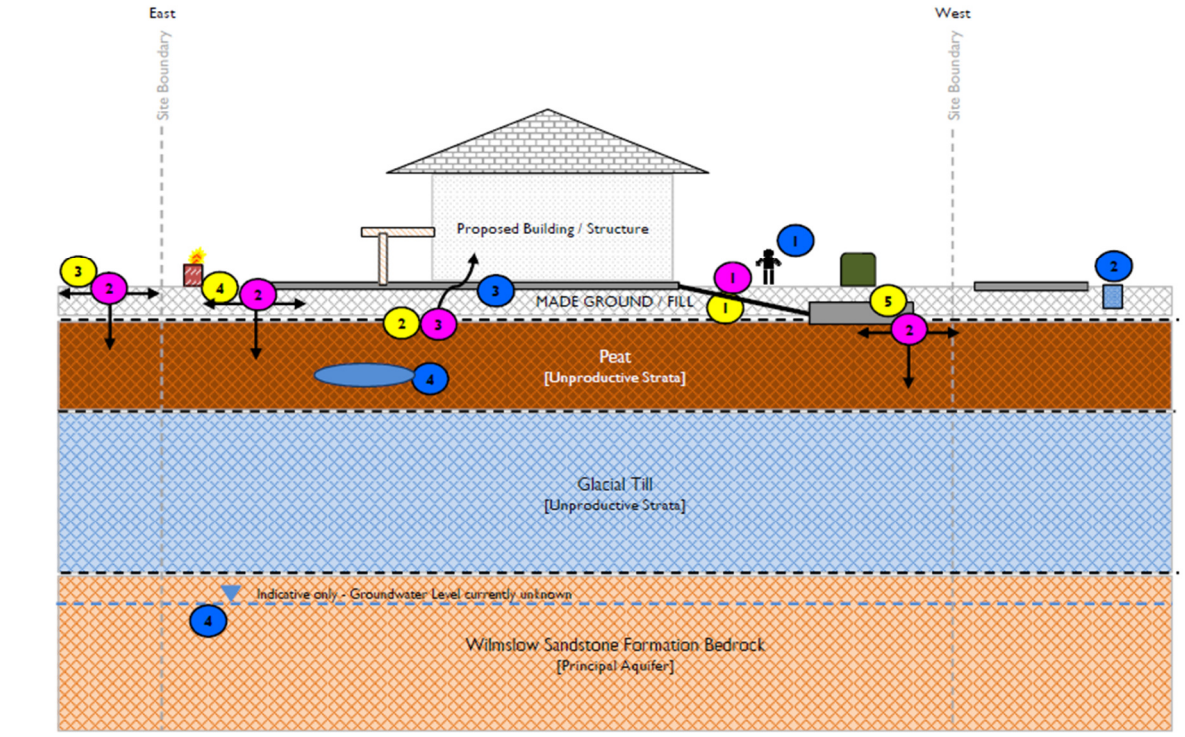
Other Pathways

Other potential pathways that are possibly less significant to the site but still require consideration are; chemical attack on foundations and services, potential for surface run-off to transport soils off-site during construction works and permeation of contaminants through water pipes.

Initial Conceptual Site Model

In accordance with BS 10175 and LCRM, a schematic Initial Conceptual Site Model has been developed based on the source-pathway-receptor data presented above. Further details of the risk assessment methodology are presented in Appendix 7.

The model shows the predicted geology and topography, the major on site potential contamination sources and vulnerable receptors, although the drawing may not be considered to scale. The information presented above represents the preliminary conceptual ground model that may need to be revised based on information obtained as part of any future intrusive investigation. A number of sensitive receptors and potential pathways and sources (in association with a list of likely contaminants) have been identified, as illustrated below and included in Appendix 8:



Sources:

1. Made Ground/Fill and Hydrocarbon/chemical spills
2. Ground Gases / Vapours
3. Off site Made Ground/Fill and hydrocarbon/chemical spills
4. Burning of waste
5. Leaks from existing septic tank / fuel storage tank / buried pipework

Pathways:

1. Direct contact/dermal contact/inhalation/ingestion
2. Horizontal/vertical migration
3. Gas/Vapour Migration

Receptors:

1. End-users and construction workers
2. Off site receptors (surface water)
3. Construction materials / buried services
4. Groundwater

The ground model and proposed end use described above have been considered in relation to Nathaniel et al. 2015, The LQM/CIEH S4ULs for Human Health Risk Assessment. The proposed development generally does not conform to the conceptual models defined in Nathaniel et al. 2015 however for the purpose of this geo-environmental assessment, the site is closest to commercial land-use.

Potential Contaminant Linkages Assessment

For each contamination source there are potential contaminant linkages with all receptors. However, in the context of this site, not all of the contaminant linkages are plausible. The likelihood of the various pathways linking the contaminants to the receptors is presented in the table below:

The preliminary contaminant linkage assessment is based on current available guidance published by a number of sources.

The preliminary hazard assessment is a qualitative assessment of the risks posed by each viable pollution link identified. The hazard assessment leads to a recommended subsequent activity that could be:

- Action Required (AR) in the short term to break existing contaminant-pathway-receptor (CPR) link;
- Site Investigation Required (SIR) with objectives for risk estimation; or
- No Action Required (NAR) at this stage.

Hazard Identification				Hazard Assessment			
Link	Contaminant	Pathway	Receptor	Probability	Consequence	Risk	Contaminant Linkage Assessment
1	Contaminated soil / groundwater	Ingestion (via soil dust) and inhalation (via soil dust and vapours), ingestion through dirty hands, dermal contact with soil/water.	A- Humans using the site during construction.	Medium	Medium	Medium	SIR: Potential for contaminants to be present in Made Ground, demolition wastes and from any spillages or leaks. Confirmation of contaminant status in the footprint of the proposed development is required.
2		Ingestion (via soil dust) and inhalation (via soil dust and vapours), ingestion through dirty hands, dermal contact with soil/water.	B- Humans using the site after development completion.	Low	Medium	Low / Medium	SIR: The construction of the floor slabs should break the pathway for direct contact or inhalation/ingestion of possible contaminants. However, where soft landscaped areas remain, confirmation of contaminant status is still required.
3		Downward / Lateral migration	D – Unproductive strata D – Principal Aquifer	Low	Low	Low	NAR: Potential presence of Glacial Till would form an aquiclude (barrier) preventing downward migration of contaminants into underlying Principal Aquifer. Investigation required to confirm presence of Glacial Till. Concentrations of contaminants in groundwater (soil leaching samples if groundwater not encountered) required to quantify risks to nearby sensitive receptors.
4		Inhalation	B- Humans using the site after development completion.	Medium	Medium	Medium	SIR: Potential for ground gases in Peat deposits as well as asbestos fibres in Made Ground or from demolition.
5		Ingestion, inhalation, dermal / direct contact	E- Ecology (Flora/Fauna)	Low	Negligible	Low	NAR: No Action Required.
6	Gas – methane & carbon dioxide	Ingestion, inhalation, dermal / direct contact	B - Humans using the site after development completion.	Medium	Medium	Medium	SIR: Peat deposits indicated to be present at the site. Potential for presence of Made Ground. Potential for vapours from leaks/spillages from above ground fuel storage tank/pipework.
7		Unproductive Strata	E- Ecology (Flora/Fauna)	Negligible	Negligible	Low	NAR: No Action Required.
8	Contaminated soil / waste / groundwater	Direct contact.	F- Building structures.	Medium	Moderate	Medium	SIR: Potential for contaminants to be present in Made Ground, demolition wastes and from spillages. Confirmation of contaminant status in the footprint of the proposed development is required.

9.0 GEOTECHNICAL HAZARDS ASSOCIATED WITH THE DEVELOPMENT

In addition to the environmental hazards, there are also geotechnical hazards associated with the stability of the ground (including load bearing capacity, slope stability and effects of ground (mining) cavities). Local Authorities follow the NPPF (2021) which requires that "site is suitable for its new use taking account of ground conditions and land instability….including risks arising from natural hazards or former activities such as mining…" A summary of the geotechnical hazards and considerations is provided below:

Geohazards	
Highly Compressible Ground	High risk in Peat deposits and organic soils identified on Geological Records.
Collapsible Soils	Negligible.
Swelling Clay	Negligible in peat deposits. Underlying Glacial Till (if present) are generally considered to be of low shrinking/swelling potential.
Running Sand	Negligible.
Ground Dissolution	Negligible.
Landslip	Negligible.
Mining & Quarrying	Negligible. There is no evidence of mining or mineral extraction or quarrying at the site.
Geotechnical Design Considerations	
Site Clearance	The current development proposals will include the demolishing of the existing dwelling and barns, general clearance of the area, excavation of soils and possible removal from site.
Trees	Several mature and semi-mature trees are present on site. Site proposals indicate that there is to be minimal removal of trees for construction. Consideration should be given to the NHBC Guidance on Building Near Trees (Chapter 4.2, 2022 Edition).
Existing Buildings / Obstructions	There are existing buildings/structures present on site with associated foundations. The foundation type and depth for these structures is unknown.
Foundations	The new structures are proposed to be built in previously developed areas of the site. It is likely that there will be obstructions in these areas (existing foundations etc). The new structures are understood to comprise both a two-storey timber framed building with brickwork and timber cladding, and a timber framed stable/barn building. Spread foundations are unlikely to be suitable at this site due to the Peat deposits indicated to be present on the geological mapping and nearby historical boreholes. The foundations will likely need to be founded in the deeper glacial till deposits (if present), indicated to underly the peat deposits. The strength, compressibility and volume change potential of the foundation-bearing stratum must be confirmed. Ground investigation will be required in order to fully inform the design of such foundations.
Floor Slabs	Ground investigation will be required in order to fully inform the design of any floor slabs.
Groundwater	There is high potential for shallow groundwater to be encountered in the peat deposits as it is understood that groundwater seeps into the existing basement causing flooding. Ground investigation will be required to determine whether any groundwater control measures will be required during construction.
Earthworks	No significant bulk earthworks are likely to be required to produce the development platform. However should any earthworks be required, it is unclear whether site excavated soils can be reused. Ground investigation will be required to fully inform the suitability of soils for reuse on site.
Slopes	Slope instability is likely to be low risk as the topography over the development area is generally flat.
Retaining Walls	No retaining structures were observed during the walkover. No significant retaining structures are anticipated as part of the proposed development.
Pavements / Hard Standing	It is not clear whether any permanent pavements / hard standing are included in the proposals for the site. However, given the thickness of peat anticipated to be present at the site, consideration should be given to the construction of temporary roads for construction traffic, and the design of any permanent roadways at the site. This needs to be confirmed by intrusive investigation.
Chemically aggressive ground conditions	Adverse pH and sulphate levels are possible but this needs to be confirmed as part of an investigation, particularly in any Made Ground and Peat deposits.

A detailed ground investigation is imperative in the redevelopment of a site. The proposed investigation detailed below in Section 10 is for preliminary purposes. Contractors for the construction should obtain any additional investigation work that may be required to prepare their own detailed Ground Investigation Report and Geotechnical Design Report and to prepare their own contaminated land risk assessment in line with Land Contamination Risk Management (LCRM, 2021) guidance including further ground investigation and risk assessment, remediation options appraisal and remediation strategy and verification (if required), which are to be used as the basis of the contractors detailed design.

10.0 CONCLUSION & RECOMMENDATIONS

Environmental Risk Assessment

The results of the risk assessments indicate that there are some potential sources of contaminants present at the site, primarily related to any potential Made Ground deposits and/or demolition waste. There is also the potential for localised spillages of fuels, leaks of effluent from buried pipework or tanks, as well as the presence of Made Ground/Fill materials from developments/constructions on other parts of the site. There is a moderate risk to receptors including human receptors during construction and a lower risk to site users following development. The presence of peat deposits is unlikely to be a significant source of ground gases due to the low potential to generate significant quantities of methane and carbon dioxide. However, spillages/leaks of heating fuel could be a source of ground gases/vapours which will require further investigation and analysis. No specific precautions are required with respect to radon for the development.

There is limited potential for possible contaminants in Made Ground to migrate vertically down into the underlying bedrock aquifer due to the potential presence of relatively low permeability non-productive Glacial Till deposits. The presence of such deposits would need to be proven following intrusive investigation. Lateral migration may occur from off and on site sources potentially along the topsoil / Made Ground boundary and the underlying Drift deposits.

If any soils are to be removed from site and disposed of at a Permitted facility, these should be chemically analysed to ensure appropriate waste classification and characterisation.

Geotechnical Risks

The assessment has concluded that there are some geotechnical risks associated with the proposed development which require further investigation. Information is required in order to design appropriate foundations and/or floor slabs for the proposed development, as well as assess the potential for aggressive ground conditions for concrete design purposes. If earthworks (cut and fill) are proposed relating structures and features at the site, information will be required to assess the soils compaction and chemical characteristics.

Recommendations for Further Works and Proposed Investigation Strategy

Proposed intrusive investigation strategy

In order to make a quantitative assessment of the potential risks and so any required remedial measures can be considered, Geotechnics Limited recommend that a Phase 2 Investigation is carried out in accordance with BS 10175:2011+A2:2017. This should be combined with a geotechnical investigation carried out in accordance with BS 5930:2015+A1:2020 to assist with the proposed development design. We recommend that the aims of future investigations are:

- Determine whether any contaminative substances are present at site associated with any Made Ground, on-site demolition waste or effluent and fuel leaks/spillages.
- To confirm the depth and extent of any Made Ground that may be present across the site.
- Determine the geotechnical properties of the natural soils at the site, and any Made Ground that may be present, to allow for the design of the proposed development foundations, the aggressiveness of the soils to buried concrete and provide information for pavement / hard-standing design and any earthworks including slopes and retaining structures.
- Determine the presence of any groundwater and also determine if it has been impacted by onsite contaminant sources.
- Determine the presence of any sources of ground gases via monitoring of ground gas levels in standpipes.

In order to fulfil the aims detailed above, we recommend that this preliminary investigation comprises:

- Exploratory hole comprising a single (1 No.) cable percussion borehole, to a depth of up to 10m bgl (dependant on ground conditions) in the area of the proposed new structures, to determine thickness of peat deposits and obtain undisturbed samples of underlying glacial till (if present) for strength and compressibility testing.
- Exploratory holes comprising up to six (6 No.) dynamic sample boreholes, to a depth of 6m bgl (dependant on ground conditions) in the areas of the proposed new structures, to determine thickness of peat deposits and prove presence of and depth to glacial till around the site.
- Recovery of samples of the appropriate Sample Class for classification, strength, compressibility, earthworks classification and buried concrete classification;
- Installation of combined gas / groundwater monitoring wells and their subsequent monitoring/sampling;
- In situ testing comprising DCP tests for areas of hardstanding and proposed roads/pavements.
- Recovery of samples from boreholes to undertake chemical testing including asbestos, heavy metals, speciated TPH plus BTEX, speciated PAH, pathogens, herbicides and pesticides.
- Soil leaching tests of Made Ground materials to asses any potential impact to the underlying strata, if shallow groundwater is not encountered;
- Analytical analysis of soils to allow for waste classification and characterisation;
- For each contaminant identified, a quantified application of risk assessment models in accordance with LCRM;
- Commissioning of a Phase 2 report following the completion of the intrusive investigations; and,
- Review and update of the Geotechnical Risks.

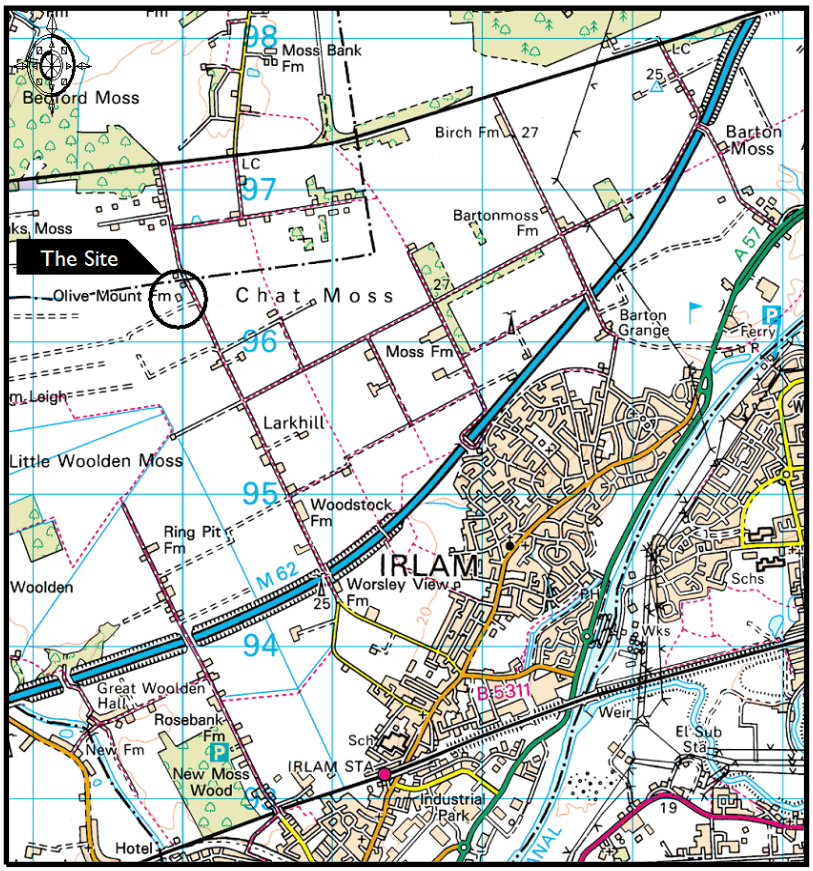
11.0 REFERENCES

1) Environmental Protection Act 1990: Part IIA, Contaminated Land Statutory Guidance, HM Government, April 2012.
2) BS 5930: 2015 + A1: 2020 : Code of practice for site investigation. British Standards Institution.
3) BS 10175: 2011+ A2 2017: Investigation of potentially contaminated sites – Code of Practice. British Standards Institution
4) Building Research Establishment : 2010 : Part C.
5) Building Research Establishment : 2015 : Radon: Guidance on protective measures for new buildings.
6) Environment Agency : 2010 : GPLC1 – Guiding principles for land contamination. GPLC2 – FAQs, technical information and references. GPLC3 – Reporting checklists.
7) Environment Agency : 2021: Land Contamination Risk Management
8) HM Government : 2013 : The Building Regulations 2010. Part C. Site Preparation and resistance to contaminants and moisture. 2004 Edition with Amendments 2010 & 2013.
9) Ministry of Housing, Communities & Local Government: 2021: National Planning Policy Framework, February 2019.
10) Statutory Instruments: 2012: Environmental Protection, England. Contaminated Land (England) (Amendment) Regulations 2012 No. 263 coming into force 6th April 2012.
11) Statutory Instruments: 2015: The Construction (Design and Management) Regulations 2015 (CDM 2015) coming into force 6th April 2015.
12) Nathaniel et al. 2015, The LQM/CIEH S4ULs for Human Health Risk Assessment.

APPENDIX I

Site Location Plan

SITE LOCATION PLAN



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Desk Study Report
at
Olive Mount Farm
for
Ms Rachel Pike

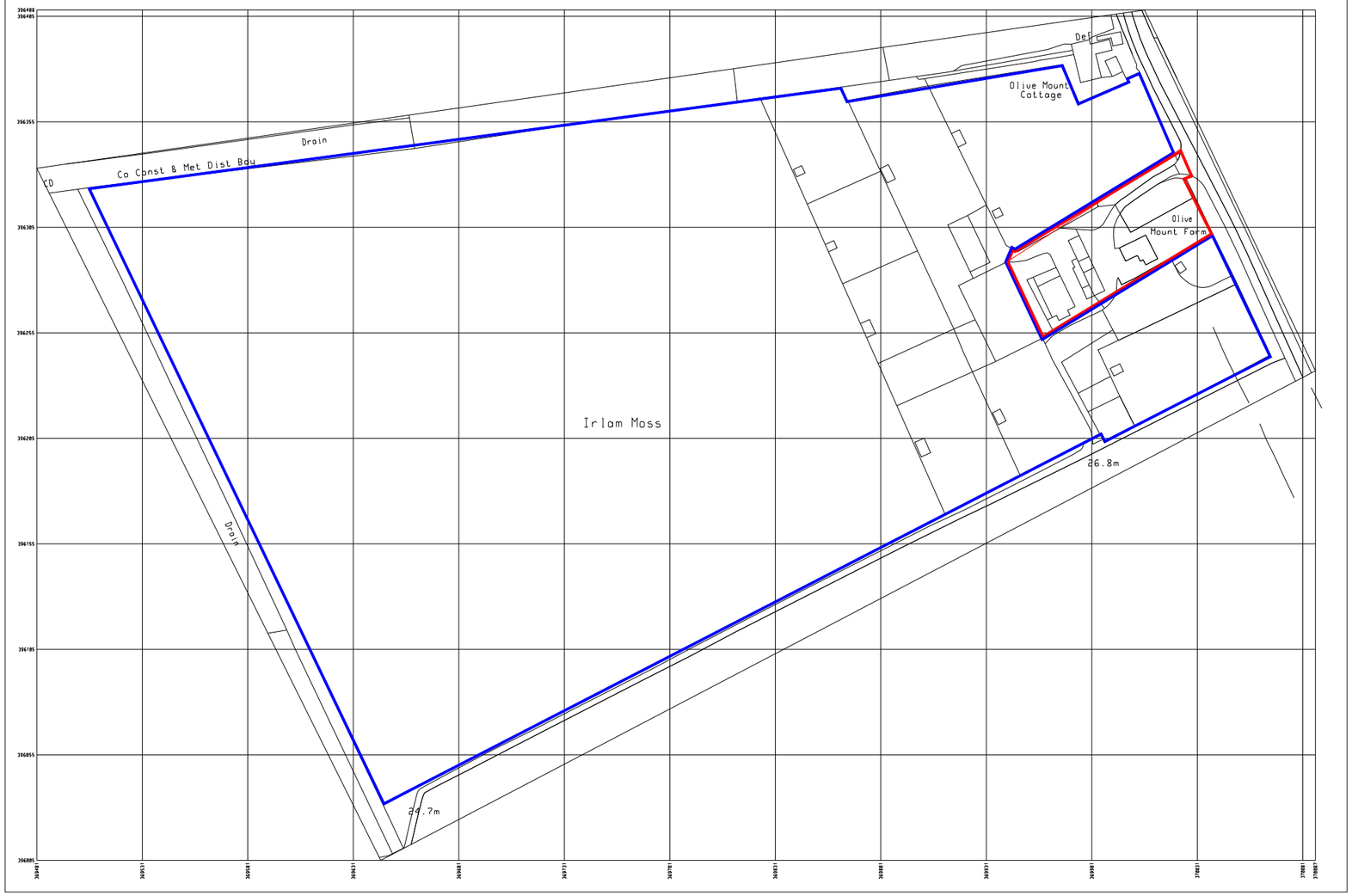
GEOTECHNICS
geotechnical and geoenvironmental specialists

APPENDIX 2

Plans and Drawings provided by Client

UK Planning Maps

01856 898 822
www.UKPlanningMaps.com



Produced on 16 November 2021 from the Ordnance Survey National Geographic Database and incorporating surveyed revision available at this date.
This map shows the area bounded by 369644 396885,378887 396237,378886 396488,369481 396333,369644 396885
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Data licence expires 16 November 2022. Unique plan reference: uk/716721/969789

0 8 16 28 36 48 56

Revision Details		Drawn	Date	
Mark	Revision	Drawn	Date	Checked

SALT Architects
54 Lairgate, Beverley
East Yorkshire
HU17 8EU
telephone 01482 888102
fax 01482 888621

Client's name

Rachel Pike

Job title

Olive Mount Farm, Astley Road, Irlam

Drawing title

Location Plan

Scale

1:2500@A3

Drawn	Checked	Date
BH		25/7/22

Job No	Drawing No.	Rev
2938	3_001	

Status

RIBA stage 3 planning

S:\Projects\2938 RACHEL PIKE\1_DRAWINGS\1.3_PLANNING\site plan.MAN

Schwegler Bat Boxes and bird boxes to be fixed under the direction of the ecologist

surface water to be directed to soak aways
- positions to be agreed outside of tree area and roadways

foul water to be directed to package treatment plan

tree protection area to be constructed as **BS 5837** (2012) – Trees in Relation to Design, Demolition and Construction.

new trees

blue boundary indicating extended site ownership

N

ASTLEY ROAD

EXISTING ACCESS
NEW GATES SET BACK TO ALLOW OPENING

EXISTING DRIVEWAY

POND

EXISTING BARN

new soakaway

NEW STABLE BLOCK

STABLE ACCESS

TRACTOR ACCESS TO FIELDS

YARD

dog wash

WORKSHOP

CAR AND HORSE BOX PARKING

new soakaway

TREE PROTECTION AREA

new treatment plant
septic tank removed

new orchard fruit trees

COURTYARD

HOUSE

GARAGE AND UTILITY

TREE PROTECTION AREA

EXISTING HORSE MENAGE

garden space
developed for vegetables and flowers

TRACTOR ACCESS TO FIELDS

TREE PROTECTION AREA

new orchard fruit trees

native hedging

new soakaway

TRACTOR ACCESS TO FIELDS

0 5 10 15 20 25 30 35 40 50M

Revision Details

Mark	Revision	Drawn	Date	Checked

SALT Architects
54 Lairgate, Beverley
East Yorkshire
HU17 8EU
telephone 01482 888102
fax 01482 888621

Client's name

Rachel Pike

Job title

Olive Mount Farm, Astley Road, Irlam

Drawing title

Site Plan

Scale

1:200@A1

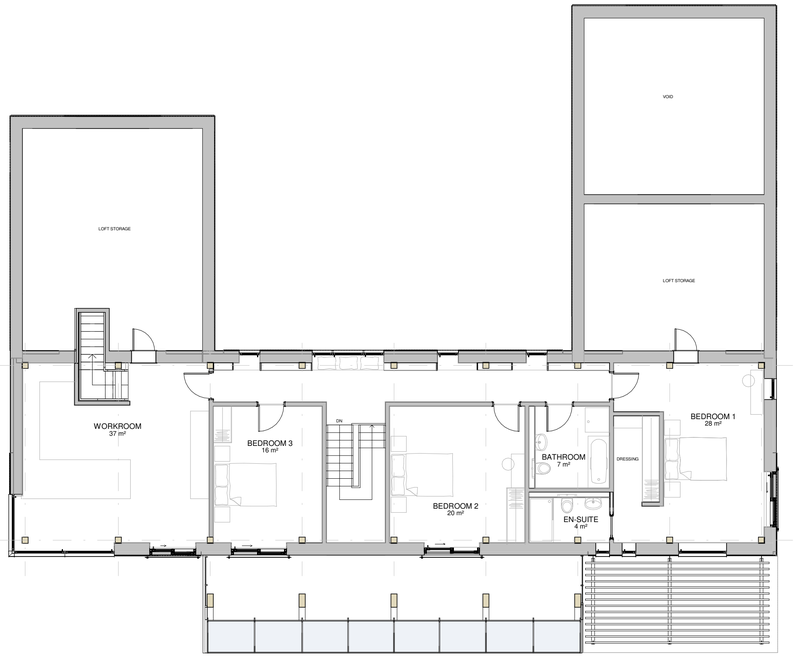
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Status

RIBA stage 3 planning

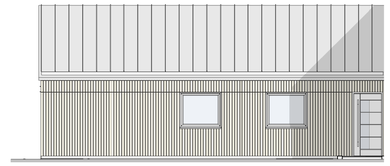
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FIRST FLOOR PLAN
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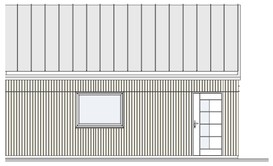
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COURTYARD ELEVATION 1
1 : 100



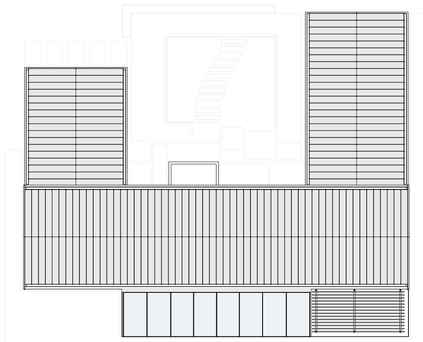
EAST ELEVATION
1 : 100



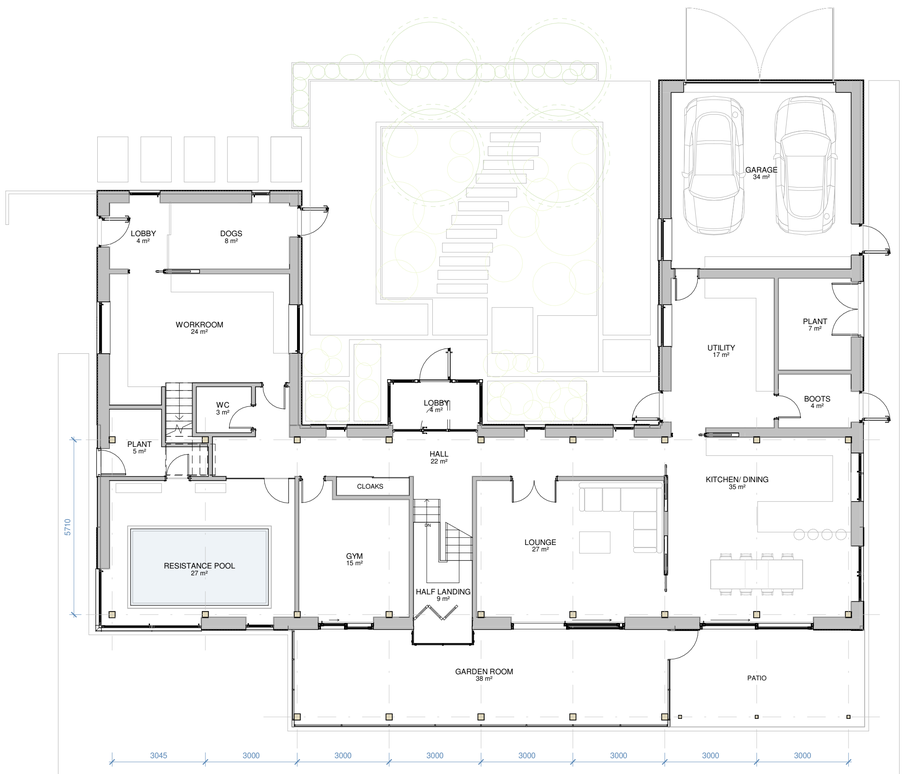
COURTYARD ELEVATION 2
1 : 100



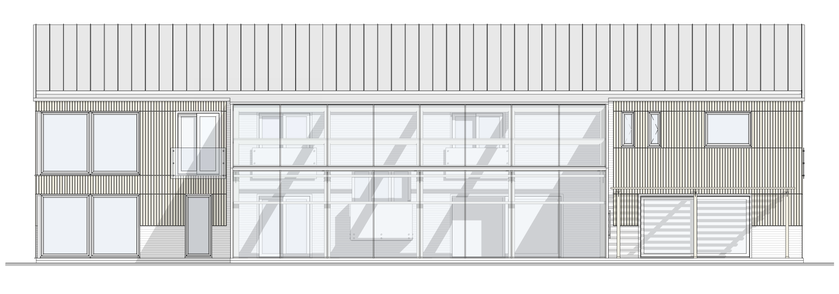
SOUTH ELAVATION
1 : 100



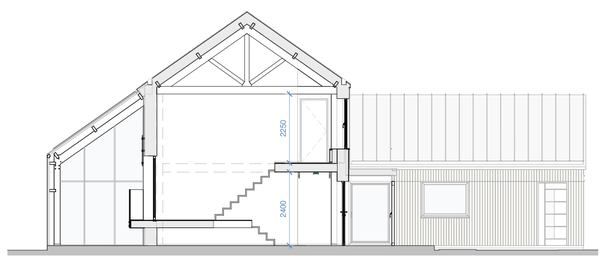
ROOF PLAN
1 : 200



GROUND FLOOR PLAN
1 : 100



WEST ELEVATION
1 : 100



TYPICAL SECTION
1 : 100

MATERIALS KEY

Roof - Zinc/ Grey metal standing Seam
Walls - Buff facing brickwork - Timber vertical boarding
Windows - Black upvc tripple glazed
Doors - Composite with tripple glazed panels





Rev	Description	Issued by	Date

Notes

Figured dimensions only are to be taken from this drawing. All dimensions are to be checked on site before any work is put in hand.

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SALT architects
54 Lairgate, Beverley
East Yorkshire
HU17 8EU
Telephone 01482 888102
fax 01482 888621

Client Name
Rachel Pike

Job Title
Olive Mount Farm, Astley Road, Irlam

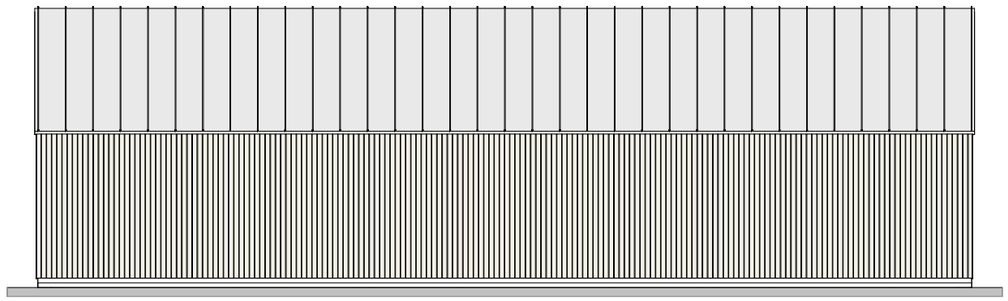
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Proposed Plans Elevations and Section

Scale @ A1
As indicated

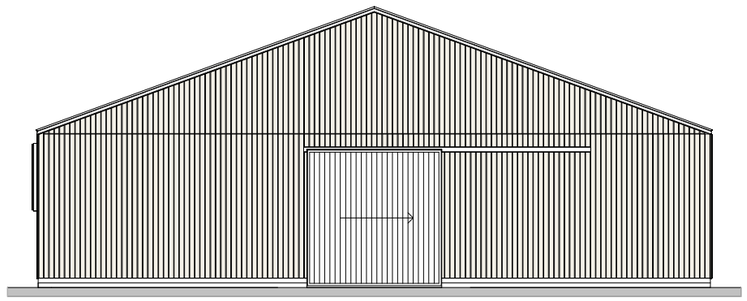
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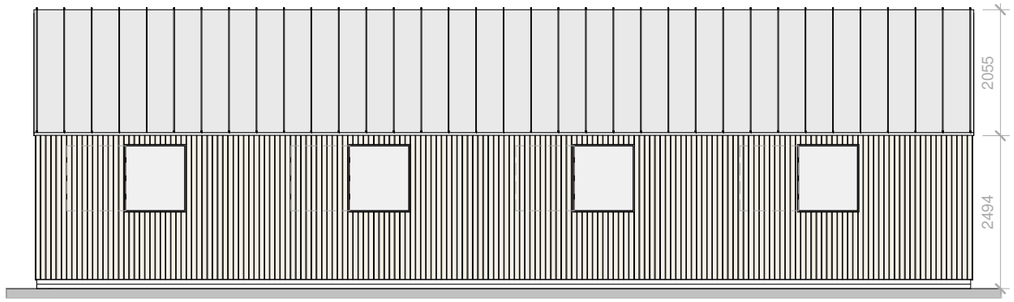
Status
PLANNING



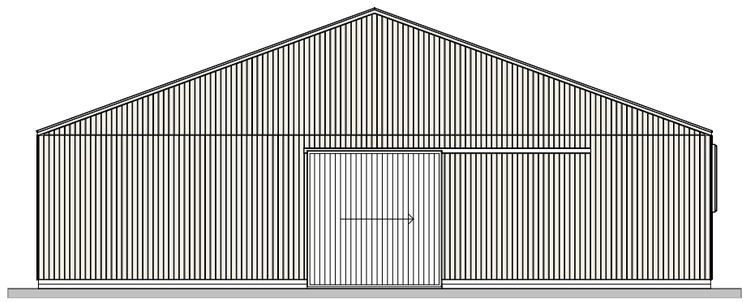
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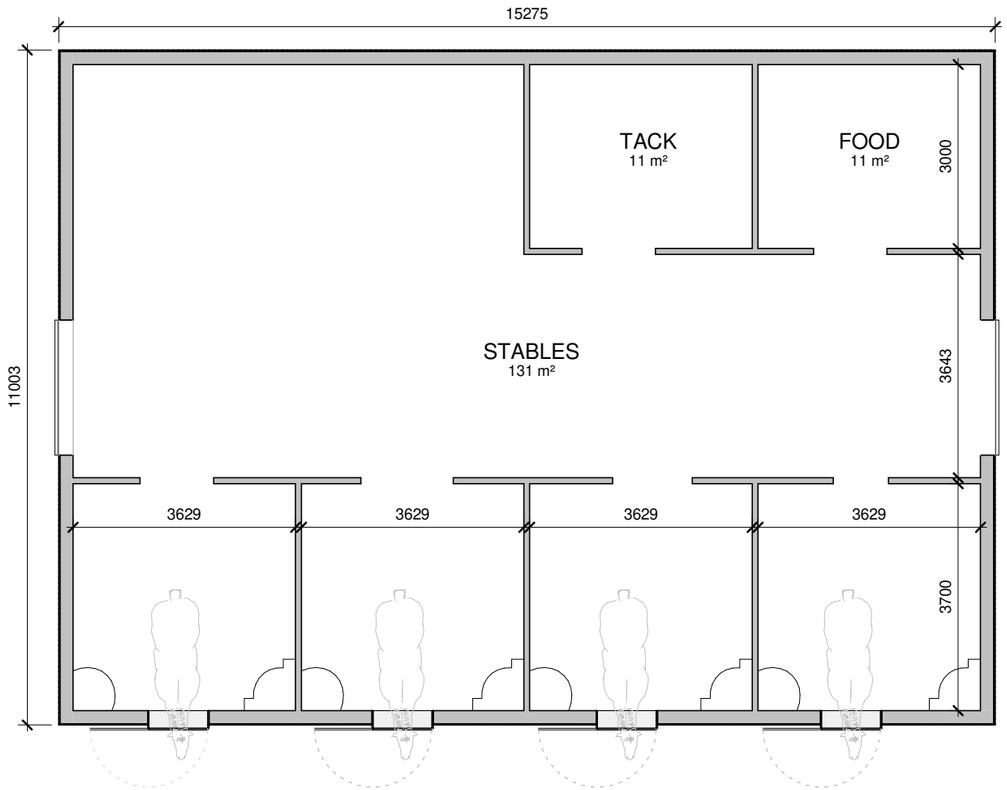
EAST ELEVATION
1:100



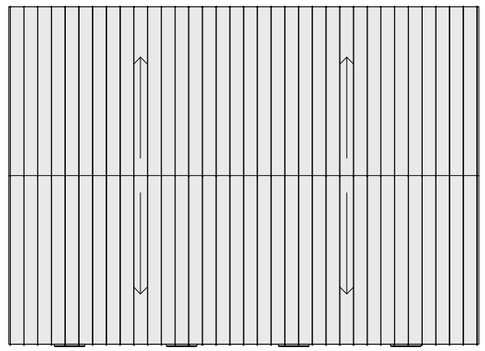
SOUTH ELEVATION
1:100



WEST ELEVATION
1:100



FLOOR PLAN
1:100



ROOF PLAN
1:200

MATERIALS KEY

Roof - Zinc/ Grey metal standing Seam
Walls -Timber vertical boarding



GRAPHIC SCALE: 1:200



GRAPHIC SCALE: 1:100

Notes

Figured dimensions only are to be taken from this drawing. All dimensions are to be checked on site before any work is put in hand.

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Rev	Description	Issued By	Date

SALT architects

54 Lairgate, Beverley
East Yorkshire
HU17 8EU

Telephone 01482 888102

fax 01482 888621

Client Name

Rachel Pike

Job Title

New Dwelling
Olive Mount Farm, Astley Road, Irlam

Drawing Title

Proposed Stables Plans and Elevations

Scale @ A3

As indicated

Drawn	Checked	Date
ST	BH	25/07/22

Job No.	Drawing No.	Rev
2938	(3) - 005	

Status

PLANNING



Approach to the Formal Entrance

Olive Mount Farm, New Dwelling: Images



Entrance with Workshop and Garage Forming Courtyard



View to the Southwest with Orangery – stables adjacent



View of the Southwest with Workrooms and Pool Area



View to the Kitchen Dining Area with Shading Pergola



North East View with Stables Adjacent



South West View in Winter – the Orangery forming a Buffer Zone

APPENDIX 3

Site Visit Photographs

Project Number : PN224461

Project : Olive Mount Farm Desk Study Report



1. Site entrance



2. Site entrance looking south



3. North-eastern corner of site looking west from site entrance



4. Front of existing residential dwelling



5. South-eastern corner of site



6. Septic Tank cover



7. Possible infilled pond



8. Above ground fuel storage container



9. Front of existing wooden barns



10. Contents of wooden barn



11. Materials stored within wooden barn



12. Rear of Wooden Barn



13. Front of existing Dutch Barn



14. Storage container adjacent to dutch barn



15. Contents of dutch barn



16. Rear of Dutch Barn



17. Wet ground at rear of dutch barn



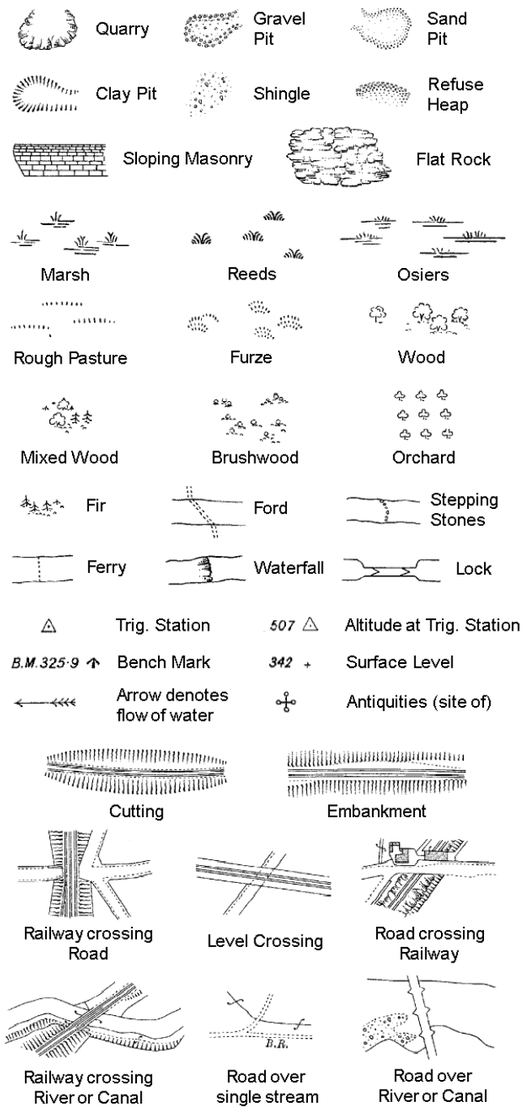
18. Manure stockpile to rear of wooden barn

APPENDIX 4

Envirocheck Historical Maps

Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

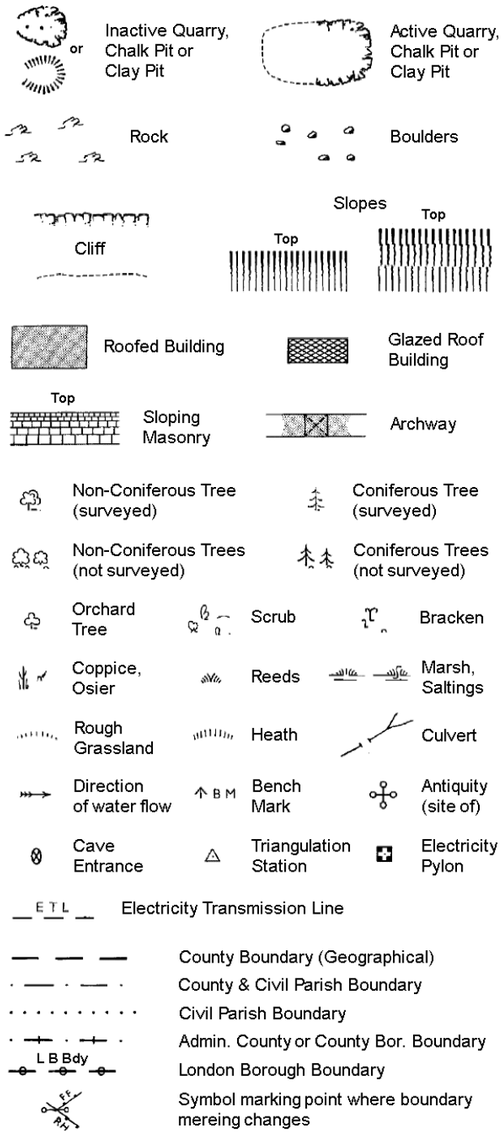
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

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



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

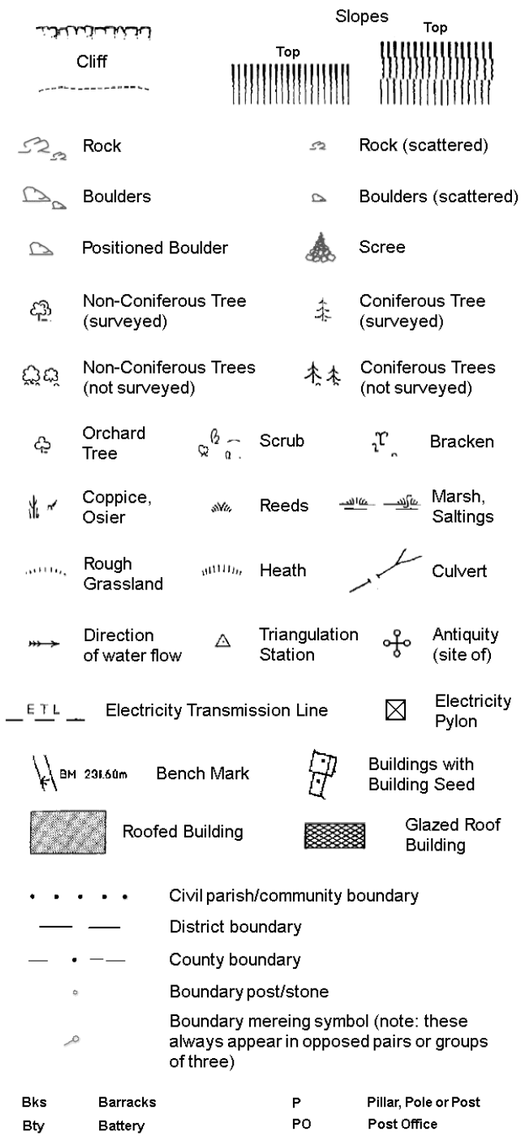
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

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



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

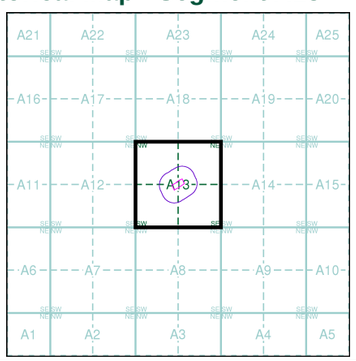
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

geotechnics

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:2,500	1890 - 1893	2
Lancashire And Furness	1:2,500	1907 - 1908	3
Lancashire And Furness	1:2,500	1928	4
Ordnance Survey Plan	1:2,500	1962 - 1968	5
Additional SIMs	1:2,500	1962	6
Supply of Unpublished Survey Information	1:2,500	1975	7
Ordnance Survey Plan	1:2,500	1979	8
Large-Scale National Grid Data	1:2,500	1992	9
Large-Scale National Grid Data	1:2,500	1994	10
Historical Aerial Photography	1:2,500	2000	11

Historical Map - Segment A13



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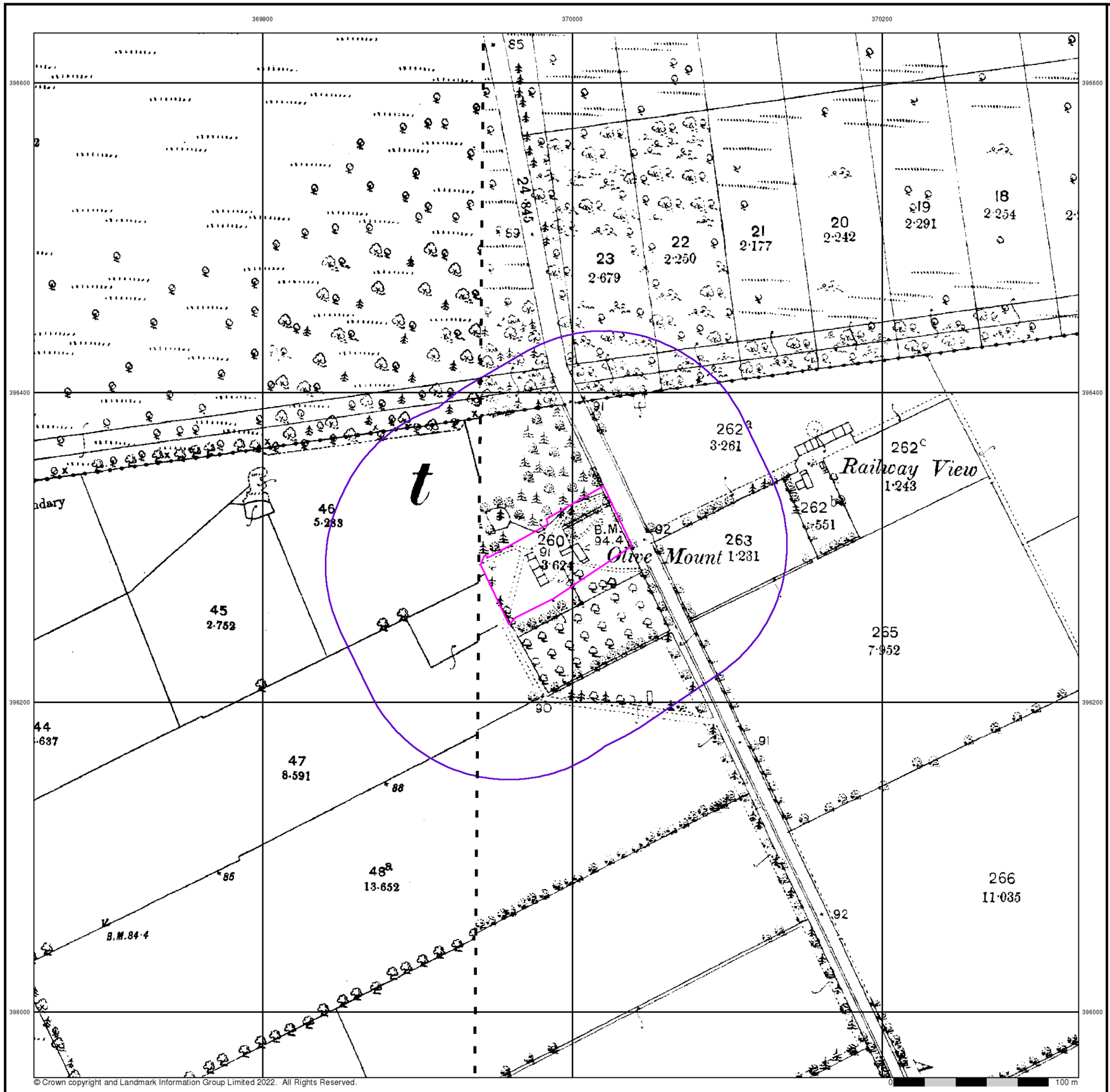
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Search Buffer (m):	100

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

Landmark INFORMATION GROUP

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



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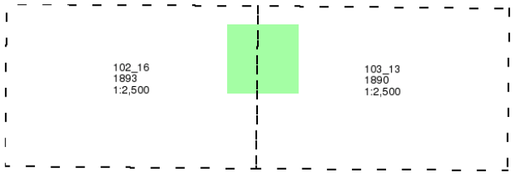
Lancashire And Furness

Published 1890 - 1893

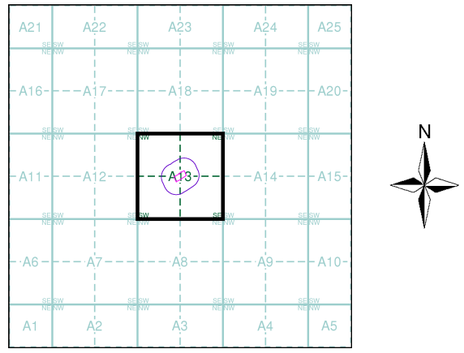
Source map scale - 1:2,500

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



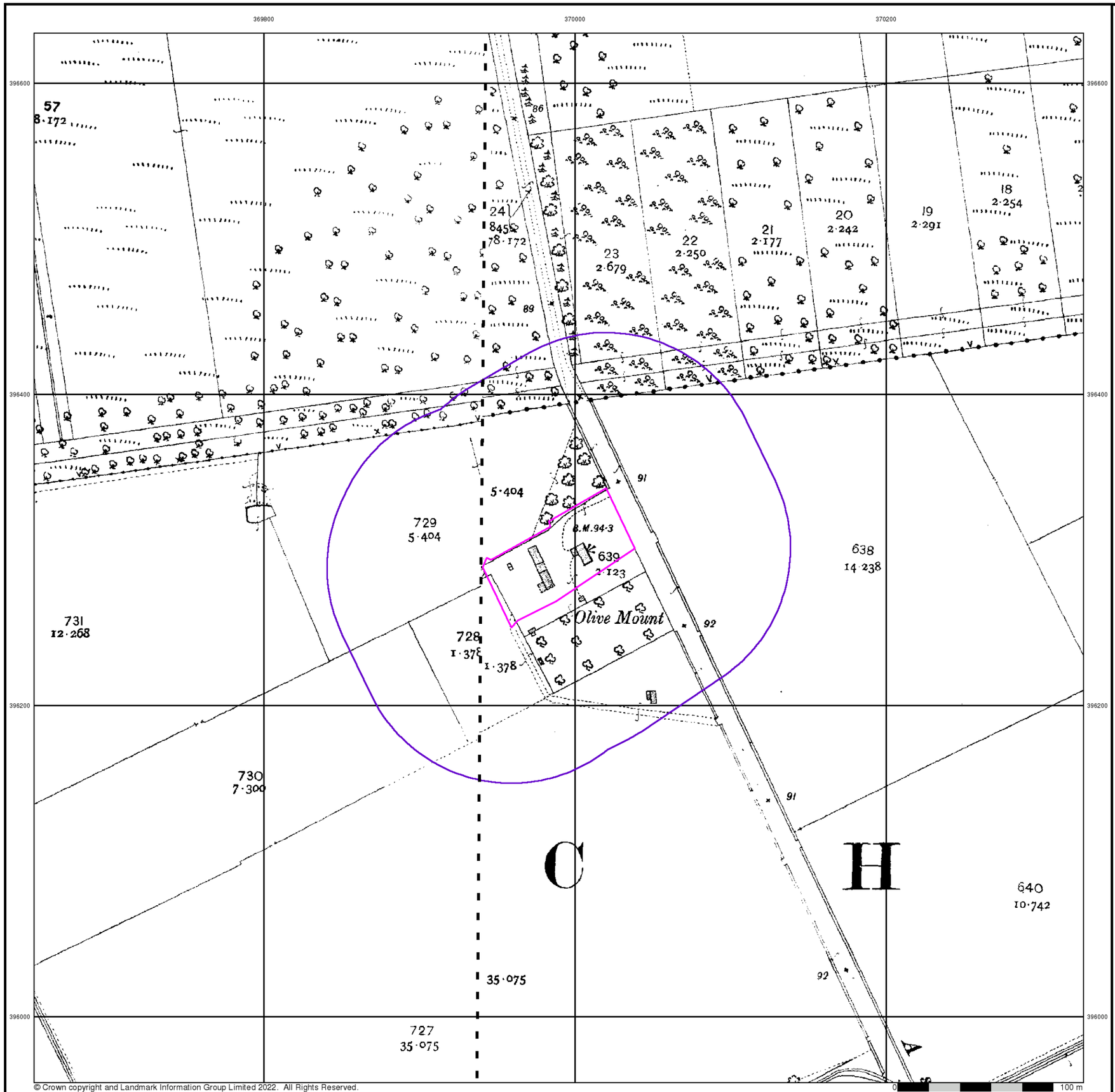
Order Details

Order Number:	302167182_1_1
Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
Search Buffer (m):	100

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

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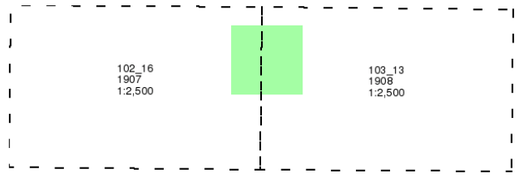
Lancashire And Furness

Published 1907 - 1908

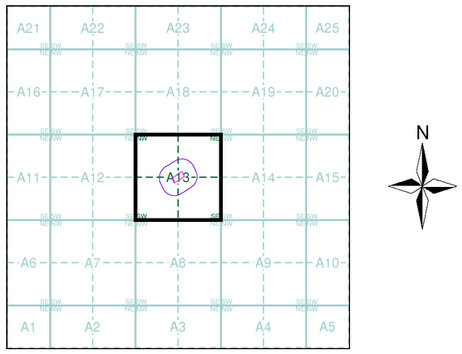
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



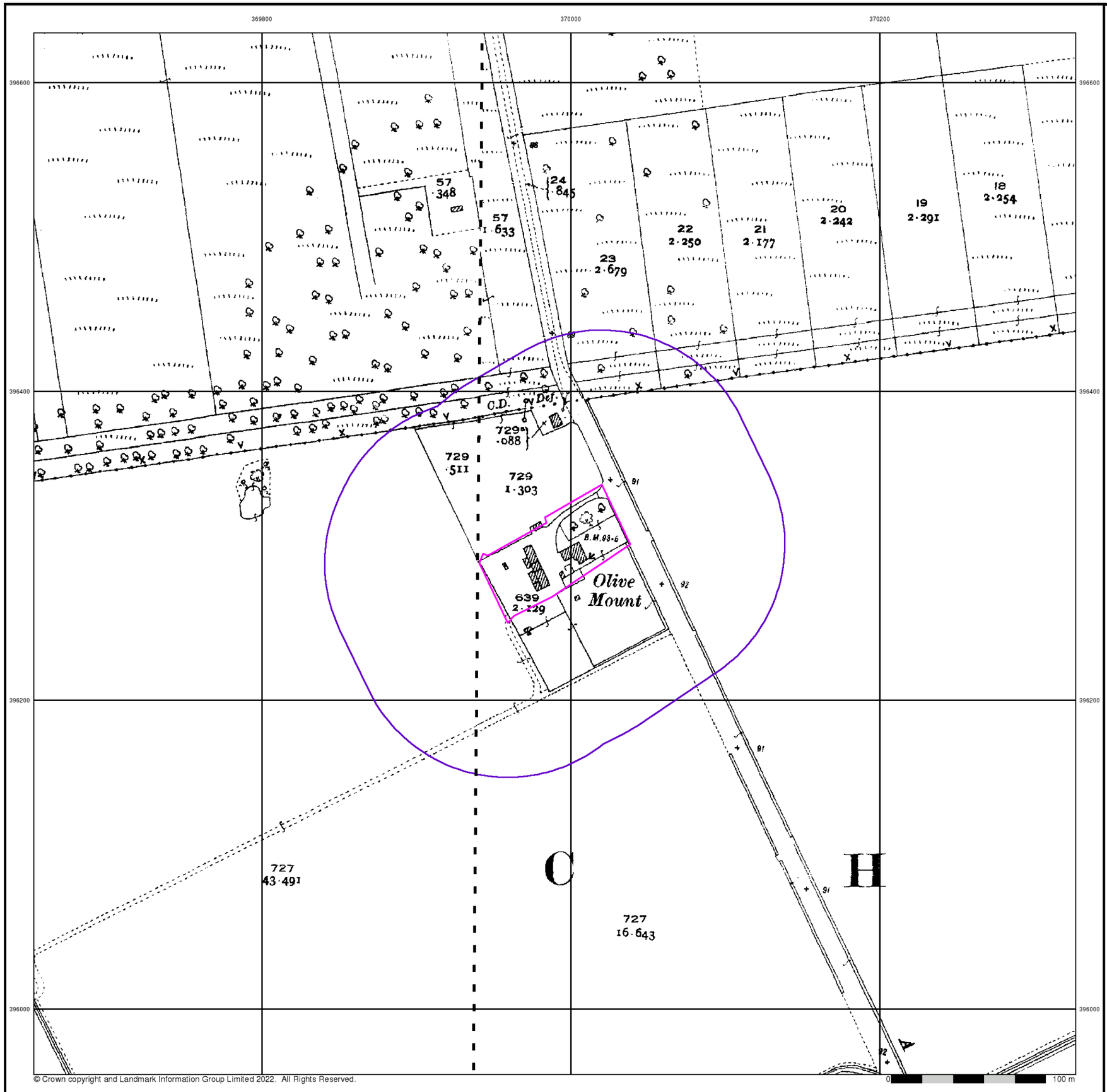
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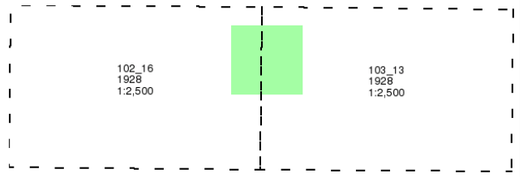
Lancashire And Furness

Published 1928

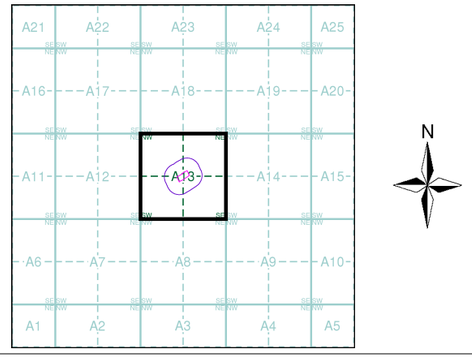
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



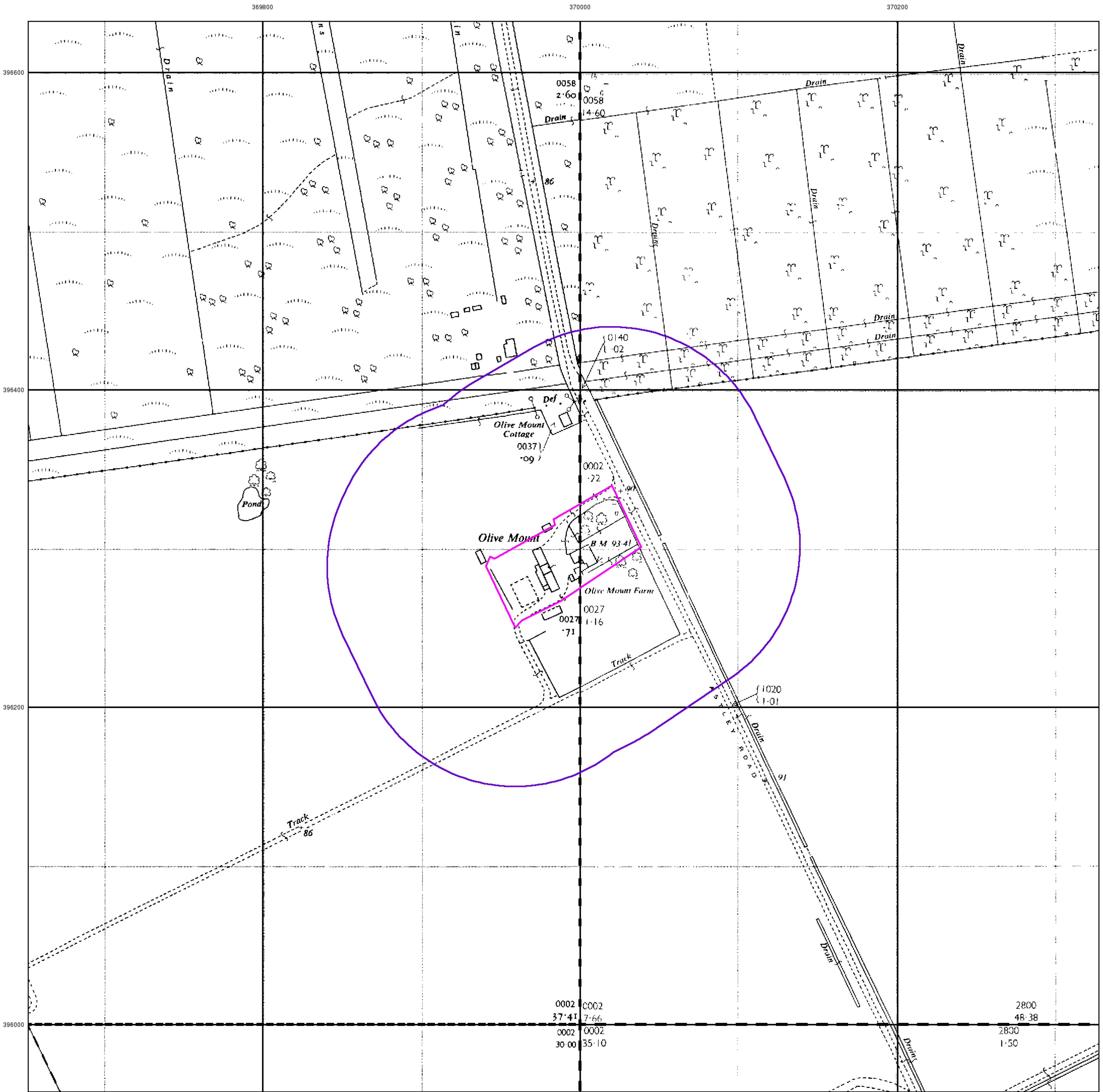
Order Details

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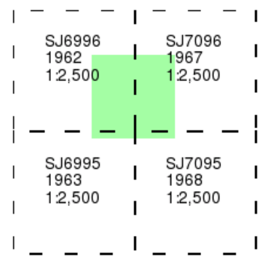
Ordnance Survey Plan

Published 1962 - 1968

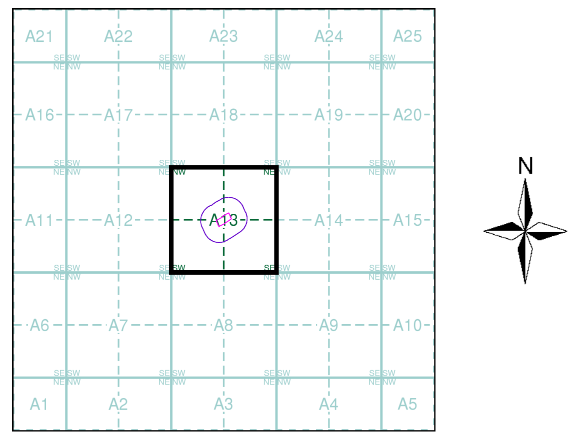
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13

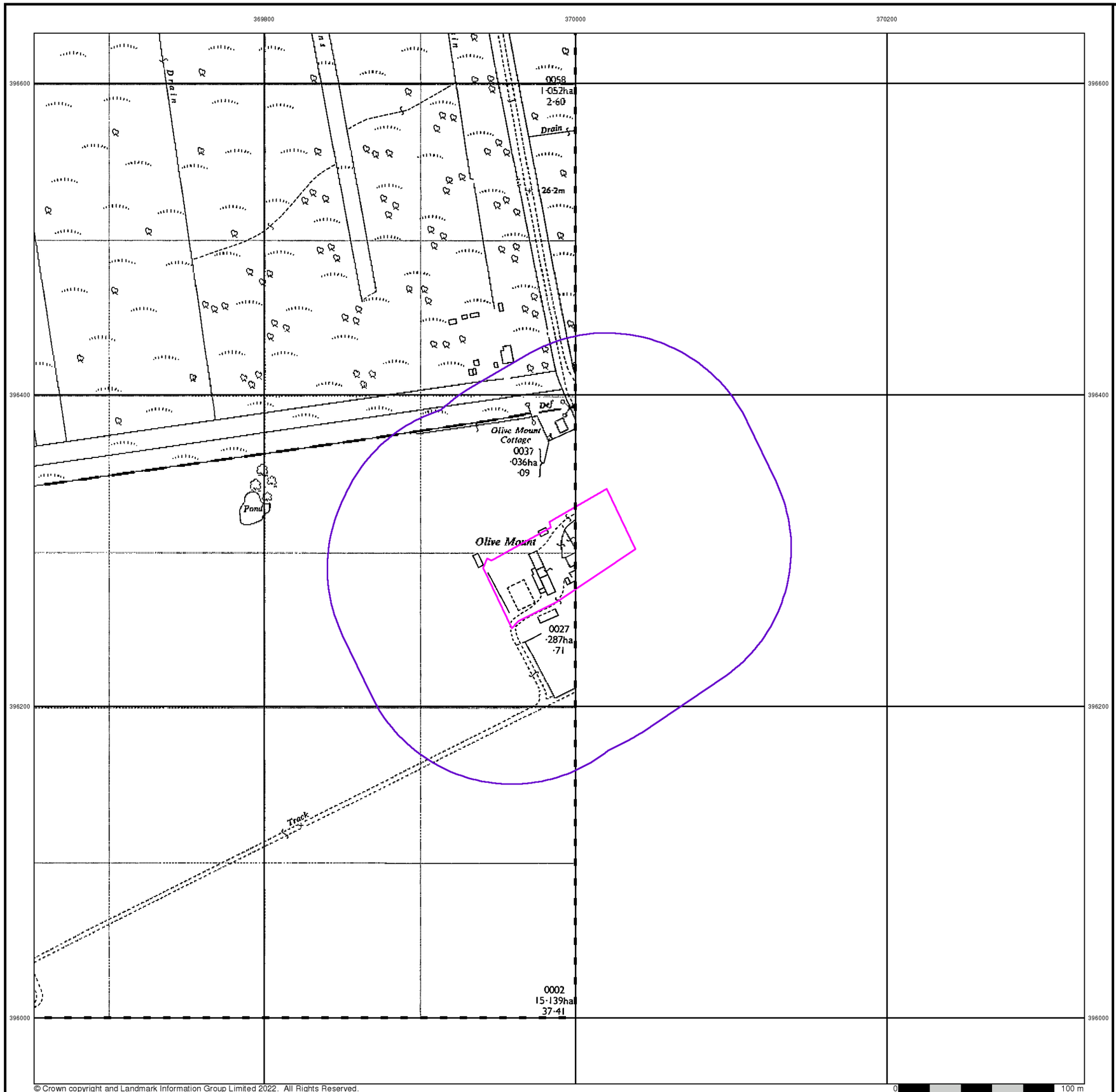


Order Details

Order Number: 302167182_1_1
Customer Ref: PN224461
National Grid Reference: 369990, 396300
Slice: A
Site Area (Ha): 0.42
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Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU



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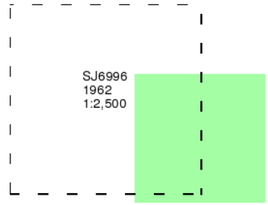
Additional SIMs

Published 1962

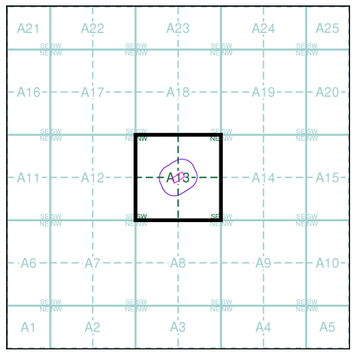
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

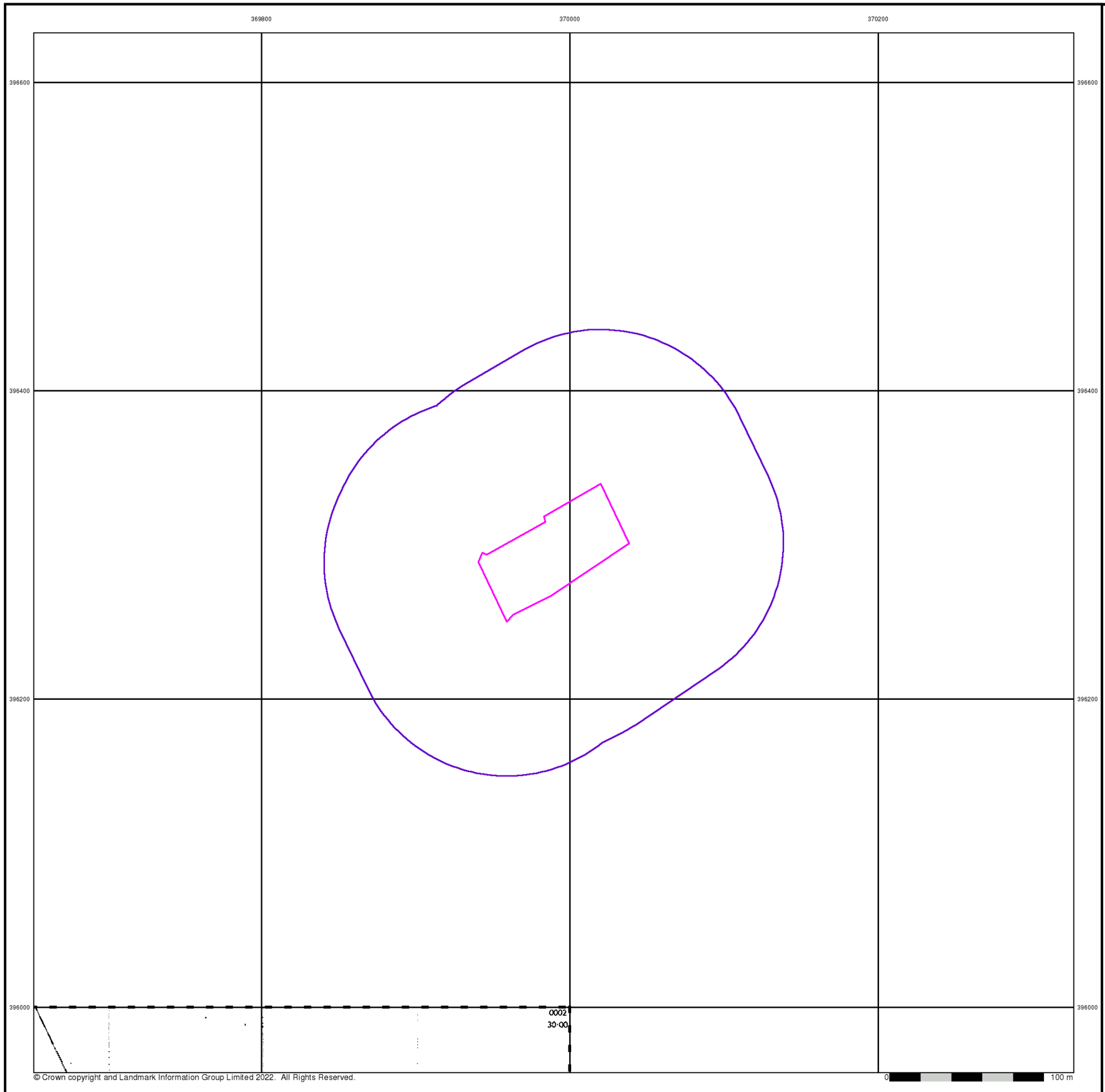
Order Number:	302167182_1_1
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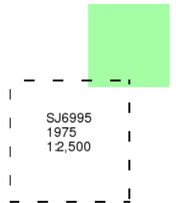
Supply of Unpublished Survey Information

Published 1975

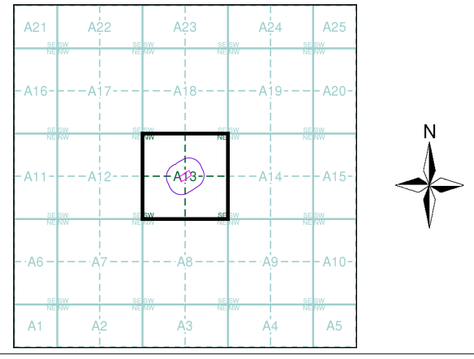
Source map scale - 1:2,500

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a `work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



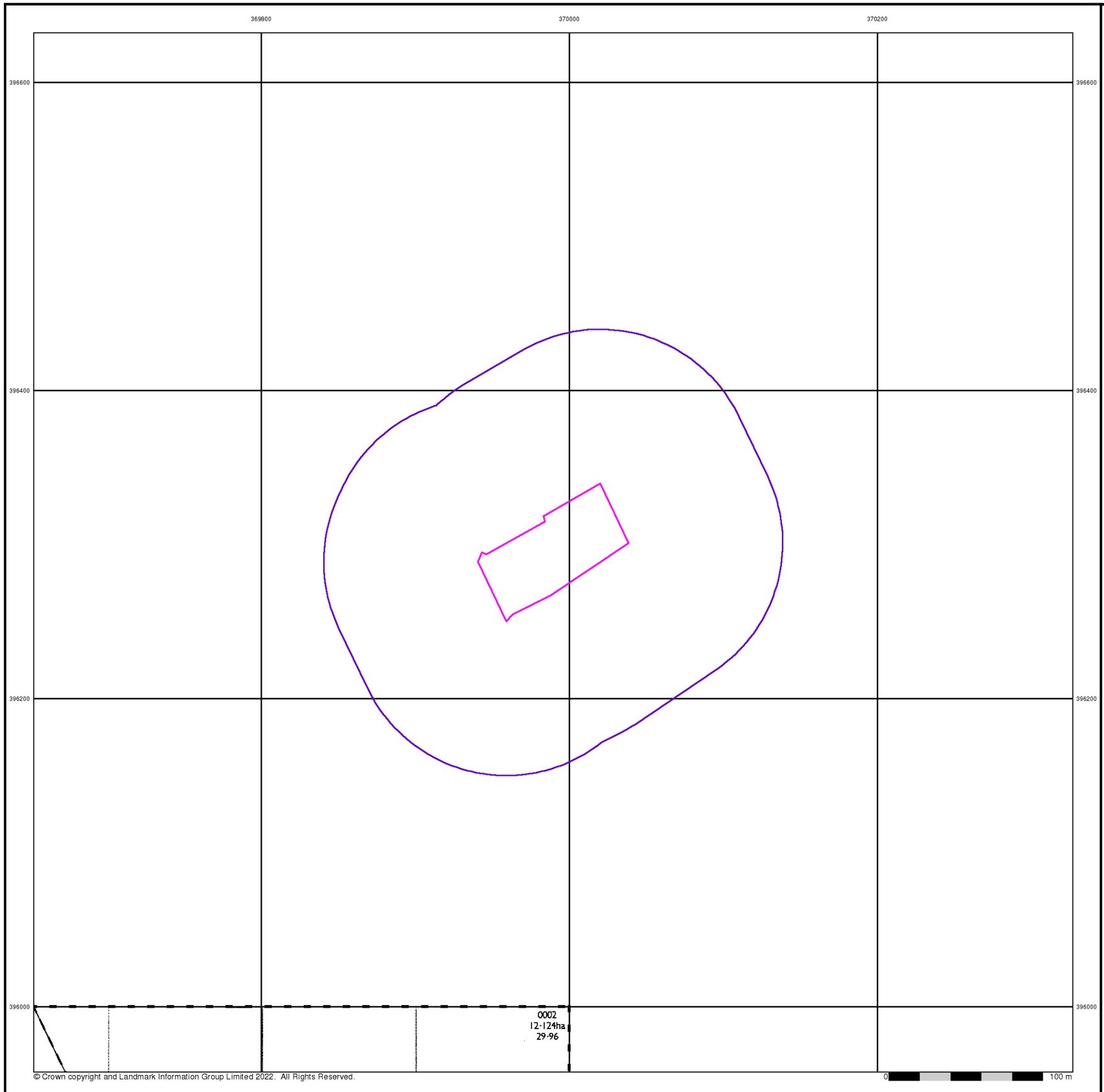
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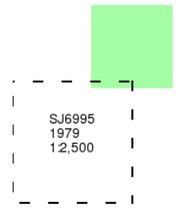
Ordnance Survey Plan

Published 1979

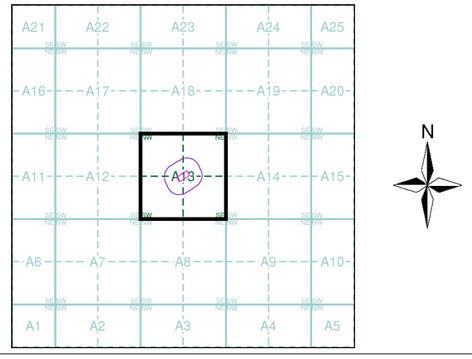
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

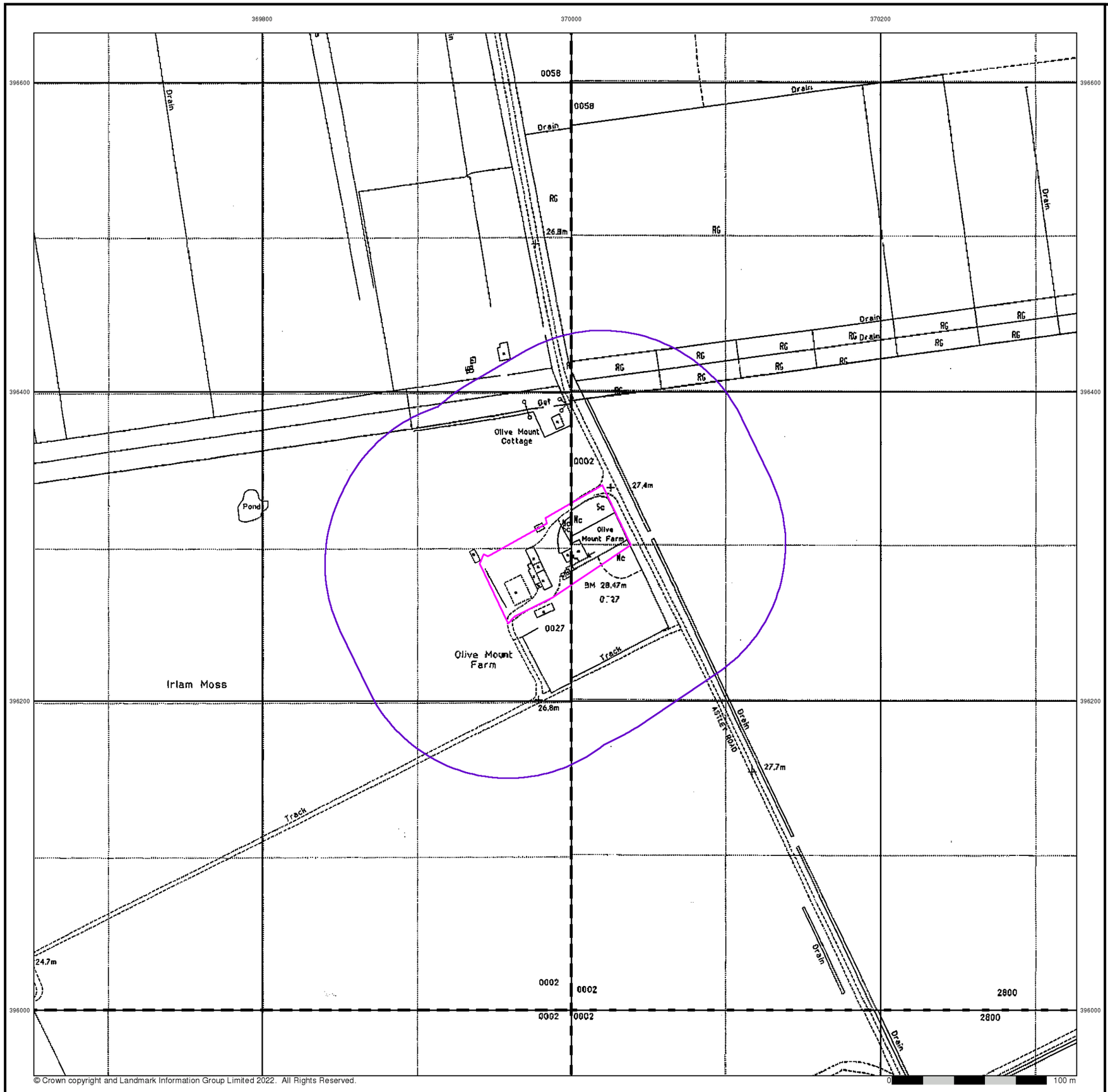
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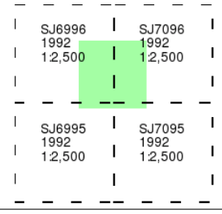
Large-Scale National Grid Data

Published 1992

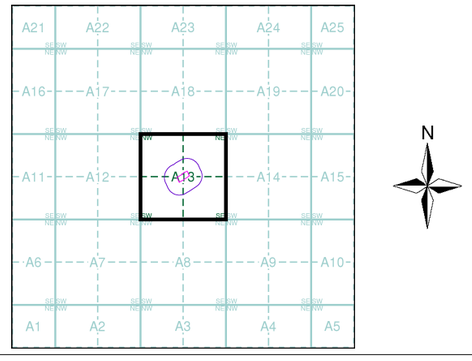
Source map scale - 1:2,500

'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)



Historical Map - Segment A13



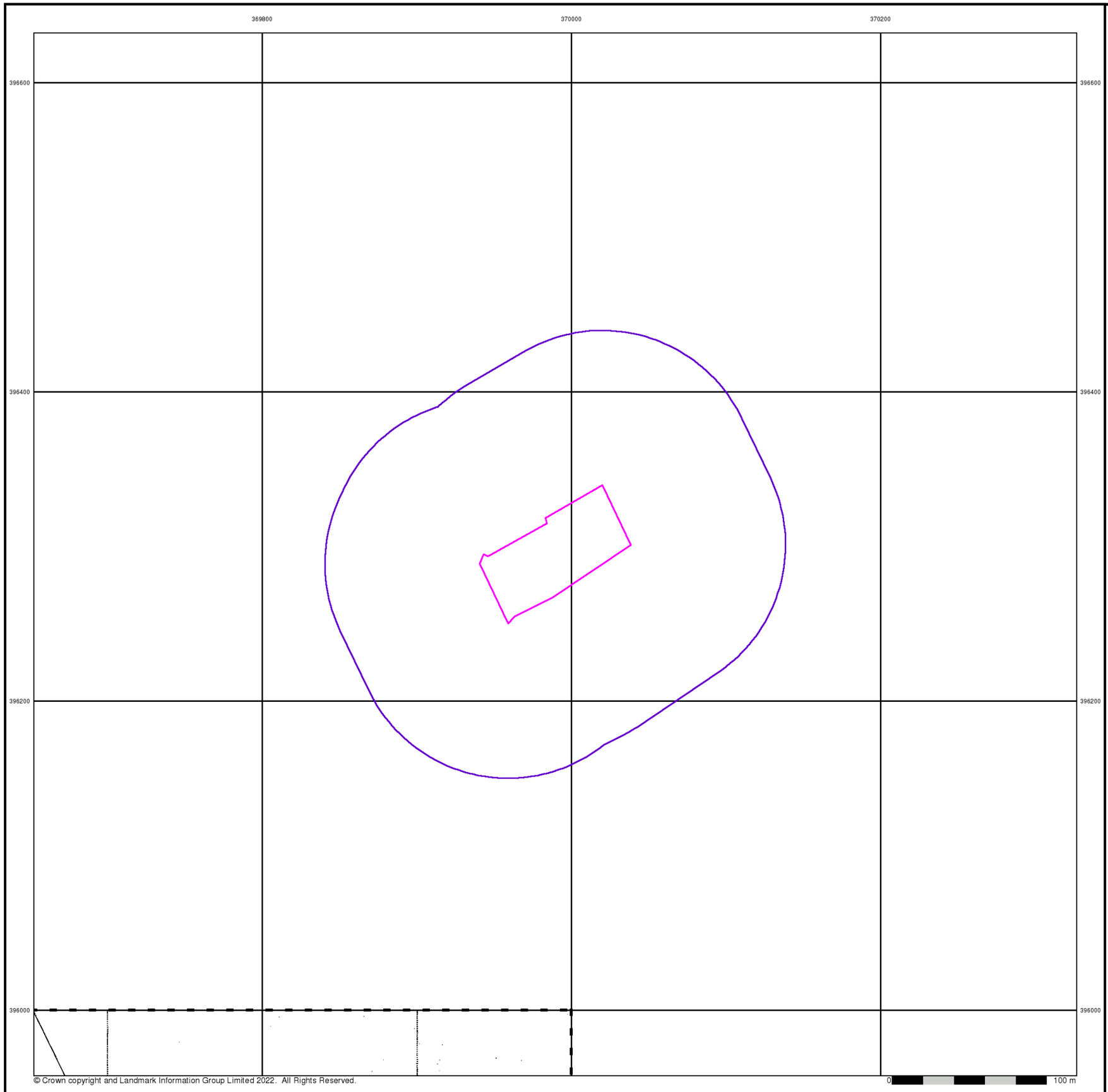
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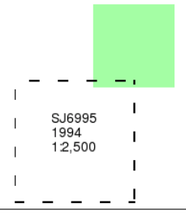
Large-Scale National Grid Data

Published 1994

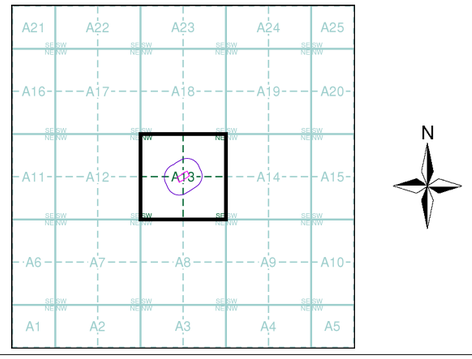
Source map scale - 1:2,500

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Map Name(s) and Date(s)



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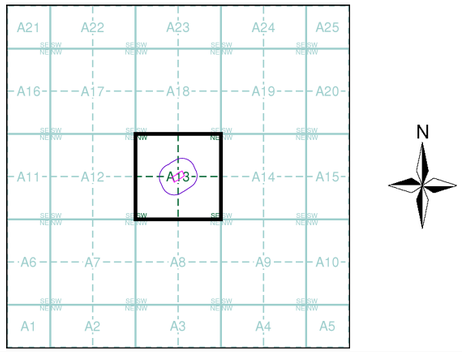
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Historical Aerial Photography

Published 2000

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:	302167182_1_1
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Site Details

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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
Fenced
Un-Fenced
Minor Roads
Fenced
Un-Fenced
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
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)
R.D. Bdy. Rural District Boundary
Civil Parish Boundary

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Pylon
Electricity Transmission Line
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
Standard Gauge Single Track
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

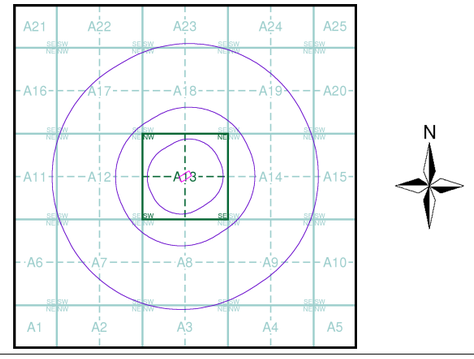
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Mud
Sand
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m 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

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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1848 - 1849	3
Cheshire	1:10,560	1881	4
Lancashire And Furness	1:10,560	1894 - 1896	5
Cheshire	1:10,560	1899	6
Lancashire And Furness	1:10,560	1908 - 1909	7
Cheshire	1:10,560	1911	8
Cheshire	1:10,560	1911	9
Cheshire	1:10,560	1911	10
Lancashire And Furness	1:10,560	1929	11
Lancashire And Furness	1:10,560	1929	12
Lancashire And Furness	1:10,560	1938 - 1951	13
Cheshire	1:10,560	1951	14
Lancashire And Furness	1:10,560	1951 - 1952	15
Ordnance Survey Plan	1:10,000	1954 - 1955	16
Ordnance Survey Plan	1:10,000	1965 - 1967	17
Ordnance Survey Plan	1:10,000	1970 - 1971	18
Manchester	1:25,000	1975	19
Ordnance Survey Plan	1:10,000	1980 - 1987	20
Warrington	1:10,000	1984	21
Ordnance Survey Plan	1:10,000	1990 - 1996	22
10K Raster Mapping	1:10,000	1999	23
10K Raster Mapping	1:10,000	2006	24
VectorMap Local	1:10,000	2021	25

Historical Map - Slice A



Order Details

Order Number: 302167182_1_1
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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

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Fireproof Building
- Prominent Fireproof Building
- Non-fireproof Building
- Non-fireproof Building (non-dwelling)
- Factory, mill, and flour mill, with chimneys
- Factory, mill, and flour mill, without chimneys
- Power Station, drawn to scale
- Hydroelectric Power Station
- Radio Station, drawn to scale
- Telephone Station, drawn to scale
- Abandoned Open-pit Mine or Quarry
- Open-pit Salt Mine
- Pit
- Oil Deposit or Well
- Oil Seepage
- Tailings Pile
- Fuel Storage Tanks
- Natural Gas Tank
- Bench Mark
- Drill Hole
- Burial Mound
- Triangulation Point on Burial Mound
- Single-track Railroad
- Double-track Railroad and Station Building
- Coniferous Forest
- Deciduous Forest
- Mixed Forest
- Lawns
- Citrus Orchard
- Wet Ground
- Scattered Vegetation

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

180/12 180/12 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

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Partly Demolished Buildings
- Demolished Buildings
- Built-Up Area with Fireproof Buildings Predominant
- Built-Up Area with Non-Fireproof Buildings Predominant
- Individual Fireproof Building
- Prominent Industrial Building
- Individual Dwelling, Fireproof
- Ruins of an Individual Dwelling
- Factory or Mill Chimney
- Factory or Mill with Chimney
- Factory or Mill without Chimney
- Mine or Open Pit Mine
- Operating Shaft or Mine
- Non-Operating Shaft or Mine
- Salt Mine
- Tailings Pile
- Pit
- Stone Quarry
- Gas Pump or Service Station
- Fuel Storage or Natural Gas Tank
- Oil or Natural Gas Derrick
- Small Hydroelectric Power Station
- Power Station
- Transformer Station
- Cemetery
- Burial Mound (height in metres)
- Triangulation Point on Burial Mound
- Triangulation Point
- Bench Mark
- Bench Mark (monumented)
- Telegraph Office
- Telephone Station
- Radio Station
- Radio Tower
- Airfield or Seaplane Base
- Landing Strip
- Main Highway
- Highway under Construction
- Improved Dirt Road (former truck road)
- Double-track Railroad with First Class Station
- Dismantled Railroad
- Railroad Under Construction
- Shore Embankment
- River or Ditch with Embankment
- Direction and velocity of current
- Well
- Water Reservoir or Rain Water Pit
- Spring
- Isobath with value
- Heavy (Index) Contour Line
- Contour Line and Value
- Half Contour Line
- Spot Elevation Value
- Coniferous
- Deciduous
- Mixed
- Scrub

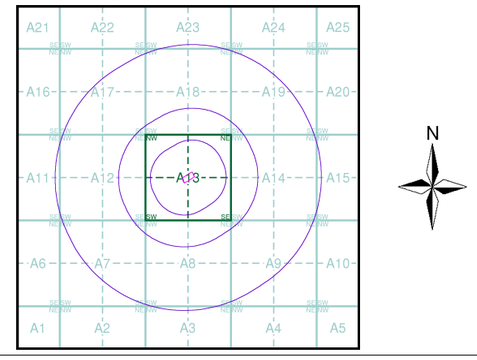
Key to Numbers on Mapping

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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1848 - 1849	3
Cheshire	1:10,560	1881	4
Lancashire And Furness	1:10,560	1894 - 1896	5
Cheshire	1:10,560	1899	6
Lancashire And Furness	1:10,560	1908 - 1909	7
Cheshire	1:10,560	1911	8
Cheshire	1:10,560	1911	9
Cheshire	1:10,560	1911	10
Lancashire And Furness	1:10,560	1929	11
Lancashire And Furness	1:10,560	1929	12
Lancashire And Furness	1:10,560	1938 - 1951	13
Cheshire	1:10,560	1951	14
Lancashire And Furness	1:10,560	1951 - 1952	15
Ordnance Survey Plan	1:10,000	1954 - 1955	16
Ordnance Survey Plan	1:10,000	1965 - 1967	17
Ordnance Survey Plan	1:10,000	1970 - 1971	18
Manchester	1:25,000	1975	19
Ordnance Survey Plan	1:10,000	1980 - 1987	20
Warrington	1:10,000	1984	21
Ordnance Survey Plan	1:10,000	1990 - 1996	22
10K Raster Mapping	1:10,000	1999	23
10K Raster Mapping	1:10,000	2006	24
VectorMap Local	1:10,000	2021	25

Russian Map - Slice A



Order Details

Order Number:	302167182_1_1
Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
Search Buffer (m):	1000

Site Details

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Lancashire And Furness

Published 1848 - 1849

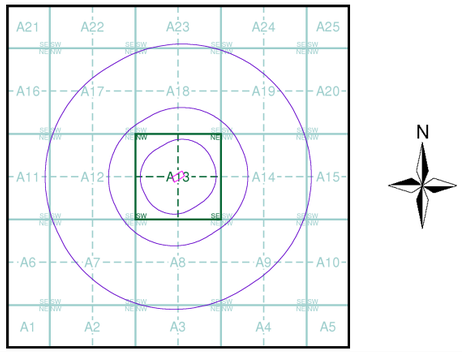
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Map Name(s) and Date(s)

10200 1849 1:10,560	10300 1848 1:10,560
10900 1849 1:10,560	11000 1848 1:10,560

Historical Map - Slice A



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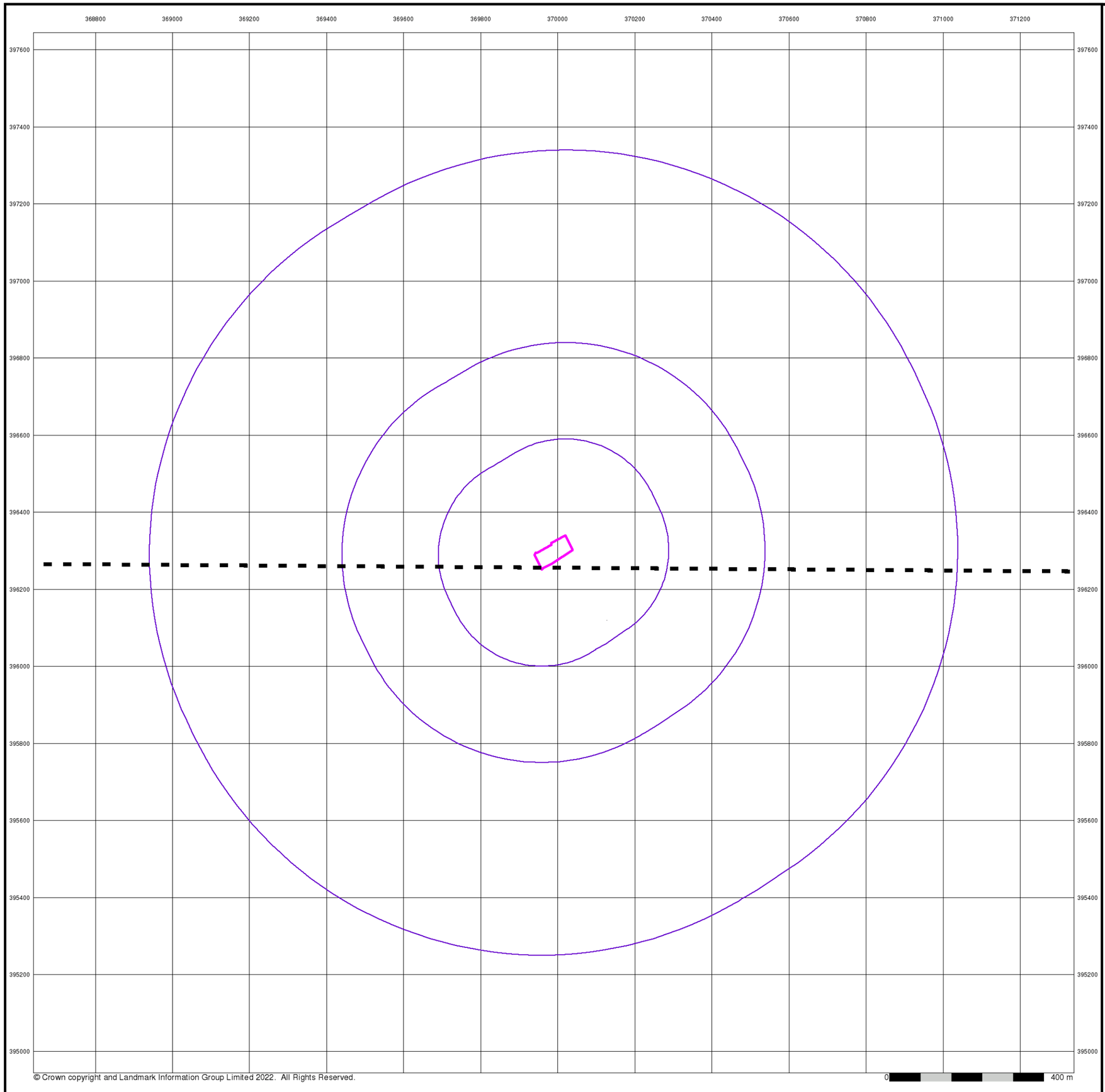
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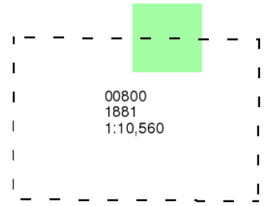
Cheshire

Published 1881

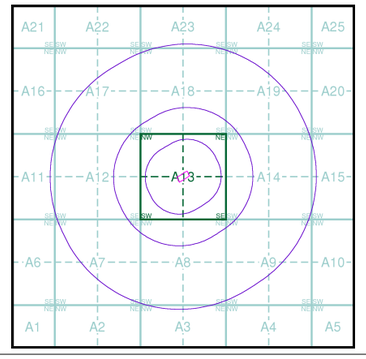
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Historical Map - Slice A



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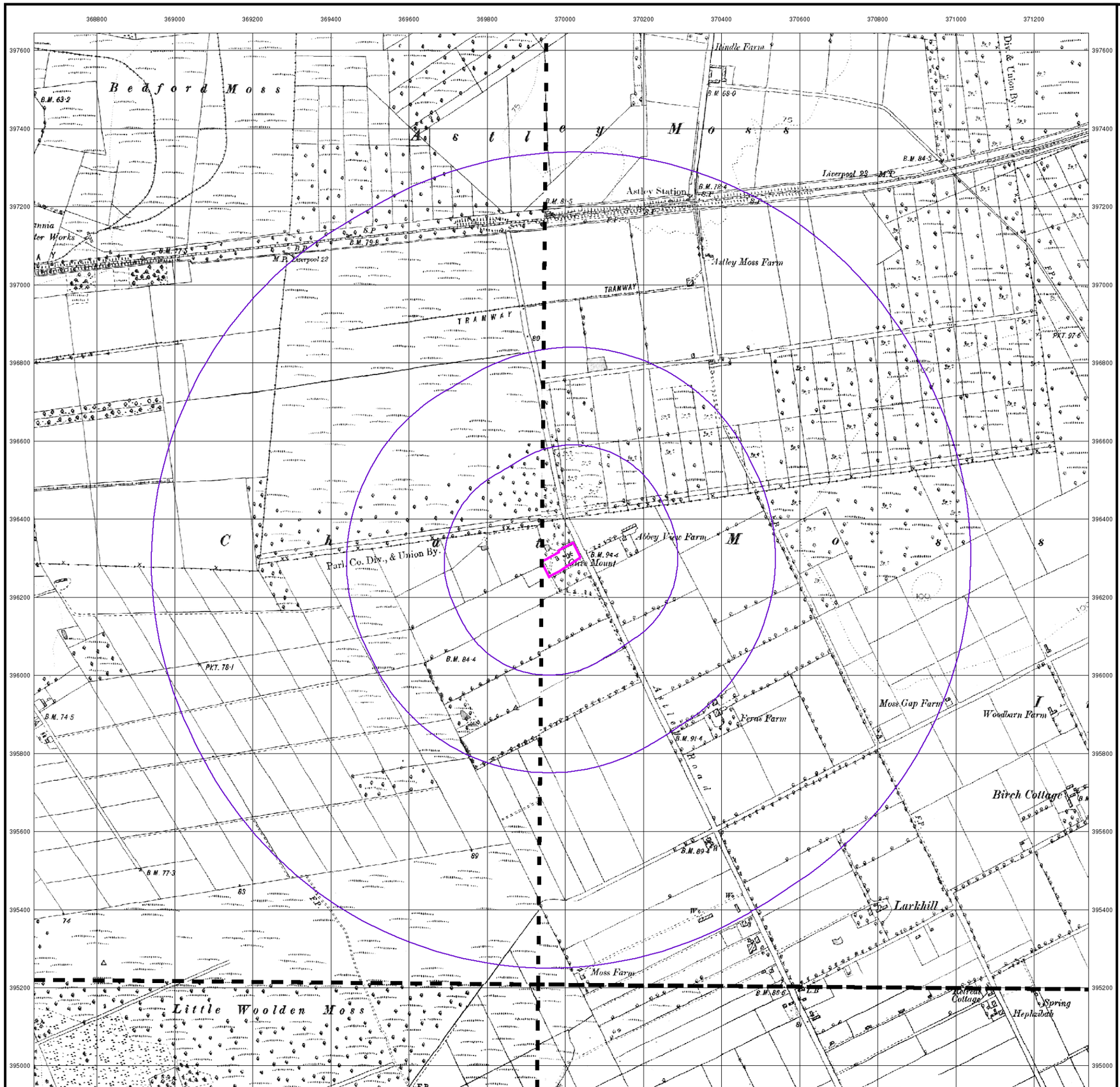
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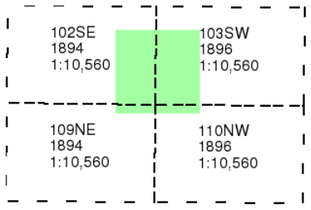
Lancashire And Furness

Published 1894 - 1896

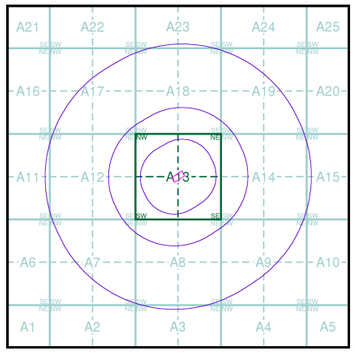
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Historical Map - Slice A



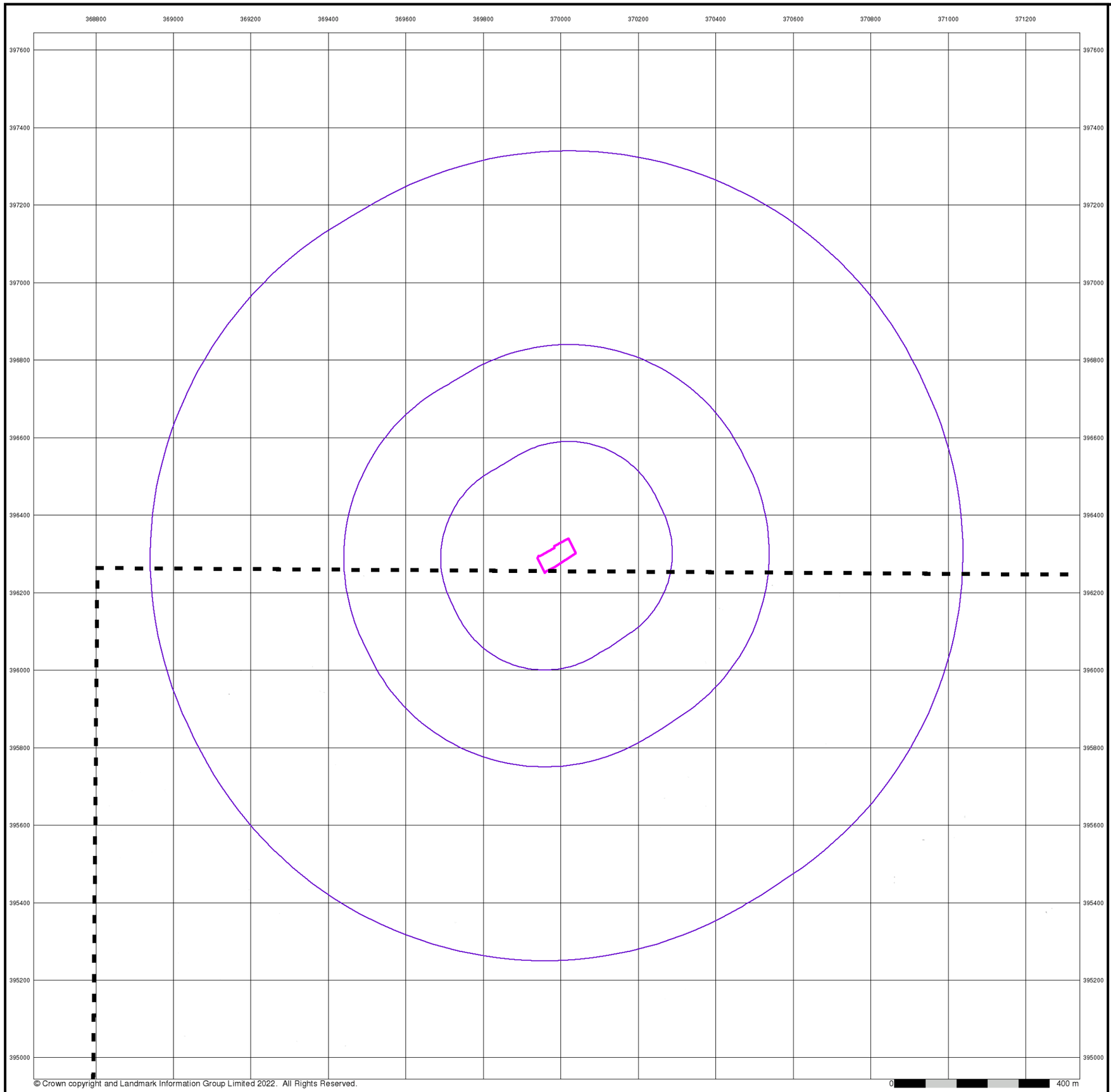
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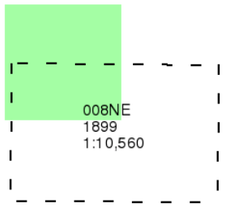
Cheshire

Published 1899

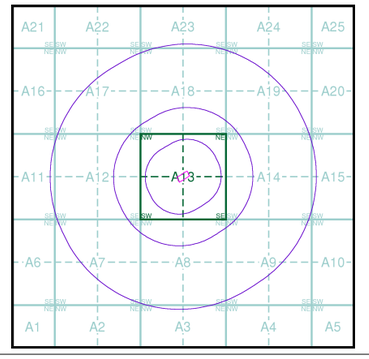
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Map Name(s) and Date(s)



Historical Map - Slice A



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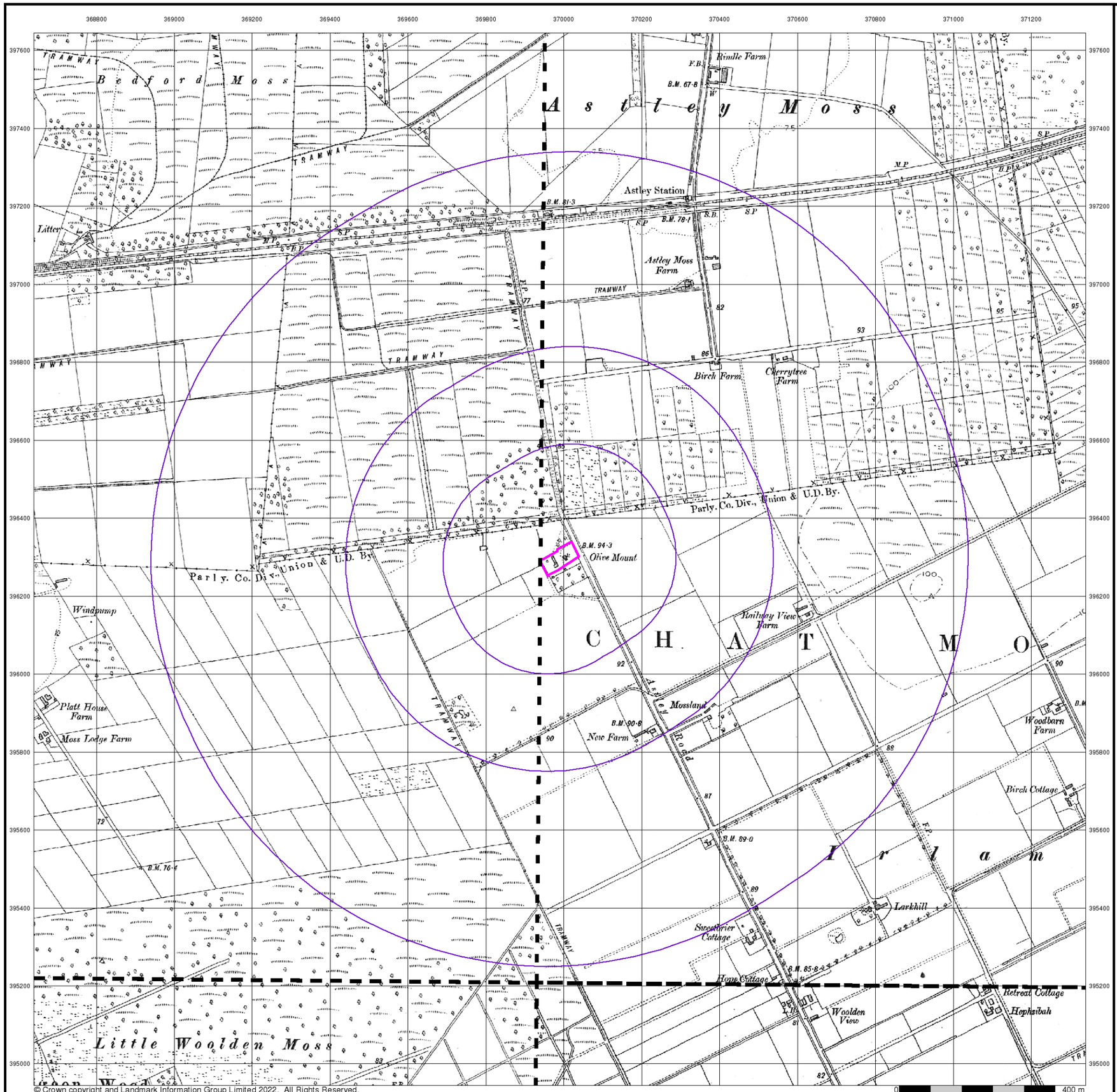
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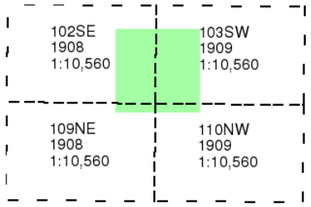
Lancashire And Furness

Published 1908 - 1909

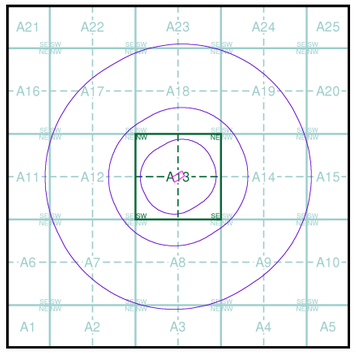
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Map Name(s) and Date(s)



Historical Map - Slice A



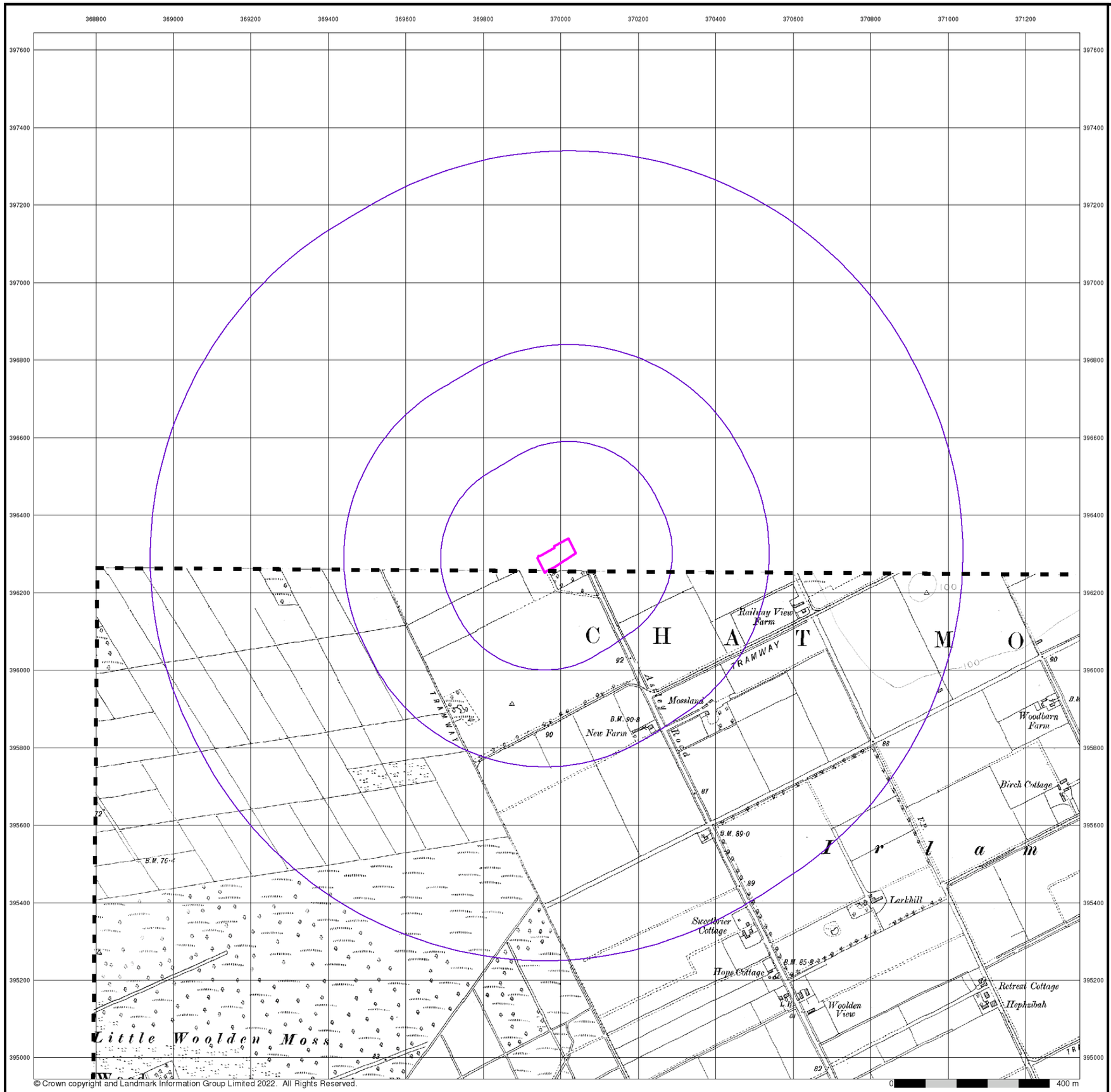
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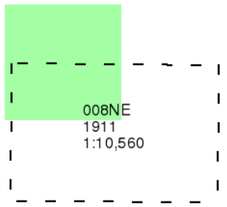
Cheshire

Published 1911

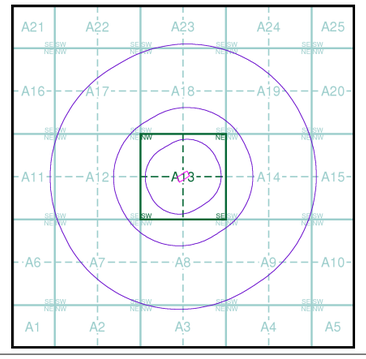
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Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

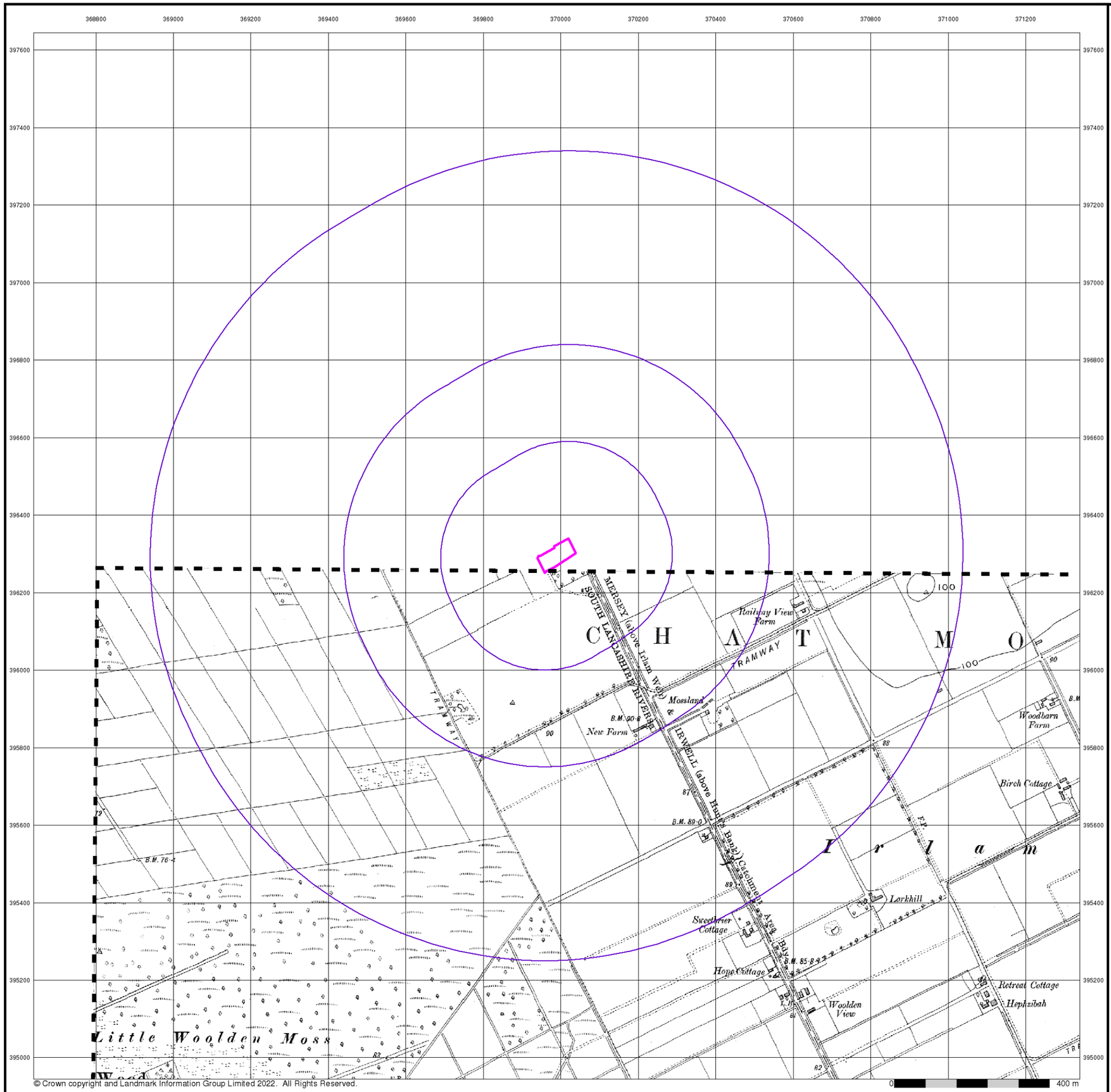
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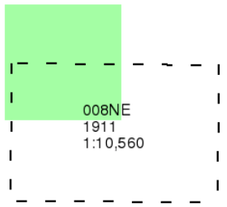
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Published 1911

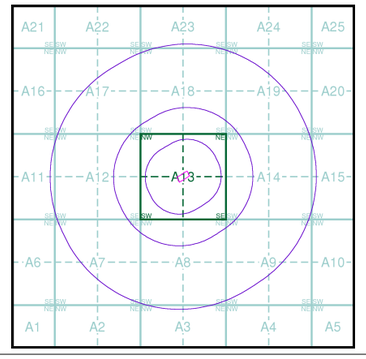
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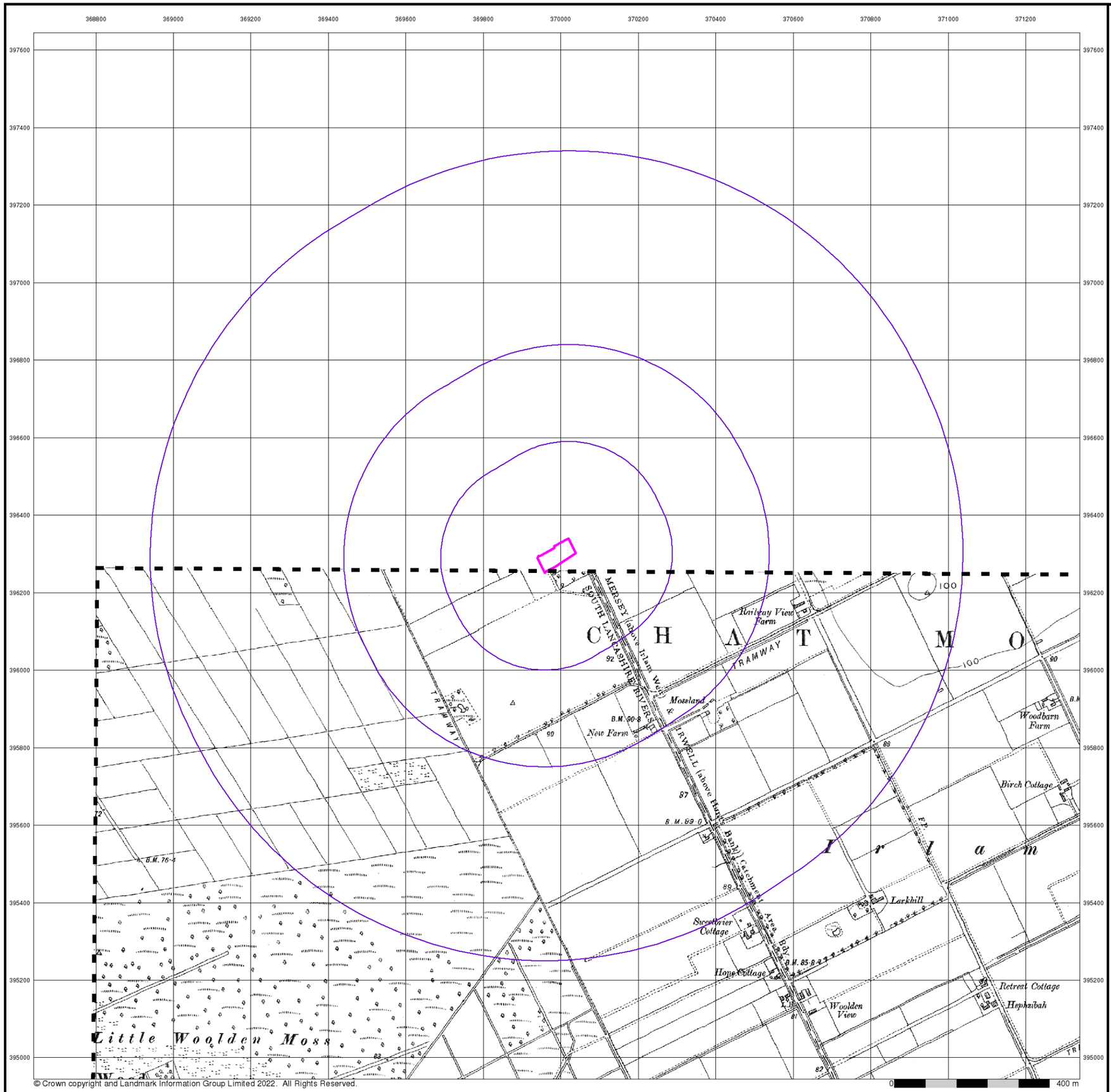
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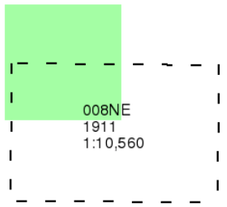
Cheshire

Published 1911

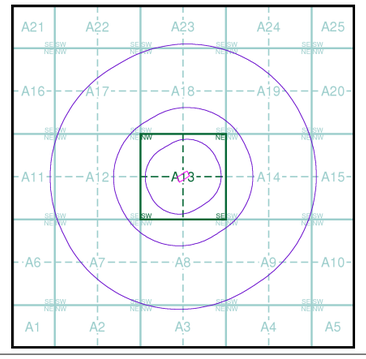
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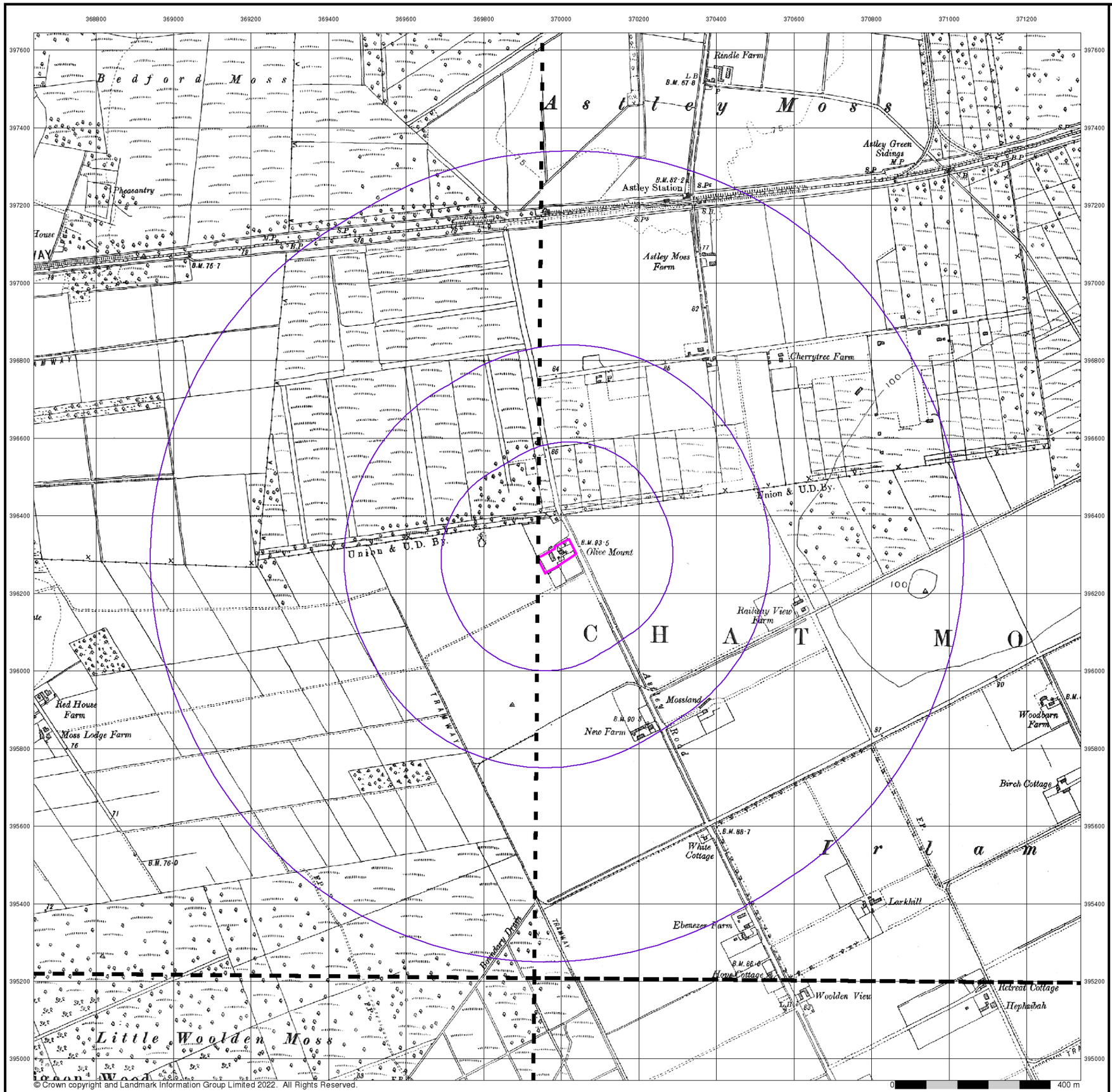
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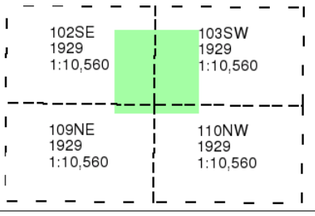
Lancashire And Furness

Published 1929

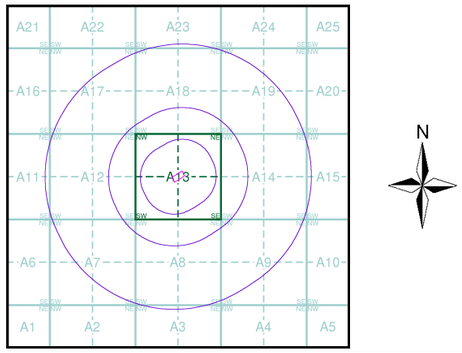
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps.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

Map Name(s) and Date(s)



Historical Map - Slice A



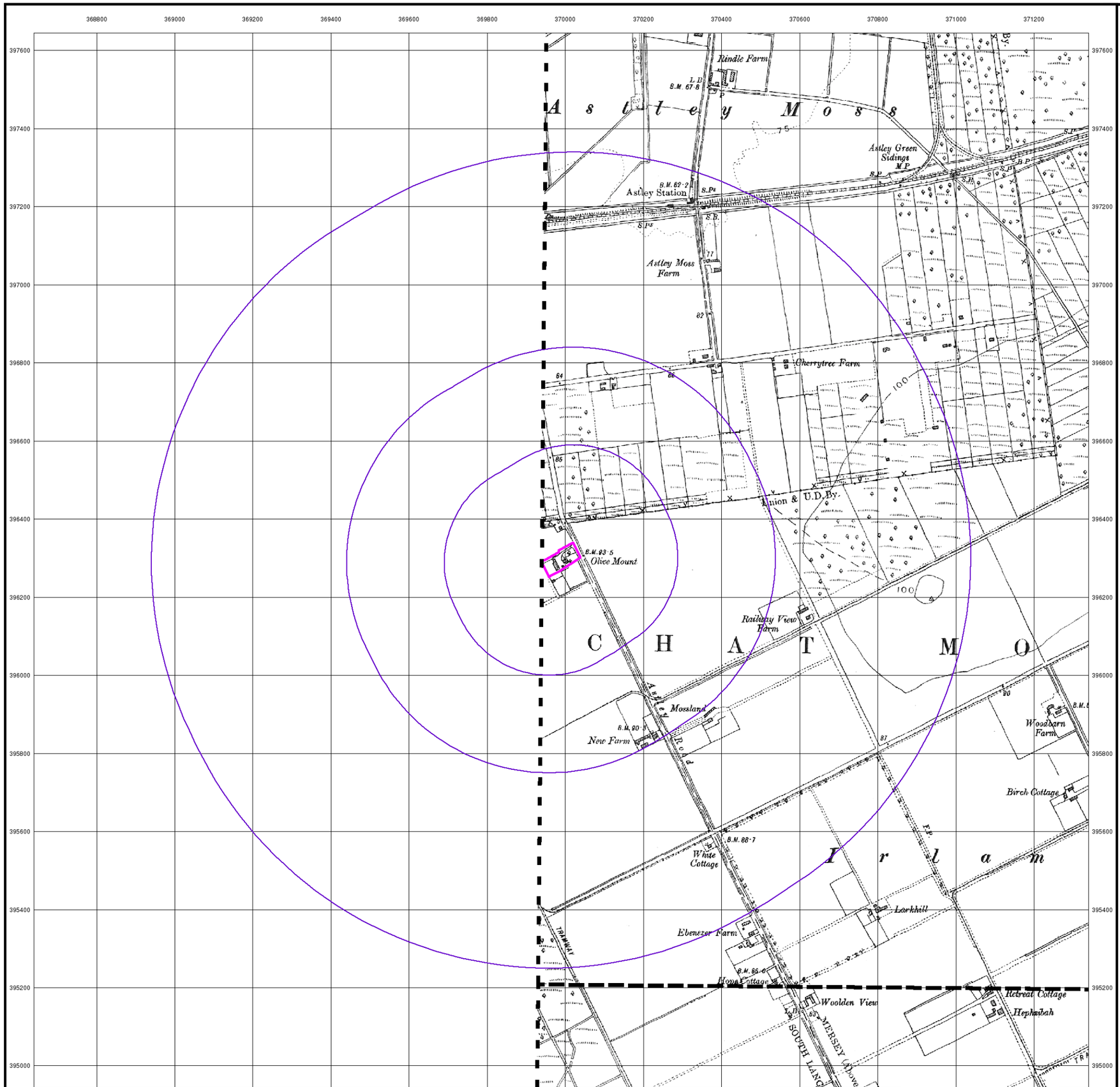
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Customer Ref:	PN224461
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Site Area (Ha):	0.42
Search Buffer (m):	1000

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

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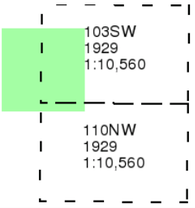
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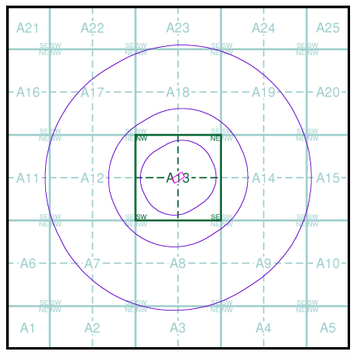
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Map Name(s) and Date(s)



Historical Map - Slice A



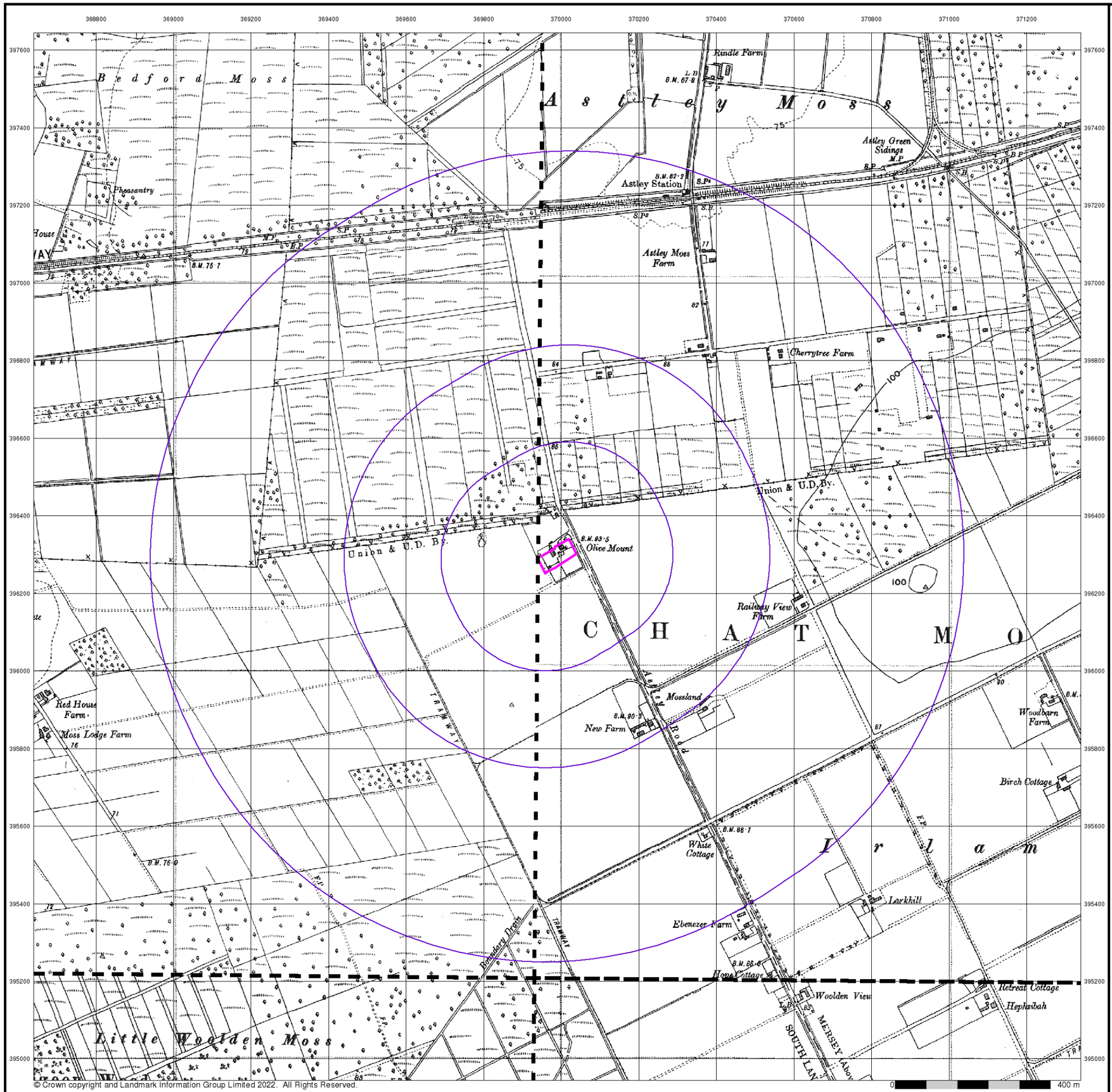
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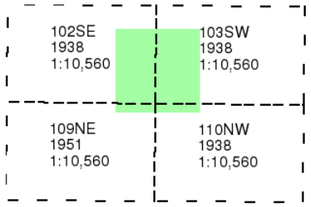
Lancashire And Furness

Published 1938 - 1951

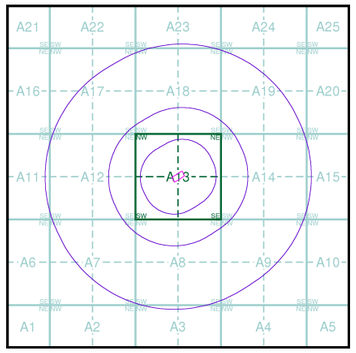
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Map Name(s) and Date(s)



Historical Map - Slice A



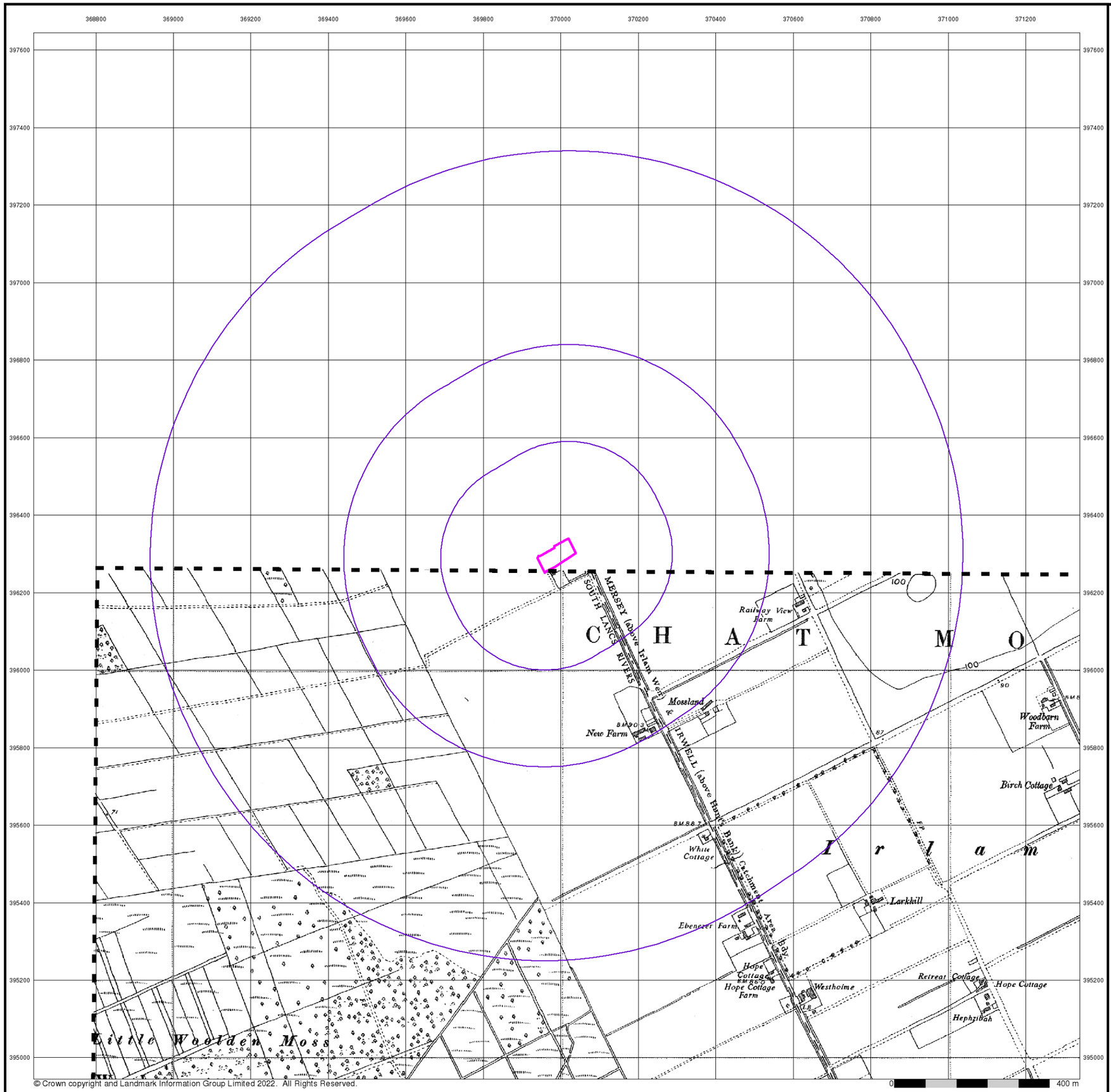
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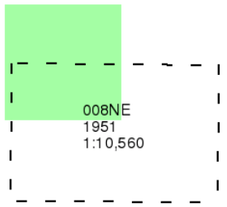
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Published 1951

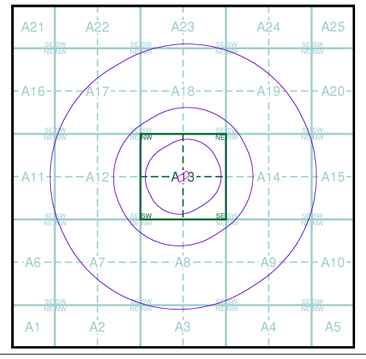
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



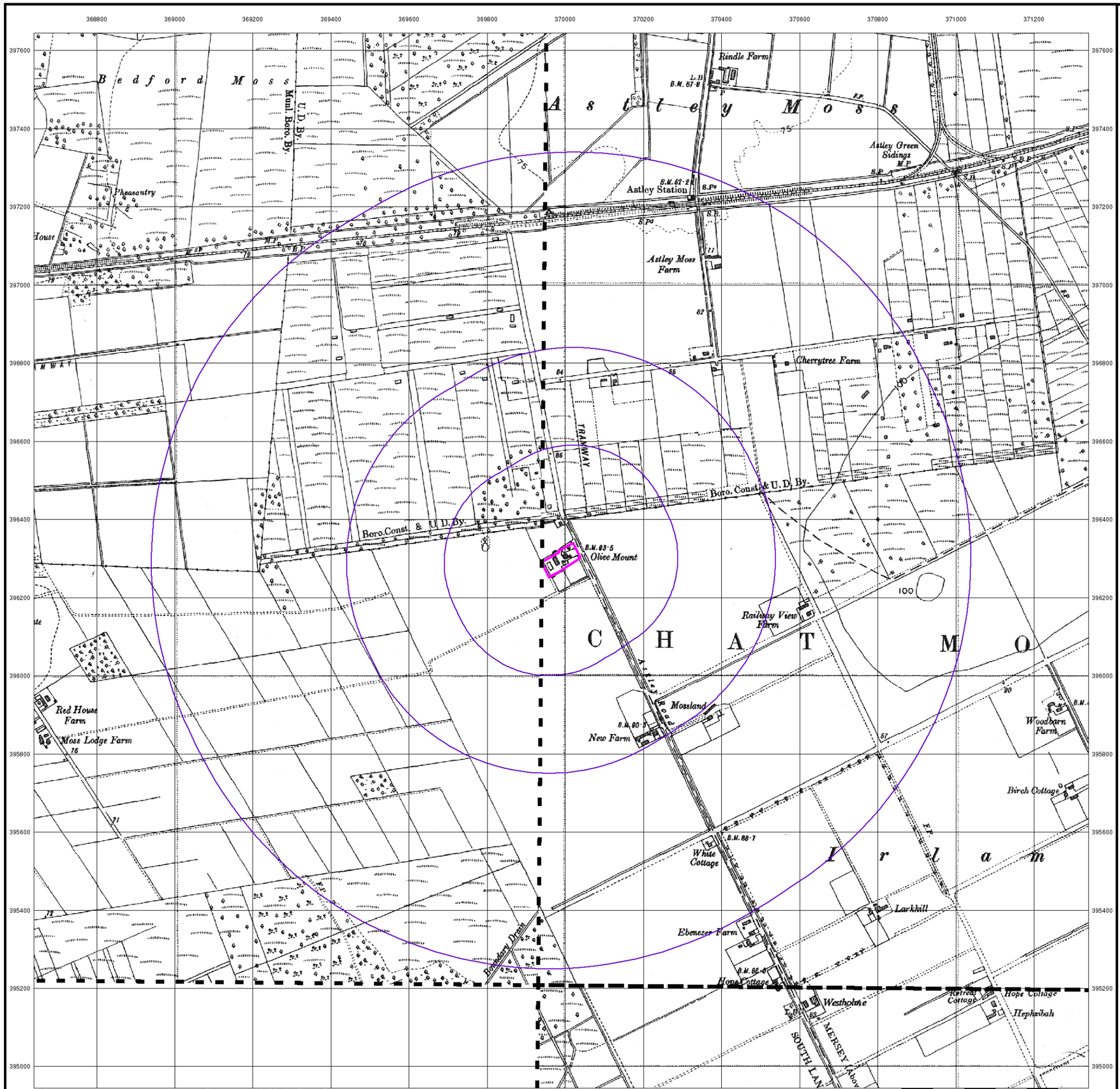
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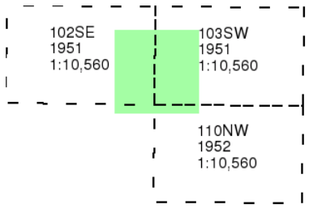
Lancashire And Furness

Published 1951 - 1952

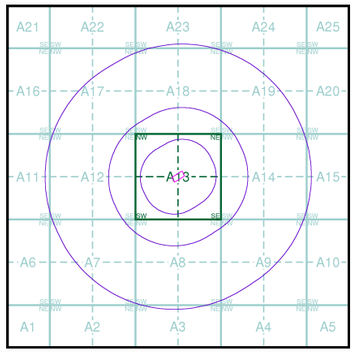
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Map Name(s) and Date(s)



Historical Map - Slice A



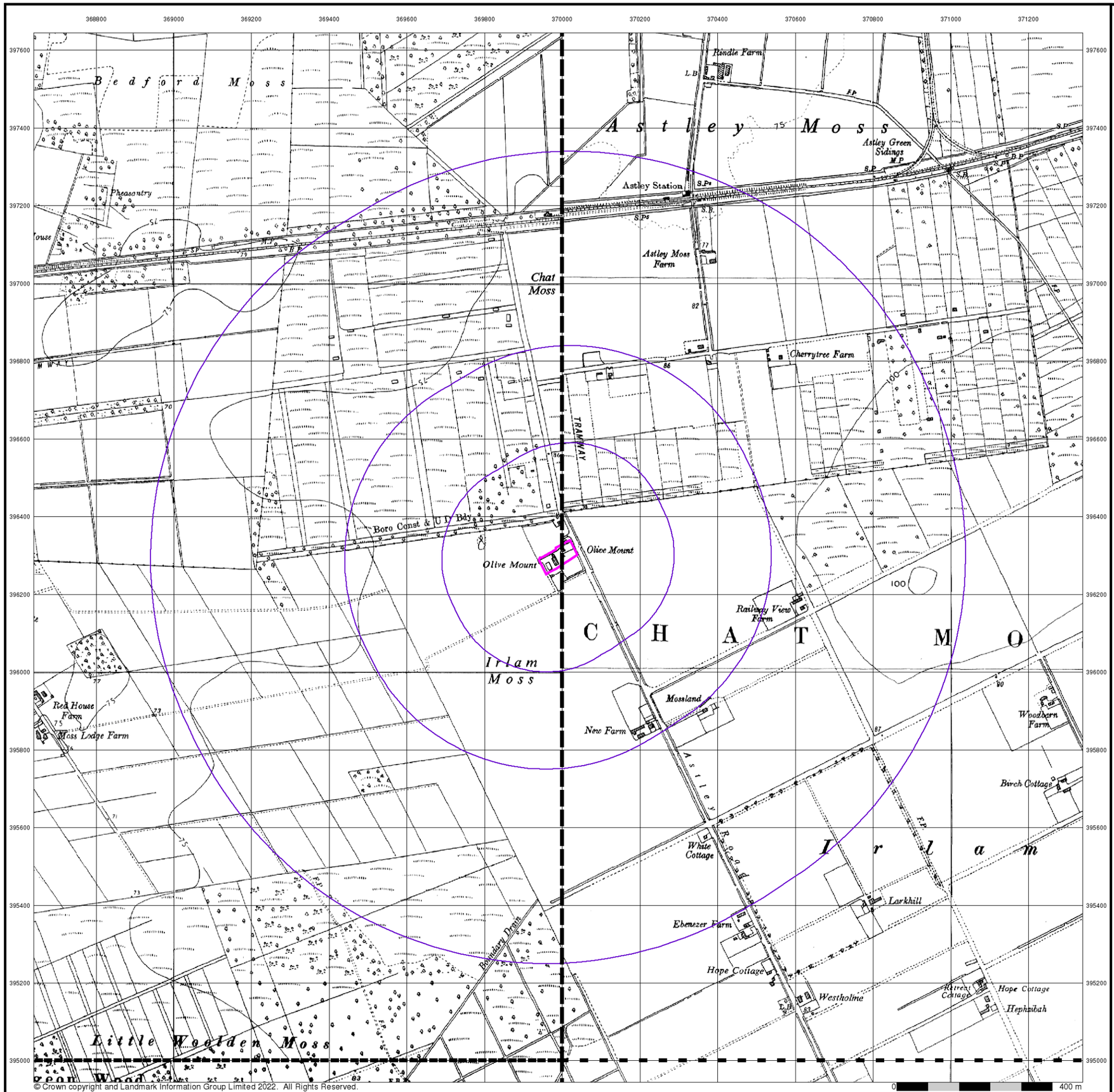
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Ordnance Survey Plan

Published 1954 - 1955

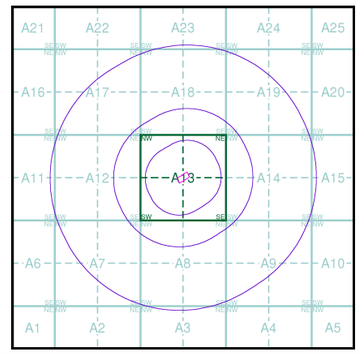
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Map Name(s) and Date(s)

SJ69NE 1955 1:10,560	SJ79NW 1955 1:10,560
SJ69SE 1954 1:10,560	SJ79SW 1954 1:10,560

Historical Map - Slice A



Order Details

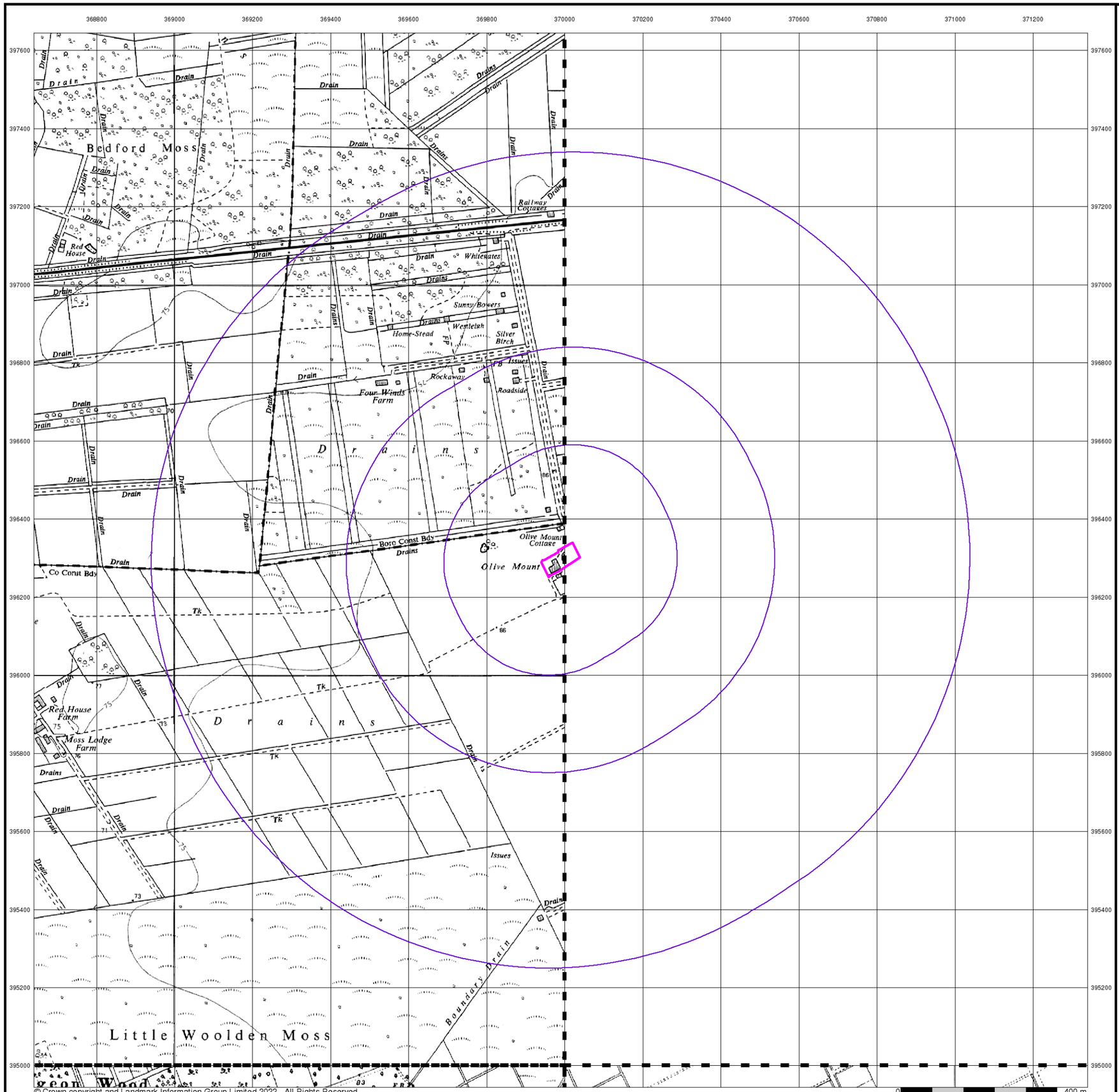
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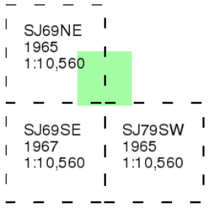
Ordnance Survey Plan

Published 1965 - 1967

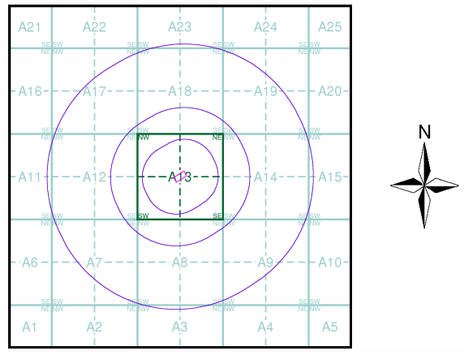
Source map scale - 1:10,000

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Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

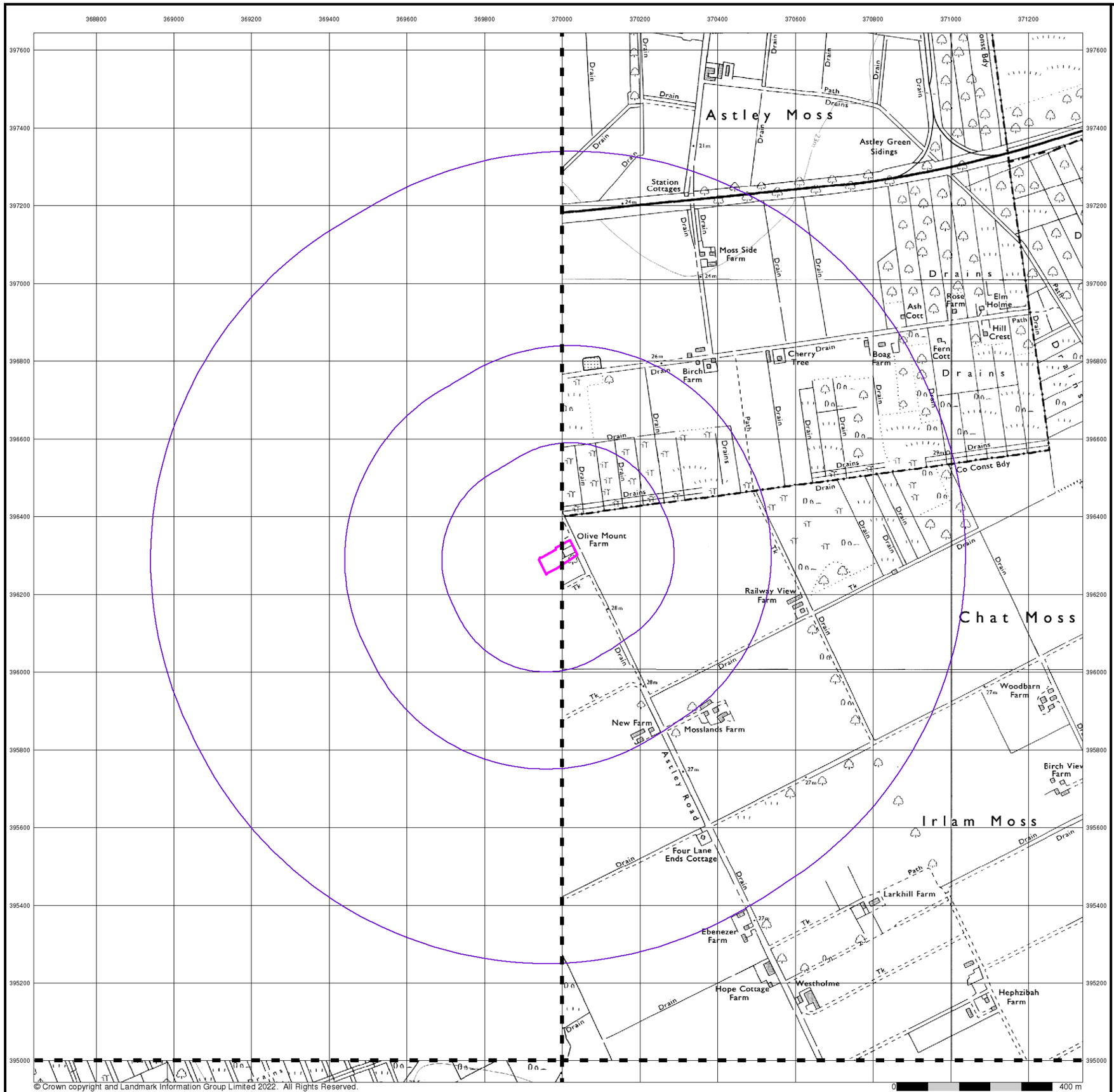
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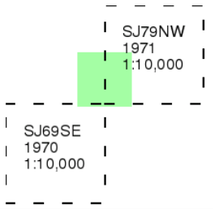
Ordnance Survey Plan

Published 1970 - 1971

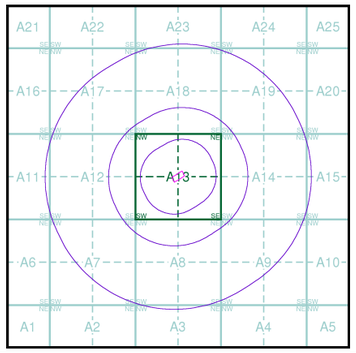
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Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

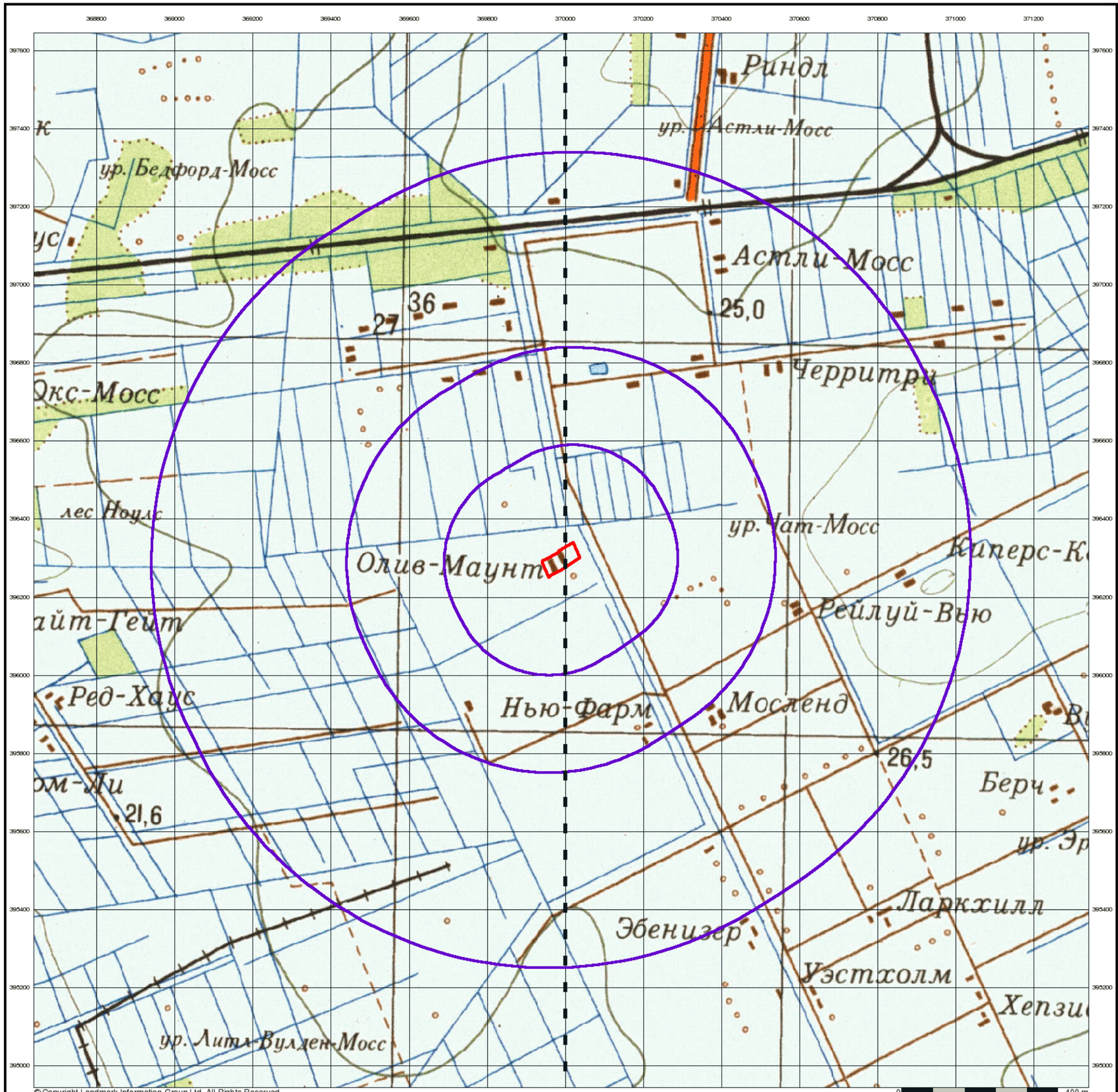
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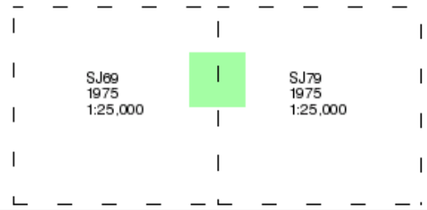
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Published 1975

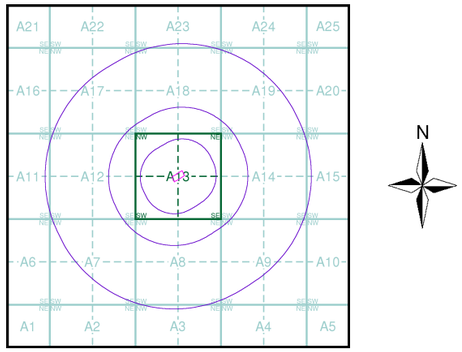
Source map scale - 1:25,000

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)



Russian Map - Slice A

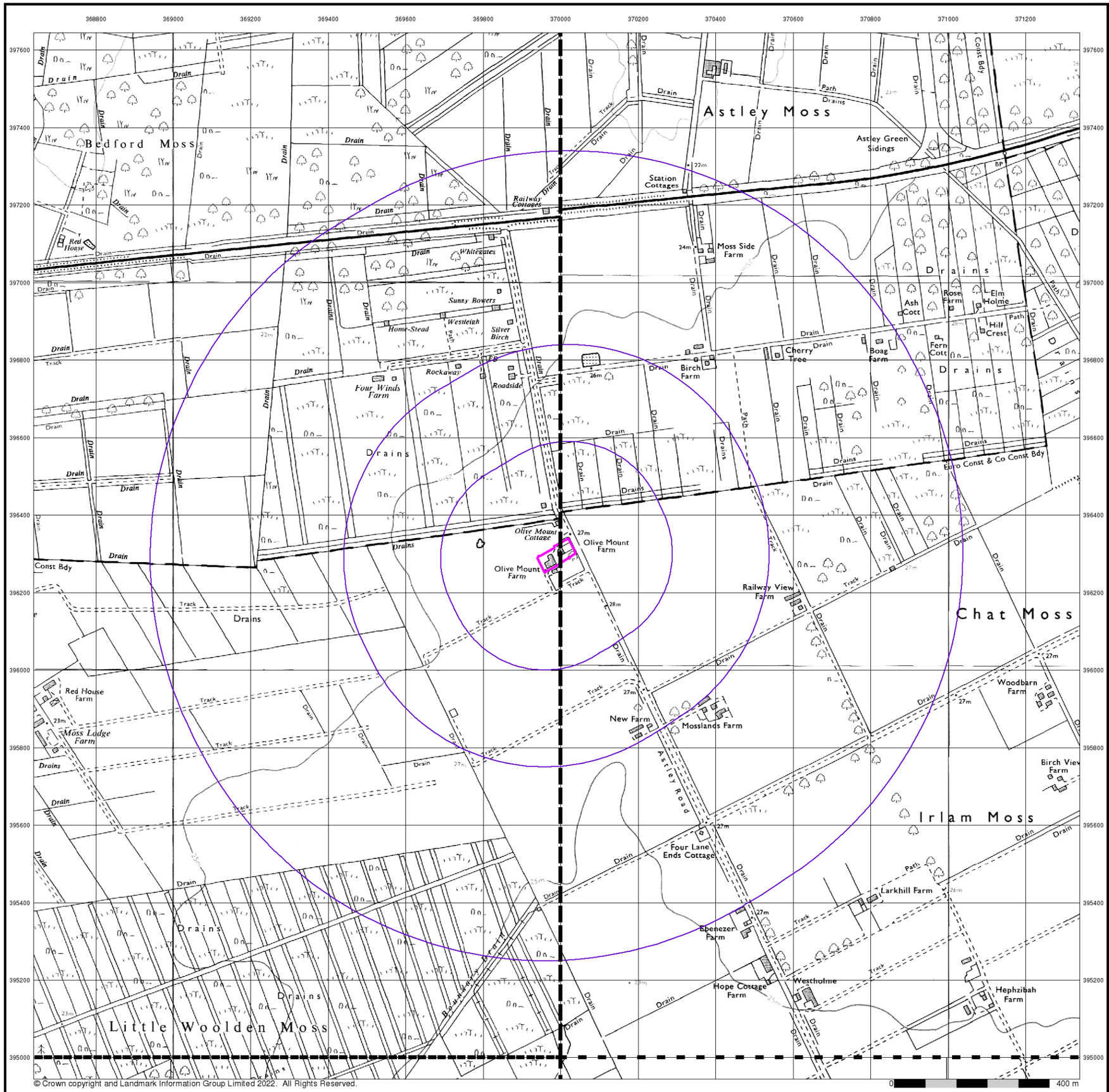


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Ordnance Survey Plan

Published 1980 - 1987

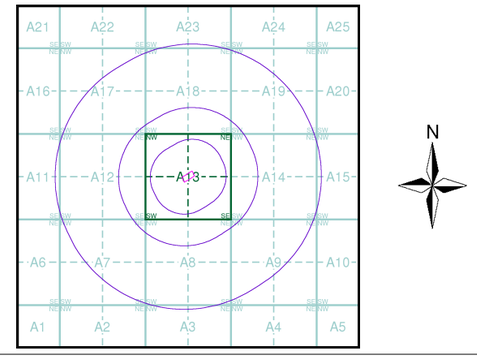
Source map scale - 1:10,000

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Map Name(s) and Date(s)

SJ69NE 1980 1:10,000	SJ79NW 1982 1:10,000
SJ69SE 1987 1:10,000	SJ79SW 1981 1:10,000

Historical Map - Slice A



Order Details

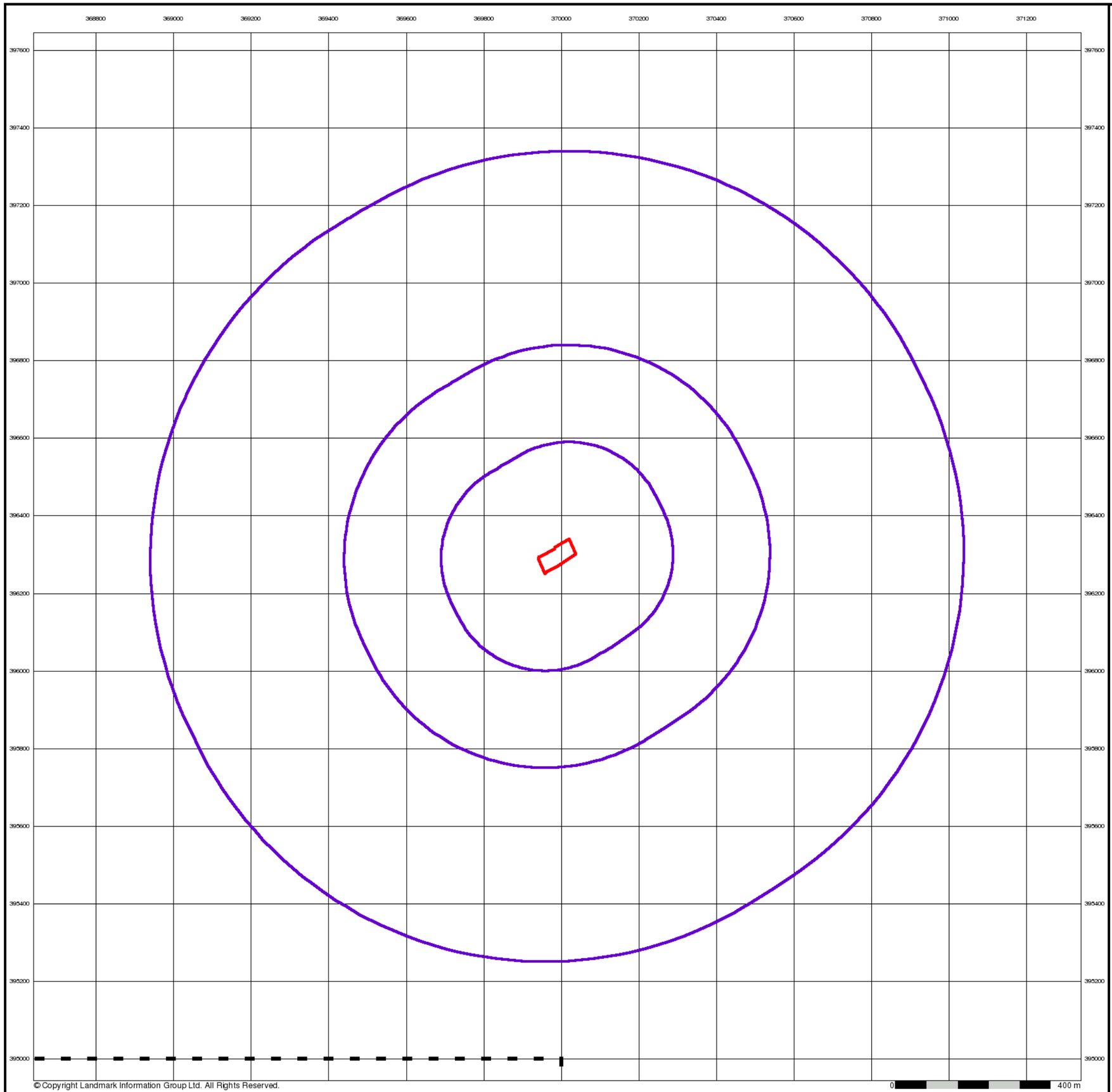
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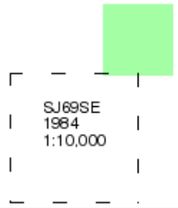
Warrington

Published 1984

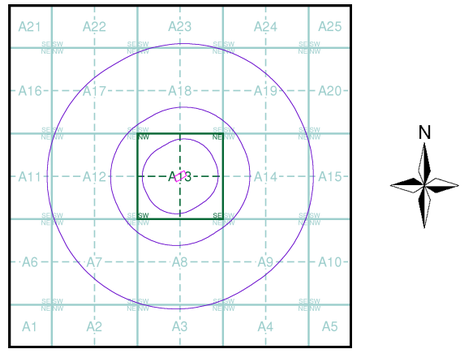
Source map scale - 1:10,000

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)



Russian Map - Slice A



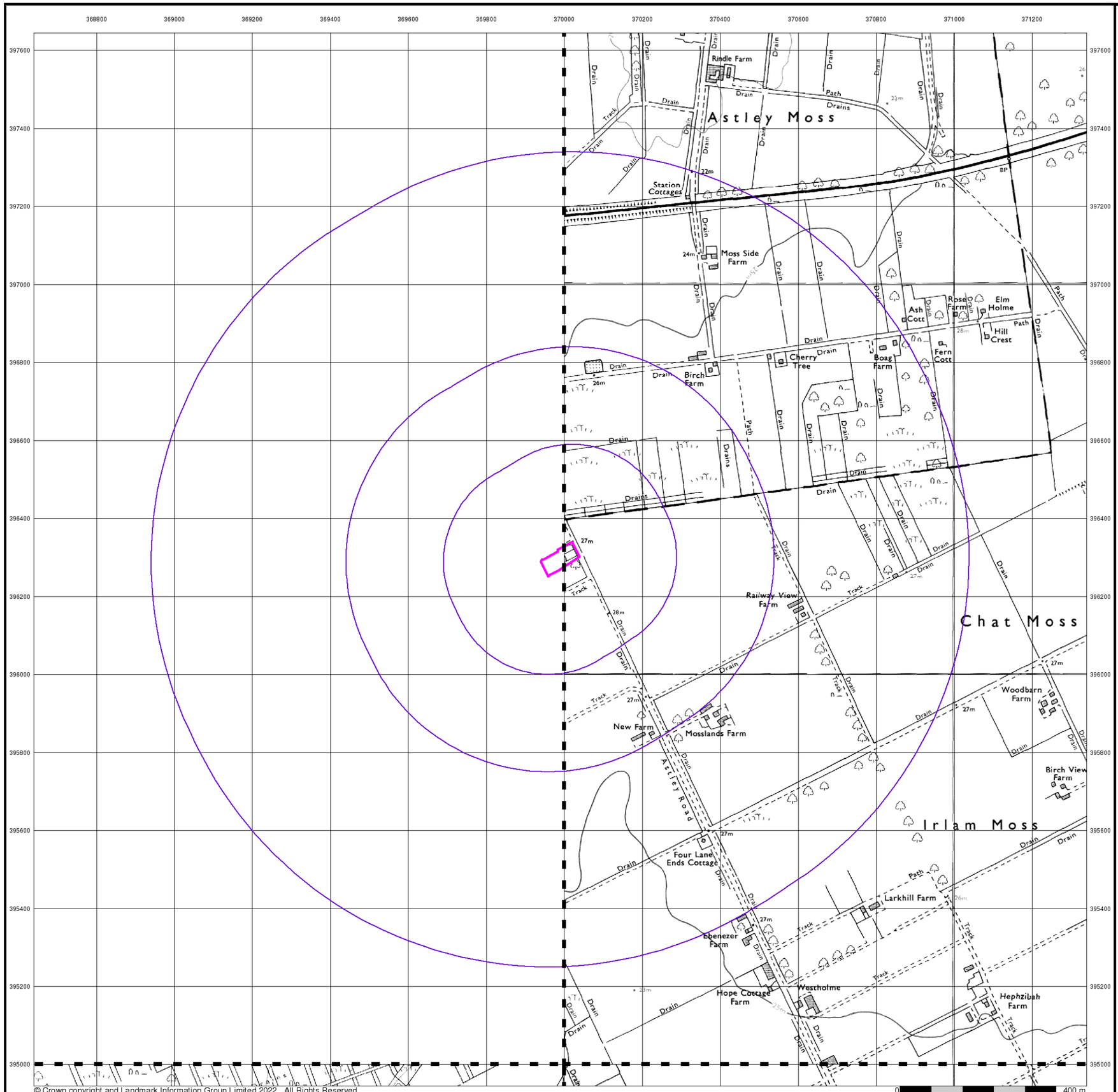
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Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
Search Buffer (m):	1000

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

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Web: www.envirocheck.co.uk



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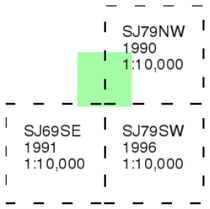
Ordnance Survey Plan

Published 1990 - 1996

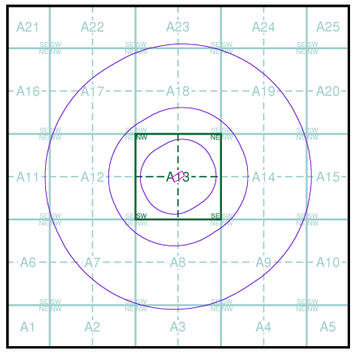
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



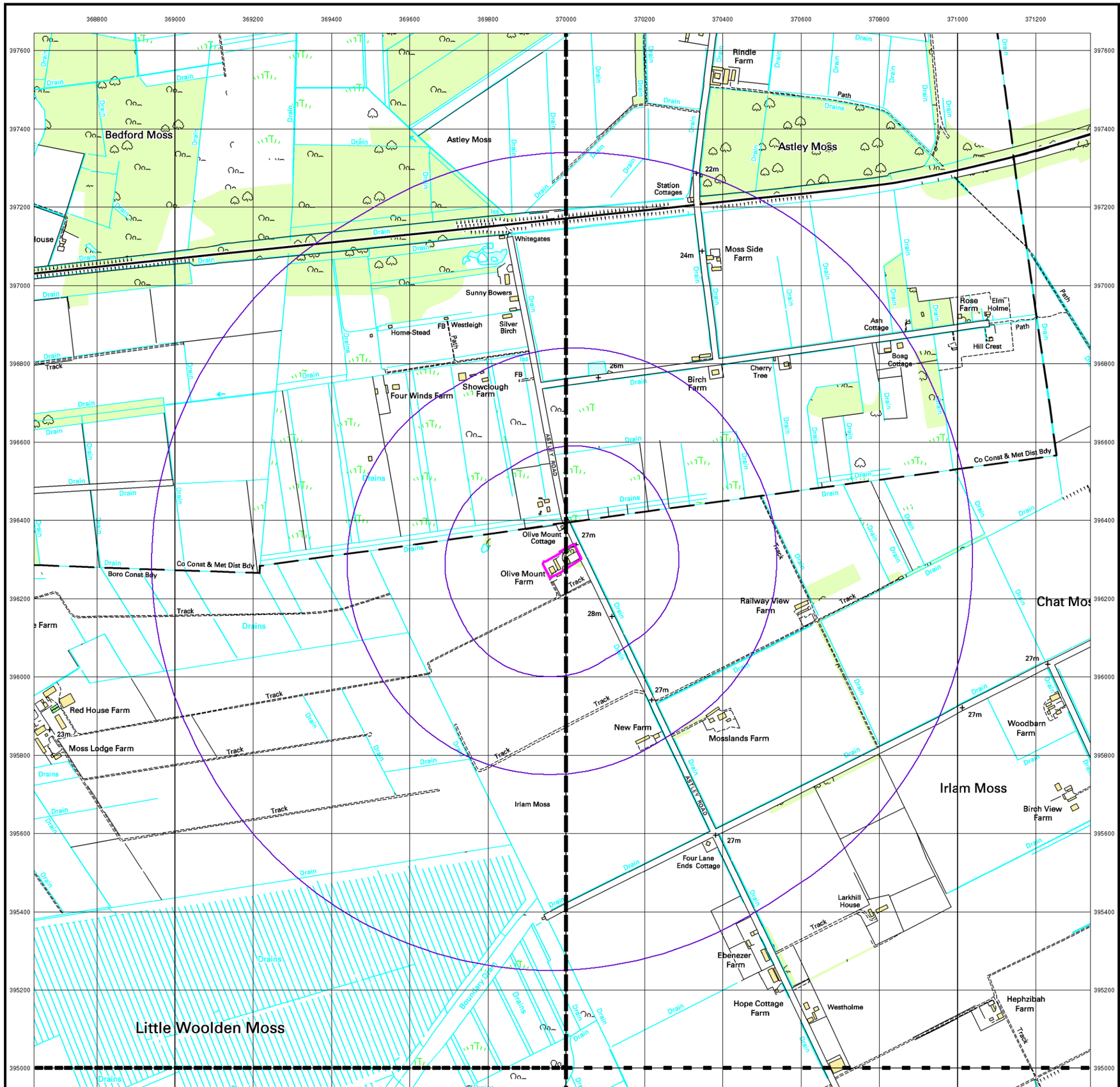
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Order Number:	302167182_1_1
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10k Raster Mapping

Published 1999

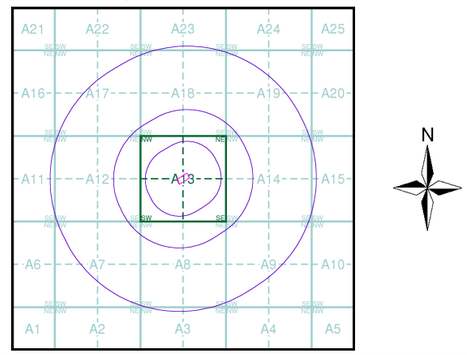
Source map scale - 1:10,000

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)

SJ69NE 1999 1:10,000	SJ79NW 1999 1:10,000
SJ69SE 1999 1:10,000	SJ79SW 1999 1:10,000

Historical Map - Slice A



Order Details

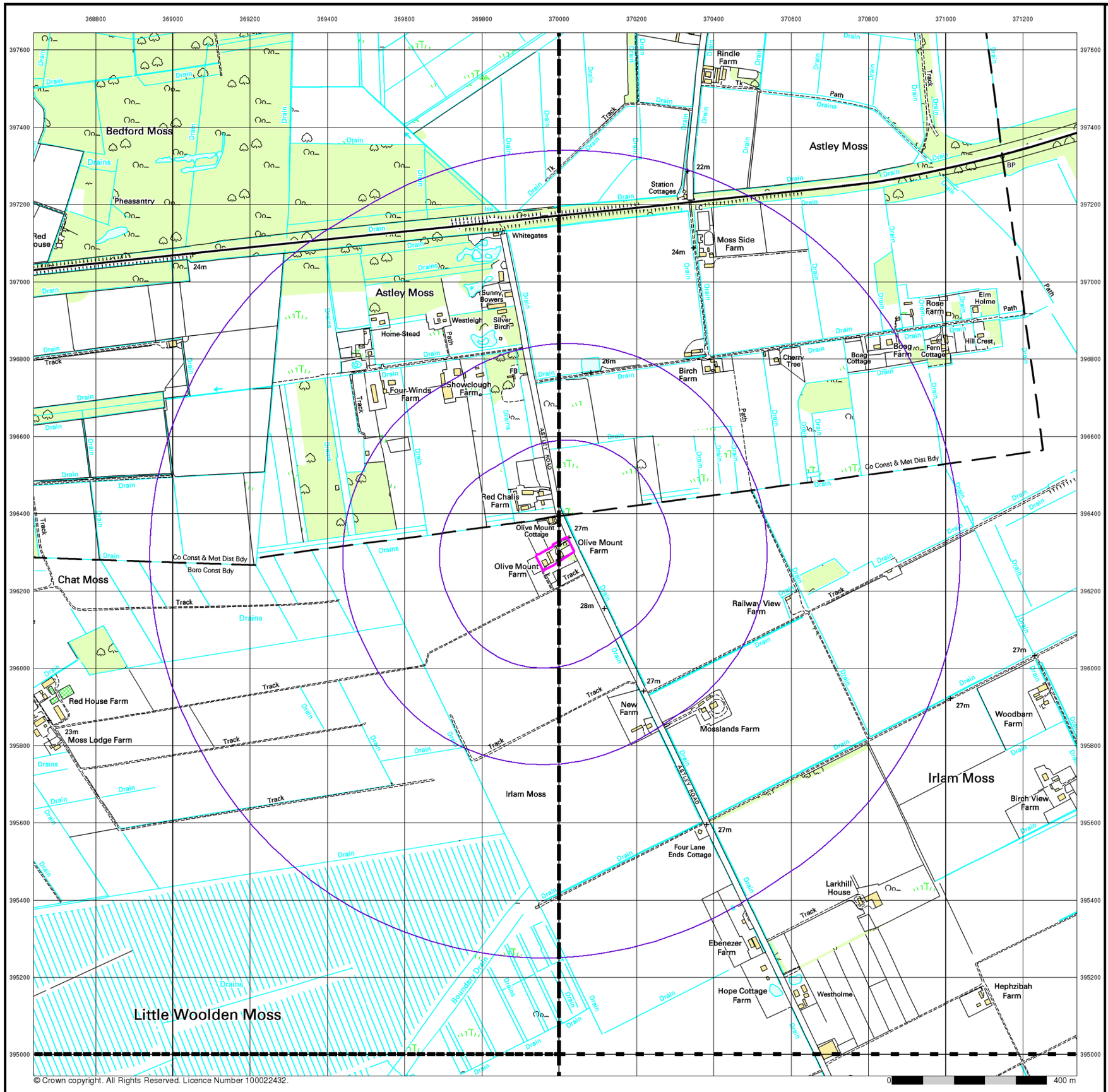
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Site Area (Ha):	0.42
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10k Raster Mapping

Published 2006

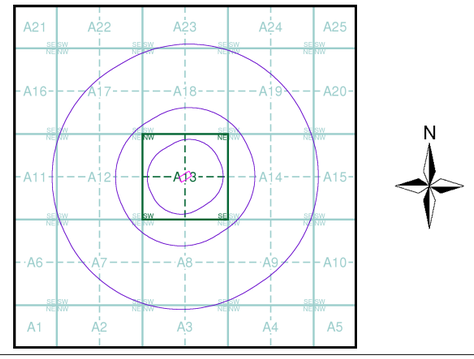
Source map scale - 1:10,000

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)

SJ69NE 2006 1:10,000	SJ79NW 2006 1:10,000
SJ69SE 2006 1:10,000	SJ79SW 2006 1:10,000

Historical Map - Slice A



Order Details

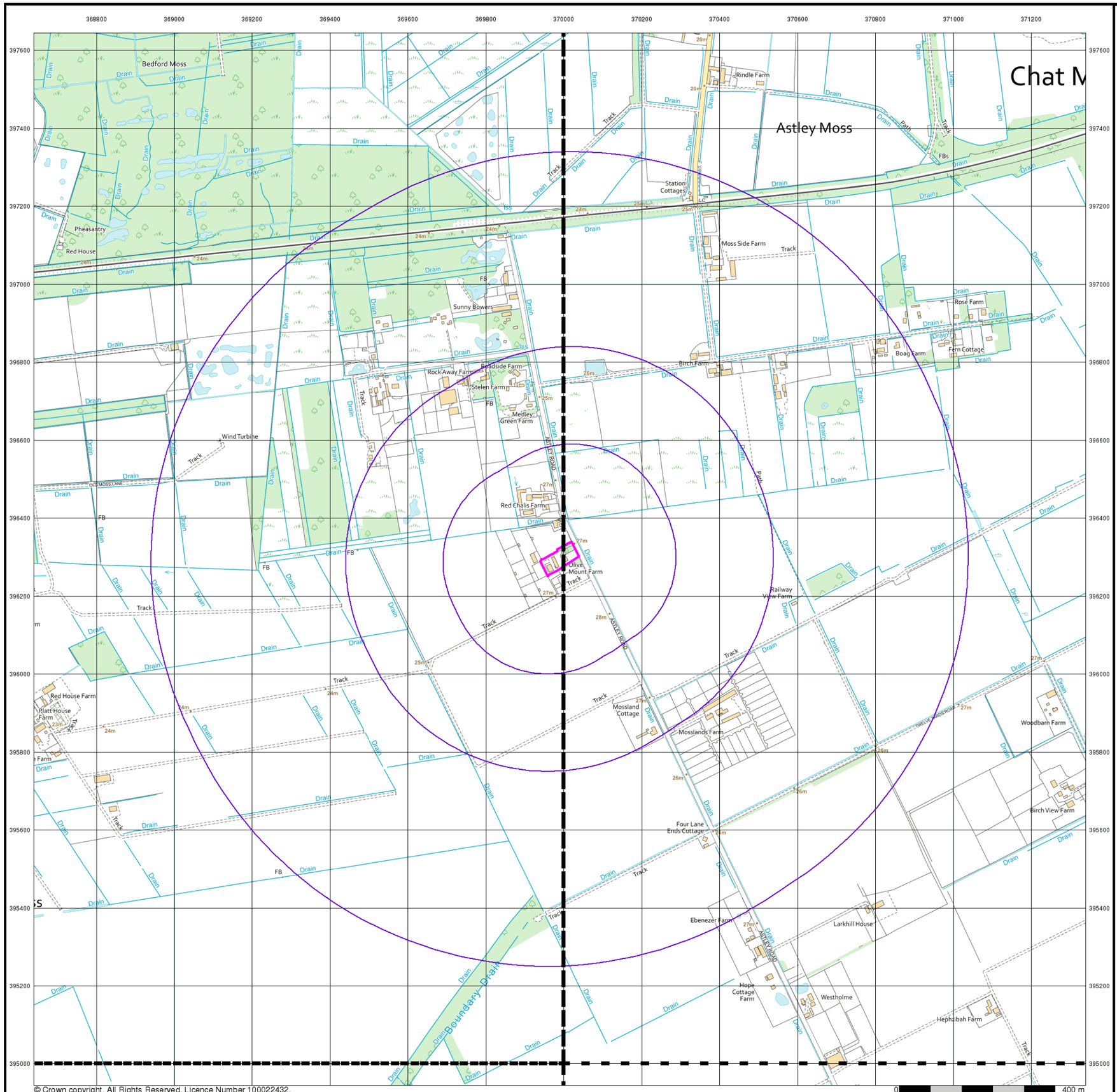
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Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
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VectorMap Local

Published 2021

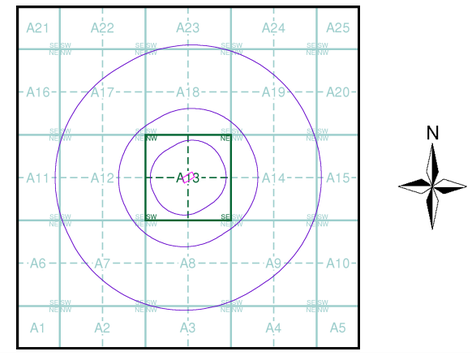
Source map scale - 1:10,000

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)

SJ69NE 2021 Variable	SJ79NW 2021 Variable
SJ69SE 2021 Variable	SJ79SW 2021 Variable

Historical Map - Slice A



Order Details

Order Number:	302167182_1_1
Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
Search Buffer (m):	1000

Site Details

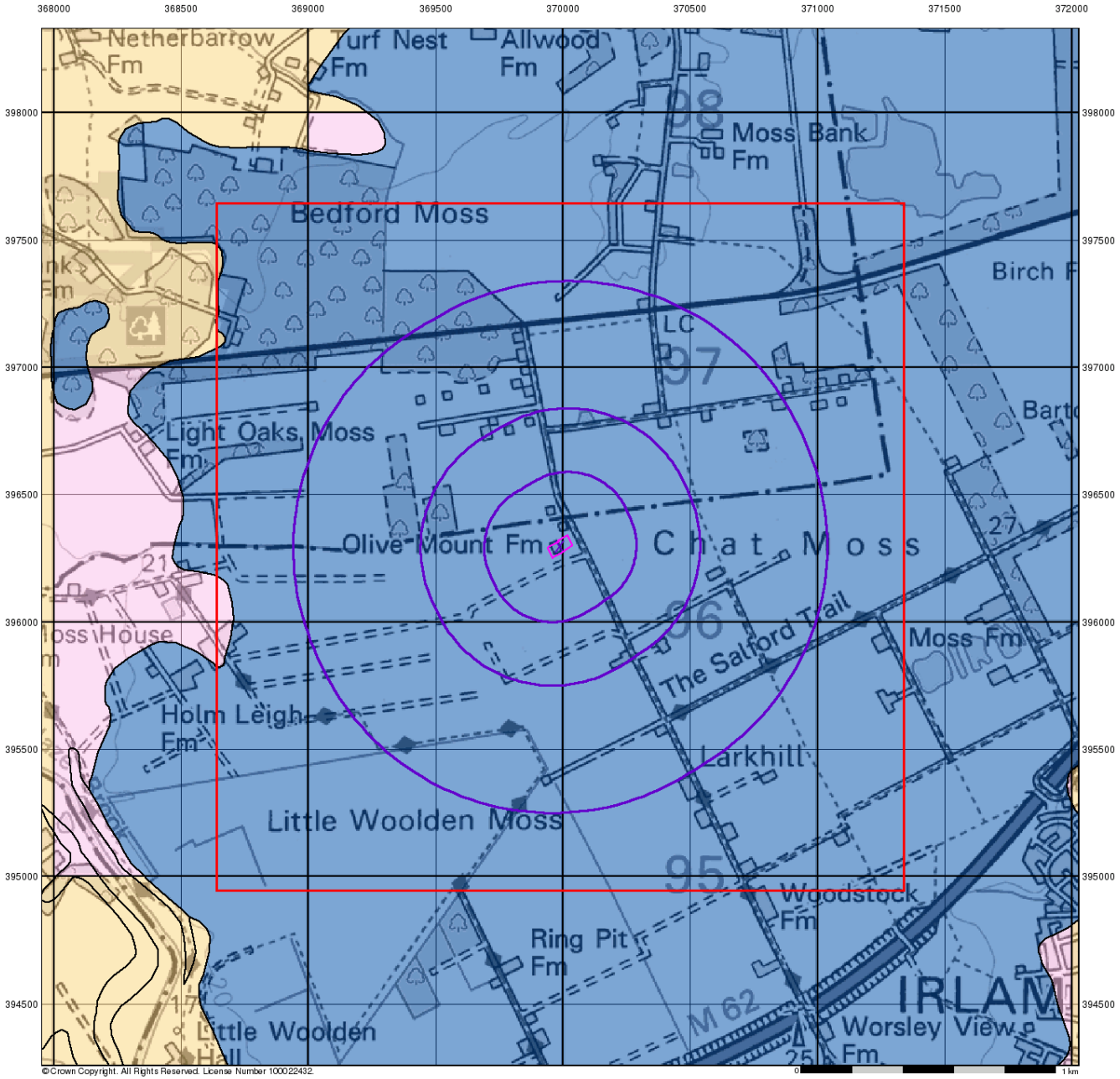
Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

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APPENDIX 5

Envirocheck Reports



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Groundwater Vulnerability

General

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

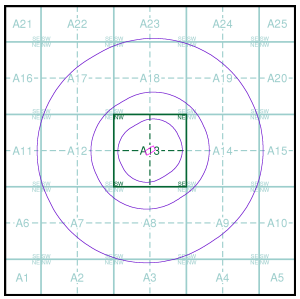
Agency and Hydrological

Bedrock Aquifers	Superficial Aquifers
High Vulnerability, Principal Aquifer	High Vulnerability, Principal Aquifer
High Vulnerability, Secondary Aquifer	High Vulnerability, Secondary Aquifer
Medium Vulnerability, Principal Aquifer	Medium Vulnerability, Principal Aquifer
Medium Vulnerability, Secondary Aquifer	Medium Vulnerability, Secondary Aquifer
Low Vulnerability, Principal Aquifer	Low Vulnerability, Principal Aquifer
Low Vulnerability, Secondary Aquifer	Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

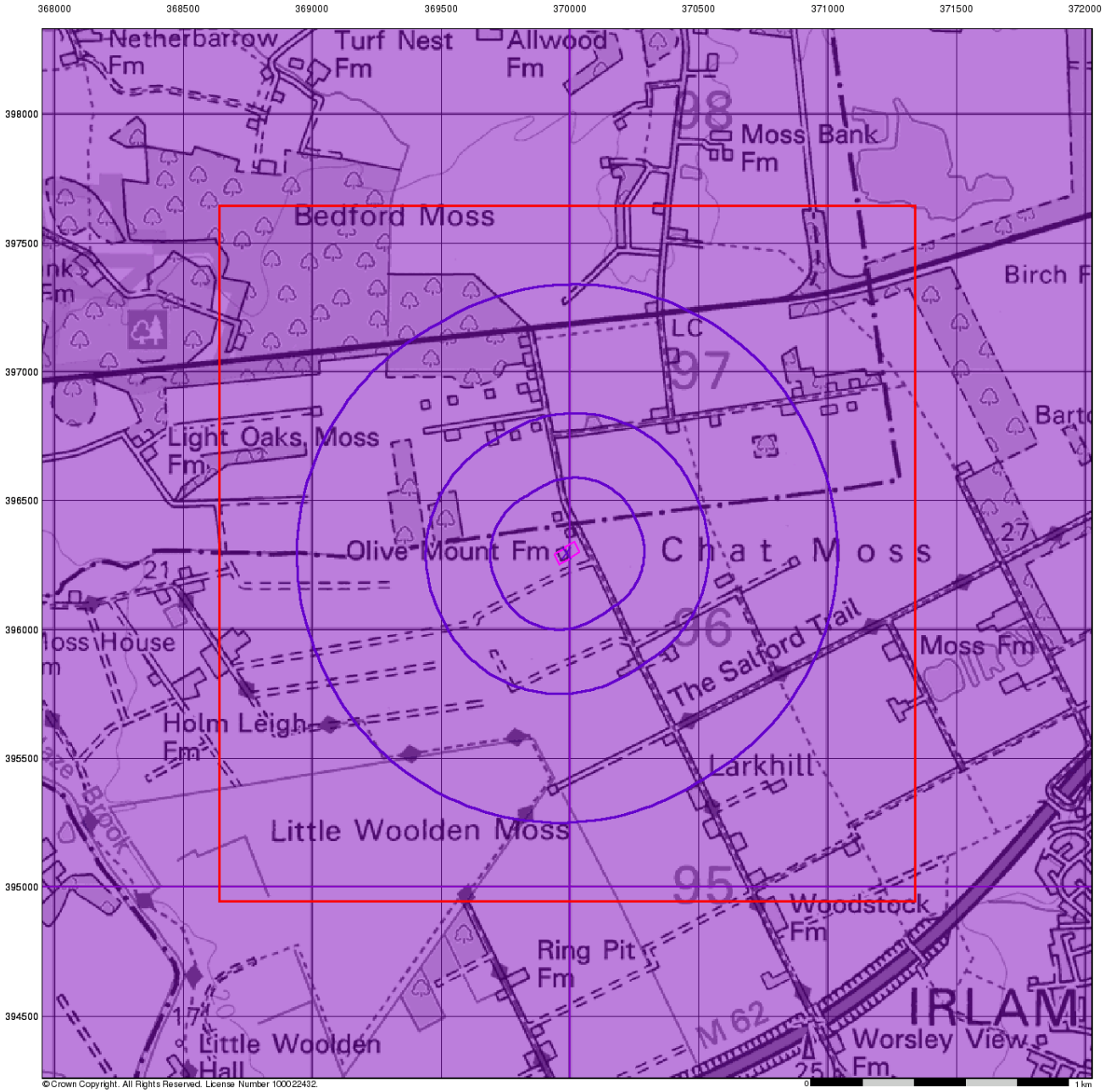
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Customer Ref:	PN224461
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Slice:	A
Site Area (Ha):	0.42
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Bedrock Aquifer Designation

General

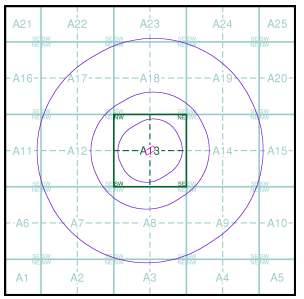
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice A



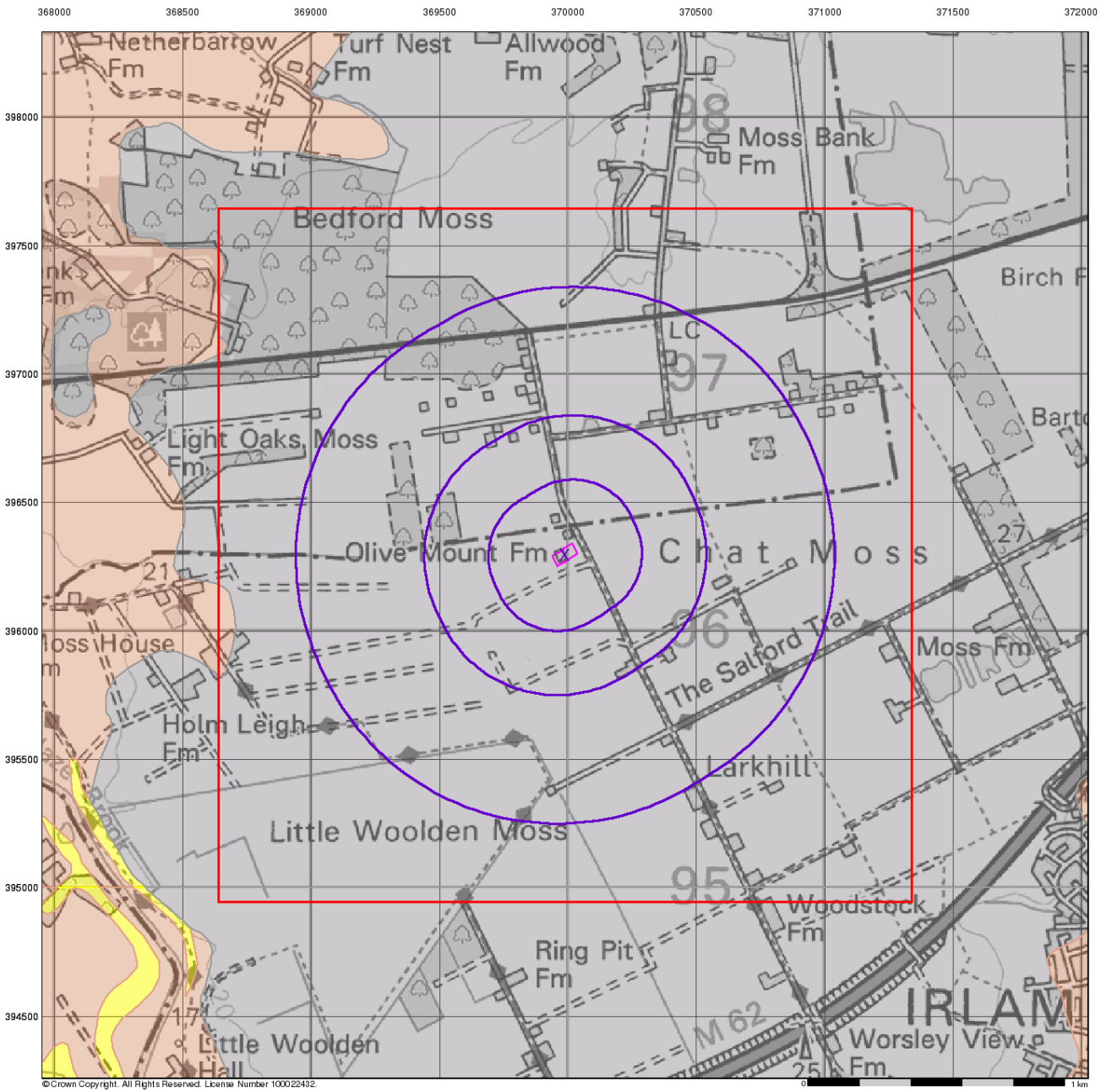
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Superficial Aquifer Designation

General

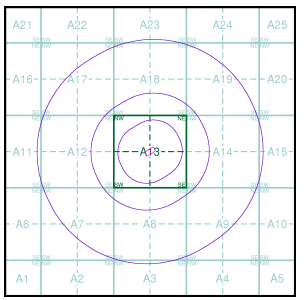
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice A

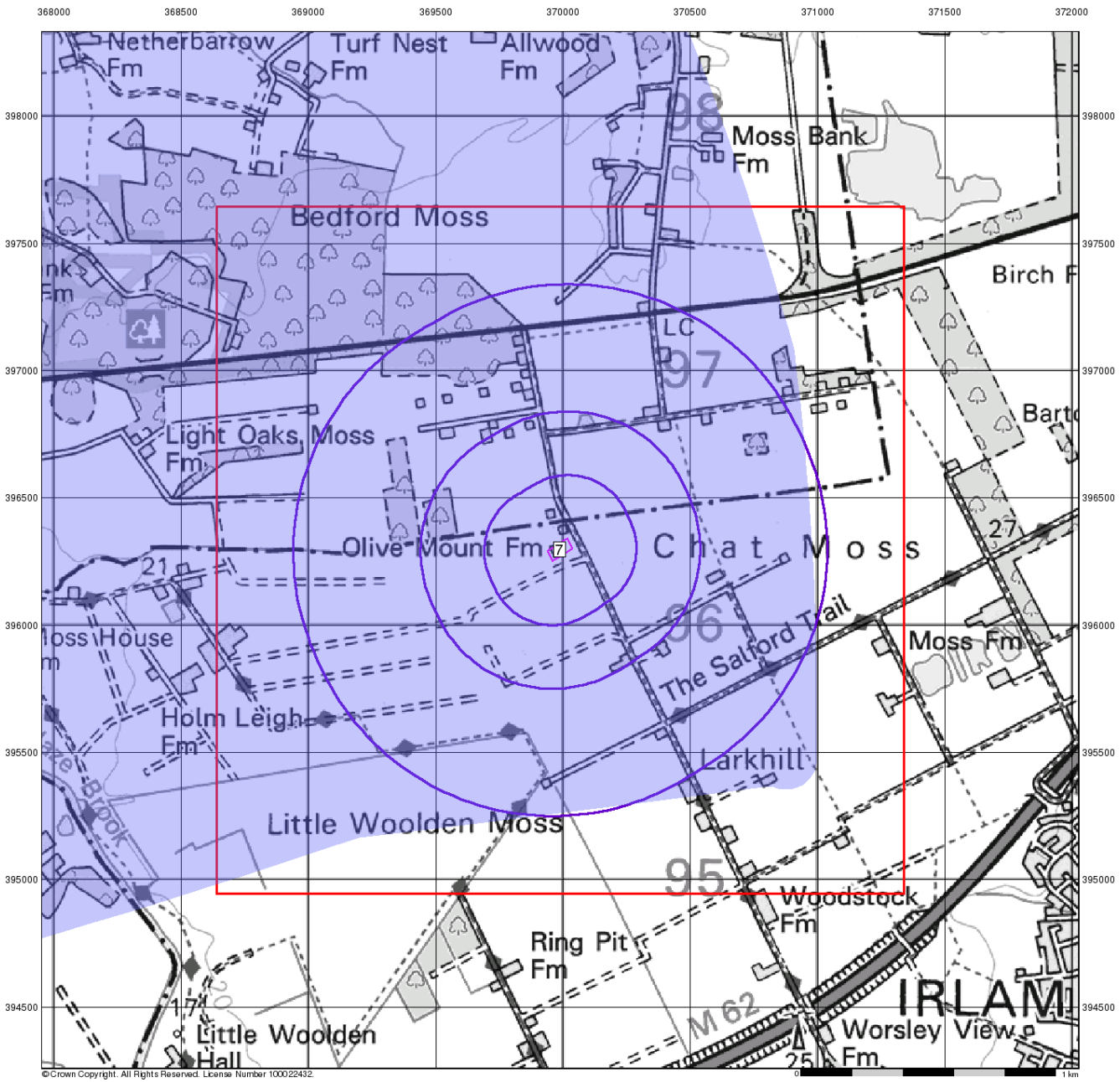


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Order Number:	302167182_1_1
Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
Search Buffer (m):	1000

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU



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Source Protection Zones

General

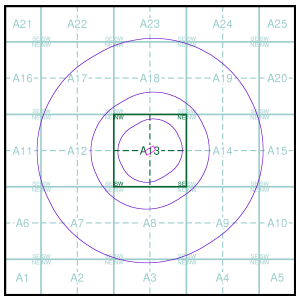
Specified Site | Specified Buffer(s) | Bearing Reference Point

Slice | Map ID

Agency and Hydrological

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

Site Sensitivity Context Map - Slice A



Order Details

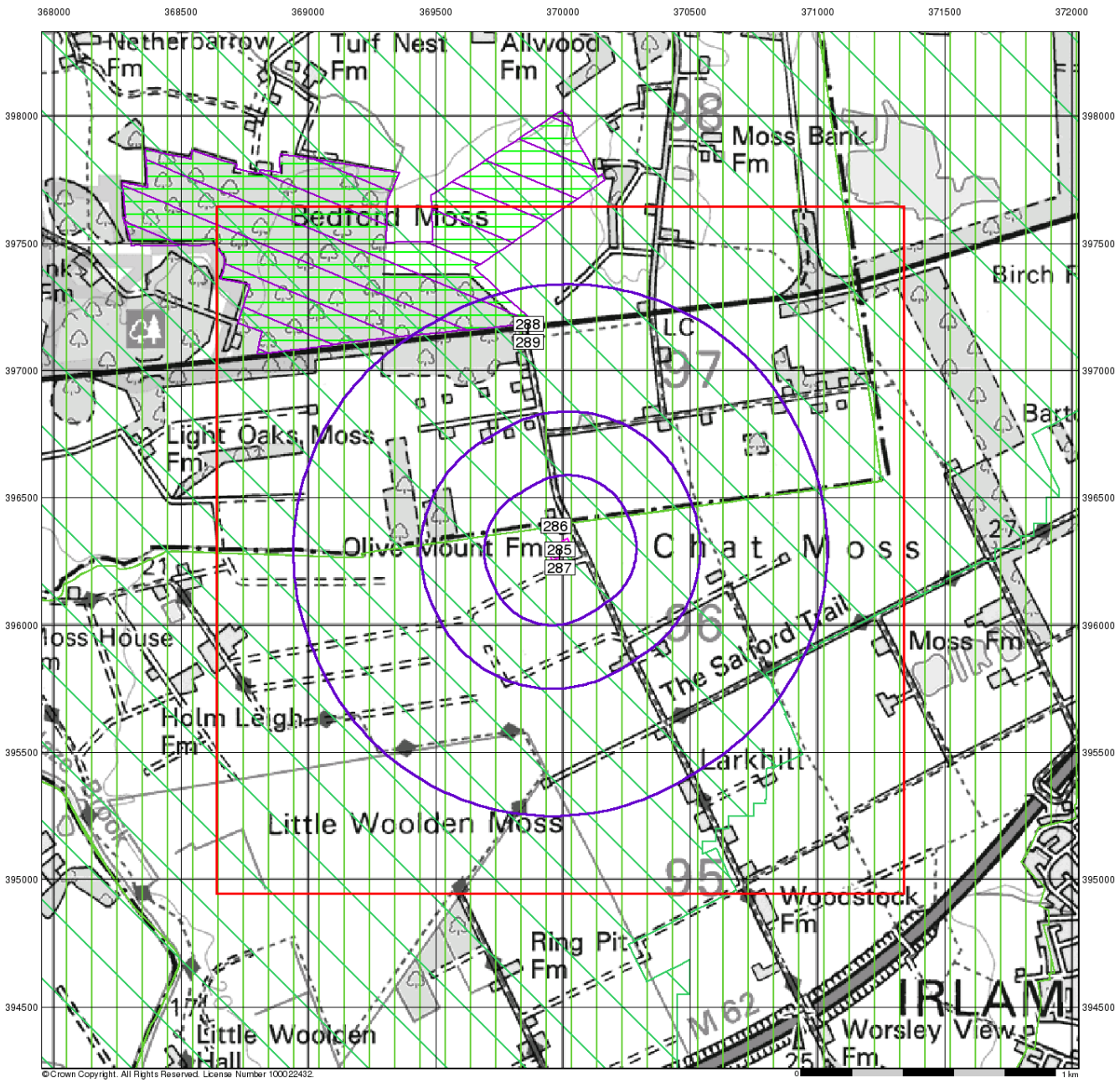
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National Grid Reference:	369990, 396300
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Site Area (Ha):	0.42
Search Buffer (m):	1000

Site Details

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Sensitive Land Uses

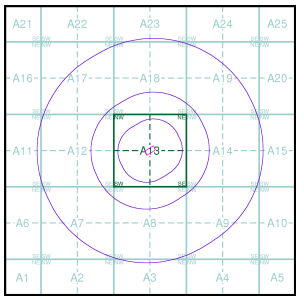
General

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

Sensitive Land Uses

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

Site Sensitivity Context Map - Slice A



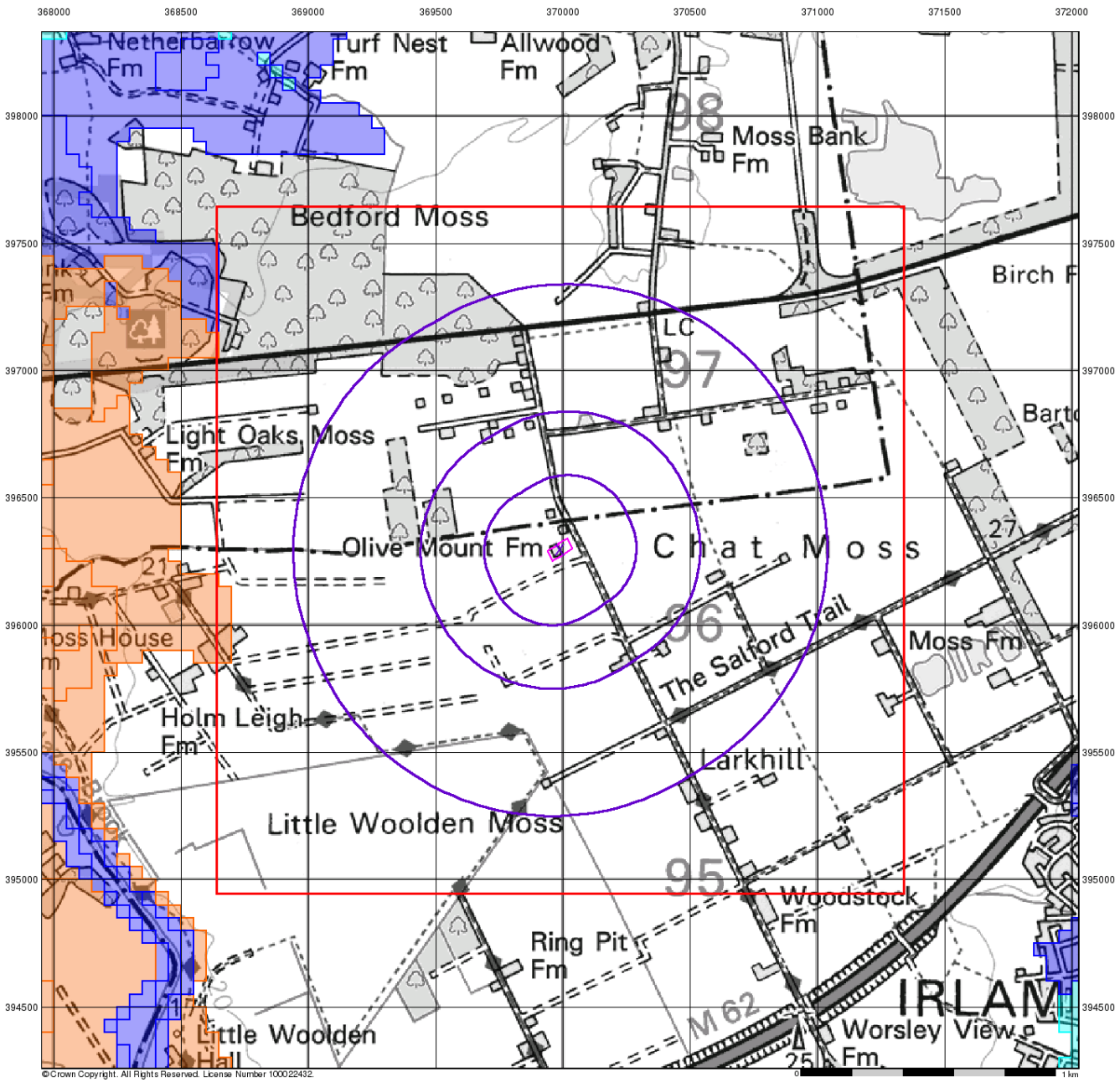
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Customer Ref:	PN224461
National Grid Reference:	369990, 396300
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Site Area (Ha):	0.42
Search Buffer (m):	1000

Site Details

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BGS Flood GFS Data

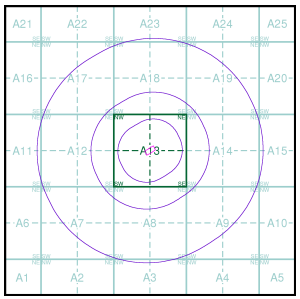
General

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

Agency and Hydrological (Flood)

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

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	302167182_1_1
Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
Search Buffer (m):	1000

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
302167182_1_1

Customer Reference:
PN224461

National Grid Reference:
369990, 396300

Slice:
A

Site Area (Ha):
0.42

Search Buffer (m):
1000

Site Details:

Olive Mount Farm, Astley Road
Irlam
MANCHESTER
M44 5LU

Client Details:

Mr J Booth
Geotechnics Ltd
The Geotechnical Centre
Unit 1 Borders Industrial Park
River Lane
Saltney
CH4 8RJ

Contents

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	38
Hazardous Substances	-
Geological	39
Industrial Land Use	42
Sensitive Land Use	43
Data Currency	44
Data Suppliers	50
Useful Contacts	51

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

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility					n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			1	3
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 1		Yes		
Pollution Incidents to Controlled Waters	pg 2			1	1
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 2				(*20)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 7	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 7	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 7	Yes	n/a	n/a	n/a
Source Protection Zones	pg 7	1			
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 8		14	50	205

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Summary

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 38				1
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 38	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)					
Potentially Infilled Land (Water)	pg 38		1	1	1
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					

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Summary

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 39	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 39	Yes		Yes	Yes
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 40	Yes	n/a	n/a	n/a
Mining Instability			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				n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 40	Yes		n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 40	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 40	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards				n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 42				2
Fuel Station Entries					
Points of Interest - Commercial Services	pg 42				2
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 42				3
Points of Interest - Public Infrastructure					
Points of Interest - Recreational and Environmental					
Gas Pipelines					
Underground Electrical Cables					

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Summary

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 43	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	pg 43	1			
Ramsar Sites					
Sites of Special Scientific Interest	pg 43				1
Special Areas of Conservation	pg 43				1
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	**Discharge Consents** Operator: Mr.Ian Parsons Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Four Winds, Astley Moss, Tyldesley, Manchester, M29 7ly Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016990553 Permit Version: 1 Effective Date: 30th November 1984 Issued Date: 30th November 1984 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Trib Of Glaze **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A18SW (N)	476	2	369900 396800
2	**Discharge Consents** Operator: Kenneth Mcbride Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Rock Away Farm Astley Moss, ., Tyldesley, Greater Manchester, M29 7ly Authority: Environment Agency, North West Region Catchment Area: Glaze (Pennington & Hey) Brook Reference: Eprrp3424xe Permit Version: 1 Effective Date: 20th March 2012 Issued Date: 20th March 2012 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Groundwaters Via Soakaway **Status: New issued under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A18SW (NW)	532	2	369727 396784
3	**Discharge Consents** Operator: Mr John Breedon Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Stelen Farm, Astley Moss, Astley, Manchester, M29 7ly Authority: Environment Agency, North West Region Catchment Area: Glaze (Pennington & Hey) Brook Reference: 016993812 Permit Version: 1 Effective Date: 27th September 2005 Issued Date: 27th September 2005 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Trib Of River Glaze **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	A18SW (NW)	533	2	369770 396810
4	**Discharge Consents** Operator: Mr Jimmy Yaqub Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Moss Side Farm Rindle Road, Manchester, ., Lancashire, M29 7lt Authority: Environment Agency, North West Region Catchment Area: Glaze (Pennington & Hey) Brook Reference: Npswqd005563 Permit Version: 1 Effective Date: 10th December 2008 Issued Date: 10th December 2008 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of Moss Brook **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	822	2	370357 397089
	Nearest Surface Water Feature	A13NE (NE)	16	-	370045 396322

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Moss Pond, East Lancashire Road, Astley Moss Authority: Environment Agency, North West Region Pollutant: Chemicals - Acid Note: Hydrolic Acid In Water Incident Date: 8th November 1998 Incident Reference: SO981962 Catchment Area: Glaze Receiving Water: Freshwater Stream/River Cause of Incident: Other Cause Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SE (N)	468	2	370100 396800
6	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Fire water / Foam Note: Fire Water Incident Date: 9th May 1996 Incident Reference: 96710994 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9SW (SE)	923	2	370500 395500
	Water Abstractions Operator: W H Mawdsley Ltd Licence Number: 2569016084 Permit Version: 1 Location: A Borehole At Whitegate Farm, Glazebury, Nr. Warrington 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): Not Supplied Yearly Rate (m3): Not Supplied Details: Whitegate Farm Glazebury Warrington Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 14th May 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A11SE (W)	1180	2	368770 396140
	Water Abstractions Operator: W H Mawdsley Ltd Licence Number: 2569016073 Permit Version: 100 Location: A Borehole At Whitegate Farm, Glazebury, Nr. Warrington 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): 382 Yearly Rate (m3): 25000 Details: Land At Whitegate Farm, Glazebury, Near Warrington Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 11th July 1997 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A11SE (W)	1180	2	368770 396140
	Water Abstractions Operator: A E Marshall & Sons Ltd Licence Number: 2569016046 Permit Version: 101 Location: Unnamed Trib Of Glaze Brook At Holmleigh Farm, Glazebury Authority: Environment Agency, North West Region Abstraction: General Agriculture: 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: Holmleigh Farm, Glazebury, Nr. Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A11SW (W)	1543	2	368400 396200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: A E Marshall & Sons Ltd Licence Number: 2569016046 Permit Version: 100 Location: Unnamed Tributary Glaze Brook Holmleigh Farm Glazebury Authority: Environment Agency, North West Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 1900 Yearly Rate (m3): 13636 Details: Holmleigh Farm, Glazebury, Nr. Warrington Authorised Start: 01 November Authorised End: 31 May Permit Start Date: 12th February 1993 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A11SW (W)	1543	2	368400 396200
	Water Abstractions Operator: W H Mawdsley Ltd Licence Number: 2569016064 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North West Region Abstraction: Agricultural Spray Irrigation (Summer) Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 2182 Yearly Rate (m3): 18184 Details: Unnamed Tributary Of Glaze Brook Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A11SW (W)	1544	2	368400 396195
	Water Abstractions Operator: Breedon Trading Limited Licence Number: 2569016085r01 Permit Version: 3 Location: Point 1 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 29th September 2021 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006
	Water Abstractions Operator: Breedon Southern Limited Licence Number: 2569016085r01 Permit Version: 2 Location: Point 1 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 17th August 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Breedon Aggregates England Limited Licence Number: 2569016085r01 Permit Version: 1 Location: Point 1 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st April 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006
	Water Abstractions Operator: Breedon Aggregates England Limited Licence Number: 2569016085 Permit Version: 2 Location: Point 1 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: General Use (Medium Loss) Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th August 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006
	Water Abstractions Operator: Breedon Aggregates England Limited Licence Number: 2569016085 Permit Version: 2 Location: Point 2 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: General Use (Medium Loss) Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th August 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006
	Water Abstractions Operator: Breedon Aggregates England Limited Licence Number: 2569016085 Permit Version: 2 Location: Point 1 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th August 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Breedon Aggregates England Limited Licence Number: 2569016085 Permit Version: 2 Location: Point 2 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th August 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006
	Water Abstractions Operator: Breedon Aggregates England Limited Licence Number: 2569016085 Permit Version: 2 Location: Point 1 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: Dust Suppression Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th August 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006
	Water Abstractions Operator: Breedon Aggregates England Limited Licence Number: 2569016085 Permit Version: 2 Location: Point 2 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: Dust Suppression Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th August 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006
	Water Abstractions Operator: Marshalls Mono Ltd Licence Number: 2569016085 Permit Version: 1 Location: Point 1 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th September 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Marshalls Mono Ltd Licence Number: 2569016085 Permit Version: 1 Location: Point 2 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th September 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006
	Water Abstractions Operator: Marshalls Mono Ltd Licence Number: 2569016085 Permit Version: 1 Location: Point 1 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: Dust Suppression Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th September 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006
	Water Abstractions Operator: Marshalls Mono Ltd Licence Number: 2569016085 Permit Version: 1 Location: Point 2 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: Dust Suppression Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th September 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006
	Water Abstractions Operator: Marshalls Mono Ltd Licence Number: 2569016085 Permit Version: 1 Location: Point 1 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: General Use (Medium Loss) Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th September 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Marshalls Mono Ltd Licence Number: 2569016085 Permit Version: 1 Location: Point 2 On Lagoon Sand/Gravel Deposits Astley Warrington Authority: Environment Agency, North West Region Abstraction: Mineral Products: General Use (Medium Loss) Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lh Premises/Lagoon Astley Warrington Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th September 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1929	2	370990 398006
	Groundwater Vulnerability Map Combined Classification: Principle Bedrock Aquifer - Low Vulnerability Combined Vulnerability: Low Combined Aquifer: Productive Bedrock Aquifer, Unproductive Superficial Aquifer Pollutant Speed: High Bedrock Flow: Mixed Dilution: >550 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: Low	A13NW (NW)	0	3	369989 396295
	Groundwater Vulnerability Map Combined Classification: Principle Bedrock Aquifer - Low Vulnerability Combined Vulnerability: Low Combined Aquifer: Productive Bedrock Aquifer, Unproductive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: >550 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: Low	A13NE (E)	0	3	370000 396295
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Principal Aquifer	A13NW (NW)	0	3	369989 396295
	Bedrock Aquifer Designations Aquifer Designation: Principal Aquifer	A13NE (E)	0	3	370000 396295
	Superficial Aquifer Designations Aquifer Designation: Unproductive Strata	A13NW (NW)	0	3	369989 396295
	Superficial Aquifer Designations Aquifer Designation: Unproductive Strata	A13NE (E)	0	3	370000 396295
7	**Source Protection Zones** Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A13NW (NW)	0	2	369989 396295
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
8	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 497.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NE (NE)	16	4	370046 396322
9	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NE (N)	46	4	370002 396382
10	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NE (N)	52	4	370000 396387
11	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 178.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NE (N)	54	4	370013 396393
12	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 456.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A13NE (N)	54	4	370013 396393
13	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 28.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NE (N)	57	4	369998 396392
14	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 87.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (N)	67	4	369972 396389
15	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 18.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (N)	86	4	369989 396419

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 341.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (NW)	99	4	369885 396375
17	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 227.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (NW)	99	4	369885 396375
18	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 39.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (N)	104	4	369986 396437
19	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 190.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (N)	142	4	369978 396475
20	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 272.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (N)	230	4	369973 396565
21	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 242.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (N)	231	4	369973 396565
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 61.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	258	4	370152 396067
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 160.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (W)	286	4	369660 396342
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 14.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (W)	286	4	369660 396342

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
25	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 443.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A13NW (W)	291	4	369658 396357
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 12.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (W)	291	4	369658 396357
27	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 183.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A13NW (W)	297	4	369656 396370
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 413.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (W)	297	4	369656 396370
29	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 16.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	332	4	369940 396662
30	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 84.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	348	4	369937 396677
31	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 128.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (NE)	370	4	370366 396474
32	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 117.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A12SE (SW)	383	4	369600 396114
33	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 231.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (SW)	383	4	369600 396114

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
34	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 121.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NE (SE)	383	4	370206 395953
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 131.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (SW)	383	4	369600 396114
36	**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: 2	A12SE (SW)	393	4	369650 396008
37	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 234.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A12SE (SW)	394	4	369651 396005
38	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SE (N)	407	4	370007 396746
39	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 53.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SE (N)	408	4	370016 396747
40	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	414	4	369936 396744
41	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A18SW (N)	415	4	369942 396746
42	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A18SW (N)	415	4	369938 396746

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
43	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 113.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A18SW (N)	415	4	369942 396746
44	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 391.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	416	4	369936 396746
45	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 526.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NE (SE)	417	4	370233 395930
46	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SE (N)	418	4	370069 396754
47	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 11.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (NE)	419	4	370418 396477
48	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 47.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SE (N)	419	4	370075 396755
49	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 100.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	420	4	369823 396711
50	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 55.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	420	4	369823 396711
51	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 120.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (NE)	422	4	370416 396488

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
52	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	432	4	369920 396760
53	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SE (N)	434	4	370122 396761
54	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 54.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	437	4	369921 396765
55	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 92.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SE (N)	437	4	370131 396762
56	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 143.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NE (W)	442	4	369500 396323
57	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 37.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	451	4	370462 396455
58	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	451	4	370462 396455
59	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	452	4	370462 396458
60	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 213.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	453	4	370462 396461

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
61	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 19.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A12NE (W)	471	4	369474 396345
62	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 413.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A12NE (W)	471	4	369474 396345
63	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SE (NE)	481	4	370222 396776
64	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 114.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SE (NE)	484	4	370227 396776
65	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 75.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	488	4	370499 396460
66	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 337.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14NW (E)	488	4	370499 396460
67	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 105.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A12NE (W)	489	4	369455 396342
68	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 416.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A12NE (W)	489	4	369455 396342
69	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 105.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	497	4	369908 396824

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
70	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 209.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NW (SW)	500	4	369754 395794
71	**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	A8NW (SW)	500	4	369754 395794
72	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NE (SE)	502	4	370258 395844
73	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 93.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NE (SE)	510	4	370261 395838
74	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 138.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (W)	510	4	369470 396093
75	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 83.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (W)	510	4	369468 396098
76	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (W)	510	4	369470 396093
77	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 363.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	512	4	369898 396837
78	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 323.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NE (SE)	514	4	370277 395843

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
79	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 11.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	518	4	369804 396810
80	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 44.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	522	4	369787 396807
81	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 144.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (W)	527	4	369426 396176
82	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 118.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (NW)	551	4	369708 396795
83	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 98.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (E)	552	4	370577 396183
84	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 154.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NE (NW)	558	4	369481 396606
85	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 351.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	562	4	370574 396471
86	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 69.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	562	4	370574 396471
87	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 108.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (E)	580	4	370614 396238

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
88	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 99.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NE (W)	583	4	369359 396305
89	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 151.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (E)	588	4	370623 396240
90	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 54.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A12NE (W)	592	4	369350 396327
91	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 411.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A12NE (W)	592	4	369350 396327
92	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 27.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	598	4	369591 396778
93	**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	A19SW (NE)	599	4	370392 396809
94	**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	A19SW (NE)	601	4	370391 396812
95	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 121.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (SW)	601	4	369429 395966
96	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 36.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	604	4	370408 396802

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
97	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 200.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	604	4	370389 396817
98	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 153.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NE (SE)	606	4	370303 395750
99	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 164.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	612	4	370377 396837
100	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 23.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	613	4	369887 396938
101	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 46.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	614	4	369559 396773
102	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 119.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (E)	616	4	370644 396190
103	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 10.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	616	4	369485 395858
104	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 128.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	618	4	369843 396931
105	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 98.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	618	4	369490 395849

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
106	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 15.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14SW (E)	625	4	370645 396155
107	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 45.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14NW (E)	630	4	370643 396479
108	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 32.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	630	4	370643 396479
109	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 138.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (W)	630	4	369323 396167
110	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	631	4	369537 396778
111	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	631	4	370445 396806
112	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	633	4	369546 396787
113	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 159.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14SW (E)	634	4	370652 396142
114	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	636	4	369540 396786

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
115	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 67.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	636	4	370450 396807
116	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 105.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	638	4	369536 396785
117	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14NW (E)	639	4	370637 396525
118	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	639	4	369514 396767
119	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 97.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14NW (E)	640	4	370636 396528
120	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 45.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	640	4	369510 396766
121	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	643	4	370449 396817
122	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 231.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	645	4	370452 396818
123	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (W)	645	4	369333 396071

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
124	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 77.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A12NW (W)	646	4	369296 396320
125	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 295.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A12NW (W)	646	4	369296 396320
126	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	647	4	369536 395762
127	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 502.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	649	4	369539 395755
128	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (W)	652	4	369327 396070
129	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 164.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (W)	655	4	369324 396069
130	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (W)	655	4	369324 396069
131	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 97.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (W)	656	4	369322 396074
132	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 177.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14NE (E)	663	4	370675 396484

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
133	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 107.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NE (E)	663	4	370675 396484
134	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	668	4	369465 396760
135	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14NW (NE)	669	4	370624 396625
136	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 128.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (NW)	670	4	369658 396903
137	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 43.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14NW (NE)	671	4	370624 396632
138	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	672	4	369458 396759
139	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 22.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	673	4	369456 396759
140	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 43.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	681	4	369260 396290
141	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 97.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (NW)	682	4	369656 396917

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
142	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 113.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	682	4	369270 396167
143	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 177.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A19SW (NE)	686	4	370618 396675
144	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 905.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A8SW (S)	686	4	369859 395571
145	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 150.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	686	4	369859 395571
146	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 27.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	687	4	369434 396756
147	**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: 2	A17SE (NW)	687	4	369434 396756
148	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	689	4	370517 396816
149	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A17SE (NW)	690	4	369434 396760
150	**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: 2	A17SE (NW)	692	4	369434 396762

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
151	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A17SE (NW)	696	4	369437 396772
152	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 121.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	696	4	369342 395926
153	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 96.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A17SE (NW)	698	4	369435 396773
154	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	706	4	369407 396752
155	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 106.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A19SW (NE)	710	4	370653 396659
156	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	712	4	370747 396246
157	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 106.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	715	4	369393 396750
158	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	717	4	370753 396248
159	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 14.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	719	4	369531 396883

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
160	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 332.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	721	4	369827 397034
161	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 197.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (W)	721	4	369224 396364
162	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 12.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (W)	722	4	369219 396309
163	**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	A12NW (W)	723	4	369218 396297
164	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 18.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	724	4	369217 396284
165	**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	A14SE (E)	725	4	370761 396251
166	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	725	4	369517 396881
167	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	727	4	369513 396880
168	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 185.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	727	4	369215 396266

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
169	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 91.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A17SE (NW)	729	4	369513 396882
170	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	729	4	369513 396882
171	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 274.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A17SE (NW)	734	4	369512 396889
172	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 102.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SE (NW)	734	4	369512 396889
173	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 344.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	735	4	369837 397051
174	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 231.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (W)	735	4	369238 396506
175	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 100.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (W)	735	4	369238 396506
176	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 26.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (NE)	741	4	370356 397000
177	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 72.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	742	4	370577 396829

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
178	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14SE (E)	748	4	370721 395998
179	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 188.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14SE (E)	752	4	370724 395992
180	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 10.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (NE)	759	4	370365 397016
181	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 157.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (NE)	763	4	370353 397026
182	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 122.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (NW)	763	4	369247 396606
183	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 150.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SE (SE)	765	4	370297 395565
184	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SE (SE)	765	4	370303 395568
185	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 76.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9SW (SE)	765	4	370335 395583
186	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 28.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (NE)	768	4	370363 397026

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
187	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 177.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NE (E)	769	4	370781 396498
188	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 197.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NE (E)	769	4	370781 396498
189	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 457.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9SW (SE)	769	4	370385 395610
190	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 198.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A17SE (NW)	775	4	369422 396868
191	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SE (S)	780	4	370163 395498
192	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 215.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SE (S)	781	4	370157 395495
193	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 71.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9SW (SE)	781	4	370390 395598
194	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 357.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SW (NW)	789	4	369288 396734
195	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (NE)	798	4	370360 397061

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
196	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 66.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (NE)	801	4	370359 397064
197	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 291.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	803	4	369774 397103
198	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 458.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	803	4	369906 397135
199	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	804	4	370649 396839
200	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 82.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	806	4	370652 396839
201	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 567.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	809	4	369854 397131
202	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 78.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	811	4	370759 396674
203	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 216.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SW (NW)	811	4	369259 396728
204	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 50.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	815	4	369925 395436

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
205	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	815	4	369925 395436
206	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 119.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9SW (SE)	817	4	370393 395558
207	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	818	4	369161 396044
208	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 582.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	820	4	369921 395431
209	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 18.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	822	4	370860 396281
210	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 184.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	823	4	369155 396043
211	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 15.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17NE (NW)	826	4	369498 396990
212	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	837	4	370681 396852
213	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 229.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	837	4	370681 396852

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
214	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	837	4	370748 396752
215	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 200.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	838	4	370876 396272
216	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 62.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17NE (NW)	840	4	369496 397005
217	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 208.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	841	4	370747 396760
218	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 90.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	841	4	370747 396760
219	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 151.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	842	4	370687 396852
220	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 48.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	852	4	369905 397184
221	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	853	4	369893 397183
222	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 601.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	853	4	369893 397183

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
223	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 232.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	855	4	369895 397185
224	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 113.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	855	4	369986 397193
225	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 120.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	856	4	369094 396161
226	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 132.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9SW (SE)	858	4	370423 395528
227	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 55.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (NE)	859	4	370353 397130
228	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 257.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	859	4	369846 397181
229	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 341.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	862	4	369862 397187
230	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 299.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	869	4	370099 397204
231	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 207.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	869	4	370099 397204

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
232	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 289.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	871	4	369952 395380
233	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 357.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A18NW (N)	888	4	369807 397201
234	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 21.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boundary Drain Catchment Name: Mersey Primacy: 1	A8SW (S)	890	4	369907 395362
235	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 10.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	892	4	370316 397181
236	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 18.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	892	4	370316 397181
237	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17NE (NW)	898	4	369485 397066
238	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 23.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	898	4	369661 397162
239	**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	A17NE (NW)	902	4	369488 397074
240	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 213.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A9NE (SE)	904	4	370804 395822

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
241	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 85.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17NE (NW)	904	4	369484 397073
242	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A19NW (N)	906	4	370343 397186
243	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	907	4	369034 396265
244	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 21.8 Watercourse Level: Underground Permanent: True Watercourse Name: Boundary Drain Catchment Name: Mersey Primacy: 1	A8SW (S)	908	4	369895 395345
245	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 276.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (N)	909	4	370349 397186
246	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 117.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	912	4	369029 396272
247	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	912	4	369029 396272
248	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 214.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	913	4	369028 396280
249	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 363.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	921	4	369657 397186

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
250	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	921	4	369659 397186
251	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 156.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A18NW (N)	921	4	369657 397186
252	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 329.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	926	4	369966 397263
253	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 324.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boundary Drain Catchment Name: Mersey Primacy: 1	A8SW (S)	927	4	369882 395327
254	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 54.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	933	4	370310 397226
255	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17NE (NW)	944	4	369399 397065
256	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 108.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17NE (NW)	946	4	369395 397065
257	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 211.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (N)	946	4	370346 397227
258	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 63.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	963	4	370830 396860

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
259	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 17.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (W)	963	4	368999 396493
260	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 174.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (W)	966	4	368999 396503
261	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 130.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	966	4	368983 396159
262	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 110.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	966	4	369105 395798
263	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (NE)	968	4	370645 397078
264	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 133.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19NW (NE)	972	4	370644 397085
265	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 31.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SE (NE)	976	4	370837 396873
266	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 64.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A19SE (NE)	976	4	370837 396873
267	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 240.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14NE (E)	979	4	370990 396527

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
268	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 192.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (W)	979	4	368985 396502
269	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 12.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14NE (E)	980	4	370992 396525
270	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 178.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (W)	980	4	368982 396492
271	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 113.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A14NE (E)	986	4	371000 396516
272	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	987	4	370324 397278
273	**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	A17SW (NW)	988	4	369044 396704
274	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 143.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A17SW (NW)	988	4	369044 396704
275	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 171.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	991	4	370325 397283
276	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 119.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9SW (SE)	995	4	370482 395403

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
277	**Historical Landfill Sites** Licence Holder: Not Supplied Location: Irlam, Greater Manchester Name: Railway View Farm Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD17889 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste Type: Not Supplied EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: E110	A14SW (E)	579	2	370613 396234
	Local Authority Landfill Coverage Name: Salford Metropolitan District Council - Has no landfill data to supply		0	5	369989 396295
	Local Authority Landfill Coverage Name: Wigan Metropolitan Borough Council - Has no landfill data to supply		54	6	369976 396388
278	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A13NW (NW)	22	-	369951 396321
279	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8NE (SE)	495	-	370265 395857
280	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8NE (SE)	510	-	370276 395847

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Triassic Rocks (Undifferentiated)	A13NW (NW)	0	1	369989 396295
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: 3.0 - 6.0 mg/kg Chromium Concentration: 120 - 180 mg/kg Lead Concentration: >1200 mg/kg Nickel Concentration: 80 - 100 mg/kg	A13NE (E)	0	1	370000 396295
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: 3.0 - 6.0 mg/kg Chromium Concentration: 90 - 120 mg/kg Lead Concentration: >1200 mg/kg Nickel Concentration: 60 - 80 mg/kg	A13NW (NW)	0	1	369989 396295
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: 3.0 - 6.0 mg/kg Chromium Concentration: 120 - 180 mg/kg Lead Concentration: >1200 mg/kg Nickel Concentration: 80 - 100 mg/kg	A13SW (S)	251	1	369989 396000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: 3.0 - 6.0 mg/kg Chromium Concentration: 120 - 180 mg/kg Lead Concentration: >1200 mg/kg Nickel Concentration: >100 mg/kg	A13SE (S)	254	1	370000 396000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: 2.2 - 3.0 mg/kg Chromium Concentration: 120 - 180 mg/kg Lead Concentration: >1200 mg/kg Nickel Concentration: 80 - 100 mg/kg	A14NW (E)	503	1	370500 396500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: 2.2 - 3.0 mg/kg Chromium Concentration: 120 - 180 mg/kg Lead Concentration: >1200 mg/kg Nickel Concentration: 80 - 100 mg/kg	A14NE (E)	962	1	371000 396295

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: 1.8 - 2.2 mg/kg Chromium Concentration: 120 - 180 mg/kg Lead Concentration: >1200 mg/kg Nickel Concentration: 80 - 100 mg/kg	A14NE (E)	982	1	371000 396500
	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.	A13NW (NW)	0	7	369989 396295
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	369989 396295
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	370000 396295
	Potential for Compressible Ground Stability Hazards Hazard Potential: High Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	369989 396295
	Potential for Compressible Ground Stability Hazards Hazard Potential: High Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	370000 396295
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	369989 396295
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	370000 396295
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	369989 396295
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	370000 396295
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	369989 396295
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	370000 396295
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	369989 396295
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	370000 396295
	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	A13NW (NW)	0	1	369989 396295

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	370000 396295
	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	A13NW (NW)	0	1	369989 396295
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	370000 396295

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
281	**Contemporary Trade Directory Entries** Name: Norcott Haulage Ltd Location: Mossland, Astley Road, Irlam, Manchester, Lancashire, M44 5LT Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	530	-	370372 395889
282	**Contemporary Trade Directory Entries** Name: B & I Spencer Ltd Location: Birch Farm, Astley Moss, Tyldesley, Manchester, M29 7LU Classification: Freight Forwarders **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	571	-	370385 396778
283	**Points of Interest - Commercial Services** Name: B & I Spencer Ltd Location: Birch Farm, Astley Moss, Tyldesley, Manchester, M29 7LU Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SW (NE)	567	8	370381 396777
283	**Points of Interest - Commercial Services** Name: B & I Spencer Ltd Location: Birch Farm, Astley, Tyldesley, M29 7LU Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SW (NE)	571	8	370385 396778
284	**Points of Interest - Manufacturing and Production** Name: Wind Turbine Location: M29 Category: Industrial Features Class Code: Energy Production Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	876	8	369122 396601
284	**Points of Interest - Manufacturing and Production** Name: Light Oaks Turbine Location: M29 Category: Industrial Features Class Code: Energy Production Positional Accuracy: Positioned to address or location	A12NW (W)	876	8	369123 396602
284	**Points of Interest - Manufacturing and Production** Name: Light Oaks Location: Moss Farm, Old Moss Lane, Glazebury, Warrington, WA3 5PY Category: Industrial Features Class Code: Energy Production Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	876	8	369123 396602

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
285	**Areas of Adopted Green Belt** Authority: Salford City Council Plan Name: City Of Salford Unitary Development Plan **Status: Adopted** Plan Date: 21st June 2006	A13NW (NW)	0	9	369989 396295
286	**Areas of Adopted Green Belt** Authority: Wigan Metropolitan Borough Council Plan Name: Wigan Unitary Development Plan **Status: Adopted** Plan Date: 30th April 2006	A13NW (N)	57	10	369973 396388
287	**Nitrate Vulnerable Zones** Name: River Glaze Nvz Description: Surface Water Source: Environment Agency, Head Office	A13NW (NW)	0	3	369989 396295
288	**Sites of Special Scientific Interest** Name: Astley & Bedford Mosses Multiple Areas: N Total Area (m2): 919965.26 Source: Natural England Reference: 1002755 Designation Details: Local Wildlife Site Designation Date: 29th September 1989 Date Type: Notified Designation Details: Special Area Of Conservation Designation Date: 29th September 1989 Date Type: Notified Designation Details: Site Of Special Scientific Interest Designation Date: 29th September 1989 Date Type: Notified Designation Details: Water Framework Directive (WFD) Designation Date: 29th September 1989 Date Type: Notified	A18NW (N)	858	12	369862 397182
289	**Special Areas of Conservation** Name: Manchester Mosses Multiple Areas: Y Total Area (m2): 1715154.68 Source: Natural England Reference: UK0030200 **Status: Designated**	A18NW (N)	858	12	369862 397182

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Environment Agency - Head Office	June 2020	Annually
Trafford Metropolitan Borough Council - Renewal and Environmental Protection	November 2013	Annual Rolling Update
Salford City Council - Environmental Health Department	October 2017	Annual Rolling Update
Wigan Metropolitan Borough Council - Environmental Services	October 2017	Annual Rolling Update
Warrington Borough Council - Environmental Health Department	October 2017	Annually
Discharge Consents		
Environment Agency - North West Region	July 22	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	July 2022	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Warrington Borough Council - Environmental Health Department	February 2015	Variable
Wigan Metropolitan Borough Council - Environmental Services	March 2014	Variable
Salford City Council - Environmental Health Department	March 2015	Variable
Trafford Metropolitan Borough Council - Environmental Health Department	October 2014	Variable
Local Authority Pollution Prevention and Controls		
Warrington Borough Council - Environmental Health Department	February 2015	Not Applicable
Wigan Metropolitan Borough Council - Environmental Services	March 2014	Annual Rolling Update
Salford City Council - Environmental Health Department	March 2015	Annual Rolling Update
Trafford Metropolitan Borough Council - Environmental Health Department	October 2014	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Warrington Borough Council - Environmental Health Department	February 2015	Variable
Wigan Metropolitan Borough Council - Environmental Services	March 2014	Variable
Salford City Council - Environmental Health Department	March 2015	Variable
Trafford Metropolitan Borough Council - Environmental Health Department	October 2014	Variable
Nearest Surface Water Feature		
Ordnance Survey	August 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 - South Area	July 2022	Quarterly
Water Abstractions		
Environment Agency - North West Region	July 2022	Quarterly
Water Industry Act Referrals		
Environment Agency - North West Region	October 2017	

Data Currency

Agency & Hydrological	Version	Update Cycle
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	July 2022	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	April 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 - South Area	July 2022	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - North West Region - South Area	April 2022	Quarterly
Local Authority Landfill Coverage		
Salford City Council - Environmental Health Department	February 2003	Not Applicable
Trafford Metropolitan Borough Council - Environmental Health Department	February 2003	Not Applicable
Warrington Borough Council - Environmental Health Department	February 2003	Not Applicable
Wigan Metropolitan Borough Council - Environmental Services	February 2003	Not Applicable
Local Authority Recorded Landfill Sites		
Salford City Council - Environmental Health Department	October 2018	
Trafford Metropolitan Borough Council - Environmental Health Department	October 2018	
Warrington Borough Council - Environmental Health Department	October 2018	
Wigan Metropolitan Borough Council - Environmental Services	October 2018	
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	
Registered Landfill Sites		
Environment Agency - North West Region - South Area	March 2006	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - North West Region - South Area	April 2018	
Registered Waste Treatment or Disposal Sites		
Environment Agency - North West Region - South Area	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		
Trafford Metropolitan Borough Council	April 2016	Variable
Wigan Metropolitan Borough Council - The Planning Department	January 2016	Variable
Salford City Council	June 2016	Variable
Warrington Borough Council - Environmental and Regeneration	June 2016	Variable
Planning Hazardous Substance Consents		
Trafford Metropolitan Borough Council	April 2016	Variable
Wigan Metropolitan Borough Council - The Planning Department	January 2016	Variable
Salford City Council	June 2016	Variable
Warrington Borough Council - Environmental and Regeneration	June 2016	Variable

Data Currency

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	May 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	March 2014	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	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	July 2022	Quarterly
Fuel Station Entries Catalist Ltd - Experian	August 2022	Quarterly
Gas Pipelines National Grid	October 2021	Bi-Annually
Points of Interest - Commercial Services PointX	September 2022	Quarterly
Points of Interest - Education and Health PointX	September 2022	Quarterly
Points of Interest - Manufacturing and Production PointX	September 2022	Quarterly
Points of Interest - Public Infrastructure PointX	September 2022	Quarterly
Points of Interest - Recreational and Environmental PointX	September 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		
Salford City Council	July 2022	Quarterly
Trafford Metropolitan Borough Council	July 2022	Quarterly
Warrington Borough Council	July 2022	Quarterly
Wigan Metropolitan Borough Council	July 2022	Quarterly
Areas of Unadopted Green Belt		
Salford City Council	July 2022	Quarterly
Trafford Metropolitan Borough Council	July 2022	Quarterly
Warrington Borough Council	July 2022	Quarterly
Wigan Metropolitan Borough Council	July 2022	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)	April 2016	
Environment Agency - Head Office	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

Data Suppliers

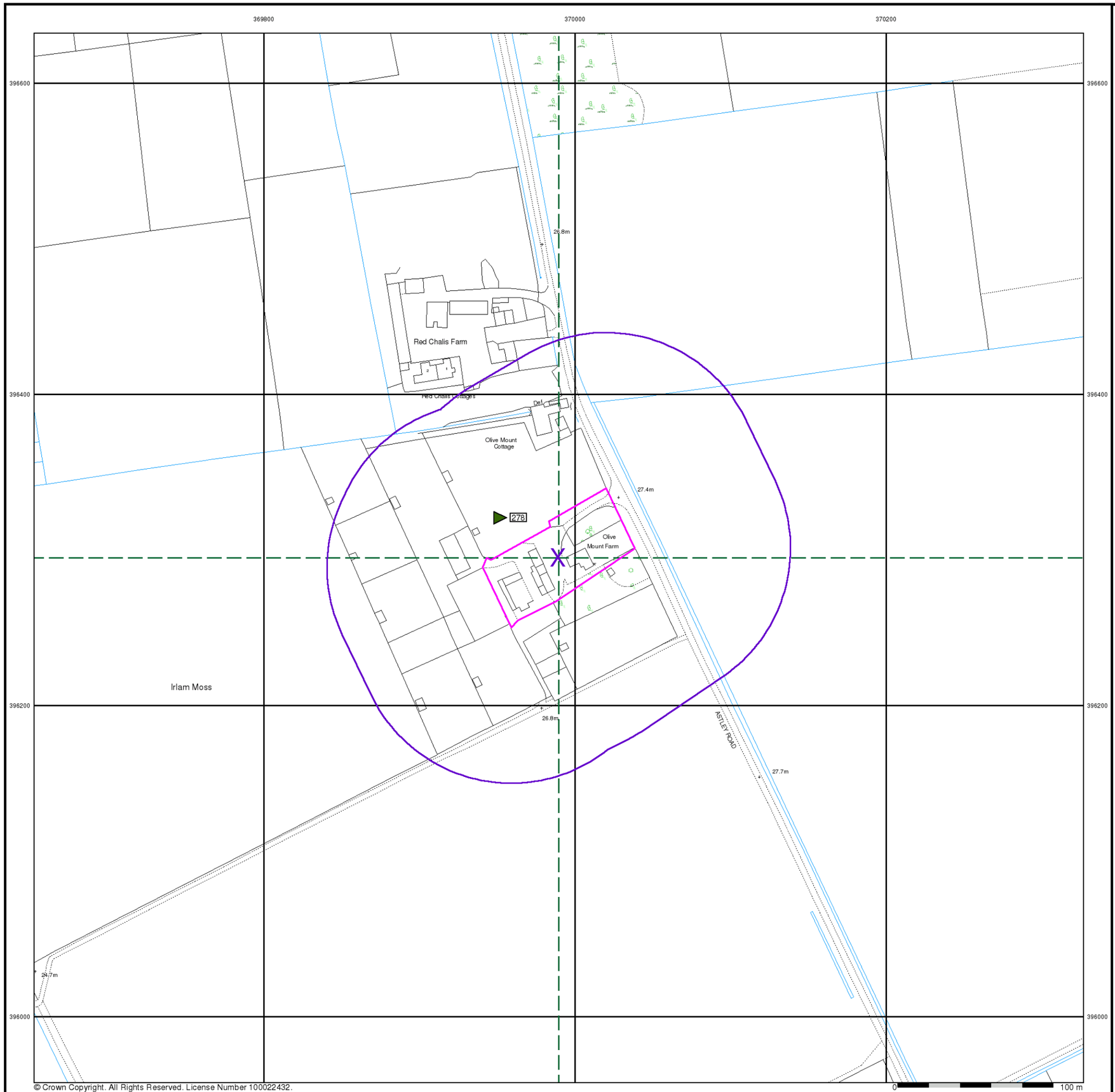
A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
Environment Agency	Environment Agency
Scottish Environment Protection Agency	SEPA Scottish Environment Protection Agency
The Coal Authority	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	Cyfoeth Naturiol Cymru Natural Resources Wales
Scottish Natural Heritage	SCOTTISH NATURAL HERITAGE
Natural England	NATURAL ENGLAND
Public Health England	Public Health England
Ove Arup	ARUP
Stantec UK Ltd	Stantec

Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
4	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	**Salford City Council - Environmental Health Department** Crompton House, 100 Chorley Road, Swinton, Manchester, Greater Manchester, M27 2ES	Telephone: 0161 7370551 Fax: 0161 728 1956 Website: www.salford.gov.uk
6	**Wigan Metropolitan Borough Council - Environmental Services** Environmental Protection Section, Unity House, Westwood Park Drive, Wigan, Lancaster, WN3 4HE	Telephone: 01942 244991 Fax: 01942 827079 Email: EHCPenquiries@wiganmbc.gov.uk Website: www.wiganmbc.gov.uk
7	**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
8	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
9	**Salford City Council** Crompton House, 100 Chorley Road, Swinton, Manchester, Greater Manchester, M27 2AD	Telephone: 0161 794 4711 Fax: 0161 727 7162 Website: www.salford.gov.uk
10	**Wigan Metropolitan Borough Council** Civic Centre, Mill Gate, Wigan, Lancaster, WN1 1YD	Telephone: 01942 827125 Fax: 01942 826415 Website: www.wiganmbc.gov.uk
11	**Warrington Borough Council** Town Hall, Warrington, Cheshire, WA1 1UH	Telephone: 01925 442140 Fax: 01925 442024 Website: www.warrington.gov.uk
12	**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.



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General

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

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

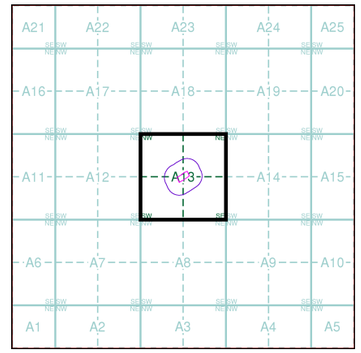
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A13



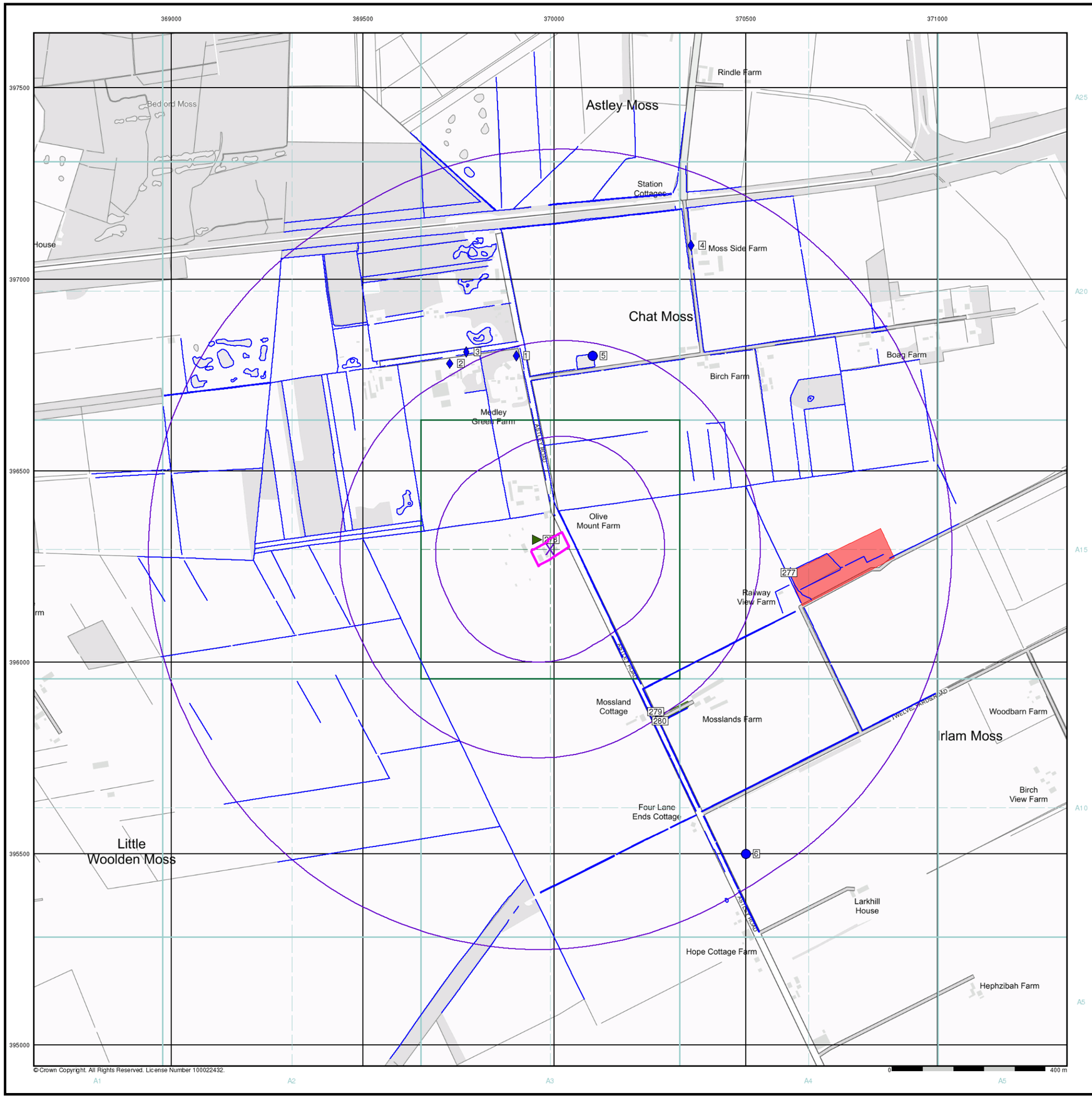
Order Details

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Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
Plot Buffer (m):	100

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

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



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General

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

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
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- Water Industry Act Referral

Hazardous Substances

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- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

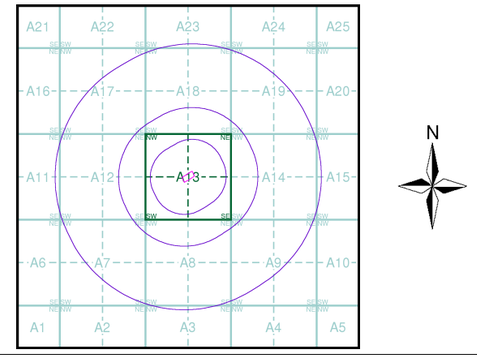
Geological

- BGS Recorded Mineral Site

Waste

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- Potentially Infilled Land (Water)
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- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Slice A



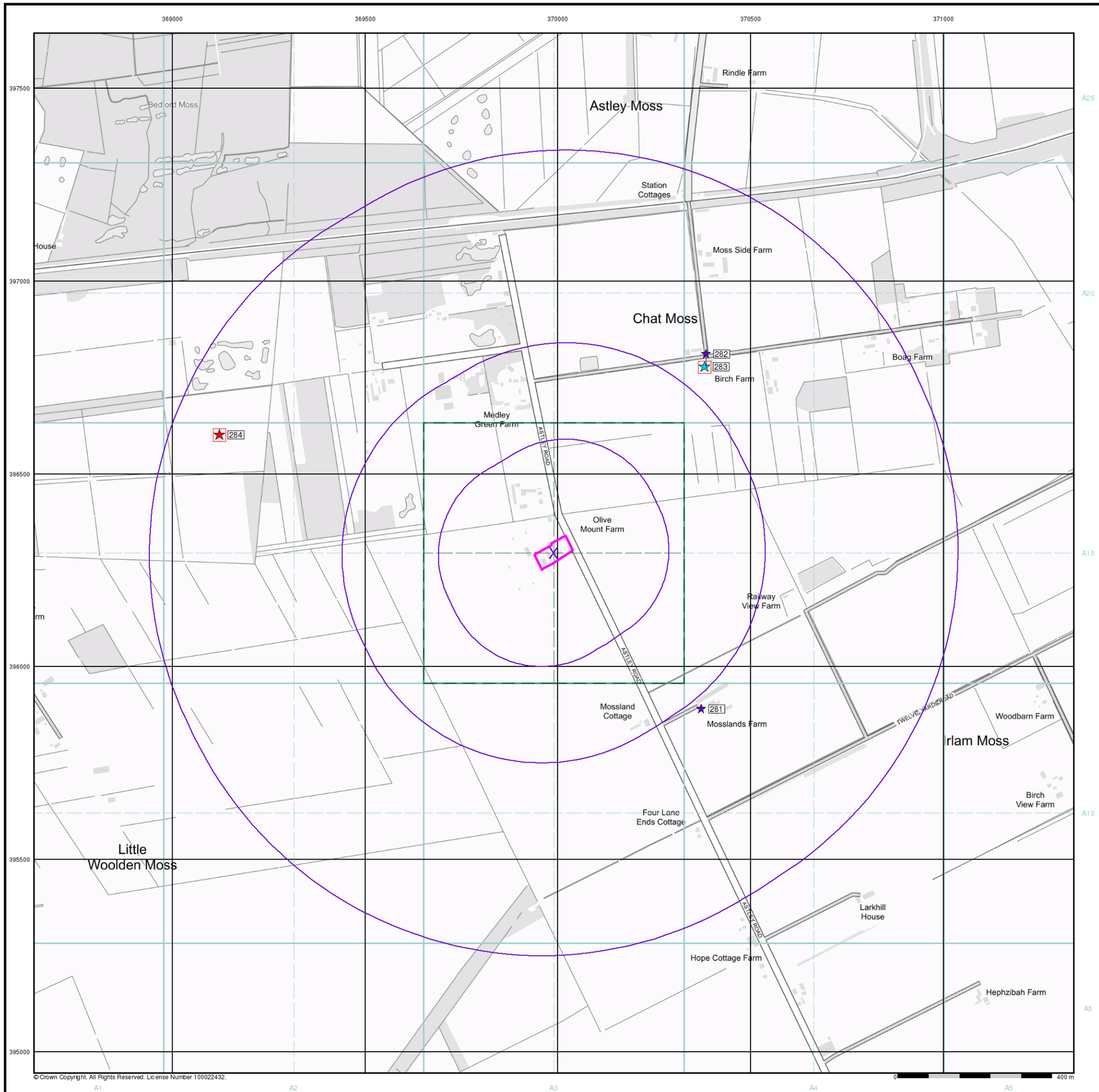
Order Details

Order Number:	302167182_1_1
Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
Search Buffer (m):	1000

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

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Web: www.envirocheck.co.uk



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Industrial Land Use Map

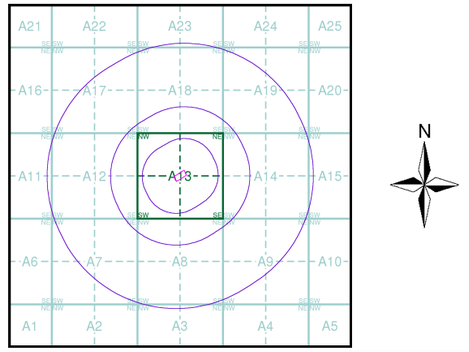
General

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

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



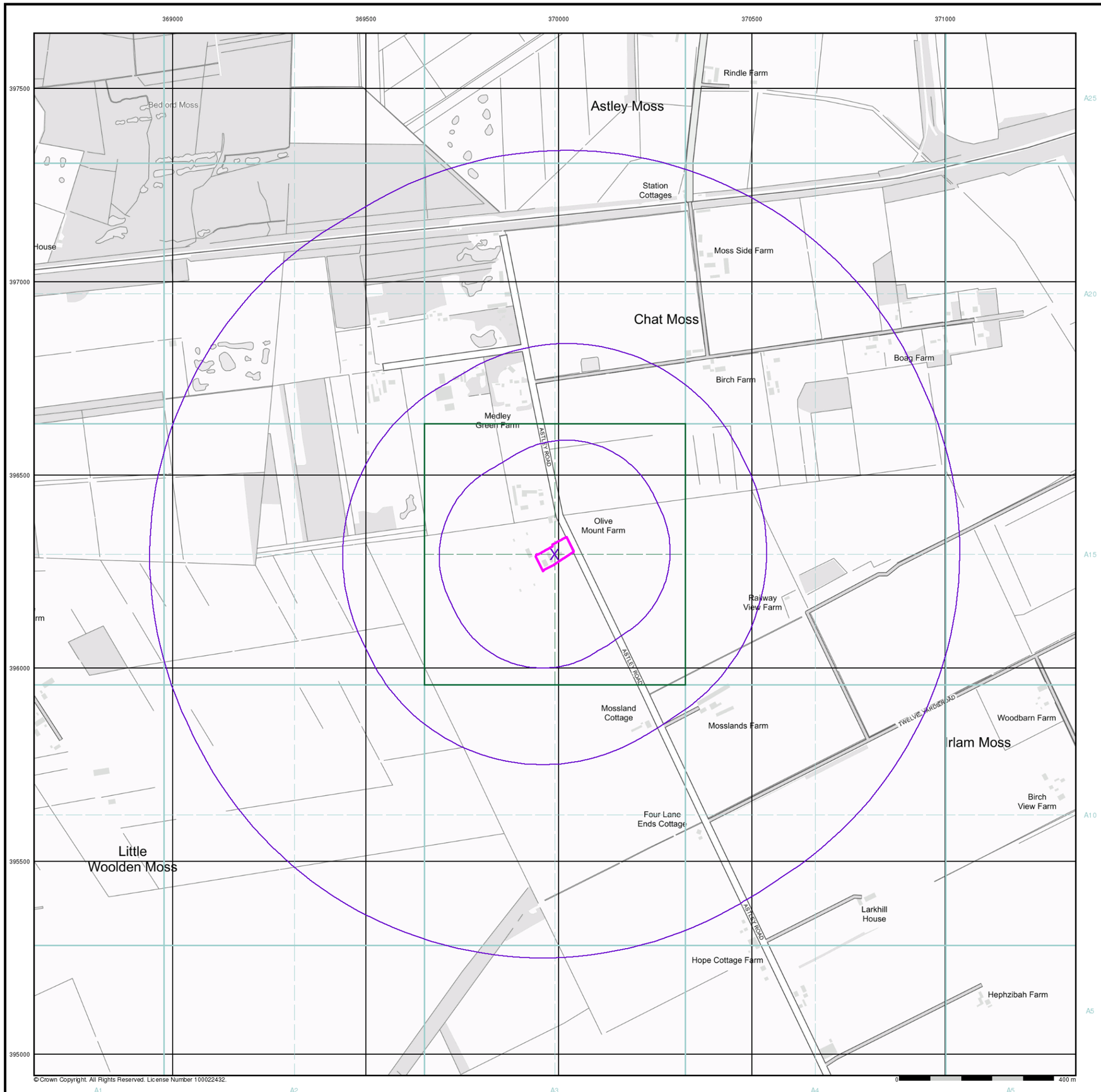
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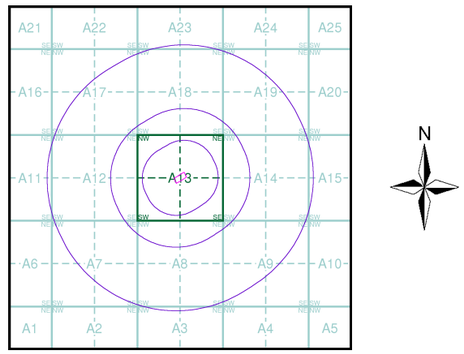
General

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

Agency and Hydrological (Flood)

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

Flood Map - Slice A



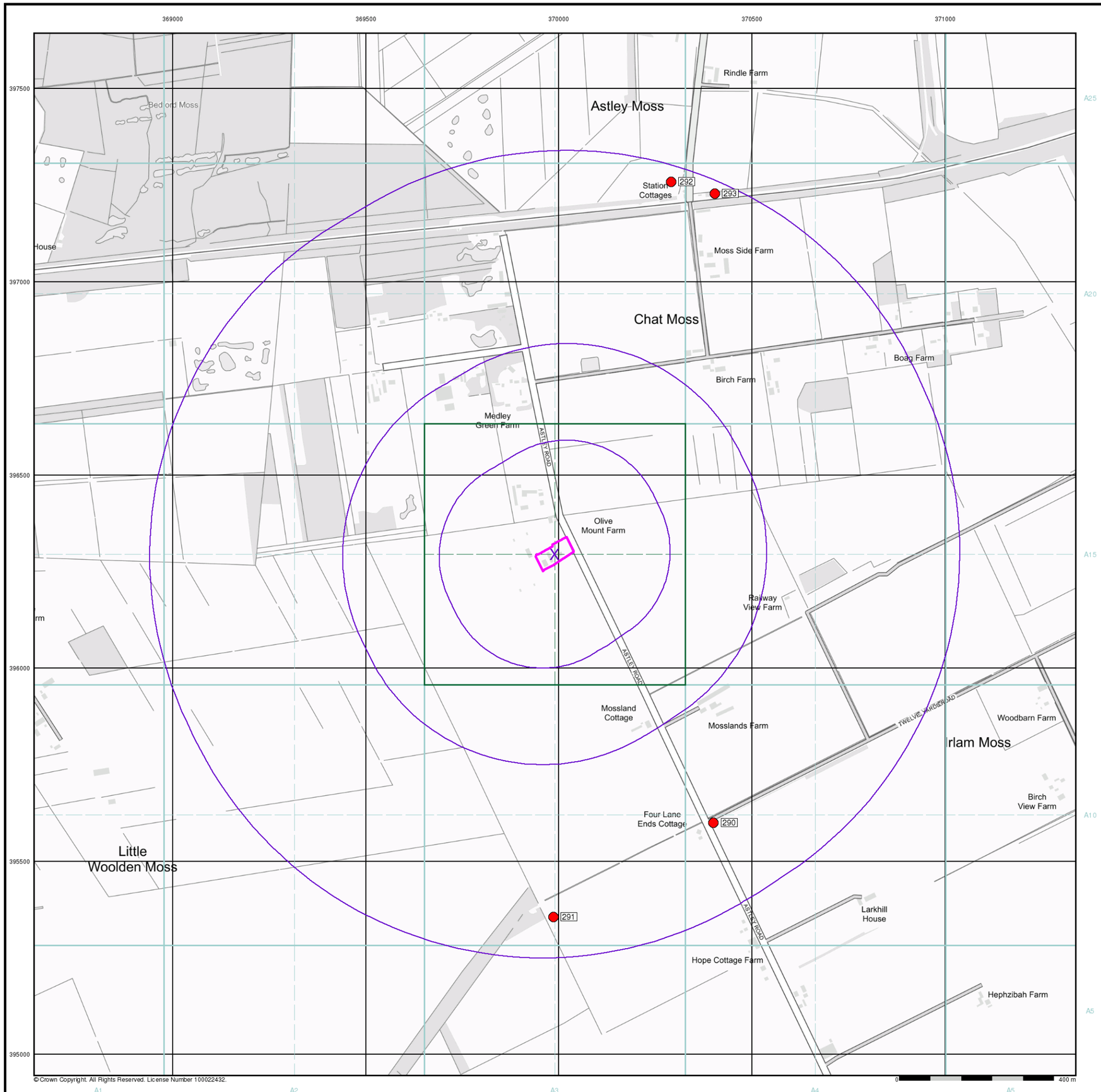
Order Details

Order Number:	302167182_1_1
Customer Ref:	PN224461
National Grid Reference:	369990, 396300
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General

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

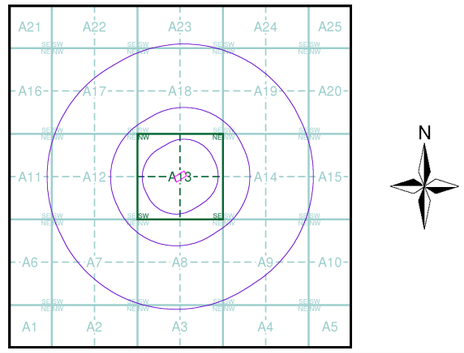
Agency and Hydrological (Boreholes)

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

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

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

Borehole Map - Slice A



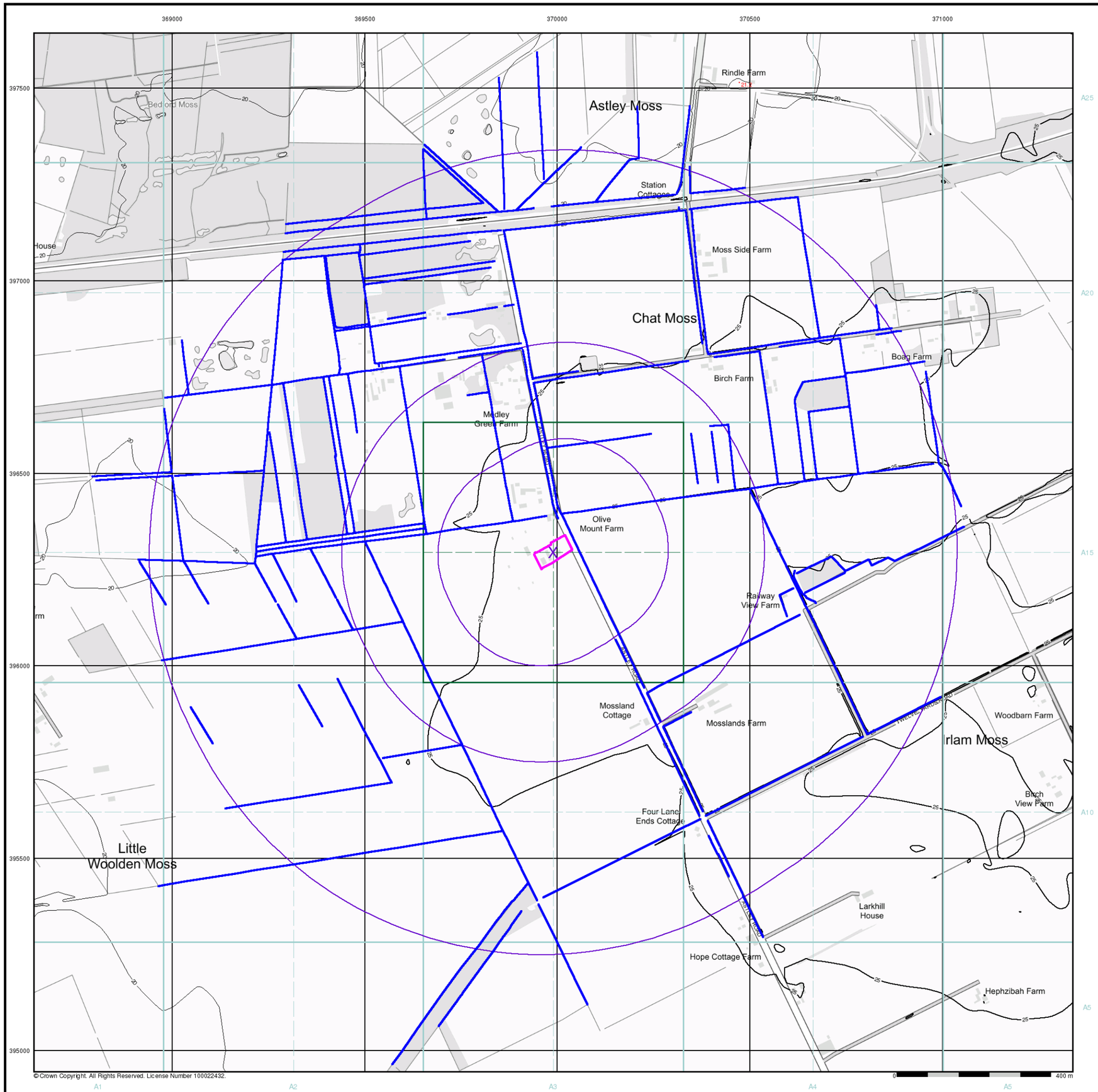
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National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
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geotechnics

General

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

OS Water Network Data

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

Contours (height in meters)

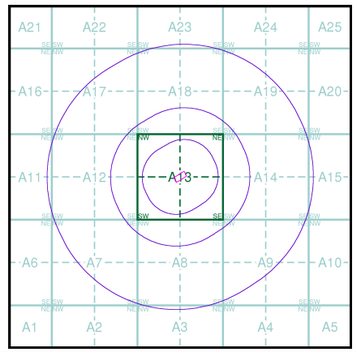
Standard Contour 105 100 95

Master Contour

Spot Height 167.3

- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

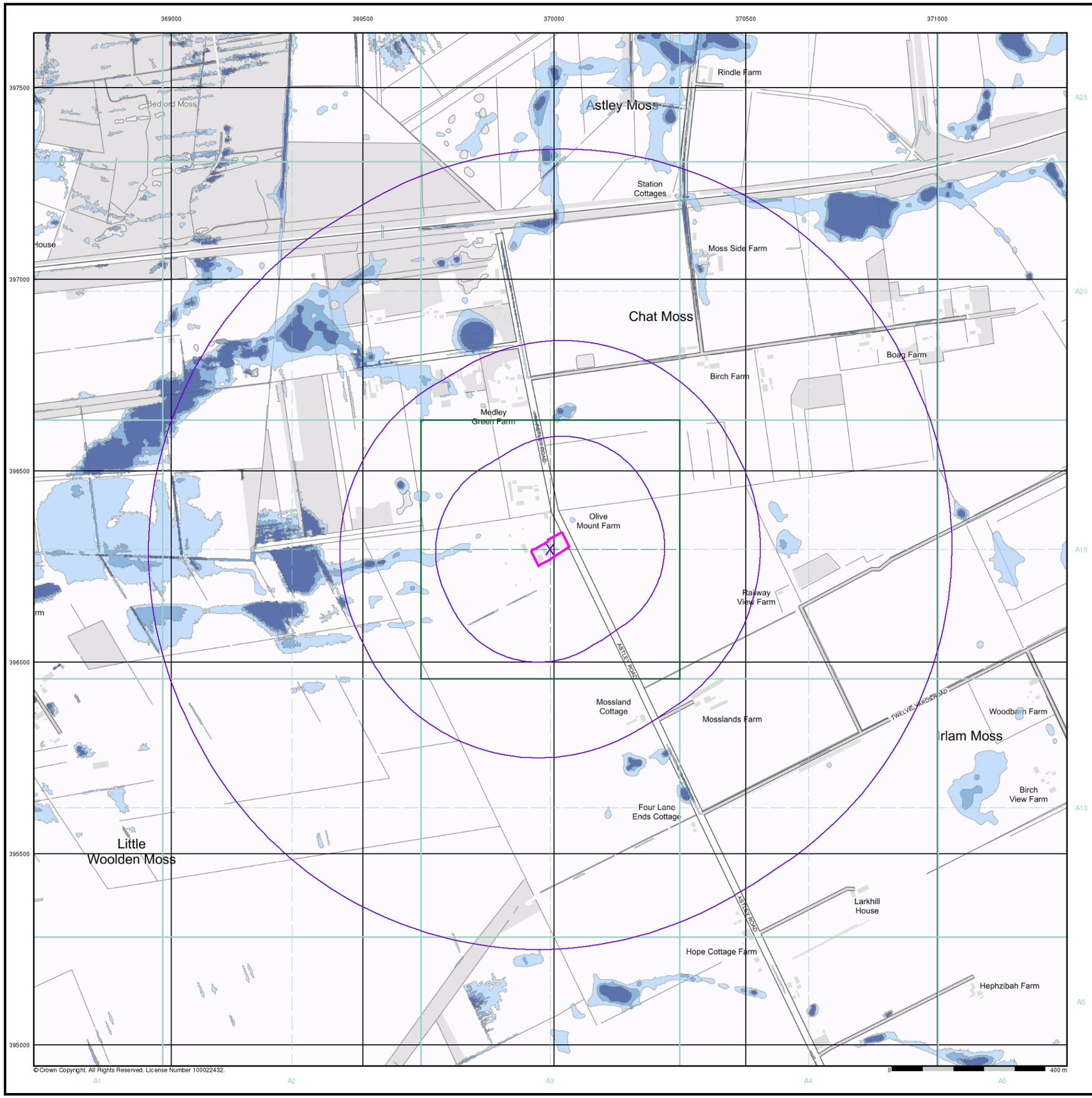
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Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
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General

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

Risk of Flooding from Surface Water

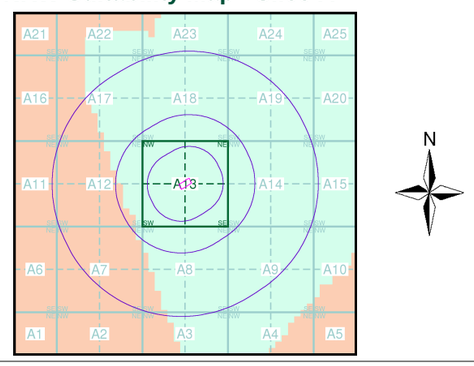
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A



Order Details

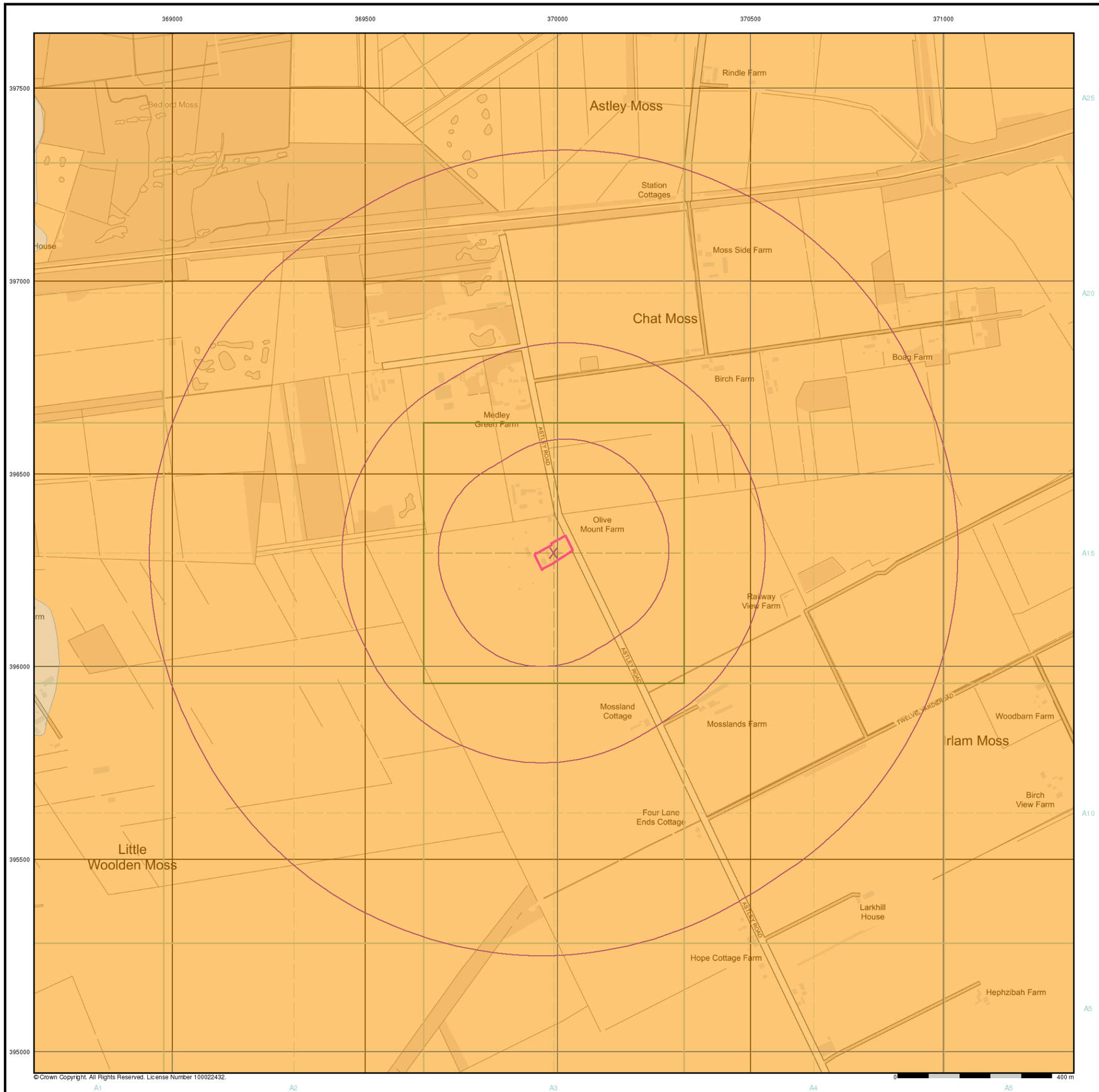
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General

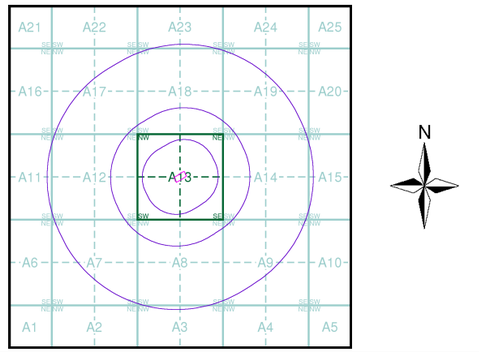
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

- < 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 60
- 60 - 120
- > 120

Estimated Soil Chemistry Arsenic - Slice A



Order Details

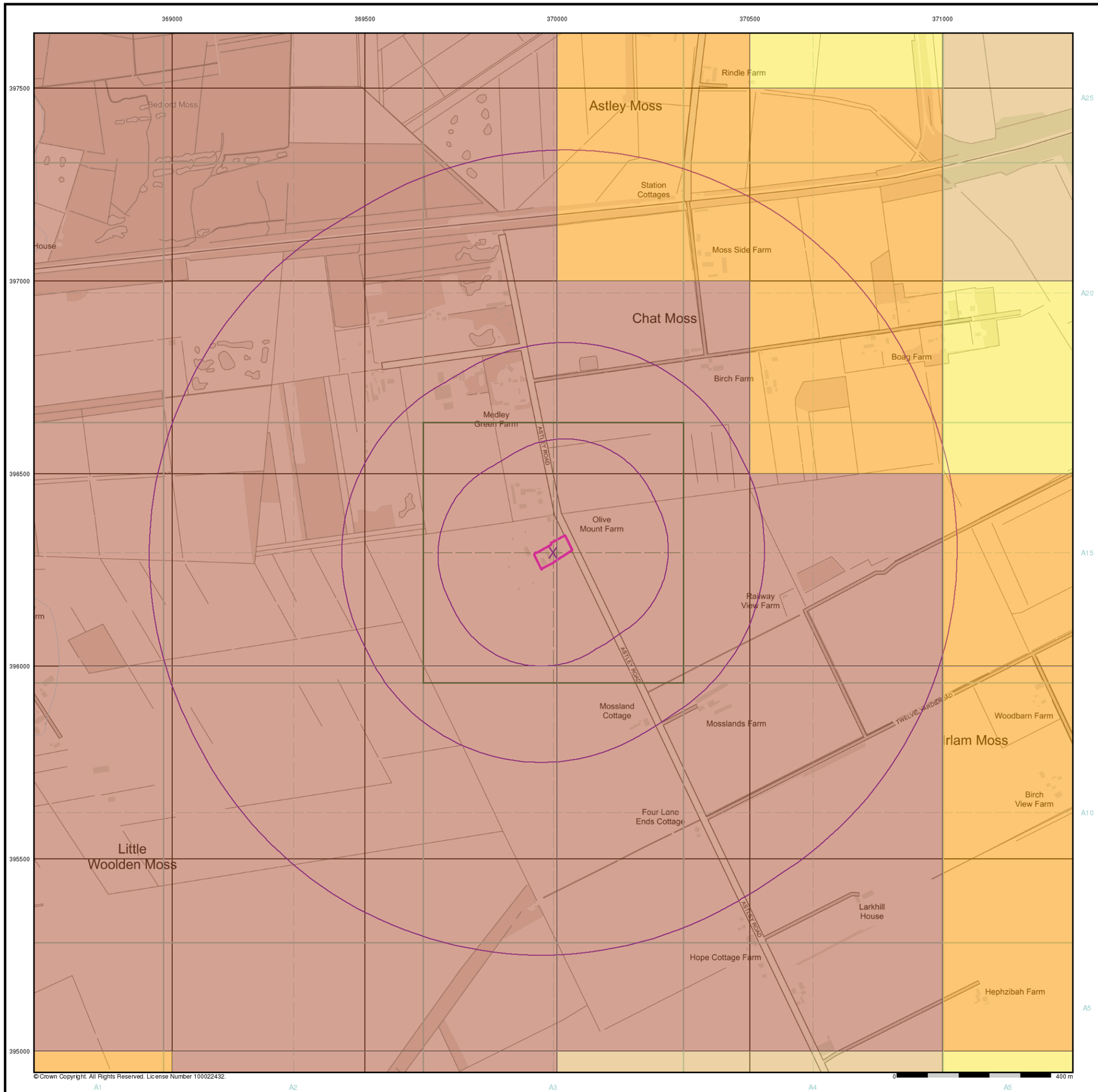
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Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
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General

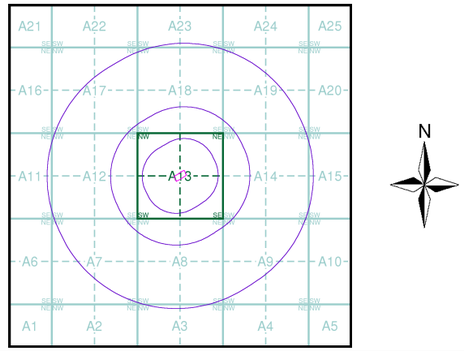
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg

- < 1.8
- 1.8 - 2.2
- 2.2 - 3.0
- > 3.0

Estimated Soil Chemistry Cadmium - Slice A



Order Details

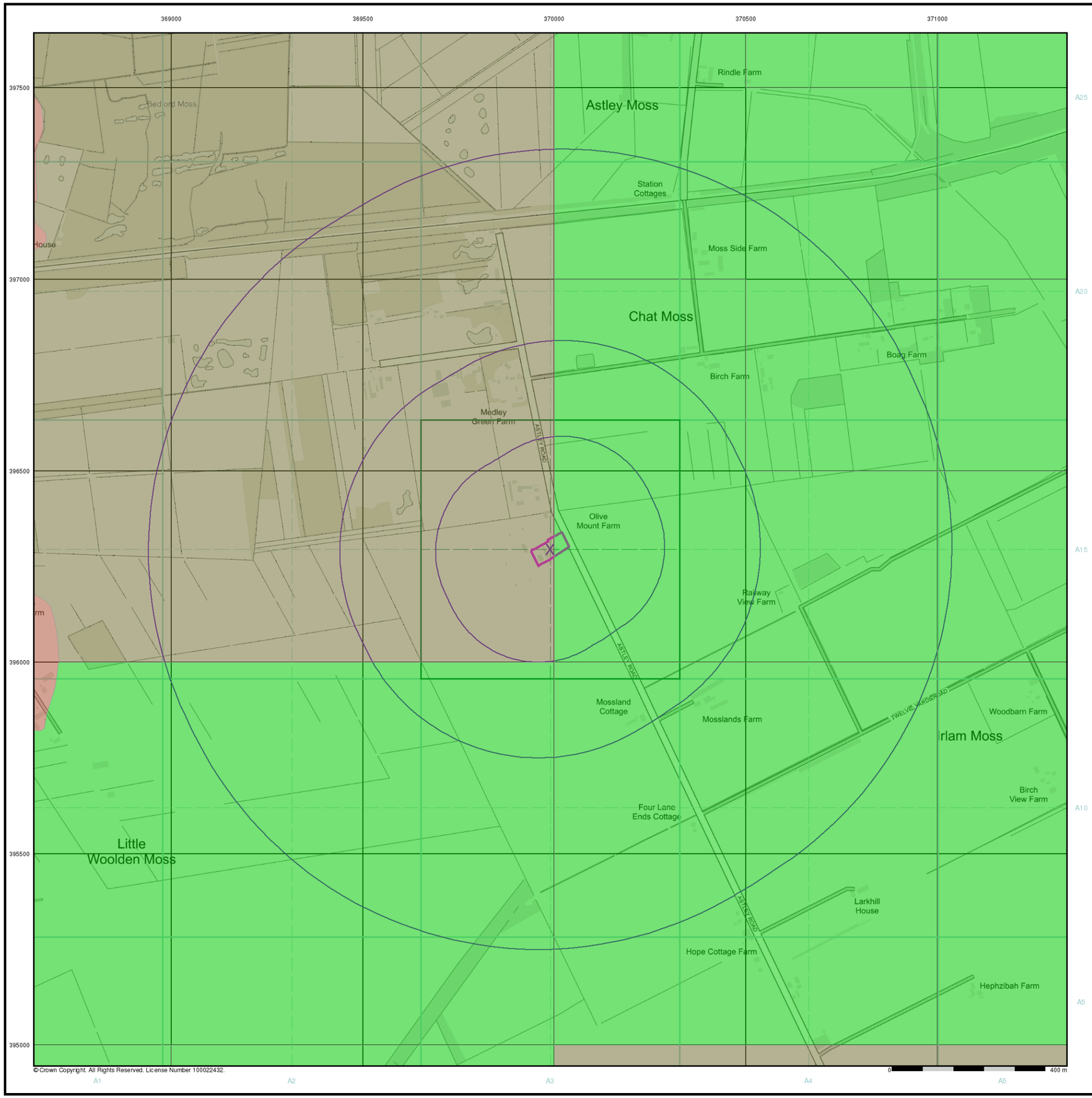
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Customer Ref:	PN224461
National Grid Reference:	369990, 396300
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General

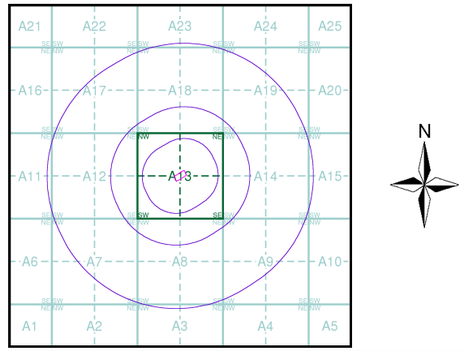
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg

- < 20
- 20 - 40
- 40 - 60
- 60 - 90
- 90 - 120
- 120 - 180
- > 180

Estimated Soil Chemistry Chromium - Slice A



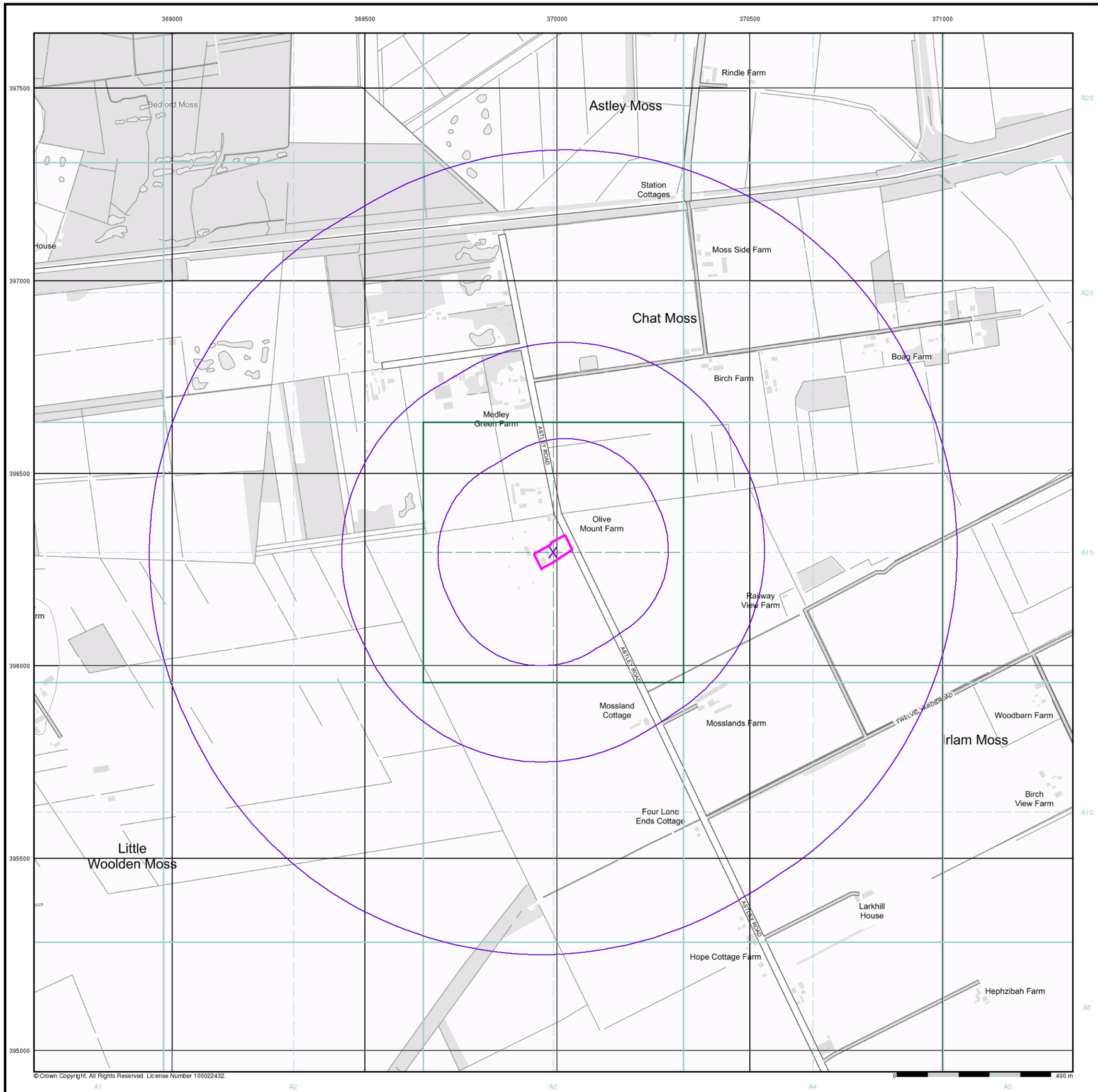
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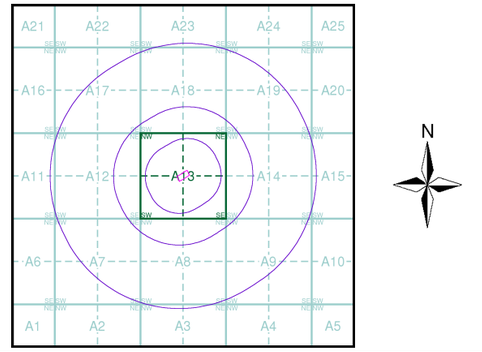
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

- <100 mg/kg
- 100 - 200
- 200 - 300
- 300 - 600
- 600 - 1200
- >1200

Estimated Soil Chemistry Lead - Slice A



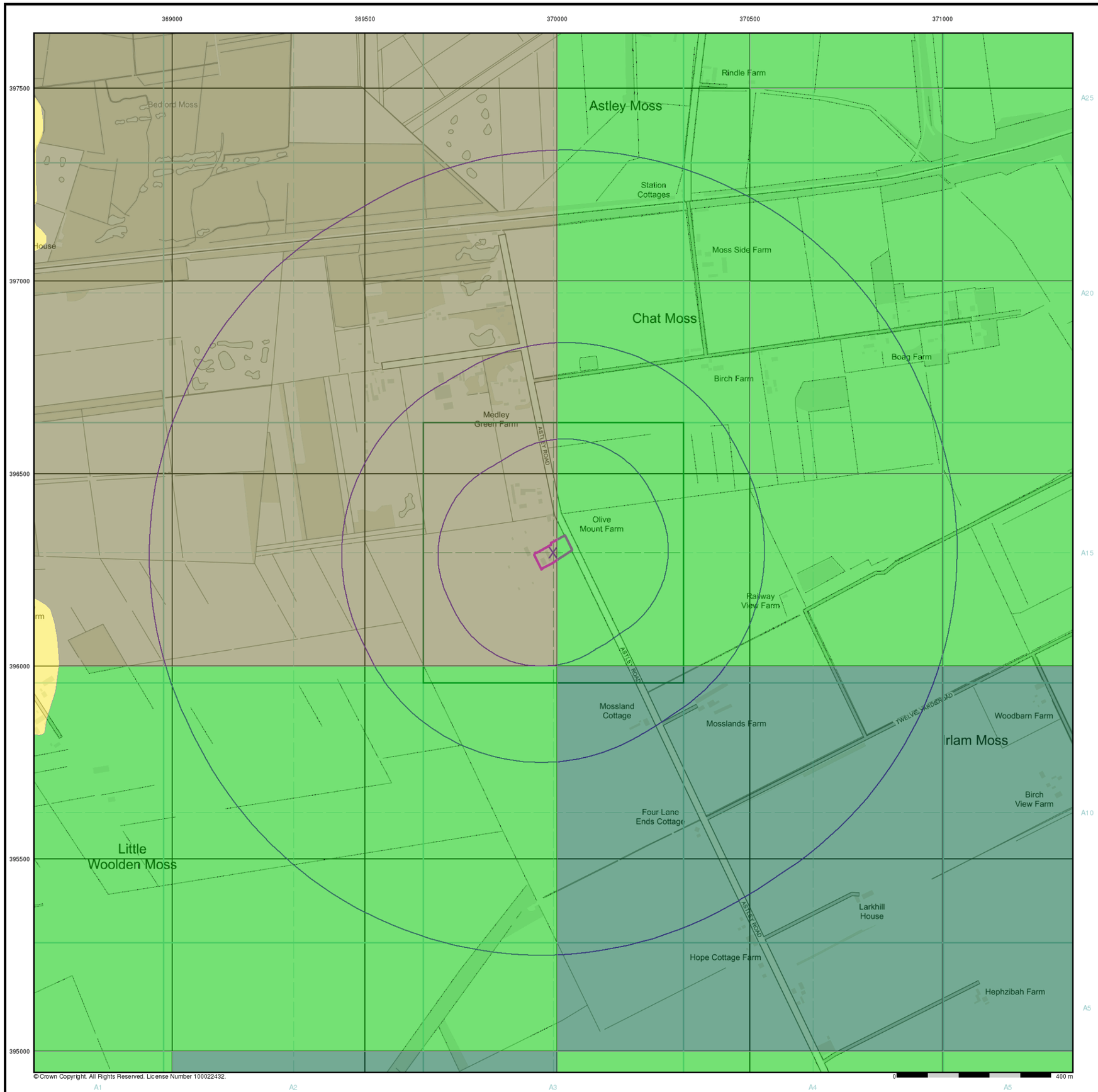
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Order Details:	302167182_1_1
Customer Ref:	PN224461
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General

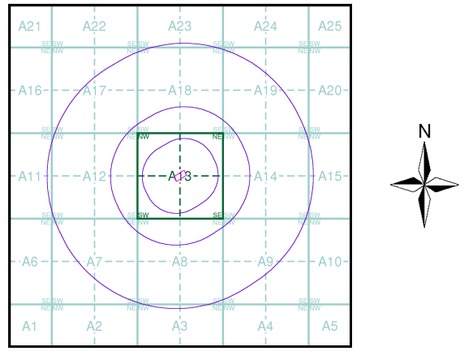
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

Estimated Soil Chemistry Nickel - Slice A



Order Details

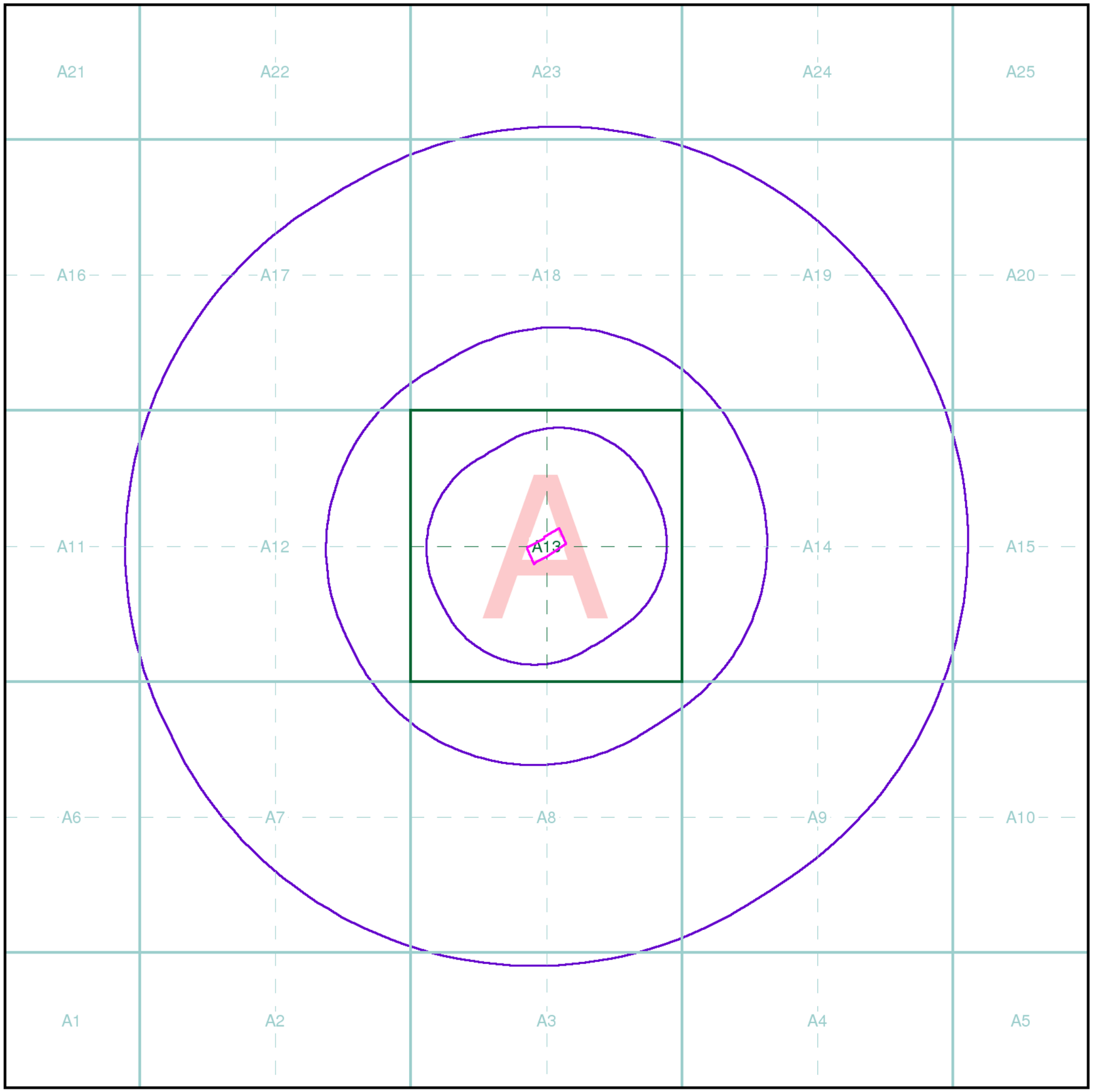
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Index Map

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:

Map data

British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

Environment Agency

NATURAL ENGLAND

Envirocheck reports are compiled from 136 different sources of data.

Client Details

Mr J Booth, Geotechnics Ltd, The Geotechnical Centre, Unit 1 Borders Industrial Park, River Lane, Saltney, CH4 8RJ

Order Details

Order Number:	302167182_1_1
Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Site Area (Ha):	0.42
Search Buffer (m):	1000

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

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Historical Land Use Information (1:2,500)

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID

Several of Type at Location

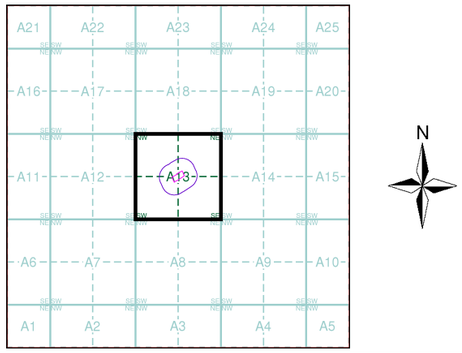
Potentially Contaminative Industrial Uses (Extractive Industries Activity)

	Point	Line	Polygon
Extractive Industries Activity from 1855 - 1909	▲	—	▭
Extractive Industries Activity from 1893 - 1915	▲	—	▨
Extractive Industries Activity from 1906 - 1937	▲	—	▭
Extractive Industries Activity from 1924 - 1949	▲	—	▨
Extractive Industries Activity from 1950 - 1980	▲	—	▥

Subterranean Features

	Point	Line	Polygon
Subterranean Features	▼	- - -	▭

Mining and Ground Stability - Segment A13



Order Details

Order Number:	302167182_1_1
Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
Plot Buffer (m):	100

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

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Envirocheck® Report:

Mining and Ground Stability Datasheet

Order Details:

Order Number:
302167182_1_1

Customer Reference:
PN224461

National Grid Reference:
369990, 396300

Slice:
A

Site Area (Ha):
0.42

Search Buffer (m):
1000

Site Details:

Olive Mount Farm, Astley Road
Irlam
MANCHESTER
M44 5LU

Client Details:

Mr J Booth
Geotechnics Ltd
The Geotechnical Centre
Unit 1 Borders Industrial Park
River Lane
Saltney
CH4 8RJ

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Contents

Report Section and Details	Page Number
Summary	-
The Summary section provides an overview of the data contained within the report, detailing the number of data set features or the existence of a data set in relation to the buffer selected. For ease of reference, the report is broken down into 4 sections of data; Mining and Natural Cavities Data, Historical Land Use Information (1:2,500), Historical Land Use Information (1:10,000) and Ground Stability Data (1:50,000).	
Mining and Natural Cavities Data	1
The Mining and Natural Cavities Data section features data sets related to the existence of mining areas and their potential hazards; and details of naturally formed cavities. Data sets within this section are not plotted, with the exception of BGS Recorded Mineral Sites and Potential Mining Areas which feature on the Historical Land Use Information (1:10,000) map.	
Historical Land Use Information (1:2,500)	-
The Historical Land Use Information (1:2,500) section contains data captured from analysis carried out by Landmark of 1:1,250 and 1:2,500 scale historical Ordnance Survey mapping, identifying areas where, historically, the land uses were potentially contaminative. For the purpose of this Envirocheck module, only historical data relating to mining and ground stability has been included and plotted on the corresponding Historical Land Use Information (1:2,500) map. This section also includes the Subterranean Features data set, which details various man-made and man-used underground spaces obtained from the Subterranea Britannica society.	
Historical Land Use Information (1:10,000)	2
The Historical Land Use (1:10,000) section covers data captured from the systematic analysis carried out by Landmark of 1:10, 560 and 1:10,000 scale historical Ordnance Survey mapping dating back to the mid-19th century, identifying potentially contaminative past industrial land uses. For the purpose of this Envirocheck module, only data relating to mining and ground stability has been included and plotted on the accompanying Historical Land Use Information (1:10,000) map.	
Ground Stability Data (1:50,000)	3
The Ground Stability (1:50,000) section includes the BGS Geosure data suite, reporting features to 250m and plotted onto 3 separate maps. Also reported is brine subsidence, brine mining and salt mining data sets, of which Brine Pumping and Salt Mining Related Features are plotted, and subsidence insurance claims and insurance investigations data, which is not plotted.	
Historical Map List	4
The Historical Map List section details the historical mapping that has been analysed for your site, in relation to the Historical Land Use Information sections.	
Data Currency	6
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The brine subsidence data relating to the Driotwich area as provided in this report is derived from JPB studies and physical monitoring undertaken annually over more than 35 years. For more detailed interpretation contact enquiries@jpb.co.uk. JPB retain the copyright and intellectual rights to this data and accept no liability for any loss or damage, including in direct or consequential loss, arising from the use of this data.

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

Report Version v53.0

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
Mining and Natural Cavities Data					
BGS Recorded Mineral Sites					
Coal Mining Affected Areas	pg 1	Yes	n/a	n/a	n/a
Man Made Mining Cavities					
Mining Instability			n/a	n/a	n/a
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential Mining Areas					
Historical Land Use Information (1:2,500)					
Extractive Industries or Potential Excavations from 1855-1909 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1893-1915 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1906-1937 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1924-1949 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1950-1980 (100m)				n/a	n/a
Subterranean Features (100m)				n/a	n/a
Historical Land Use Information (1:10,000)					
Air Shafts					
Disturbed Ground					
General Quarrying					
Heap, unknown constituents					
Mineral Railway	pg 2		2	3	10
Mining & quarrying general					
Mining of coal & lignite					
Quarrying of sand & clay, operation of sand & gravel pits					
Former Marshes					
Potentially Infilled Land (Non-Water)					
Potentially Infilled Land (Water)	pg 2		1	1	1
Ground Stability Data (1:50,000)					
CBSCB Compensation District			n/a	n/a	n/a
Brine Pumping Related Features					
Brine Subsidence Solution Area					
Potential for Collapsible Ground Stability Hazards	pg 3	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 3	Yes		n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 3	Yes		n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 3	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 3	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 3	Yes		n/a	n/a
Salt Mining Related Features					

Summary

Report Version v53.0

Mining and Natural Cavities Data

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	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.	A13NW (NW)	0	1	369989 396295
	Non Coal Mining Areas of Great Britain No Hazard				

Historical Land Use Information (1:10,000)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	**Mineral Railway** Use: Not Supplied Date of Mapping: 1849	A13NE (N)	61	-	369991 396393
2	**Mineral Railway** Use: Not Supplied Date of Mapping: 1955	A13NE (NE)	83	-	370051 396416
3	**Mineral Railway** Use: Not Supplied Date of Mapping: 1908	A13NW (W)	277	-	369677 396375
4	**Mineral Railway** Use: Not Supplied Date of Mapping: 1909 - 1929	A8NE (SE)	356	-	370164 395957
5	**Mineral Railway** Use: Not Supplied Date of Mapping: 1911 - 1929	A12SE (SW)	385	-	369602 396102
6	**Mineral Railway** Use: Not Supplied Date of Mapping: 1908	A18SW (N)	508	-	369903 396834
7	**Mineral Railway** Use: Not Supplied Date of Mapping: 1911 - 1929	A8NW (S)	529	-	369772 395756
8	**Mineral Railway** Use: Not Supplied Date of Mapping: 1909	A14SW (E)	606	-	370631 396174
9	**Mineral Railway** Use: Not Supplied Date of Mapping: 1894 - 1909	A18SW (N)	612	-	369948 396947
10	**Mineral Railway** Use: Not Supplied Date of Mapping: 1894 - 1908	A18SW (N)	616	-	369902 396945
11	**Mineral Railway** Use: Not Supplied Date of Mapping: 1908	A17SE (NW)	626	-	369556 396787
12	**Mineral Railway** Use: Not Supplied Date of Mapping: 1929	A9SW (SE)	776	-	370344 395576
13	**Mineral Railway** Use: Not Supplied Date of Mapping: 1908	A17SE (NW)	777	-	369442 396889
14	**Mineral Railway** Use: Not Supplied Date of Mapping: 1909 - 1929	A8SW (S)	832	-	369932 395419
15	**Mineral Railway** Use: Not Supplied Date of Mapping: 1894 - 1955	A12NW (W)	971	-	368993 396497
16	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A13NW (NW)	22	-	369951 396321
17	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8NE (SE)	495	-	370265 395857
18	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8NE (SE)	510	-	370276 395847

Ground Stability Data (1:50,000)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	CBSCB Compensation District The site does not fall within the brine compensation area.				
	Brine Subsidence Solution Area The site does not fall within the brine subsidence solution area.				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	3	369989 396295
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	3	370000 396295
19	**Potential for Compressible Ground Stability Hazards** Hazard Potential: High Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	3	369989 396295
20	**Potential for Compressible Ground Stability Hazards** Hazard Potential: High Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	3	370000 396295
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	3	369989 396295
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	3	370000 396295
21	**Potential for Landslide Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	3	369989 396295
22	**Potential for Landslide Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	3	370000 396295
23	**Potential for Running Sand Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	3	369989 396295
24	**Potential for Running Sand Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	3	370000 396295
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	3	369989 396295
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	3	370000 396295

Historical Map List

The following mapping has been analysed for Historical Land Use Information (1:2,500):

1:2,500	Mapsheet	Published Date
Lancashire And Furness	103_13	1890
Lancashire And Furness	102_16	1893
Lancashire And Furness	102_16	1907
Lancashire And Furness	103_13	1908
Lancashire And Furness	102_16	1928
Lancashire And Furness	103_13	1928
Ordnance Survey Plan	SJ6996	1962
Ordnance Survey Plan	SJ6995	1963
Ordnance Survey Plan	SJ7096	1967
Ordnance Survey Plan	SJ7095	1968

Historical Map List

The following mapping has been analysed for Historical Land Use Information (1:10,000):

1:10,560	Mapsheet	Published Date
Lancashire And Furness	103_00	1848
Lancashire And Furness	110_00	1848
Lancashire And Furness	102_00	1849
Lancashire And Furness	109_00	1849
Cheshire	008_00	1881
Lancashire And Furness	102_SE	1894
Lancashire And Furness	103_SW	1894
Lancashire And Furness	109_NE	1894
Lancashire And Furness	110_NW	1894
Cheshire	008_NE	1899
Lancashire And Furness	102_SE	1908
Lancashire And Furness	109_NE	1908
Lancashire And Furness	103_SW	1909
Lancashire And Furness	110_NW	1909
Cheshire	008_NE	1911
Lancashire And Furness	102_SE	1929
Lancashire And Furness	103_SW	1929
Lancashire And Furness	109_NE	1929
Lancashire And Furness	110_NW	1938
Cheshire	008_NE	1951
Ordnance Survey Plan	SJ69SE	1954
Ordnance Survey Plan	SJ79SW	1954
Ordnance Survey Plan	SJ69NE	1955
Ordnance Survey Plan	SJ79NW	1955
1:10,000	**Mapsheet**	**Published Date**
Ordnance Survey Plan	SJ69NE	1980
Ordnance Survey Plan	SJ79NW	1990
Ordnance Survey Plan	SJ69SE	1991
Ordnance Survey Plan	SJ79SW	1996

Data Currency

Mining and Cavities Data	Version	Update Cycle
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	May 2022	Bi-Annually
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Man Made Mining Cavities Stantec UK Ltd	December 2021	Bi-Annually
Mining Instability Ove Arup & Partners	June 1998	Not Applicable
Natural Cavities Stantec UK Ltd	December 2021	Bi-Annually
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Historical Land Use Information (1:2,500)	**Version**	**Update Cycle**
Subterranean Features Landmark Information Group Limited	June 2022	Bi-Annually
Ground Stability Data (1:50,000)	**Version**	**Update Cycle**
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	 As notified
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
Brine Subsidence Solution Area Johnson Poole & Bloomer	December 2020	Annual Rolling Update

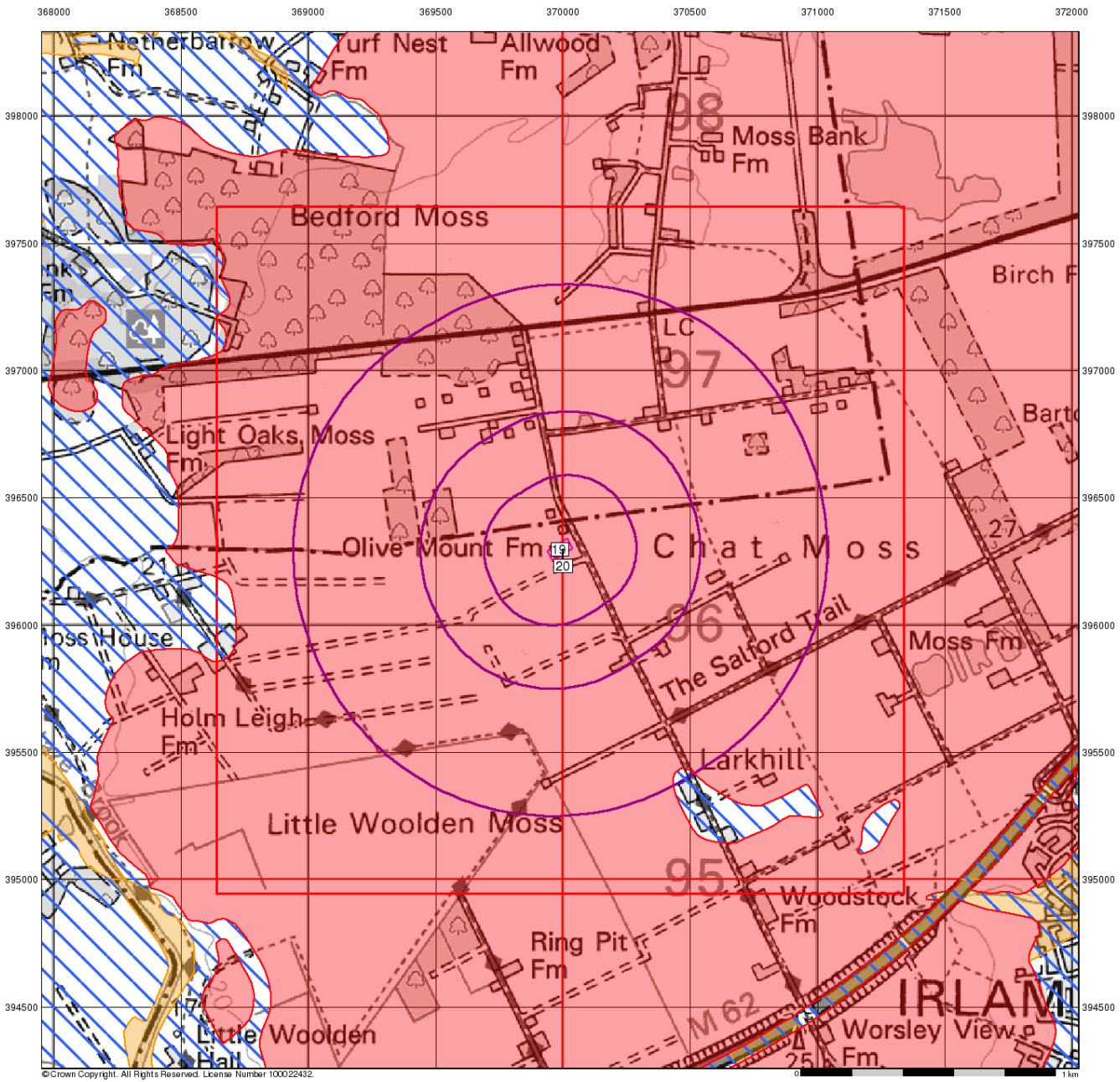
Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
British Geological Survey	British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
The Coal Authority	The Coal Authority
Ove Arup	ARUP
Stantec UK Ltd	Stantec
Wardell Armstrong	wardell armstrong your earth our world
Johnson Poole & Bloomer	JPB

Useful Contacts

Contact	Name and Address	Contact Details
1	**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
2	**Ove Arup & Partners** Central Square, Forth Street, Newcastle upon Tyne, Tyne and Wear, NE1 3PL	Telephone: 0191 261 6080 Fax: 0191 261 7879
3	**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
-	**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



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Ground Stability Data (1:50,000)

General

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

Potential for Compressible Ground Stability Hazards

High | Low | Moderate | Very Low

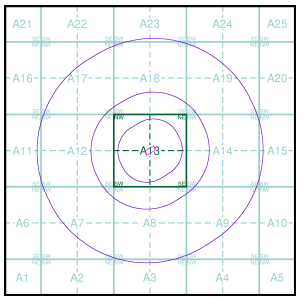
Potential for Collapsible Ground Stability Hazards

High | Low | Moderate | Very Low

Brine Pumping and Salt Mining

	Point	Polygon
Brine Pumping Related Feature	▲	▨
Salt Mining Related Feature	▲	▨

Mining and Ground Stability - Slice A



Order Details

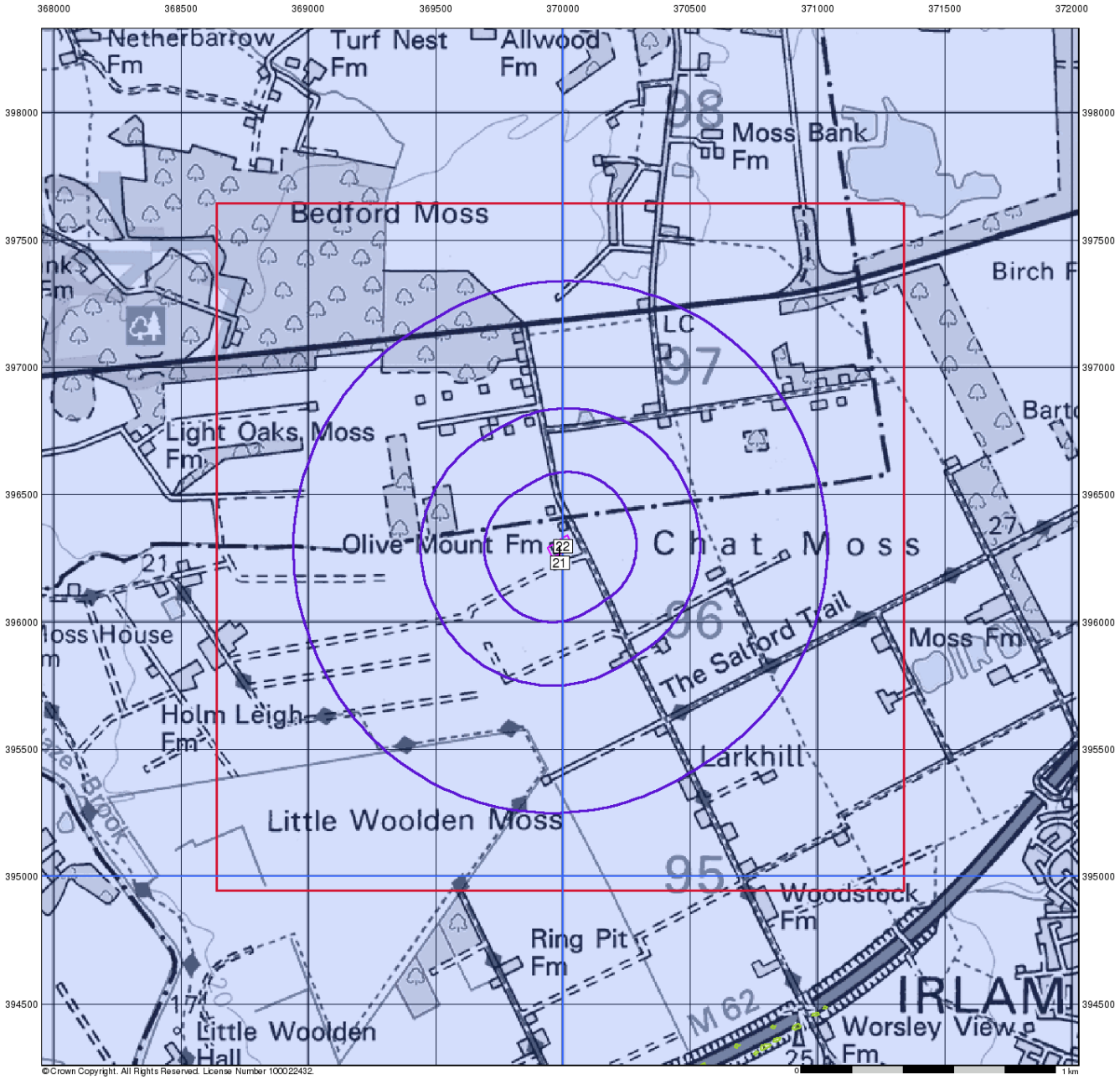
Order Number:	302167182_1_1
Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
Site Area (Ha):	0.42
Search Buffer (m):	1000

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

Landmark INFORMATION GROUP

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



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Ground Stability Data (1:50,000)

General

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

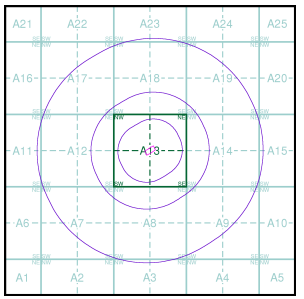
Potential for Landslide Ground Stability Hazards

High | Low | Moderate | Very Low

Potential for Ground Dissolution Stability Hazards

High | Low | Moderate | Very Low

Mining and Ground Stability - Slice A



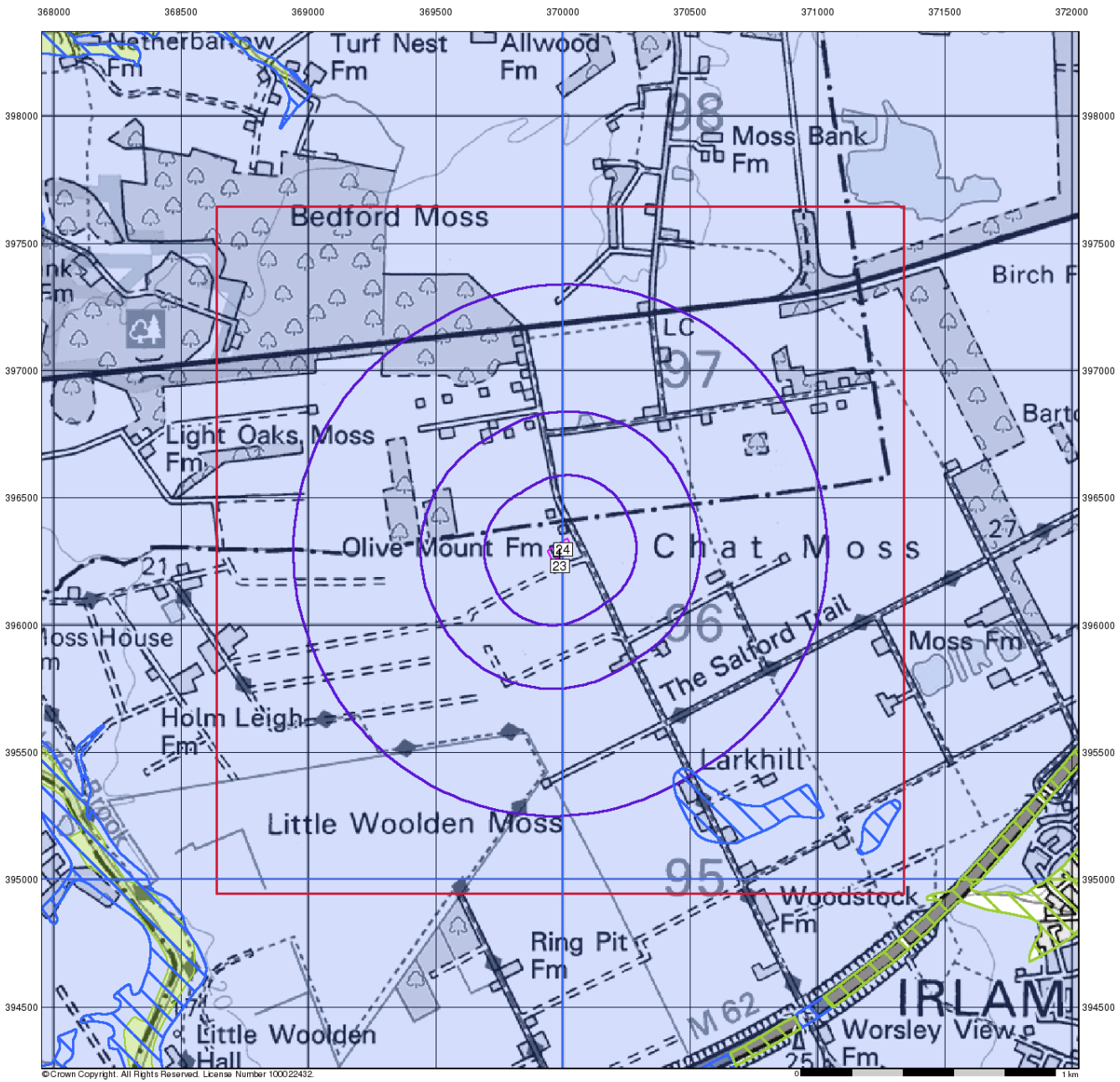
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Ground Stability Data (1:50,000)

General

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

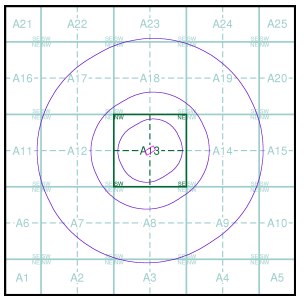
Potential for Running Sand Ground Stability Hazards

High | Low | Moderate | Very Low

Potential for Shrinking or Swelling Clay Ground Stability Hazards

High | Low | Moderate | Very Low

Mining and Ground Stability - Slice A



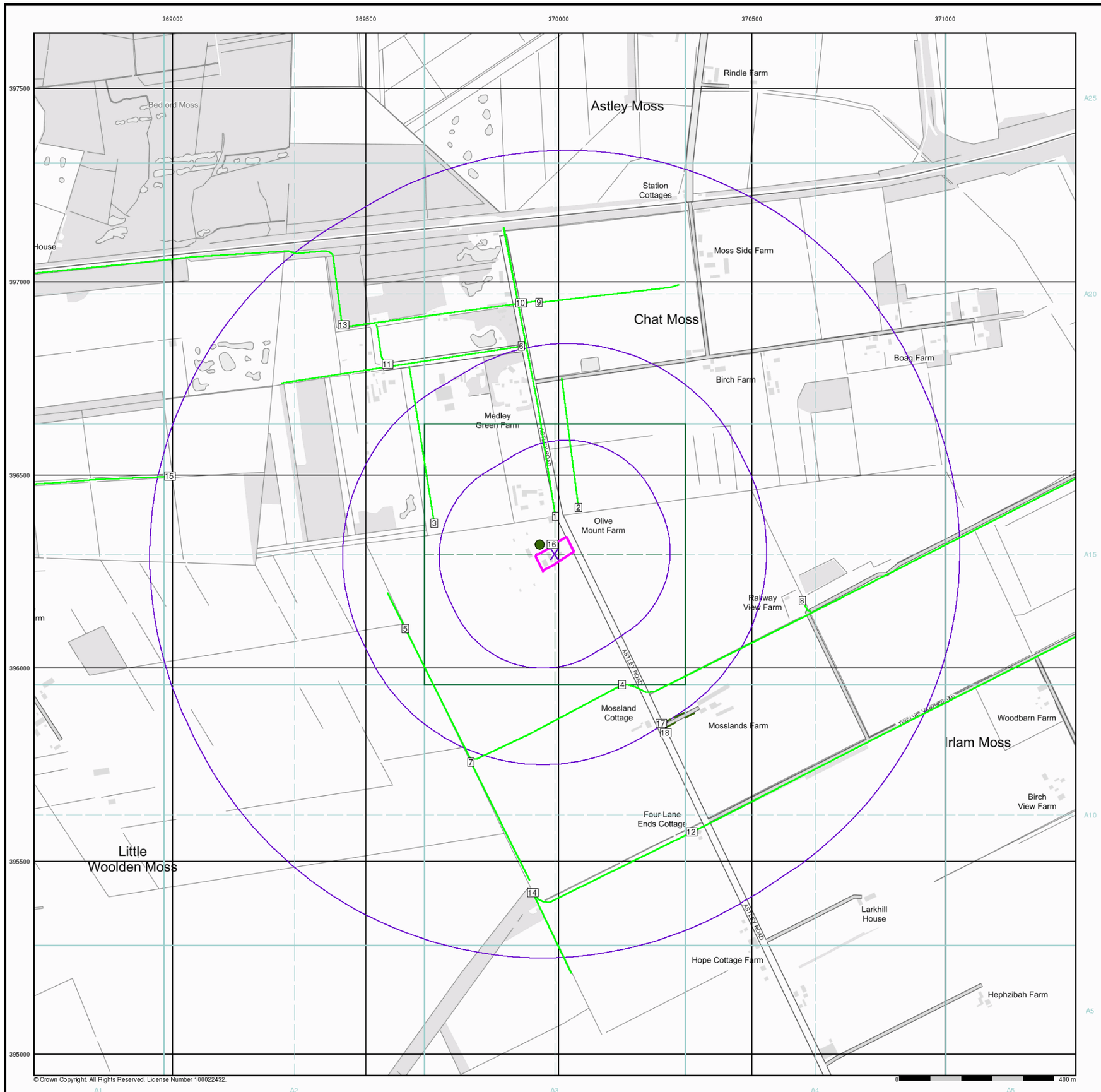
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Historical Land Use Information (1:10,000)

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID

Several of Type at Location

Potentially Contaminative Industrial Uses (Past Land Uses - Mining)

	Point	Line	Polygon
Air Shafts	◆		
Disturbed Ground	◆		
General Quarrying	◆		
Heap, unknown constituents	◆		
Mineral Railway	◆		
Mining and Quarrying General	◆		
Mining of Coal & Lignite	◆		
Quarrying of Sand and Clay, Operation of Sand and Gravel Pits	◆		

Historical Land Use

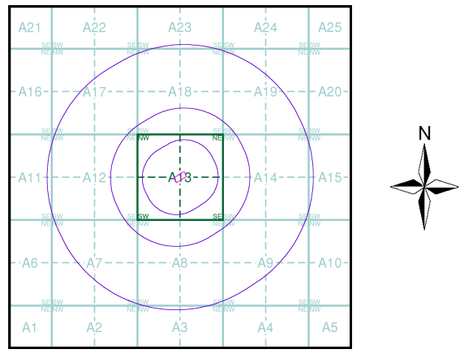
	Point	Line	Polygon
Potentially Infilled Land (Non-Water)	●		
Potentially Infilled Land (Water)	●		
Former Marsh	✠		

Mining Data

Potential Mining Area

BGS Recorded Mineral Site

Mining and Ground Stability - Slice A



Order Details

Order Number:	302167182_1_1
Customer Ref:	PN224461
National Grid Reference:	369990, 396300
Slice:	A
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Search Buffer (m):	1000

Site Details

Olive Mount Farm, Astley Road, Irlam, MANCHESTER, M44 5LU

Landmark INFORMATION GROUP

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

APPENDIX 6

Coal Authority CON29M Coal Mining Report

The Coal Authority

CON29M
coal mining report

OLIVE MOUNT FARM, ASTLEY ROAD, IRLAM, MANCHESTER, LANCASHIRE M44 5LU

Known or potential coal mining risks

Future underground coal mining Page 3

Further action

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

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

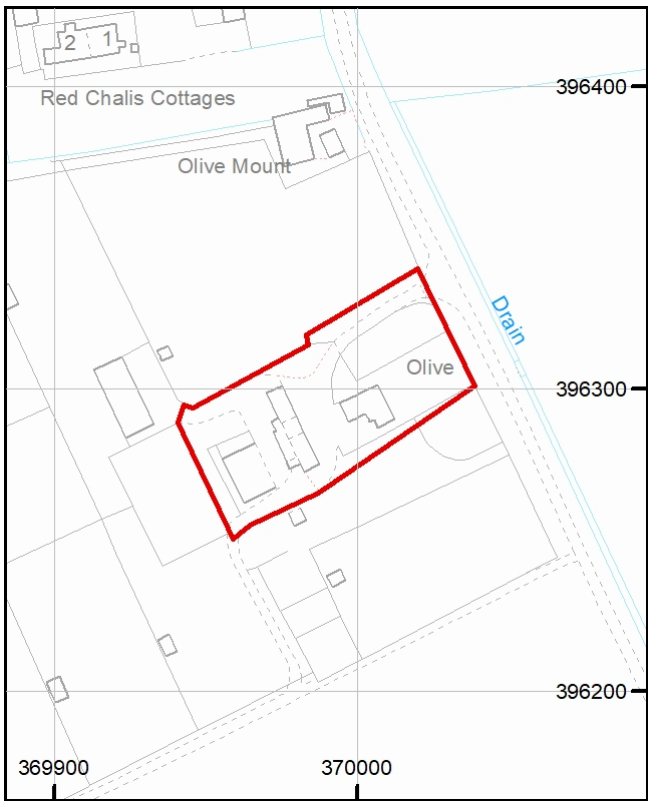
Professional opinion

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

Enquiry boundary

Key

Approximate position of enquiry boundary shown



We can confirm that the location is **on the coalfield**

Map data

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

Accessibility

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

Detailed findings

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

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1 Past underground coal mining

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

2 Present underground coal mining

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

3 Future underground coal mining

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

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

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

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

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

4 Mine entries

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

5 Coal mining geology

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

6 Past opencast coal mining

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

7 Present opencast coal mining

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

8 Future opencast coal mining

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

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

9 Coal mining subsidence

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

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

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

10 Mine gas

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

11 Hazards related to coal mining

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

12 Withdrawal of support

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

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

13 Working facilities order

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

14 Payments to owners of former copyhold land

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

Statutory cover



Coal mining subsidence

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

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

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



Coal mining hazards

Our public safety and subsidence team provide a 24 hour a day, 7 days a week hazard reporting service, to help protect the public from hazards caused by past coal workings, such as a mine shaft or shallow working collapse. To report any hazards please call 0800 288 4242. Further information can be found on our website: www.gov.uk/coalauthority.

Glossary

Key terms

adit - horizontal or sloped entrance to a mine

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

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

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

coal seams - bed of coal of varying thickness

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

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

mine entries - collective name for shafts and adits

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

shaft - vertical entry into a mine

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

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

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

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

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

APPENDIX 7

Contaminated Land Risk Assessment Methodology

CONTAMINATED LAND RISK ASSESSMENT METHODOLOGY

Legislation Overview

This report includes potential contaminant linkage and environmental risk assessment in line with the risk-based methods referred to in relevant UK legislation and guidance. Government environmental policy is based upon a "suitable for use approach," which is relevant to both the current use of land and also to any proposed future use. The contaminated land regime is the statutory regime for remediation of contaminated land that causes an unacceptable level of risk and is set out in Part 2A of the Environmental Protection Act 1990 ("EPA 1990"). The main objective of introducing the Part 2A regime is to provide an improved system for the identification and remediation of land where contamination is causing unacceptable risks to human health or the wider environment given the current use and circumstances of the land. Part IIA provides a statutory definition of contaminated land under Section 78A(2) as:

> *"any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, on, or under the land, that:*
>
> *(a) Significant harm is being caused or there is a significant possibility of such harm being caused;*
>
> *or*
>
> *(b) Pollution of controlled waters is being, or is likely to be, caused."*

In order to assist in establishing if there is a "*significant possibility of significant harm*" there must be a "*contaminant linkage"* for potential harm to exist. That means there must be a source(s) of contamination, sensitive receptors present and a connection or pathway between the two. This combination of source-pathway-receptor is termed a "contaminant linkage or SPR linkage." Part 2A of The Environmental Protection Act 1990 is supported by a substantial quantity of guidance and other Regulations. Key implementing legislation of the Part 2A regime includes the Contaminated Land (England) Regulations 2006 (SI 2006/1380) as amended by the overarching legislation for the contaminated land regime, which implements the provisions of Part IIA of the Environmental Protection Act 1990 (as inserted by section 57 of the Environment Act 1995), came into force on 14th July 2000 together with recent amended regulations: Contaminated Land (England) (Amendment) Regulations 2012 (SI 2012/263). Revised Contaminated Land Statutory Guidance was published by DEFRA in April 2012. Part 2A defines the duties of Local Authorities in dealing with it. Part 2A places contaminated land responsibility as a part of planning and redevelopment process rather than Local Authority direct action except in situations of very high pollution risk.

In the planning process guidance is provided by National Planning Policy Framework (NPPF) of February 2019 which requires that a site which has been developed shall not be capable of being determined "contaminated land" under Part 2A. In practice, Planning Authorities require sites being developed to have a lower level of risk post development, which is known as 'land affected by contamination'. This is to ensure that there is a suitable zone of safety below the level for Part 2A determination and prevent recently developed sites becoming reclassified as contaminated land if there are future legislative or technical changes (e.g. a substance is subsequently found to be more toxic than previously assessed this increases its hazard).

The criteria for assessing concentrations of contaminants and hence determining whether a site represents a hazard are based on a range of techniques, models and guidance. Within this context it is relevant to note that Government objectives are:

(a) to identify and remove unacceptable risks to human health and the environment;
(b) to seek to bring damaged land back into beneficial use;
(c) to seek to ensure that the cost burdens faced by individuals, companies and society as a whole are proportionate, manageable and economically sustainable.

These three objectives underlie the "suitable for use" approach to risk management and remediation of contaminated land. The "suitable for use" approach focuses on the risks caused by land contamination. The approach recognises that the risks presented by any given level of contamination will vary greatly according to the use of the land and a wide range of other factors, such as the underlying geology of the site. Risks therefore should be assessed on a site-by-site basis.

The "suitable for use" approach then consists of three elements:

(a) *ensuring that land is suitable for its current use* - in other words, identifying any land where contamination is causing unacceptable risks to human health and the environment, assessed on the basis of the current use and circumstances of the land, and returning such land to a condition where such risks no longer arise ("remediating" the land); the contaminated land regime provides the regulatory mechanisms to achieve this;
(b) *ensuring that land is made suitable for any new use, as planning permission is given for that new use* - in other words, assessing the potential risks from contamination, on the basis of the proposed future use and circumstances,

before official permission is given for the development and, where necessary to avoid unacceptable risks to human health and the environment, remediating the land before the new use commences; this is the role of the town and country planning and building control regimes; and

(c) *limiting requirements for remediation to the work necessary to prevent unacceptable risks to human health or the environment in relation to the current use or future use of the land for which planning permission is being sought* - in other words, recognising that the risks from contaminated land can be satisfactory assessed only in the context of specific uses of the land (whether current or proposed), and that any attempt to guess what might be needed at some time in the future for other uses is likely to result either in premature work (thereby running the risk of distorting social, economic and environmental priorities) or in unnecessary work (thereby wasting resources).

The mere presence of contaminants does not therefore necessarily warrant action, and consideration must be given to the scale of risk involved for the use that the site has, and will have in the future.

Overall Methodology

The work presented in this report has been carried out in general accordance with recognised best practice as detailed in guidance documents such as in the on-line Environment Agency Land Contamination Risk Management (LCRM), and BS10175:2011+A2 2017. Important aspects of the risk assessment process are transparency and justification. The particular rationale behind the risk assessments presented is given in this appendix.

The first stage of a two-staged investigation and assessment of a site is the Preliminary Investigation (BS 10175:2011), often referred to as the Phase 1 Study, comprising desk study and walk-over survey, which culminates in the Preliminary Risk Assessment and development of the Preliminary Conceptual Site Model (CSM). A CSM is developed which identifies potential geotechnical and geo-environmental hazards and the qualitative degree of risk associated with them. From the geo-environmental perspective, the Hazard Identification process uses professional judgement to evaluate all the hazards in terms of potential contaminant linkages (of contaminant source-pathway-receptor). Potential contaminant linkages are potentially unacceptable risks in terms of the current contaminated land regime legal framework and require either remediation or further assessment. These are normally addressed via intrusive ground investigation and generic risk assessment.

The second stage is the Ground Investigation, Generic Risk Assessment and Geotechnical Interpretation. This represents the further assessment mentioned above. The scope of the Ground Investigation is based on the findings of the Preliminary Risk Assessment and is designed to reduce uncertainty in the geotechnical and geoenvironmental hazard identification. The Ground Investigation comprises fieldwork, laboratory testing and usually also on-site monitoring. The Ground Investigation may include the Exploratory, Main and Supplementary Investigations described in BS 10175:2011+A2 2017. The results of the Ground Investigation reduces uncertainty in the geotechnical and geoenvironmental risks. Depending on the findings more detailed investigations or assessments may be required.

Preliminary Risk Assessment

Current practice recommends that the determination of potential liabilities that could arise from land contamination be carried out using the process of risk assessment, whereby "risk" is defined as:

"(a) The probability, or frequency, or occurrence of a defined hazard; and

(b) The magnitude (including the seriousness) of the consequences."

The UK's approach to the assessment of environmental risk is set out in the Environment Agency's "Land Contamination Risk Assessment". This established an iterative, systematic staged process which comprises:

(a) Hazard identification;
(b) Hazard assessment;
(c) Risk estimation; and
(d) Risk evaluation

At each stage during the development process, the above steps are repeated as more detailed information becomes available for the site.

For an environmental risk to be present, all three of the following elements must be present:

- Source/Contaminant: hazardous substance that has the potential to cause adverse impacts;
- Receptor: target that may be affected by contamination: examples include human occupants/users of site, water resources (rivers or groundwater), or structures;
- Pathway: a viable route whereby a hazardous substance may come into contact with the receptor.

The absence of one or more of each component (contaminant, pathway, receptor) would prevent a contaminant linkage being established and there would be no significant environmental risk.

The identification of potential contaminant linkages is based on a Conceptual Model of the site, which is subject to continual refinement as additional data becomes available. As part of a Preliminary Risk Assessment (Desk Study and site walk over) a Preliminary Conceptual Site Model (PCSM) is formed. Based on the PCSM, potential contaminant linkages can be assessed. If the PCSM and hazard assessment indicate that a contaminant linkage is not of significance then no further assessment or action is required for this linkage. For each significant and potential linkage a risk assessment is carried out. The linkages which potentially pose significant risks may require a variety of responses ranging from immediate remedial action or risk management or, more commonly, further investigation and risk assessment. This next stage is termed a Phase II Main Site Investigation and should provide additional data to allow refinement of the Conceptual Site Model and assess the level of risk from each contaminant linkage.

Definition of Risk Assessment Terminology

The criteria used for risk assessment are broadly based on those presented in DETR's "A Guide to Risk Assessment and Risk Management for Environmental Protection" (2000). The Severity of the risk is classified according to the criteria in Table C.1 below:

Table C.1 Severity/Consequence of Risk	
Severe	Acute risks to human health. Catastrophic damage to buildings/property (e.g. by explosion). Direct pollution of sensitive water receptors or serious pollution of other controlled water (watercourses or groundwater) bodies.
Medium	Harm to human health from long-term exposure. Slight pollution of sensitive controlled waters (surface waters or aquifers) or pollution of other water bodies. Significant effects on sensitive ecosystems or species.
Mild	No significant harm to human health in either short or long term. No pollution of sensitive controlled waters, no more than slight pollution of non-sensitive waters. Significant damage to buildings or structures. Requirement for protective equipment during site works to mitigate health effects.
Negligible	Damage to non-sensitive ecosystems or species. Minor damage to buildings or structures. No harm or pollution of water.

The probability of the risk occurring is classified according to criteria given in Table C.2 below:

Table C.2: Probability of Risk Occurring	
High likelihood	Contaminant linkage may be present, and risk is almost certain to occur in the long term, or there is evidence of harm to the receptor.
Medium/Reasonably Foreseeable	Contaminant linkage may be present, and it is probable that the risk will occur over the long term.
Low/Unlikely	Contaminant linkage may be present and there is a possibility of the risk occurring, although there is no certainty that it will do so.
Negligible/ Not credible	Contaminant linkage may be present but the circumstances under which harm would occur are improbable.

An overall evaluation of the level of risk is gained from a comparison of the severity and probability, as shown in Table C.3 below:

Table C.3: Comparison of Severity and Probability					
		Severity			
		Severe	Medium	Mild	Negligible
Probability	High likelihood	Very High Risk	High Risk	Medium/Low Risk	Low Risk
	Medium/Reasonably Foreseeable	High Risk	Medium Risk	Low Risk	Near Zero
	Low/Unlikely	High/Medium Risk	Medium/Low Risk	Low Risk	Near Zero
	Negligible/ Not credible	Medium/Low Risk	Low Risk	Low Risk	Near Zero

The various risk rankings provide guidance for recommended actions, whether this is:

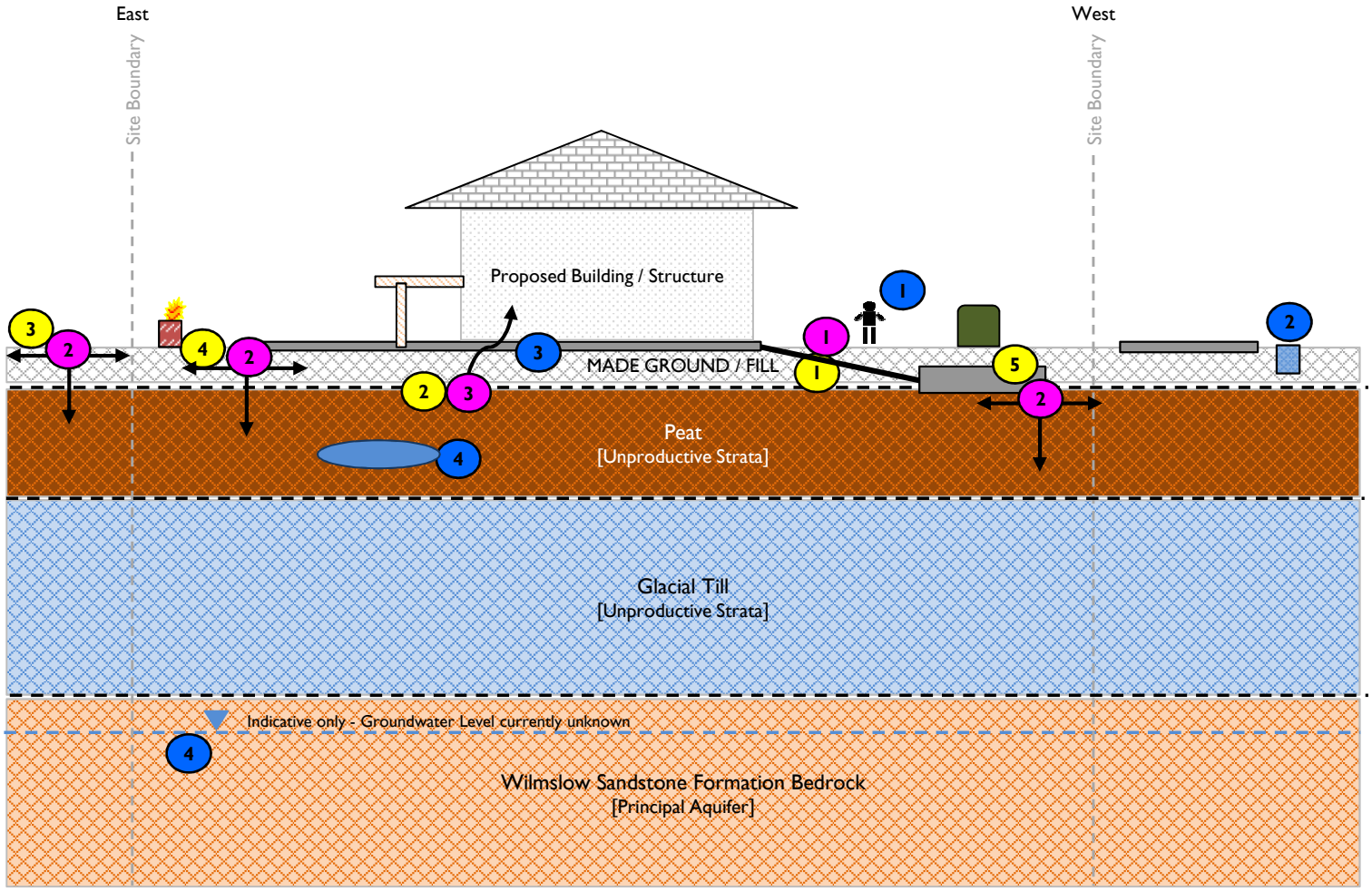
AR - Action Required, Remediation or mitigation or site investigation works required
SIR - Site Investigation Required, further assessment is required.
NAR - No Action Required.

A description of the evaluated risk is as follows:

Table C.4 – Description of the Classified Risks and Likely Action Required	
Evaluated Risk	Recommended Actions
Very High Risk	AR: 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 undertaken already) and remediation are likely to be required.
High Risk	AR: 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 long term.
Medium Risk	SI: It is possible that harm could arise to a designated receptor from an identified hazard. However, it is 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	NAR: It is possible that harm could arise to a designated receptor from an identified hazard, but there is a low likelihood of this hazard occurring and if realised, harm would at worst normally be mild.
Near Zero	NAR: There is a negligible possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.

APPENDIX 8

Conceptual Site Model



Sources:

1. Made Ground/Fill and Hydrocarbon/chemical spills
2. Ground Gases / Vapours
3. Off site Made Ground/Fill and hydrocarbon/chemical spills
4. Burning of waste
5. Leaks from existing septic tank / fuel storage tank / buried pipework

Pathways:

1. Direct contact/dermal contact/inhalation/ingestion
2. Horizontal/vertical migration
3. Gas/Vapour Migration

Receptors:

1. End-users and construction workers
2. Off site receptors (surface water)
3. Construction materials / buried services
4. Groundwater

NOT TO SCALE

All Measurements in Metres

All references to the origin and/or ownership of existing underground plant/services are based on the correlation of service drawings provided by the Client and visual inspection of underground plant/services during excavation. Actual origin and/or ownership remains unconfirmed.

Client: Ms Rachel Pike

Project: Olive Mount Farm

Project No: PN224461

Title: Conceptual Site Model

View: Section

Drawn by: TB

Date: 7th October 2022

Contact: Tbirch@geotechnics.co.uk

GEOTECHNICS
geotechnical and geoenvironmental specialists

The Geotechnical Centre
Unit 1 Borders Industrial Estate
River Lane
Saltney
Chester
CH4 8RJ

Tel. 01244 671117

Fax. 01244 671122

N°