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Preliminary Geo-Environmental Risk Assessment

Atlas Park Development, Manchester

Presented to: Aviva Life and Pensions UK Limited

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Executive Summary

Brief	Lucion was instructed by Aviva Life and Pensions UK Limited to produce a Preliminary Geo-Environmental Risk Assessment for Atlas Park Development, Simonsway, Wythenshawe, Manchester M22 5PR, for input into a planning application for commercial development.
Site Use & Surrounding Area	The Site comprises vacant brownfield land associated with the former Ferranti factory, which previously occupied part of the Site. This area retains remnants of hardstanding associated with the former buildings and infrastructure. An asphalt access road traverses the Site and forms a crescent-shaped loop along the eastern boundary. The Site also includes an existing surface-level car park, a vacant office building (previously occupied by Vodafone), and an area of vacant, undeveloped land located between the office building and the western boundary.
Environmental Setting	The Site is likely underlain by a sequence of Topsoil and / or Made Ground (anticipated in locations of former buildings or infilled ground) underlain by Alluvium and Devensian Till (Secondary Undifferentiated Aquifers) diamicton. Bedrock of the Bollin Mudstone Member (Secondary B Aquifer) mudstone and siltstone is beneath most of the Site. The Site is not located within a source protection zone. There are no groundwater abstractions with 1 km of the Site boundary. The nearest surface water feature is a pond on a farm, located 120 m north-east.
Contamination Potential Sources	Potential sources of contamination have been identified, comprising localised Made Ground deposits, the former chemical and manufacturing works on the Site, and potentially infilled land from the former pond on Site.
Development Considerations	Widespread contamination is considered unlikely however locally may be present in areas of the former chemical works, and the preliminary risk assessment has identified a **low to moderate** risk of soil contamination, groundwater and hazardous ground gas at the Site. Asbestos may be present within the localised Made Ground and stockpile of demolition material. Potential geohazards have been identified associated with potential Made Ground, potentially infilled land, and potential soft ground on-Site. This will require further investigation to determine the extent and properties of the clay deposits and allow for development of an accurate ground model for foundation design.
Uncertainty and Data Gaps	This assessment is based on desk study information only. No Site-specific ground investigation data has made available for review.
Recommendations	It is recommended that an intrusive Site investigation is undertaken to assess the potential for contamination and ground gases to impact on the proposed development. The investigation will also refine the Site-specific ground model and groundwater regime and enable an assessment of foundation and engineering solutions to be made.
This is intended as a summary only. Further detail and the limitations of the assessment are provided within the main body of the Report.	

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1.0 Introduction

1.1 Appointment

Lucion Delta-Simons Limited ("Lucion") was instructed by Aviva Life and Pensions UK Limited (the "Client") to prepare a Preliminary (Geo-Environmental) Risk Assessment for Atlas Park Development, Simonsway, Wythenshawe, Manchester M22 5PR (the "Site").

This Report was undertaken in accordance with Lucions' fee proposal dated 1st June 2026. The standard limitations associated with this Assessment are presented in Appendix A.

1.2 Context & Purpose

The aim of this Report is to support the submission of a planning application for the proposed commercial development.

The proposed development for the Site is the construction of seven units (light industrial (Use Class E(g)(iii), general industrial (Use Class B2) and/or storage or distribution (Use Class B8), together with ancillary offices (Use Class E(g)(i)) providing a total gross external area of 38,430 sqm; and associated service yards, parking, landscaping, amenity space and infrastructure, with vehicular access off Simonsway, as per drawing ref 20071-HAL-SK2000 Rev. P01 Hale Architecture Design Management. Drawing Included as Drawing 1.

To that end this study assesses the likely environmental and geotechnical issues associated with soil and groundwater conditions that may affect the proposed development of the Site. This Report is designed in general accordance with guidance on Land Contamination: Risk Management pages of the GOV.UK web pages, the relevant requirements of the National Planning Policy Framework (NPPF) (as revised 2025) (paragraphs 187 & 196-197))[1] and the Planning Practice Guidance (Land Affected by Contamination)[2].

1.3 Scope of Works

- Review of the environmental setting of the Site, including the current use / status of the Site and surrounding area, and review of the geology, hydrogeology and hydrology;
- Review of the historical activities of the Site and surrounding area;
- Review of regulatory information relating to the Site;
- Review of the online planning records for the Site;
- Consult and review information from the Local Authority in relation to Part 2A of the 1990 Environmental Protection Act;
- Review detailed explosive ordnance risk assessment report;
- Complete a Site reconnaissance by undertaking a visual inspection of readily accessible areas of the Site;
- Develop an outline Conceptual Site Model and undertake a Preliminary Risk Assessment with respect to potential contamination focussed on the proposed land use;
- Provide commentary on potential land contamination and geotechnical constraints in the context of the proposed development.

Data sources used in this assessment are listed in Appendix B.

1.4 Limitations

The standard limitations associated with this Assessment are presented in Appendix A. In addition, there are the following specific limitations that apply to this Assessment:

[1]] https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2024.pdf
[2] https://www.gov.uk/guidance/land-affected-by-contamination

- Only limited access was available during the Site reconnaissance, due to how overgrown it was in places and the building in the southwest being inaccessible;
- The Consultant undertaking the Site inspection maintained a general awareness for evidence of invasive plant species, particularly Japanese Knotweed. While none were observed during the walkover, it should be noted that the Consultant is not a trained ecologist and a separate survey undertaken by an experienced Ecologist would be necessary if a more robust assessment is needed;
- While a detailed radon assessment falls outside of the scope of this Report, a commentary based on UK Health Security Agency guidance (as at ukradon.org.uk) and data presented in the Envirocheck report, is provided. However, it cannot be precluded that further assessment might be required by the Local Authority;

2.0 Site Context & Data Review

The following sections provide a summary of the key site features based on the data sources listed in Appendix B. All distances, measurements and dates are approximate, and the accuracy limitations of the data sources should be noted.

2.1 Site Information

Site Overview			
			
Co-ordinates	Centred at National Grid Reference 383650, 386010.	**Elevation**	70 – 72 m AOD
		Area	7.87 Ha
Site Address and Location	Atlas Park Development, Simonsway, Wythenshawe, Manchester M22 5PR The Site is located to the east of Wythenshawe town centre within the administrative boundary of Manchester City Council ('MCC' or 'the Council'). The Site is located c. 14km to the south of Manchester City Centre. A Site Location Plan is included as Figure 1. Google Maps Link *Map data: Google, Maxar Technologies*		
Site Occupant(s)	The Site is currently vacant.		

Site Description	The Site comprises vacant brownfield land associated with the former Ferranti factory, which previously occupied part of the Site. This area retains remnants of hardstanding associated with the former buildings and infrastructure. An asphalt access road traverses the Site and forms a crescent-shaped loop along the eastern boundary. The Site also includes an existing surface-level car park, a vacant office building (previously occupied by Vodafone), and an area of vacant, undeveloped land located between the office building and the western boundary. The Site is accessible via Simonsway, which is located c.2.2km from Junction 4 of the M56 Motorway, providing connections to Manchester, Cheshire, and North Wales, and subsequently the wider strategic motorway network. Lucion conducted a Site visit on 29th June 2026. A series of Site photographs are presented as Appendix D, and pertinent information that was observed or reported on-Site is summarised below. The west of the Site was a roughly square plot of land that was predominantly overgrown with willow and birch. Access was somewhat limited in this area. It was noted that the car park in the central southwest area is generally in a poor condition. There was some light fly tipping of roofing materials adhesive and sealant and a blue barrel in the southwest corner of the car park. The eastern part of the Site appeared to be large areas of stockpiled Made Ground forming a plateau approximately 2 m higher than the surrounding ground level. The stockpile was noted to comprise gravel and cobbles of concrete and brick There were no immediate signs of asbestos containing materials. There isn't any evidence e.g. slabs relict foundations of where the former buildings were. Although this are of the Site was walked, some areas were inaccessible due to the presence of vegetation. Evidence of the previous SI was observed.
Description of Adjacent and Surrounding Land Uses	Three existing office buildings within Atlas Business Park bound the Site to the north and east. A key characteristic of the Site, particularly along its northern boundary, is the presence of established landscaping and mature vegetation. This boundary is defined by a mixture of mature Lombardy Poplar trees, together with a range of smaller trees and shrubs. Beyond the immediate boundary lies Simonsway. The eastern boundary is defined by the existing loop road and areas of low-level, self-seeded vegetation, which form the Site's boundary with the Greater Manchester Green Belt. Beyond this lies Styal Road (B5166). The southern boundary comprises a vegetated wire mesh and concrete post fence separating the Site from the Manchester Airport JetParks Ringway car park and Ringway Trading Estate. The western boundary is defined by existing fencing adjacent to the Manchester Metrolink line. Beyond this lie Shadowmoss Road and residential properties.
Where identified, the potential on-Site or off-Site sources of contamination are considered further in Section 3.0.	

2.2 Physical Setting

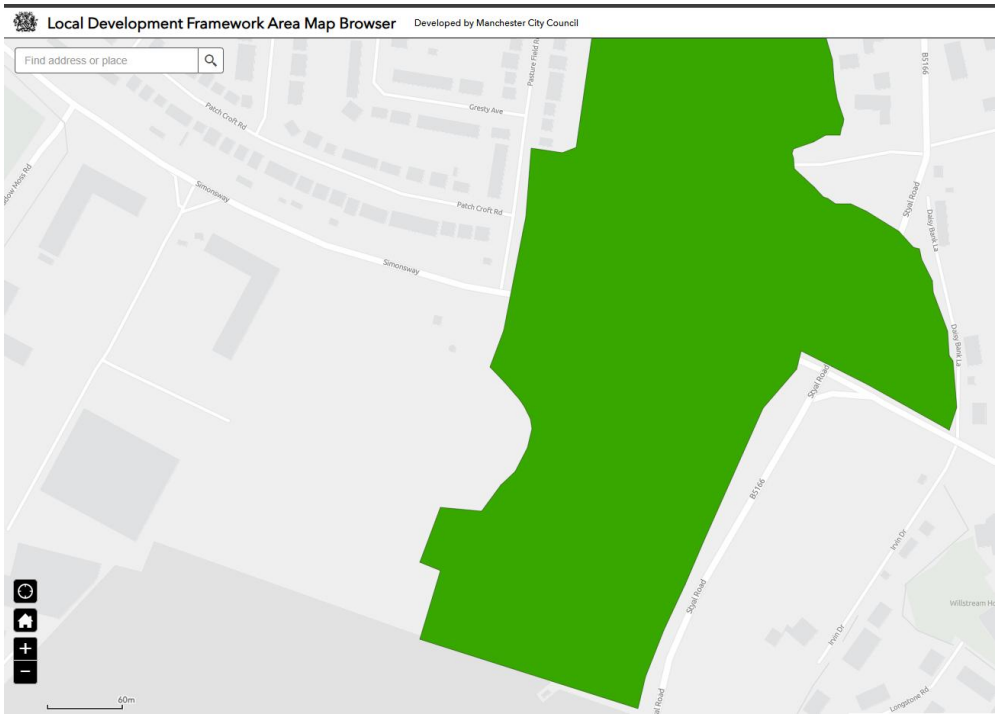
The physical setting of the subject property can influence the susceptibility to, and relative magnitude of, environmental impacts and liabilities associated with on- and off-Site sources of contamination. The following table provides physical setting information for the subject property and surrounding area.

Published Geology	British Geological Survey (BGS) online viewer (bgs.ac.uk/viewer) and mapping (bgs.ac.uk/maps) (1:63,000 Sheet Number 98, Stockport) indicates that ground conditions at the Site comprise: • Superficial deposits: Devensian Till, diamicton; • Bedrock: Bollin Mudstone Member, of the Mercia Mudstone Group The Bolin Mudstone Member is anticipated to be underlain at depth by the Helsby Formation and Wilmslow

	Sandstone Formation, both of the Sherwood Sandstone Group which is the predominant solid geology to the East of the Site.
Site-Specific Geology	There are no BGS recorded boreholes available to view (bgs.ac.uk/viewer) on the Site or in the immediate vicinity of the Site. However, a site investigation report, produced by Listers Geotechnical Consultants (summarised in Section 2.7) was obtained through the Manchester City Council planning portal for land approximately 250 m south-east of Site. Six trial pits were excavated to a maximum depth of 3.1 m below ground level (bgl), and two boreholes were drilled to a maximum depth of 10.45 m bgl. The typical ground conditions encountered are summarised as follows: • Topsoil comprising black slightly gravelly silty clay, to 0.3 m bgl; • Made Ground comprising soft brown gravelly silty clay, or clayey gravel, with brick, to depths of between 0.3 m and 0.7 m bgl; • Alluvium comprising firm black fibrous silty clay with occasional gravel and coal fragments and an organic odour, between 0.7 m and 1.40 m bgl; • Glacial till comprising firm to stiff reddish brown mottled grey slightly gravelly silty clay with pockets of sand, to depth of 10.45 m bgl.
Aquifers and Groundwater Receptors	The Environment Agency (EA) data (magic.defra.gov.uk) provides the following aquifer classification and designations: • Superficial deposits: The Devensian Till deposit is classed as a Secondary Undifferentiated Aquifer; • Bedrock: The Bollin Mudstone Member is classed as a Secondary B Aquifer, while the Helsby Sandstone Formation is classed as a Principal Aquifer; • Source Protection Zones: The Site is not in a designated groundwater Source Protection Zone (SPZ) and no SPZs are listed within 500 m of the Site boundary; Groundwater Abstractions: There are no licensed groundwater abstractions located within 1 km of the Site.
Groundwater Levels and Flow Direction	The afore mentioned Listers Geotechnical Consults Report states: *Groundwater was not encountered in any of the exploratory holes during the fieldwork down to 10.45m depth below the existing ground level. The soil was recorded to be damp in BH2 at about 5.0m and again at about 10.0m depth.* *Long term monitoring carried out as part of the project has revealed groundwater levels in borehole BH1 at 2.2m and 2.0m depth below the existing ground level. However, BH2 was underwater. When the gas bung was removed from the standpipe, the water did not flow into the borehole, which was also filled with water. Indicating flooded from surface wate.*
Hydrology	The nearest surface water feature is a drain located approximately 180 m to the north-west of the Site. The Site is not located in a flood zone. According to the Envirocheck Report, there are no licensed abstraction records from surface water located within 500 m of the Site.
Site Topography	The Site topography is generally flat with a minor slope down from the south to the north. The south-east area of Site is slightly higher at approximately 70 m AOD. The regional topography slopes very gradually downwards from south to north including across the Site area.
Mining & Quarrying	Reference to the Coal Authority on-line viewer (bgs.ac.uk/coal authority) indicates that the Site is not with a Coal Mining Reporting Area and is not within a Development High Risk Area.

	Consequently, a Coal Mining Risk Assessment (CMRA) is unlikely to be required under the planning regime.
Ground Stability Hazards	The Envirocheck Report indicates the following hazards in the area of the Site: • Landslide – very low; • Shrinking and swelling clay – very low; • Collapsible ground – very low; • Running sands – very low; • Compressible ground – no hazard; and, • Ground dissolution – no hazard.
Radon Gas	Public Health England (ukradon.org) data indicates that the Site lies within the lowest band of elevated radon potential, with a maximum radon potential of 1% of homes being above the action level for radon. Radon protection measures are not required in the construction of new buildings. A detailed radon assessment falls outside of the scope of this Report, and the requirement for radon mitigation measures in the proposed development should be identified separately to the satisfaction of the Local Authority.

2.3 Sensitive Land Use

Ecological Receptors	It is understood from information provided within the Envirocheck Report that the following statutory ecological receptors are located within 500 m of the Site: • The east of the Site area lies within an Area of Adopted Green Belt under the Manchester City Council Authority. Whilst the Envirocheck report shows this as being on Site this is likely to be a discrepancy in boundaries it is recommended that clarification on this is sort. Essentially, it traces the boundary of the Site;  • Additional areas of Adopted Green Belt lie 255 m north-east, and 484 east of the Site under the Stockport Metropolitan Borough Council

Heritage Interest	Historic England Records (historicengland.org.uk) indicate the following listed buildings within 250 m of the Site: • Chamber Hall, Barn, grade 2 listed building, located 163 m north-east of the Site; and, • Chamber Hall, grade 2 listed building, located 168 m north-east of the Site.

2.4 Historical Use of the Site & Surrounding Area

2.4.1 Approach

The historical development of the Site and surrounding area has been assessed through a review of historical maps, aerial photographs, internet sources, previous reports and Google Earth historical satellite imagery. A summary of the key historical Site uses and developments in the surrounding area is presented below. Copies of selected historical maps are included as Appendix E.

2.4.2 Historical Information Review

The following table provides a review of the historical information for the Site, adjacent and surrounding area.

Date	Source	Site Description	Surrounding Area
1882	OS Mapping - Cheshire	Site is agricultural land separated into several fields with trees along the boundaries.	To the north of Site lies Chamber Hall which appears to be a collection of several buildings, with a road to the north side of these buildings running east to west. Several unlabelled buildings lie close to the east boundary of the Site, part of Heald Green, and a road running north-east to south-west lies east of these. To the south and west of Site is further agricultural land. Moss Nook village lies approximately 330 m to the south of the Site. Woodland is located approximately 230 m north-east of Site. Marsh, or salting, ground is indicated approximately 80 m west, and 165 m south-west of Site alongside a pond.
1899	OS Mapping - Cheshire	No significant changes observed.	The river Gatley Brook, is indicated approximately 130 m to the east and 130 m north-east of Site, running approximately south-east to north-west.
1911	OS Mapping - Cheshire	County boundary drawn through the western part of the Site, running approximately north to south.	Construction of a railway line running north-north-east to south-south-west has begun approximately 275 m east of the Site.
1935	OS Mapping – Lancashire and Furness	No significant changes observed.	Railway line has been completed. Additional residential buildings (labelled as homes for elderly women) have been constructed around Heald Green, to the east, north-east, and south-east of the Site, and around Moss Nook, approximately 420 m south of Site.
1960-1967	OS Mapping	Works buildings have appeared in the western area of Site, with a road running through the Site from north to south to join the buildings. Two small buildings have appeared in the north of the Site, adjacent to the road. Three circular structures, potentially	Works buildings have appeared adjacent to the west of the Site boundary. A road now appears running adjacent to Site along the north boundary. Housing has appeared to the north-west of Site, north of the road.

		tanks, are present near the southern boundary.	Buildings to the east and south-east of Site in Heald Green are labelled as retirement homes and a nursery. Approximately 50 m to the south-west of Site a football field is now indicated. A large area of residential housing has been constructed, located approximately 280 m west and south-west of the Site. A pond is indicated next to Chamber Hall buildings. The east area of Site is labelled as a Sports Field with Tennis Courts appearing in the north-east corner of Site. Trees are also mapped across the north and north-east areas of Site. The pond in the south-west corner is no longer labelled, possibly infilled.
1973	OS Mapping - Ordnance Survey Plan	The works in the west of Site are now labelled as Chemical Works. Tennis courts are no longer indicated in the north-east corner of Site.	No significant changes observed.
1975	Russian Military Mapping	No significant changes observed.	Mapping indicates works buildings to the west of Site are 'Prominent Industrial Buildings'. Airport runway is indicated approximately 500 m south-west of Site.
1978	OS Mapping	No significant changes observed.	No significant changes observed.
1979	OS Mapping – Additional Survey of Information Microfilm (SIMs)	The westernmost of the small buildings in the north of the Site is now labelled as an electricity substation.	No significant changes observed.
1990	OS Mapping	A building appears in the southwest of the Site in 2006.	Ringway Trading Estate appears, located close to south-west corner of Site.
1996	OS Mapping		A railway line has been constructed running east to west, approximately 350 m south of Site.
1999	OS Mapping		The works buildings adjacent to the west of Site are gone. Airport hotel appears, approximately 500 m south-west of Site.
2000	Historical Aerial Photography		The area to the west appears to be under construction, with one unit present adjacent to the south-western corner of Site.
2006	OS Mapping		Four large buildings are indicated adjacent to the west boundary of Site.
2016	Online Aerial Imagery	The works buildings in the west of Site are no longer present.	Car parking is now indicated adjacent to the southern boundary of Site.

2021	VectorMap Local	The Sports Field in the east of Site is no longer indicated. The building previously labelled as an electricity substation is still present and a number of the former access roads are still present in the west.	The Sports Field in the east of Site is no longer indicated.
2026	Online Aerial Imagery	Site is shown in its present state.	No significant changes observed.

2.4.3 Historical Use Summary

Based on a review of the compilation of historical sources dating back to 1882, it appears that the subject property was agricultural land until 1960, when a works, later labelled as a chemical works, appeared in the western area of the Site which were demolished pre2016. The areas to the south, west, and north of the Site were also largely agricultural land prior to 1960, at which point housing and industrial developments appeared. The land to the east of Site has not undergone significant development and is now part of Manchester City Council greenbelt.

Potentially contaminative land uses identified in the surrounding area include the railway line approximately 325 m to the east of the Site from 1911 to present day, the works adjacent to the west of the Site observed between 1960 and 1999, Ringway Trading Estate present to the west from 1990.

2.4.4 Unexploded Ordnance (UXO)

The Zetica Regional Unexploded Bomb Risk Map for the area of the Site (zeticauxo.com) indicates that there is a moderate risk of UXO in the area of the Site. Airport formerly known as RAF Ringway opened in 1938 which was a production facility for planes and may have been a Luftwaffe target.

A Stage 2 Detailed UXO assessment commissioned by the Client, and is presented in the Stage 2 Detailed Explosive Ordnance Risk Assessment report prepared by Impartial Assessments, dated June 2026and is included as Appendix F.

The assessment concluded that explosive ordnance (EO) presents a Low-to-Moderate Risk to the proposed ground works. The principal potential UXO hazard was identified as British WWII heavy anti-aircraft projectiles, with a lower likelihood associated with German WWII unexploded bombs and other land service ammunition.

The assessment found that the wider area experienced a low bombing density, with no recorded bombing incidents within 500 m of the site and the nearest recorded high explosive bomb strikes located over 600 m away. The orientation and distance of the nearest recorded bomb-stick were considered to reduce the likelihood of a German unexploded bomb being present.

However, the report noted that a significant number of WWII heavy anti-aircraft guns were active within firing range, and that a large quantity of ammunition would have been expended over the wider area. As a result, there is an elevated likelihood that unexploded heavy anti-aircraft shells could have struck the site and, if present, may remain at shallow depth, typically within approximately 0.5 m to 1.5 m below ground level.

The report concluded that any very shallow explosive ordnance is likely to have been disturbed, observed and removed during post-war agricultural activity or subsequent construction works. However, unexploded heavy anti-aircraft shells could remain in areas of undisturbed ground or beneath post-war hardstanding.

The recommended mitigation measures comprise the preparation of Explosive Ordnance Site Safety Instructions for the development phase ground works and Explosive Ordnance Safety and Awareness Briefings for both the site investigation and development phase ground works. EOD Engineer supervision and intrusive or non-intrusive magnetometer surveys were not recommended.

2.5 Environmental Database Review

The Landmark Envirocheck® Report provides a database of environmental information held by various statutory bodies including the EA, Local Authority (LA), Health & Safety Executive (HSE) and Public Health England amongst others. A copy of the Envirocheck Report is provided in Appendix E, and the most relevant information is summarised below.

Features On-Site	The Landmark Envirocheck® Report lists the following as relating to the Site: • There are no active Contemporary Trade Directory Entries associated with the Site;

	• Inactive Contemporary Trade Directory Entries located within the Site include garage services; pest and vermin control; car dealership; tyre dealership; freight forwarders; road haulage; scientific instrument manufacturers; and oil and gas exploration supplies and services; • Points of interest relating to Manufacturing and Production classed as Unspecified Works or Factories, and Business Parks and Industrial Estates are expected to relate to the former works factory present on Site between 1960 and 1999. Contemporary Trade Directory Entries considered to relate to this are the inactive entries for scientific instrument manufacturers, and oil and gas exploration supplies; • Points of interest relating to Commercial Services classed as Distribution and Haulage, and Vehicle Repair, Testing and Servicing, are expected to relate to the former works factory and supporting businesses present on Site between 1960 and 1999. Contemporary Trade Directory Entries considered to relate to this are the inactive entries for freight forwarders, airfreight services, pumps – sales services and repairs, road haulage services, car dealers, garage services, and tyre dealers; • There are no BGS, LA and EA registered landfill sites on-Site.
Potentially Contaminative Features Off-Site	The Landmark Envirocheck® Report lists the following as relating to the Site: • Two points of potentially infilled land are registered within 100 m of the Site. One lies 54 m to the north-west, relating to a previous pond or water feature • Within 250 m of Site there are active and inactive Contemporary Trade Directory Entries for cargo and freight services, pest and vermin control, chemicals and allied products; car painters and sprayers; garage, breakdown and car repair services; engineers and a commercial vehicle dealer; • A Local Authority Pollution Prevention and Control record for respraying vehicles, located 91 and 99 m south-west of Site; • A tank is listed located 54 m south-west of Site, potentially associated with the Contemporary Trade Directory Entry for commercial vehicle dealer in the same vicinity; and, • There are no enforcement or prohibition notices relating to pollution or hazardous substances within 1 km of Site. There are no recorded Pollution Incidents to Controlled Waters on Site there are two within 250 m of the Site are: • A spillage of unspecified material into Gatley Brook, at a point 164 m to the north-east of Site in 1993; and • A spillage of crude sewage into Gatley Brook, at a point 250 m to the south-east of Site in 1999.

2.6 Planning Review/Regulatory Enquiries

On-line Planning Review	Manchester City Council https://www.manchester.gov.uk/planning	**Date Accessed**	19/06/2026
On-Site Applications	A number of planning application records relate the Site – Most are for internal works however 135952/FO/2023 for 5 commercial units was refused. There is a TPO Tree Preservation Order TPO-2023-0476, the exact location of this is unknown. No relevant information in relation to land contamination is included within the supporting documentation.		

Part 2A of the Environmental Protection Act (EPA) 1990	Manchester City Council's contaminated land officer was contacted for information on the Site; however, no response has been received at the time of report issue. However, given the known history and current use of the Site and surrounding area, it is considered that the Site would be considered a low priority for inspection under Part 2A. The Site area was also not listed under the Council's contaminated land public register of contaminated sites.

2.7 Previous Reports

List of Reports	The following reports relating to the Site has been obtained via the public planning records. • Phase 1 Geo-Environmental Investigation by IGE Consulting dated June 2018; • Ground Investigation by Listers Geotechnical Consultants dated March 2012; and, • Preliminary Geo-Environmental Risk Assessment by Delta-Simons Ltd Dated August 2022. A review of these third-party reports is provided for information purposes only. No reliance on these reports is assumed or inferred. A copy of this report is available via the Planning Authority on-line records.
Key Findings – Phase 1 Geo-Environmental Investigation, by IGE Consulting, dated 11/06/2018	IGE Consulting undertook a Phase 1 desk study to support a planning application for the construction of a car park to give access to Manchester Airport. The area referred to in the IGE report lies approximately 45 m east of the Site discussed in this report. The summary findings of this report contain the following: • Risk to human health from contaminated soil was considered very low to low for all users except construction workers, for whom the risk to health from contaminated soil was considered low; • Potential sources of ground gas were identified on-site including potential organic deposits and made ground, however the potential for these to generate ground gas was expected to be very low; and, • Risk to controlled water was considered very low to low, due to expected lack of widespread contamination and expected presence of glacial till to 12 m bgl preventing migration of contaminants. Recommendations from this report included: • No intrusive ground / site investigation was necessary to determine quantify the potential contamination for the construction of the car park, however chemical testing on soils was advised to determine any risks to construction Site workers, and the suitability off-site removal and re-use; • No gas monitoring was considered necessary; and, • A site investigation to determine the geotechnical conditions on-site was indicated to be necessary. The report concluded that further assessment in the form of intrusive investigation in relation to human health, ground gas and controlled waters risks was not necessary. However, intrusive investigation was recommended to assess the suitability of soils for re-use or removal from site, and to undertake further geotechnical assessment.
Key Findings – Phase 1 Geo-Environmental Investigation, by IGE Consulting, dated 11/06/2018	The audit and report were undertaken in the context of a proposed acquisition of the wider Intec site. Notable points of interest reported comprise: A fuel interceptor in the east of the Site, and a three-stage interceptor adjacent to Intec 2; Minor staining to the gravels around a sub-station adjacent to Intec 2; The walkover noted that Intec 2, 4 and 5 were served by gas fired boilers;

	No evidence of above or below ground fuel storage tanks or fuel use was observed; Contact with Building Control Officer confirmed that the Local Authority were unaware of any contamination issues at the Site; IGE concluded a low overall risk status for the Site and no further investigation was recommended.
Key Findings – Ground Investigation, by Listers Geotechnical Consultants, dated March 2012	A ground investigation was undertaken in 2012 to support the planning application for the construction of a public house with beer garden and associated car parking and soft landscaping. The site referred to in this ground investigation lies approximately 45 m south-east of the Site discussed in this report. The investigation included the excavation of six trial pits to a maximum depth of 3.1 m bgl and two cable-percussive boreholes to a maximum depth of 10.45 m bgl. Ground conditions were summarised as follows: • Topsoil – comprising black humic slightly gravelly silty clay with rootlets, encountered to a maximum depth of 0.3 m bgl; • Made Ground – comprising soft brown silty gravelly clay, or clayey gravel, with occasional service pipes uncovered, encountered to depths between 0.3 m and 0.7 m bgl; • Alluvium – comprising firm black fibrous silty clay with occasional gravel and coal fragments, and an organic odour, encountered to depths between 0.3 m and 0.7 m bgl; and, • Glacial Till – comprising firm reddish brown mottled pale grey slightly gravelly clay with pockets of sand, encountered to depths between 0.3 and 10.45 m bgl. Groundwater was not encountered in any of the excavations, however, installs in the boreholes recorded groundwater between 2.0 m and 2.2 m bgl. It was considered that the site was not suitable for soakaways. Conventional shallow strip or pad foundations were considered suitable. CBR tests were undertaken at four locations with results between 4% and 7%. Soil chemical testing revealed all samples to be below the Generic Assessment Criteria (GAC) values for commercial end use. The gas risk assessment undertaken classified the site as Characteristic Situation 1 (CS1).
Preliminary Geo-Environmental Risk Assessment by Delta-Simons Ltd Dated August 2022.	This preliminary risk assessment included the land further east of the current Site. The Site comprised a disused, roughly rectangular plot. The western area contained a fenced car park, the central and western zones held a large stockpile of demolition rubble from former buildings, and the eastern portion consisted of vegetated ground with grass, trees, and bushes. Surrounding land uses were residential, light industrial, and car parking. The environmental setting indicated that the Site was likely underlain by Topsoil and/or Made Ground, Devensian Till (Secondary Undifferentiated Aquifers). Bedrock comprised the Bollin Mudstone Member (Secondary B Aquifer), with the Helsby Sandstone Formation (Principal Aquifer) present in the east. The Site was not within a source protection zone, and no groundwater abstractions were recorded within 1 km. The nearest surface water feature was a farm pond located 88 m to the north-east. Potential contamination sources were identified, including localised Made Ground deposits, the former chemical and manufacturing works previously located on the Site, and potentially infilled land associated with the former pond. The risk of regulatory enforcement or legal action from neighbouring landowners was considered low. The preliminary assessment indicated that widespread or significant contamination was unlikely, with a low to moderate risk of soil contamination and hazardous ground gas. Asbestos could have been present within Made Ground and demolition stockpiles. Potential

	geohazards were associated with Made Ground, infilled land, and soft ground, requiring further investigation to refine the ground model and inform foundation design. The assessment was based solely on desk-study information, with no Site-specific ground investigation data available. It was recommended that an intrusive Site investigation be undertaken to assess contamination and ground gas risks, refine the ground and groundwater model, and support the development of appropriate foundation and engineering solutions.

3.0 Conceptual Site Model

3.1 Introduction

A Conceptual Site Model (CSM) represents the relationships between contaminant sources, pathways and receptors, to support the identification and assessment of contaminant linkages.

3.2 Overall Site Sensitivity

The Site is considered to be of a low to moderate environmental sensitivity given the absence of a source protection zone or potable water supply abstractions, the presence of Secondary Undifferentiated Aquifer in the superficial deposits and Principal (just off site to the east) and Secondary B Aquifers in the bedrock and in consideration to the currently disused nature of the Site and the wider surrounding area of predominantly industrial / commercial units.

3.3 Potential Contamination Sources

A source is a contaminant or pollutant that is in, on or under the land that has the potential to cause harm or pollution.

The following identified potential contamination sources are considered in the CSM:

- Contaminants from the former agricultural usage of Site – potentially PAHs from the burning of agricultural waste on-Site, and pesticides and herbicides from maintenance of crops;
- Contaminants from the former manufacturing facility / chemical works site and electricity substation including the demolition materials – potentially containing metals and metalloids, petroleum hydrocarbons, PAHs, SVOC, VOC, PCBs, Phenols, cyanide and asbestos-containing materials; and,
- Ground gases typically Methane, carbon dioxide, Hydrogen Sulphide and Carban Monoxide.

3.4 Potential Pathways

A pathway is a route by which a receptor is or could be affected by contaminant.

The potential pathways are considered to be as follows:

- Direct contact, ingestion or inhalation of soil bound contaminants / dust during or following redevelopment;
- Inhalation of organic vapours associated with contamination;
- Migration of ground gas / vapours into on-Site buildings causing asphyxiation or risk of explosion;
- Leaching of contamination into groundwater followed by migration of groundwater to the wider groundwater environment or discharge to surface waters;
- Direct contact between aggressive ground conditions and new infrastructure.

3.5 Potential Receptors

A receptor is something that could be adversely affected by a contaminant, for example a person, controlled waters, an organism, an ecosystem, or Part 2A receptors such as buildings crops or animals.

Relevant potential receptors are considered to include:

- Construction workers;
- Third parties during construction (adjacent Site users and adjacent residents);
- Future Site users and maintenance workers; and,
- The Built Environment (new buildings and infrastructure / utilities).

The surface watercourse of the Gatley Brook, closest point located 280 m to the north-east is not considered to be a plausible receptor given its distance from the Site.

Contaminant Linkage Assessment					
Source(s)	**Pathway(s)**	**Receptor(s)**	**Risk**	**Comments**	**Requires Investigation**
Potentially contaminated soils and/or groundwater located beneath the Site, and Potentially contaminated stockpile of demolition rubble / debris / fly tipping.	Direct contact/ ingestion and inhalation of dust and vapours.	Site users.	Low to Moderate Risk	Whilst significant potential sources of contamination have not been identified associated with the current use of the Site, a number of potential sources have been identified with the historical use of the Site, and as such, there remains the potential for localised contamination to be present. Given the proposed end use of the Site, which will be predominantly covered with buildings and hardstanding, with some areas of soft landscaping, the risk to future Site users is considered to be low to moderate. Intrusive investigation will be required to support planning for the new development area. Investigation should also be undertaken within the stockpile to assess the suitability for re-use.	Yes
	Direct contact, ingestion and inhalation of dust and vapours.	Maintenance workers during any future sub-surface works at the Site.	Low to Moderate Risk	Site workers may become exposed to localised contaminated soils during intrusive groundworks undertaken at the Site. Safe working practices should be undertaken, and appropriate Personal Protective Equipment (PPE) should be used that will reduce the risk to low. Intrusive investigation will inform potential risks in new development areas.	Yes
	Leaching of contaminants and vertical migration.	Groundwater beneath the Site.	Low Risk	Significant potential sources of contamination have not been identified associated with the current use of the Site, however, there remains the potential for localised contamination to be present associated with the historical use of the Site. The risk to underlying groundwater is considered to be low as the presence of Glacial Till will reduce the migration of mobile contaminants into the underlying aquifers. It would be prudent to sample shallow groundwater on Site, if encountered during Site investigation works.	Yes
	Permeation of hydrocarbons through plastic pipe work.	Water supply pipes.	Low to Moderate Risk	Hydrocarbons, especially aromatics and chlorinated solvents are known to permeate plastic pipes, particularly when encountered at high concentrations. The Local Water Authority should be consulted and provided with chemical results from an intrusive investigation to advise on potential use of upgraded supply pipe.	Yes

Contaminant Linkage Assessment					
Source(s)	**Pathway(s)**	**Receptor(s)**	**Risk**	**Comments**	**Requires Investigation**
	Lateral migration through any groundwater beneath the Site.	Off-Site receptors (neighbouring properties/ users).	Low Risk	Whilst significant potential sources of contamination have not been identified associated with the current use of the Site, there remains the potential for localised contamination associated with historical Site uses. However, given the expected strata underneath the Site, predominantly clay, the potential for infiltration and leaching of any contaminants is reduced.	No
Ground gas originating from the anticipated Made Ground.	Vertical and lateral migration of ground gases.	Site users & the buildings on-Site.	Low to Moderate Risk	Made Ground is likely to be present on Site associated with the former use, which is considered to be a potential source of ground gas. Given the age of the Made Ground and absence of any bulk sources of ground gas at or near the vicinity of the Site the overall risk is likely to be low to moderate.	Yes
Potentially contaminated soil and groundwater from off-Site sources.	Lateral migration and subsequent inhalation.	Groundwater beneath the Site and future Site users.	Low Risk	The Site is located adjacent to a commercial industrial estate setting, likely resulting in some impact to the wider groundwater quality of the Site area. A former works is present adjacent to the west of Site; however, it has subsequently been redeveloped and therefore it is considered that any contamination associated with the former use would have been addressed during the planning process. As such, it is considered to represent a low risk to the subject Site.	No

4.0 Conclusions & Recommendations

4.1 Land Contamination Risks and Liabilities

Uncertainty and Data Gaps	This assessment is based on desk study information only. No Site-specific ground investigation data has made available for review.
Soils	Significant widespread soil contamination is not anticipated. Localised contamination may be present around the areas of the former works.
Groundwater	Significant widespread groundwater contamination is not anticipated although localised groundwater contamination is possible due to the historical uses on Site.
Ground Gas	It is considered unlikely that a widespread ground gas risk exists, although it would be prudent to allow for basic ground gas protection measures until monitoring data is available for interpretation.
Volatile Organic Vapours	Potential volatile contamination may be present associated with the former chemical works in the west of Site.
Contamination Risks Associated with Ownership (Current Use)	Widespread contamination is considered unlikely and the preliminary risk assessment has identified a **low to moderate** risk of soil/groundwater contamination and hazardous ground gas at the Site. Asbestos may be present within the Made Ground.
Potential Contaminated Land Development Risks	Widespread contamination is considered unlikely and the preliminary risk assessment has identified a **low to moderate** risk of soil/groundwater contamination and hazardous ground gas at the Site. Asbestos may be present within the Made Ground.
UXO	The Stage 2 Detailed Explosive Ordnance Risk Assessment report concluded that explosive ordnance poses a Low-to-Moderate risk to the anticipated ground works.

4.2 Geotechnical Considerations

Uncertainty and Data Gaps	This assessment is based on desk study information only. No Site-specific ground investigation data has made available for review.
Preliminary Ground Model	Based on the available information, it is anticipated that the Site is likely underlain by a sequence of Topsoil and Made Ground (in locations of former buildings or infilled ground) underlain by Glacial Till in places, and bedrock of the Bollin Mudstone Member across the Site. Given the previous marshland surround Site, and third-party investigation data in the vicinity of Site, it is expected that shallow groundwater may be encountered.
Plausible Geo-Hazards	While the desk study has not identified any specific geohazards, the following are plausible geohazards associated to the proposed development area: • Made Ground: - The western part of the Site may have varied depth of Made Ground associated with the former works, now demolished, may contain Made Ground. Made Ground is typically variable in nature and strength with a potentially low bearing capacity, and unacceptable levels of total/differential settlement may occur; • Buried obstructions/ basements associated with former development may still be present. Foundations spanning these features may be subject to differential and excessive settlement. • Requirement for earthworks due to variable topography in east of the Site • Compressible ground: - The Envirocheck report identified no hazard associated with compressible ground. However, some types of compressible ground may be

	present within the Site including soft ground relating to the surrounding marshy ground; • Geological fault lines: - A fault line exists approximately 130 m to the east of the Site running north to south. This fault separates the two bedrock types Bollin Mudstone Member to the west, and Helsby Sandstone Formation in the east. The exact location of this should be determined. • Historical use of Site may have resulted chemically aggressive ground conditions
Plausible Foundation Solutions	Given the likely presence of Made Ground across the Site, heavily loaded ground bearing floor slabs are unlikely to be suitable. Shallow spread foundations transferring light to moderate loads to the competent Glacial Till may be suitable however Made Ground thickness may preclude selection of this option. Due to the variable topography in the northeast, it may be necessary to undertake an earthworks exercise to provide level development platform. It is likely that either a shallow spread and ground improvement or wholly ground improved solution may need to be adopted to support the proposed development. Alternatively, a piled foundation solution could be adopted.

4.3 Recommendations and Other Development Considerations

Ground Investigation Recommendations	Based on the preliminary assessment and identified potential sources, intrusive investigation is required to confirm the potential contaminant linkages. This may include, but is not limited to, the assessment of: • The thickness and nature of any Made Ground; • The presence, concentrations and leachability of substances of concern in shallow soils (including Made Ground) on-Site; • Substances of concern in any perched water/soil pore water or shallow groundwater beneath Site; and • Ground gas and/or soil vapour intrusion into future on-Site buildings. Lucion recommends that an intrusive ground investigation is undertaken to investigate, inter alia, the presence and nature of Made Ground deposits, the identified potential contamination sources, the gas-generating potential of Made Ground.
Other Development Considerations	Recommended mitigations in relation to UXO risk include Explosive Ordnance Site Safety Instructions for the development phase ground works and Explosive Ordnance Safety and Awareness Briefings for both the site investigation and development phase ground works. The exact location of the TPO should be confirmed with Manchester City Council.

Drawings

Drawing 1 – Proposed Development Plan



AREA SCHEDULE

UNIT 1	**88,530 ft²**
Warehouse	80,920 ft²
Office (FF)	3,860 ft²
Office (SF)	3,750 ft²
Car Parking spaces	82
Accessible Bays	*6*
EV Charging spaces	*17*
Shared spaces	*5*
Cycle spaces	*20*
Motorcycle spaces	*5*
UNIT 2	**24,820 ft²**
Warehouse	22,130 ft²
Office (FF only)	2,690 ft²
Car Parking spaces	25
Accessible Bays	*2*
EV Charging spaces	*5*
Shared spaces	*2*
Cycle spaces	*6*
Motorcycle spaces	*2*
UNIT 3	**20,910 ft²**
Warehouse	18,220 ft²
Office (FF only)	2,690 ft²
Car Parking spaces	20
Accessible Bays	*2*
EV Charging spaces	*4*
Shared spaces	*2*
Cycle spaces	*6*
Motorcycle spaces	*2*
UNIT 4	**55,990 ft²**
Warehouse	51,890 ft²
Office (FF)	4,100 ft²
Car Parking spaces	54
Accessible Bays	*3*
EV Charging spaces	*11*
Shared spaces	*3*
Cycle spaces	*14*
Motorcycle spaces	*3*
UNIT 5	**48,560 ft²**
Warehouse	44,490 ft²
Office (FF)	4,070 ft²
Car Parking spaces	55
Accessible Bays	*3*
EV Charging spaces	*11*
Shared spaces	*3*
Cycle spaces	*12*
Motorcycle spaces	*3*
UNIT 6	**71,220 ft²**
Warehouse	63,600 ft²
Office (FF)	3,880 ft²
Office (SF)	3,740 ft²
Car Parking spaces	66
Accessible Bays	*4*
EV Charging spaces	*14*
Shared spaces	*4*
Cycle spaces	*16*
Motorcycle spaces	*3*
UNIT 7	**62,990 ft²**
Warehouse	55,400 ft²
Office (FF)	3,860 ft²
Office (SF)	3,730 ft²
Car Parking spaces	58
Accessible Bays	*3*
EV Charging spaces	*12*
Shared spaces	*3*
Cycle spaces	*16*
Motorcycle spaces	*3*
Total GIA	**373,020 ft²**
Total Parking Spaces	**360**

Disclaimer:
Subject to survey.

Notes:

0 10 20 30 40 50
SCALE 1:1000 @ A1

N

KEY

- Site Boundary (847,890 ft² / 78,770 m² / 19.44 acres / 7.87 ha)
- Existing Substation
- Pedestrian & Cycle Route
- Proposed Fence Line
- Existing Fence Line
- Proposed Retaining Wall
- Refuse Store
- Amenity Area
- Insitu Concrete (with light brush finish)
- Truck Pave
- Asphalt
- Block paving
- Soft Landscaping
- New Entrance
- 1 Cycle Stands
- 2 Car Share Spaces
- 3 EV Charging Bays
- 4 Motorcycle Spaces
- R Refuse
- A Accessible Parking Bays
- SS Sub-Station
- Existing Trees
- Existing Trees to be Removed

Rev:	Notes:	Date:	Dwn:	Iss:
P07	Amendments to red boundary line	11.09.2026	CM	HA
P06	Amendments to unit 7 & Tree retention highlighted	09.09.2026	CM	HA
P04	Amendments to Layout	21.08.2026	AH	HA
P03	Amendments to Layout	14.08.2026	AH	HA
P02	Amendments to Layout	12.08.2026	AH	HA
P01	First Issue	06.08.2026	AH	HA

Suitability Code:
PLANNING

Client:
AVIVA INVESTORS

hale
ARCHITECTURE | DESIGN MANAGEMENT
22c Leathermarket Street, London, SE1 3HP

Project:
Atlas Business Park
Manchester

Drawing Title:
Proposed Site Plan

Project No:	Scale @ A1 / A3
20071	1:1000 / 1:2000

Drawing No:	Revision:
20071-HAL-ZZ-ZZ-DR-A-PL003	P07



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Notes:

0 10 20 30 40 50
SCALE 1:1000 @ A1

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Drawing Title:
Proposed Site Plan

Project No:	Scale @ A1 / A3
20071	1:1000 / 1:2000

Drawing No:	Revision:
20071-HAL-ZZ-ZZ-DR-A-PL003	P07

Figures

Figure 1 – Site Location Plan



Legend

Site boundary

0 40 80 120 160 Meters

N

Figure	Site Location Plan		
Job	Atlas Park		
Client	Aviva Life and Pensions UK Limited		
Figure No. 1	Revision A	Date 17/09/2026	
Drawn GC	Checked JB	Scale 1:5,000 @ A3	
Job No. 130414.732912		Central GR 383638E 386012N	



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Lucion
Protecting people and planet

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Appendices

Appendix A – Limitations

Limitations

This Report was prepared by Lucion Delta Simons ("Lucion") for the sole and exclusive use of the Client and for the specific purpose for which Lucion was instructed. Nothing contained in this Report shall be construed to give any rights or benefits to anyone other than the Client and Lucion, and all duties and responsibilities undertaken are for the sole and exclusive benefit of the Client and not for the benefit of any other party. Lucion does not intend, without its written consent through a formal letter of reliance or warranty, for this Report to be disseminated to any party other than the named Client or to be used or relied upon by any party other than the named Client. Use of the Report by any other party is unauthorised and such use is at the sole risk of the user. Any party using or relying upon this Report, other than the Client, agrees by virtue of its use to indemnify and hold harmless Lucion from and against all claims, losses and damages (of whatsoever nature and howsoever or whensoever arising), arising out of or resulting from the performance of the work by Lucion. Unless explicitly agreed otherwise, in writing, this Report has been prepared under Lucion' Standard Terms and Conditions as included within our proposal to the Client.

The recommendations contained within this Report represent Lucions' professional opinions, based upon the information detailed within the Report, exercising the reasonable skill and care to be expected of a professional consultant holding itself out as having the competence, experience and resources necessary for the purpose of carrying out similar work in scope and character to the services performed. The Report needs to be considered in the light of the proposal and associated limitations of scope. The Report needs to be read and considered in full and isolated sections cannot be used without full reference to other elements of the report and any previous works referenced within the Report.

Where Lucion has obtained, reviewed and evaluated information in preparing this Report from the Client and others and Lucion conclusions, opinions and recommendations has been reasonably determined using this information, Lucion does not warrant the accuracy of the third-party information provided to it and cannot be responsible for any opinions which Lucion has expressed, or conclusions which it has reached in reliance upon information which is subsequently proven to be inaccurate.

Site surveys document the conditions encountered at the time of survey only and conditions may change due to natural processes or human intervention. As such, surveys represent an assessment at a specific point in time and Lucion cannot be responsible for adverse conditions which arise or become apparent after the time of the survey or for conditions which sit outside the scope for which the survey or Report was commissioned.

Where intrusive investigations have been completed, information, comments and opinions given in this report are based on the ground conditions encountered during the site work period and on the results of laboratory and field tests performed during the investigation. Ground conditions are inherently variable such that no investigation can be exhaustive to the extent that all adverse conditions are revealed. Conditions may therefore be present beneath the site that were not apparent in the data reviewed or obtained as part of this assessment. It should be noted that groundwater levels vary due to seasonal and other effects and may at times differ to those measured during the investigation. Lucion does not warrant or guarantee that the Site is free of hazardous or potentially hazardous materials or conditions. Where risk assessment is undertaken, this is based upon the standards, guidance and common practice at the time of the assessment and Lucion cannot be responsible for conditions which become apparent following changes in guidance or practice or advancements in scientific knowledge which change the position in relation to assessment of risk.

No aspect of this Report constitutes a design. Where this information is used in design, the designer should verify the information has been used appropriately.

Where budgets are prepared and presented within the Report, these are for information only to indicate the likely magnitude of a cost and do not represent an invitation to treat for the works. All budgets and programmes presented should be reviewed and verified by appropriately qualified and experienced independent Project Managers and Cost Consultants. .

Appendix B – Data Sources

In completing this Assessment, Lucion has utilised the following data sources and third party information:

- Current and Historical Ordnance Survey (OS) maps;
- British Geological Survey (BGS) data;
- Environment Agency (EA) online data;
- Coal Authority (CA) online data;
- A Landmark Envirocheck® Report for the Site (Ref. 28248), dated 16th June 2026
- Historical Maps included as part of the Envirocheck Report.

Appendix C – Risk Definitions

Contaminated Land Risk Definitions

The following methodology is based on the methodology presented in CIRIA C552 Contaminated Land Risk Assessment: A Guide to Good Practice 2001. It requires the classification of the:

Magnitude of the potential consequence (severity) of the Risk occurring: and

Magnitude of the Probability (likelihood) of the Risk occurring.

The classifications are then compared to indicate the risk presented by each pollutant linkage.

Consequence to Receptor Definition Matrix

	Human Health	Controlled Waters	Buildings/Services
Severe Consequence	Acute or chronic permanent impact on human health.	Sensitive controlled water pollution ongoing, or just about	Catastrophic collapse
Medium Consequence	Chronic permanent impact on human health	Gradual pollution of sensitive controlled water	Degradation of materials
Mild Consequence	Chronic temporary impact on human health	Gradual pollution of non- sensitive controlled water	Damage to building rendering it unsafe.to occupy (e.g. foundation damage resulting in instability).
Minor Consequence	Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc).	Slight discoloration of water	Easily repairable effects of damage to buildings, structures and services, i.e. discoloration of concrete

Probability Definitions

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

Standard Risk Matrix

		Consequence/Magnitude of impact			
		Severe	**Medium**	**Mild**	**Minor**
Probability	**High**	Very High	High	Moderate	Moderate/Low
	Likely	High	Moderate	Moderate/low	Low
	Low Likelihood	Moderate	Moderate/low	Low	Very Low
	Unlikely	Moderate/low	Low	Very Low	Very Low

Classified Risks and Likely Action

Significance Level	Definition/Comments
Very High Risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required. Demonstrable contaminated land situation, highest threat & liability level, urgent action recommended.
High Risk	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the longer term. Likely contaminated land situation, risk assessment and action recommended.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, if is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term. Plausible contaminated land situation, risk assessment and possible action recommended.
Low Risk	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild. Unlikely contaminated land situation, possible risk assessment and possible action.
Very Low Risk	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe. Negligible risk, no action recommended except vigilance for changes in conditions.

Geotechnical Risk Classification

The geohazards listed in the report within Section 4 follow guidance presented in Clayton, C.R.I. (2001) *Managing Geotechnical Risk*, Thomas Telford and the National Highways document CD622 '*Managing Geotechnical Risk'* (2020) which aims to identify and manage the geotechnical risks associated with a scheme throughout its lifespan, from planning to construction to maintenance.

For each geohazard the probability of the hazard occurring (P) has been considered together with the impact it would have (I) if it were to happen to calculate the risk rating between 1 and 25.

Risks that fall within Moderate, Significant and Severe categories below are considered to be ***substantial*** and are therefore listed within the report.

Probability	**(P)**
Very Likely (VLk)	5
Likely (Lk)	4
Plausible (P)	3
Unlikely (U)	2
Very Unlikely (VU)	1

X

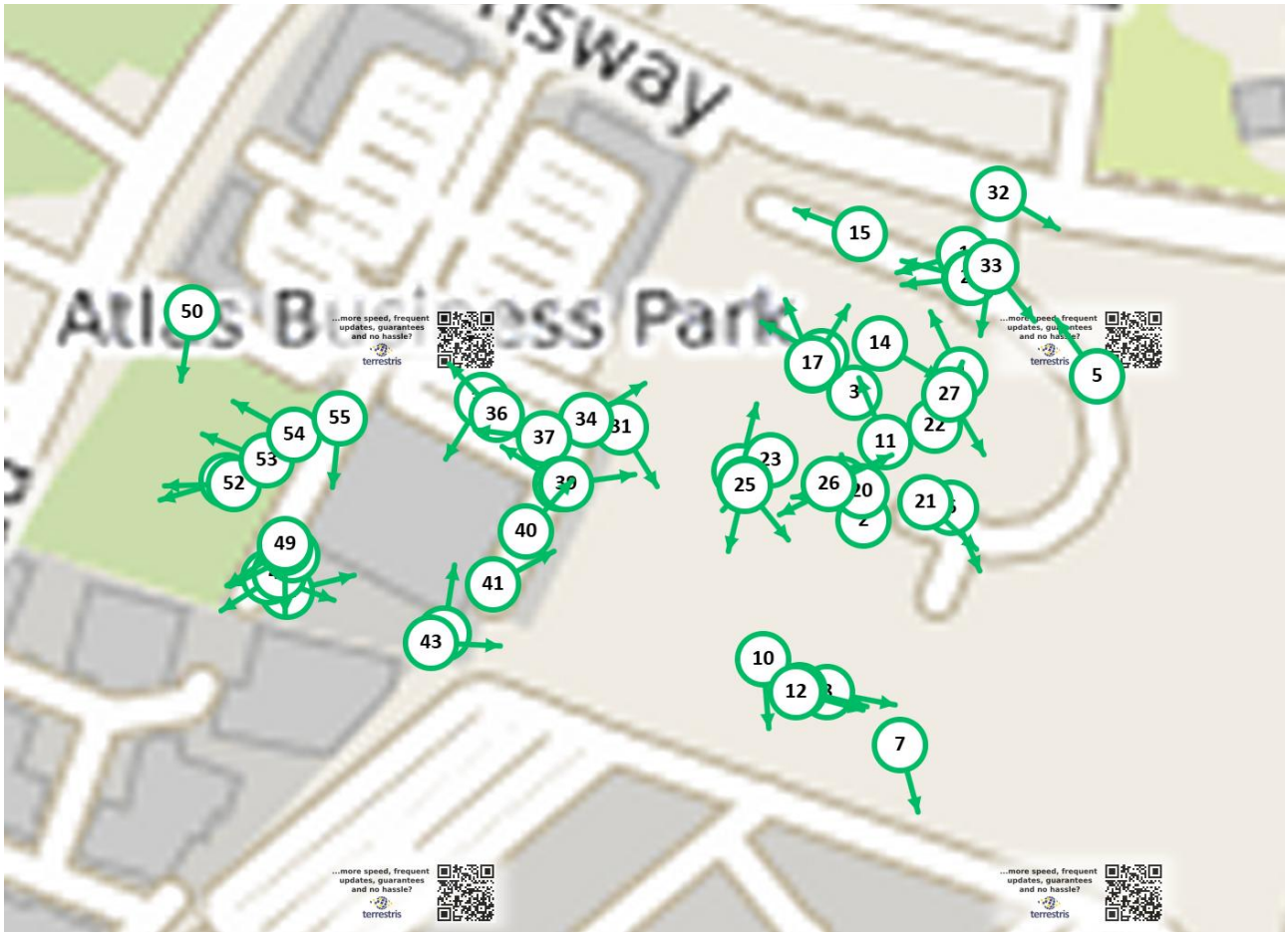
Impact	**(I)**
Very High (VH)	5
High (H)	4
Medium (M)	3
Low (L)	2
Very Low (VL)	1

=

(R)	**Risk**
20 – 25	Severe
15 – 19	Substantial
10 – 14	Moderate
5 – 9	Minor
1 – 4	Negligible

Appendix D – Site Photographs

Photo Log



Basemap: OSM WMS (terrestris) • Markers: Lucion Photo Log



Photograph 1 – Substation at the Site boundary.



Photograph 2 – General overview of the vegetation.



Photograph 3 – Close up of the typical composition of the Made Ground.



Photograph 4 – Relict structures and roadways.



Photograph 5 – Relict roadway.



Photograph 6 – Demolition rubble.



Photograph 7 – Hole in the fence meaning security of the Site is compromised.



Photograph 8 – General site overview.



Photograph 9 – General Site overview.



Photograph 10 – General Site overview.



Photograph 11 – Plateau of the stockpiled demolition rubble.



Photograph 12 – Trying to capture the height difference between the rubble plateau and normal.



Photograph 13 – Slope up onto the top of demolition rubble.



Photograph 14 – General Site overview.



Photograph 15 – Suspected Drainage channel looks to hold water based on the carpet of moss.



Photograph 16 – General Site overview.



Photograph 17 – General Site overview.



Photograph 18 – Evidence of former Site Investigation.



Photograph 19 – Edge of demolition rubble slope.



Photograph 20 – General Site overview.



Photograph 21 – Remaining roadways.



Photograph 22 – Evidence of previous Site Investigation.



Photograph 23 – General Site overview.



Photograph 24 – General Site overview.



Photograph 25 – General Site overview.



Photograph 26 – General Site overview.



Photograph 27 – Former roadways.



Photograph 28 – General Site overview.



Photograph 29 – Composition of the Made Ground.



Photograph 30 – Former security hut.



Photograph 31 – Car park.



Photograph 32 – Access to northern area.



Photograph 33 – Former roadway.



Photograph 34 – Car park.



Photograph 35 – Front aspect of former Vodafone building.



Photograph 36 – Access to Vodafone Car Park.



Photograph 37 – Vodafone Car Park.



Photograph 38 – Unkept nature of Car Park.



Photograph 39 – Rest area within Vodafone Car Park.



Photograph 40 – Vodafone Car Park.



Photograph 41 – Weeds poking through block paving.



Photograph 42 – Building Security.



Photograph 43 – General Site overview.



Photograph 44 – Vodafone service yard and Car Park.



Photograph 45 – Fly tipping.



Photograph 46 – Fly tipping.



Photograph 47 – Access to west of Vodafone service yard.



Photograph 48 – General Site overview.



Photograph 49 – General Site overview.



Photograph 50 – General Site overview.



Photograph 51 – General Site overview.



Photograph 52 – General Site overview.



Photograph 53 – General Site overview.



Photograph 54 – General Site overview.



Photograph 55 – General Site overview.

Appendix E – Landmark Envirocheck® Report

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Envirocheck® Report:

Datasheet

Order Details:

Order Number:
404873443_1_1

Customer Reference:
28248

National Grid Reference:
383650, 386010

Slice:
A

Site Area (Ha):
7.9

Search Buffer (m):
1000

Site Details:

Atlas Business Park
Simonsway
Manchester
M22 5PP

Client Details:

Ms J Trevelyan
Lucion Delta Simons Ltd
Unit 5 Abbots Park,
Preston Brook,
Runcorn,
Cheshire,
WA7 3GH

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Contents

Report Section	Page Number
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Agency & Hydrological	1
Waste	15
Hazardous Substances	-
Geological	21
Industrial Land Use	23
Sensitive Land Use	49
Data Currency	50
Data Suppliers	57
Useful Contacts	58

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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Radon Potential dataset Copyright Notice

Information supplied from a joint dataset compiled by The British Geological Survey and Public Health England. The probability result is only valid for properties above ground. All basement and cellar areas are considered to be at additional risk from high radon levels. If an underground room such as a cellar or basement makes up part of the living or working accommodation, the property should be tested regardless of Radon Affected Area status.

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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	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			1	3
Prosecutions					
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 2		2		5
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 3		Yes		
Pollution Incidents to Controlled Waters	pg 3			6	10
Historical Prosecutions					
Registered Radioactive Substances					
Substantiated Pollution Incident Register					
Water Abstractions	pg 6				(*3)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 6	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					
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 NGD Water Network Links	pg 7		2	25	28
Water Framework Directive - Catchment	pg 13	Yes			
Water Framework Directive - Groundwater	pg 13	Yes		Yes	
Water Framework Directive - Surface Waters	pg 14			Yes	

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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 15				1
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 15				1
Potentially Infilled Land (Water)	pg 15		11	18	58
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Waste Exemption Permits	pg 19			3	5
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 21	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 21	Yes	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			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	pg 22	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 22	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 22	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 22	Yes		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 23	20	15	24	104
Fuel Station Entries	pg 37				2
Points of Interest - Commercial Services	pg 37	16	13	8	49
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 44	5	5	4	10
Points of Interest - Public Infrastructure	pg 46			4	8
Points of Interest - Recreational and Environmental	pg 47				13
Pollution Inventory					
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 49	1		2	3
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7NW (E)	0	1	383800 386013
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A7NW (SW)	0	1	383650 386013
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A11SW (E)	60	1	383950 386050
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A11SW (NE)	157	1	383950 386250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11NW (N)	257	1	383800 386400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A6SE (S)	281	1	383500 385650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A10SW (NW)	284	1	383250 386300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A7SE (SE)	291	1	384000 385650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7SE (SE)	330	1	384000 385600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11NE (NE)	407	1	384000 386500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7NE (E)	443	1	384300 385850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7SE (SE)	460	1	384000 385450
1	**Discharge Consents** Operator: B I Appleton (Sales) Ltd Property Type: Undefined Or Other Location: Bi Appleton'S Workshop Swo Styal Road, Heald Green, Cheadle, Cheshire Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016991198 Permit Version: 1 Effective Date: 4th November 1987 Issued Date: Not Supplied Revocation Date: 1st July 1991 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Gatley Brook **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A11SE (NE)	377	2	384200 386300
2	**Discharge Consents** Operator: Manchester Airport Plc Property Type: AIR TRANSPORT/AIRPORT Location: Manchester Airport: Site Drainage And Containment System, Olympic House, Off The Domestic Approach Road, Manchester, M90 1qx Authority: Environment Agency, North West Region Catchment Area: Bollin Reference: Eprcb3299en Permit Version: 2 Effective Date: 15th February 2019 Issued Date: 15th February 2019 Revocation Date: Not Supplied Discharge Type: Trade Effluent Discharge-Site Drainage Discharge Environment: Freshwater Stream/River Receiving Water: River Bollin & Nearby Tribs **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A2NE (S)	769	2	383310 385194

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	**Discharge Consents** Operator: Manchester Airport Plc Property Type: AIR TRANSPORT/AIRPORT Location: Manchester Airport: Site Drainage And Containment System, Olympic House, Off The Domestic Approach Road, Manchester, M90 1qx Authority: Environment Agency, North West Region Catchment Area: Bollin Reference: Eprcb3299en Permit Version: 1 Effective Date: 16th November 2015 Issued Date: 30th October 2015 Revocation Date: 14th February 2019 Discharge Type: Trade Effluent Discharge-Site Drainage Discharge Environment: Freshwater Stream/River Receiving Water: River Bollin & Nearby Tribs **Status: New issued under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A2NE (S)	769	2	383310 385194
3	**Discharge Consents** Operator: Frank Matthews & Sons (Styal) Lt Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Boundary Farm, Styal Road, Moss Nook, Manchester, M22 5ya Authority: Environment Agency, North West Region Catchment Area: Bollin Reference: 0171/1368 Permit Version: 1 Effective Date: 18th May 1971 Issued Date: 18th May 1971 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Trib Of Bagulay Brook **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	A3SW (S)	979	2	383790 384888
4	**Local Authority Pollution Prevention and Controls** Name: Quicks Of Manchester Airport Location: Ringway Industrial Estate, Shadowmoss Road, Ringway, Manchester, M22 5lh Authority: Manchester City Council, Environmental Health Department Permit Reference: 87/96 Dated: 1st June 1996 Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 10m	A6NE (SW)	91	3	383493 385847
5	**Local Authority Pollution Prevention and Controls** Name: Lloyds Autobody Ringway Ltd Location: Unit 11 Ringway Trading Estate, Shadow Moss Road, MANCHESTER, M22 5LH Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/B/34/05/AW Dated: 23rd July 2001 Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A6NE (SW)	99	3	383434 385854
6	**Local Authority Pollution Prevention and Controls** Name: Styal Road Service Station Location: Styal Road, Wythenshawe, MANCHESTER, Lancashire, M22 5WB Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/PFS/RM/042/06 Dated: 22nd December 1998 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorised** Positional Accuracy: Automatically positioned to the address	A3NW (S)	613	3	383937 385268
7	**Local Authority Pollution Prevention and Controls** Name: Heald Green Dry Cleaners Location: 246 Finney Lane, Heald Green, Sk8 3qd Authority: Stockport Metropolitan Borough Council, Environmental Health Department, EEDD Permit Reference: PPC109 Dated: 4th October 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A8NW (E)	638	4	384527 385970

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Local Authority Pollution Prevention and Controls** Name: Esso Location: 238 Finney Lane, Heald Green, CHEADLE, Cheshire, SK8 3QD Authority: Stockport Metropolitan Borough Council, Environmental Health Department, EEDD Permit Reference: EPA088 Dated: 30th December 1998 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorisation revoked** Positional Accuracy: Automatically positioned to the address	A8NW (E)	663	4	384552 385973
8	**Local Authority Pollution Prevention and Controls** Name: Avis-Rent-A-Car Location: Woodhouse Lane, Off Ringway Road, MANCHESTER, M22 5PY Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/PFS/RM/007/06 Dated: 20th December 2001 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorised** Positional Accuracy: Located by supplier to within 10m	A1NE (SW)	987	3	382717 385241
8	**Local Authority Pollution Prevention and Controls** Name: Hertz Location: Woodhouse Lane, Off Ringway Road, Wythenshawe, MANCHESTER, M22 5PA Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/PFS/RM/046/06 Dated: 20th December 2001 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorised** Positional Accuracy: Located by supplier to within 10m	A1NE (SW)	987	3	382717 385241
	Nearest Surface Water Feature	A10SE (NW)	108	-	383383 386182
9	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Inert Suspended Solids Note: Tributary Gatley Bk Incident Date: 21st February 1995 Incident Reference: 95510363 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A10SW (NW)	254	2	383300 386300
10	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Not Given Note: Gatley Brook; None Pollution Found Incident Date: 7th June 1993 Incident Reference: 93511147 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11SE (E)	339	2	384200 386200
11	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Diesel (Including Agricultural) Note: Tributary Gatley Bk Incident Date: 2nd June 1995 Incident Reference: 95511302 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Accidental Spillage/Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A10NW (NW)	342	2	383300 386400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
12	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Other Oil Note: Tributary Gatley Brook; Cable Oil Incident Date: 6th May 1994 Incident Reference: 94510908 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Leaking Underground Pipe Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SW (SE)	379	2	383900 385500
13	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Tributary Gatley Brook Incident Date: 22nd September 1993 Incident Reference: 93511832 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (SE)	415	2	384000 385500
14	**Pollution Incidents to Controlled Waters** Property Type: WSC Sewage, Sewerage & Supply: Private Sewerage Systems Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Crude Sewage Note: Not Supplied Incident Date: 30th July 1999 Incident Reference: 30774 Catchment Area: River Mersey (Etherow) Receiving Water: River Stretch (Freshwater) Cause of Incident: Wrong Connection Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7NE (SE)	428	2	384200 385700
15	**Pollution Incidents to Controlled Waters** Property Type: Private Sewage (Non-PLC): Sewerage Systems Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Crude Sewage Note: Gatley Brook; Sewage Incident Date: 10th May 1996 Incident Reference: 96511011 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NE (NE)	503	2	384000 386600
16	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: Tributary River Mersey Incident Date: 29th August 1995 Incident Reference: 95512208 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A10NE (NW)	513	2	383400 386600
17	**Pollution Incidents to Controlled Waters** Property Type: Boats/Ships Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Natural Note: None Found Incident Date: 31st July 1994 Incident Reference: 94511744 Catchment Area: Sinderland Brook Receiving Water: Groundwater Cause of Incident: Algal Bloom Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A15SW (N)	638	2	383700 386800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: No Pollution Found Incident Date: 19th June 1996 Incident Reference: 96511341 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A15SE (NE)	698	2	384000 386800
19	**Pollution Incidents to Controlled Waters** Property Type: Private Sewage (Non-PLC): Sewerage Systems Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Crude Sewage Note: Tributary Gatley Brook Incident Date: 10th May 1995 Incident Reference: 95511087 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Wrong Connection Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NW (E)	781	2	384600 386395
19	**Pollution Incidents to Controlled Waters** Property Type: Connection To Surface Drains Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Unknown Sewage Note: Rosevale Park Incident Date: 22nd March 1993 Incident Reference: 93510577 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NW (E)	783	2	384600 386400
20	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Stream Through , Rose Vale Field, Off Brown Lane Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Unknown Note: Brown Colour Incident Date: 7th August 1998 Incident Reference: SO981427 Catchment Area: Mersey - Non-Tidal Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NW (NE)	822	2	384600 386495
20	**Pollution Incidents to Controlled Waters** Property Type: Connection To Surface Drains Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Other Sewage Note: Tributary Gatley Brk Incident Date: 18th August 1995 Incident Reference: 95512134 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Wrong Connection Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A12NW (NE)	824	2	384600 386500
21	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: Not Supplied Incident Date: 25th April 1996 Incident Reference: 96510889 Catchment Area: Mersey - Non-Tidal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A16SW (NE)	859	2	384500 386700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	**Pollution Incidents to Controlled Waters** Property Type: Domestic/Residential Location: Park Rose Vale , WILMSLOW Authority: Environment Agency, North West Region Pollutant: Sewage - Wrong Connection Note: Dirty Grey Gooey Water; Culvert Incident Date: 29th September 1998 Incident Reference: SO981791 Catchment Area: Mersey - Non-Tidal Receiving Water: Freshwater Stream/River Cause of Incident: Wrong Connection Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NW (NE)	876	2	384600 386600
	Water Abstractions Operator: Robinsons Nurseries Limited Licence Number: Nw/069/0019/007 Permit Version: 1 Location: Borehole At Yew Tree Farm Authority: Environment Agency, North West Region Abstraction: Trickle 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: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 7th October 2022 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4SE (SE)	1474	2	384783 384763
	Water Abstractions Operator: Peter And William Robinson T/A W Robinson And Sons Licence Number: 2569015007 Permit Version: 101 Location: A Borehole At Yew Tree Farm, Heald Green, Cheshire Authority: Environment Agency, North West Region Abstraction: Horticulture And Nurseries: 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: Yew Tree Farm, Cheadle, Cheshire Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A4SE (SE)	1533	2	384800 384700
	Water Abstractions Operator: William Robinson & Sons Licence Number: 2569015007 Permit Version: 100 Location: A Borehole At Yew Tree Farm, Heald Green, Cheshire Authority: Environment Agency, North West Region Abstraction: Horticulture And Nurseries: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 91 Yearly Rate (m3): 16366 Details: Yew Tree Farm, Cheadle, Cheshire Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st December 1996 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A4SE (SE)	1533	2	384800 384700
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Low Vulnerability Combined Vulnerability: Low Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: <40% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: Low	A7NW (S)	0	2	383650 386000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Low Vulnerability Combined Vulnerability: Low Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: <40% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	A7NW (SW)	0	2	383650 386013
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - B	A7NW (SW)	0	2	383650 386013
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	A7NW (SW)	0	2	383650 386013
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
23	**OS NGD Water Network Links** Description: Watercourse Length: 97.837 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A10SE (NW)	108	5	383383 386182
24	**OS NGD Water Network Links** Description: Watercourse Length: 151.958 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A10SE (NW)	116	5	383394 386195
25	**OS NGD Water Network Links** Description: Watercourse Length: 42.566 Physical Level: Surface level Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A11SE (NE)	254	5	384098 386228
26	**OS NGD Water Network Links** Description: Watercourse Length: 7.617 Physical Level: Underground Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A11SE (NE)	254	5	384098 386230

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
27	**OS NGD Water Network Links** Description: Watercourse Length: 9.26 Physical Level: Surface level Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A11SE (NE)	258	5	384096 386240
28	**OS NGD Water Network Links** Description: Watercourse Length: 29.137 Physical Level: Underground Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A11SE (NE)	262	5	384099 386245
29	**OS NGD Water Network Links** Description: Watercourse Length: 73.069 Physical Level: Underground Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A11SE (E)	272	5	384129 386202
30	**OS NGD Water Network Links** Description: Drain Length: 59.753 Physical Level: Surface level Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A7NE (SE)	289	5	384099 385804
31	**OS NGD Water Network Links** Description: Drain Length: 19.96 Physical Level: Underground Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A7NE (E)	290	5	384125 385843
32	**OS NGD Water Network Links** Description: Drain Length: 23.32 Physical Level: Surface level Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A7NE (E)	290	5	384135 385859
33	**OS NGD Water Network Links** Description: Drain Length: 44.702 Physical Level: Underground Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A7NE (E)	291	5	384147 385880
34	**OS NGD Water Network Links** Description: Watercourse Length: 517.533 Physical Level: Surface level Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A11SE (NE)	291	5	384126 386255
35	**OS NGD Water Network Links** Description: Watercourse Length: 1.651 Physical Level: Surface level Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A7NE (E)	315	5	384184 385905

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
36	**OS NGD Water Network Links** Description: Watercourse Length: 106.426 Physical Level: Surface level Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A7NE (E)	315	5	384184 385905
37	**OS NGD Water Network Links** Description: Drain Length: 73.42 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (E)	315	5	384180 385891
38	**OS NGD Water Network Links** Description: Watercourse Length: 135.86 Physical Level: Surface level Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A11SE (E)	323	5	384191 386166
39	**OS NGD Water Network Links** Description: Watercourse Length: 57.635 Physical Level: Underground Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A7NE (E)	325	5	384215 385981
40	**OS NGD Water Network Links** Description: Drain Length: 9.61 Physical Level: Underground Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (E)	368	5	384222 385857
41	**OS NGD Water Network Links** Description: Drain Length: 62.65 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (E)	378	5	384231 385854
42	**OS NGD Water Network Links** Description: Drain Length: 96.101 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A10NE (NW)	408	5	383449 386496
43	**OS NGD Water Network Links** Description: Drain Length: 2.497 Physical Level: Underground Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (E)	438	5	384280 385817
44	**OS NGD Water Network Links** Description: Drain Length: 20.03 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (E)	440	5	384282 385816

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
45	**OS NGD Water Network Links** Description: Drain Length: 115.891 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A10NE (N)	452	5	383502 386566
46	**OS NGD Water Network Links** Description: Drain Length: 82.169 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A10NE (N)	452	5	383502 386566
47	**OS NGD Water Network Links** Description: Drain Length: 88.402 Physical Level: Underground Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (E)	457	5	384291 385798
48	**OS NGD Water Network Links** Description: Drain Length: 263.227 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (E)	485	5	384377 386020
49	**OS NGD Water Network Links** Description: Drain Length: 266.436 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (E)	494	5	384386 386018
50	**OS NGD Water Network Links** Description: Drain Length: 101.765 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A10NE (N)	529	5	383495 386648
51	**OS NGD Water Network Links** Description: Drain Length: 5.175 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A10NE (N)	529	5	383495 386648
52	**OS NGD Water Network Links** Description: Drain Length: 152.189 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NW (SE)	533	5	384336 385722
53	**OS NGD Water Network Links** Description: Drain Length: 26.639 Physical Level: Underground Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (E)	568	5	384415 386280

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
54	**OS NGD Water Network Links** Description: Drain Length: 27.05 Physical Level: Underground Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (E)	577	5	384424 386282
55	**OS NGD Water Network Links** Description: Drain Length: 245.003 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (E)	580	5	384419 386306
56	**OS NGD Water Network Links** Description: Drain Length: 224.514 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (E)	589	5	384428 386309
57	**OS NGD Water Network Links** Description: Watercourse Length: 7.238 Physical Level: Underground Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A15SE (NE)	607	5	384010 386704
58	**OS NGD Water Network Links** Description: Drain Length: 56.158 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A10NW (NW)	610	5	383017 386529
59	**OS NGD Water Network Links** Description: Watercourse Length: 4.061 Physical Level: Surface level Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A15SE (NE)	613	5	384014 386710
60	**OS NGD Water Network Links** Description: Watercourse Length: 74.345 Physical Level: Underground Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A15SE (NE)	617	5	384016 386714
61	**OS NGD Water Network Links** Description: Still water Length: 7.855 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A10NW (NW)	630	5	383043 386578
62	**OS NGD Water Network Links** Description: Watercourse Length: 5.636 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A10NW (NW)	634	5	383046 386585

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
63	**OS NGD Water Network Links** Description: Drain Length: 141.811 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (SE)	651	5	384392 385584
64	**OS NGD Water Network Links** Description: Watercourse Length: 237.863 Physical Level: Surface level Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A15SE (NE)	684	5	383998 386786
65	**OS NGD Water Network Links** Description: Drain Length: 215.338 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 2	A5SE (SW)	742	5	382746 385589
66	**OS NGD Water Network Links** Description: Watercourse Length: 84.471 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (N)	767	5	383429 386878
67	**OS NGD Water Network Links** Description: Drain Length: 22.969 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (N)	850	5	383416 386961
68	**OS NGD Water Network Links** Description: Watercourse Length: 10.851 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (N)	850	5	383416 386961
69	**OS NGD Water Network Links** Description: Watercourse Length: 309.341 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (NE)	863	5	384630 386524
70	**OS NGD Water Network Links** Description: Drain Length: 17.439 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A5SE (SW)	864	5	382723 385411
71	**OS NGD Water Network Links** Description: Watercourse Length: 341.337 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A16SW (NE)	887	5	384477 386762

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
72	**OS NGD Water Network Links** Description: Watercourse Length: 7.777 Physical Level: Underground Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A16SW (NE)	887	5	384481 386759
73	**OS NGD Water Network Links** Description: Watercourse Length: 3.802 Physical Level: Underground Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A15SE (N)	894	5	384051 386989
74	**OS NGD Water Network Links** Description: Watercourse Length: 664.164 Physical Level: Surface level Permanence: Permanent Feature Name: Gatley Brook Catchment Name: Mersey Primacy: 1	A15SE (N)	898	5	384051 386993
75	**OS NGD Water Network Links** Description: Drain Length: 54.732 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A4NW (SE)	946	5	384516 385243
76	**OS NGD Water Network Links** Description: Drain Length: 251.545 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NE (N)	993	5	383324 387079
77	**OS NGD Water Network Links** Description: Drain Length: 15.706 Physical Level: Surface level Permanence: Permanent Feature Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NE (N)	998	5	383356 387098
	Water Framework Directive - Catchment Class Code: River Catchment WaterBody Name: Mersey (upstream of Manchester Ship Canal) WaterBody ID: GB112069061030 Operational Catchment: Bollin Dean Mersey Upper Management Catchment: Mersey Upper Catchment Name: Upper Mersey	A7NW (E)	0	2	383670 386013
	Water Framework Directive - Catchment Class Code: River Catchment WaterBody Name: Sinderland Brook (Fairywell Bk and Baguley Bk) WaterBody ID: GB112069061270 Operational Catchment: Bollin Dean Mersey Upper Management Catchment: Mersey Upper Catchment Name: Upper Mersey	A7NW (SW)	0	2	383650 386013
	Water Framework Directive - Groundwater Waterbody Name: Weaver and Dane Quaternary Sand and Gravel Aquifers Waterbody ID: GB41202G991700 URL Address: https://environment.data.gov.uk/catchment-planning/WaterBody/GB41202G991700 Overall Rating: Poor Chemical Rating: Poor Quantitative Measure: Good Year: 2019	A7NW (SW)	0	2	383650 386013

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Framework Directive - Groundwater Waterbody Name: Manchester and East Cheshire Permo-Triassic Sandstone Aquifers Waterbody ID: GB41201G101100 URL Address: https://environment.data.gov.uk/catchment-planning/WaterBody/GB41201G101100 Overall Rating: Poor Chemical Rating: Poor Quantitative Measure: Poor Year: 2019	A11SE (E)	255	2	384143 386079
	Water Framework Directive - Surface Waters Class Code: River Waterbody Name: Mersey (Upstream Of Manchester Ship Canal) Waterbody ID: GB112069061030 URL Address: Not Supplied Overall Rating: Not Assessed Chemical Rating: Not Assessed Classification Year: 2022	A11SE (NE)	254	2	384099 386227

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
78	**Historical Landfill Sites** Licence Holder: Not Supplied Location: Greater Manchester Name: Airport Woodhouse Park Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD16964 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: F054	A6SW (SW)	596	2	383212 385397
	Local Authority Landfill Coverage Name: Manchester City Council - Had landfill data but passed it to the relevant environment agency		0	6	383650 386013
	Local Authority Landfill Coverage Name: Stockport Metropolitian Borough Council - Has not been able to supply Landfill data		254	4	384098 386229
	Local Authority Landfill Coverage Name: Macclesfield Borough Council - Has not been able to supply Landfill data		924	7	383686 384943
	Local Authority Landfill Coverage Name: Cheshire County Council - Has supplied landfill data		924	8	383686 384943
79	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1996	A15NE (NE)	955	-	384131 387032
80	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A10SE (NW)	54	-	383449 386142
81	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A11SW (NE)	103	-	383912 386208
82	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A10SE (NW)	132	-	383460 386218
83	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A10SE (NW)	158	-	383488 386238
84	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A7NW (SE)	158	-	383958 385826
85	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A7NW (SE)	171	-	383949 385773
86	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A10SE (NW)	181	-	383542 386247
87	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A10SE (NW)	220	-	383522 386292
88	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A6NW (SW)	231	-	383207 385819
89	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A11NW (N)	233	-	383741 386392
90	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A6NW (SW)	242	-	383200 385811

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
91	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A10SE (N)	253	-	383522 386337
92	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1996	A11SE (NE)	255	-	384099 386228
93	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1899	A10NE (NW)	275	-	383415 386362
94	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1899	A7NE (SE)	302	-	384088 385760
95	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A6NW (SW)	317	-	383125 385785
96	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A10NE (N)	365	-	383609 386514
97	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A11SE (NE)	367	-	384207 386264
98	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A7NE (E)	371	-	384255 385950
99	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A7SW (SE)	388	-	383887 385488
100	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A7SW (SE)	393	-	383951 385501
101	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A10SW (W)	396	-	383058 386209
102	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A5NE (W)	428	-	382961 385898
103	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1899	A8NW (E)	450	-	384340 385990
104	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1899	A8NW (E)	479	-	384354 385900
105	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A10NW (NW)	480	-	383257 386532
106	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A6SE (S)	491	-	383519 385431
107	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A9SE (W)	493	-	382943 386191
108	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A6SE (S)	496	-	383581 385421
109	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12SW (E)	505	-	384373 386189
110	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A7SE (SE)	511	-	384269 385652
111	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A11NE (NE)	535	-	384211 386527

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
112	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1899	A7SE (SE)	537	-	384279 385612
113	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A10NW (NW)	613	-	383007 386522
114	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A14SW (NW)	618	-	383299 386691
115	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A3NE (SE)	621	-	384071 385305
116	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A15SW (N)	629	-	383839 386777
117	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A14SW (NW)	631	-	383268 386696
118	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A10NW (NW)	638	-	383034 386581
119	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8NW (E)	650	-	384509 385818
120	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A14SE (N)	674	-	383609 386829
121	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12SW (E)	695	-	384529 386341
122	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1899	A8NW (E)	695	-	384530 385747
123	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A3NE (SE)	701	-	384181 385274
124	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A9SE (W)	704	-	382737 386248
125	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12NW (E)	704	-	384528 386370
126	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1899	A12NW (NE)	716	-	384441 386547
127	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A2NE (S)	720	-	383547 385195
128	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A5NE (W)	721	-	382719 385688
129	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1899	A3NE (SE)	724	-	384222 385274
130	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A3NW (S)	728	-	383683 385149
131	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12SW (E)	738	-	384606 386220
132	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A3NW (S)	743	-	383735 385127

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
133	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A9NE (NW)	746	-	382906 386609
134	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1899	A8NW (E)	751	-	384583 385726
135	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A15SE (NE)	752	-	384250 386763
136	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A15SE (NE)	755	-	384291 386742
137	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A12NW (NE)	762	-	384400 386662
138	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A15SE (NE)	778	-	384067 386867
139	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A9NE (NW)	790	-	382911 386675
140	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A14SW (NW)	802	-	383070 386800
141	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A2NE (S)	833	-	383487 385091
142	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A14SE (N)	841	-	383623 386999
143	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A12SE (E)	853	-	384738 386140
144	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1899	A2NE (S)	860	-	383312 385100
145	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14SW (NW)	874	-	383092 386890
146	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A15SW (N)	877	-	383871 387022
147	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A13SE (NW)	881	-	382900 386785
148	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A4NW (SE)	882	-	384506 385331
149	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A14NE (N)	887	-	383513 387028
150	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14SW (NW)	891	-	383082 386905
151	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A2NW (SW)	906	-	383078 385115
152	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A15NW (N)	909	-	383901 387049
153	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A2NE (S)	911	-	383377 385031

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
154	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8SW (SE)	919	-	384645 385488
155	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A2NW (SW)	919	-	383092 385097
156	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A14SW (NW)	924	-	383071 386935
157	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A9NE (NW)	934	-	382646 386582
158	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A13SE (NW)	935	-	382765 386736
159	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8NE (E)	952	-	384837 385917
160	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A1NE (SW)	953	-	382736 385268
161	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A9SW (W)	958	-	382478 386281
162	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A12NE (E)	961	-	384769 386458
163	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1899	A12SE (E)	985	-	384875 386099
164	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A15NE (NE)	986	-	384211 387040
165	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A13SE (NW)	987	-	382797 386838
166	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A12SE (E)	997	-	384880 386161
167	**Waste Exemption Permits** Permit Reference: WEX396803 Exemption Category: Use Exemption Sub-Category: Use of waste in construction. Exemption Definition: The U1 exemption allows you to use suitable waste in construction as a recovery activity.	A7NE (E)	350	2	384216 385890
168	**Waste Exemption Permits** Permit Reference: WEX413340 Exemption Category: Treatment Exemption Sub-Category: Sort and denature controlled drugs for disposal. Exemption Definition: The T28 exemption allows pharmacies and similar places to denature controlled drugs to comply with Misuse of Drugs Regulations 2001.	A6NW (W)	404	2	382979 385960
169	**Waste Exemption Permits** Permit Reference: WEX341627 Exemption Category: Treatment Exemption Sub-Category: Sort and denature controlled drugs for disposal. Exemption Definition: The T28 exemption allows pharmacies and similar places to denature controlled drugs to comply with Misuse of Drugs Regulations 2001.	A7NE (E)	407	2	384247 385820
170	**Waste Exemption Permits** Permit Reference: WEX371877 Exemption Category: Disposal Exemption Sub-Category: Burning waste in the open. Exemption Definition: The D7 exemption allows you to burn plant tissue and untreated wood waste from joinery or manufacturing in the open air.	A8NW (E)	567	2	384441 385887

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
171	**Waste Exemption Permits** Permit Reference: WEX367434 Exemption Category: Treatment Exemption Sub-Category: Sort and denature controlled drugs for disposal. Exemption Definition: The T28 exemption allows pharmacies and similar places to denature controlled drugs to comply with Misuse of Drugs Regulations 2001.	A8NE (E)	792	2	384680 385949
172	**Waste Exemption Permits** Permit Reference: WEX414798 Exemption Category: Treatment Exemption Sub-Category: Sort and denature controlled drugs for disposal. Exemption Definition: The T28 exemption allows pharmacies and similar places to denature controlled drugs to comply with Misuse of Drugs Regulations 2001.	A8NE (E)	792	2	384680 385949
173	**Waste Exemption Permits** Permit Reference: WEX295956 Exemption Category: Treatment Exemption Sub-Category: Sort and denature controlled drugs for disposal. Exemption Definition: The T28 exemption allows pharmacies and similar places to denature controlled drugs to comply with Misuse of Drugs Regulations 2001.	A5NW (W)	875	2	382520 385828
174	**Waste Exemption Permits** Permit Reference: WEX393643 Exemption Category: Treatment Exemption Sub-Category: Sort and denature controlled drugs for disposal. Exemption Definition: The T28 exemption allows pharmacies and similar places to denature controlled drugs to comply with Misuse of Drugs Regulations 2001.	A5NW (W)	967	2	382429 385810

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Triassic Rocks (Undifferentiated)	A7NW (SW)	0	1	383650 386013
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	A7NW (SW)	0	1	383650 386013
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11SE (E)	85	1	383976 386037
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A6SE (SW)	408	1	383311 385549
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A15SW (N)	838	1	383650 387000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: <15 mg/kg	A5NW (W)	883	1	382500 386000
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A7NW (SW)	0	1	383650 386013
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A7NW (SW)	0	1	383650 386013
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A7NW (SW)	0	1	383650 386013
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A7NW (SW)	0	1	383650 386013
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A7NW (SW)	0	1	383650 386013
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A7NW (SW)	0	1	383650 386013
	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	A7NW (SW)	0	1	383650 386013
	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	A7NW (SW)	0	1	383650 386013

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
175	**Contemporary Trade Directory Entries** Name: Micromass Location: Atlas House, Atlas Park, Simonsway, Manchester, M22 5PP Classification: Scientific Apparatus & Instruments - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: Lupprians Cargo Express Ltd Location: Atlas House, Atlas Park, Simonsway, Manchester, M22 5PP Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: R I O Freight Ltd Location: Atlas House, Atlas Park, Simonsway, Manchester, Lancashire, M22 5PP Classification: Airfreight Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: Neuman & Esser Uk Location: Atlas House,Atlas Pk,Simonsway, Manchester, M22 5PP Classification: Oil & Gas Exploration Supplies & Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (E)	0	-	383780 386010
175	**Contemporary Trade Directory Entries** Name: H D Technologies Ltd Location: Atlas Ho,Atlas Park,Simonsway, Manchester, M22 5PP Classification: Scientific Apparatus & Instruments - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (E)	0	-	383780 386010
175	**Contemporary Trade Directory Entries** Name: P C Pumps & Equipment Ltd Location: Atlas House, Atlas Park, Simonsway, Manchester, Lancashire, M22 5PP Classification: Pumps - Sales, Servicing & Repairs **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: Triangle Shipping & Forwarding Services Location: Atlas House, Atlas Park, Simonsway, Manchester, Lancashire, M22 5PP Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: P M Logistics Location: Atlas House, Atlas Park, Simonsway, Manchester, Lancashire, M22 5PP Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: Uk Car Discount Location: Atlas House, Atlas Park, Simonsway, Manchester, Lancashire, M22 5PP Classification: Car Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: Automove Location: Atlas House, Atlas Park, Simonsway, Manchester, Lancashire, M22 5PP Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: Reisa Freight Location: Atlas House, Atlas Park, Simonsway, Manchester, Lancashire, M22 5PP Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: Logictrans Location: Atlas House, Atlas Park, Simonsway, Manchester, Lancashire, M22 5PP Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A11SW (E)	0	-	383785 386018

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
175	**Contemporary Trade Directory Entries** Name: Atlas Motor Services Location: Atlas House, Atlas Park, Simonsway, Manchester, M22 5PP Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: C T Transport Ltd Location: Atlas House, Atlas Park, Simonsway, Manchester, Lancashire, M22 5PP Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: Uk Car Discount Ltd Location: Atlas House, Atlas Park, Simonsway, Manchester, Lancashire, M22 5PP Classification: Car Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: Embassy Freight Location: Atlas House, Atlas Park, Simonsway, Manchester, Lancashire, M22 5PP Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: Reisa Freight Location: Atlas House, Atlas Park, Simonsway, Manchester, M22 5PP Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SW (E)	0	-	383785 386018
175	**Contemporary Trade Directory Entries** Name: Heald Green Garage Location: Pavillion,Atlas House,Atlas Pk,Simonsway, Manchester, Lancashire, M22 5PP Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A11SW (E)	0	-	383784 386018
175	**Contemporary Trade Directory Entries** Name: Freight Systems Location: Atlas House, Atlas Park, Simonsway, Manchester, M22 5PP Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SW (E)	0	-	383785 386018
176	**Contemporary Trade Directory Entries** Name: Professional Chauffeur Services Location: Atlas House Atlas Business Park,Simonsway, Manchester, Greater Manchester, M22 5PP Classification: Pest & Vermin Control **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A11SW (E)	0	-	383713 386021
177	**Contemporary Trade Directory Entries** Name: Nippon Express Uk Ltd Location: Unit 12, Ringway Trading Estate, MANCHESTER, M22 5LH Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6NE (W)	13	-	383419 385947
178	**Contemporary Trade Directory Entries** Name: Servisair Location: Atlantic House, Atlas Park, Simonsway, Manchester, M22 5PR Classification: Cargo Handling Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SW (N)	13	-	383680 386145
179	**Contemporary Trade Directory Entries** Name: Lloyds Autobody Location: Unit 11, Ringway Trading Estate, Manchester, M22 5LH Classification: Car Body Repairs **Status: Active** Positional Accuracy: Automatically positioned to the address	A6NE (SW)	76	-	383442 385876

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
180	**Contemporary Trade Directory Entries** Name: Graphicus Of Manchester Ltd Location: Unit 9, Ringway Trading Estate, Manchester, M22 5LH Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6NE (SW)	105	-	383386 385859
181	**Contemporary Trade Directory Entries** Name: Angel Car Removals Location: 2, Cornishway, Manchester, M22 0LD Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6NW (W)	131	-	383292 385875
182	**Contemporary Trade Directory Entries** Name: Cronin 24hr Breakdown Service Location: Chamber Hall Farm, Styal Road, Heald Green, Cheadle, SK8 3UA Classification: Car Breakdown & Recovery Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SE (NE)	140	-	383984 386197
183	**Contemporary Trade Directory Entries** Name: Airport Secure Parking Manchester Location: 66, Holliney Road, Manchester, M22 5JH Classification: Car Painters & Sprayers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SW (N)	173	-	383668 386331
184	**Contemporary Trade Directory Entries** Name: Yusen Air & Sea Service Ltd Location: Unit 2, Ringway Trading Estate, Manchester, M22 5LH Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6NE (SW)	184	-	383349 385787
184	**Contemporary Trade Directory Entries** Name: Snt Services Ltd Location: Unit 2, Ringway Trading Estate, Manchester, M22 5LH Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6NE (SW)	184	-	383349 385787
184	**Contemporary Trade Directory Entries** Name: Fourwoods Cargo Ltd Location: Unit 4, Ringway Trading Estate, Manchester, M22 5LH Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6NE (SW)	186	-	383375 385779
185	**Contemporary Trade Directory Entries** Name: Rubix Location: Dakota House, Concord Business Park, Threapwood Road, Manchester, M22 0RR Classification: Machine Tools - Manufacturers & Distributors **Status: Active** Positional Accuracy: Automatically positioned to the address	A10SW (W)	187	-	383232 386086
185	**Contemporary Trade Directory Entries** Name: Rubix Location: DAKOTA HOUSE, CONCORD BUSINESS PARK, THREAPWOOD ROAD, MANCHESTER, M22 0RR Classification: Engineers - General **Status: Active** Positional Accuracy: Automatically positioned to the address	A10SW (W)	187	-	383232 386086
185	**Contemporary Trade Directory Entries** Name: Rubix Location: DAKOTA HOUSE, CONCORD BUSINESS PARK, THREAPWOOD ROAD, MANCHESTER, M22 0RR Classification: Machine Tools - Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A10SW (W)	187	-	383232 386086
186	**Contemporary Trade Directory Entries** Name: Freight Systems (Uk) Ltd Location: 1 Simonsway, Manchester, Lancashire, M22 5PP Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A10SE (NW)	218	-	383516 386292

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
187	**Contemporary Trade Directory Entries** Name: Nova Innovene Uk Ltd Location: Caravelle Court, Concord Business Park, Threapwood Road, Manchester, M22 0NX Classification: Polythene & Plastic Sheeting Supplies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A10SW (W)	249	-	383177 386117
188	**Contemporary Trade Directory Entries** Name: Traffjet Carpet & Upholstery Cleaning Location: 24a, Pasture Field Road, Manchester, M22 5JU Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11NW (NE)	272	-	383886 386388
189	**Contemporary Trade Directory Entries** Name: Hockley International Ltd Location: Unit 3, Longstone Road, Manchester, M22 5LB Classification: Chemicals & Allied Products **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SE)	301	-	384119 385814
190	**Contemporary Trade Directory Entries** Name: Vans Direct Ltd Location: Yew Tree Cottage, Styal Road, Manchester, M22 5TJ Classification: Commercial Vehicle Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SW (SE)	321	-	383972 385592
191	**Contemporary Trade Directory Entries** Name: Auto-Mobile Location: 6, Cunningham Drive, Manchester, M22 5LT Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	322	-	384051 385658
192	**Contemporary Trade Directory Entries** Name: B I Appleton Ltd Location: 326, Styal Road, Heald Green, Cheadle, Cheshire, SK8 3UA Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SE (NE)	342	-	384162 386296
192	**Contemporary Trade Directory Entries** Name: B I Appleton Garage Ltd Location: 326, Styal Road, Heald Green, Cheadle, Cheshire, SK8 3UA Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A11SE (NE)	342	-	384162 386296
193	**Contemporary Trade Directory Entries** Name: Nordson Uk Ltd Location: Unit 10, Longstone Road, Manchester, M22 5LB Classification: Engineers - General **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (E)	381	-	384207 385804
194	**Contemporary Trade Directory Entries** Name: Moss Nook Car Sales Location: Styal Rd, Moss Nook, Manchester, M22 5WB Classification: Car Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SE)	391	-	384005 385530
194	**Contemporary Trade Directory Entries** Name: Skymart Worldwide Location: Trident Business Park,Styal Rd, Manchester, Lancashire, M22 5XB Classification: Airfreight Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SE)	394	-	384016 385534
195	**Contemporary Trade Directory Entries** Name: Endospine Kinectics Location: Aviator Way, Manchester, Lancashire, M22 5TG Classification: Medical Instruments - Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A10NW (NW)	401	-	383279 386456

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
196	**Contemporary Trade Directory Entries** Name: Pro Cleaners Woodhouse Park Location: 508, Portway, Manchester, M22 0LA Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6NW (W)	405	-	382979 385965
196	**Contemporary Trade Directory Entries** Name: Higginsons Hardware Location: 90, Cornishway, Manchester, M22 0JX Classification: Hardware **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6NW (W)	419	-	382965 385941
197	**Contemporary Trade Directory Entries** Name: Ingredion Uk Ltd Location: 333, Styal Road, Manchester, M22 5LW Classification: Food Products - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	442	-	384114 385550
197	**Contemporary Trade Directory Entries** Name: Ingredion Uk Ltd Location: 333, Styal Road, Manchester, M22 5LW Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	442	-	384114 385550
198	**Contemporary Trade Directory Entries** Name: Wepark Location: 3, Hazel Drive, MANCHESTER, M22 5LY Classification: Car Painters & Sprayers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	450	-	384201 385651
199	**Contemporary Trade Directory Entries** Name: Skyways Cargo Location: 5, Emerald Road, Manchester, M22 5WA Classification: Freight Forwarders **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SW (SE)	460	-	383975 385439
199	**Contemporary Trade Directory Entries** Name: Excel Cleaning Location: Styal Rd, Manchester, Lancashire, M22 5XB Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SE)	494	-	384016 385420
200	**Contemporary Trade Directory Entries** Name: Spiralto Ltd Location: 199, Peel Hall Road, Manchester, M22 5HJ Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11NW (N)	464	-	383646 386622
200	**Contemporary Trade Directory Entries** Name: Airport Minicoaches Location: 197, Peel Hall Road, Manchester, M22 5HJ Classification: Bus & Coach Operators & Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11NW (N)	471	-	383645 386629
201	**Contemporary Trade Directory Entries** Name: Heald Green M O T Location: Station Approach, Finney Lane, Heald Green, Cheadle, SK8 3QH Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	465	-	384321 385841
202	**Contemporary Trade Directory Entries** Name: Colin Buxton & Sons Location: Station Approach, Finney Lane, Heald Green, Cheadle, Cheshire, SK8 3QH Classification: Dairies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (E)	479	-	384305 385777
203	**Contemporary Trade Directory Entries** Name: S M Freight Services Ltd Location: Trenchard Dr, Manchester, M22 5NA Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7SW (S)	482	-	383889 385392

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
203	**Contemporary Trade Directory Entries** Name: L S Express Ltd Location: Moss Nook House, 6-8, Trenchard Drive, Manchester, M22 5NA Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SW (S)	528	-	383888 385346
203	**Contemporary Trade Directory Entries** Name: Eprint Digital Ltd Location: 6 Trenchard Drive, Manchester, Greater Manchester, M22 5NA Classification: Office Furniture & Equipment **Status: Active** Positional Accuracy: Manually positioned to the address or location	A7SW (S)	529	-	383892 385345
203	**Contemporary Trade Directory Entries** Name: Minuteman Press Location: Stable Cottage,Trenchard Dr, Manchester, Lancashire, M22 5NA Classification: Printers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A7SW (S)	537	-	383911 385340
204	**Contemporary Trade Directory Entries** Name: The Tyre People Limited Location: Unit 3, Cornishway Industrial Estate, Manchester, M22 0WT Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	490	-	382894 385957
204	**Contemporary Trade Directory Entries** Name: City Air Express (Northern) Ltd Location: Aviation House, Austell Road, Manchester, M22 0WN Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	490	-	382894 385941
205	**Contemporary Trade Directory Entries** Name: M D Gas Services Location: Wynfield Avenue, Manchester, Greater Manchester, M22 5NE Classification: Boilers - Servicing, Replacements & Repairs **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A6SE (S)	511	-	383623 385390
206	**Contemporary Trade Directory Entries** Name: Country Car Parks Ltd Location: 16, Ringway Road, Manchester, M22 5ND Classification: Car Painters & Sprayers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SW (S)	518	-	383742 385353
207	**Contemporary Trade Directory Entries** Name: Gaswerx Location: 17, Carsdale Road, Manchester, M22 0HQ Classification: Boilers - Servicing, Replacements & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	519	-	383076 385550
208	**Contemporary Trade Directory Entries** Name: Chiesi Location: 333, Styal Road, Manchester, M22 5LG Classification: Chemists' & Pharmacists' Suppliers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	520	-	384238 385578
209	**Contemporary Trade Directory Entries** Name: N N R Global Logistics Location: HALE HOUSE, 337, STYAL ROAD, MANCHESTER, M22 5LW Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	533	-	384210 385519
210	**Contemporary Trade Directory Entries** Name: Premier Contract Furniture Location: 35, Lomond Road, Manchester, M22 5JA Classification: Furniture - Repairing & Restoring **Status: Active** Positional Accuracy: Automatically positioned to the address	A11NW (N)	545	-	383851 386687
211	**Contemporary Trade Directory Entries** Name: Trans Eastern Freight Location: Trident One, Styal Road, Manchester, Lancashire, M22 5XB Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A7SE (SE)	558	-	384166 385440

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
211	**Contemporary Trade Directory Entries** Name: Renold Plc Location: Trident Business Park, Styal Road, Manchester, M22 5XB Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	558	-	384166 385440
211	**Contemporary Trade Directory Entries** Name: Hecny Transportation (Uk) Ltd Location: Trident One, Styal Road, Manchester, M22 5XB Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	558	-	384166 385440
211	**Contemporary Trade Directory Entries** Name: Transpoint International Uk Ltd Location: Trident Business Park, Styal Road, MANCHESTER, M22 5XB Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	558	-	384166 385440
211	**Contemporary Trade Directory Entries** Name: Excel Cleaning Location: Trident One Styal rd, Manchester, Lancashire, M22 5XB Classification: Cleaning Services - Domestic **Status: Active** Positional Accuracy: Manually positioned to the address or location	A7SE (SE)	558	-	384166 385440
211	**Contemporary Trade Directory Entries** Name: Bsc Essex Freight Ltd Location: Trident One,Styal Rd, Manchester, Lancashire, M22 5XB Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A7SE (SE)	558	-	384166 385440
211	**Contemporary Trade Directory Entries** Name: Renold Plc Location: Trident Two,Styal Road, Manchester, Greater Manchester, M22 5XB Classification: Power Transmission Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	561	-	384160 385432
211	**Contemporary Trade Directory Entries** Name: M P M Location: Trident Three,Styal Road, Manchester, Greater Manchester, M22 5XB Classification: Pet Foods & Animal Feeds **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	561	-	384160 385432
211	**Contemporary Trade Directory Entries** Name: M P M Products Location: TRIDENT 3, STYAL ROAD, MANCHESTER, M22 5XB Classification: Pet Foods & Animal Feeds **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	561	-	384160 385432
211	**Contemporary Trade Directory Entries** Name: Landis & Gyr Location: TRIDENT 1, STYAL ROAD, MANCHESTER, M22 5XB Classification: Meter Manufacturers & Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	581	-	384156 385404
212	**Contemporary Trade Directory Entries** Name: Sosha Cleaning Location: Portway, Manchester, Lancashire, M22 0EJ Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A9SE (W)	571	-	382909 386303
213	**Contemporary Trade Directory Entries** Name: All Style Gates Location: 21, Lambourne Close, Manchester, M22 1HS Classification: Gate Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	581	-	382925 385612
214	**Contemporary Trade Directory Entries** Name: Tubs & Loos Home Centre Location: 258, Finney Lane, Heald Green, Cheadle, Cheshire, SK8 3QD Classification: Hardware **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A8NW (E)	592	-	384481 385970

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
214	**Contemporary Trade Directory Entries** Name: Flightdeck Ltd Location: 252a, Finney Lane, Heald Green, Cheadle, Cheshire, SK8 3QD Classification: Radio Communication Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	609	-	384497 385967
214	**Contemporary Trade Directory Entries** Name: Heald Green Location: 246, Finney Lane, Heald Green, Cheadle, Cheshire, SK8 3QD Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	638	-	384527 385970
214	**Contemporary Trade Directory Entries** Name: Heald Green Service Station Location: Petrol Station, 238, Finney Lane, Heald Green, Cheadle, Cheshire, SK8 3QD Classification: Petrol Filling Stations - 24 Hour **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	663	-	384552 385973
215	**Contemporary Trade Directory Entries** Name: Carpet Cleaning Services Location: 20, Elmsleigh Road, Heald Green, Cheadle, Cheshire, SK8 3UE Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11NE (NE)	593	-	384313 386510
216	**Contemporary Trade Directory Entries** Name: Daves Location: 130, Cornishway, Manchester, M22 0WY Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	595	-	382789 385943
217	**Contemporary Trade Directory Entries** Name: Kintetsu World Express Uk Ltd Location: Gateway House, Styal Road, Manchester, M22 5WY Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	598	-	384103 385348
217	**Contemporary Trade Directory Entries** Name: Sheraton International Shipping Ltd Location: Gateway House,Styal Road, Manchester, Greater Manchester, M22 5WY Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	598	-	384103 385348
217	**Contemporary Trade Directory Entries** Name: Castle Chemicals Location: Gateway House, Styal Road, MANCHESTER, M22 5WY Classification: Chemicals & Allied Products **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	598	-	384103 385348
218	**Contemporary Trade Directory Entries** Name: The Ironing Suite Location: 28, Litherland Avenue, Manchester, M22 5LD Classification: Ironing & Home Laundry Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A10NE (NW)	601	-	383343 386682
219	**Contemporary Trade Directory Entries** Name: Clean-Well Location: 1, Portrush Road, Manchester, M22 5QP Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A10NW (NW)	602	-	383170 386626
219	**Contemporary Trade Directory Entries** Name: Capture Location: 8, Glenarm Walk, Manchester, M22 5GW Classification: Photo & Digital Imaging Bureaus **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A10NW (NW)	636	-	383130 386644
220	**Contemporary Trade Directory Entries** Name: Styal Road Service Station Location: Styal Road, Manchester, M22 5WX Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NW (S)	611	-	383939 385271

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
220	**Contemporary Trade Directory Entries** Name: Shell Styal Road Service Station Location: Styal Road, Manchester, M22 5WX Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	A3NW (S)	611	-	383939 385271
220	**Contemporary Trade Directory Entries** Name: Styal Road Service Station Location: Styal Road Service Station, Styal Road, Manchester, M22 5WX Classification: Petrol Filling Stations - 24 Hour **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NW (S)	613	-	383937 385268
220	**Contemporary Trade Directory Entries** Name: Total Location: Styal Road, Manchester, M22 5WX Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NW (S)	613	-	383937 385268
220	**Contemporary Trade Directory Entries** Name: Styal Car Centre Location: Styal Road Service Station, Styal Road, Manchester, Lancashire, M22 5WX Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NW (S)	613	-	383937 385268
220	**Contemporary Trade Directory Entries** Name: Total Convenience Stores Location: Styal Road, Manchester, Lancashire, M22 5WX Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NW (S)	613	-	383937 385268
221	**Contemporary Trade Directory Entries** Name: All Style Gates Location: 20, Lambourne Close, MANCHESTER, M22 1HS Classification: Gate Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	627	-	382903 385565
222	**Contemporary Trade Directory Entries** Name: U T C Uk Ltd Location: Suite 15f Manchester International Office Centre Styal rd, Manchester, Greater Manchester, M22 5WB Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A3NE (SE)	677	-	384101 385257
222	**Contemporary Trade Directory Entries** Name: Servest Location: 15c Manchester International Office Centre,Styal Road, Manchester, Greater Manchester, M22 5WB Classification: Mechanical Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	680	-	384103 385255
222	**Contemporary Trade Directory Entries** Name: U T C Overseas Location: Suite 15f Building M I O C, Styal Road, Manchester, Lancashire, M22 5WB Classification: Airfreight Services **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A3NE (SE)	687	-	384147 385270
222	**Contemporary Trade Directory Entries** Name: T G E Location: Suite 2a M I O C,Styal Road, Manchester, Greater Manchester, M22 5WB Classification: Oil & Gas Extraction **Status: Active** Positional Accuracy: Manually positioned to the address or location	A3NE (SE)	687	-	384147 385270
222	**Contemporary Trade Directory Entries** Name: Phoenix International Freight Services Ltd Location: Manchester International Office Centre, Styal Road, Manchester, Lancashire, M22 5WB Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A3NE (SE)	687	-	384147 385270

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
222	**Contemporary Trade Directory Entries** Name: Cct International Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A3NE (SE)	687	-	384147 385270
222	**Contemporary Trade Directory Entries** Name: Seko Logistics Location: Manchester International Office Centre,Styal Road, Manchester, Greater Manchester, M22 5WB Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384146 385269
222	**Contemporary Trade Directory Entries** Name: Horizon International Cargo Location: Suite 2f, Manchester International Office Centre, Styal Road, Manchester, M22 5WB Classification: Cargo Handling Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384146 385269
222	**Contemporary Trade Directory Entries** Name: Active Payments Location: 3d Manchester International Office Centre, Styal Road, Manchester, M22 5WB Classification: Cash Registers & Check-Out Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384146 385269
222	**Contemporary Trade Directory Entries** Name: Flash V-One Location: Managers Office, Styal Road, Manchester, M22 5WB Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384147 385270
222	**Contemporary Trade Directory Entries** Name: B D P Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Classification: Freight Forwarders **Status: Active** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384146 385269
222	**Contemporary Trade Directory Entries** Name: C H Robinson Europe Ltd Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384147 385270
222	**Contemporary Trade Directory Entries** Name: Loksys International Location: 15e Manchester International Office Centre,Styal Road, Manchester, Greater Manchester, M22 5WB Classification: Road Haulage Services **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A3NE (SE)	688	-	384146 385269
222	**Contemporary Trade Directory Entries** Name: Oce Uk Ltd Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Classification: Copying & Duplicating Machines & Supplies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384147 385270
222	**Contemporary Trade Directory Entries** Name: Active Payments Location: Suite 3, Manchester International Office Centre, Styal Road, Manchester, M22 5WB Classification: Cash Registers & Check-Out Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384146 385269
222	**Contemporary Trade Directory Entries** Name: Aramex Location: Suite 11c, Manchester International Office Centre, Styal Road, Manchester, M22 5WB Classification: Freight Forwarders **Status: Active** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384146 385269

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
222	**Contemporary Trade Directory Entries** Name: Jas Forwarding Uk Ltd Location: Manchester International Office Centre, Styal Road, Manchester, Lancashire, M22 5WB Classification: Freight Forwarders **Status:** **Active** Positional Accuracy: Manually positioned to the address or location	A3NE (SE)	688	-	384147 385270
222	**Contemporary Trade Directory Entries** Name: Franke Location: SUITE 1, MANCHESTER INTERNATIONAL OFFICE CENTRE, STYAL ROAD, MANCHESTER, M22 5WB Classification: Kitchen Furniture Manufacturers **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384146 385269
222	**Contemporary Trade Directory Entries** Name: U Cargo Location: 15aii Manchester International Office Centre,Styal Road, Manchester, Greater Manchester, M22 5WB Classification: Freight Forwarders **Status:** **Active** Positional Accuracy: Manually positioned to the address or location	A3NE (SE)	688	-	384146 385269
222	**Contemporary Trade Directory Entries** Name: Trioplast Location: Manchester International Office Centre,Styal Rd, Manchester, Lancashire, M22 5WB Classification: Plastic Products - Manufacturers **Status:** **Inactive** Positional Accuracy: Manually positioned to the address or location	A3NE (SE)	688	-	384146 385269
222	**Contemporary Trade Directory Entries** Name: W T A Location: SUITE 3E, MANCHESTER INTERNATIONAL OFFICE CENTRE, STYAL ROAD, MANCHESTER, M22 5WB Classification: Road Haulage Services **Status:** **Active** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384146 385269
222	**Contemporary Trade Directory Entries** Name: World Transport Agency Location: SUITE 3E, MANCHESTER INTERNATIONAL OFFICE CENTRE, STYAL ROAD, MANCHESTER, M22 5WB Classification: Freight Forwarders **Status:** **Active** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384146 385269
222	**Contemporary Trade Directory Entries** Name: Sterecycle Location: Manchester International Office Centre, Styal Road, Manchester, Lancashire, M22 5WB Classification: Waste Disposal Services **Status:** **Inactive** Positional Accuracy: Manually positioned to the address or location	A3NE (SE)	688	-	384147 385270
222	**Contemporary Trade Directory Entries** Name: Embassy Freight Services Uk Ltd Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Classification: Freight Forwarders **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384147 385270
222	**Contemporary Trade Directory Entries** Name: R I F Worldwide Plc Location: 3g Manchester International Office Centre, Styal Road, Manchester, M22 5WB Classification: Freight Forwarders **Status:** **Active** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	688	-	384146 385269
223	**Contemporary Trade Directory Entries** Name: P M Radiators Location: 66, Calve Croft Road, Manchester, M22 5EU Classification: Car Radiator Servicing & Repairs **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (N)	678	-	383467 386797
224	**Contemporary Trade Directory Entries** Name: Appliance Repair Centre Location: 47, Thornsgreen Road, Manchester, M22 1QH Classification: Domestic Appliances - Servicing, Repairs & Parts **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	691	-	382732 385738

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
225	**Contemporary Trade Directory Entries** Name: Sell Your Watch Location: Manchester Business Park,Aviator Way, Manchester, Greater Manchester, M22 5TG Classification: Clocks & Watches - Manufacturers & Wholesalers **Status: Active** Positional Accuracy: Manually positioned to the road within the address or location	A5SE (SW)	699	-	382883 385480
226	**Contemporary Trade Directory Entries** Name: New Look Wallpaper & Paint Ltd Location: 232, Finney Lane, Heald Green, Cheadle, Cheshire, SK8 3QA Classification: Wallpapers & Wall Coverings **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	712	-	384600 385954
227	**Contemporary Trade Directory Entries** Name: L A Advertising Location: 46, Outwood Drive, Heald Green, Cheadle, Cheshire, SK8 3QQ Classification: Digital Printing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	714	-	384561 385773
228	**Contemporary Trade Directory Entries** Name: Air Conditioning (Uk) Location: 10, The Oval, Heald Green, Cheadle, Cheshire, SK8 3JJ Classification: Air Conditioning Equipment & Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	715	-	384542 385721
229	**Contemporary Trade Directory Entries** Name: Costain Location: Costain House, 1500, Aviator Way, Manchester, M22 5TG Classification: Engineers - General **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	726	-	382779 385566
230	**Contemporary Trade Directory Entries** Name: Heald Green Location: Unit 3, Glass Court, Finney Lane, Heald Green, CHEADLE, Cheshire, SK8 3QA Classification: Pet Foods & Animal Feeds **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	760	-	384650 385973
230	**Contemporary Trade Directory Entries** Name: Wynors Village Saver Location: 212, FINNEY LANE, HEALD GREEN, CHEADLE, SK8 3QA Classification: Hardware **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NE (E)	781	-	384669 385949
231	**Contemporary Trade Directory Entries** Name: South Manchester Gate & Barrier Location: WILLOW BANK HOUSE, 2, BLEAK HEY ROAD, MANCHESTER, M22 5ES Classification: Gate Manufacturers - Automated **Status: Active** Positional Accuracy: Automatically positioned to the address	A15SW (N)	763	-	383646 386923
231	**Contemporary Trade Directory Entries** Name: S M Gb Location: Willow Bank House, 2, Bleak Hey Road, Manchester, M22 5ES Classification: Gate Manufacturers - Automated **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A15SW (N)	763	-	383646 386923
232	**Contemporary Trade Directory Entries** Name: K Wheeler Location: 163, Ashurst Road, Manchester, M22 5AU Classification: Lawnmowers & Garden Machinery - Sales & Service **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A15SW (N)	806	-	383806 386962
233	**Contemporary Trade Directory Entries** Name: C & S Lock & Safe Ltd Location: 8, Wilks Avenue, Manchester, M22 5ET Classification: Safes & Vaults - Suppliers & Installers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A15SW (N)	811	-	383722 386973

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
234	**Contemporary Trade Directory Entries** Name: Spanners Mobile Mechanic Location: 23, Leominster Drive, Manchester, M22 5DF Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (N)	813	-	383537 386958
235	**Contemporary Trade Directory Entries** Name: A C Cleaning Services Location: 9, Woodhouse Road, Manchester, M22 1PZ Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	815	-	382575 385864
236	**Contemporary Trade Directory Entries** Name: Cheap Ironing Services Location: 32, Motcombe Road, Heald Green, Cheadle, Cheshire, SK8 3TP Classification: Ironing & Home Laundry Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A16SW (NE)	838	-	384363 386792
237	**Contemporary Trade Directory Entries** Name: Cookerburra Oven Cleaning Services Location: 5, Wythens Road, Heald Green, Cheadle, SK8 3JH Classification: Oven cleaning **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SE (E)	868	-	384683 385663
238	**Contemporary Trade Directory Entries** Name: Pestop Environmental Ltd Location: 21, Lagan Walk, Manchester, M22 5WG Classification: Pest & Vermin Control **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (NW)	871	-	383080 386882
238	**Contemporary Trade Directory Entries** Name: Pestop Location: 21, Lagan Walk, Manchester, M22 5WG Classification: Pest & Vermin Control **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (NW)	871	-	383080 386882
239	**Contemporary Trade Directory Entries** Name: A Better Jetclean Location: 6, Didcot Road, Manchester, M22 1WB Classification: Steam Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (W)	969	-	382446 386215
240	**Contemporary Trade Directory Entries** Name: Yumapos Location: Manchester Business Park, Manchester, Greater Manchester, M22 5TG Classification: Cash Registers & Check-Out Equipment **Status: Active** Positional Accuracy: Manually positioned to the address or location	A5SW (W)	980	-	382468 385618
240	**Contemporary Trade Directory Entries** Name: Logwin Location: 3000 Aviator Way,Manchester Business Park, Manchester, Greater Manchester, M22 5TG Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382457 385637
240	**Contemporary Trade Directory Entries** Name: Rossi Automobili Location: 3000, Aviator Way, Manchester, M22 5TG Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382452 385650
240	**Contemporary Trade Directory Entries** Name: Design & Print By Jon Philips Ltd Location: 3000, Aviator Way, Manchester, M22 5TG Classification: Digital Printing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382452 385650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
240	**Contemporary Trade Directory Entries** Name: Greener Cleaning Co Location: 3000 Aviator Way, Manchester, Greater Manchester, M22 5TG Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382457 385637
240	**Contemporary Trade Directory Entries** Name: Santova Logistics Location: 3000, AVIATOR WAY, MANCHESTER, M22 5TG Classification: Freight Forwarders **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382457 385637
240	**Contemporary Trade Directory Entries** Name: Global Star Location: Ground Floor, 3000, Aviator Way, Manchester, M22 5TG Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382457 385637
240	**Contemporary Trade Directory Entries** Name: W J Kenyon Location: 3000, AVIATOR WAY, MANCHESTER, M22 5TG Classification: Refrigerators & Freezers - Servicing & Repairs **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382457 385637
240	**Contemporary Trade Directory Entries** Name: Lanier (Uk) Ltd Location: Aviator Way, Manchester, M22 5TG Classification: Photocopiers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382452 385650
240	**Contemporary Trade Directory Entries** Name: The Gruff Stuff Location: 3000 Aviator Way, Manchester, Greater Manchester, M22 5TG Classification: Cosmetic Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382457 385637
240	**Contemporary Trade Directory Entries** Name: A F S Global Ltd Location: 3000, AVIATOR WAY, MANCHESTER, M22 5TG Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382457 385637
240	**Contemporary Trade Directory Entries** Name: Mortuaryequipment.Net Location: 3000, AVIATOR WAY, MANCHESTER, M22 5TG Classification: Metal Products - Fabricated **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382457 385637
240	**Contemporary Trade Directory Entries** Name: Camida Ltd Location: 3000, AVIATOR WAY, MANCHESTER, M22 5TG Classification: Chemicals - Distributors & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382457 385637
240	**Contemporary Trade Directory Entries** Name: Skyport International Logistics Ltd Location: 3000, AVIATOR WAY, MANCHESTER, M22 5TG Classification: Airfreight Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382457 385637
240	**Contemporary Trade Directory Entries** Name: Amba Location: Manchester Business Park, Aviator Way, Manchester, M22 5TG Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382457 385637
240	**Contemporary Trade Directory Entries** Name: Lifetec Medical Location: 3000, Aviator Way, Manchester, M22 5TG Classification: Medical Equipment Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382452 385650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
240	**Contemporary Trade Directory Entries** Name: Dresser-Rand Location: 3000, Aviator Way, Manchester, M22 5TG Classification: Engineering Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382452 385650
240	**Contemporary Trade Directory Entries** Name: Globel Elite Traders Ltd Location: 3000, Aviator Way, Manchester, M22 5TG Classification: Oil Companies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SW (W)	984	-	382452 385650
241	**Contemporary Trade Directory Entries** Name: A S P Nationwide Ltd Location: Styal Road, MANCHESTER, M22 5YA Classification: Car Painters & Sprayers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3SW (S)	981	-	383793 384885
242	**Fuel Station Entries** Name: Styal Road Service Station Location: Styal Road West Ringway Road, Wythenshawe , Manchester, Greater Manchester, M22 5WX Brand: Shell Premises Type: Petrol Station **Status: Open** Positional Accuracy: Automatically positioned to the address	A3NW (S)	611	-	383939 385271
243	**Fuel Station Entries** Name: Heald Green Service Station Location: 238, Finney Lane , Heald Green , Cheadle, Greater Manchester, SK8 3QH Brand: Obsolete Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Automatically positioned to the address	A8NW (E)	663	-	384552 385973
244	**Points of Interest - Commercial Services** Name: Lupprians Cargo Express Ltd Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: J A S Forwarding Ltd Location: Atlas House, Atlas Pk, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7NW (E)	0	9	383780 386010
244	**Points of Interest - Commercial Services** Name: Select Euro Express Ltd Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: R J J Worldwide Ltd Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: Mapcargo (International) Ltd Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: C T Transport Ltd Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
244	**Points of Interest - Commercial Services** Name: Embassy Freight Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: Reisa Freight Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: P M Logistics Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: Atlas Motor Services Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: Embassy Freight Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: Automove Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: Reisa Freight Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: Embassy Freight Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: Lupprians Cargo Express Ltd Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
244	**Points of Interest - Commercial Services** Name: Freight Systems UK Ltd Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
245	**Points of Interest - Commercial Services** Name: Servisair Location: Atlantic House Atlas Park, Simonsway, Manchester, M22 5PR Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11SW (N)	13	9	383680 386145
246	**Points of Interest - Commercial Services** Name: Nippon Express UK Ltd Location: Unit 12 Ringway Trading Estate, Shadowmoss Road, Manchester, M22 5LH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6NE (W)	26	9	383431 385930

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
246	**Points of Interest - Commercial Services** Name: Lloyds Autobody Ltd Location: Unit 11, Ringway Trading Estate, Manchester, M22 5LH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A6NE (SW)	76	9	383442 385876
246	**Points of Interest - Commercial Services** Name: Nippon Express (UK) Ltd Location: Unit 8, Ringway Trading Estate, Manchester, M22 5LH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6NE (SW)	85	9	383377 385883
246	**Points of Interest - Commercial Services** Name: Pfe Express Location: Unit 8, Ringway Trading Estate, Manchester, M22 5LH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6NE (SW)	85	9	383377 385883
246	**Points of Interest - Commercial Services** Name: Lloyds Autobody Location: Unit 11 Ringway Trading Estate, Shadowmoss Road, Manchester, M22 5LH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A6NE (SW)	88	9	383455 385860
247	**Points of Interest - Commercial Services** Name: R J J Freight Location: Unit 9, Ringway Trading Estate, Manchester, M22 5LH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6NE (SW)	105	9	383386 385859
247	**Points of Interest - Commercial Services** Name: Aramex Location: Unit 10, Ringway Trading Estate, Manchester, M22 5LH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6NE (SW)	113	9	383423 385843
247	**Points of Interest - Commercial Services** Name: Yusen Air & Sea Service (UK) Ltd Location: Unit 2, Ringway Trading Estate, Manchester, M22 5LH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6NE (SW)	184	9	383349 385787
247	**Points of Interest - Commercial Services** Name: Yusen Air & Sea Service UK Ltd Location: Unit 2, Ringway Trading Estate, Manchester, M22 5LH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6NE (SW)	184	9	383349 385787
247	**Points of Interest - Commercial Services** Name: Ringway Haulage Location: Unit 4, Ringway Trading Estate, Manchester, M22 5LH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6NE (SW)	186	9	383375 385779
247	**Points of Interest - Commercial Services** Name: E M S Cargo Ltd Location: Unit 5, Ringway Trading Estate, Manchester, M22 5LH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6NE (SW)	188	9	383388 385774
248	**Points of Interest - Commercial Services** Name: Hotel Secure Parking Ltd Location: 2 Patch Croft Road, Manchester, M22 5JS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A10NE (N)	246	9	383605 386387
249	**Points of Interest - Commercial Services** Name: Auto-mobile Location: 6 Cunningham Drive, Manchester, M22 5LT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7SE (SE)	322	9	384051 385658

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
250	**Points of Interest - Commercial Services** Name: B I Appleton Garage Ltd Location: 328 Styal Road, Heald Green, Cheadle, SK8 3UA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A11SE (NE)	335	9	384164 386278
250	**Points of Interest - Commercial Services** Name: B I Appleton Ltd Location: 326 Styal Road, Heald Green, Cheadle, SK8 3UA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A11SE (NE)	342	9	384162 386296
251	**Points of Interest - Commercial Services** Name: S M Freight Services Ltd Location: 30 Trenchard Drive, Manchester, M22 5NA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SW (SE)	441	9	383945 385448
251	**Points of Interest - Commercial Services** Name: Skyways Cargo Location: 5 Emerald Road, Manchester, M22 5WA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SE (SE)	460	9	383976 385439
251	**Points of Interest - Commercial Services** Name: Skyways Cargo Location: 5 Emerald Road, Manchester, M22 5WA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SW (SE)	460	9	383975 385439
252	**Points of Interest - Commercial Services** Name: Heald Green M O Ts Location: Station Approach, Finney Lane, Heald Green, Cheadle, SK8 3QH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (E)	451	9	384335 385941
253	**Points of Interest - Commercial Services** Name: Heald Green M O T Location: Station Approach, Finney Lane, Heald Green, Cheadle, SK8 3QH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (E)	465	9	384321 385841
254	**Points of Interest - Commercial Services** Name: New Breed Freight Ltd Location: 9 Haslington Road, Manchester, M22 5HS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A10NW (NW)	502	9	383276 386562
255	**Points of Interest - Commercial Services** Name: L S Express Ltd Location: Moss Nook House, Trenchard Drive, Manchester, M22 5NA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SW (S)	529	9	383892 385345
256	**Points of Interest - Commercial Services** Name: N N R Global Logistics Location: Hale House 337, Styal Road, Manchester, M22 5LW Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SE (SE)	533	9	384209 385518
257	**Points of Interest - Commercial Services** Name: Brunswick International Location: 43 Ravenscar Crescent, Manchester, M22 0HY Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A5NE (W)	533	9	382902 385740
258	**Points of Interest - Commercial Services** Name: Embassy Freight Location: Trident One, Styal Road, Manchester, M22 5XB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SE (SE)	558	9	384166 385440

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
258	**Points of Interest - Commercial Services** Name: Trans Eastern Freight Location: Trident One, Styal Road, Manchester, M22 5XB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SE (SE)	558	9	384166 385440
258	**Points of Interest - Commercial Services** Name: Hecny Transportation (UK) Ltd Location: Trident One, Styal Road, Manchester, M22 5XB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SE (SE)	558	9	384166 385440
258	**Points of Interest - Commercial Services** Name: Skymart Worldwide Location: Trident Business Park, Styal Road, Manchester, M22 5XB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SE (SE)	558	9	384166 385440
258	**Points of Interest - Commercial Services** Name: A K Mail Services Ltd Location: Trident One, Styal Road, Manchester, M22 5XB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SE (SE)	558	9	384166 385440
258	**Points of Interest - Commercial Services** Name: Transpoint International Location: Trident One, Styal Road, Manchester, M22 5XB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SE (SE)	558	9	384166 385440
258	**Points of Interest - Commercial Services** Name: Renold Plc Location: First Floor, Trident 2, Styal Road, Manchester, M22 5XB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7SE (SE)	561	9	384159 385431
259	**Points of Interest - Commercial Services** Name: Kintetsu World Express UK Ltd Location: Gateway House, Styal Road, Manchester, M22 5WY Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7SE (SE)	598	9	384103 385348
260	**Points of Interest - Commercial Services** Name: Shell Car Wash Location: Styal Road Service Station, Styal Road, Manchester, M22 5WX Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A3NW (S)	611	9	383938 385270
260	**Points of Interest - Commercial Services** Name: Car Wash Location: Styal Road, Manchester, M22 5WX Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A3NW (S)	613	9	383937 385268
260	**Points of Interest - Commercial Services** Name: Styal Road Service Station Location: Styal Road, Manchester, M22 5WX Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A3NW (S)	635	9	383941 385246
261	**Points of Interest - Commercial Services** Name: P M Radiators Location: 66 Calve Croft Road, Manchester, M22 5EU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SE (N)	678	9	383467 386797
262	**Points of Interest - Commercial Services** Name: Phoenix International Ltd Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	687	9	384147 385270

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
262	**Points of Interest - Commercial Services** Name: S B S Worldwide Ltd Location: 3b Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	687	9	384147 385270
262	**Points of Interest - Commercial Services** Name: R I F Worldwide Plc Location: 16d Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	687	9	384147 385270
262	**Points of Interest - Commercial Services** Name: R I F Worldwide Plc Location: Suite 16 D Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	687	9	384147 385270
262	**Points of Interest - Commercial Services** Name: Seko Logistics Location: Suite 4c Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384146 385269
262	**Points of Interest - Commercial Services** Name: B D P Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384146 385269
262	**Points of Interest - Commercial Services** Name: Loksys International Location: Suite 15e Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384146 385269
262	**Points of Interest - Commercial Services** Name: Walker Freight Services Ltd Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384147 385270
262	**Points of Interest - Commercial Services** Name: World Transport Agency Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384147 385270
262	**Points of Interest - Commercial Services** Name: Aramex Location: Suite 11c Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384146 385269
262	**Points of Interest - Commercial Services** Name: Phoenix International Freight Services Ltd Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384147 385270
262	**Points of Interest - Commercial Services** Name: Flash V-one Location: Suite 10 Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384146 385269

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
262	**Points of Interest - Commercial Services** Name: W T A Location: Suite 3e Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384146 385269
262	**Points of Interest - Commercial Services** Name: Jas Forwarding UK Ltd Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384146 385269
262	**Points of Interest - Commercial Services** Name: World Transport Agency Location: Suite 3e Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384146 385269
262	**Points of Interest - Commercial Services** Name: Skymart Worldwide Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384147 385270
262	**Points of Interest - Commercial Services** Name: Phoenix International Freight Services Ltd Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384147 385270
262	**Points of Interest - Commercial Services** Name: C C T International Freight Forwarders Ltd Location: 2d Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384146 385269
262	**Points of Interest - Commercial Services** Name: Embassy Freight Ltd Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384147 385270
262	**Points of Interest - Commercial Services** Name: U Cargo Location: 15aii Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	702	9	384142 385251
263	**Points of Interest - Commercial Services** Name: Mobile Car Parlour Location: 28 Thornsgreen Road, Manchester, M22 1QD Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A5NE (W)	768	9	382660 385712
264	**Points of Interest - Commercial Services** Name: Automotive Glazing Location: 29 Rosslare Road, Manchester, M22 5GQ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SW (NW)	832	9	383263 386902
265	**Points of Interest - Commercial Services** Name: Pestop Location: 21 Lagan Walk, Manchester, M22 5WG Category: Contract Services Class Code: Pest and Vermin Control Positional Accuracy: Positioned to address or location	A14SW (NW)	871	9	383080 386882

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
265	**Points of Interest - Commercial Services** Name: Pestop Environmental Ltd Location: 21 Lagan Walk, Manchester, M22 5WG Category: Contract Services Class Code: Pest and Vermin Control Positional Accuracy: Positioned to address or location	A14SW (NW)	871	9	383080 386882
266	**Points of Interest - Commercial Services** Name: Toms Mobile Valet Location: 12 Lea Road, Heald Green, Cheadle, SK8 3RD Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A12SE (E)	945	9	384827 386167
267	**Points of Interest - Commercial Services** Name: Logwin Location: 3000 Aviator Way, Manchester, M22 5TG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A5SW (W)	984	9	382457 385636
267	**Points of Interest - Commercial Services** Name: A F S Global Ltd Location: 3000 Aviator Way, Manchester, M22 5TG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A5SW (W)	984	9	382457 385636
267	**Points of Interest - Commercial Services** Name: B S C Essex Freight Location: 3000 Aviator Way, Manchester, M22 5TG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A5SW (W)	984	9	382452 385650
267	**Points of Interest - Commercial Services** Name: Santova Logistics Location: 3000 Aviator Way, Manchester, M22 5TG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A5SW (W)	984	9	382457 385636
267	**Points of Interest - Commercial Services** Name: Global Star Location: 3000 Aviator Way, Manchester, M22 5TG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A5SW (W)	984	9	382457 385636
267	**Points of Interest - Commercial Services** Name: Allseas Cargo UK Location: 3000 Aviator Way, Manchester, M22 5TG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A5SW (W)	984	9	382452 385650
267	**Points of Interest - Commercial Services** Name: Elite Valet Parking Location: 3000 Aviator Way, Manchester, M22 5TG Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A5SW (W)	985	9	382452 385649
267	**Points of Interest - Commercial Services** Name: Freightex Location: 3000 Aviator Way, Manchester, M22 5TG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A5SW (W)	985	9	382452 385649
268	**Points of Interest - Manufacturing and Production** Name: Atlas Business Centre Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
268	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A7NW (SE)	0	9	383736 385976

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
268	**Points of Interest - Manufacturing and Production** Name: Atlas Business Centre Location: Atlas House Atlas Park, Simonsway, Manchester, M22 5PP Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A11SW (E)	0	9	383785 386018
268	**Points of Interest - Manufacturing and Production** Name: Works Location: M22 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A7NW (SE)	0	9	383726 385955
269	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A6NE (SW)	0	9	383586 385981
269	**Points of Interest - Manufacturing and Production** Name: Atlas Business Park Location: M22 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A6NE (SW)	13	9	383592 385905
270	**Points of Interest - Manufacturing and Production** Name: Tank Location: M22 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A6NE (SW)	54	9	383410 385906
271	**Points of Interest - Manufacturing and Production** Name: Regus UK Ltd Location: Eagle Court Concord Business Park, Threapwood Road, Manchester, M22 0RR Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A10SW (W)	189	9	383257 386147
272	**Points of Interest - Manufacturing and Production** Name: Concord Business Park Location: M22 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A10SE (NW)	215	9	383336 386277
272	**Points of Interest - Manufacturing and Production** Name: Concord Business Park Location: M22 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A10SW (NW)	236	9	383294 386274
273	**Points of Interest - Manufacturing and Production** Name: Greencourts Business Park Location: M22 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A7SE (SE)	422	9	384114 385578
273	**Points of Interest - Manufacturing and Production** Name: Greencourts Business Park Location: M22 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A7SE (SE)	441	9	384140 385579
274	**Points of Interest - Manufacturing and Production** Name: Cornishway Industrial Estate Location: M22 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A5NE (W)	457	9	382926 385959
274	**Points of Interest - Manufacturing and Production** Name: Cornishway Industrial Estate Location: M22 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A5NE (W)	459	9	382925 385956

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
275	**Points of Interest - Manufacturing and Production** Name: Joe Brown Volkswind UK Location: Trident One, Styal Road, Manchester, M22 5XB Category: Industrial Features Class Code: Energy Production Positional Accuracy: Positioned to address or location	A7SE (SE)	558	9	384166 385440
275	**Points of Interest - Manufacturing and Production** Name: M W B Business Exchange Location: Trident One, Styal Road, Manchester, M22 5XB Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A7SE (SE)	558	9	384165 385440
275	**Points of Interest - Manufacturing and Production** Name: Joe Brown Volkswind UK Location: Trident One, Styal Road, Manchester, M22 5XB Category: Industrial Features Class Code: Energy Production Positional Accuracy: Positioned to address or location	A7SE (SE)	558	9	384166 385440
276	**Points of Interest - Manufacturing and Production** Name: Manchester International Office Centre Location: M22 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A3NE (SE)	685	9	384109 385253
276	**Points of Interest - Manufacturing and Production** Name: T G E Location: Suite 2a M I O C, Styal Road, Manchester, M22 5WB Category: Extractive Industries Class Code: Oil and Gas Extraction, Refinery and Product Manufacture Positional Accuracy: Positioned to address or location	A3NE (SE)	687	9	384147 385270
276	**Points of Interest - Manufacturing and Production** Name: M I O C Location: Styal, Road, Manchester, M22 5WB Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A3NE (SE)	687	9	384147 385270
277	**Points of Interest - Manufacturing and Production** Name: Frank Matthews & Sons (Styal) Ltd Location: Boundary Farm, Styal Road, Manchester, M22 5YA Category: Farming Class Code: Arable Farming Positional Accuracy: Positioned to address or location	A3SW (S)	929	9	383762 384939
278	**Points of Interest - Manufacturing and Production** Name: Regus Location: 3000 Aviator Way, Manchester, M22 5TG Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A5SW (W)	984	9	382452 385650
278	**Points of Interest - Manufacturing and Production** Name: Regeus Business Centre Location: 3000 Aviator Way, Manchester, M22 5TG Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A5SW (W)	984	9	382452 385650
278	**Points of Interest - Manufacturing and Production** Name: Regus Ltd Location: 3000 Aviator Way, Manchester, M22 5TG Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A5SW (W)	984	9	382452 385650
279	**Points of Interest - Public Infrastructure** Name: Sluice Location: M22 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A7SE (SE)	399	9	384089 385586
279	**Points of Interest - Public Infrastructure** Name: Sluice Location: M22 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A7SE (SE)	401	9	384094 385588

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
280	**Points of Interest - Public Infrastructure** Name: Heald Green Rail Station Location: SK8 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A8NW (E)	480	9	384344 385863
280	**Points of Interest - Public Infrastructure** Name: Heald Green Station Location: Nr Outwood Drive, SK8 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A8NW (E)	480	9	384344 385863
281	**Points of Interest - Public Infrastructure** Name: Styal Road Service Station Location: Styal Road, Manchester, M22 5WX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A3NW (S)	613	9	383937 385268
281	**Points of Interest - Public Infrastructure** Name: Shell Styal Road Service Station Location: Styal Road, Manchester, M22 5WX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A3NW (S)	613	9	383937 385268
281	**Points of Interest - Public Infrastructure** Name: Shell Styal Road Service Station Location: Styal Road Service Station, Styal Road, Manchester, M22 5WX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A3NW (S)	613	9	383937 385268
281	**Points of Interest - Public Infrastructure** Name: Styal Road Service Station Location: Styal Road, Manchester, M22 5WX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A3NW (S)	613	9	383937 385268
281	**Points of Interest - Public Infrastructure** Name: Shell Styal Road Location: Styal Road, Manchester, M22 5WX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A3NW (S)	613	9	383937 385268
282	**Points of Interest - Public Infrastructure** Name: Sterecycle Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384147 385270
282	**Points of Interest - Public Infrastructure** Name: Sterecycle Ltd Location: Manchester International Office Centre, Styal Road, Manchester, M22 5WB Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A3NE (SE)	688	9	384147 385270
283	**Points of Interest - Public Infrastructure** Name: Sluice Location: SK8 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A16SW (NE)	897	9	384500 386754
284	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A6SW (SW)	541	9	383040 385550
285	**Points of Interest - Recreational and Environmental** Name: Play Area Location: M22 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A15SW (N)	579	9	383721 386741

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
285	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A15SW (N)	623	9	383777 386781
285	**Points of Interest - Recreational and Environmental** Name: Playground Location: Lomond Road, M22 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A15SW (N)	623	9	383777 386781
285	**Points of Interest - Recreational and Environmental** Name: Peel Hall Play Park Location: Lomond Road, M22 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A15SW (N)	644	9	383766 386803
286	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A9SE (W)	626	9	382765 386066
286	**Points of Interest - Recreational and Environmental** Name: Playground Location: Culmere Road, M22 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A9SE (W)	632	9	382763 386090
287	**Points of Interest - Recreational and Environmental** Name: Play Area Location: M22 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A1NE (SW)	865	9	382956 385217
288	**Points of Interest - Recreational and Environmental** Name: Play Area Location: SK8 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NE (NE)	928	9	384682 386566
289	**Points of Interest - Recreational and Environmental** Name: Playground Location: Robinswood Road, M22 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A9NW (NW)	981	9	382556 386516
289	**Points of Interest - Recreational and Environmental** Name: Playground Location: Portway, M22 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A9NW (NW)	982	9	382544 386494
289	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A9NW (NW)	982	9	382558 386521
290	**Points of Interest - Recreational and Environmental** Name: Playground Location: Coppice Court, SK8 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A8NE (E)	997	9	384828 385680

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
291	**Areas of Adopted Green Belt** Authority: Manchester City Council Plan Name: Proposal Map **Status: Adopted** Plan Date: 21st March 2024	A7NW (E)	0	10	383803 385961
292	**Areas of Adopted Green Belt** Authority: Stockport Metropolitan Borough Council Plan Name: Stockport Unitary Development Plan First Review **Status: Adopted** Plan Date: 31st May 2006	A11SE (NE)	255	11	384098 386232
293	**Areas of Adopted Green Belt** Authority: Stockport Metropolitan Borough Council Plan Name: Stockport Unitary Development Plan First Review **Status: Adopted** Plan Date: 31st May 2006	A8NW (E)	484	11	384344 385851
294	**Areas of Adopted Green Belt** Authority: Manchester City Council Plan Name: Proposal Map **Status: Adopted** Plan Date: 21st March 2024	A2NE (S)	682	10	383380 385239
295	**Areas of Adopted Green Belt** Authority: Cheshire East Council, Planning Department Plan Name: Site Specific Allocations **Status: Adopted** Plan Date: 22nd December 2022	A3SW (S)	923	12	383685 384944
296	**Areas of Adopted Green Belt** Authority: Cheshire East Council, Planning Department Plan Name: Proposal Map **Status: Adopted** Plan Date: 27th July 2017	A3SW (S)	924	12	383686 384943

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Stockport Metropolitan Borough Council - Environment Team (Land & Water)	January 2026	Annual Rolling Update
Trafford Metropolitan Borough Council - Renewal and Environmental Protection	January 2026	Annual Rolling Update
Macclesfield Borough Council (now part of Cheshire East Council) - Health and Public Safety	July 2008	
Cheshire East Council - Environmental Health Department	July 2025	Annually
Environment Agency - Head Office	November 2023	Annually
Manchester City Council - Environmental Health Department	November 2025	Annual Rolling Update
Discharge Consents		
Environment Agency - North West Region	April 2026	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	April 2026	Bi-Annually
Local Authority Integrated Pollution Prevention And Control		
Macclesfield Borough Council (now part of Cheshire East Council) - Environmental Health Department	February 2009	Not Applicable
Stockport Metropolitan Borough Council - Environmental Health Department, EEDD	October 2014	Variable
Trafford Metropolitan Borough Council - Environmental Health Department	October 2014	Variable
Manchester City Council - Environmental Health Department	September 2014	Variable
Cheshire East Council - Environmental Health Department	September 2023	Variable
Local Authority Pollution Prevention and Controls		
Macclesfield Borough Council (now part of Cheshire East Council) - Environmental Health Department	February 2009	Not Applicable
Stockport Metropolitan Borough Council - Environmental Health Department, EEDD	October 2014	Annual Rolling Update
Trafford Metropolitan Borough Council - Environmental Health Department	October 2014	Annual Rolling Update
Manchester City Council - Environmental Health Department	September 2014	Annual Rolling Update
Cheshire East Council - Environmental Health Department	September 2023	Annually
Local Authority Pollution Prevention and Control Enforcements		
Macclesfield Borough Council (now part of Cheshire East Council) - Environmental Health Department	February 2009	Not Applicable
Stockport Metropolitan Borough Council - Environmental Health Department, EEDD	October 2014	Variable
Trafford Metropolitan Borough Council - Environmental Health Department	October 2014	Variable
Manchester City Council - Environmental Health Department	September 2014	Variable
Cheshire East Council - Environmental Health Department	September 2023	Variable
Nearest Surface Water Feature		
Ordnance Survey	March 2026	
Pollution Incidents to Controlled Waters		
Environment Agency - North West Region	January 2000	
Historical Prosecutions		
Environment Agency, North West Region	March 2013	Not Applicable
Registered Radioactive Substances		
Environment Agency - North West Region	June 2026	Quarterly
Environment Agency - Head Office	May 2023	
Substantiated Pollution Incident Register		
Environment Agency - North West Region - South Area	April 2026	Quarterly
Water Abstractions		
Environment Agency - North West Region	April 2026	Quarterly
Water Industry Act Referrals		
Environment Agency - North West Region	October 2017	
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified

Agency & Hydrological	Version	Update Cycle
Bedrock Aquifer Designations Environment Agency - Head Office	January 2018	As notified
Superficial Aquifer Designations Environment Agency - Head Office	January 2018	As notified
Source Protection Zones Environment Agency - Head Office	August 2025	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	December 2023	As notified
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	December 2023	As notified
Areas Benefiting from Flood Defences Environment Agency - Head Office	February 2023	
Flood Water Storage Areas Environment Agency - Head Office	April 2026	Quarterly
Flood Defences Environment Agency - Head Office	August 2022	
OS NGD Water Network Links Ordnance Survey	April 2026	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
Water Framework Directive - Catchment Environment Agency - Head Office	July 2025	Annually
Water Framework Directive - Groundwater Environment Agency - Head Office	July 2025	Annually
Water Framework Directive - Surface Waters Environment Agency - Head Office	July 2025	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	November 2002	As notified
Historical Landfill Sites		
Environment Agency - Head Office	November 2025	Bi-Annually
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	November 2025	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - North West Region - South Area	April 2026	Bi-Annually
Local Authority Landfill Coverage		
Cheshire County Council (now part of Cheshire East Council) - Environmental Planning Department	February 2003	Not Applicable
Macclesfield Borough Council (now part of Cheshire East Council) - Environmental Health Department	February 2003	Not Applicable
Manchester City Council - Planning Department	February 2003	Not Applicable
Stockport Metropolitan Borough Council - Environmental Health Department, EEDD	February 2003	Not Applicable
Trafford Metropolitan Borough Council - Environmental Health Department	February 2003	Not Applicable
Local Authority Recorded Landfill Sites		
Cheshire County Council (now part of Cheshire East Council) - Environmental Planning Department	October 2018	
Macclesfield Borough Council (now part of Cheshire East Council) - Environmental Health Department	October 2018	
Manchester City Council - Planning Department	October 2018	
Stockport Metropolitan Borough Council - Environmental Health Department, EEDD	October 2018	
Trafford Metropolitan Borough Council - Environmental Health Department	October 2018	
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	
Registered Landfill Sites		
Environment Agency - North West Region - 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	
Waste Exemption Permits		
Natural Resources Wales	March 2026	Quarterly
Environment Agency - Head Office	May 2025	Quarterly

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	March 2026	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements		
Macclesfield Borough Council (now part of Cheshire East Council) - Planning Department	December 2008	Not Applicable
Cheshire East Council - Planning Department	February 2016	Variable
Manchester City Council - Planning Department	February 2016	Variable
Stockport Metropolitan Borough Council - Environment and Economic Development	February 2016	Variable
Cheshire County Council (now part of Cheshire East Council) - Planning Department	July 2008	Annual Rolling Update
Trafford Metropolitan Borough Council	July 2023	Variable
Planning Hazardous Substance Consents		
Manchester City Council - Planning Department	August 2022	Variable
Macclesfield Borough Council (now part of Cheshire East Council) - Planning Department	December 2008	Not Applicable
Cheshire County Council (now part of Cheshire East Council) - Planning Department	July 2008	Annual Rolling Update
Cheshire East Council - Planning Department	July 2022	Variable
Trafford Metropolitan Borough Council	November 2022	Variable
Stockport Metropolitan Borough Council - Environment and Economic Development	October 2022	Variable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	As notified
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	December 2015	As notified
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	February 2026	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
Coal Mining Affected Areas The Coal Authority - Property Searches	February 2023	
Mining Instability Ove Arup & Partners	June 1998	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	June 2021	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	November 2025	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	November 2025	Annually

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	April 2026	Quarterly
Fuel Station Entries Green Street Advisor (UK) Ltd	May 2026	Quarterly
Points of Interest - Commercial Services PointX	June 2026	Quarterly
Points of Interest - Education and Health PointX	June 2026	Quarterly
Points of Interest - Manufacturing and Production PointX	June 2026	Quarterly
Points of Interest - Public Infrastructure PointX	June 2026	Quarterly
Points of Interest - Recreational and Environmental PointX	June 2026	Quarterly
Pollution Inventory Environment Agency - Head Office	February 2026	Annually
Underground Electrical Cables National Grid	January 2024	

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	March 2026	Bi-Annually
Areas of Adopted Green Belt		
Cheshire East Council - Planning Department	March 2026	Quarterly
Macclesfield Borough Council (now part of Cheshire East Council)	March 2026	Quarterly
Manchester City Council	March 2026	Quarterly
Stockport Metropolitan Borough Council	March 2026	Quarterly
Trafford Metropolitan Borough Council	March 2026	Quarterly
Areas of Unadopted Green Belt		
Cheshire East Council - Planning Department	March 2026	Quarterly
Macclesfield Borough Council (now part of Cheshire East Council)	March 2026	Quarterly
Manchester City Council	March 2026	Quarterly
Stockport Metropolitan Borough Council	March 2026	Quarterly
Trafford Metropolitan Borough Council	March 2026	Quarterly
Areas of Outstanding Natural Beauty		
Natural England	April 2026	Bi-Annually
Environmentally Sensitive Areas		
Natural England	August 2023	
Forest Parks		
Forestry Commission	May 2023	Not Applicable
Local Nature Reserves		
Natural England	January 2026	Bi-Annually
Marine Nature Reserves		
Natural England	February 2026	Bi-Annually
National Nature Reserves		
Natural England	June 2026	Bi-Annually
National Parks		
Natural England	September 2025	Annually
Nitrate Sensitive Areas		
Natural England	April 2023	Not Applicable
Nitrate Vulnerable Zones		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	April 2016	
Environment Agency - Head Office	February 2026	Annually
Ramsar Sites		
Natural England	February 2026	Bi-Annually
Sites of Special Scientific Interest		
Natural England	April 2026	Bi-Annually
Special Areas of Conservation		
Natural England	June 2026	Bi-Annually
Special Protection Areas		
Natural England	May 2026	Bi-Annually

Data Suppliers

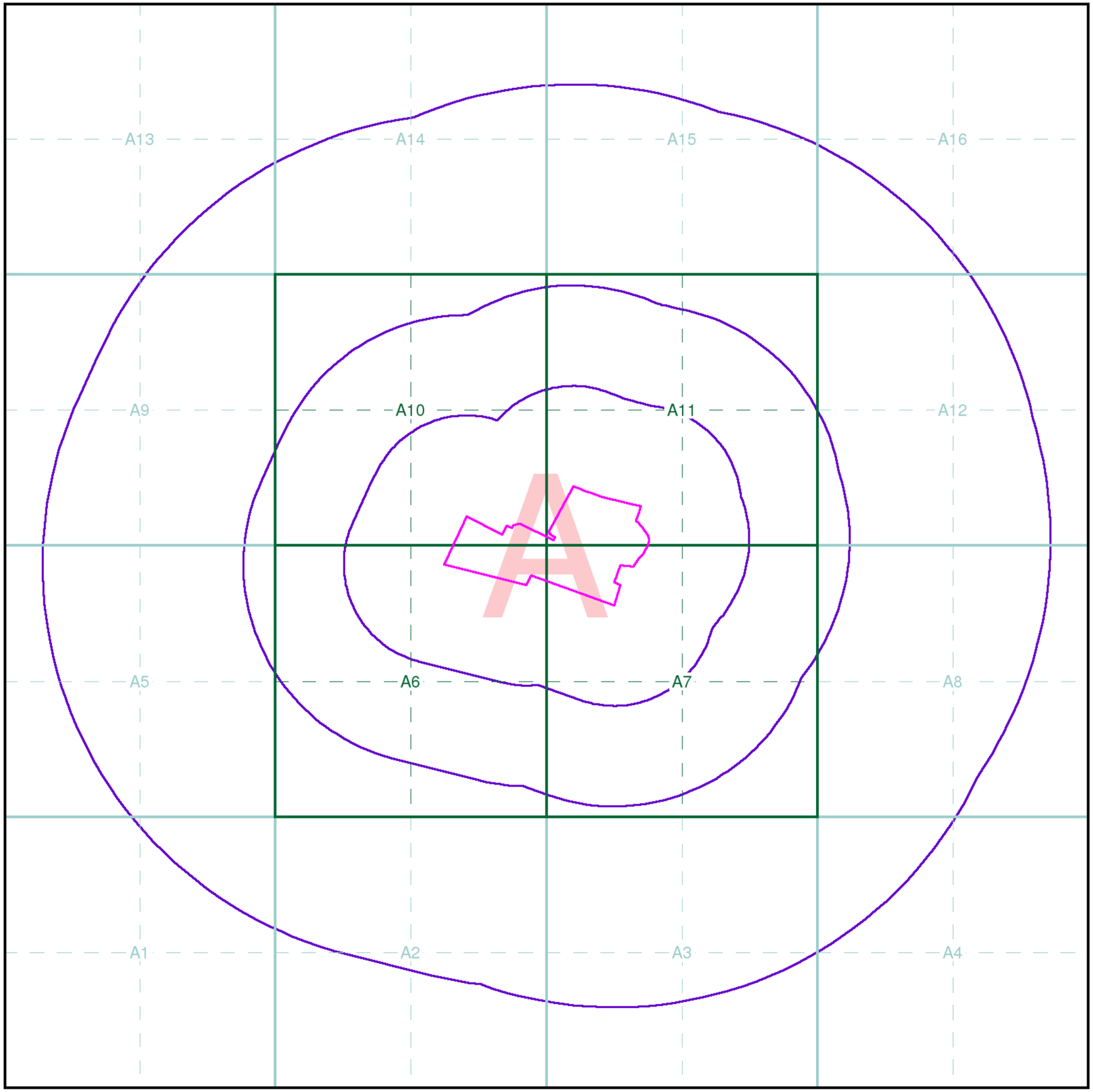
A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

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	**Manchester City Council - Environmental Health Department** PO Box 463, Town Hall Extension, Albert Square, Manchester, Greater Manchester, M60 3NY	Telephone: 0161 234 4884 / 234 4873. Fax: 0161 234 4508 Website: www.manchester.gov.uk
4	**Stockport Metropolitan Borough Council - Environmental Health Department, EEDD** Stopford House, Piccadilly, Stockport, SK1 3XE	Telephone: 0161 474 4210 Fax: 0161 477 8589 Email: environment.team@stockport.gov.uk Website: www.stockport.gov.uk
5	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.co.uk
6	**Manchester City Council - Planning Department** Town Hall, Manchester, Greater Manchester, M60 2LA	Telephone: 0161 234 5000 Fax: 0161 234 4508 Website: www.manchester.gov.uk
7	**Macclesfield Borough Council (now part of Cheshire East Council) - Environmental Health Department** Westfields, Middlewich Road, Sandbach, Cheshire, CW11 1HZ	Telephone: 0300 123 55 00 Website: www.cheshireeast.gov.uk
8	**Cheshire County Council (now part of Cheshire East Council) - Environmental Planning Department** Westfields, Middlewich Road, Sandbach, Cheshire, CW11 1HZ	Telephone: 0300 123 5015 Website: www.cheshireeast.gov.uk
9	**PointX** 5-6 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
10	**Manchester City Council** Town Hall, Albert Square, Manchester, Greater Manchester, M60 2JT	Telephone: 0161 234 5000 Fax: 0161 234 4508 Website: www.manchester.gov.uk
11	**Stockport Metropolitan Borough Council** Hygarth House, 103 Wellington Road South, Stockport, Greater Manchester, SK1 3TP	Telephone: 0161 480 4949 Fax: 0161 477 9530 Website: www.stockport.gov.uk
12	**Cheshire East Council - Planning Department** Westfields, Middlewich Road, Sandbach, Cheshire, CW11 1HZ	Telephone: 0300 123 5500 Email: info@cheshireeast.gov.uk Website: www.cheshireeast.gov.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Landmark Information Group, Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0330 036 6618 Fax: 0844 844 9951 Email: helpdesk@landmark.co.uk Website: www.landmark.co.uk

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



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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

Ms J Trevelyan, Lucion Delta Simons Ltd, Unit 5 Abbots Park,, Preston Brook,, Runcorn,, Cheshire,, WA7 3GH

Order Details

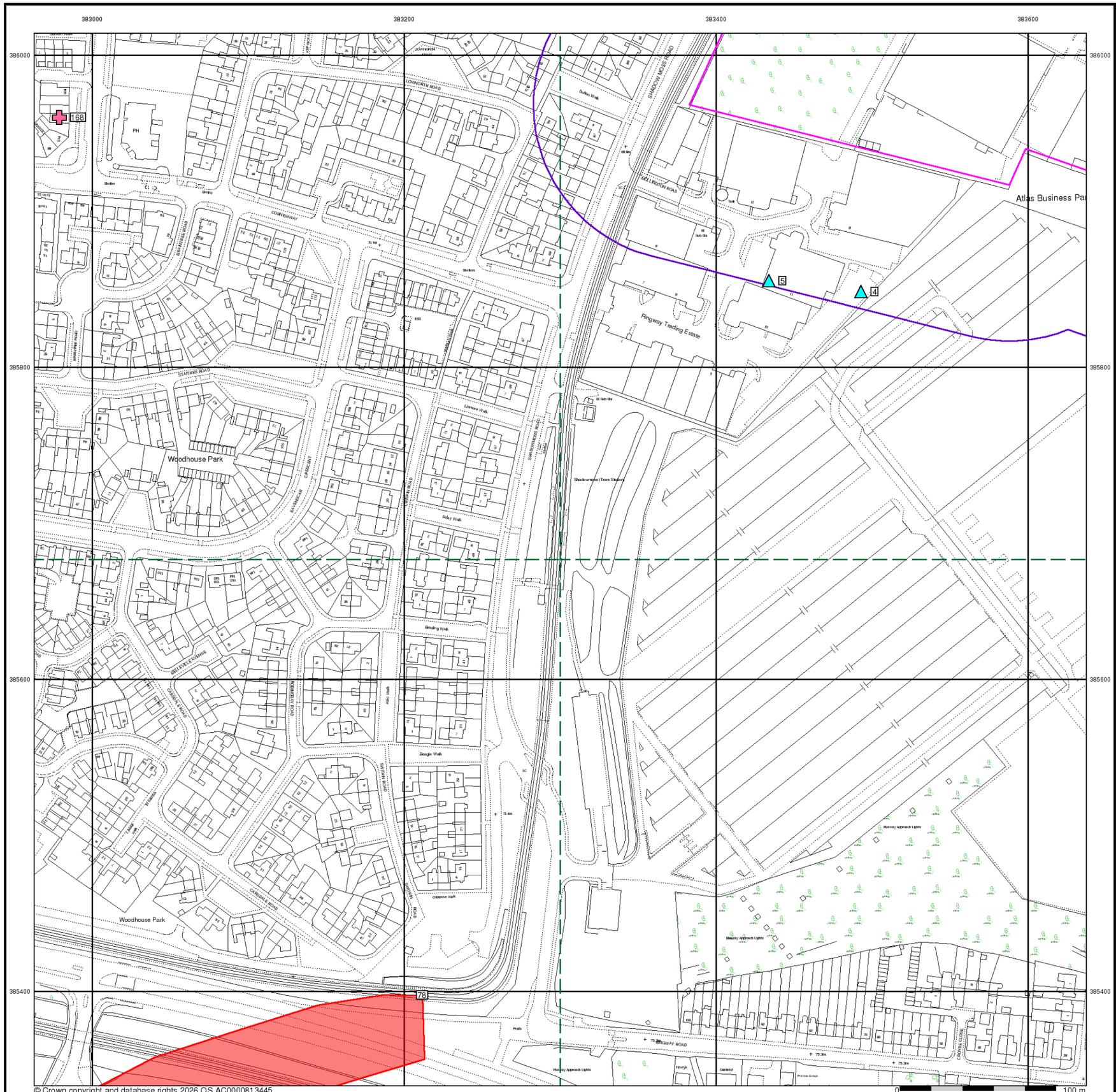
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Customer Ref:	28248
National Grid Reference:	383670, 386010
Site Area (Ha):	7.9
Search Buffer (m):	1000

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

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

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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
- Historical Prosecutions
- Prosecutions
- Registered Radioactive Substance
- River Network or Water Feature
- 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

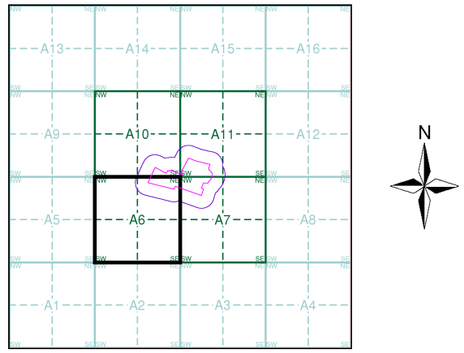
Geological

- 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
- Licenced Waste Management Facility (Landfill Boundary)
- Licenced 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
- Waste Exemption Permits

Site Sensitivity Map - Segment A6



Order Details

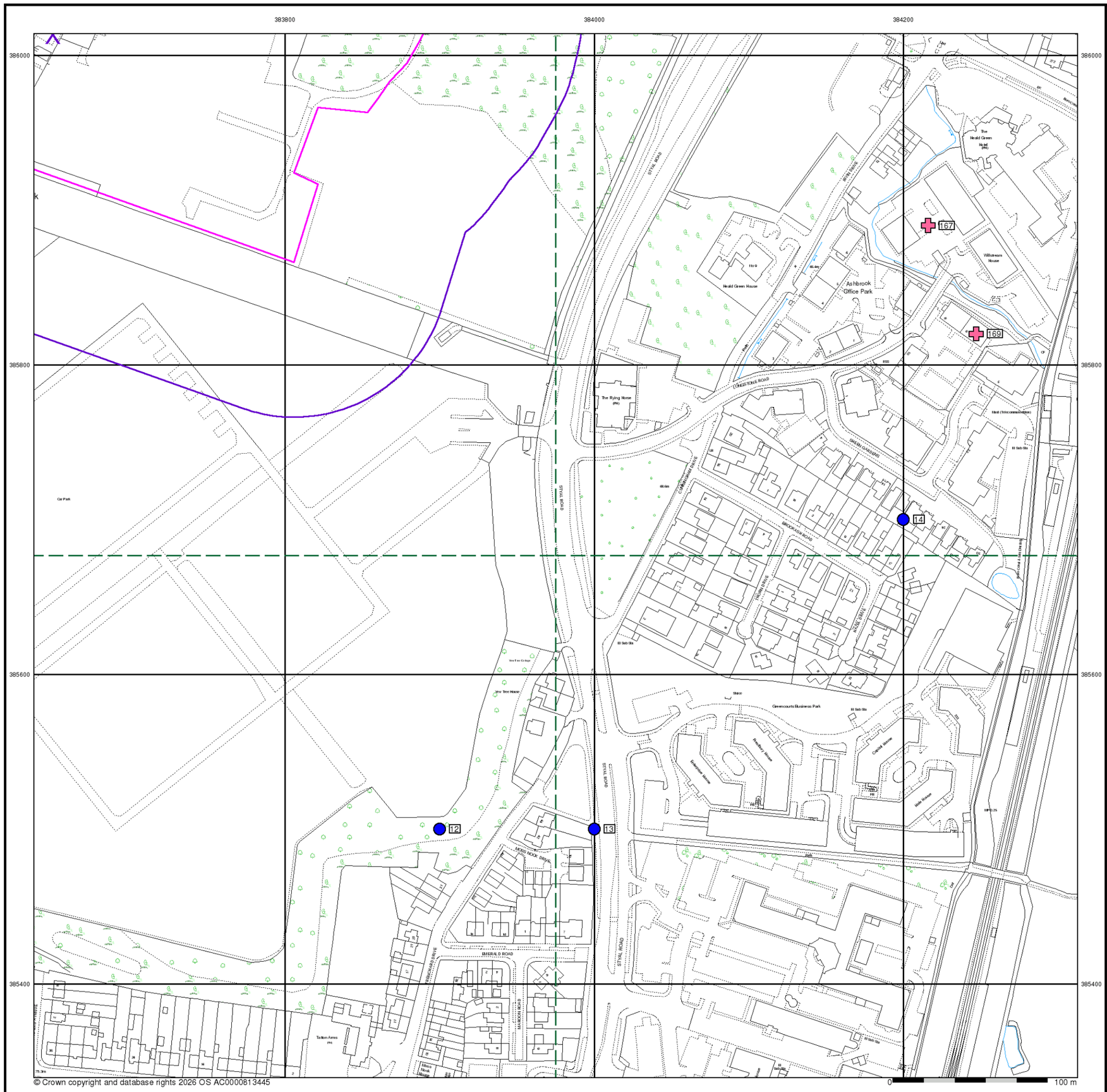
Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Plot Buffer (m):	100

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

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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
- 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
- Historical Prosecutions
- Prosecutions
- Registered Radioactive Substance
- River Network or Water Feature
- 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

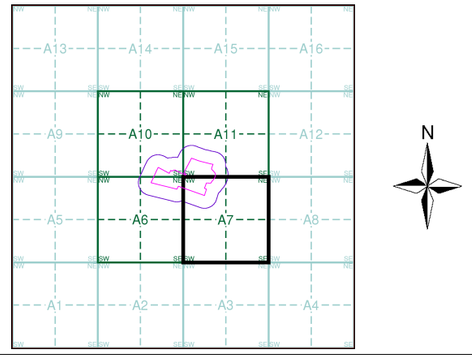
Geological

- BGS Recorded Mineral Site

Waste

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- 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
- Waste Exemption Permits

Site Sensitivity Map - Segment A7



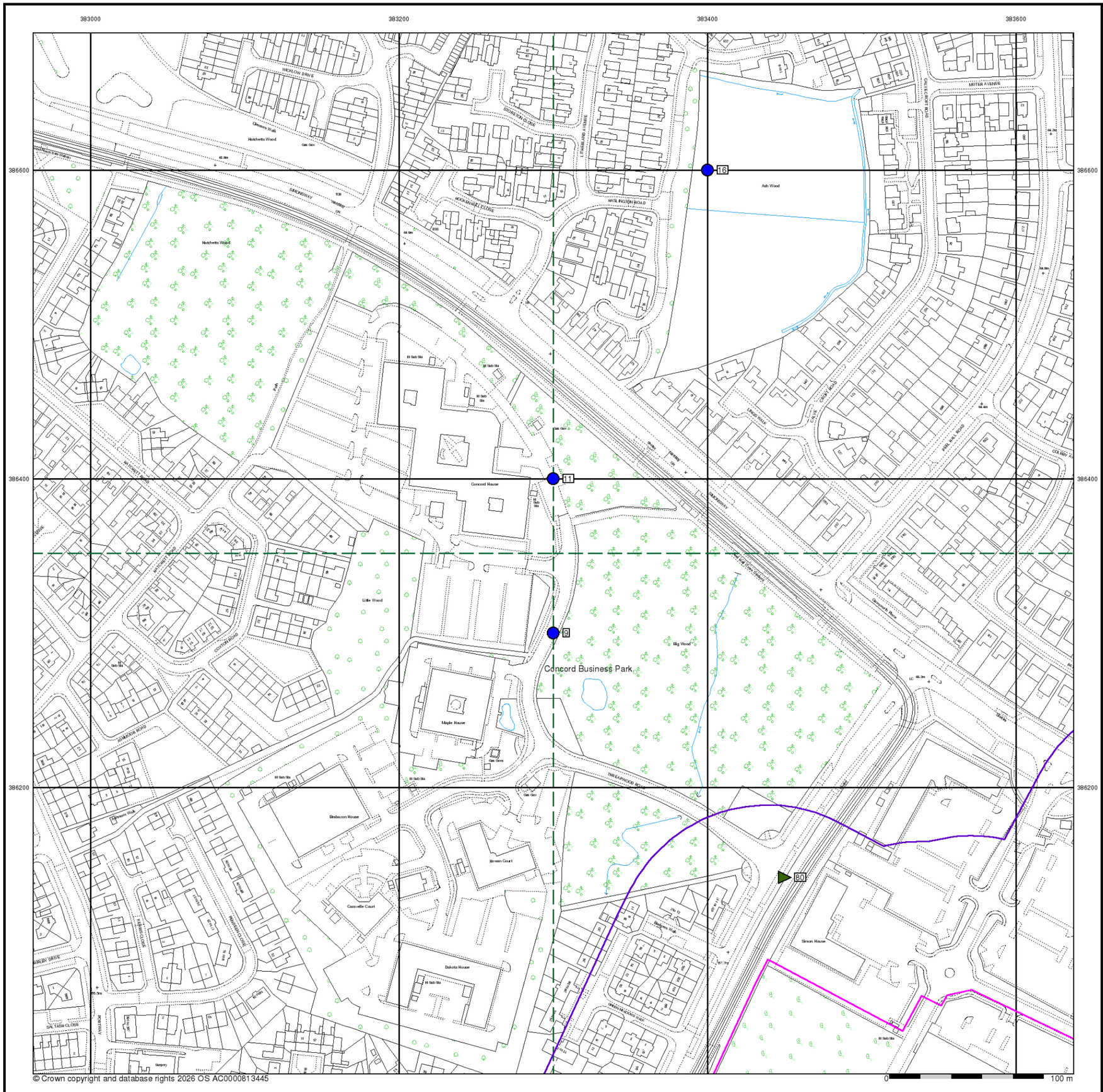
Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Plot Buffer (m):	100

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

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General

- Specified Site
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- 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
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Hazardous Substances

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

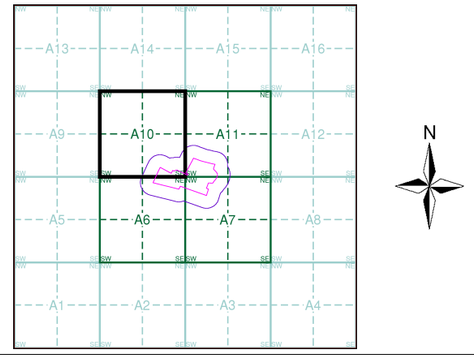
Geological

- BGS Recorded Mineral Site

Waste

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- 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
- Waste Exemption Permits

Site Sensitivity Map - Segment A10



Order Details

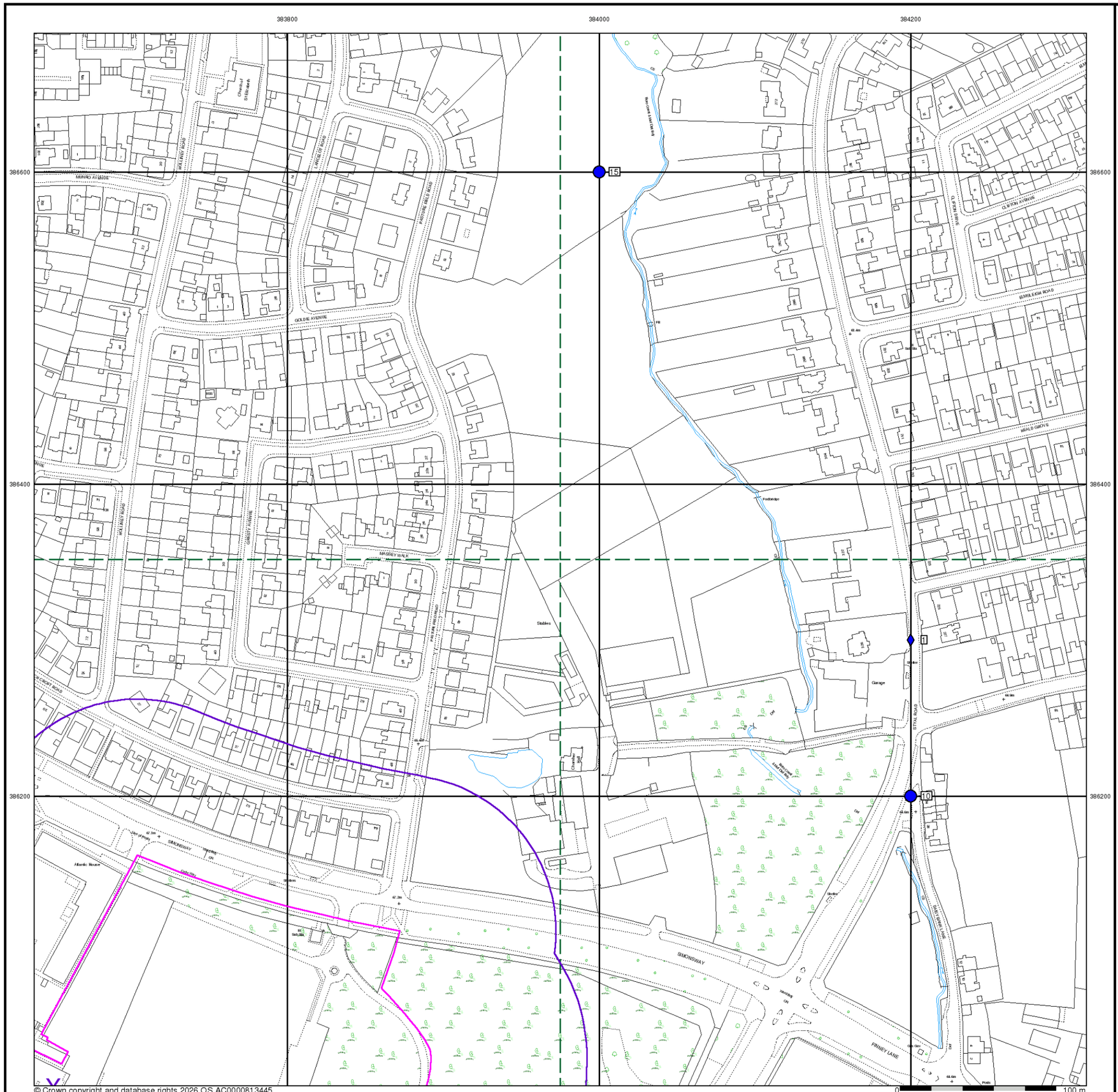
Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Plot Buffer (m):	100

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

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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
- Historical Prosecutions
- Prosecutions
- Registered Radioactive Substance
- River Network or Water Feature
- 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

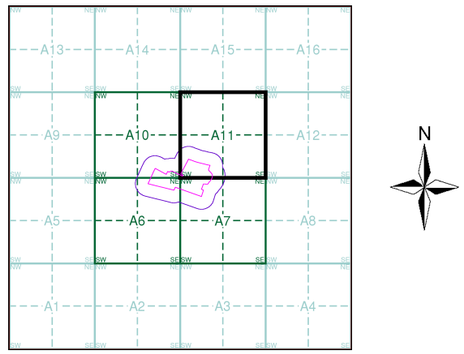
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
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- 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
- Waste Exemption Permits

Site Sensitivity Map - Segment A11



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Plot Buffer (m):	100

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

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



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Radon Affected Areas and Protection Measures

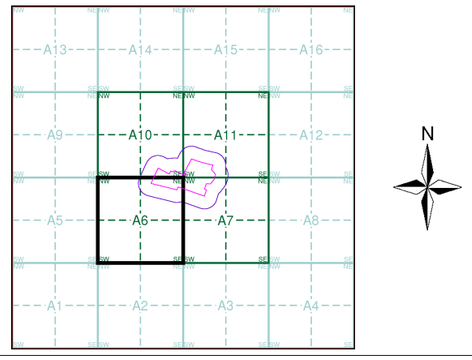
General

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

Radon Affected Areas and Protection Measures

- 1 - Less than 1% affected; no protection measures necessary
- 2 - 1-3% affected; no protection measures necessary
- 3 - 3-5% affected; basic protection measures necessary
- 4 - 5-10% affected; basic protection measures necessary
- 5 - 10-30% affected; full protection measures necessary
- 6 - Over 30% affected; full protection measures necessary

Radon Map - Segment A6



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Plot Buffer (m):	100

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

Landmark INFORMATION GROUP

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



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Radon Affected Areas and Protection Measures

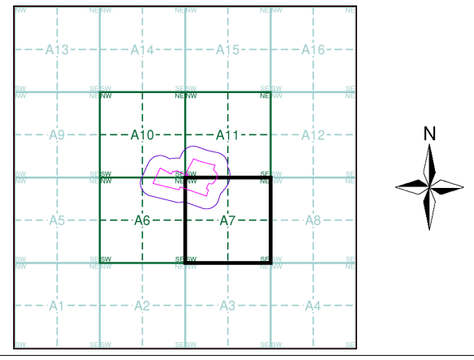
General

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

Radon Affected Areas and Protection Measures

- 1 - Less than 1% affected; no protection measures necessary
- 2 - 1-3% affected; no protection measures necessary
- 3 - 3-5% affected; basic protection measures necessary
- 4 - 5-10% affected; basic protection measures necessary
- 5 - 10-30% affected; full protection measures necessary
- 6 - Over 30% affected; full protection measures necessary

Radon Map - Segment A7



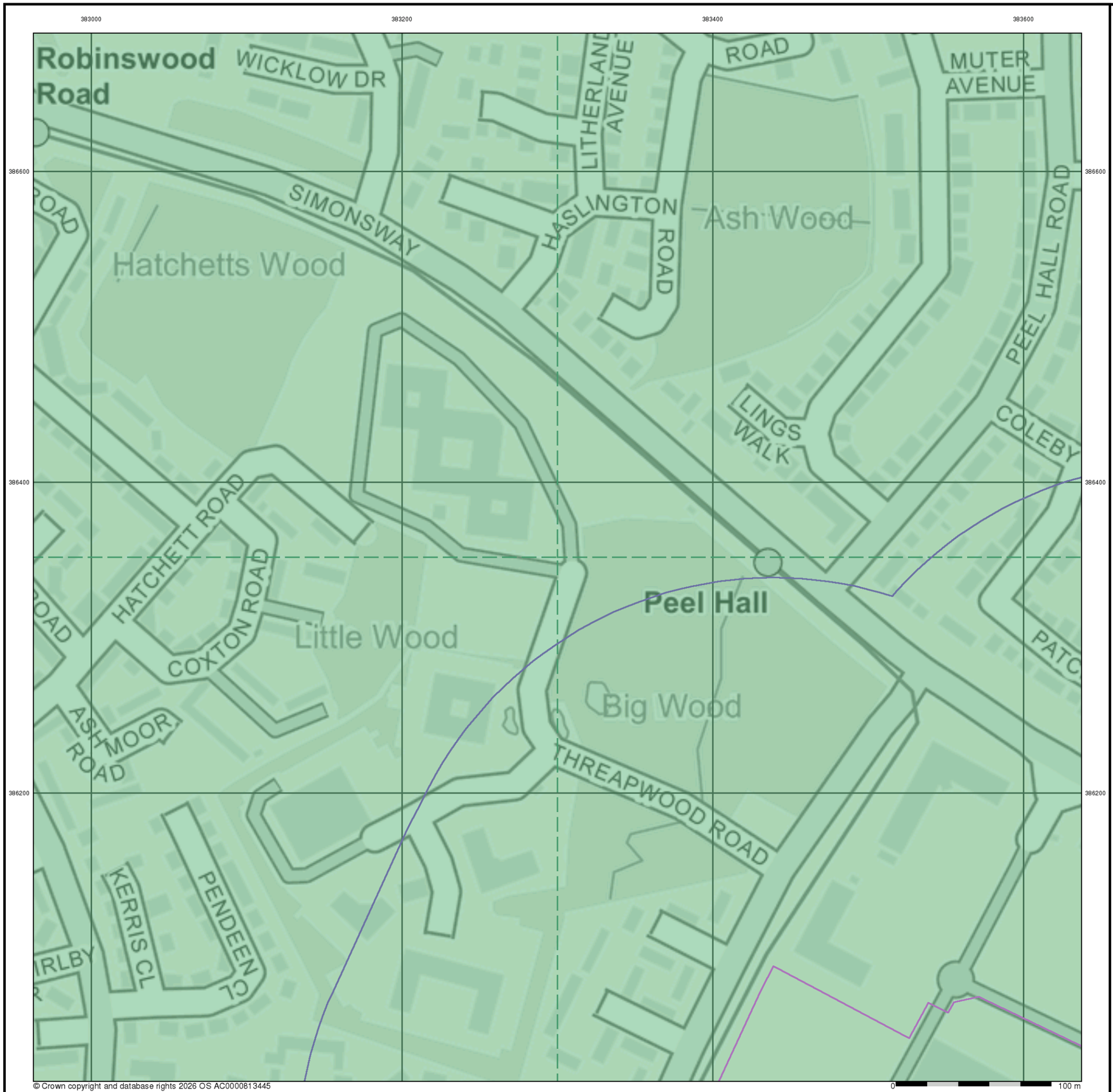
Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Plot Buffer (m):	100

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

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



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Radon Affected Areas and Protection Measures

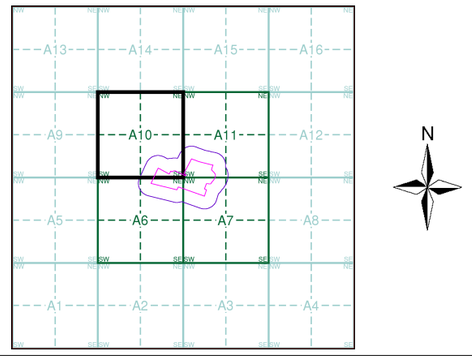
General

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

Radon Affected Areas and Protection Measures

- 1 - Less than 1% affected; no protection measures necessary
- 2 - 1-3% affected; no protection measures necessary
- 3 - 3-5% affected; basic protection measures necessary
- 4 - 5-10% affected; basic protection measures necessary
- 5 - 10-30% affected; full protection measures necessary
- 6 - Over 30% affected; full protection measures necessary

Radon Map - Segment A10



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Plot Buffer (m):	100

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

Landmark INFORMATION GROUP

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



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Radon Affected Areas and Protection Measures

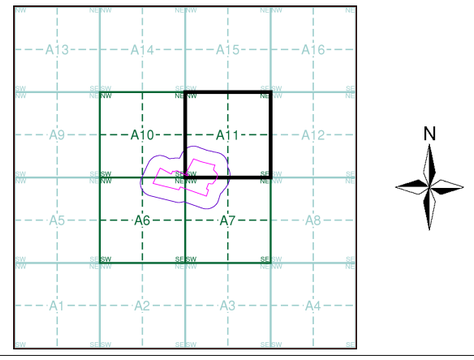
General

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

Radon Affected Areas and Protection Measures

- 1 - Less than 1% affected; no protection measures necessary
- 2 - 1-3% affected; no protection measures necessary
- 3 - 3-5% affected; basic protection measures necessary
- 4 - 5-10% affected; basic protection measures necessary
- 5 - 10-30% affected; full protection measures necessary
- 6 - Over 30% affected; full protection measures necessary

Radon Map - Segment A11



Order Details

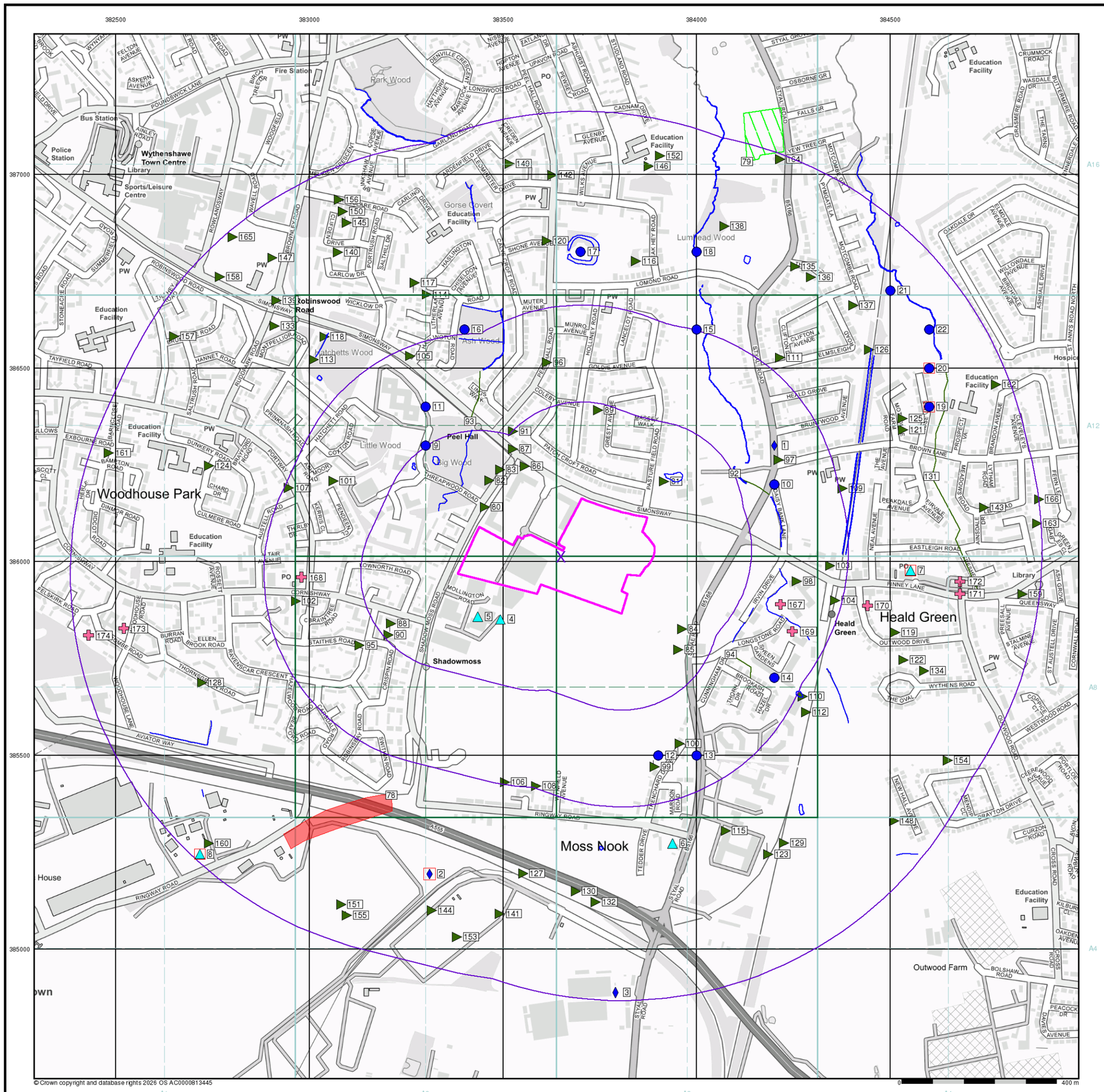
Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Plot Buffer (m):	100

Site Details

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Lucion

Protecting people and planet

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
- Pollution Incident to Controlled Waters
- Historical Prosecutions
- Prosecutions
- Registered Radioactive Substance
- River Network or Water Feature
- 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

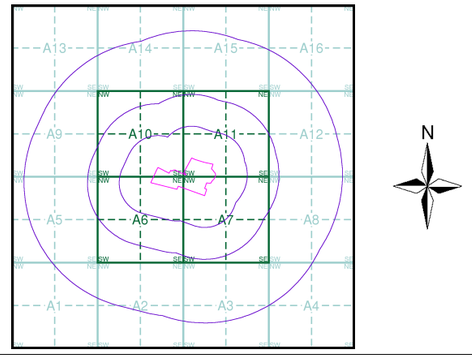
Geological

- 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
- Licenced Waste Management Facility (Landfill Boundary)
- Licenced 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
- Waste Exemption Permits

Site Sensitivity Map - Slice A



Order Details

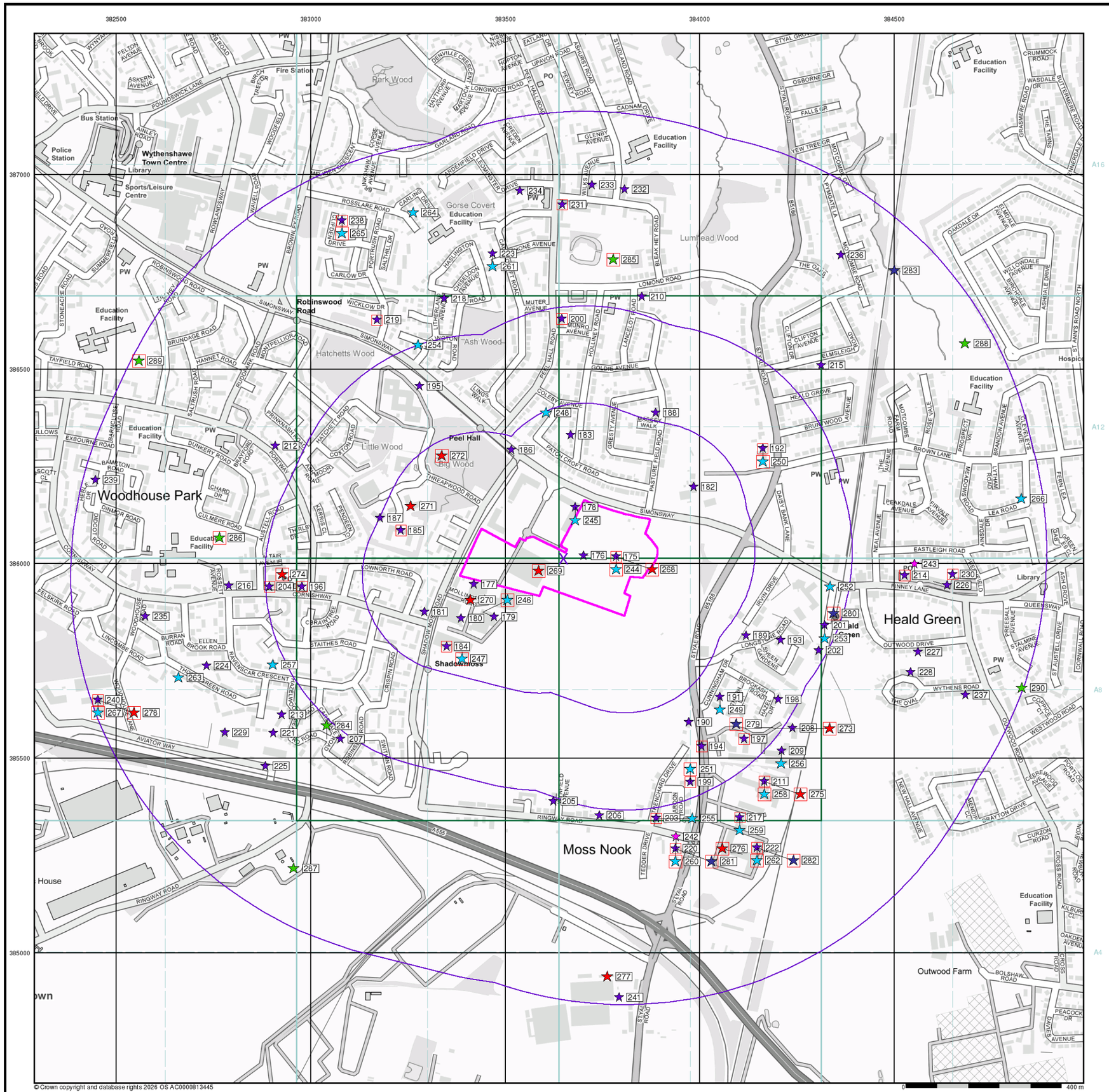
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Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	1000

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

Landmark INFORMATION GROUP

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Industrial Land Use Map

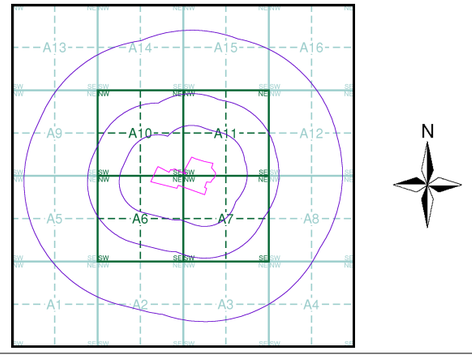
General

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

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- 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
- Pollution Inventory - Substances
- Pollution Inventory - Waste Transfers
- Pollution Inventory - Radioactive Waste
- Underground Electrical Cables

Industrial Land Use Map - Slice A



Order Details

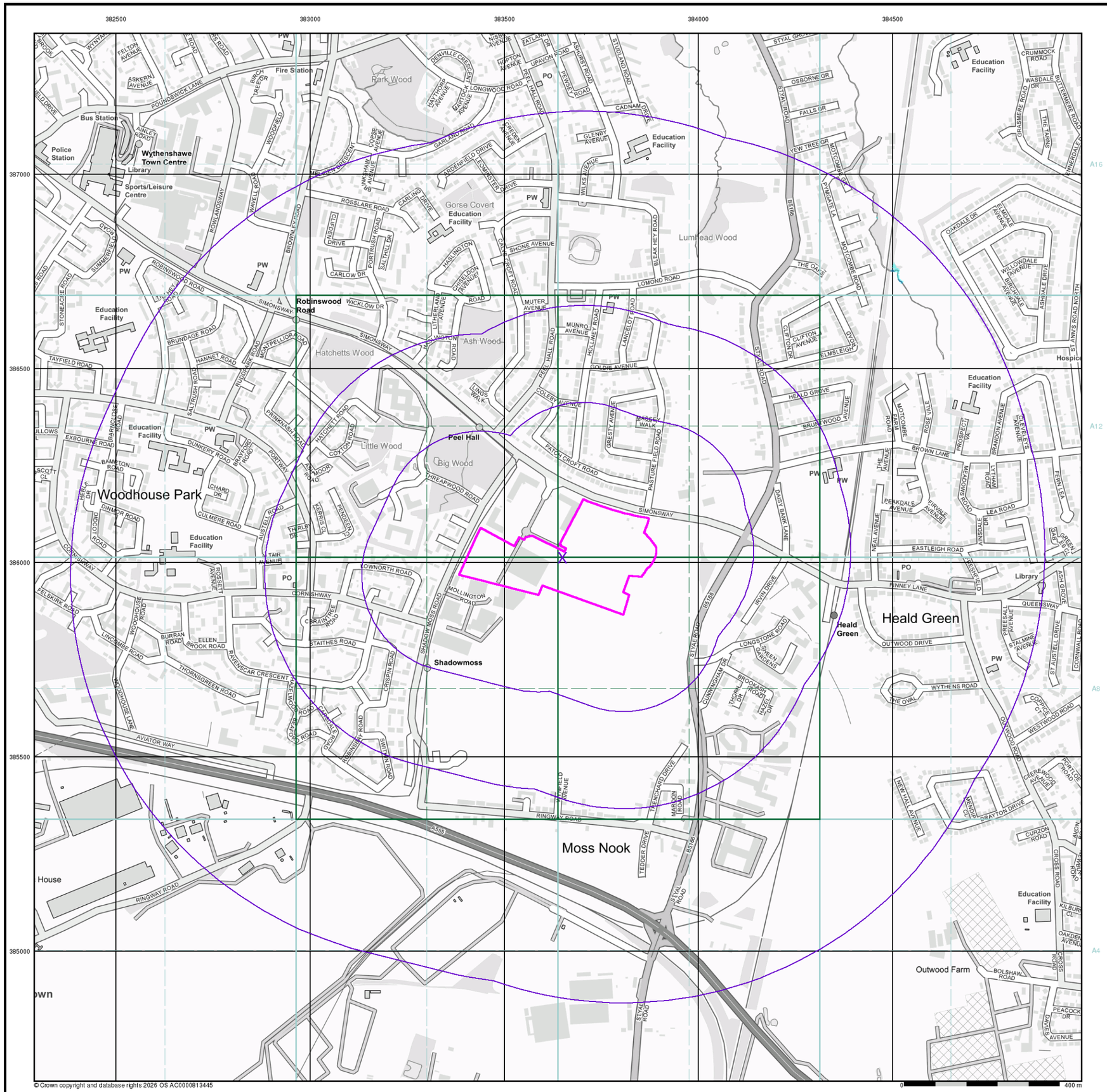
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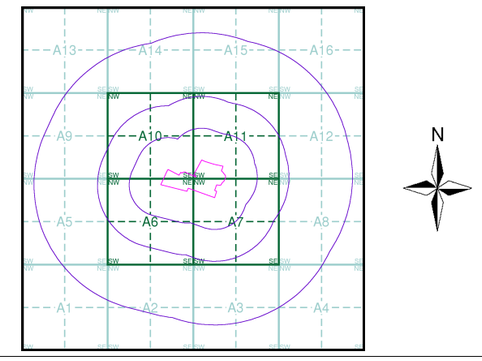
General

- Specified Site
- Specified Buffer(s)
- X 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

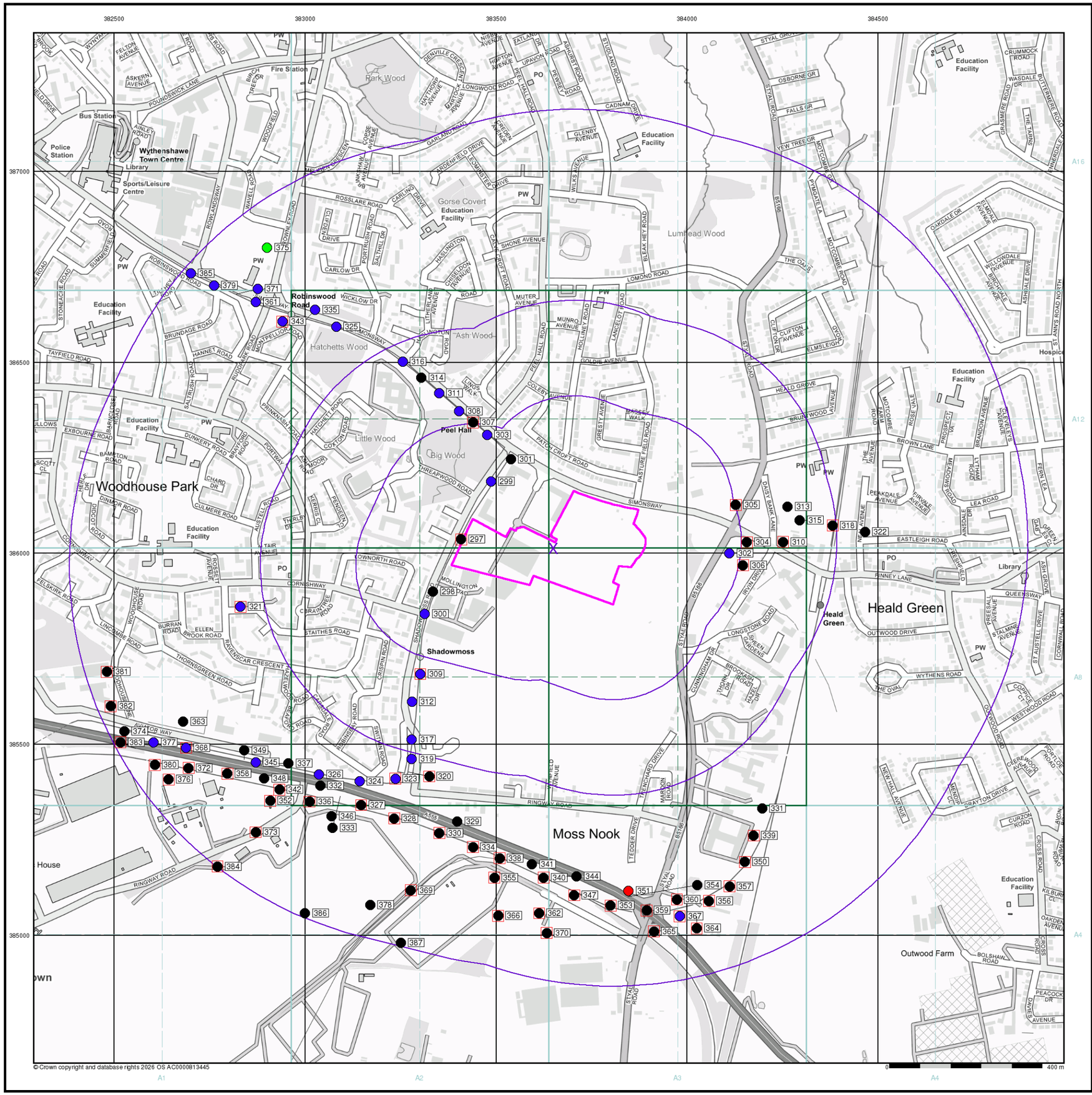
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Customer Ref:	28248
National Grid Reference:	383650, 386010
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General

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

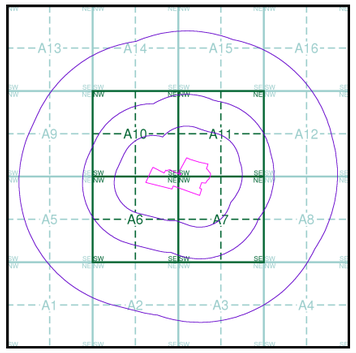
Agency and Hydrological (Boreholes)

- 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



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
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Slice:	A
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General

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

OS NGD Water Network Links Data

- Canal
- Canal Feeder
- Reservoir
- Foreshore
- Marsh
- Watercourse
- Overflow
- Drain
- Other
- Still Water
- Leat
- Lock
- Sea

Contours (height in metres)

Standard Contour

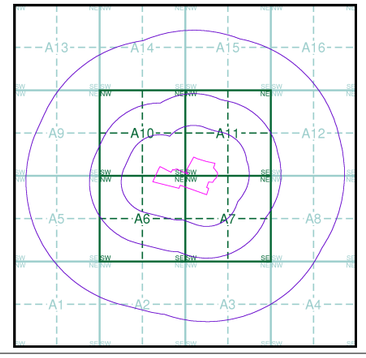
Master Contour

Spot Height 167.3

MLW Mean Low Water

MHW Mean High Water

OS NGD Water Network Map - Slice A



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
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Slice:	A
Site Area (Ha):	7.9
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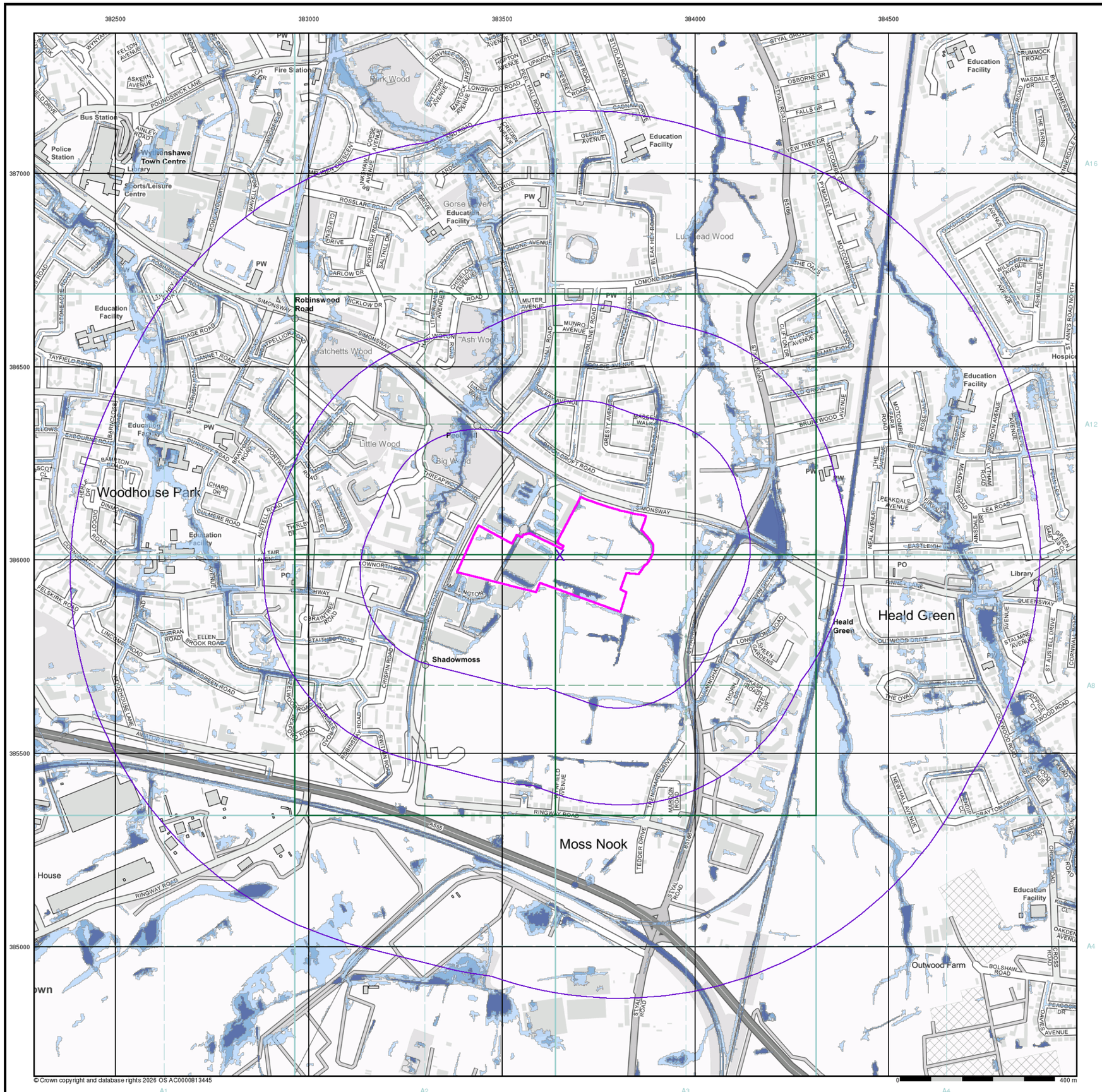
Site Details

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General

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

Risk of Flooding from Surface Water

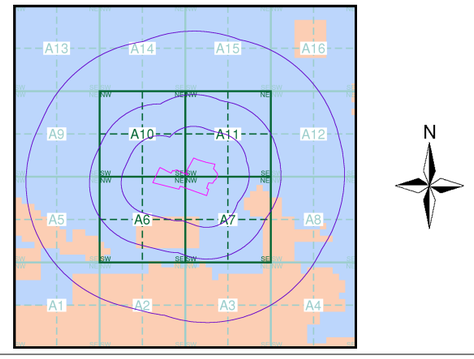
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

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

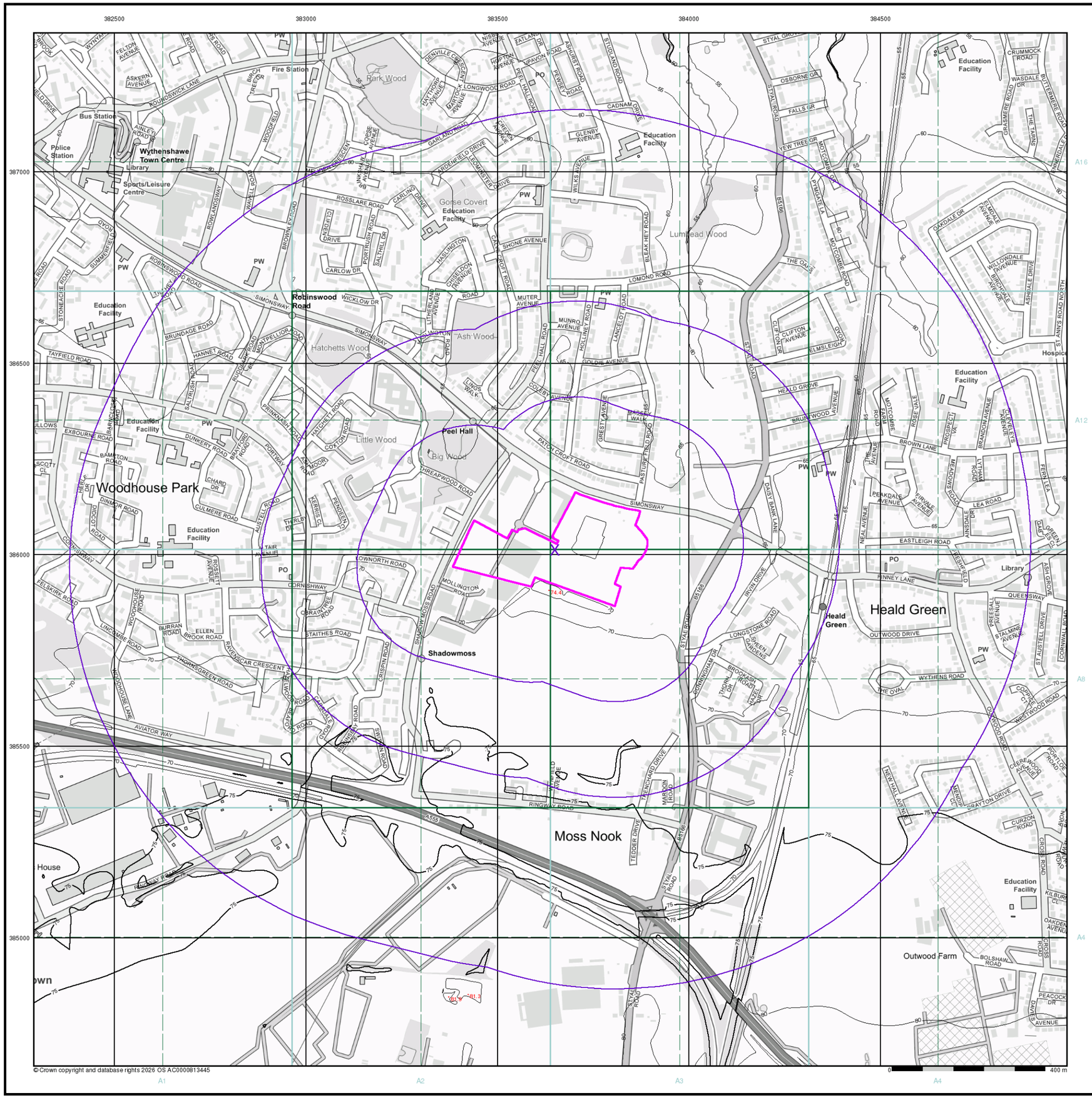
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WFD Surface Waters Map

General

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

Water Framework Directive - Surface Water Quality

- High
- Good
- Moderate
- Poor
- Bad

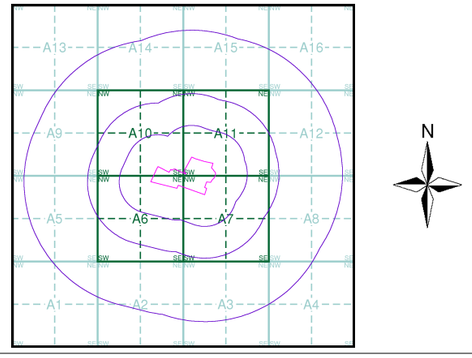
Contours (height in meters)

Standard Contour 105 100 95 — MLW Mean Low Water

Master Contour — MHW Mean High Water

Spot Height 167.3

WFD Surface Waters Map - Slice A



Order Details

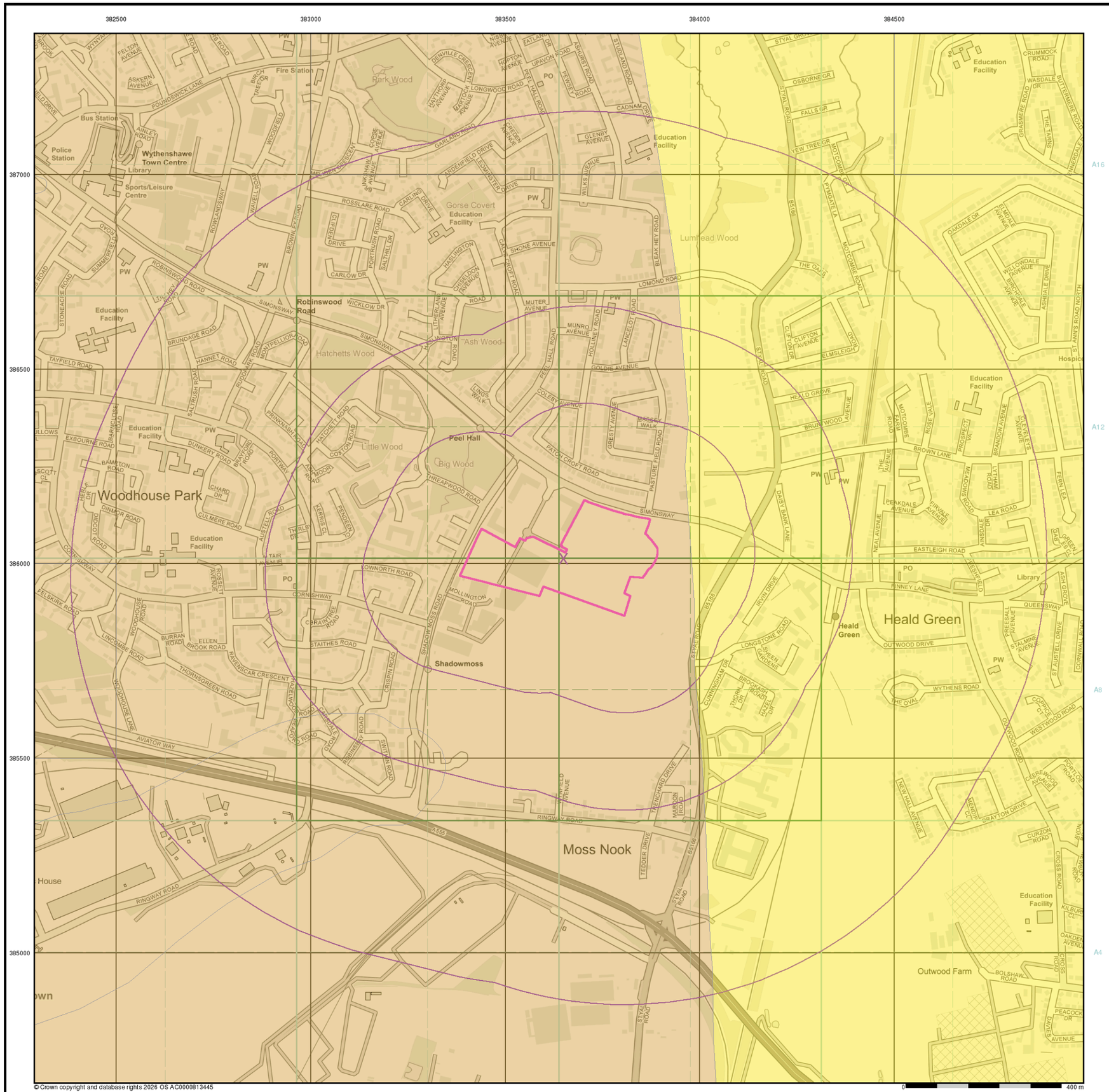
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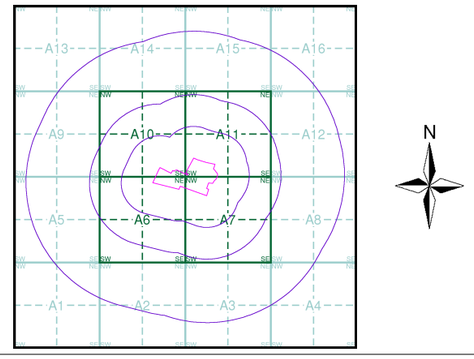
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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

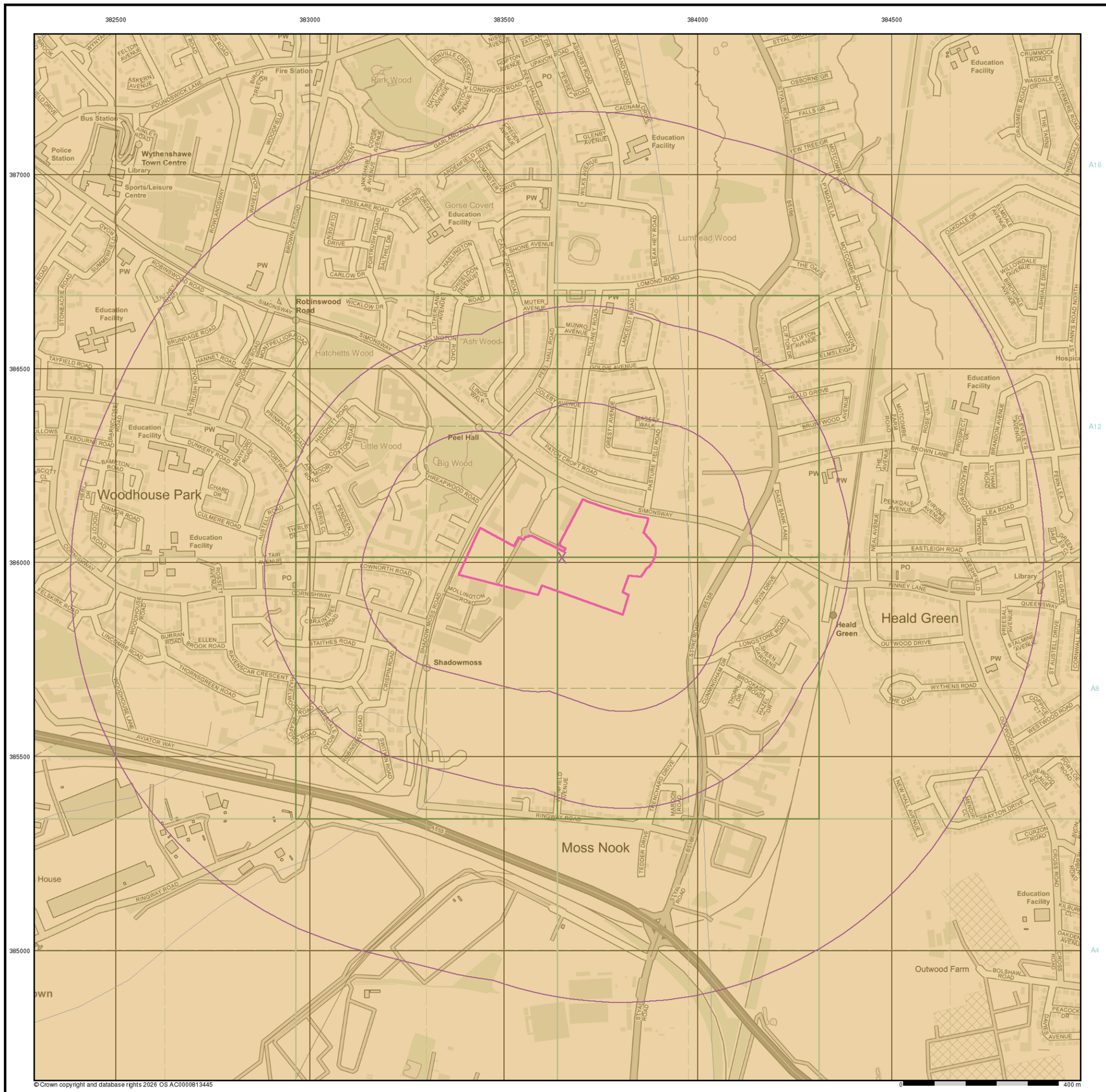
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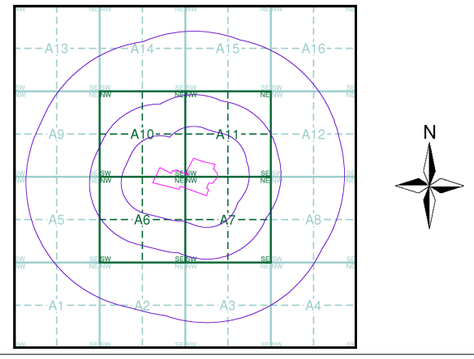
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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

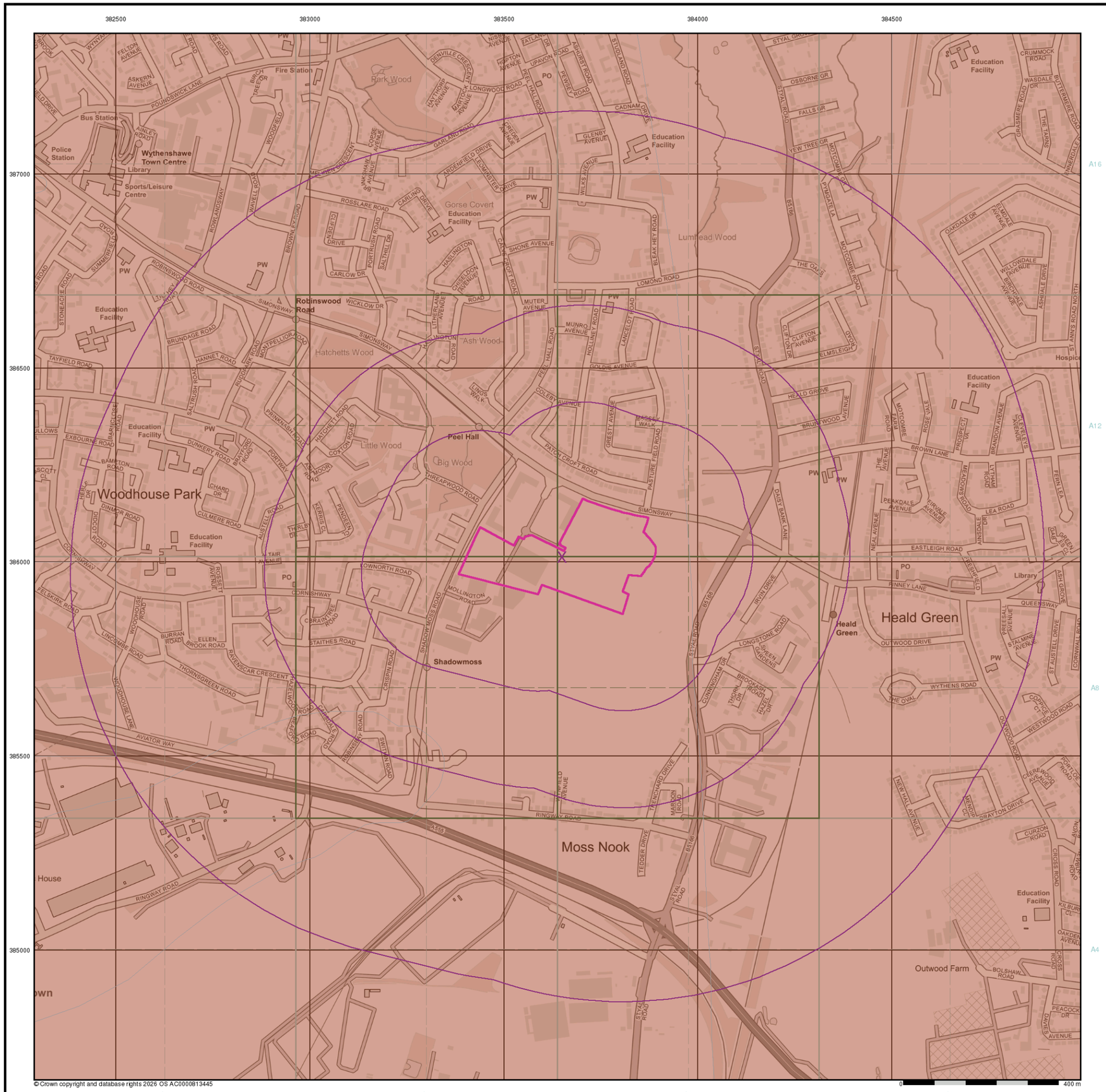
Order Details:	404873443_1_1
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General

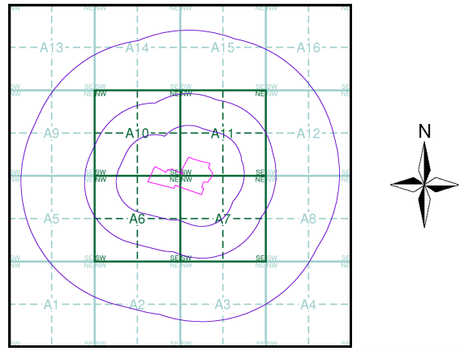
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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



Order Details

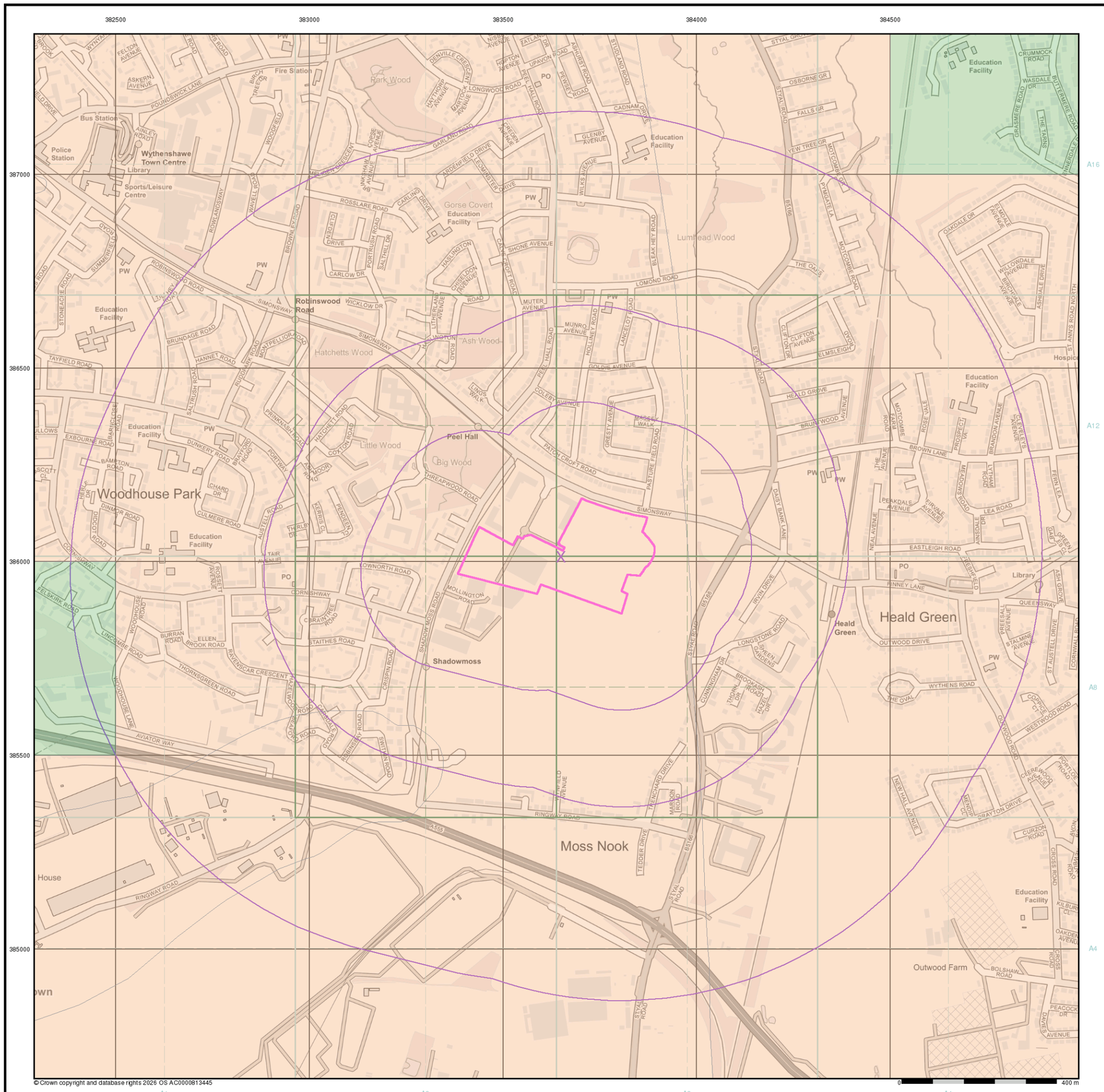
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General

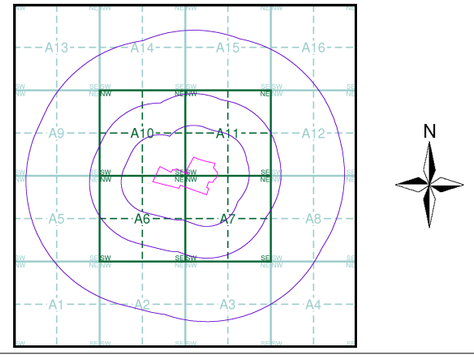
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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



Order Details

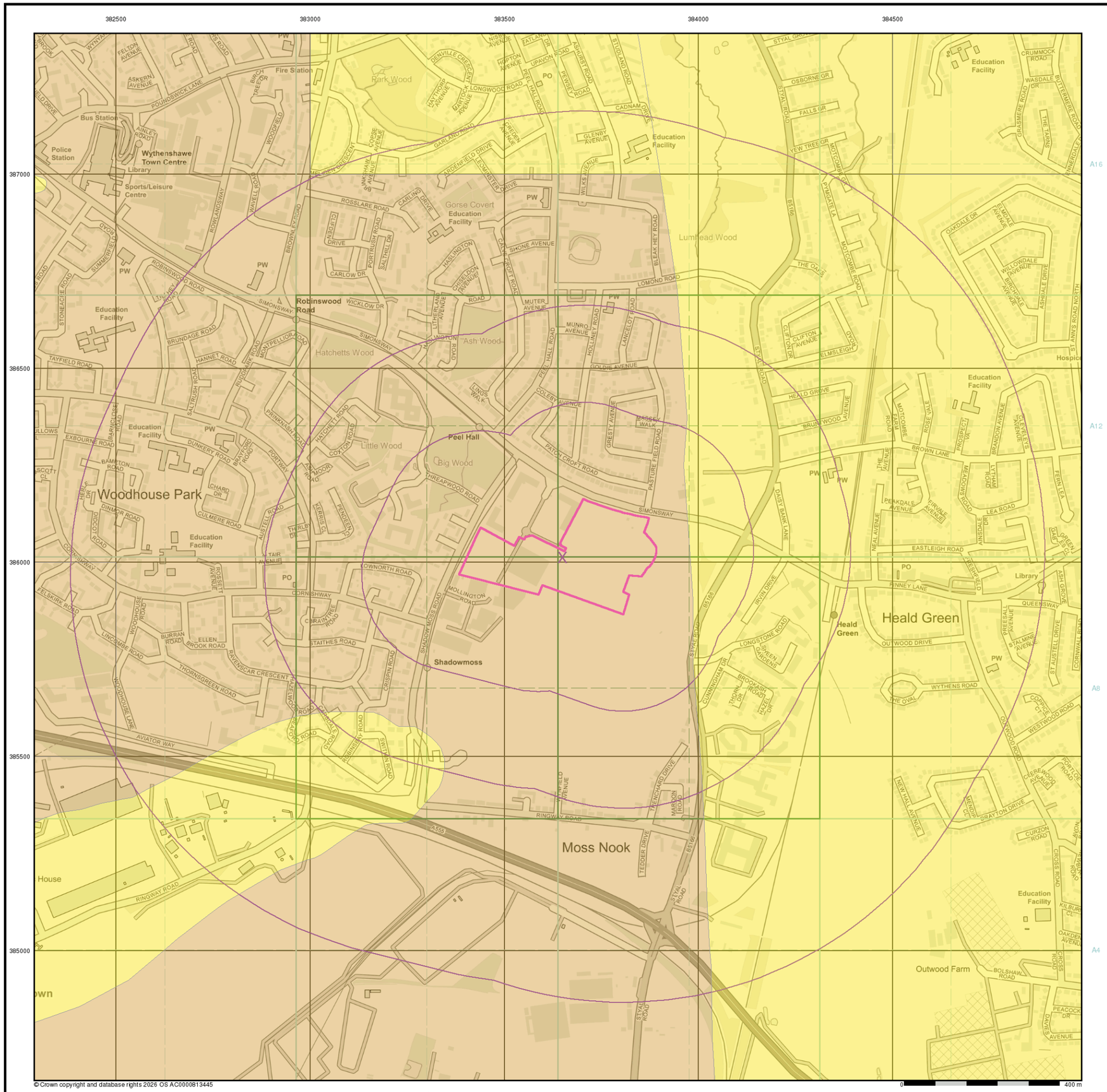
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General

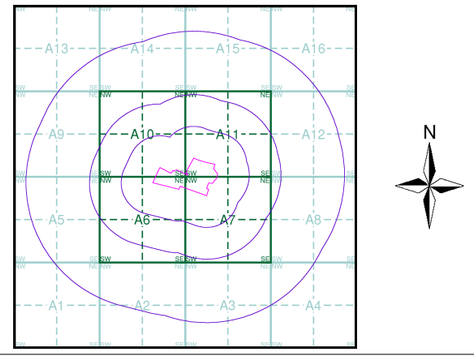
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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

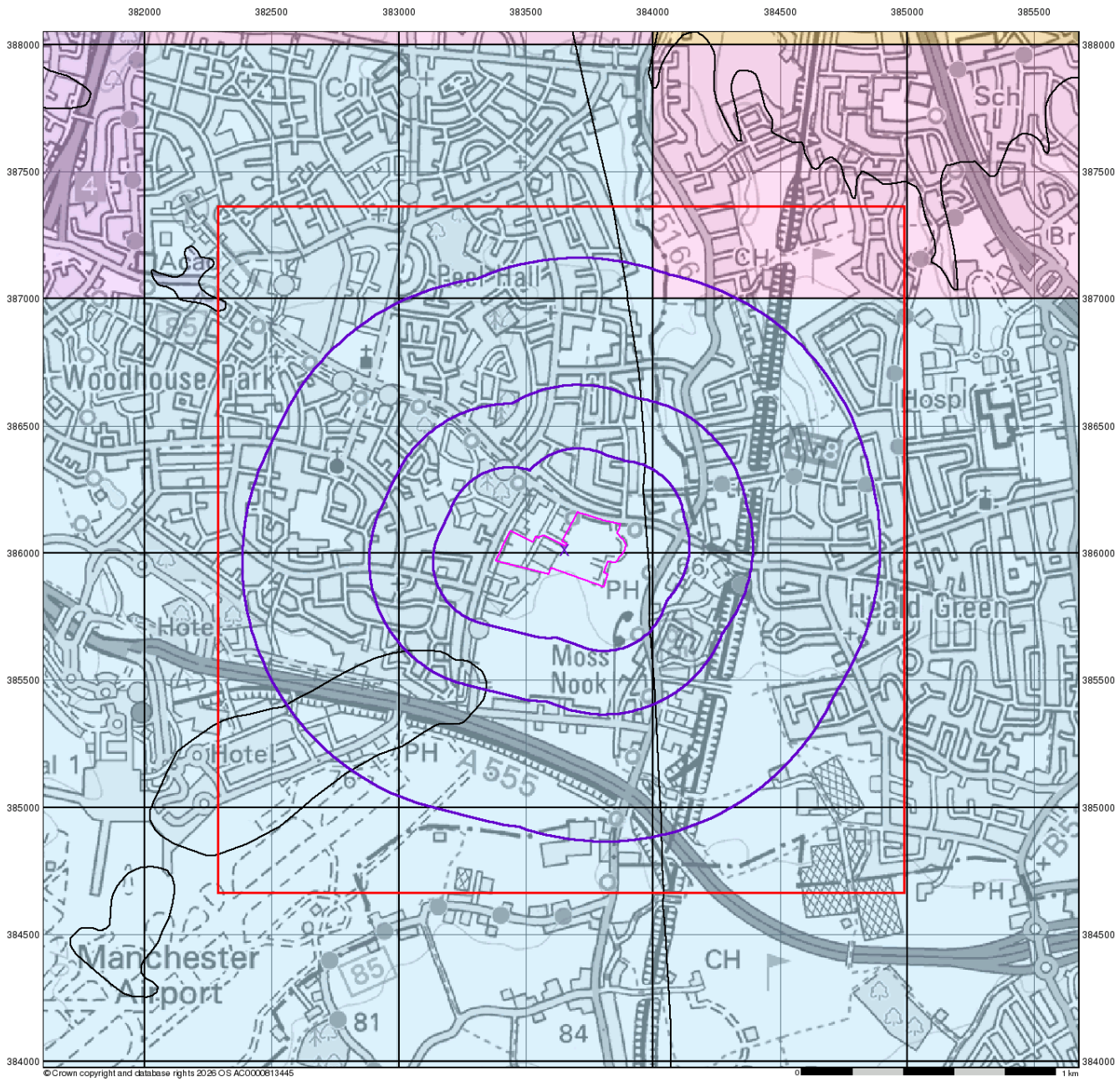
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Groundwater Vulnerability

General

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

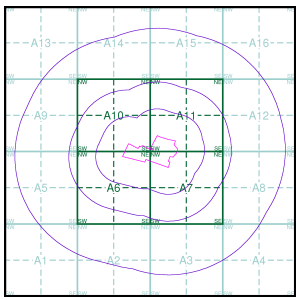
Agency and Hydrological

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



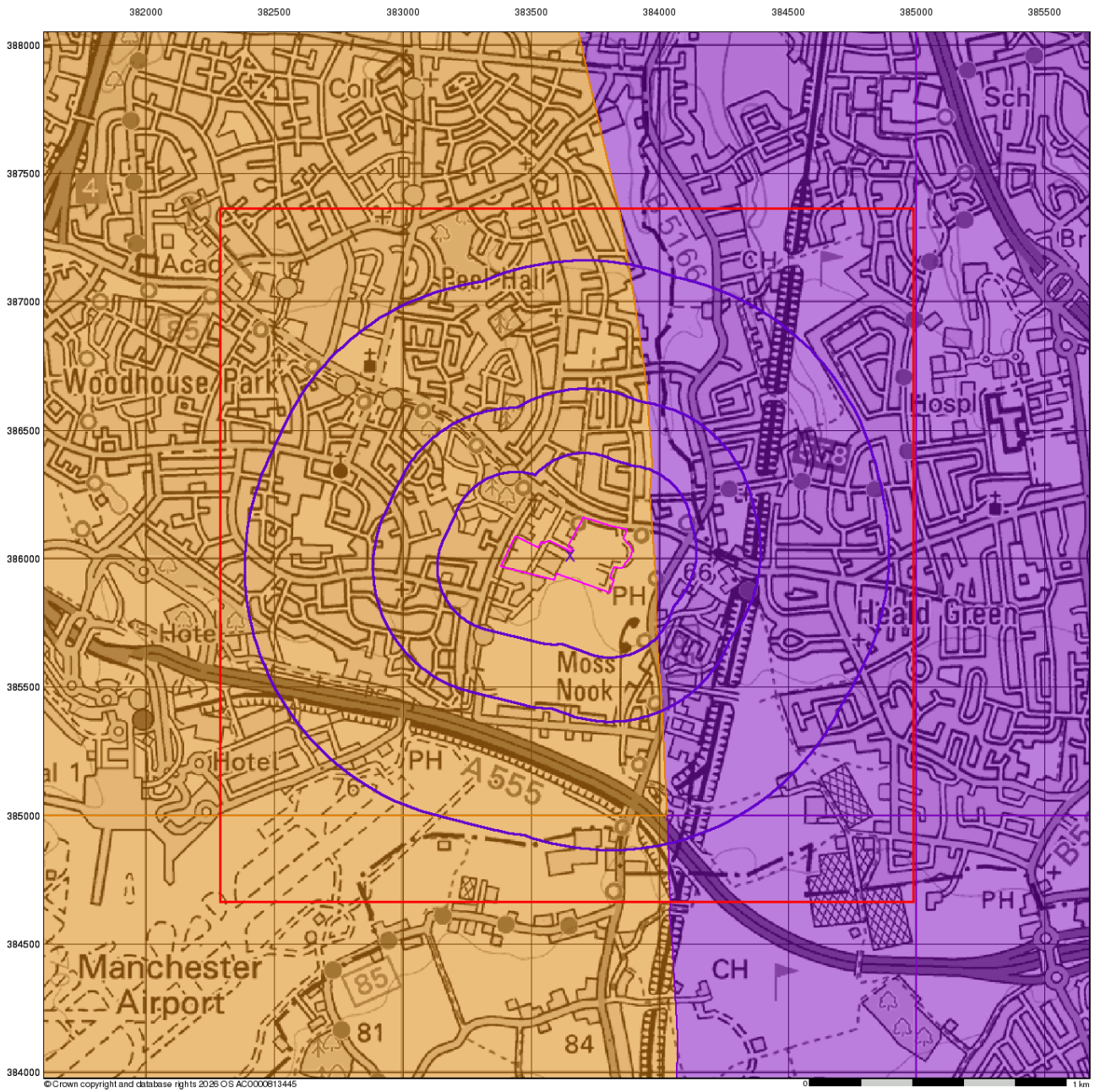
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Bedrock Aquifer Designation

General

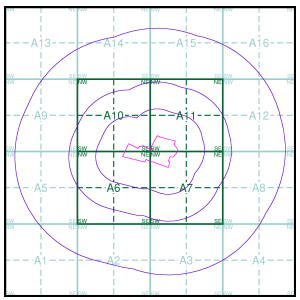
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

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



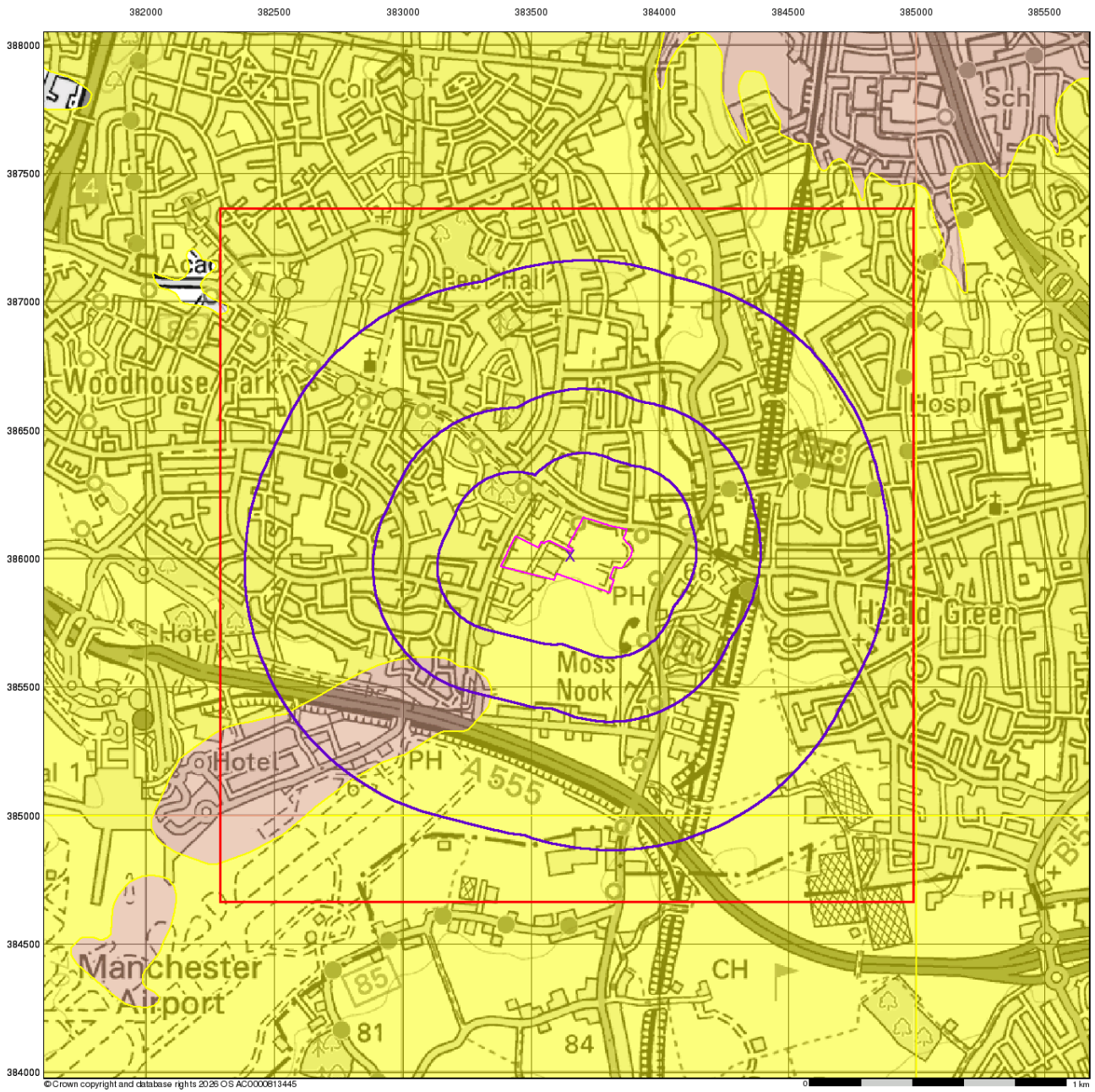
Order Details

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Superficial Aquifer Designation

General

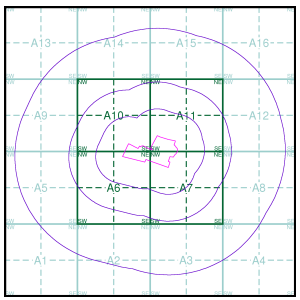
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

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



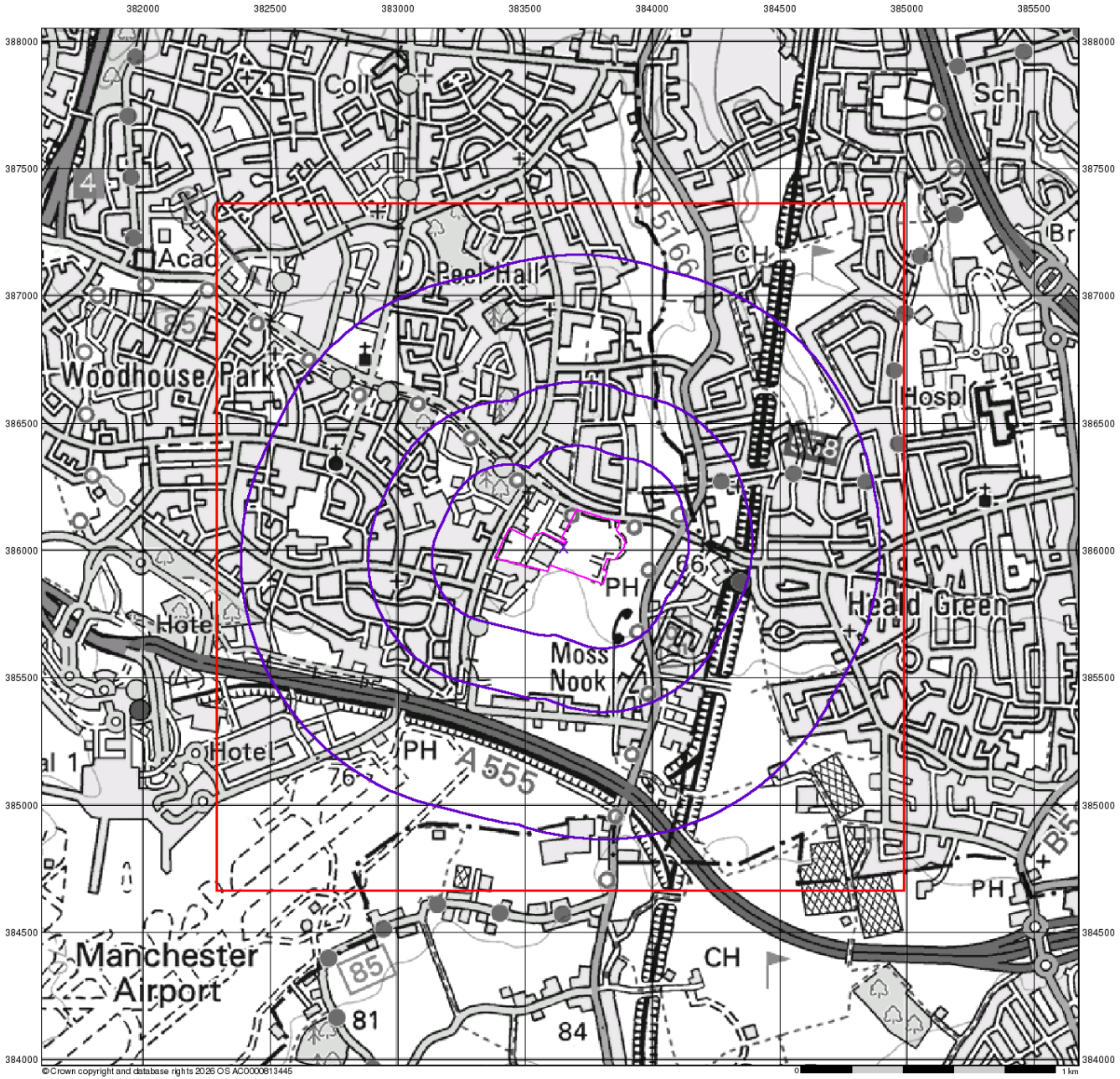
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Source Protection Zones

General

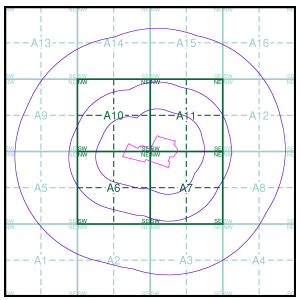
Specified Site | Specified Buffer(s) | Bearing Reference Point

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

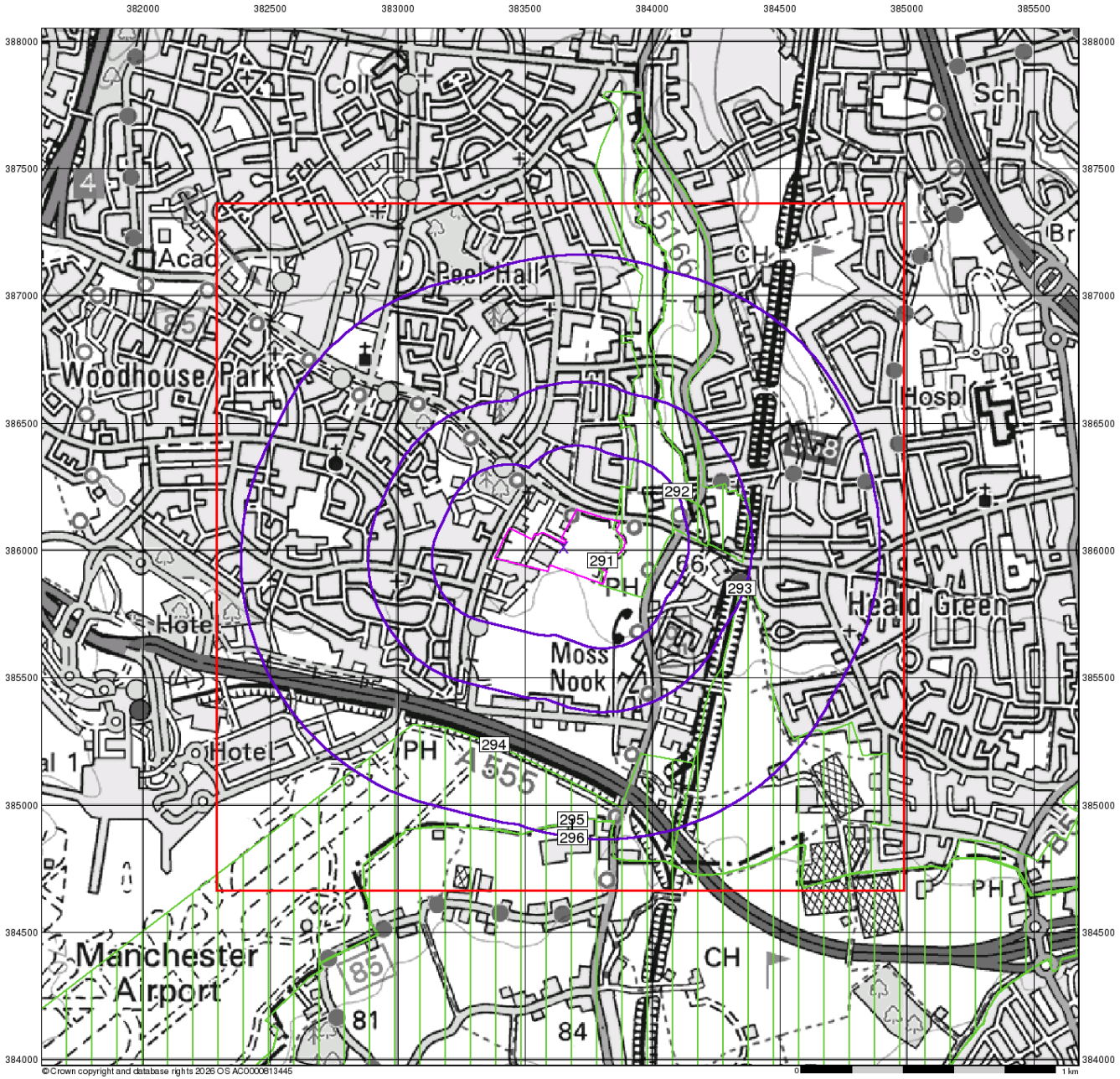
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Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	1000

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

Landmark INFORMATION GROUP

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Sensitive Land Uses

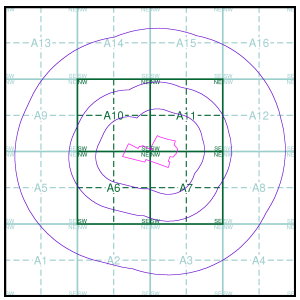
General

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



Order Details

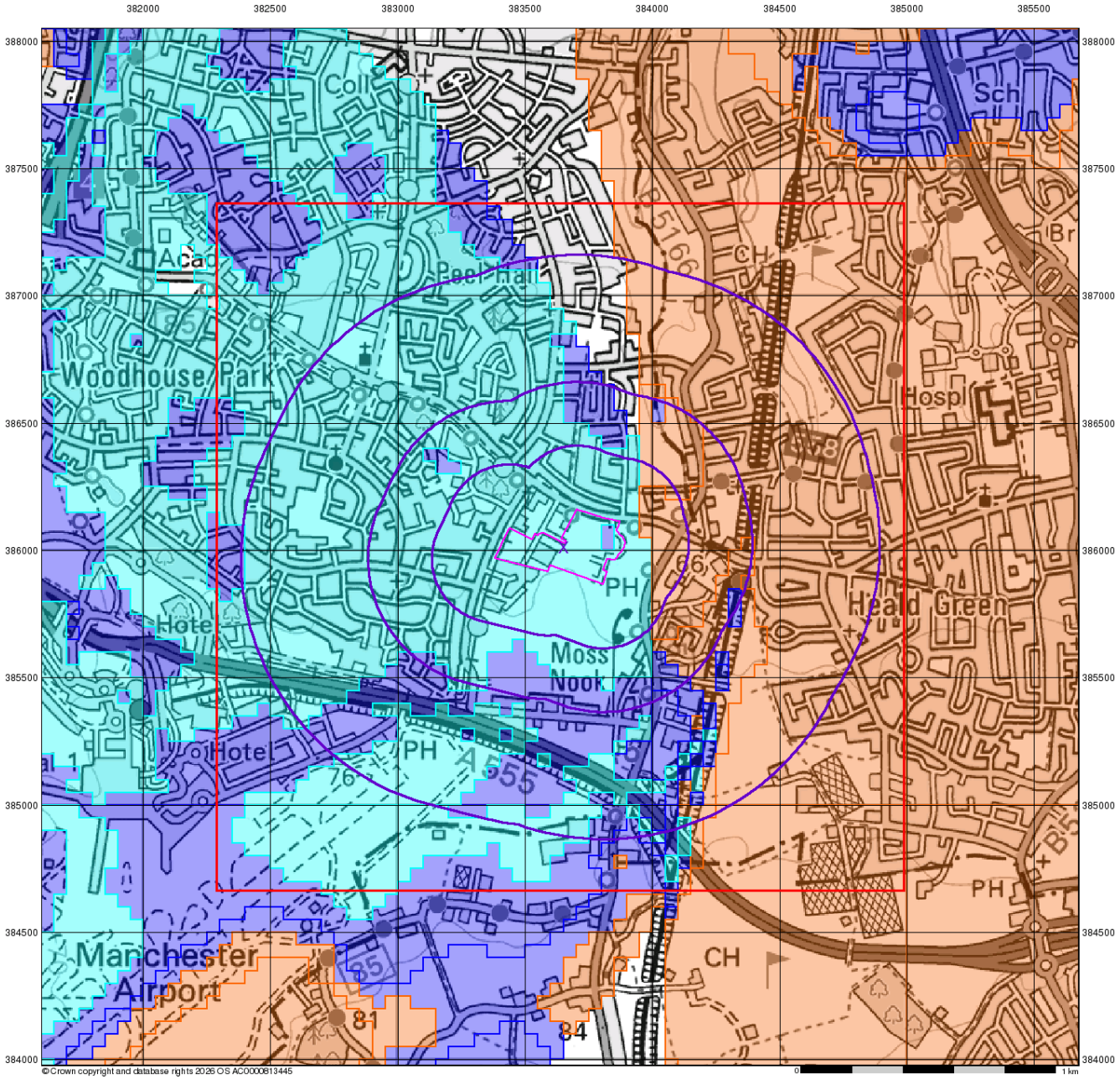
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BGS Flood GFS Data

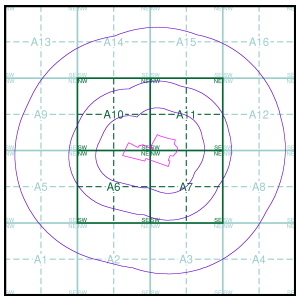
General

- 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:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
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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

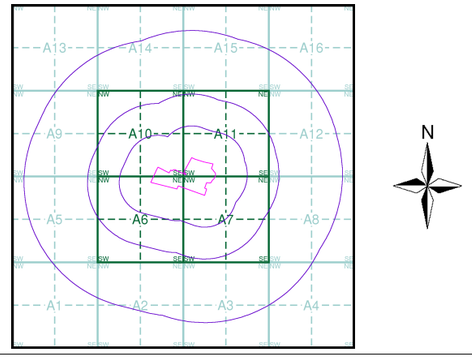
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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cheshire	1:10,560	1882	3
Cheshire	1:10,560	1899	4
Cheshire	1:10,560	1910 - 1911	5
Cheshire	1:10,560	1911	6
Cheshire	1:10,560	1911	7
Lancashire And Furness	1:10,560	1935	8
Lancashire And Furness	1:10,560	1935	9
Cheshire	1:10,560	1938	10
Ordnance Survey Plan	1:10,000	1954	11
Ordnance Survey Plan	1:10,000	1967	12
Manchester	1:25,000	1975	13
Ordnance Survey Plan	1:10,000	1976 - 1977	14
Ordnance Survey Plan	1:10,000	1990	15
Ordnance Survey Plan	1:10,000	1996	16
10K Raster Mapping	1:10,000	1999	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2026	19

Historical Map - Slice A



Order Details

Order Number: 404873443_1_1
Customer Ref: 28248
National Grid Reference: 383650, 386010
Slice: A
Site Area (Ha): 7.9
Search Buffer (m): 1000

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

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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

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 (бум.)
- Factory or Mill without Chimney (скип.)
- Mine or Open Pit Mine (медн.)
- Operating Shaft or Mine (кам. уг.)
- Non-Operating Shaft or Mine
- Salt Mine (сол.)
- Tailings Pile
- Pit (– 1.7)
- Stone Quarry (гл. пес. кам.)
- Gas Pump or Service Station
- Fuel Storage or Natural Gas Tank
- Oil or Natural Gas Derrick
- Small Hydroelectric Power Station
- Power Station
- Transformer Station (б.тр.)
- Cemetery
- Burial Mound (height in metres) (+ 8.1)
- Triangulation Point on Burial Mound (95.7)
- Triangulation Point (92.6)
- Bench Mark (52.1)
- Bench Mark (monumented) (71.1)
- Telegraph Office
- Telephone Station
- Radio Station
- Radio Tower
- Airfield or Seaplane Base
- Landing Strip
- Main Highway (Cut, Fill, Km Post, Plantings, Telegraph/Telephone Lines)
- Highway under Construction
- Improved Dirt Road (former truck road) (Width of Road, Steep Grade)
- Double-track Railroad with First Class Station (Small Bridge, Pipe (Culvert), Tunnel)
- Dismantled Railroad
- Railroad Under Construction
- Shore Embankment
- River or Ditch with Embankment (+2.4)
- Water Level Mark (Water Gauge, Direction and velocity of current, 135.1)
- Well (К. 125.0 гл.8м (г.-сол.))
- Water Reservoir or Rain Water Pit (вдхр.)
- Spring (156.2 кл.)
- Isobath with value (20)
- Heavy (Index) Contour Line
- Contour Line and Value (20)
- Half Contour Line
- Spot Elevation Value (347.1)
- Coniferous
- Deciduous
- Mixed
- Scrub

Key to Numbers on Mapping

SJ88_Manchester

No.	Description
112	Factory (Radio Electronics)

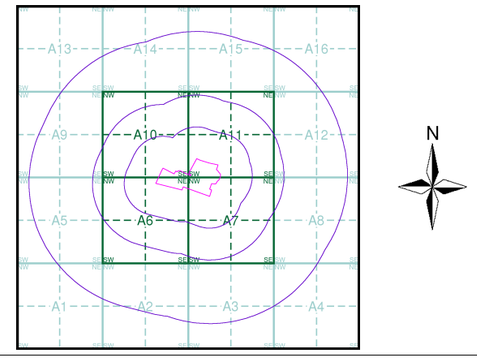
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10K Raster Mapping	1:10,000	1999	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2026	19

Russian Map - Slice A



Order Details

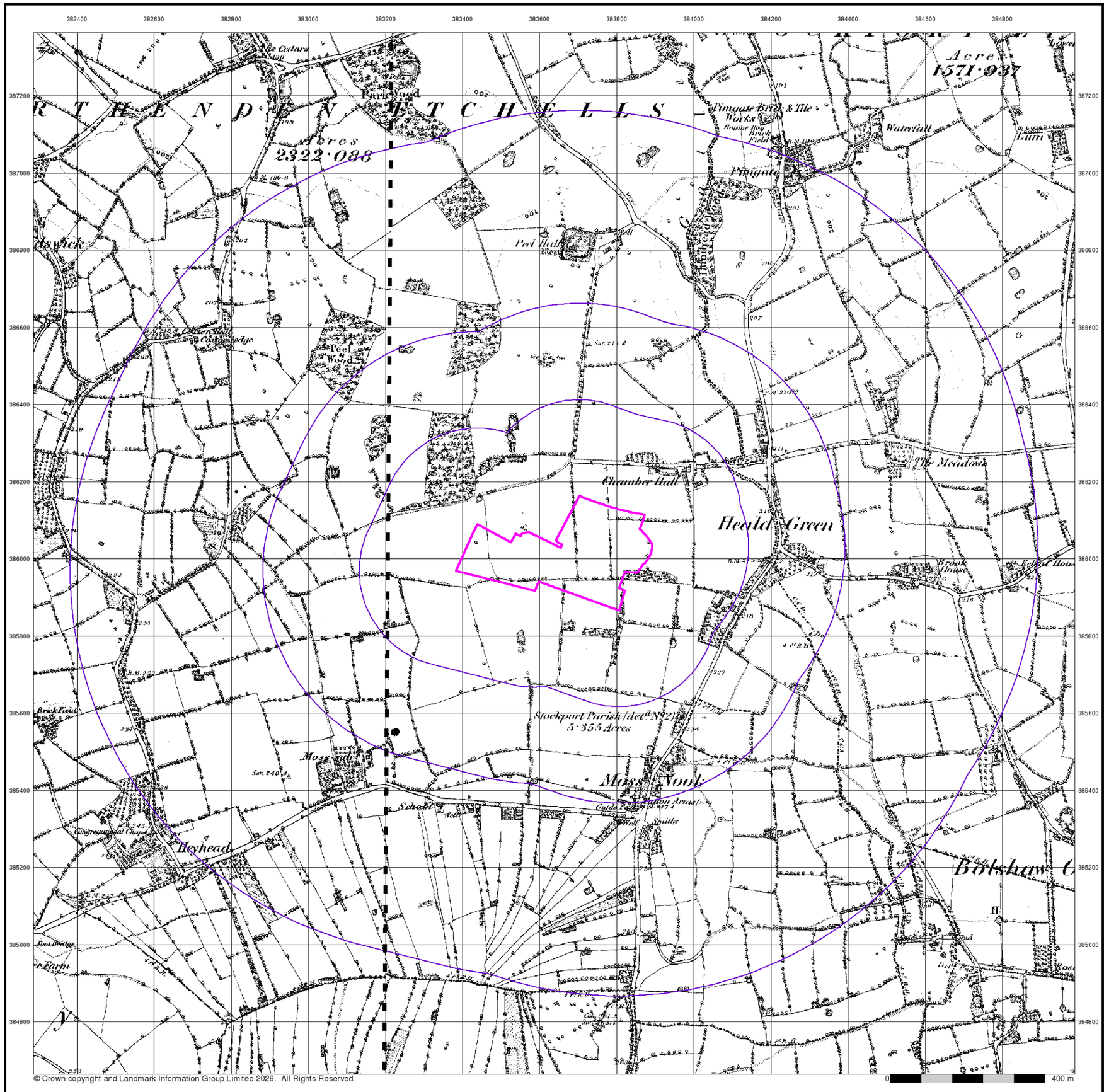
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Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	1000

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

Landmark INFORMATION GROUP

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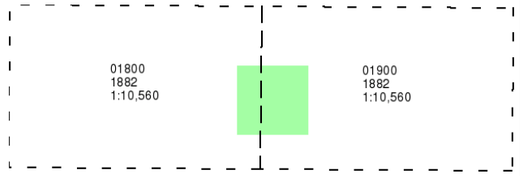
Cheshire

Published 1882

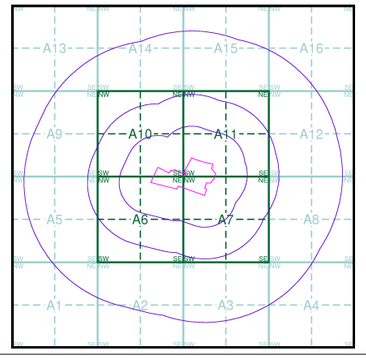
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

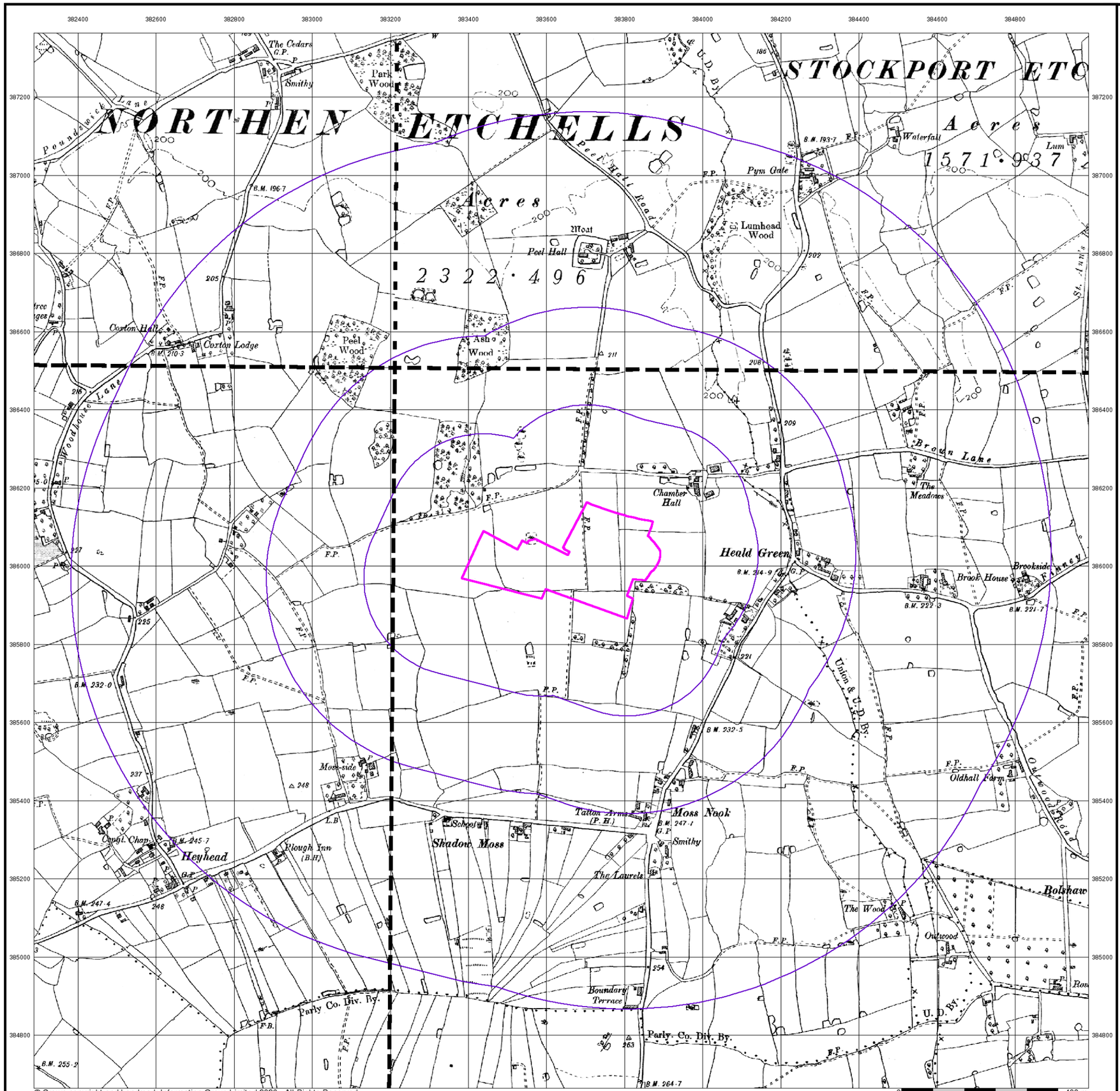
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Cheshire

Published 1899

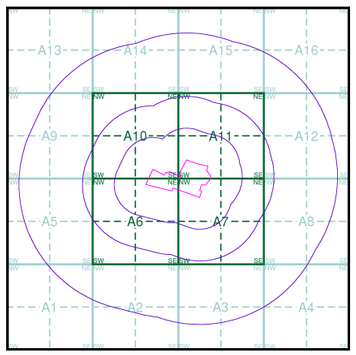
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Map Name(s) and Date(s)

018NE 1899 1:10,560	019NW 1899 1:10,560
018SE 1899 1:10,560	019SW 1899 1:10,560

Historical Map - Slice A



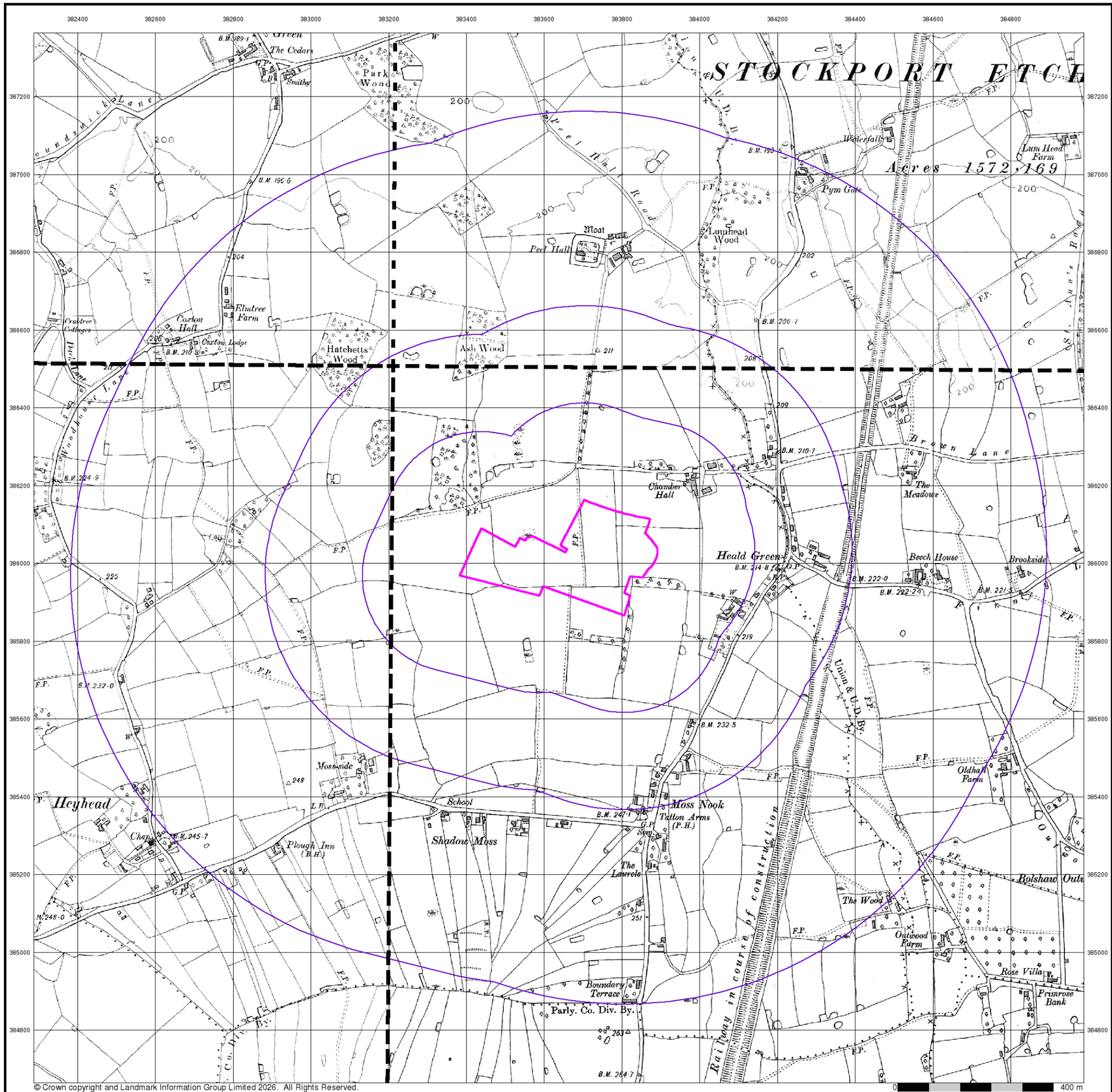
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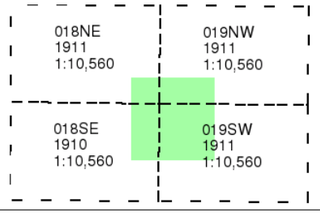
Cheshire

Published 1910 - 1911

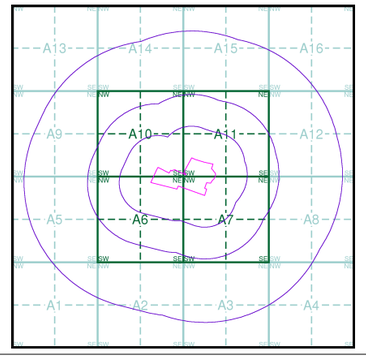
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



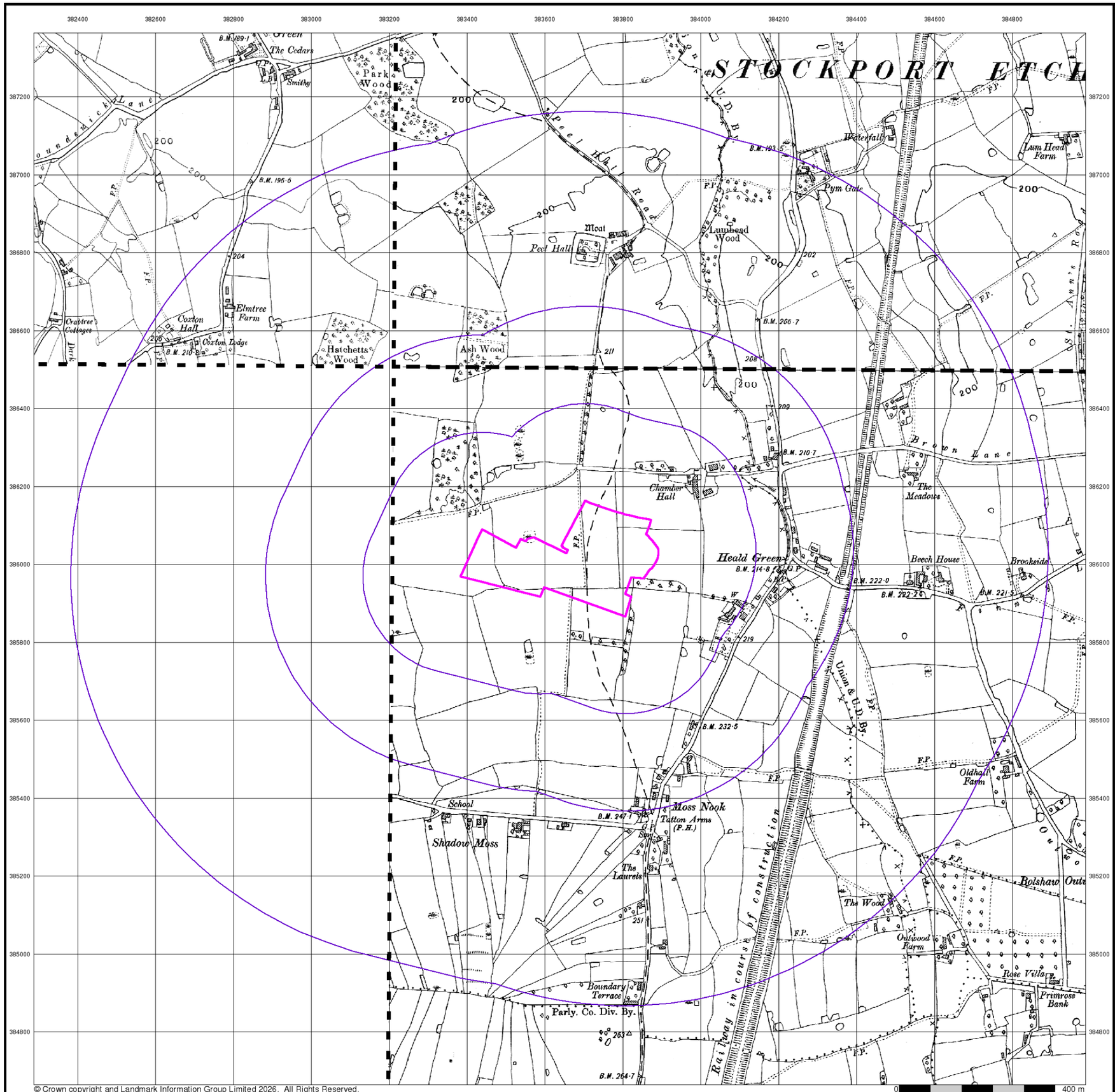
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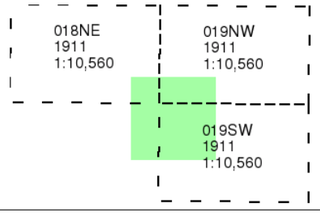
Cheshire

Published 1911

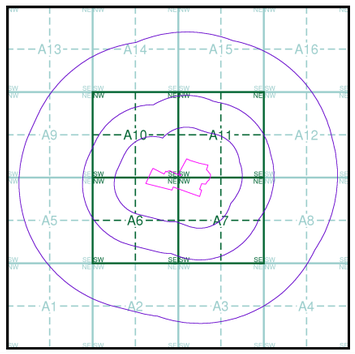
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

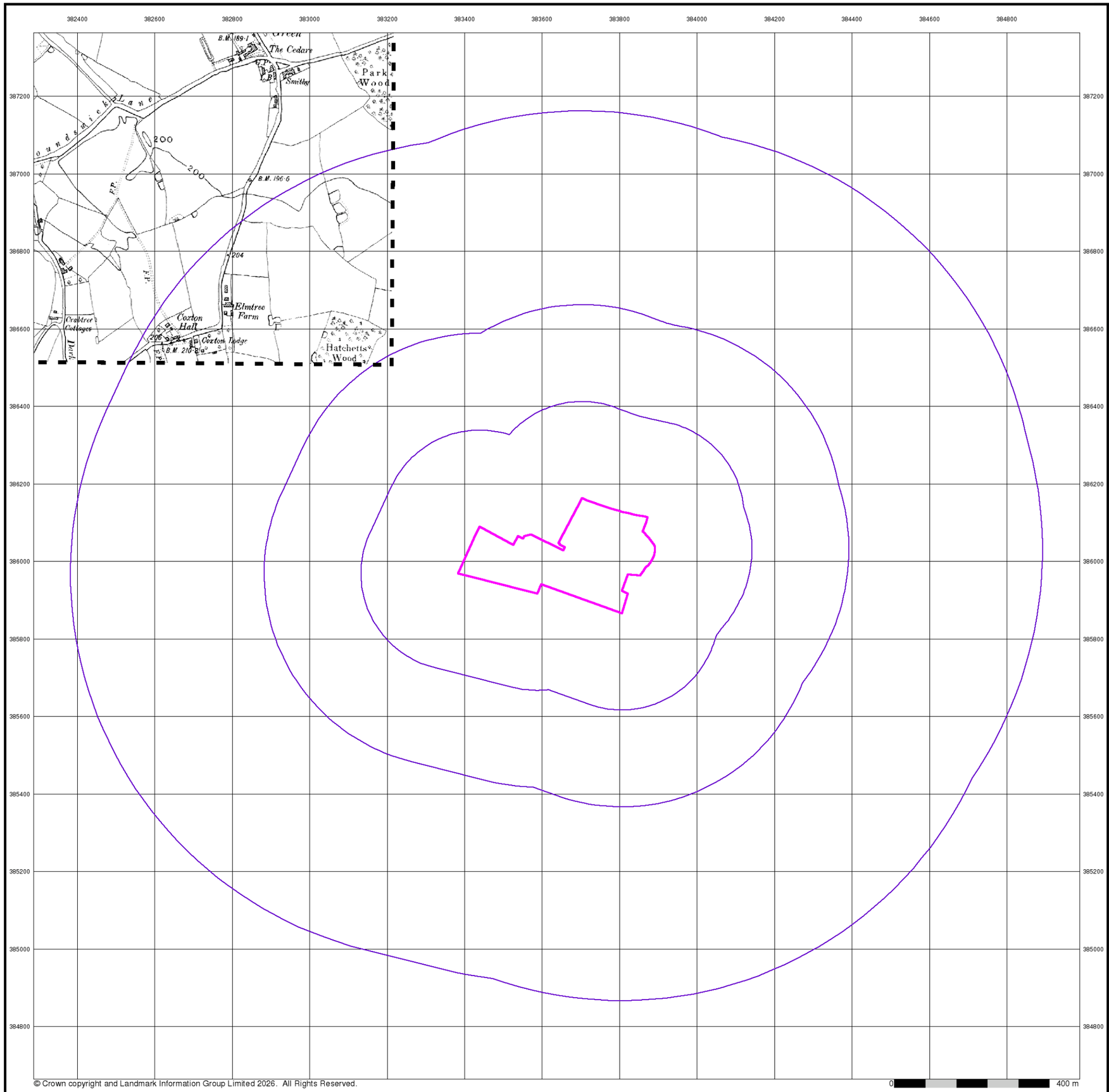
Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	1000

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

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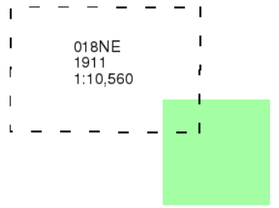
Cheshire

Published 1911

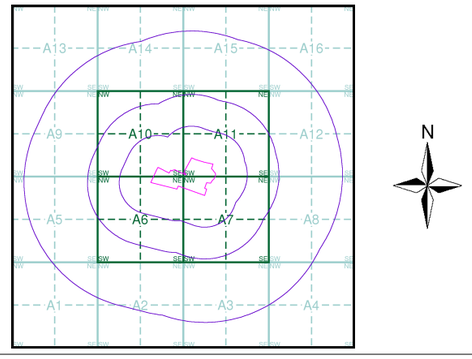
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
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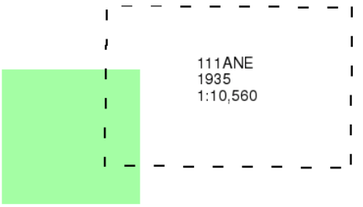
Lancashire And Furness

Published 1935

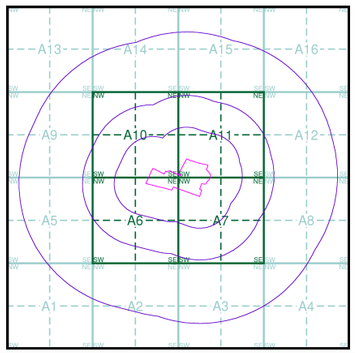
Source map scale - 1:10,560

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Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
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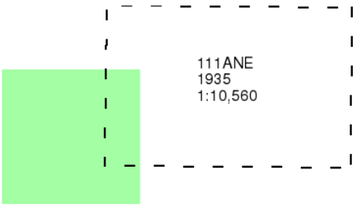
Lancashire And Furness

Published 1935

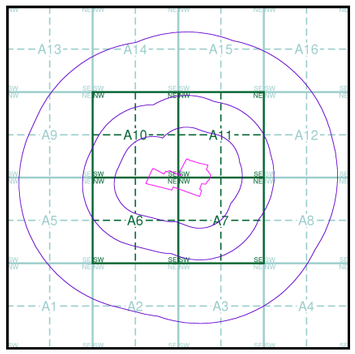
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

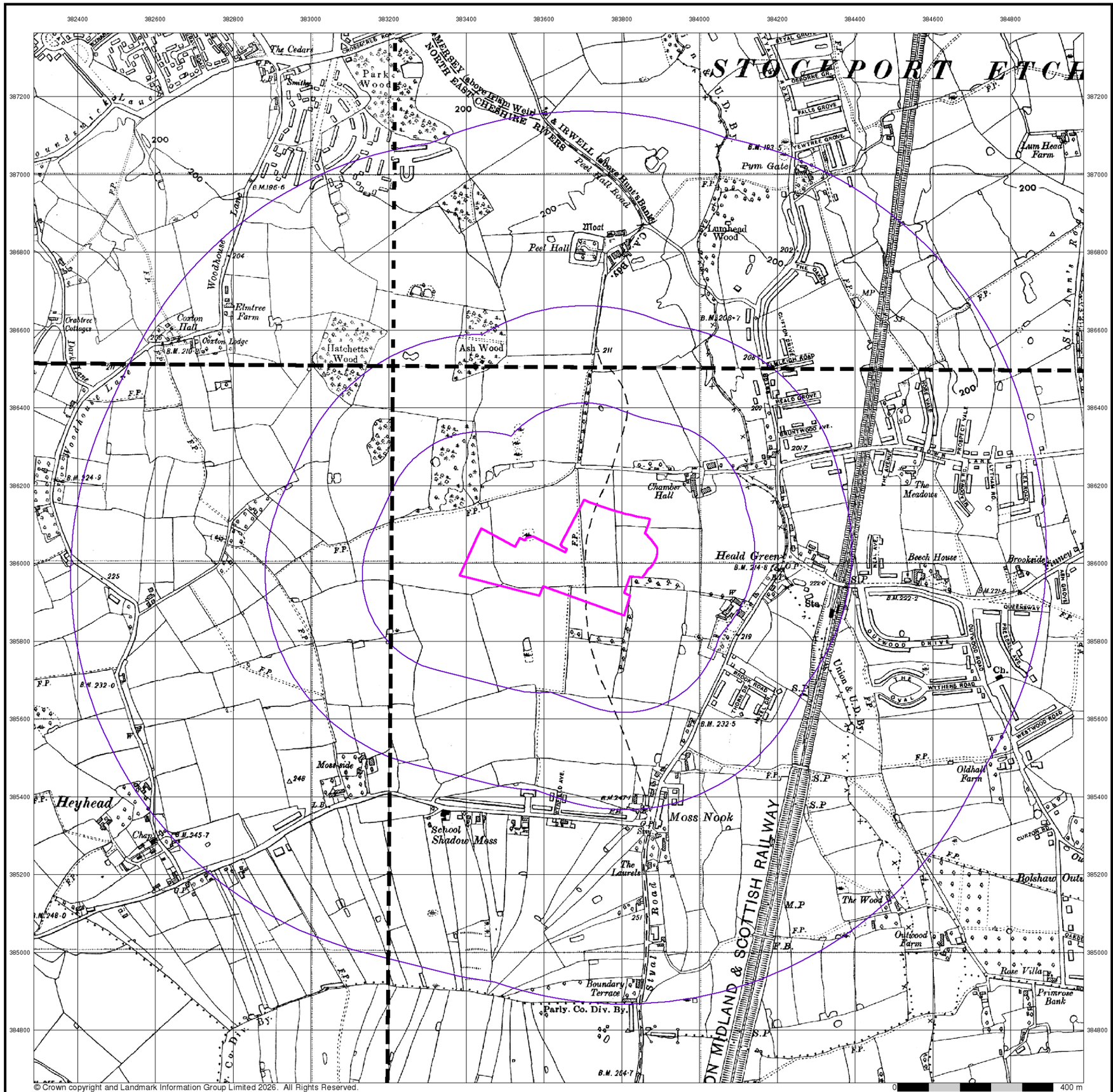
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Slice:	A
Site Area (Ha):	7.9
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Site Details

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Cheshire

Published 1938

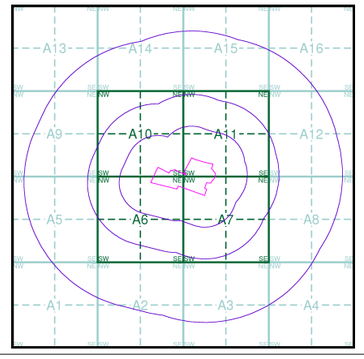
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

018NE 1938 1:10,560	019NW 1938 1:10,560
018SE 1938 1:10,560	019SW 1938 1:10,560

Historical Map - Slice A



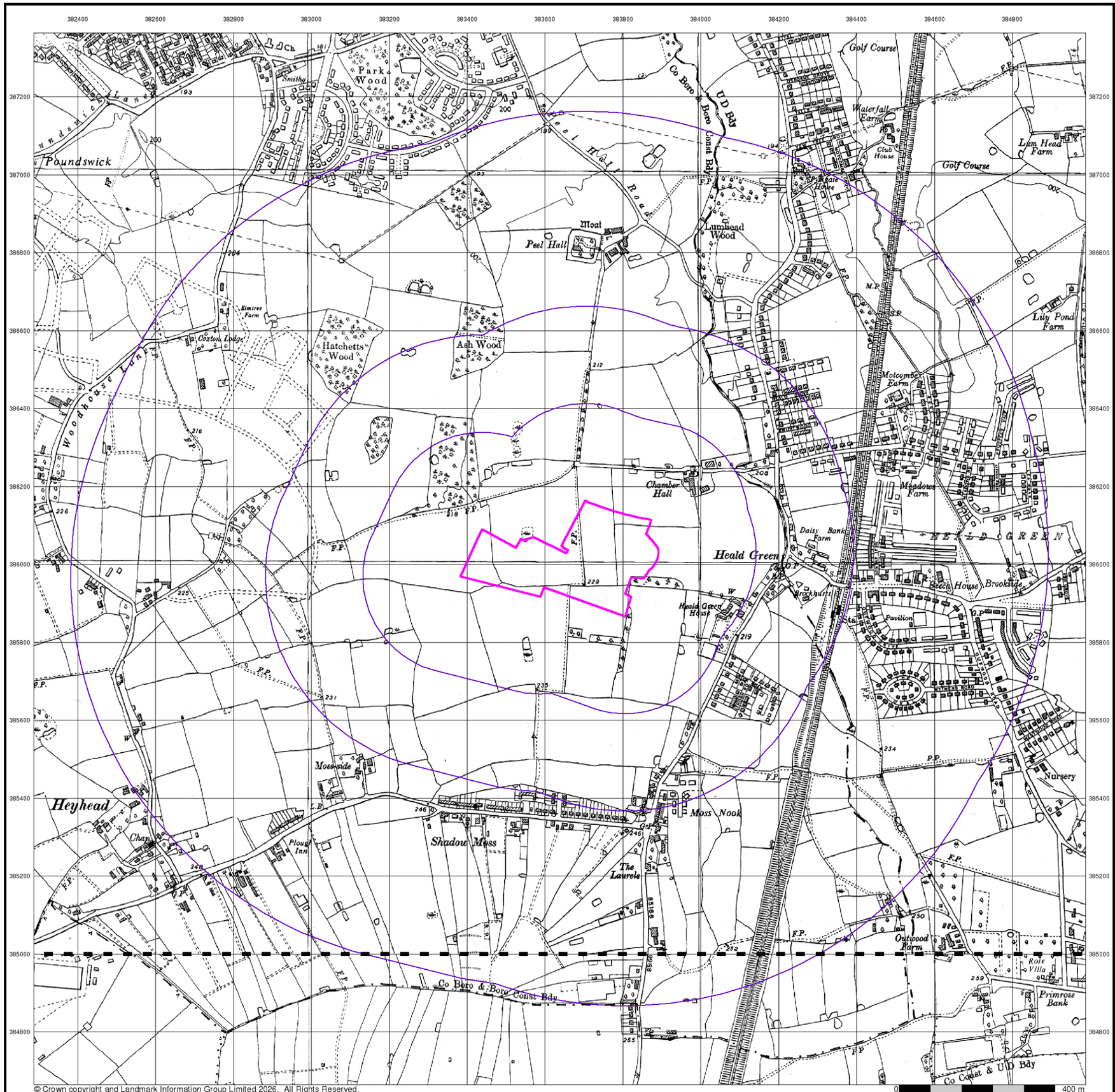
Order Details

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Customer Ref:	28248
National Grid Reference:	383650, 386010
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Ordnance Survey Plan

Published 1954

Source map scale - 1:10,000

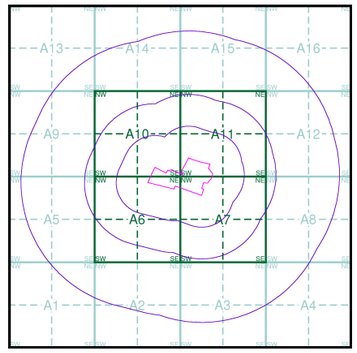
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Map Name(s) and Date(s)

SJ88NW
1954
1:10,560

SJ88SW
1954
1:10,560

Historical Map - Slice A



Order Details

Order Number:	404873443_1_1
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National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	1000

Site Details

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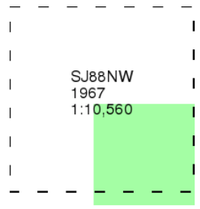
Ordnance Survey Plan

Published 1967

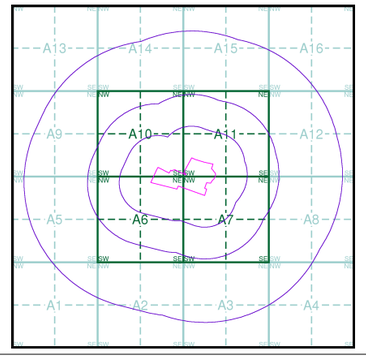
Source map scale - 1:10,000

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Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
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Site Details

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Manchester

Published 1975

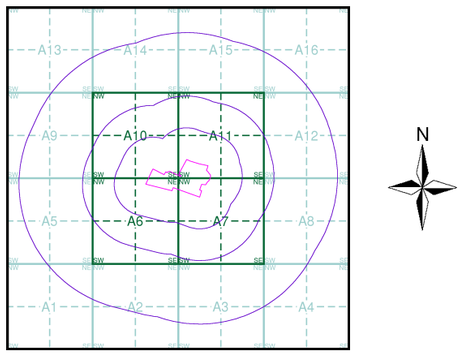
Source map scale - 1:25,000

These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.
They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

Map Name(s) and Date(s)



Russian Map - Slice A



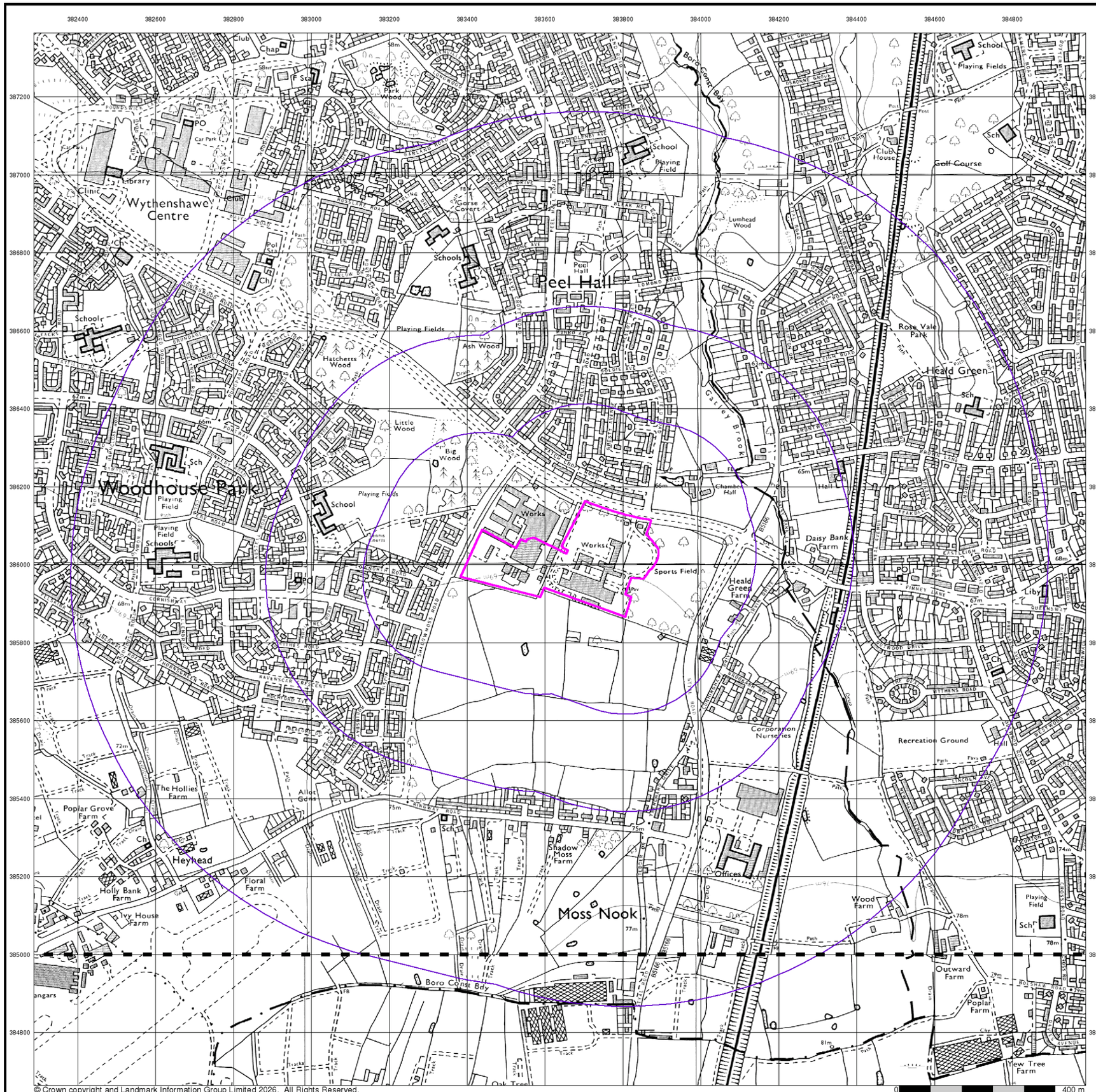
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Site Details

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Ordnance Survey Plan

Published 1976 - 1977

Source map scale - 1:10,000

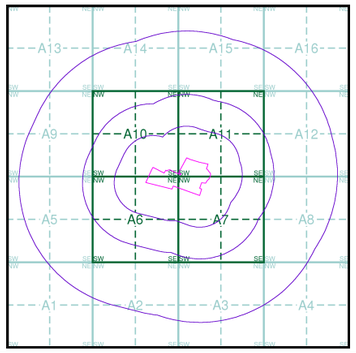
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Map Name(s) and Date(s)

SJ88NW
1977
1:10,000

SJ88SW
1976
1:10,000

Historical Map - Slice A



Order Details

Order Number:	404873443_1_1
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Ordnance Survey Plan

Published 1990

Source map scale - 1:10,000

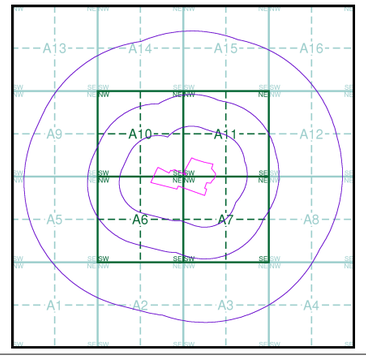
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Map Name(s) and Date(s)

SJ88NW
1990
1:10,000

SJ88SW
1990
1:10,000

Historical Map - Slice A



Order Details

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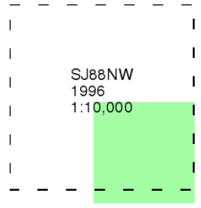
Ordnance Survey Plan

Published 1996

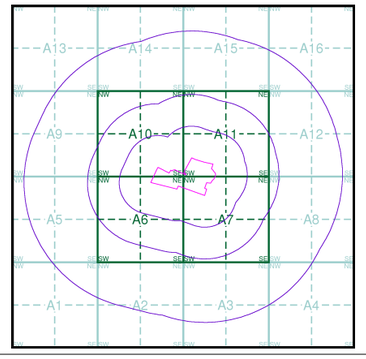
Source map scale - 1:10,000

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Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

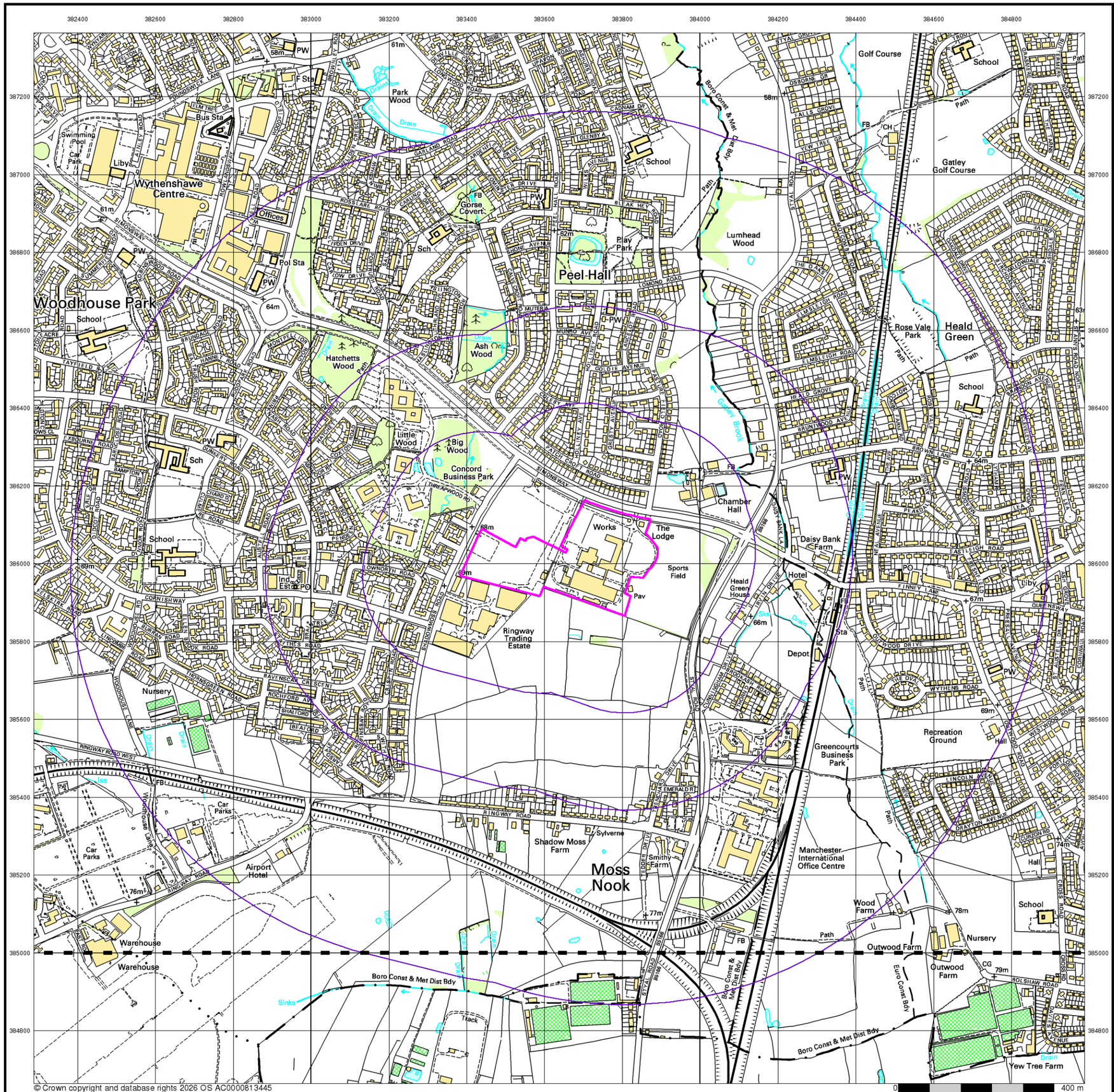
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Customer Ref:	28248
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Site Area (Ha):	7.9
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10k Raster Mapping

Published 1999

Source map scale - 1:10,000

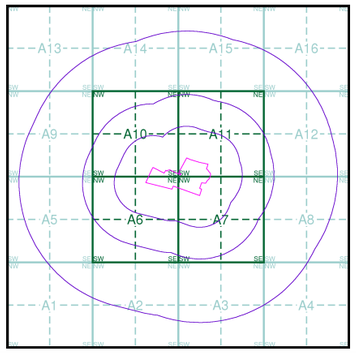
The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks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

SJ88NW
1999
1:10,000

SJ88SW
1999
1:10,000

Historical Map - Slice A



Order Details

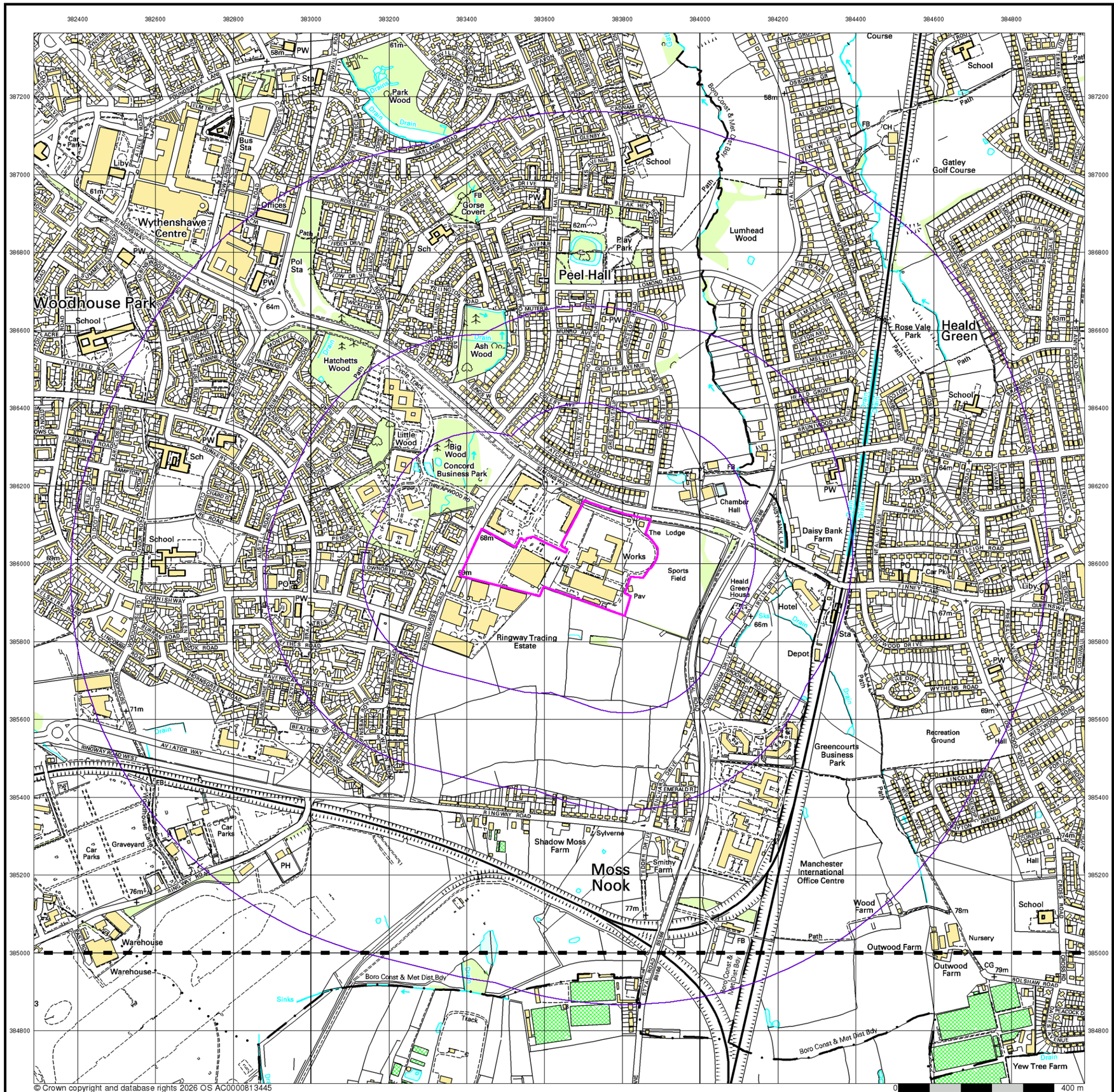
Order Number:	404873443_1_1
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10k Raster Mapping

Published 2006

Source map scale - 1:10,000

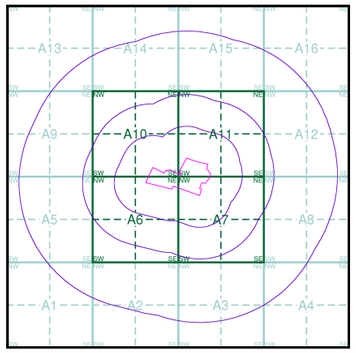
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Map Name(s) and Date(s)

SJ88NW
2006
1:10,000

SJ88SW
2006
1:10,000

Historical Map - Slice A



Order Details

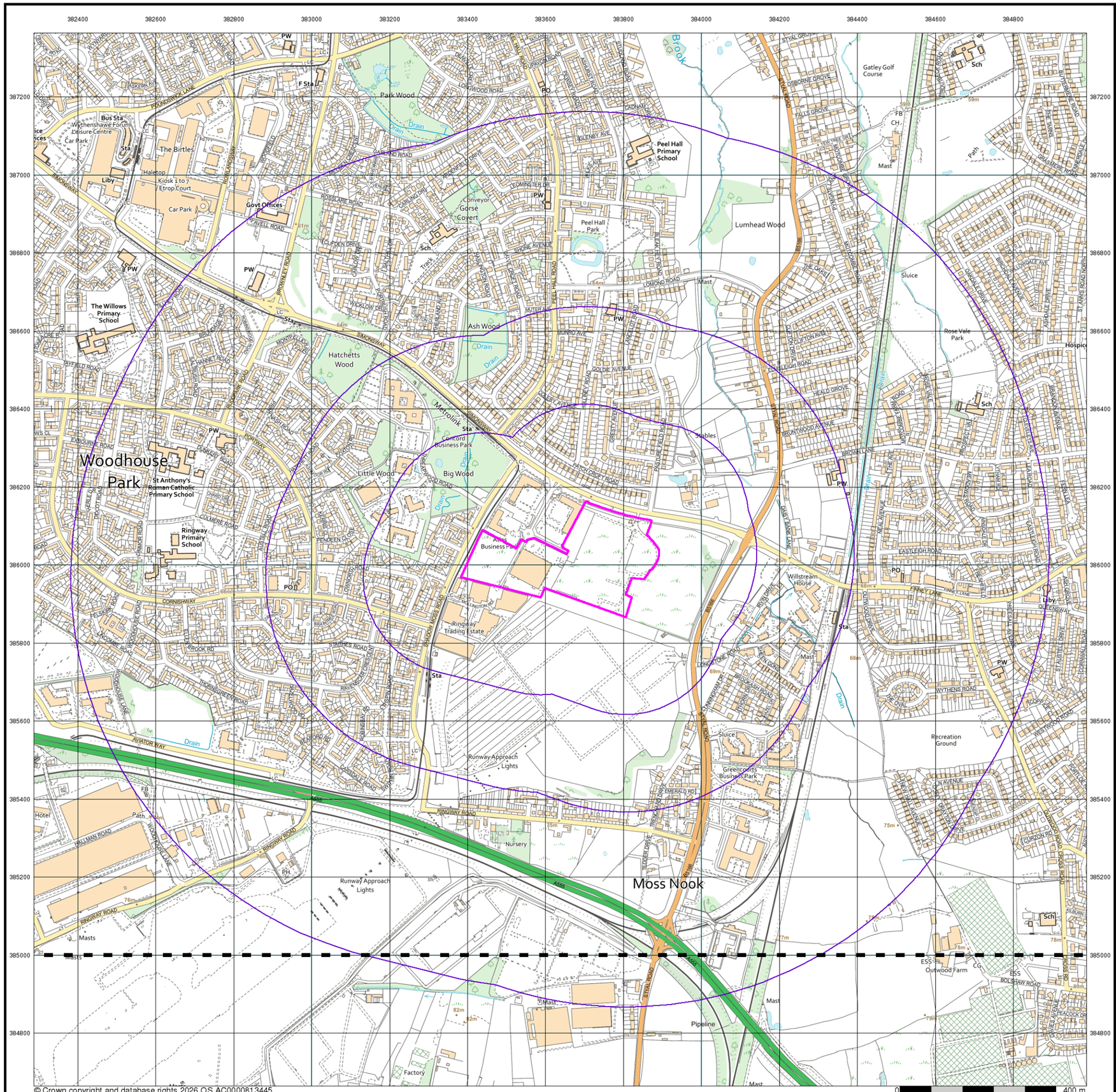
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National Grid Reference:	383650, 386010
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Site Area (Ha):	7.9
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VectorMap Local

Published 2026

Source map scale - 1:10,000

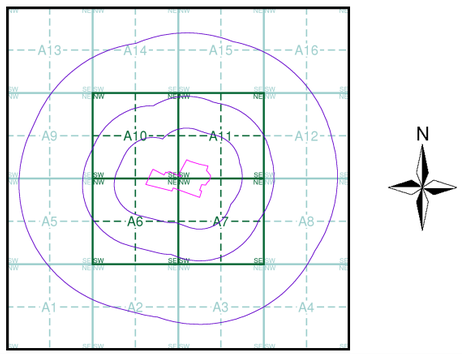
VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap 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)

SJ88NW 2026 Variable

SJ88SW 2026 Variable

Historical Map - Slice A



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	1000

Site Details

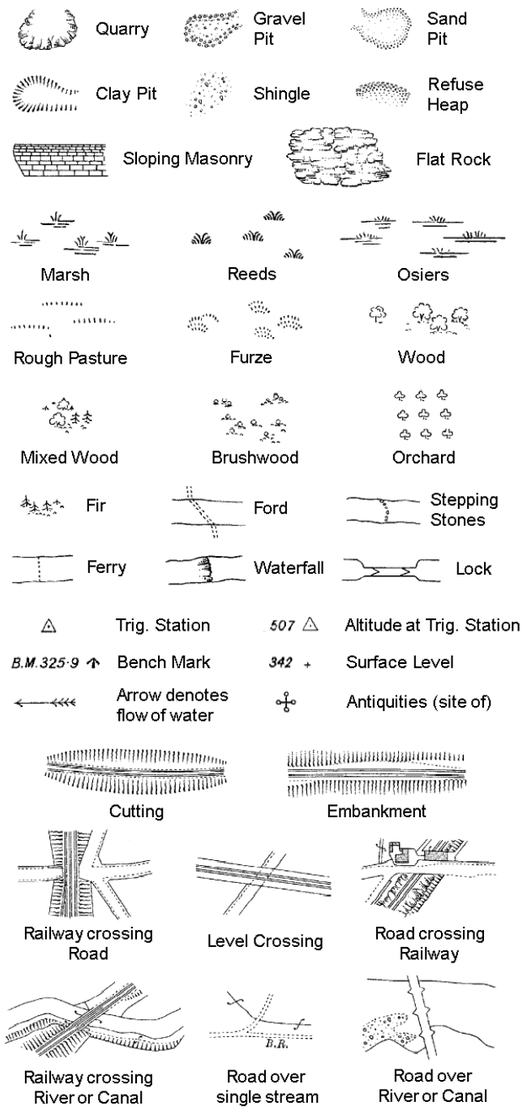
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Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

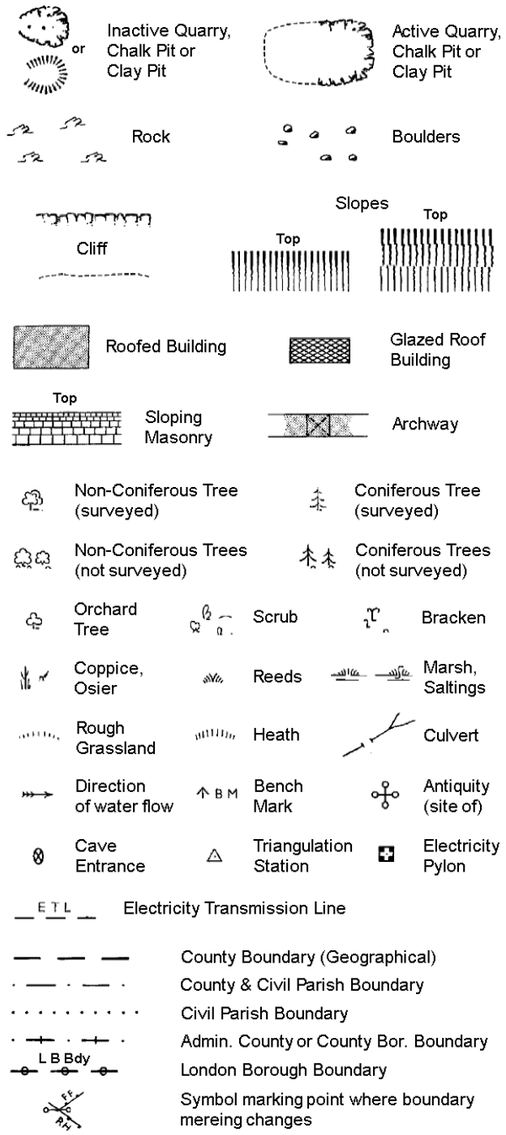
Administrative County & Civil Parish Boundary

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

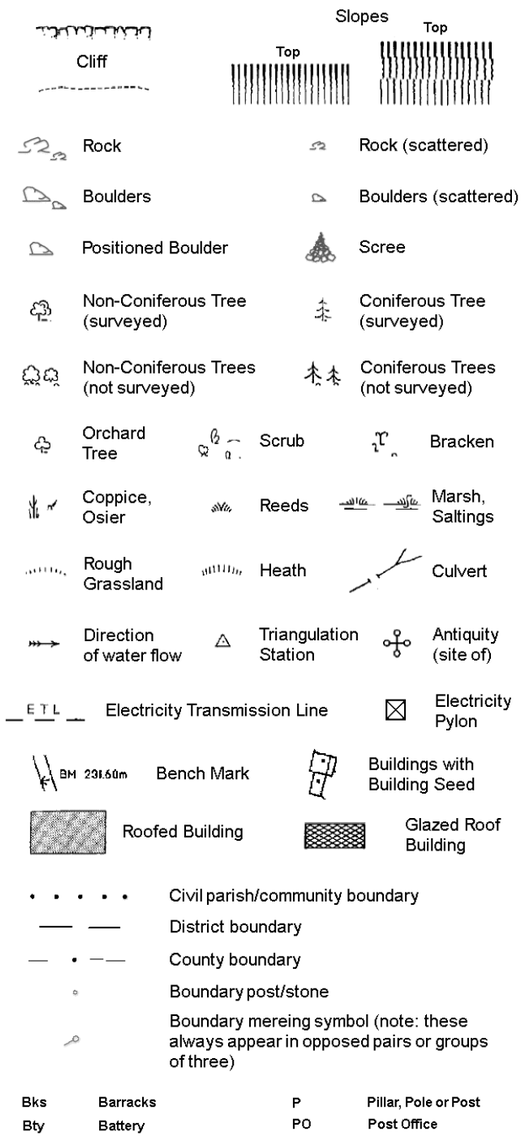
Admin. County or County Bor. Boundary

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

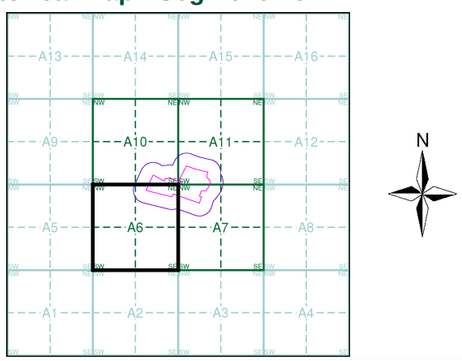
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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cheshire	1:2,500	1872 - 1887	2
Cheshire	1:2,500	1898	3
Cheshire	1:2,500	1909	4
Lancashire And Furness	1:2,500	1935	5
Ordnance Survey Plan	1:1,250	1960	6
Additional SIMs	1:1,250	1960 - 1988	7
Ordnance Survey Plan	1:2,500	1961	8
Ordnance Survey Plan	1:1,250	1965 - 1989	9
Supply of Unpublished Survey Information	1:1,250	1975	10
Additional SIMs	1:1,250	1987	11
Large-Scale National Grid Data	1:1,250	1992 - 1993	12
Large-Scale National Grid Data	1:1,250	1992 - 1993	13
Large-Scale National Grid Data	1:1,250	1995	14
Large-Scale National Grid Data	1:1,250	1996	15
Large-Scale National Grid Data	1:1,250	1996	16
Historical Aerial Photography	1:2,500	2000	17

Historical Map - Segment A6



Order Details

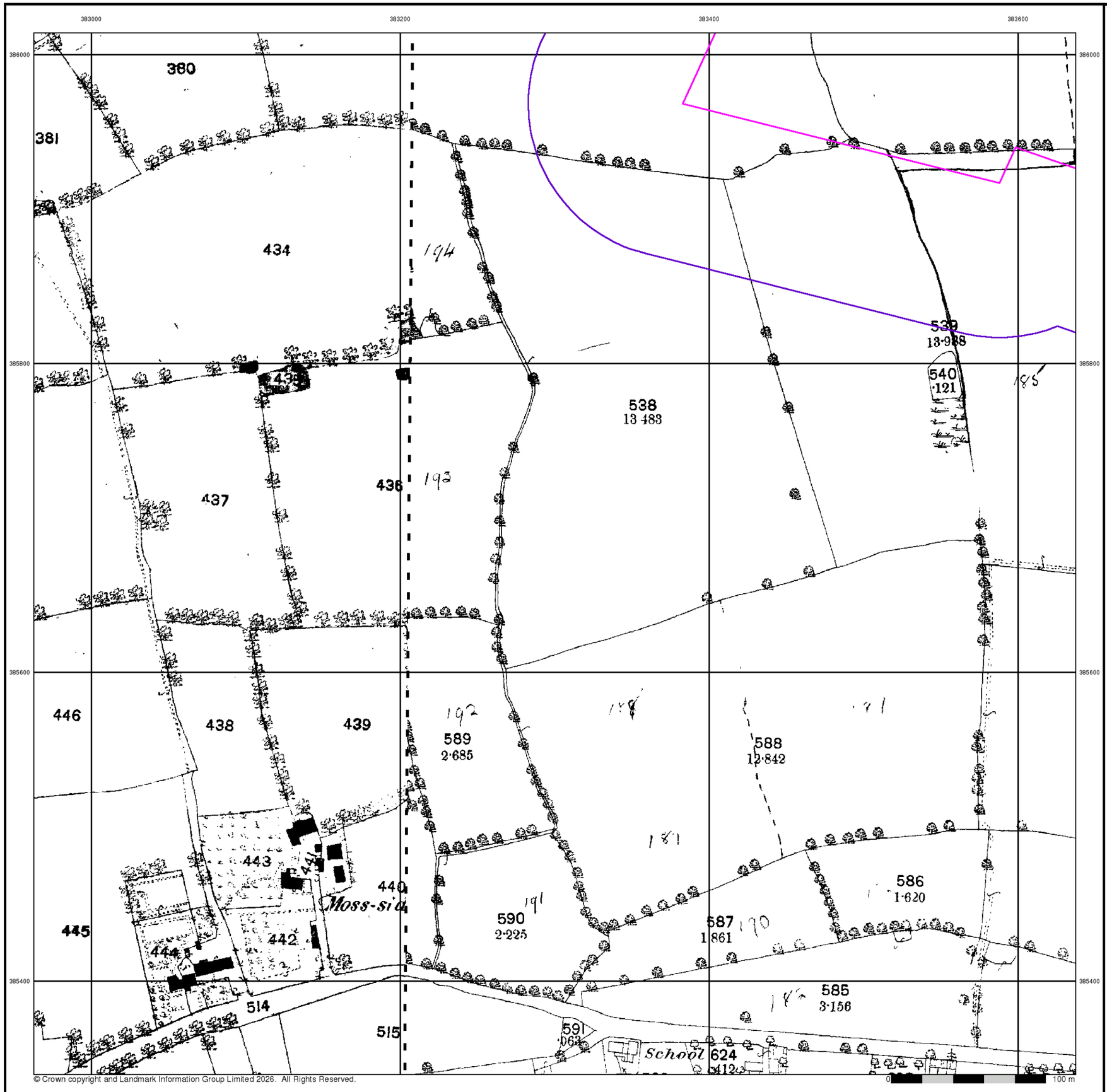
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Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	100

Site Details

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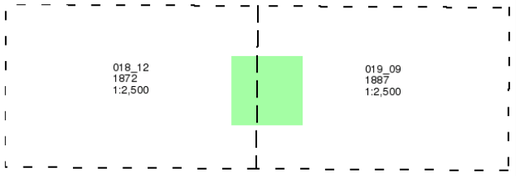
Cheshire

Published 1872 - 1887

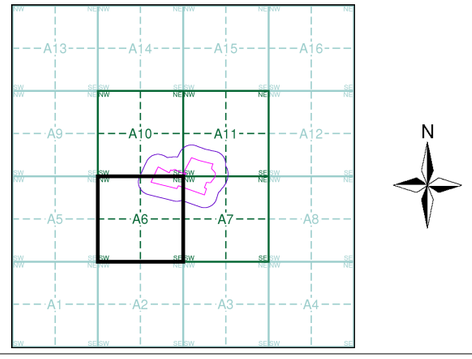
Source map scale - 1:2,500

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 A6



Order Details

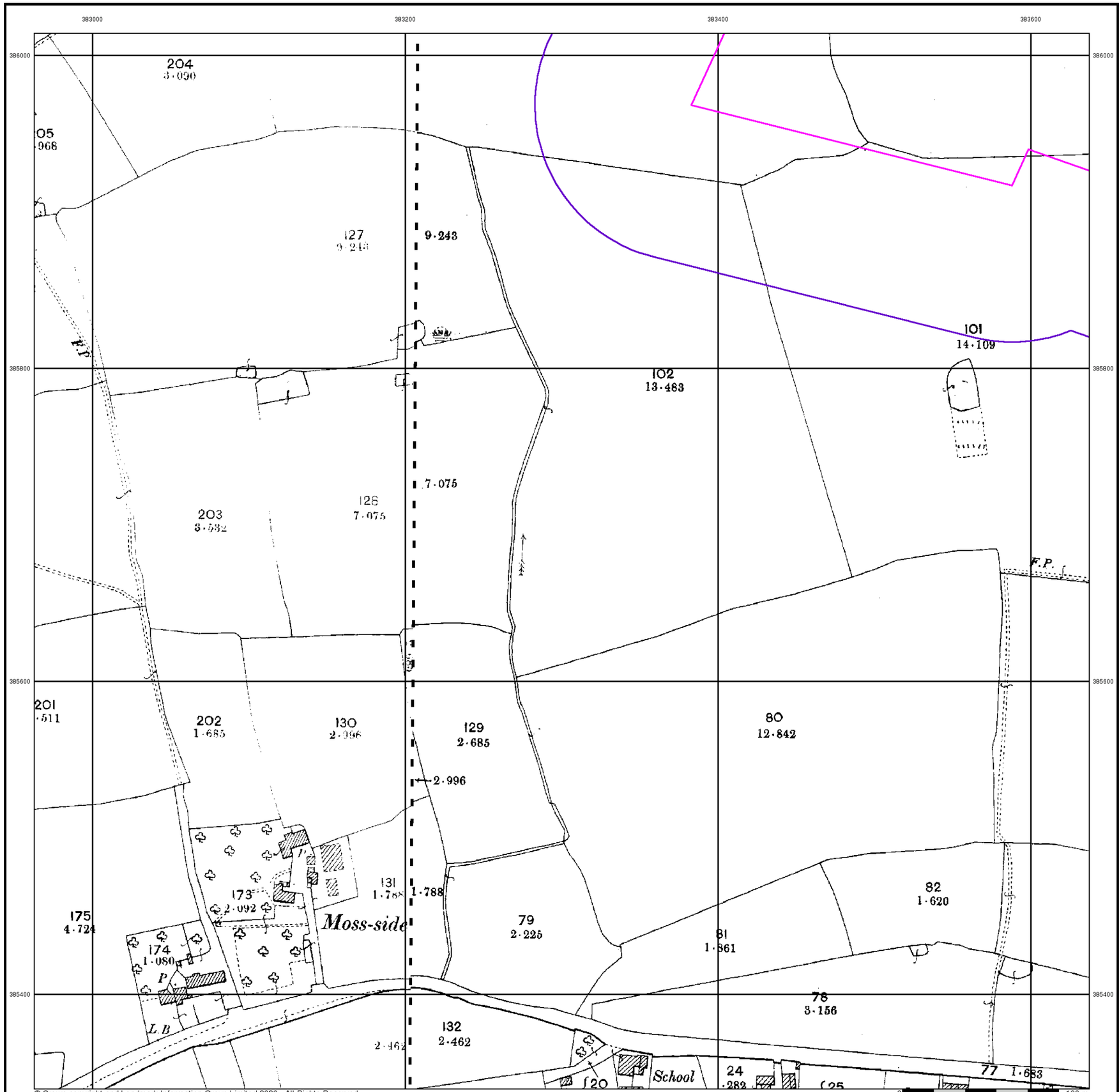
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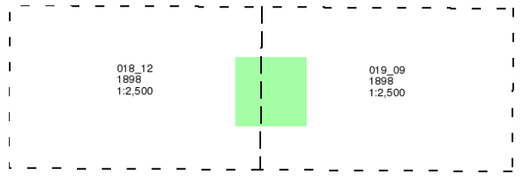
Cheshire

Published 1898

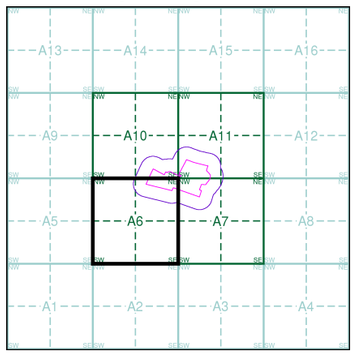
Source map scale - 1:2,500

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 A6



Order Details

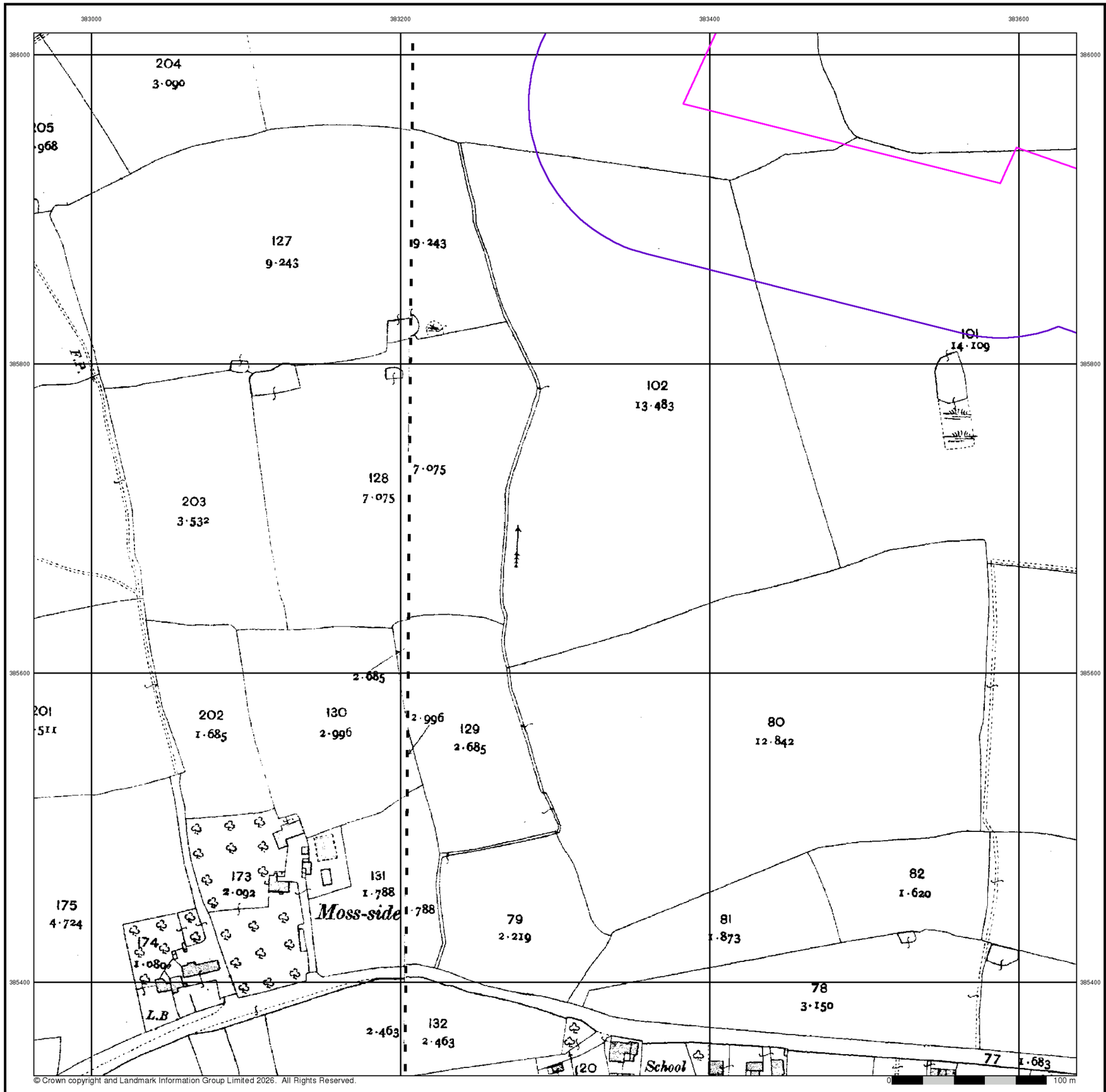
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National Grid Reference:	383650, 386010
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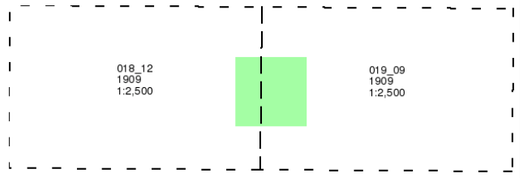
Cheshire

Published 1909

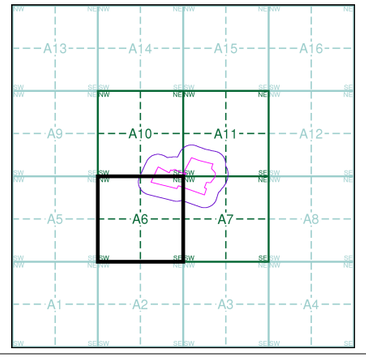
Source map scale - 1:2,500

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 A6



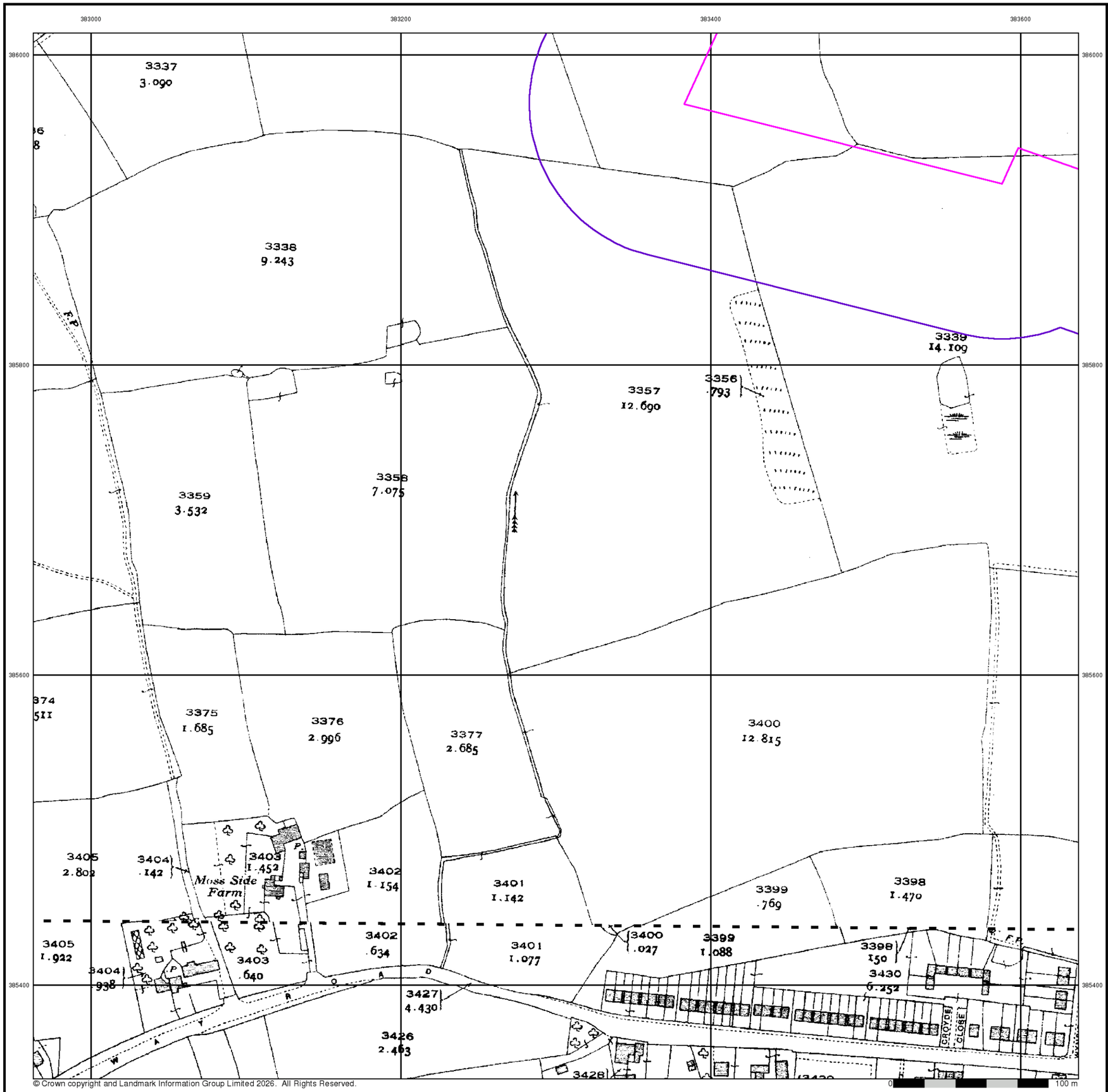
Order Details

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Customer Ref:	28248
National Grid Reference:	383650, 386010
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Site Area (Ha):	7.9
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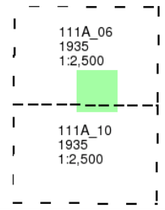
Lancashire And Furness

Published 1935

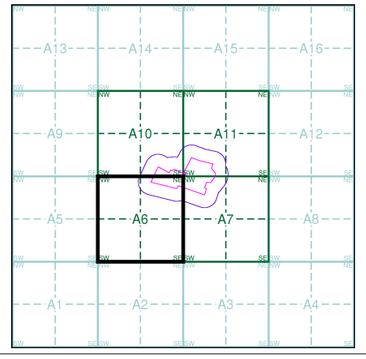
Source map scale - 1:2,500

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 A6



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
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Site Details

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Ordnance Survey Plan

Published 1960

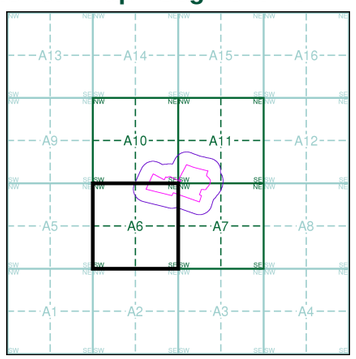
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SJ8286SE 1960 1:1,250	SJ8386SW 1960 1:1,250	SJ8386SE 1960 1:1,250
SJ8285NE 1960 1:1,250	SJ8385NW 1960 1:1,250	SJ8385NE 1960 1:1,250
SJ8285SE 1960 1:1,250	SJ8385SW 1960 1:1,250	SJ8385SE 1960 1:1,250

Historical Map - Segment A6



Order Details

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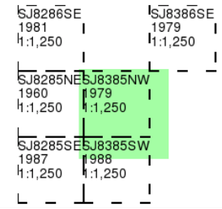
Additional SIMs

Published 1960 - 1988

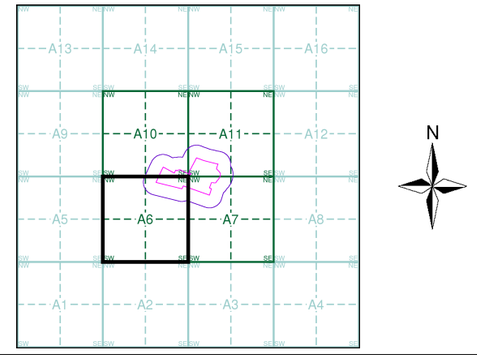
Source map scale - 1:1,250

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 A6



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
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Site Area (Ha):	7.9
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Ordnance Survey Plan

Published 1961

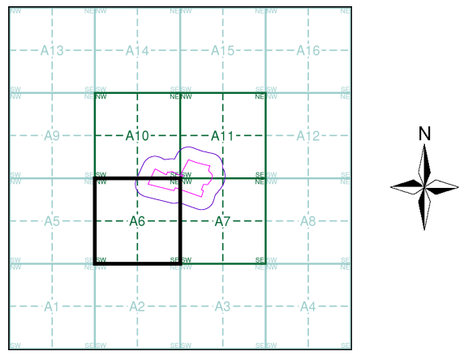
Source map scale - 1:2,500

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)

SJ8286 1961 1:2,500
SJ8386 1961 1:2,500
SJ8285 1961 1:2,500
SJ8385 1961 1:2,500

Historical Map - Segment A6



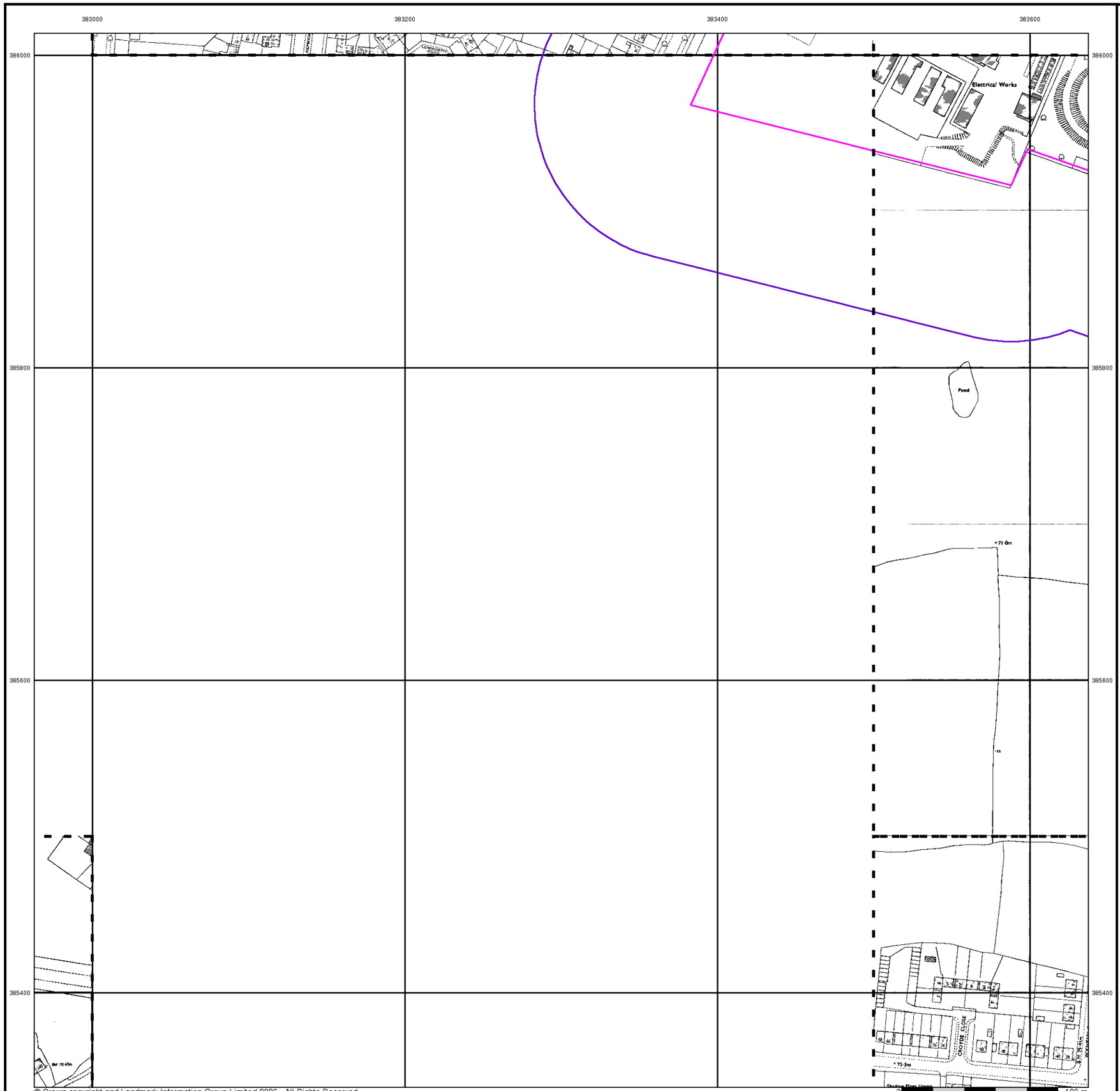
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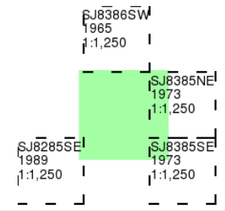
Ordnance Survey Plan

Published 1965 - 1989

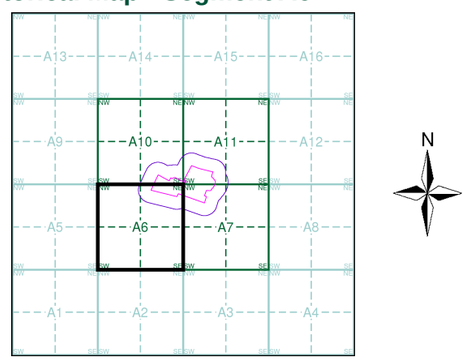
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A6



Order Details

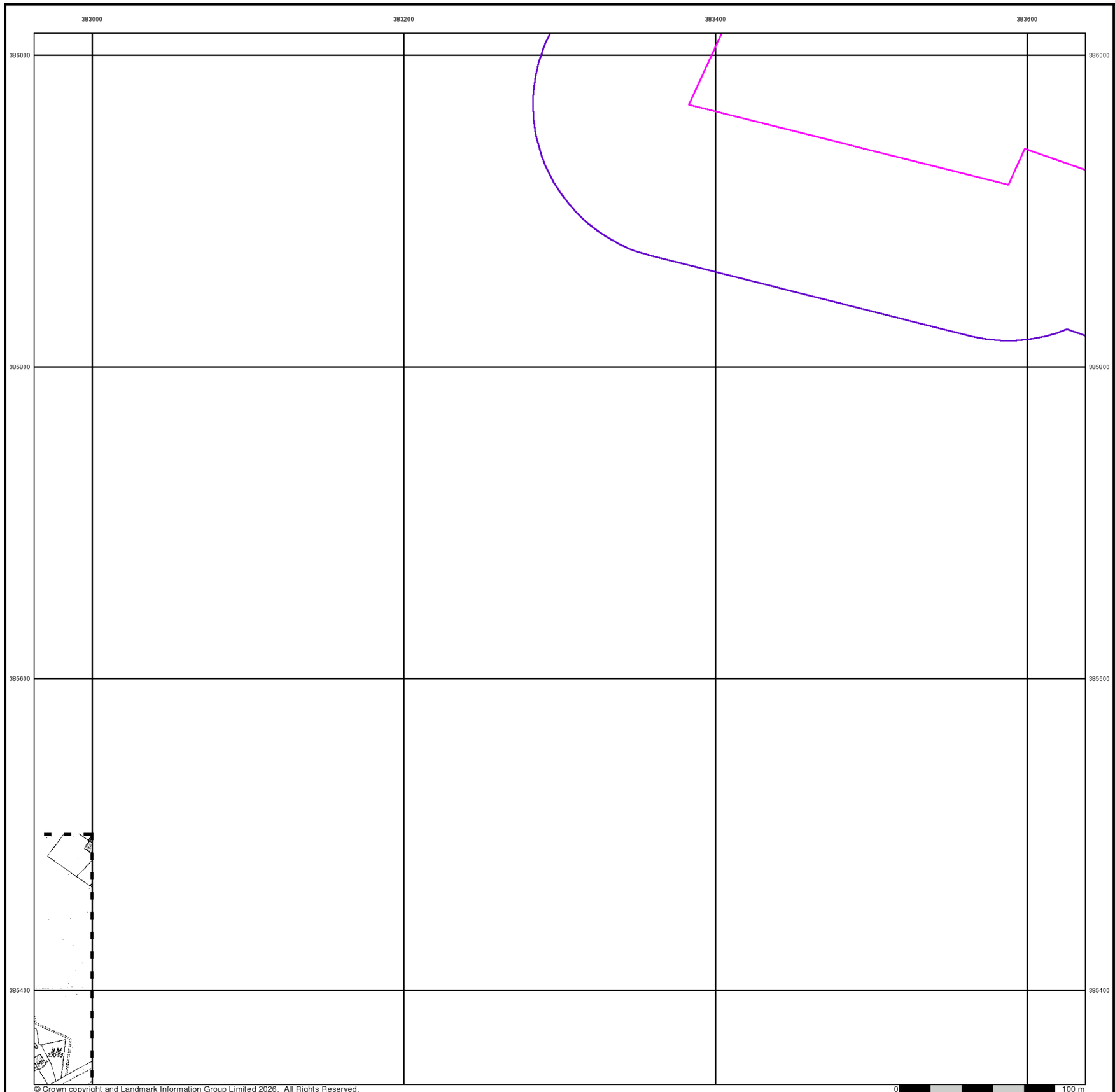
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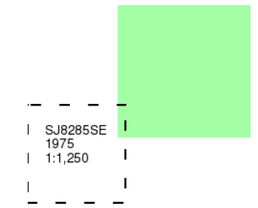
Supply of Unpublished Survey Information

Published 1975

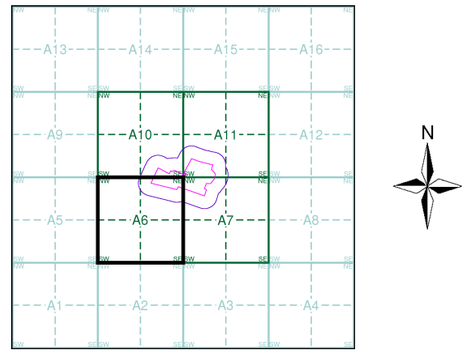
Source map scale - 1:1,250

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 A6



Order Details

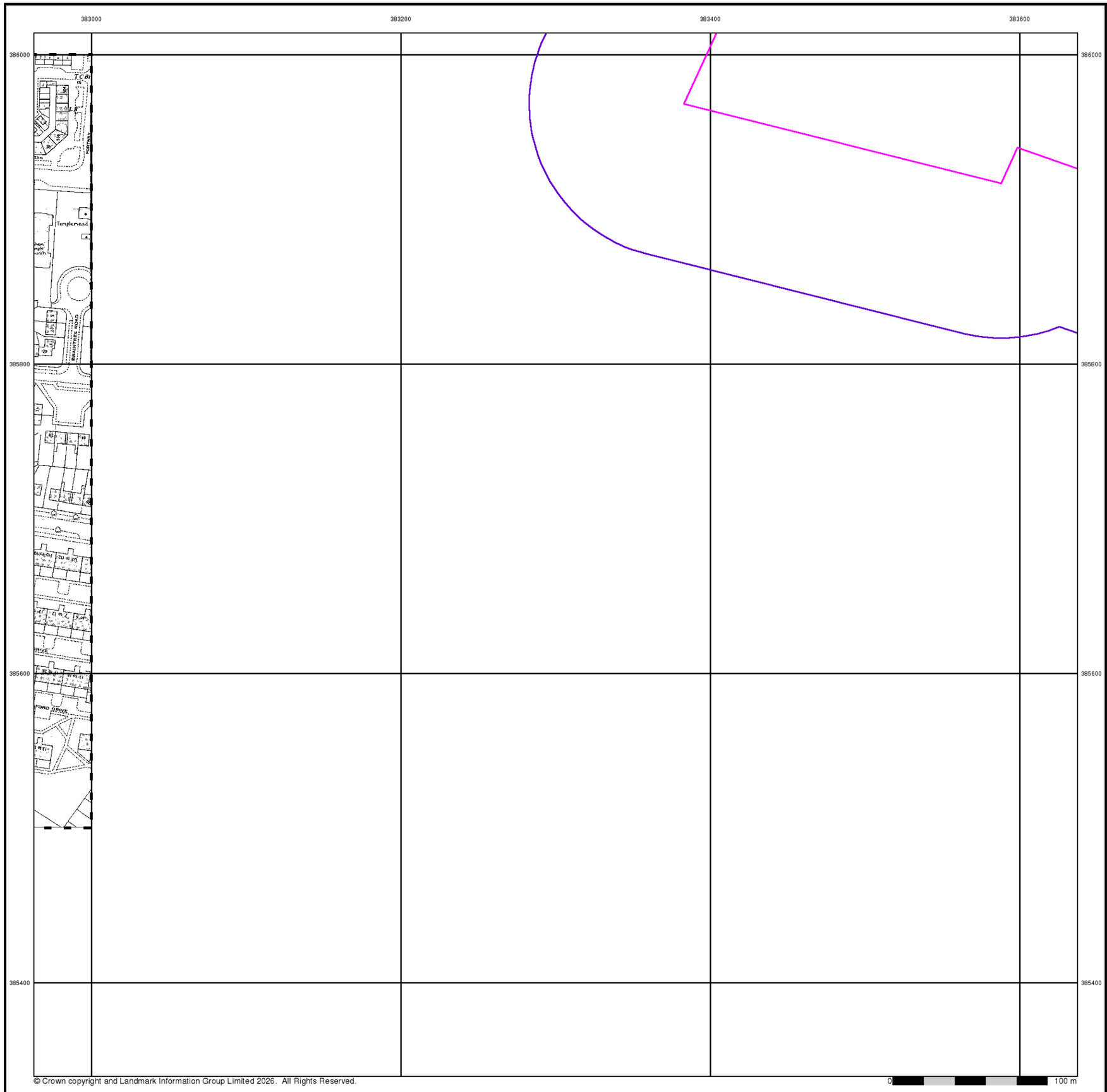
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Site Details

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Landmark INFORMATION GROUP

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



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0 100 m

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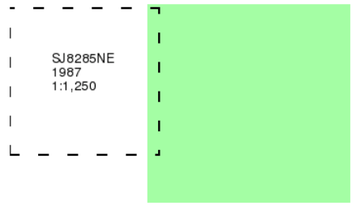
Additional SIMs

Published 1987

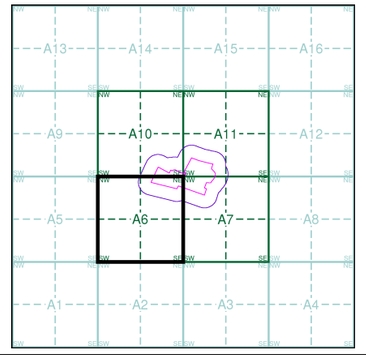
Source map scale - 1:1,250

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 A6



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	100

Site Details

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Large-Scale National Grid Data

Published 1992 - 1993

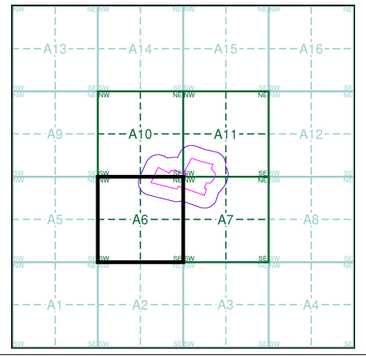
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SJ8286SE 1992 1:1,250	SJ8386SW 1992 1:1,250	SJ8386SE 1992 1:1,250
SJ8285NE 1992 1:1,250	SJ8385NW 1992 1:1,250	SJ8385NE 1992 1:1,250
SJ8285SE 1992 1:1,250	SJ8385SW 1992 1:1,250	SJ8385SE 1993 1:1,250

Historical Map - Segment A6



Order Details

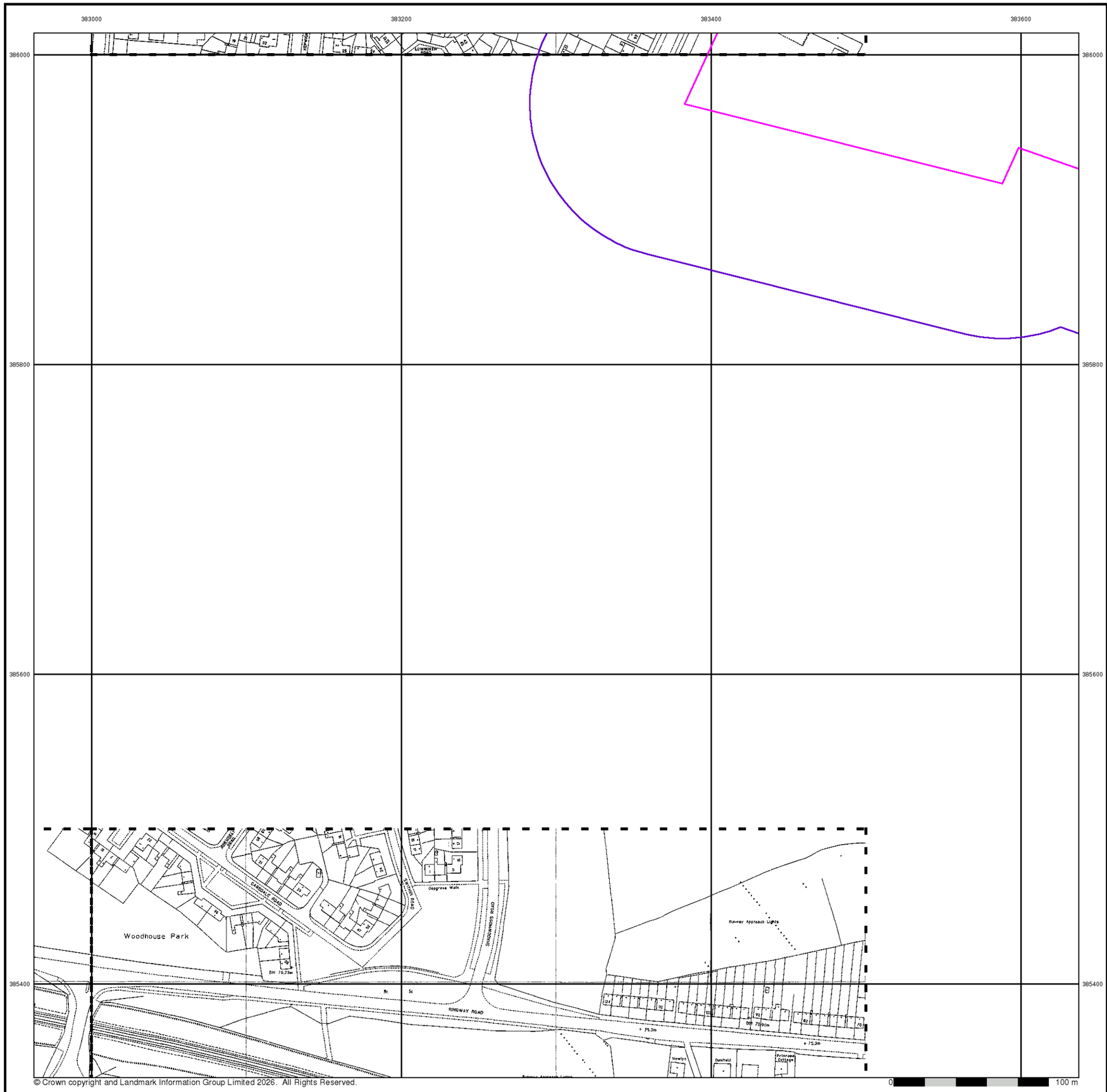
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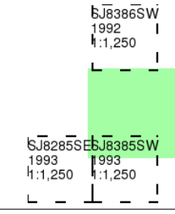
Large-Scale National Grid Data

Published 1992 - 1993

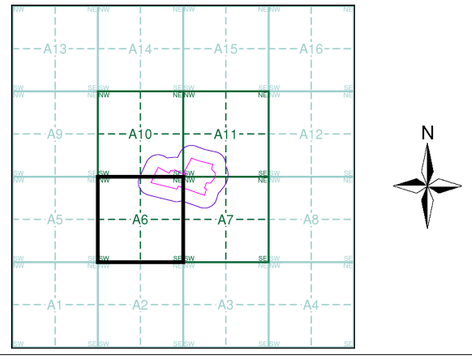
Source map scale - 1:1,250

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Map Name(s) and Date(s)



Historical Map - Segment A6



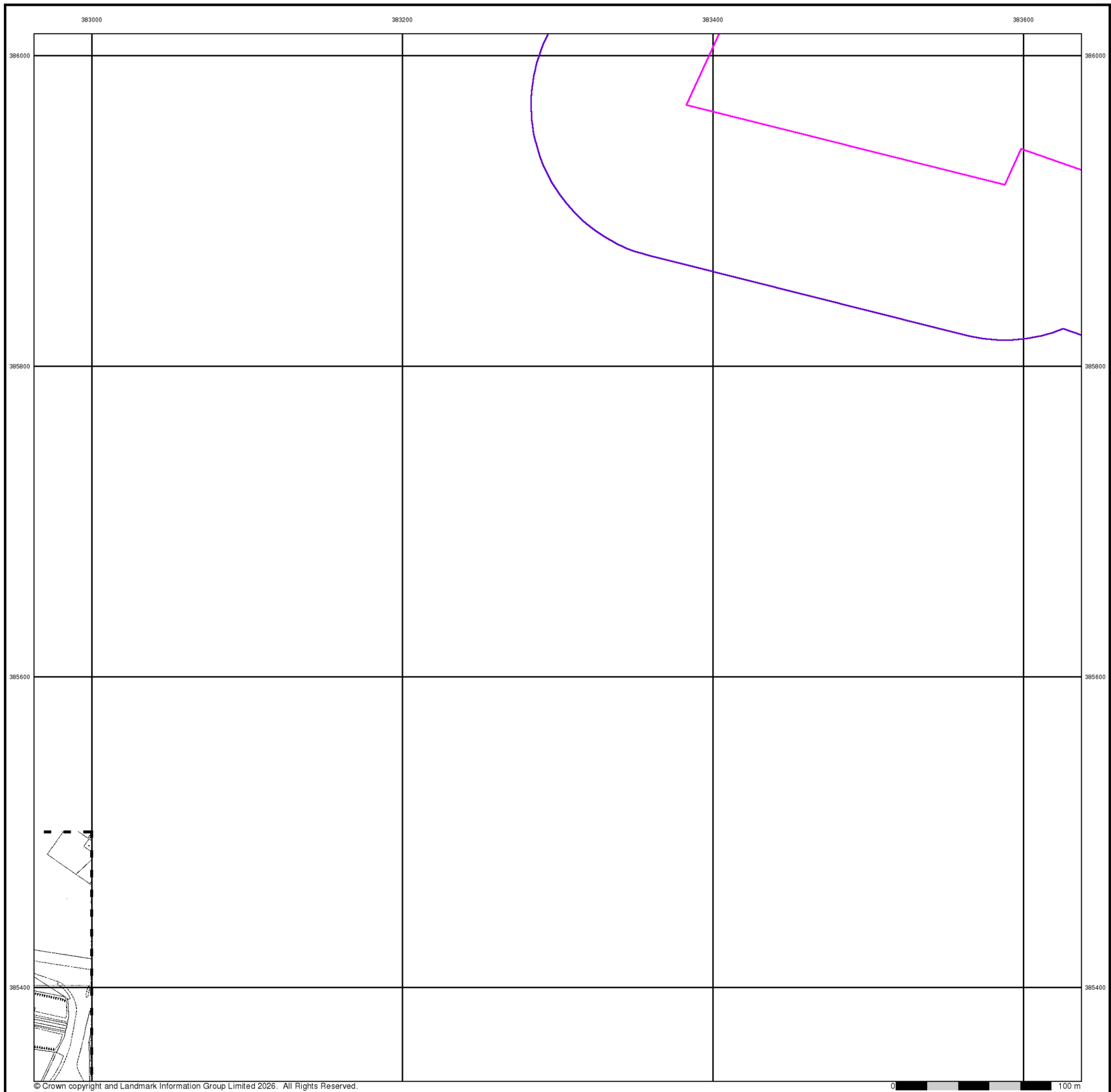
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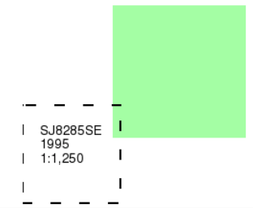
Large-Scale National Grid Data

Published 1995

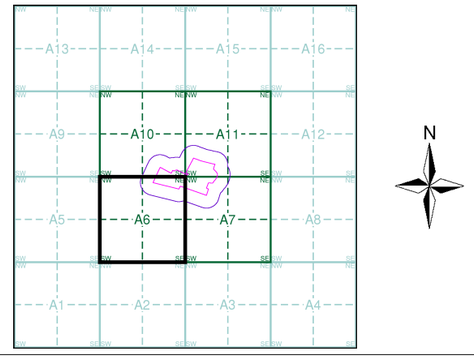
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A6



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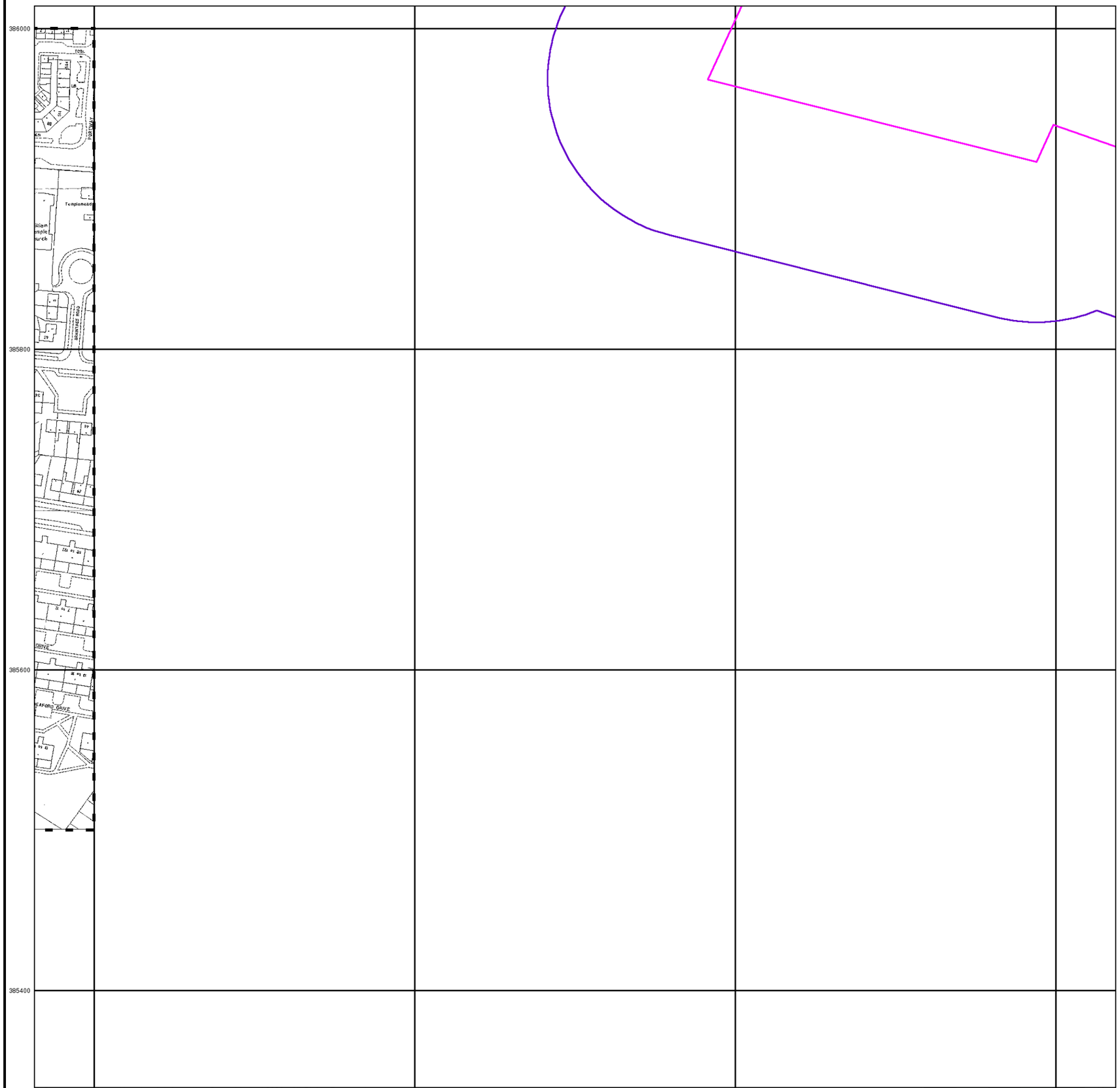
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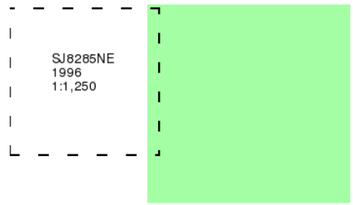
Large-Scale National Grid Data

Published 1996

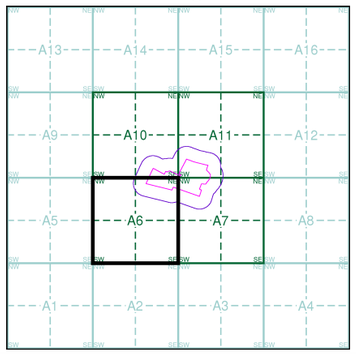
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A6



Order Details

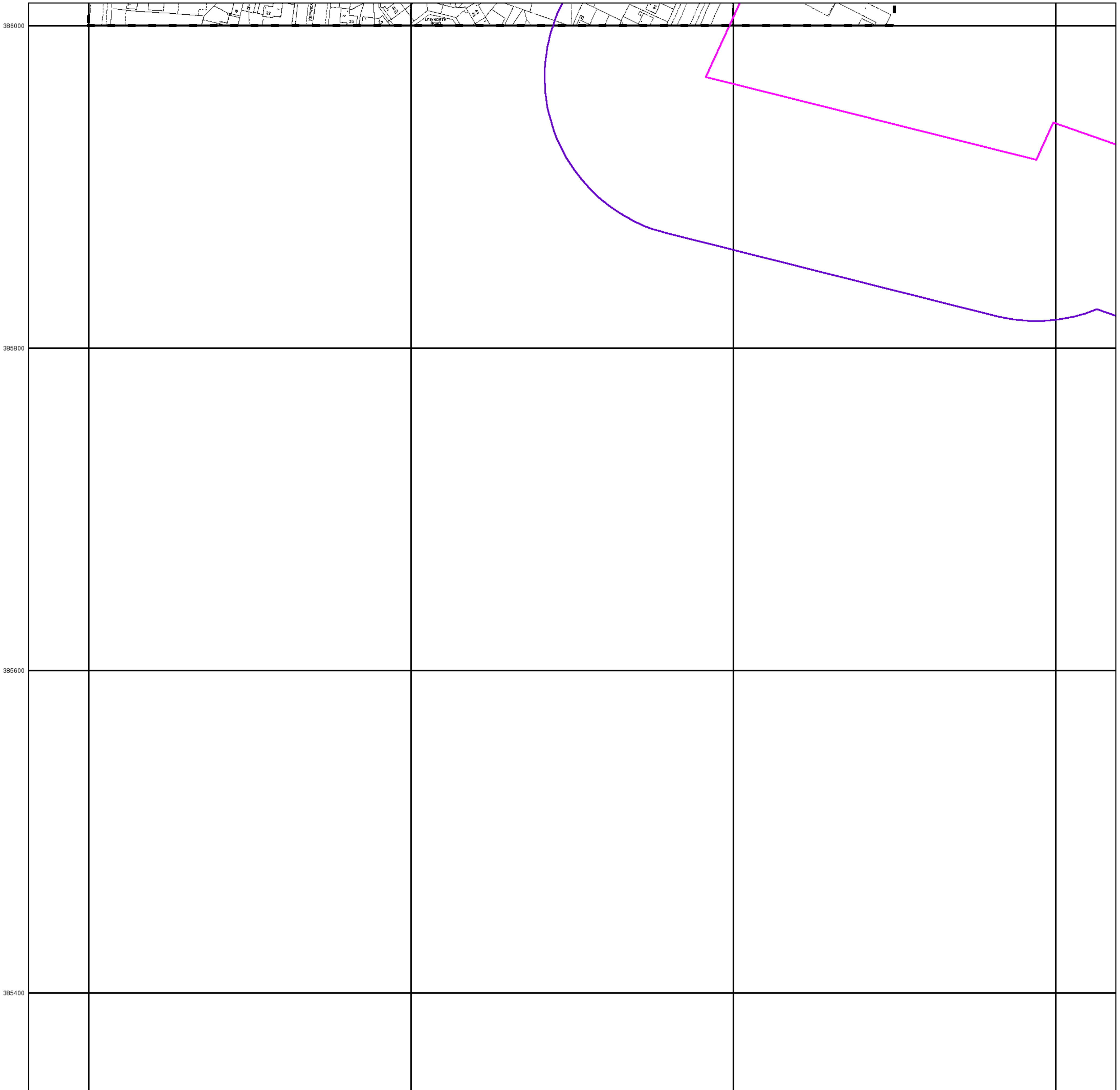
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Customer Ref:	28248
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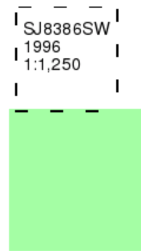
Large-Scale National Grid Data

Published 1996

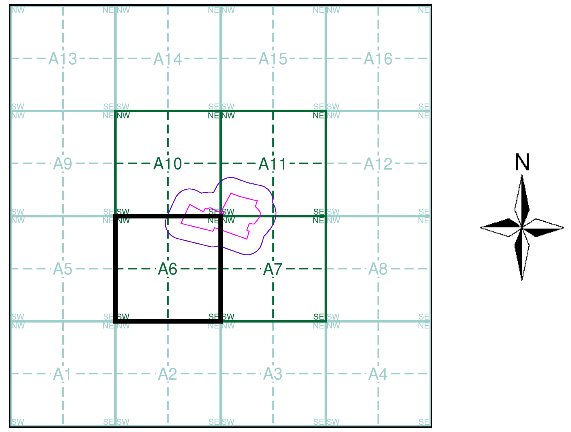
Source map scale - 1:1,250

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Map Name(s) and Date(s)



Historical Map - Segment A6



Order Details

Order Number: 404873443_1_1
Customer Ref: 28248
National Grid Reference: 383650, 386010
Slice: A
Site Area (Ha): 7.9
Search Buffer (m): 100

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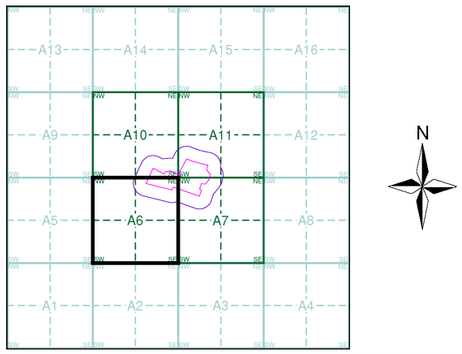
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Historical Aerial Photography

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 A6



Order Details

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Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
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Site Details

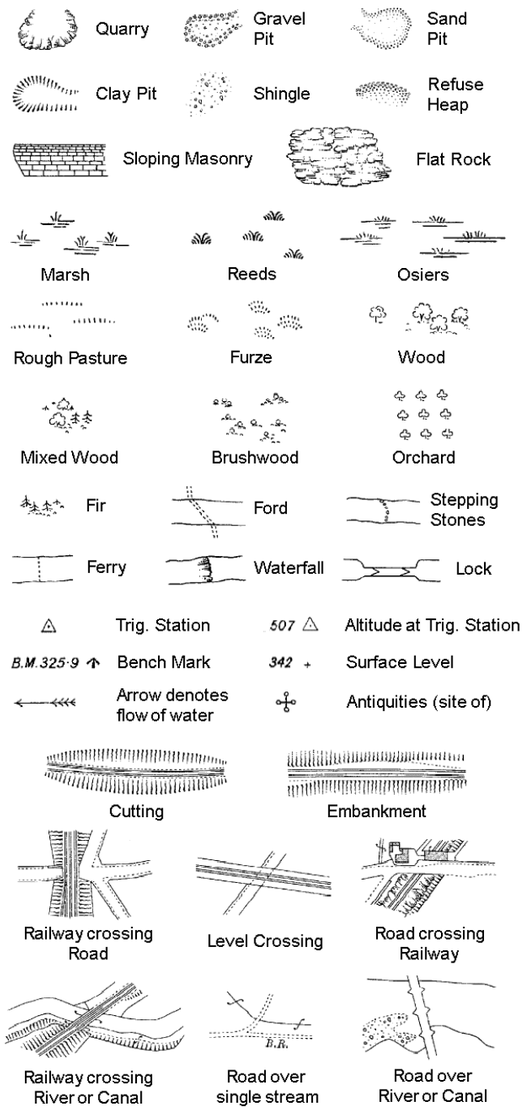
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Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

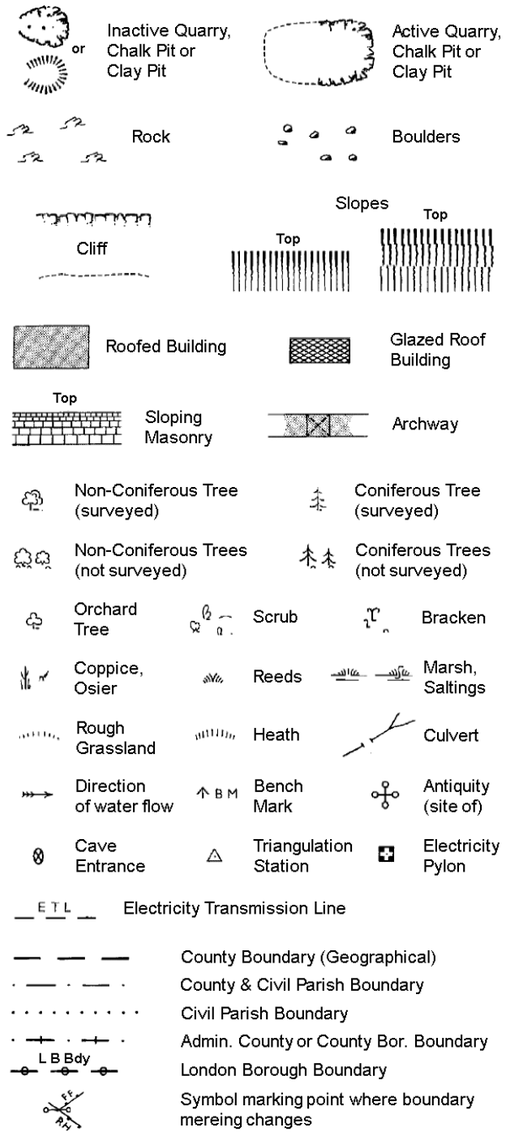
Administrative County & Civil Parish Boundary

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

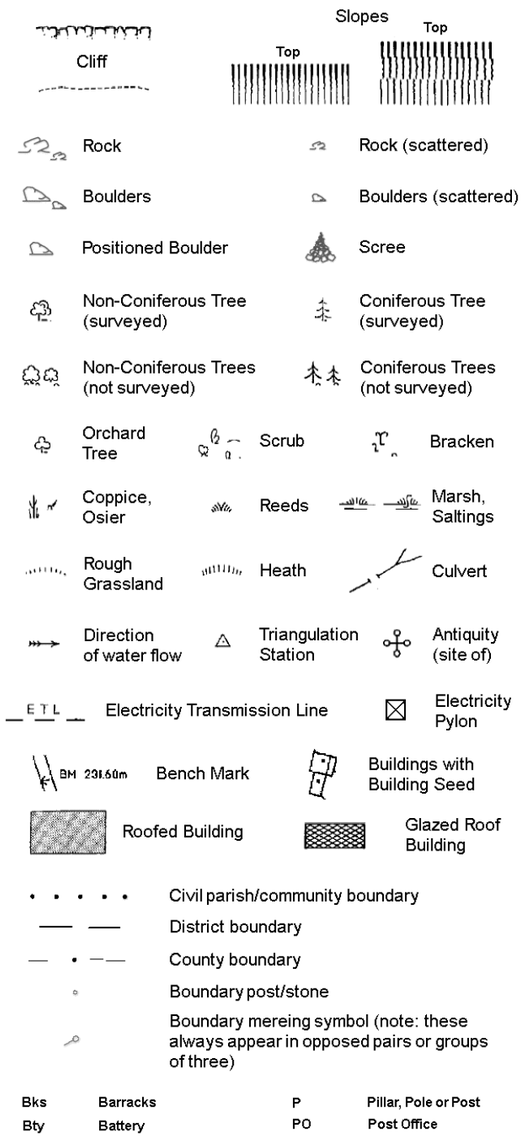
Admin. County or County Bor. Boundary

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

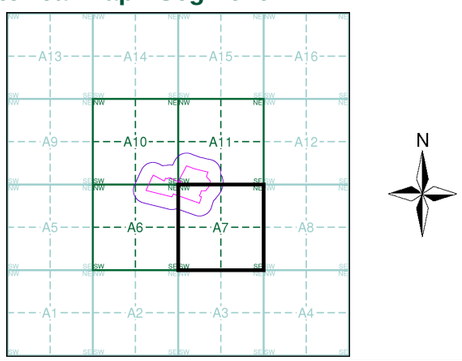
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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cheshire	1:2,500	1887	2
Cheshire	1:2,500	1898	3
Cheshire	1:2,500	1909	4
Lancashire And Furness	1:2,500	1935	5
Ordnance Survey Plan	1:1,250	1960 - 1962	6
Ordnance Survey Plan	1:2,500	1961 - 1963	7
Ordnance Survey Plan	1:1,250	1973	8
Additional SIMs	1:1,250	1979 - 1989	9
Large-Scale National Grid Data	1:1,250	1992 - 1993	10
Large-Scale National Grid Data	1:1,250	1993 - 1995	11
Historical Aerial Photography	1:2,500	2000	12

Historical Map - Segment A7



Order Details

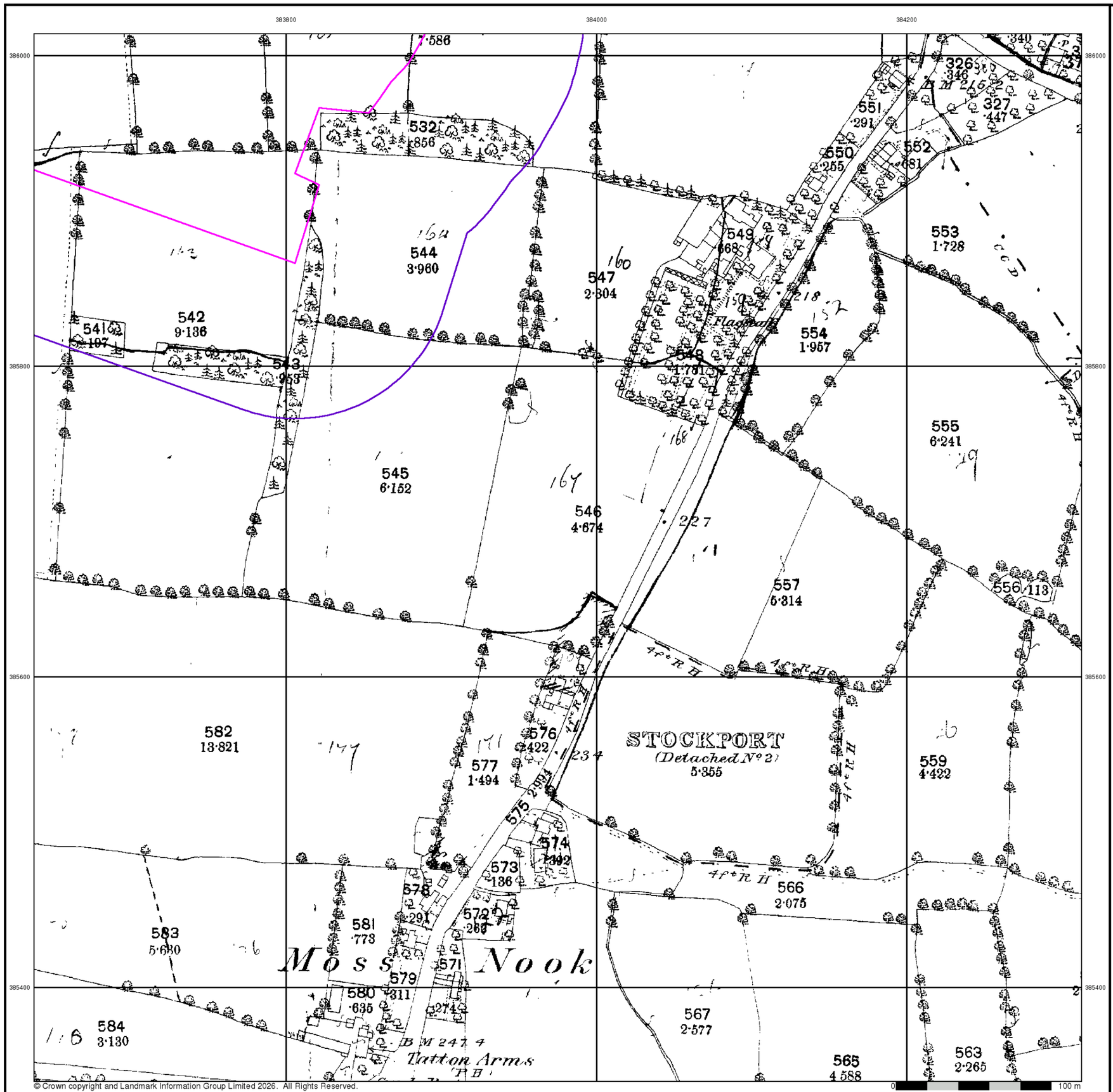
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Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	100

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Atlas Business Park, Simonsway, Manchester, M22 5PP

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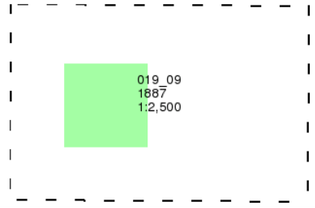
Cheshire

Published 1887

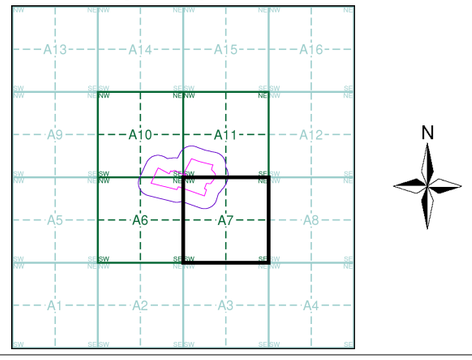
Source map scale - 1:2,500

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 A7



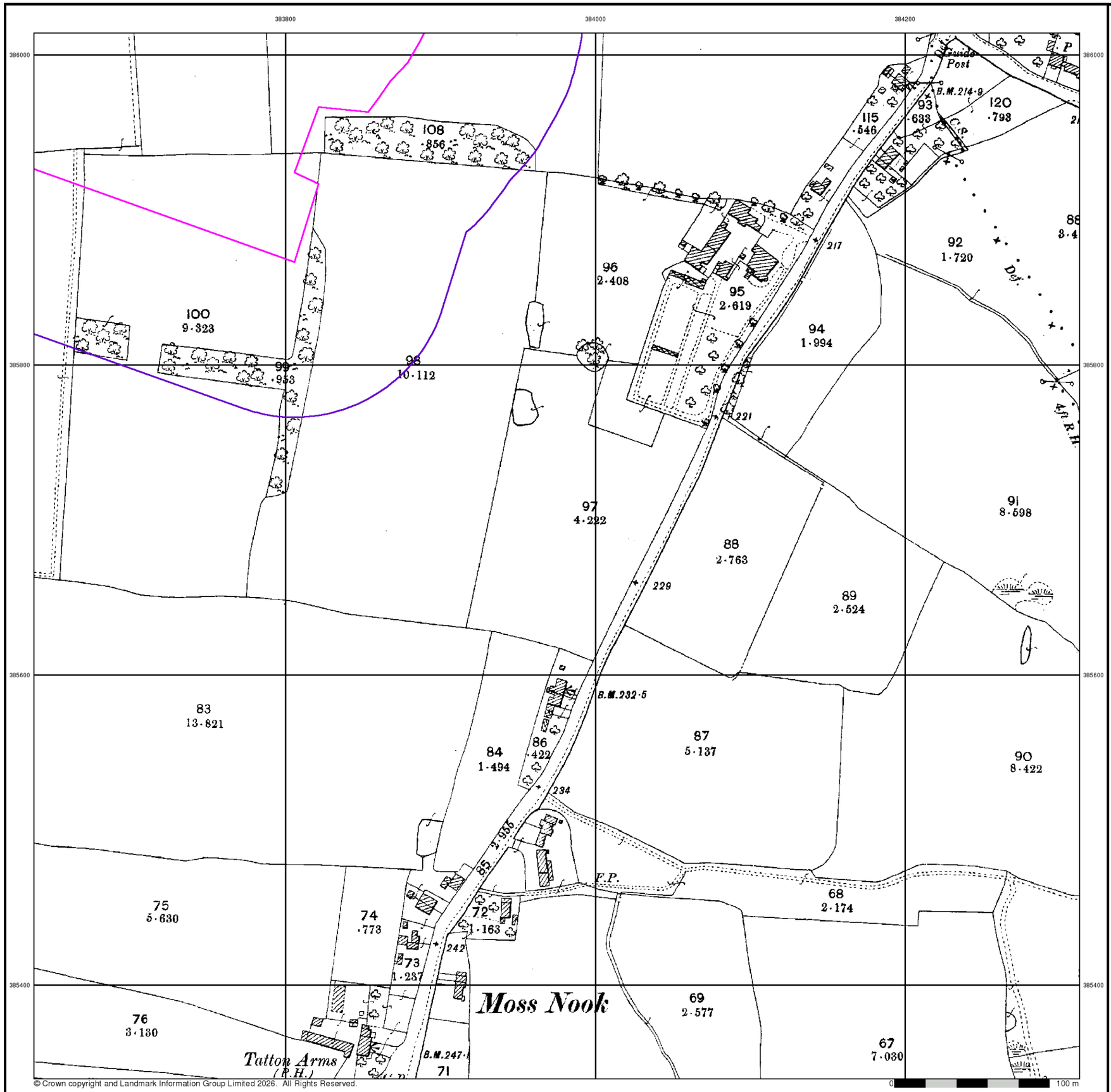
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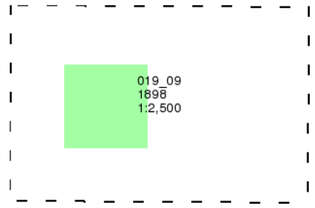
Cheshire

Published 1898

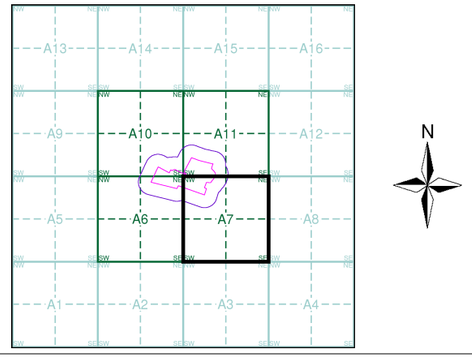
Source map scale - 1:2,500

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Historical Map - Segment A7



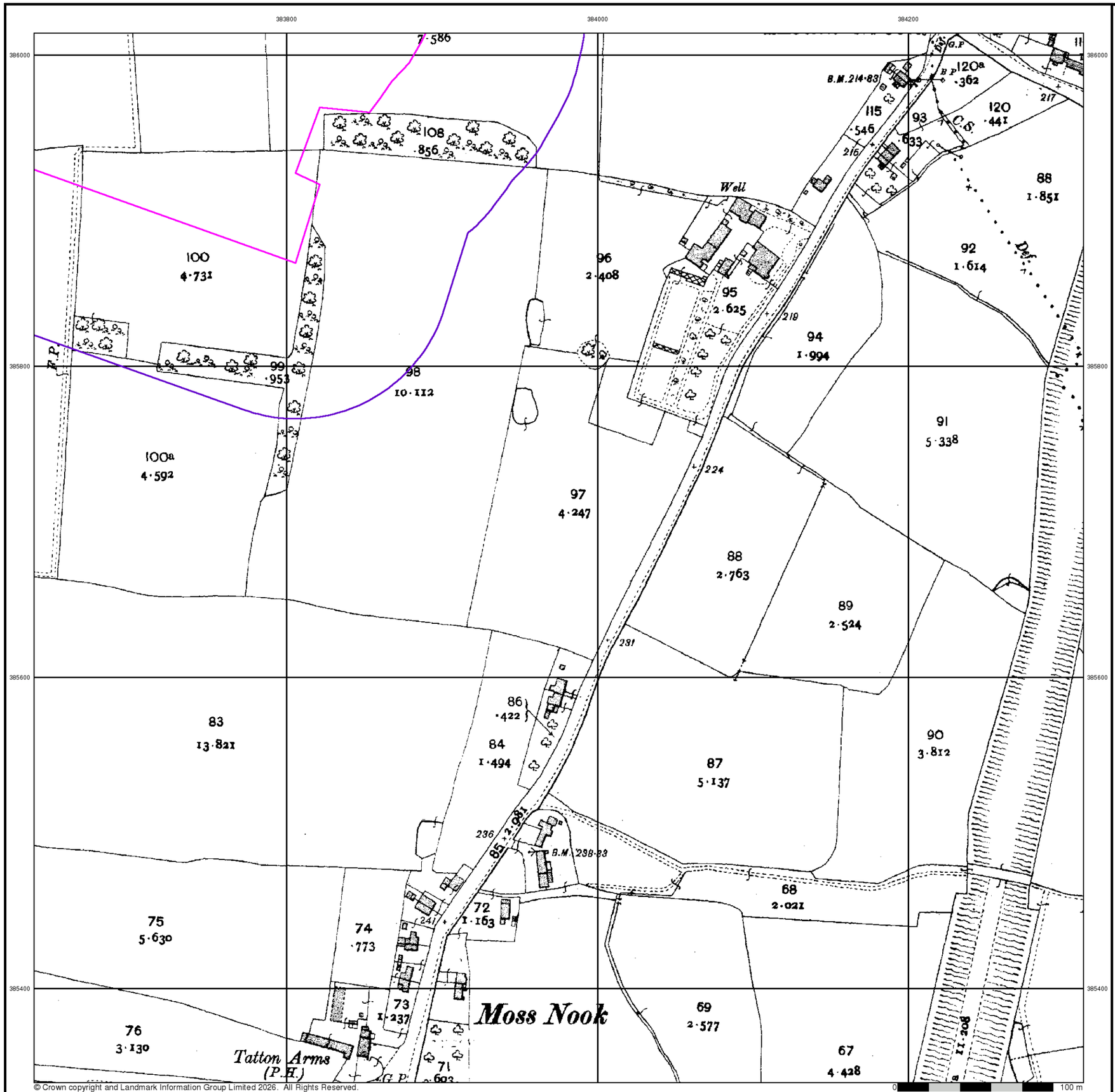
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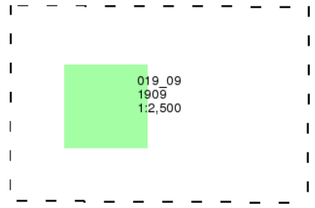
Cheshire

Published 1909

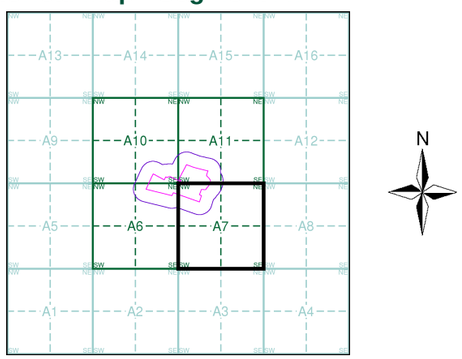
Source map scale - 1:2,500

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Historical Map - Segment A7



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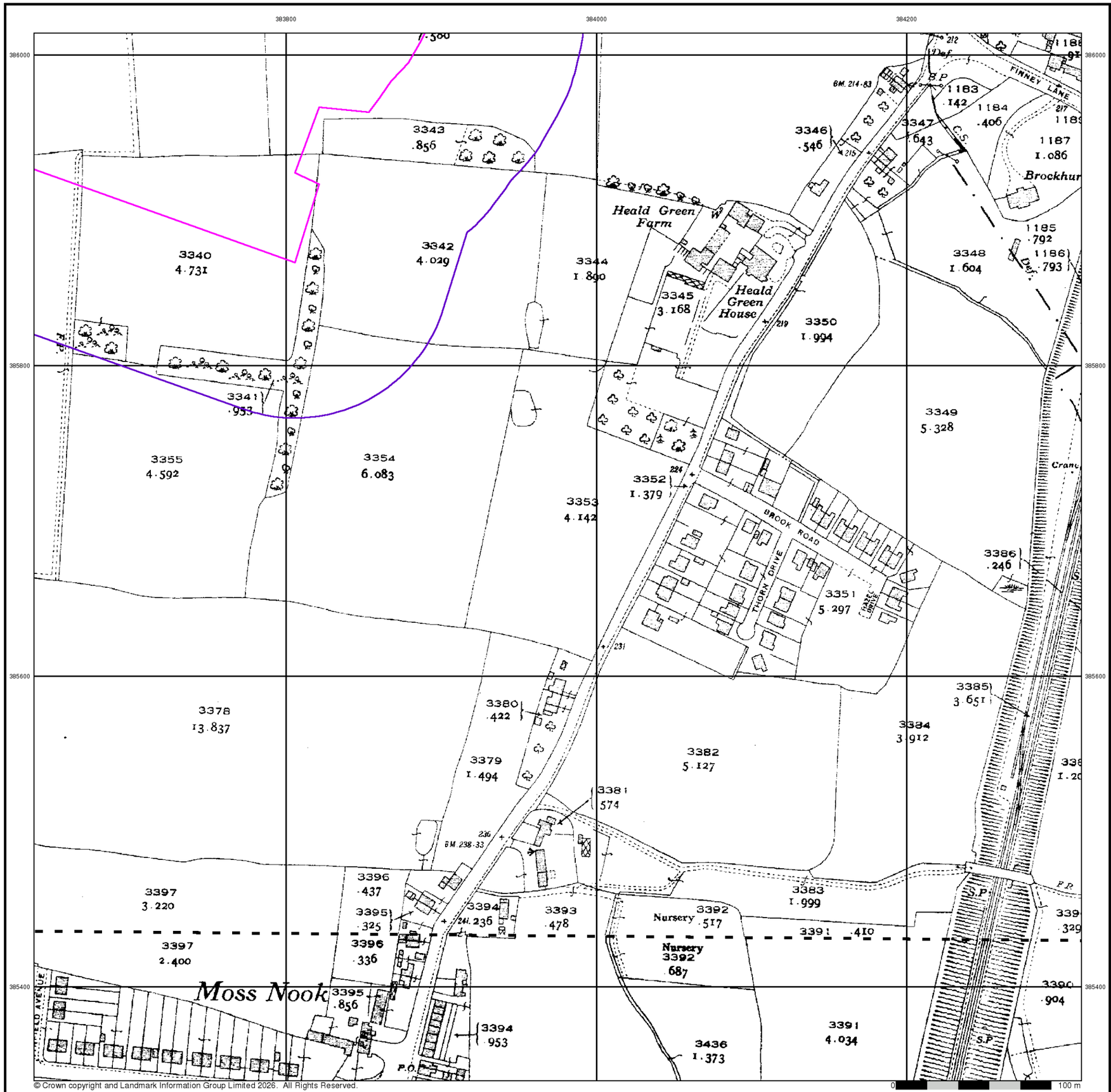
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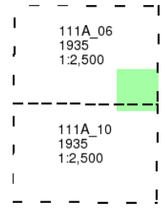
Lancashire And Furness

Published 1935

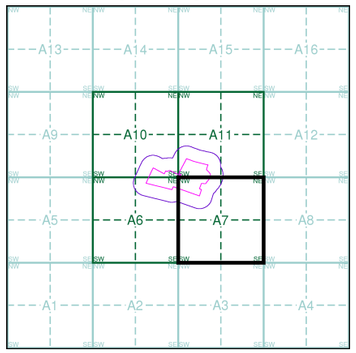
Source map scale - 1:2,500

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 A7



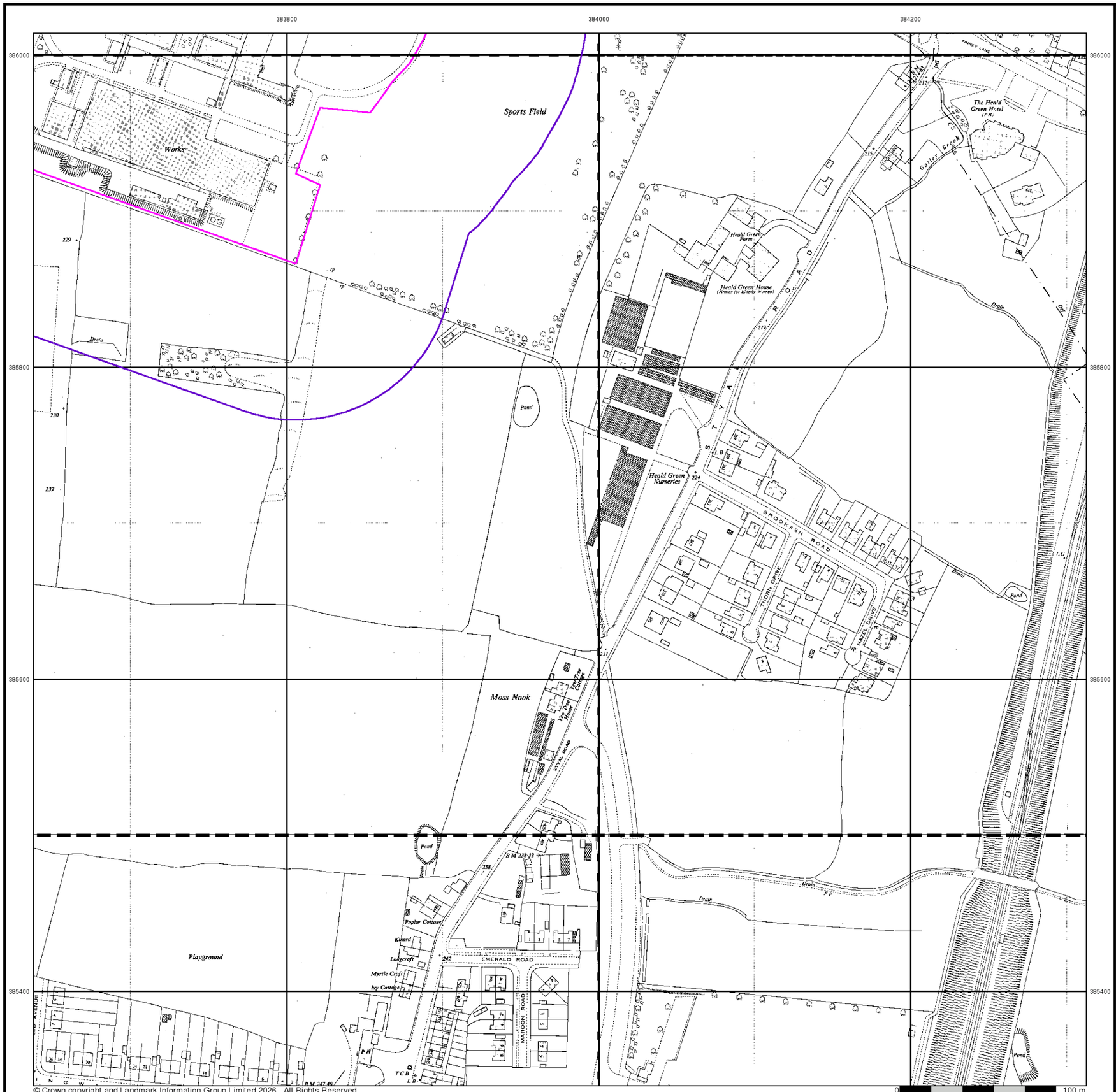
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Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	100

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

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Ordnance Survey Plan

Published 1960 - 1962

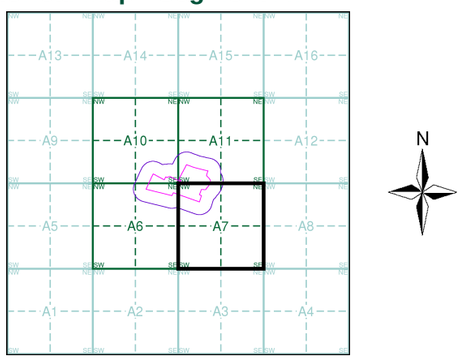
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SJ8386SE 1960 1:1,250	SJ8486SW 1962 1:1,250
SJ8385NE 1960 1:1,250	SJ8485NW 1960 1:1,250
SJ8385SE 1960 1:1,250	SJ8485SW 1960 1:1,250

Historical Map - Segment A7



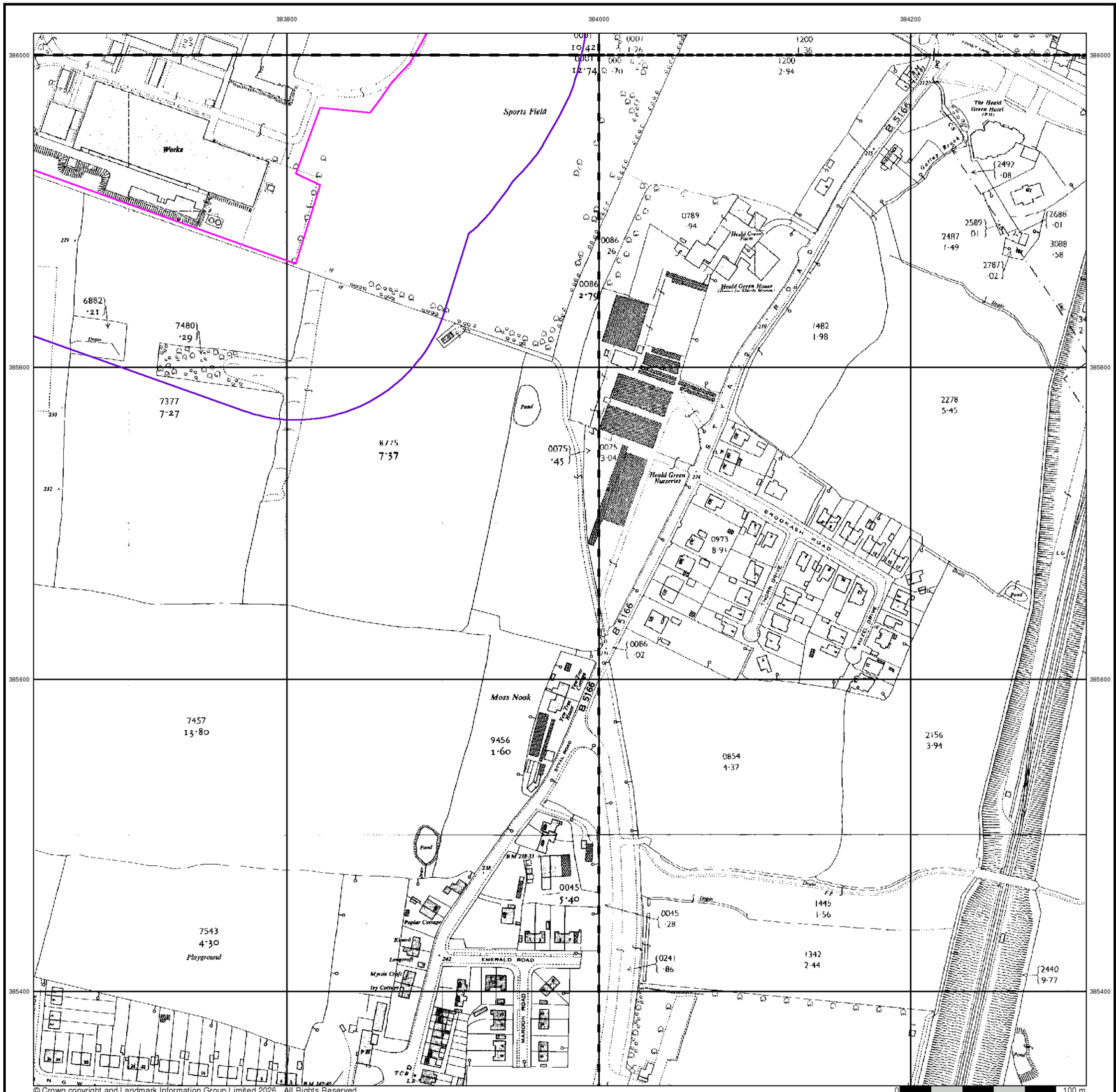
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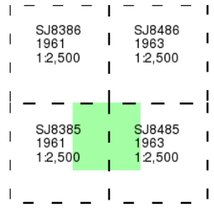
Ordnance Survey Plan

Published 1961 - 1963

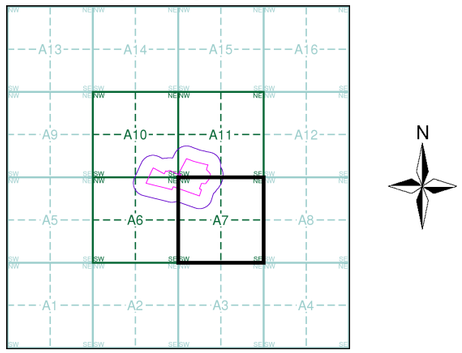
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A7



Order Details

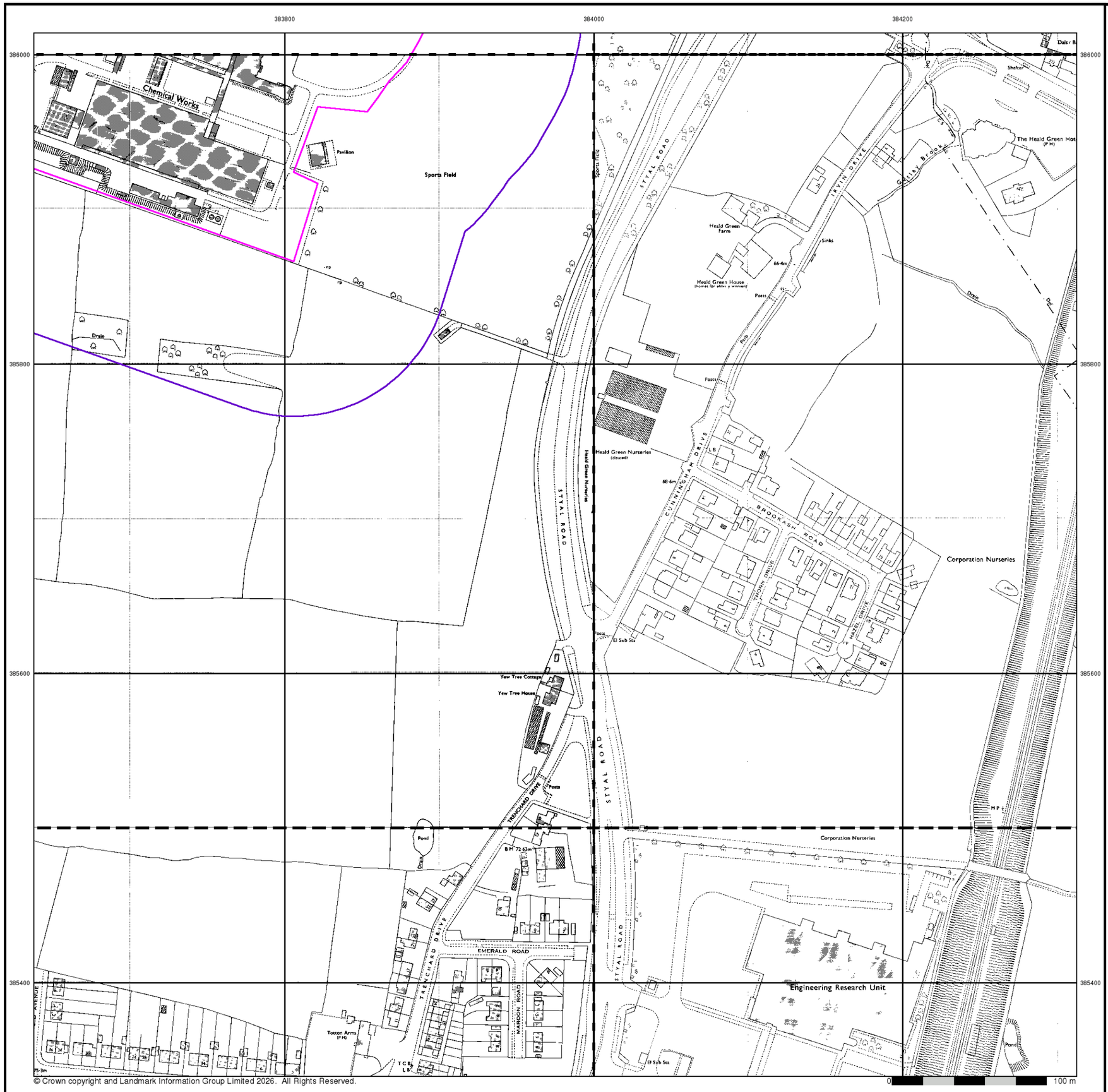
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Ordnance Survey Plan

Published 1973

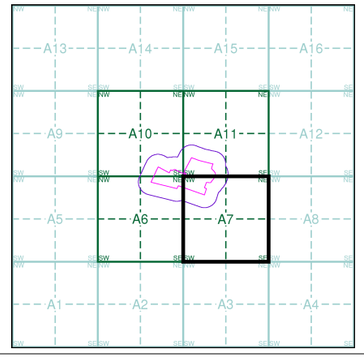
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A7



Order Details

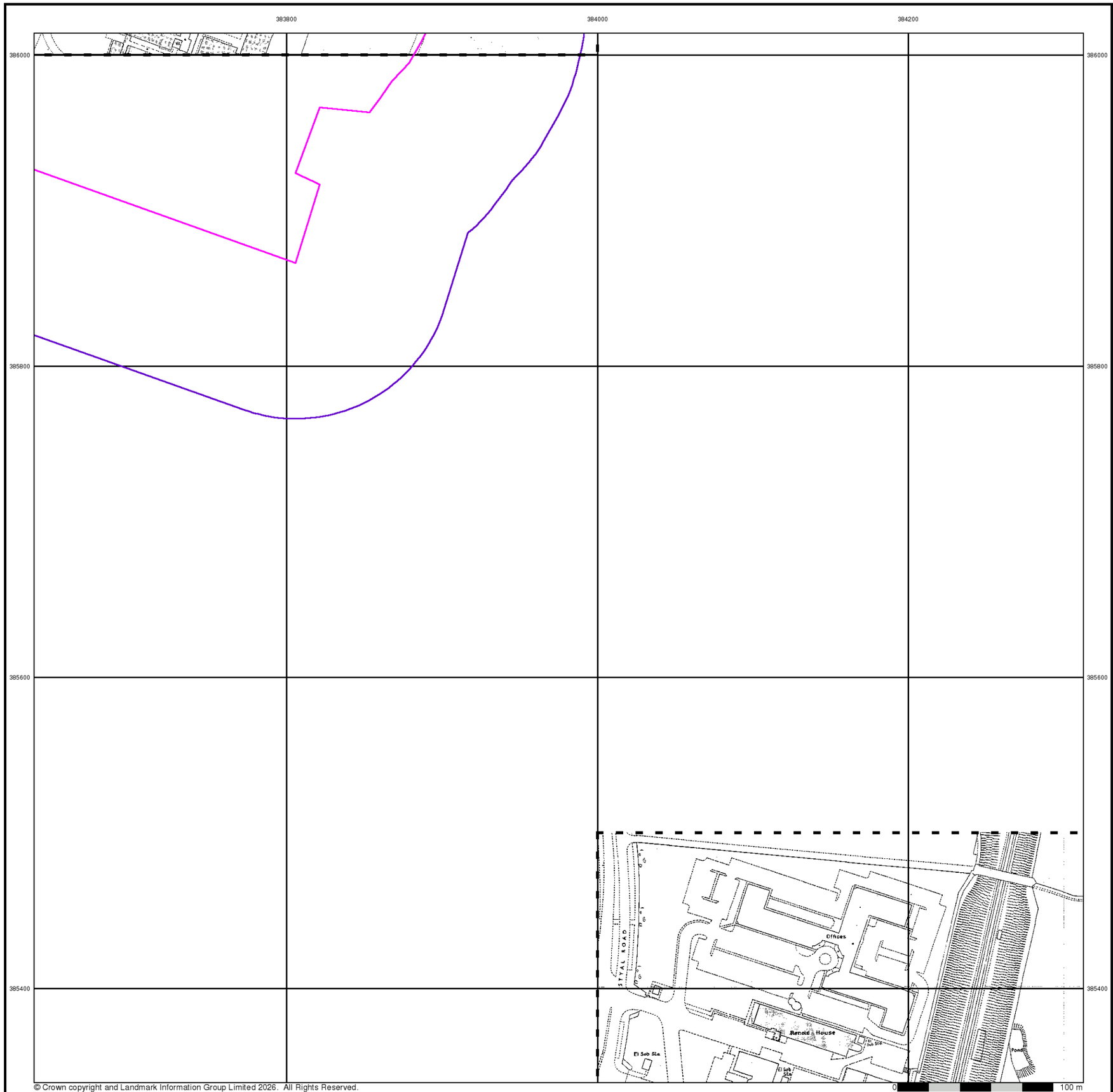
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Additional SIMs

Published 1979 - 1989

Source map scale - 1:1,250

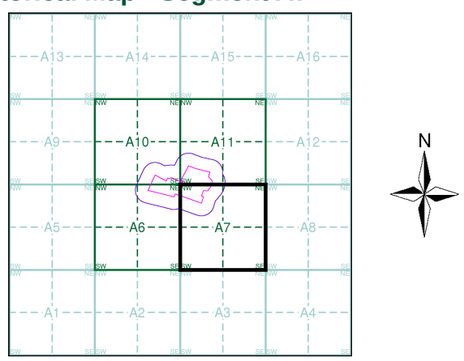
The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps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

Map Name(s) and Date(s)

SJ8386SE
1979
1:1,250

SJ8485SW
1989
1:1,250

Historical Map - Segment A7



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	100

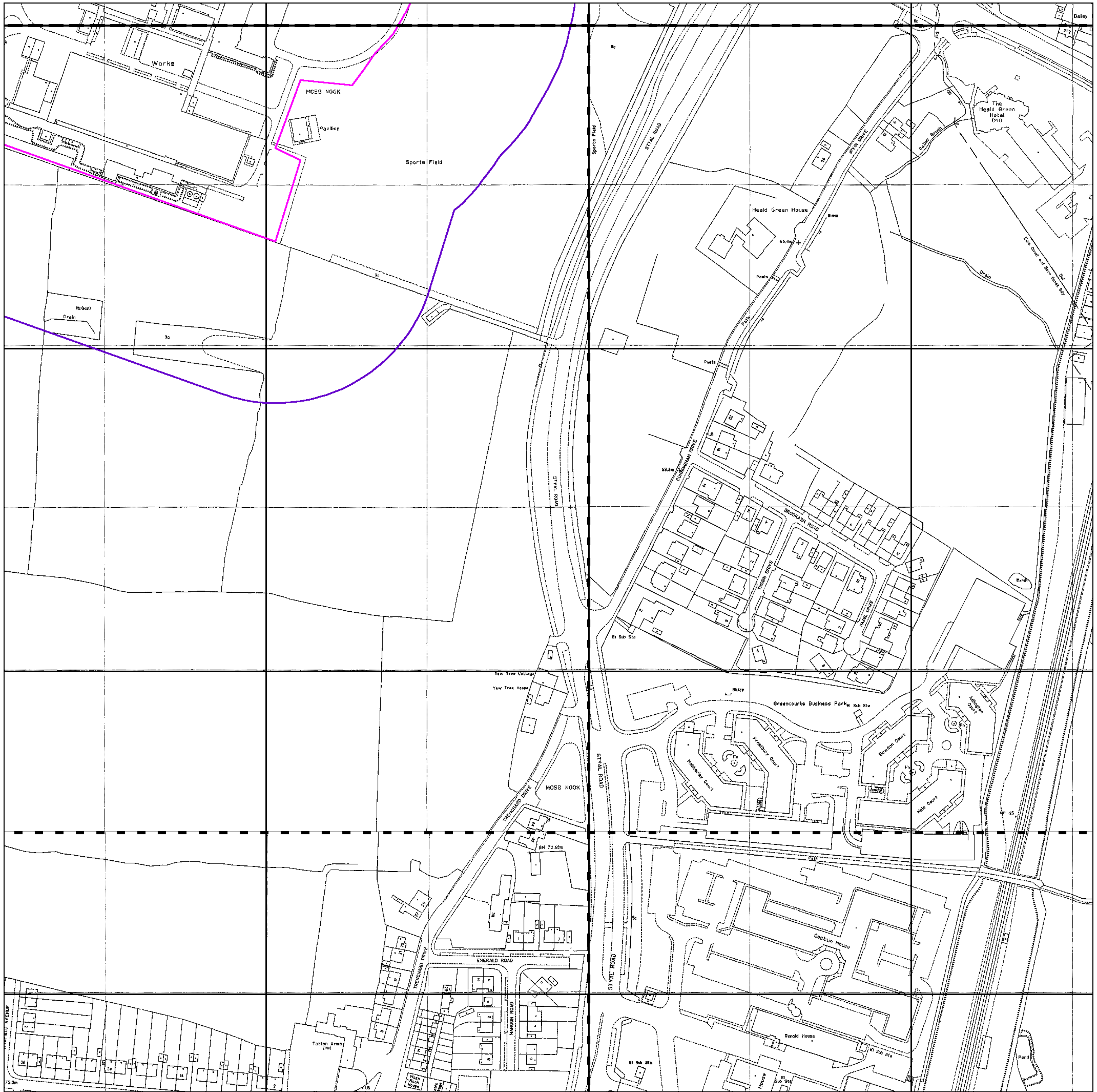
Site Details

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383800 384000 384200



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0 100 m

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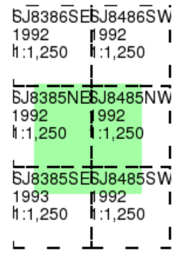
Large-Scale National Grid Data

Published 1992 - 1993

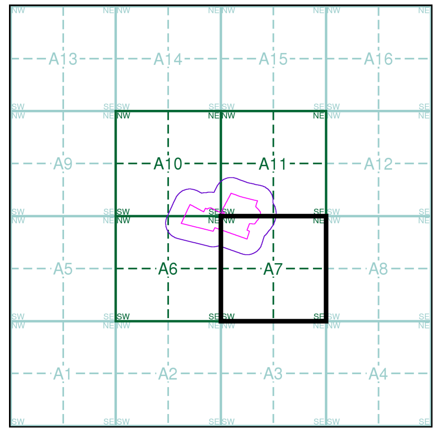
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A7



N

Order Details

Order Number: 404873443_1_1
Customer Ref: 28248
National Grid Reference: 383650, 386010
Slice: A
Site Area (Ha): 7.9
Search Buffer (m): 100

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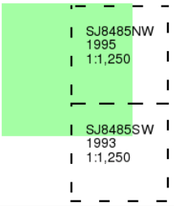
Large-Scale National Grid Data

Published 1993 - 1995

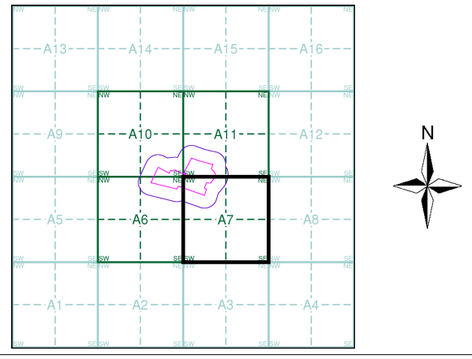
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A7



Order Details

Order Number:	404873443_1_1
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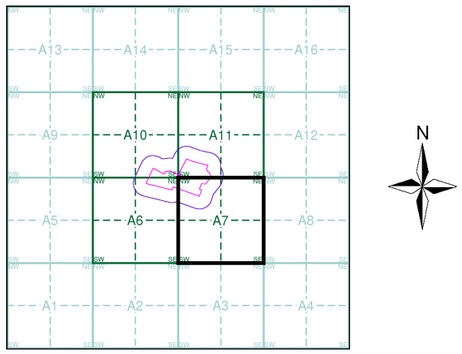
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Historical Aerial Photography

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 A7



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	100

Site Details

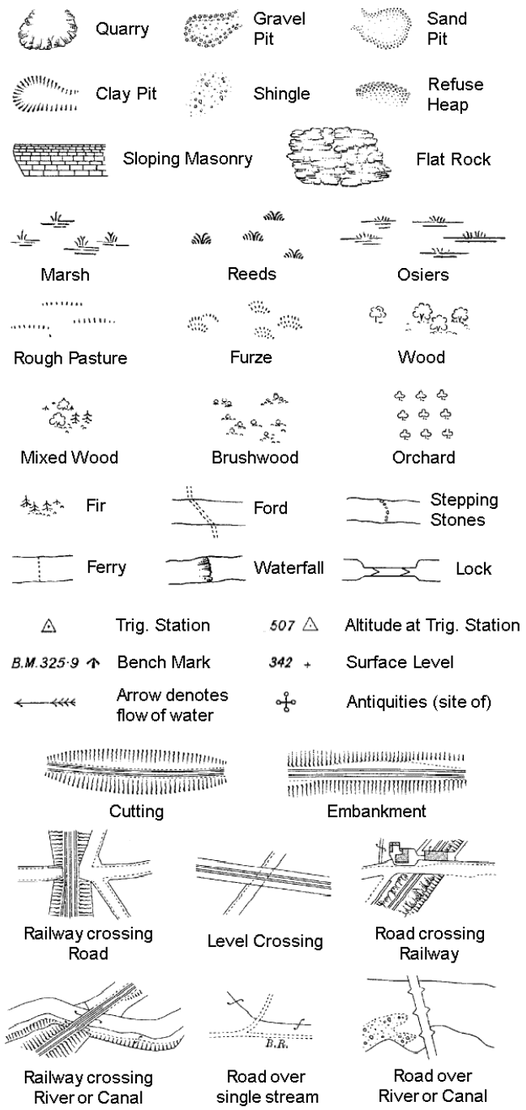
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Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

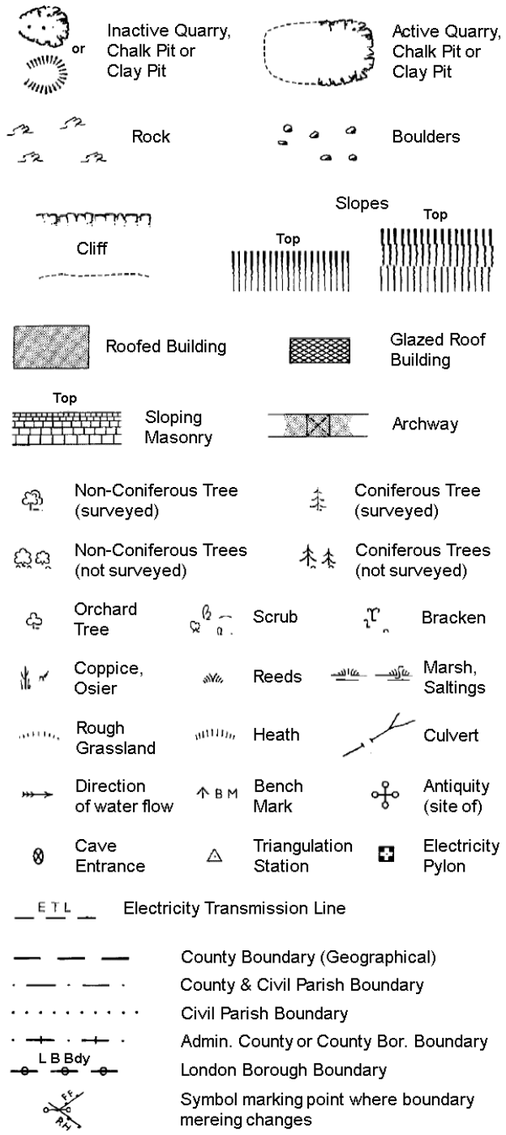
Administrative County & Civil Parish Boundary

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

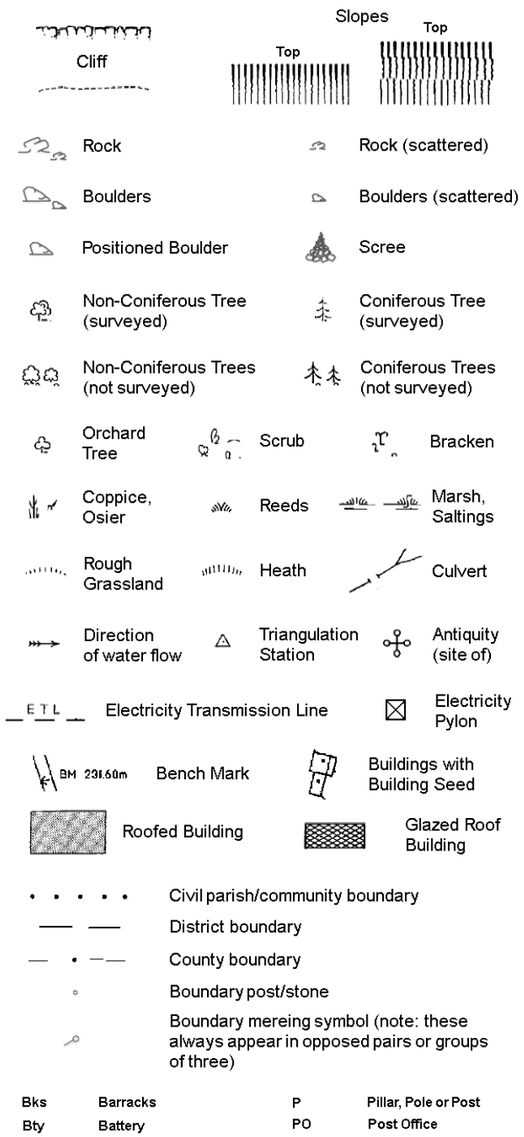
Admin. County or County Bor. Boundary

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

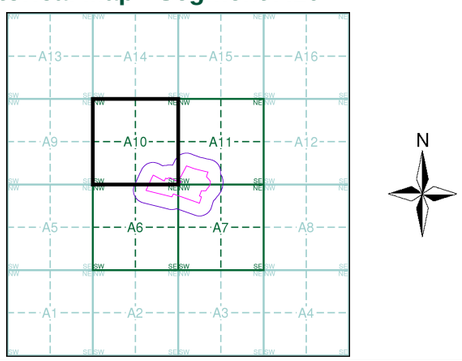
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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cheshire	1:2,500	1872 - 1887	2
Cheshire	1:2,500	1898	3
Cheshire	1:2,500	1909 - 1910	4
Lancashire And Furness	1:2,500	1935	5
Ordnance Survey Plan	1:1,250	1960	6
Ordnance Survey Plan	1:2,500	1961	7
Ordnance Survey Plan	1:1,250	1965 - 1982	8
Supply of Unpublished Survey Information	1:1,250	1975	9
Supply of Unpublished Survey Information	1:1,250	1977	10
Additional SIMs	1:1,250	1978 - 1984	11
Large-Scale National Grid Data	1:1,250	1992	12
Large-Scale National Grid Data	1:1,250	1992 - 1995	13
Large-Scale National Grid Data	1:1,250	1996	14
Historical Aerial Photography	1:2,500	2000	15

Historical Map - Segment A10



Order Details

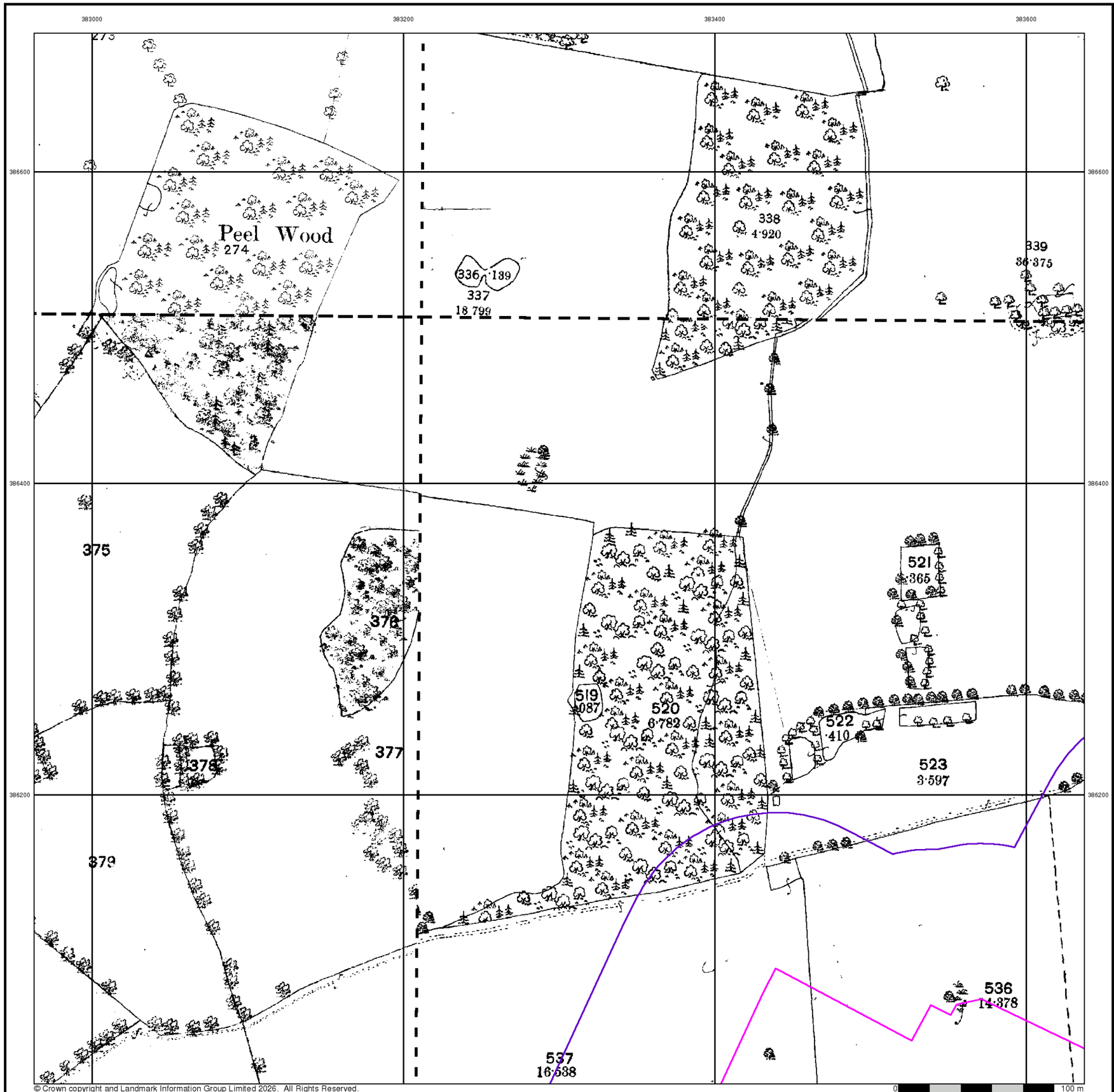
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Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	100

Site Details

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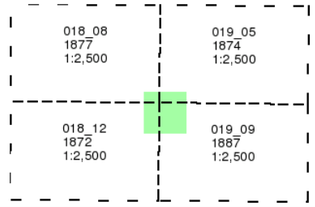
Cheshire

Published 1872 - 1887

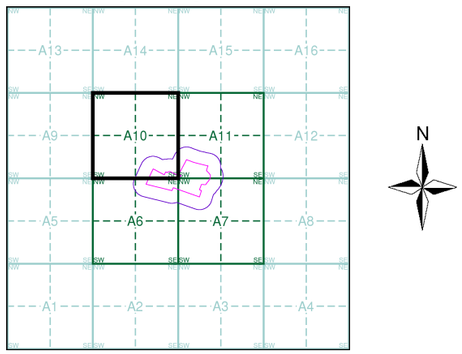
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A10



Order Details

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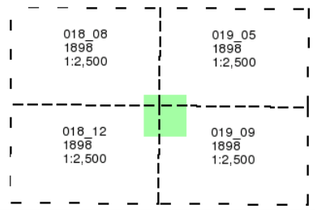
Cheshire

Published 1898

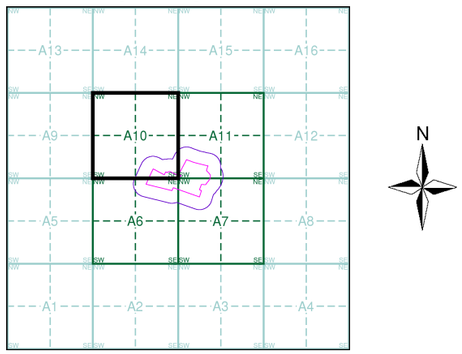
Source map scale - 1:2,500

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Historical Map - Segment A10



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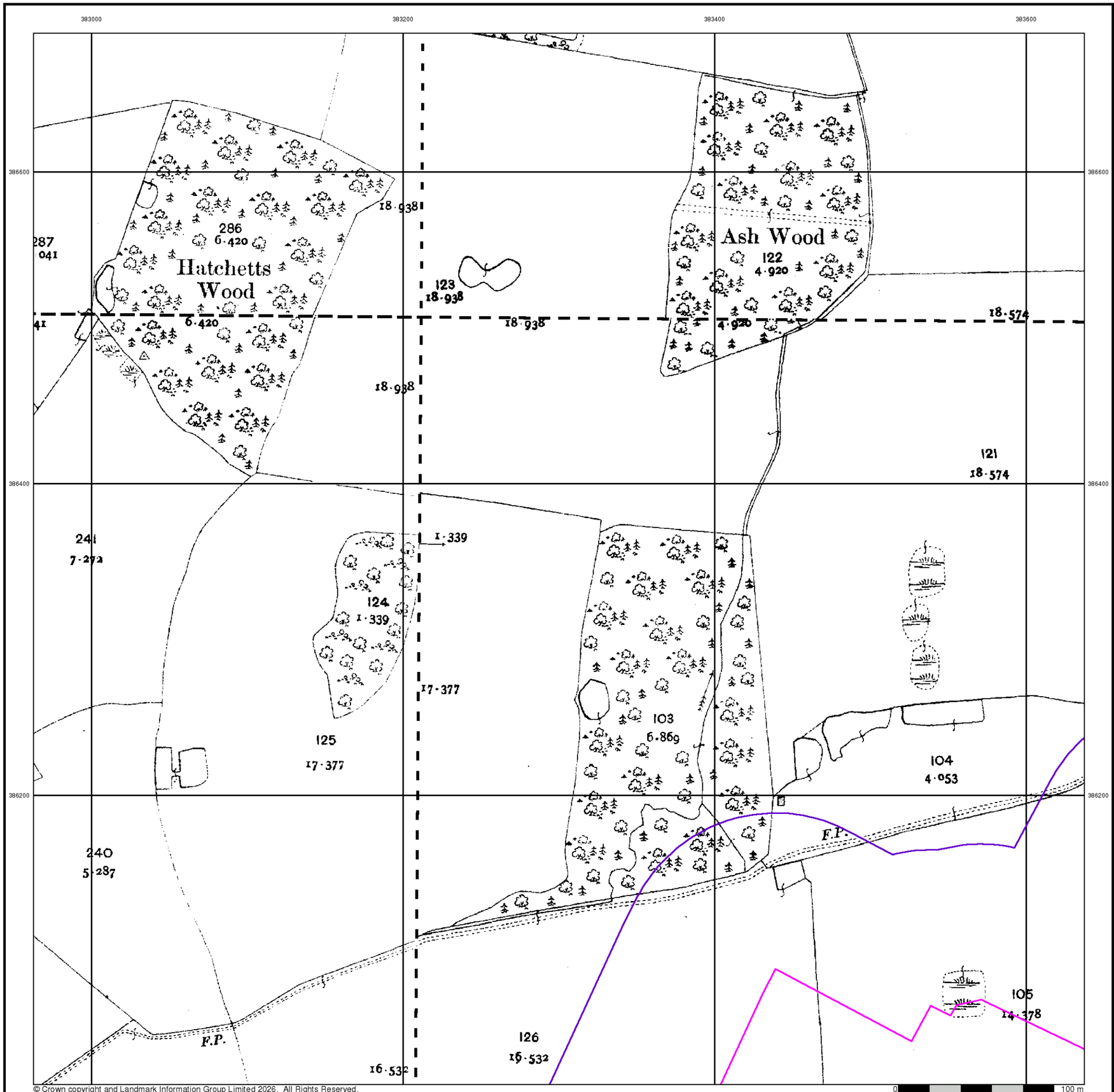
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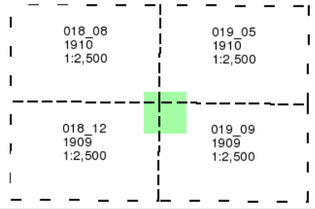
Cheshire

Published 1909 - 1910

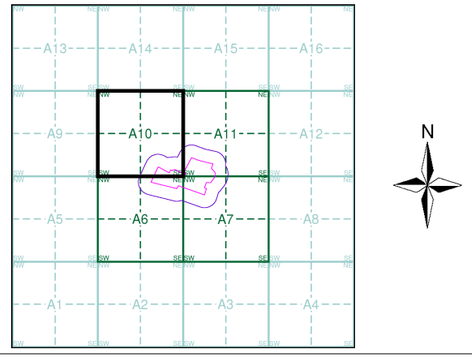
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A10



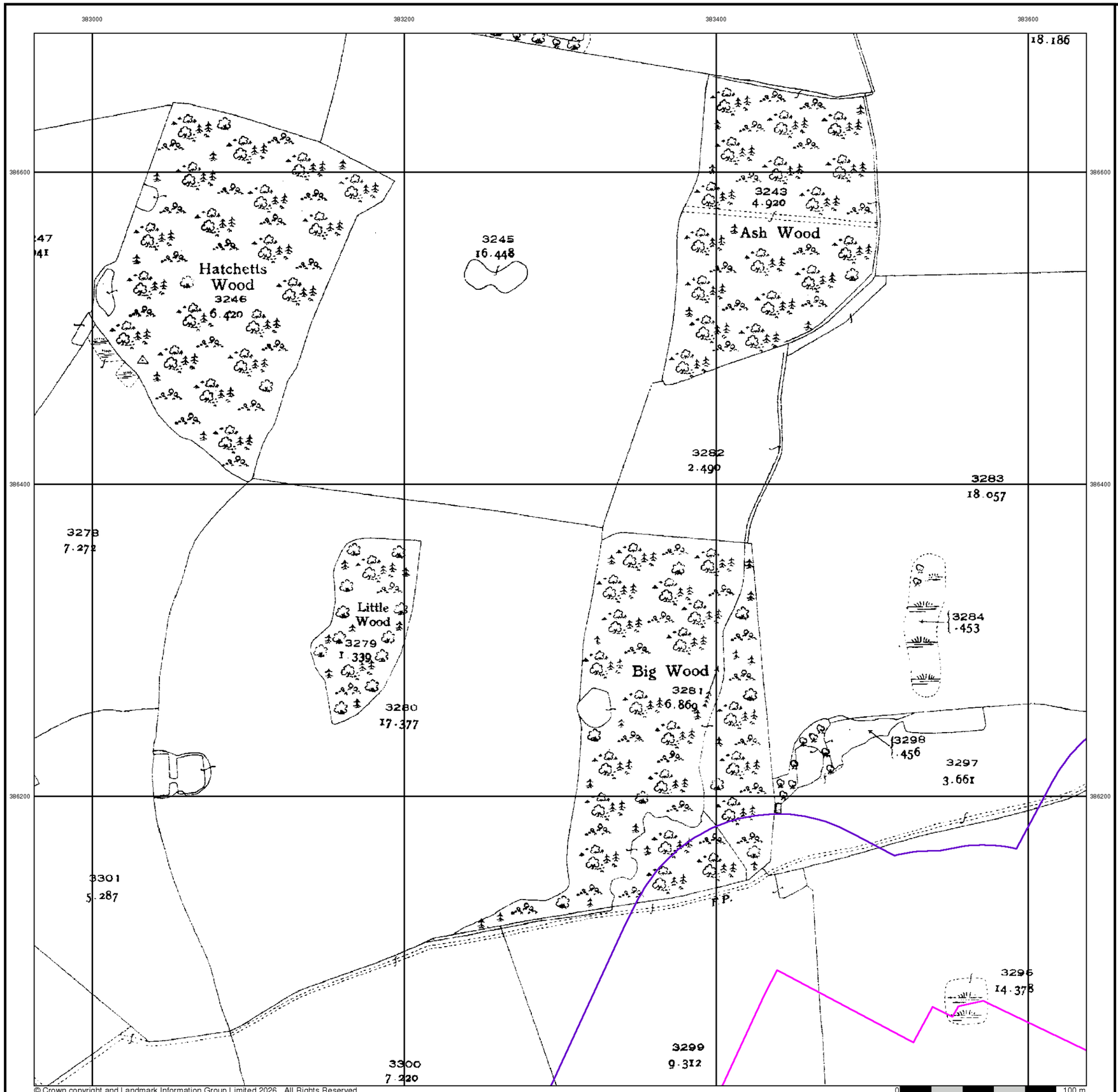
Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	100

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

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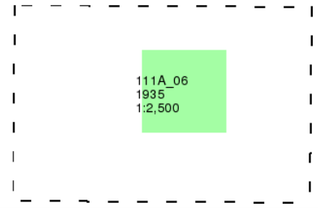
Lancashire And Furness

Published 1935

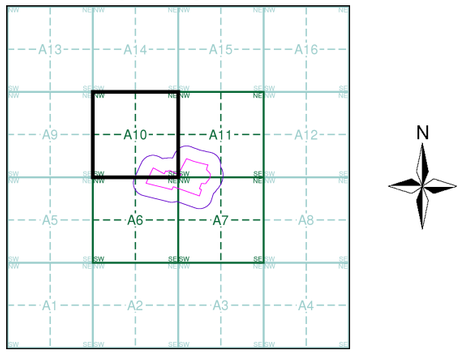
Source map scale - 1:2,500

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 A10



Order Details

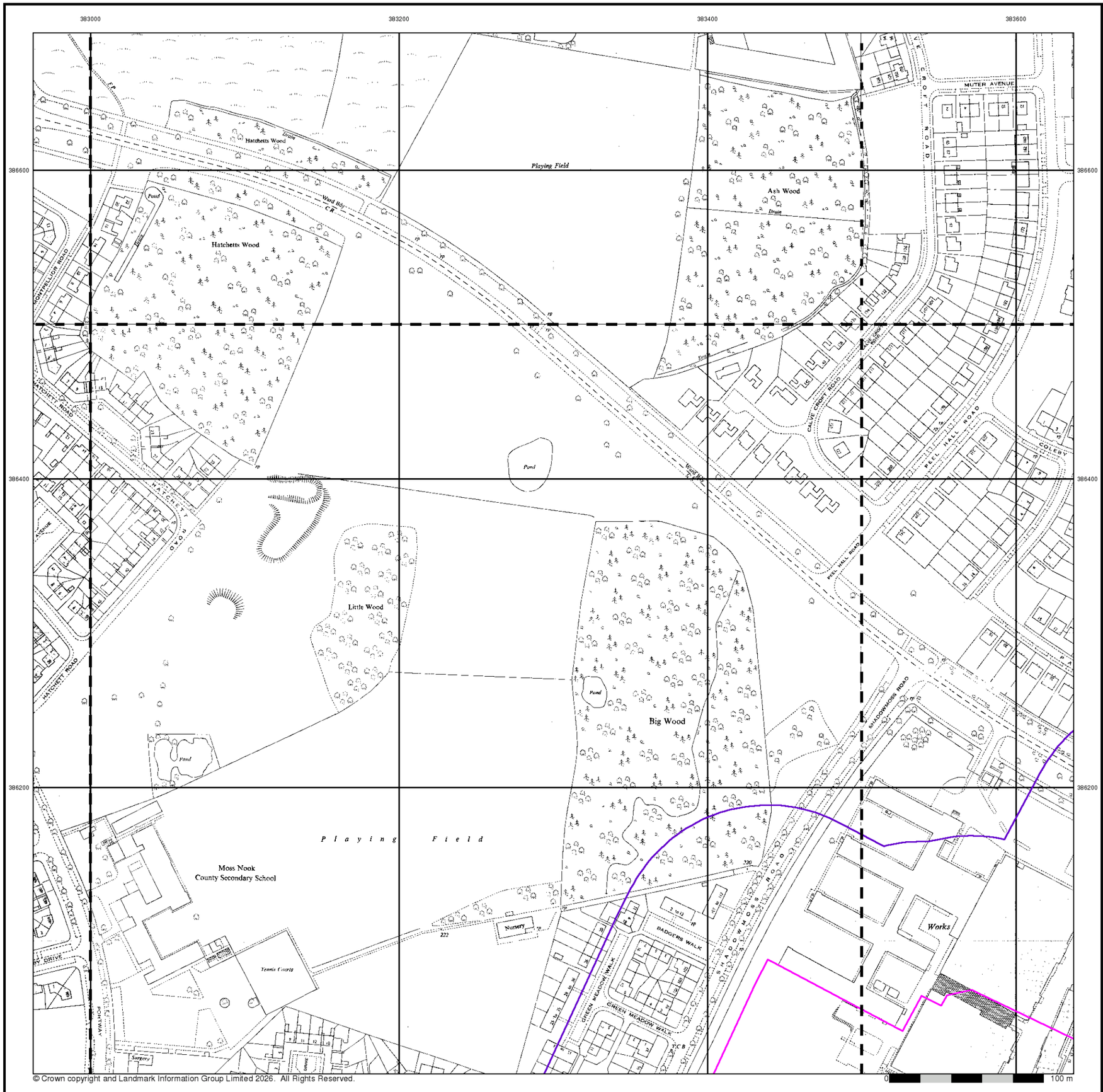
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Customer Ref:	28248
National Grid Reference:	383650, 386010
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Ordnance Survey Plan

Published 1960

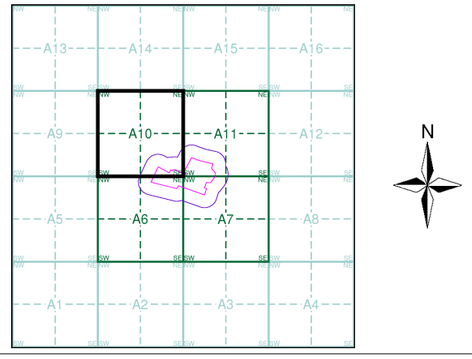
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SJ8286NE 1960 1:1,250	SJ8386NW 1960 1:1,250	SJ8386NE 1960 1:1,250
SJ8286SE 1960 1:1,250	SJ8386SW 1960 1:1,250	SJ8386SE 1960 1:1,250

Historical Map - Segment A10



Order Details

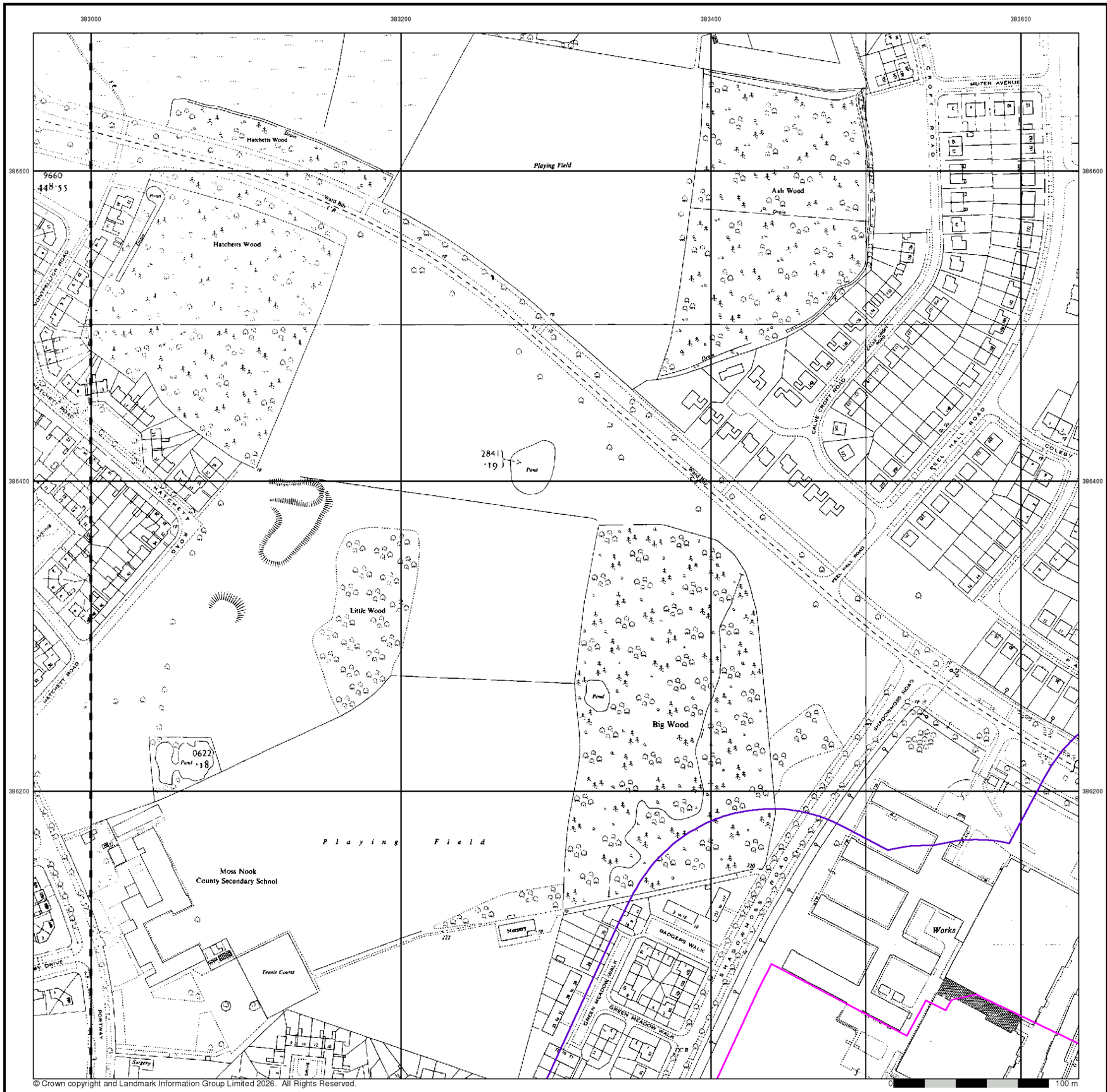
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Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
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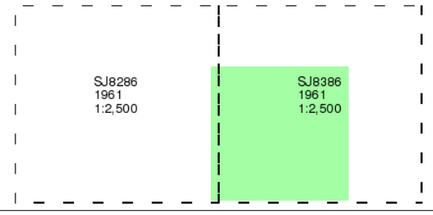
Ordnance Survey Plan

Published 1961

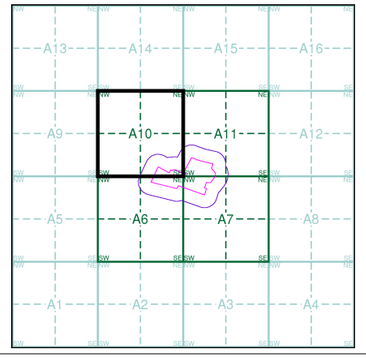
Source map scale - 1:2,500

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 A10



Order Details

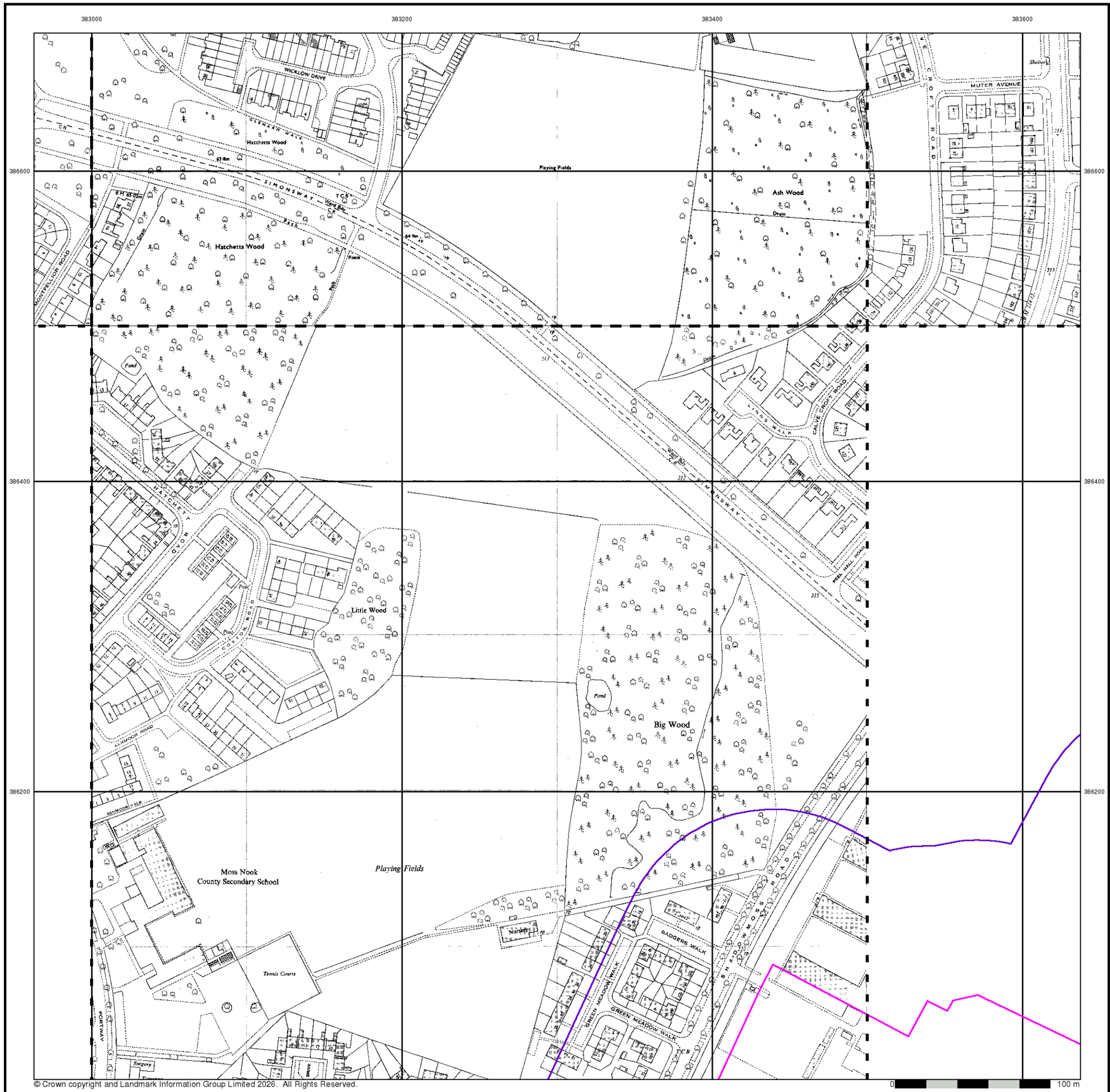
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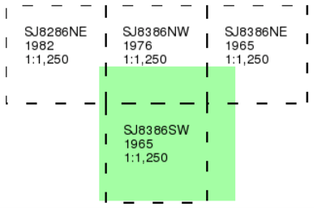
Ordnance Survey Plan

Published 1965 - 1982

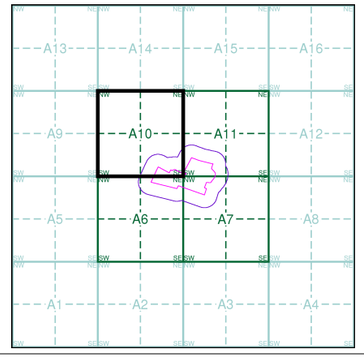
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A10



Order Details

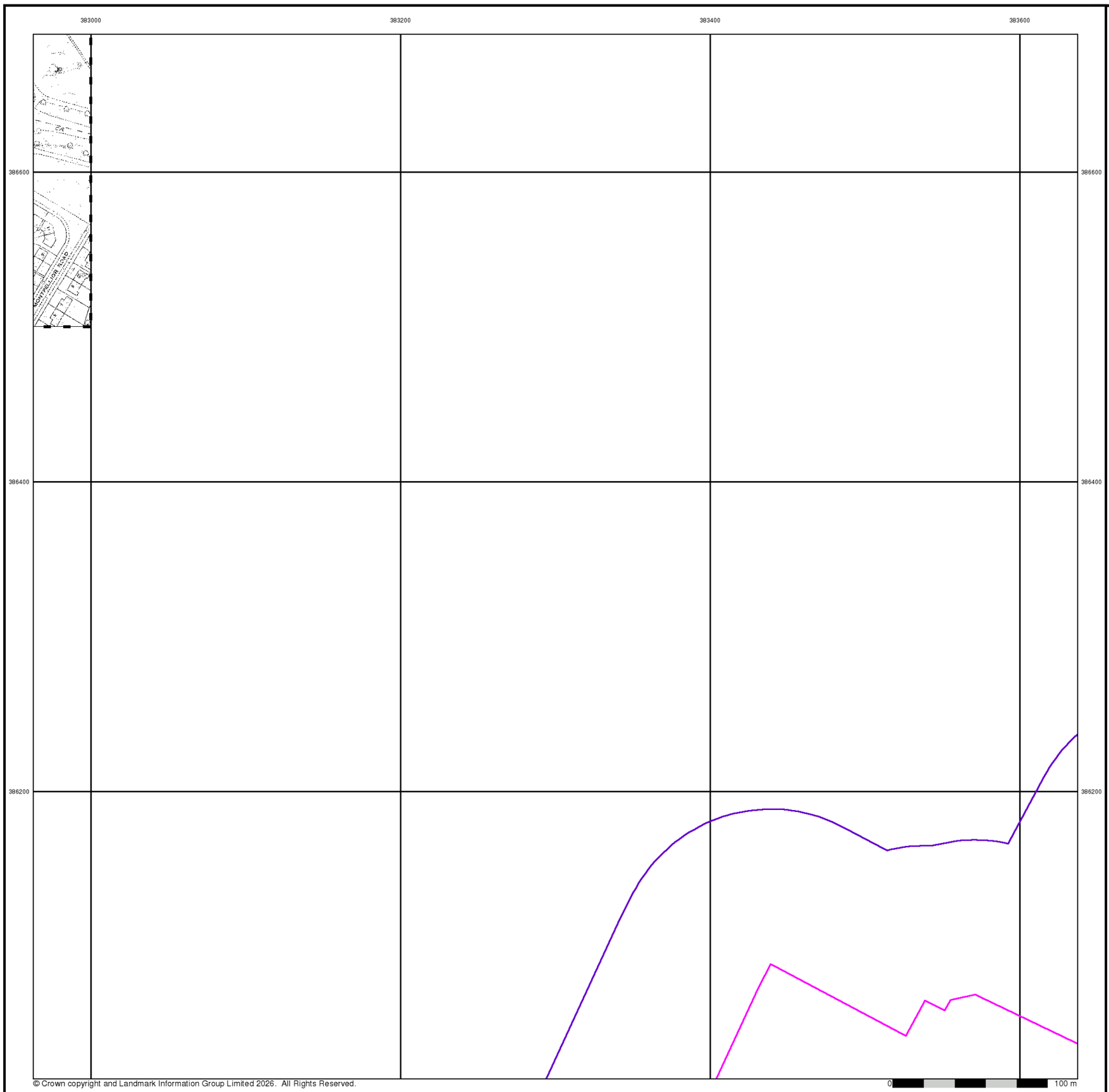
Order Number:	404873443_1_1
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Slice:	A
Site Area (Ha):	7.9
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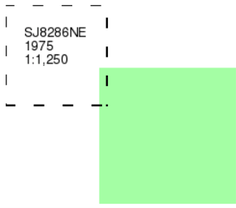
Supply of Unpublished Survey Information

Published 1975

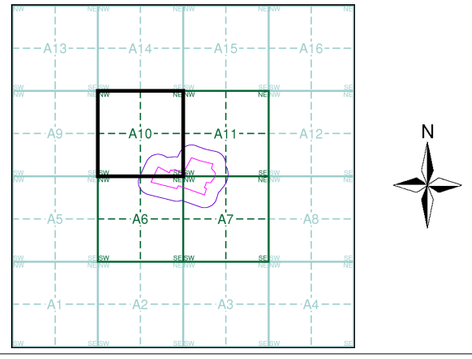
Source map scale - 1:1,250

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 A10



Order Details

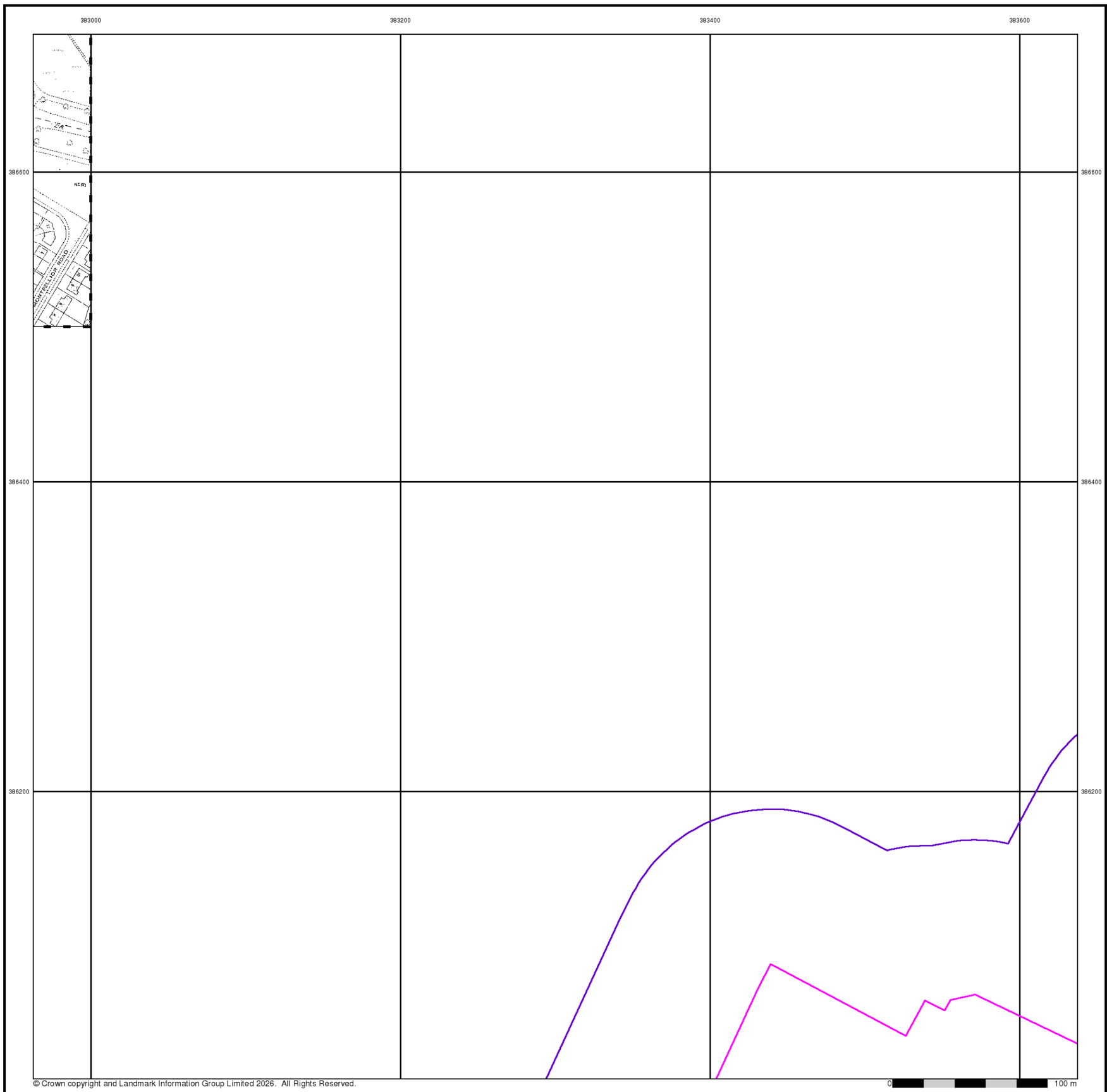
Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
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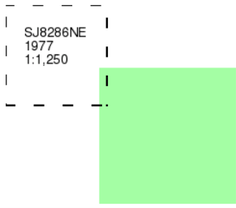
Supply of Unpublished Survey Information

Published 1977

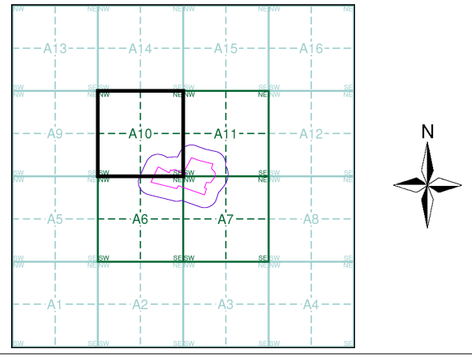
Source map scale - 1:1,250

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 A10



Order Details

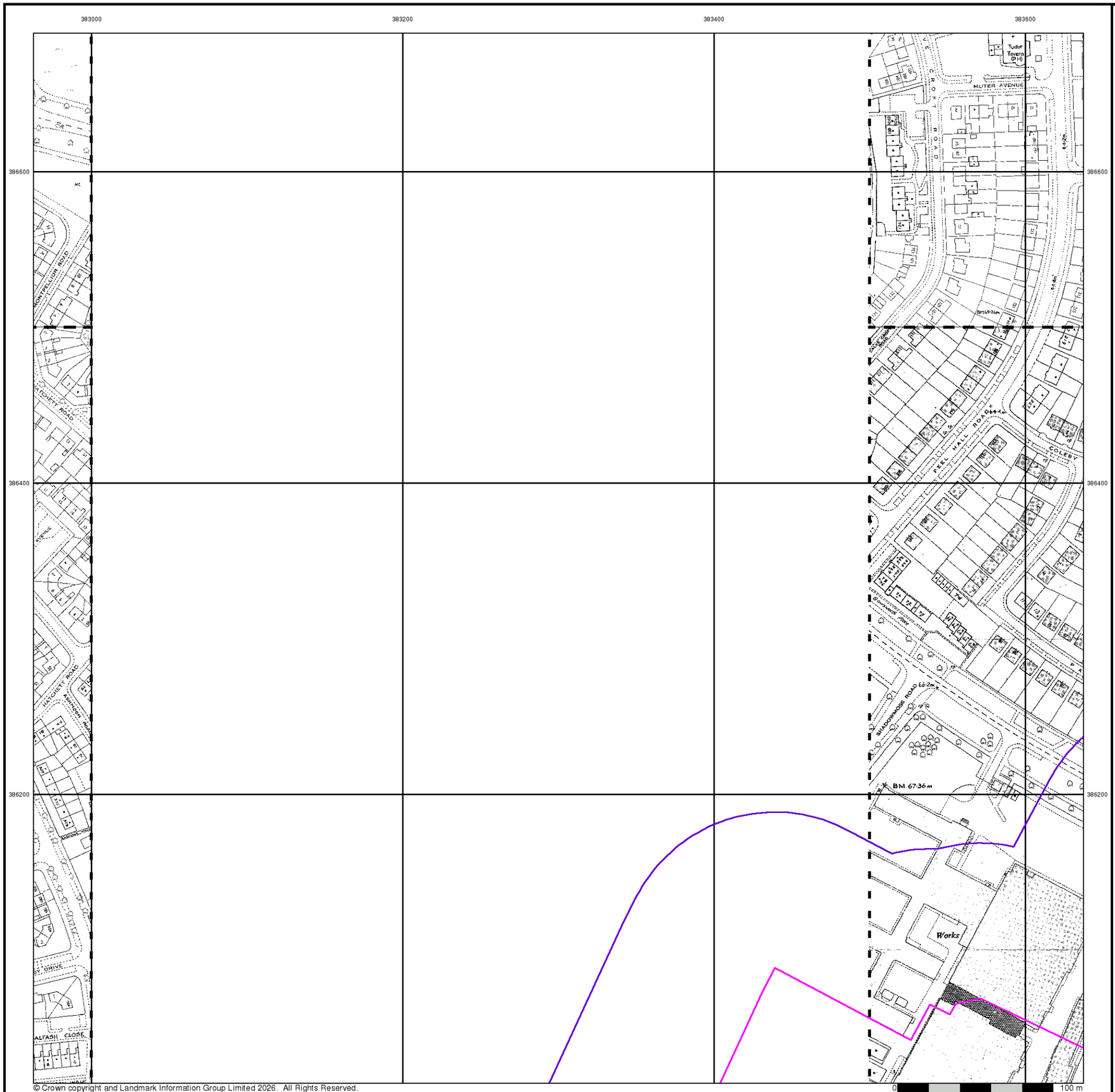
Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
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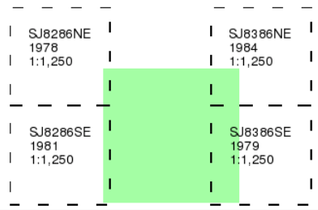
Additional SIMs

Published 1978 - 1984

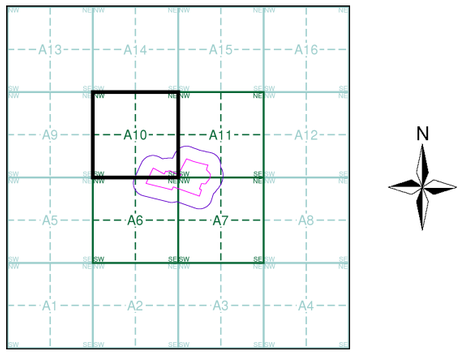
Source map scale - 1:1,250

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 A10



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	100

Site Details

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Large-Scale National Grid Data

Published 1992

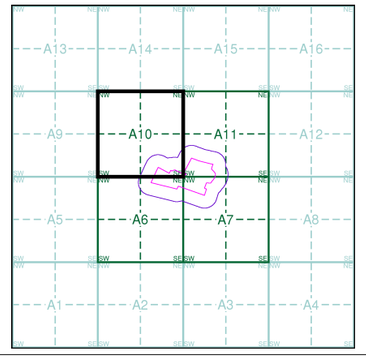
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SJ8286NE 1992 1:1,250	SJ8386NW 1992 1:1,250	SJ8386NE 1992 1:1,250
SJ8286SE 1992 1:1,250	SJ8386SW 1992 1:1,250	SJ8386SE 1992 1:1,250

Historical Map - Segment A10



Order Details

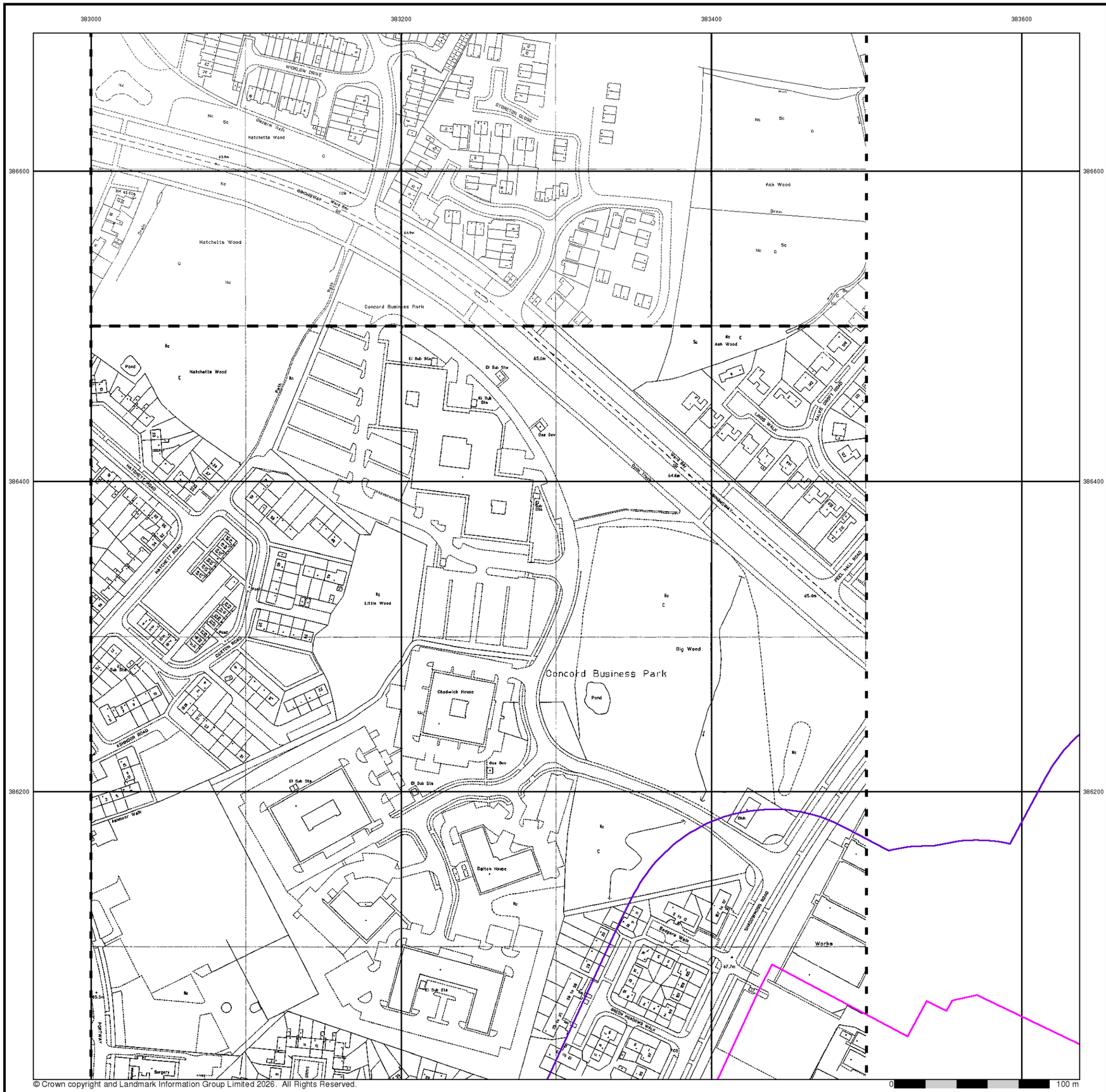
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Large-Scale National Grid Data

Published 1992 - 1995

Source map scale - 1:1,250

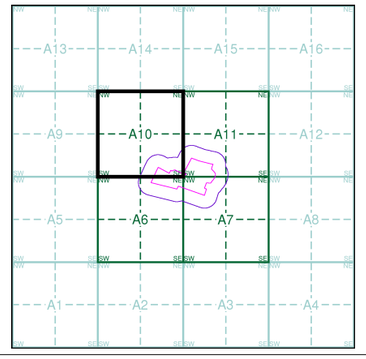
'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic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

Map Name(s) and Date(s)

SJ8386NW
1995
1:1,250

SJ8386SW
1992
1:1,250

Historical Map - Segment A10



Order Details

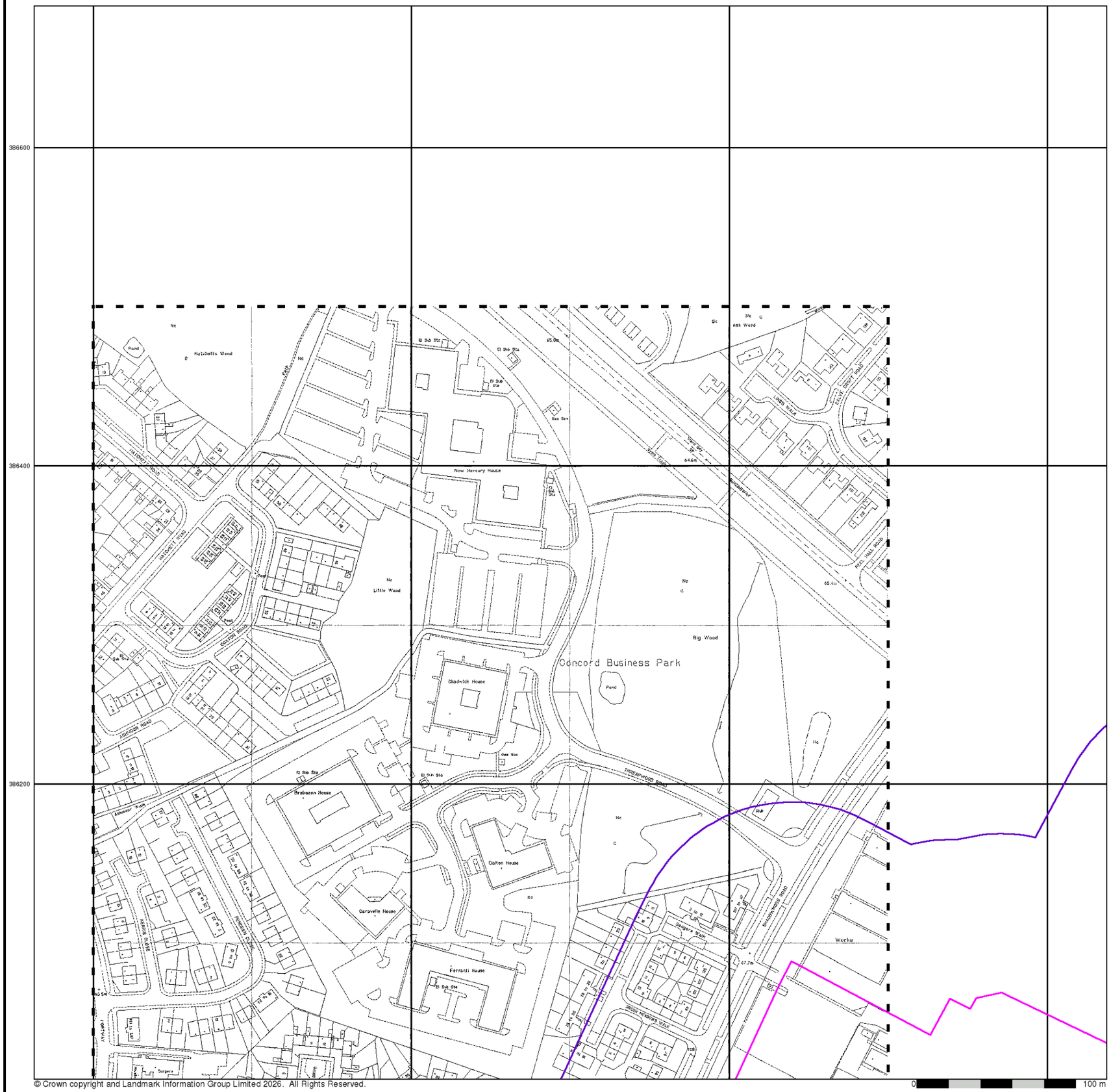
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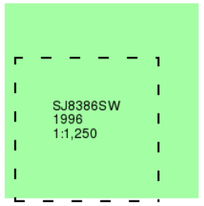
Large-Scale National Grid Data

Published 1996

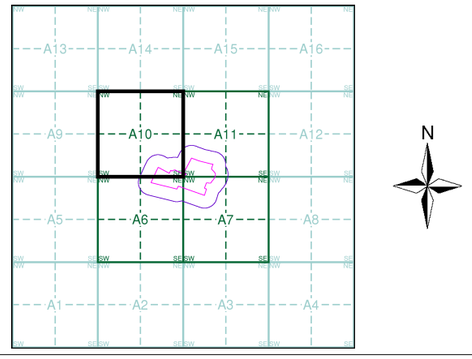
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A10



Order Details

Order Number:	404873443_1_1
Customer Ref:	28248
National Grid Reference:	383650, 386010
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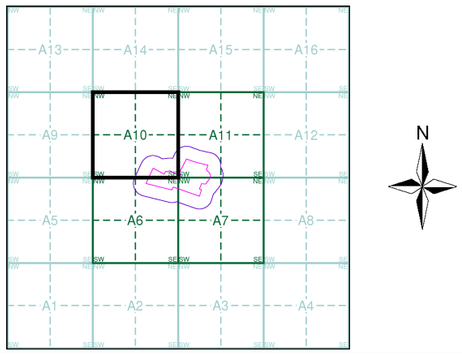
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Historical Aerial Photography

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 A10



Order Details

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Site Details

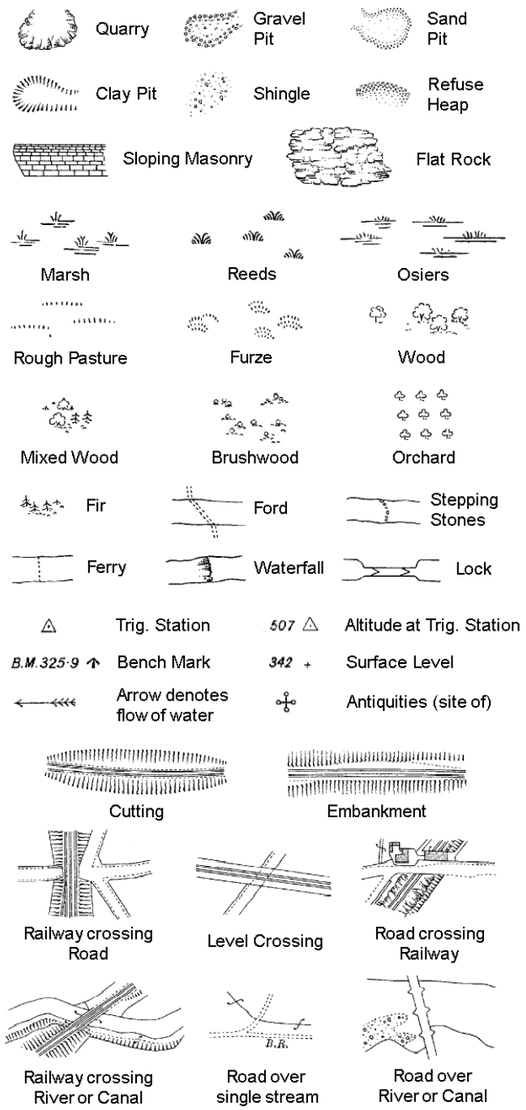
Atlas Business Park, Simonsway, Manchester, M22 5PP

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Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

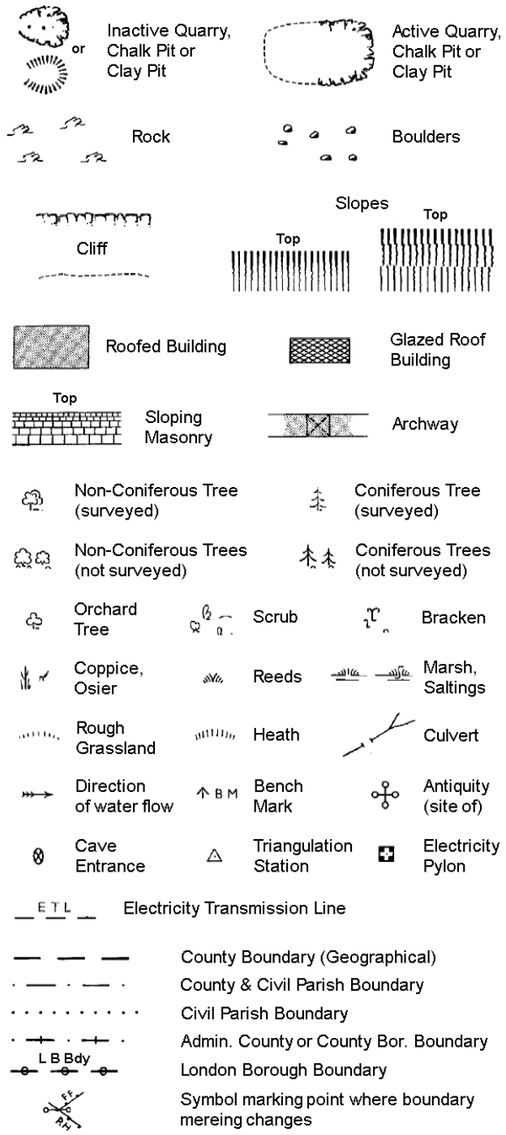
Administrative County & Civil Parish Boundary

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

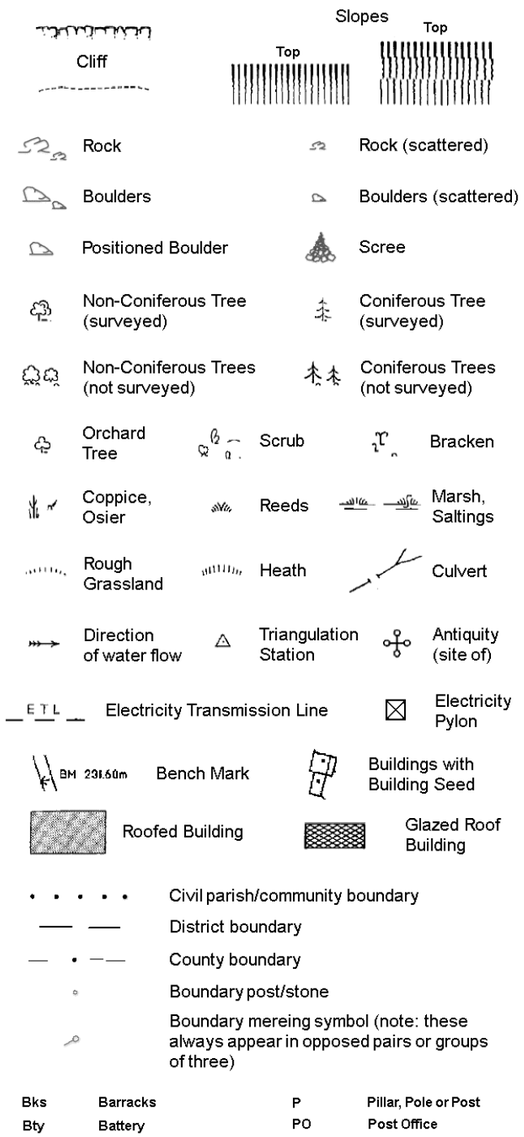
Admin. County or County Bor. Boundary

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

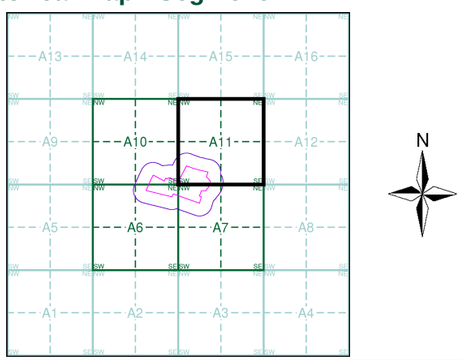
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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cheshire	1:2,500	1874 - 1887	2
Cheshire	1:2,500	1898	3
Cheshire	1:2,500	1909 - 1910	4
Lancashire And Furness	1:2,500	1935	5
Ordnance Survey Plan	1:1,250	1960 - 1962	6
Ordnance Survey Plan	1:2,500	1961 - 1963	7
Ordnance Survey Plan	1:1,250	1965 - 1973	8
Additional SIMs	1:1,250	1979 - 1984	9
Large-Scale National Grid Data	1:1,250	1992	10
Historical Aerial Photography	1:2,500	2000	11

Historical Map - Segment A11



Order Details

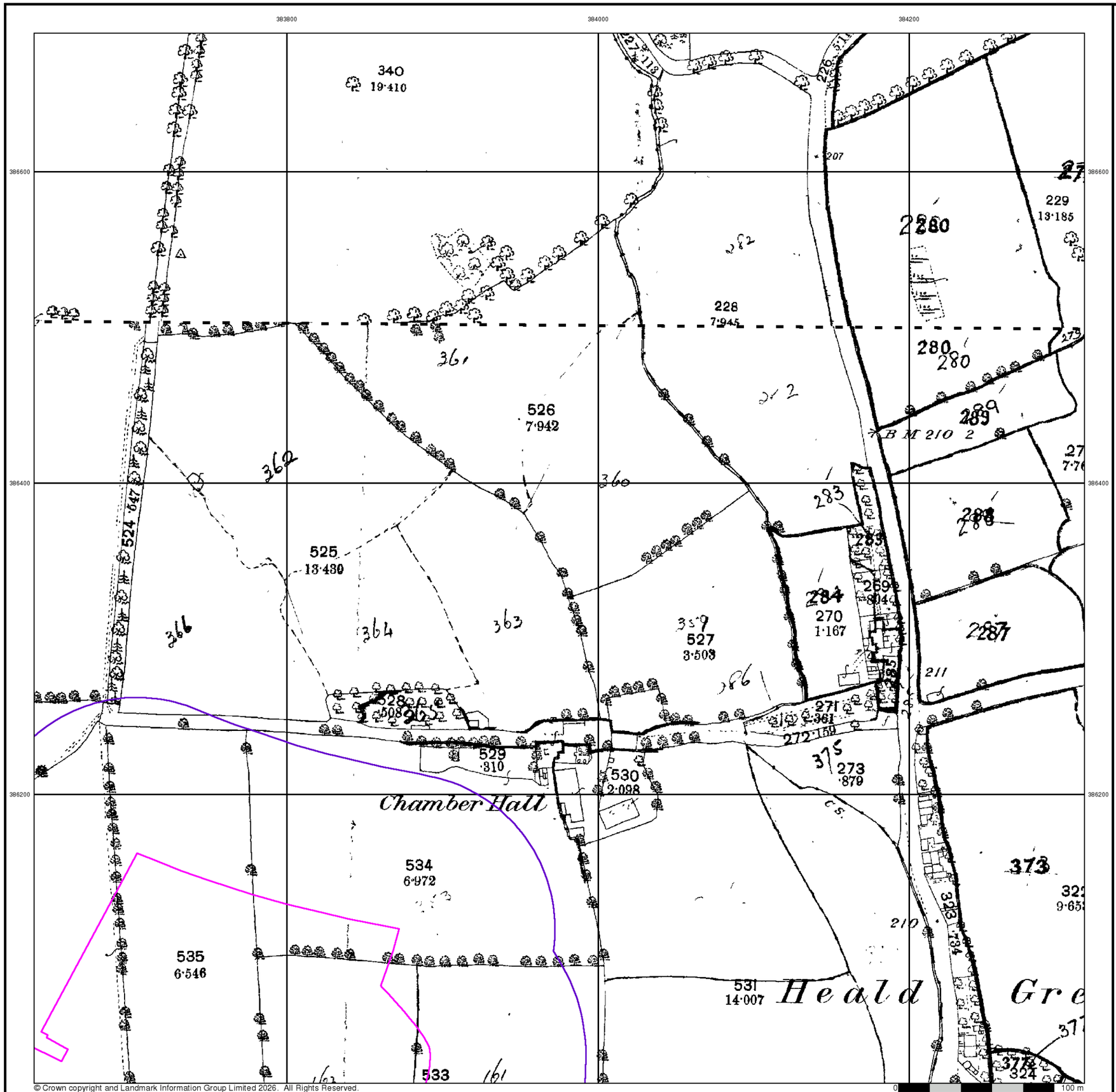
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Customer Ref:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	100

Site Details

Atlas Business Park, Simonsway, Manchester, M22 5PP

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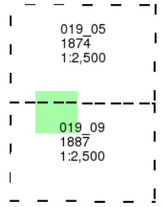
Cheshire

Published 1874 - 1887

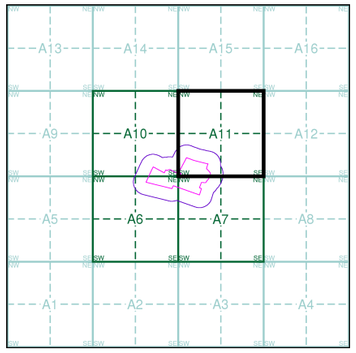
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A11



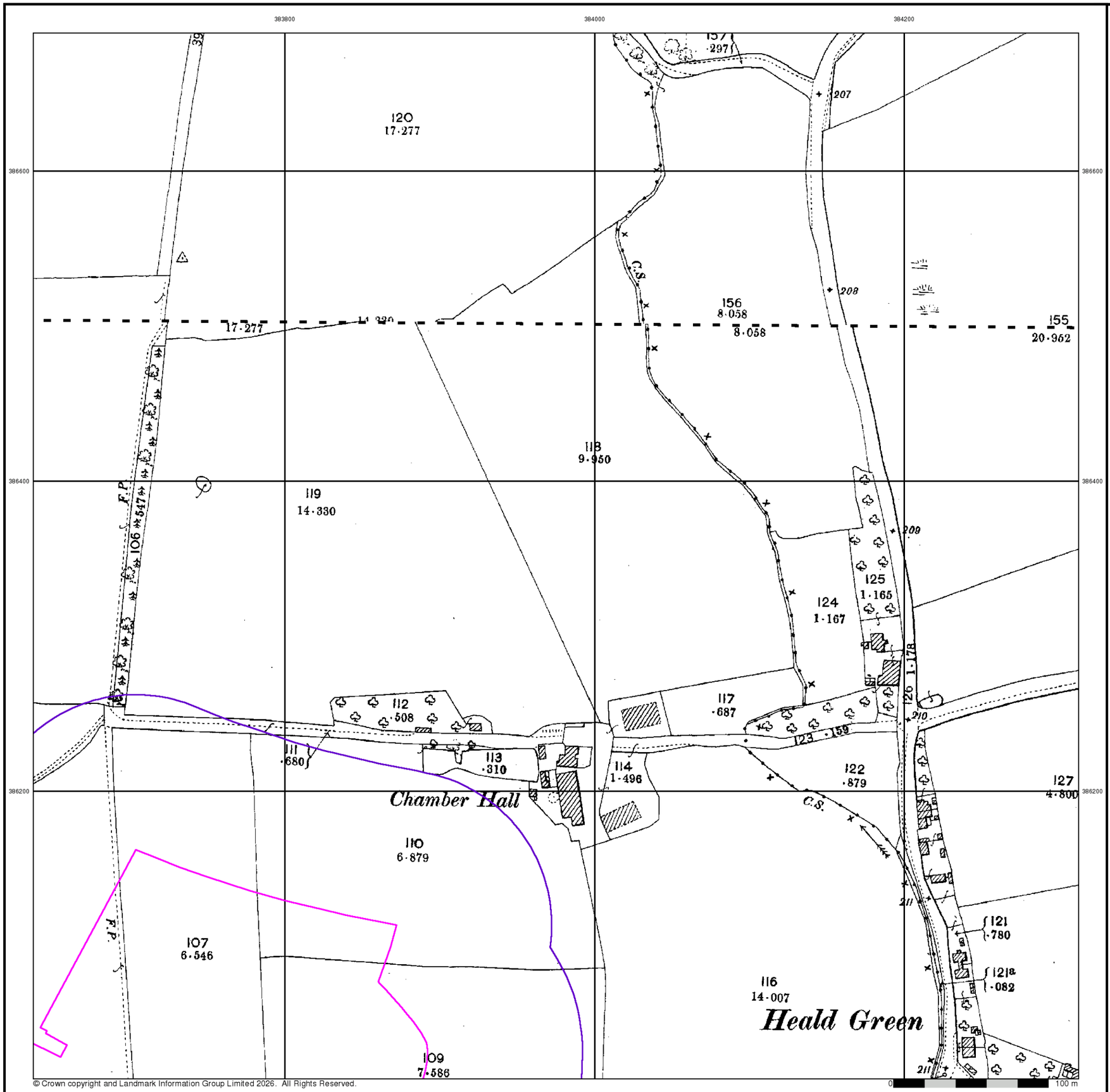
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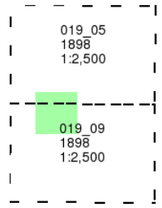
Cheshire

Published 1898

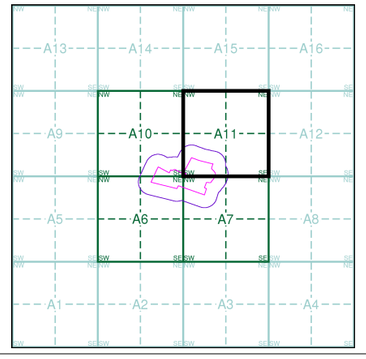
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A11



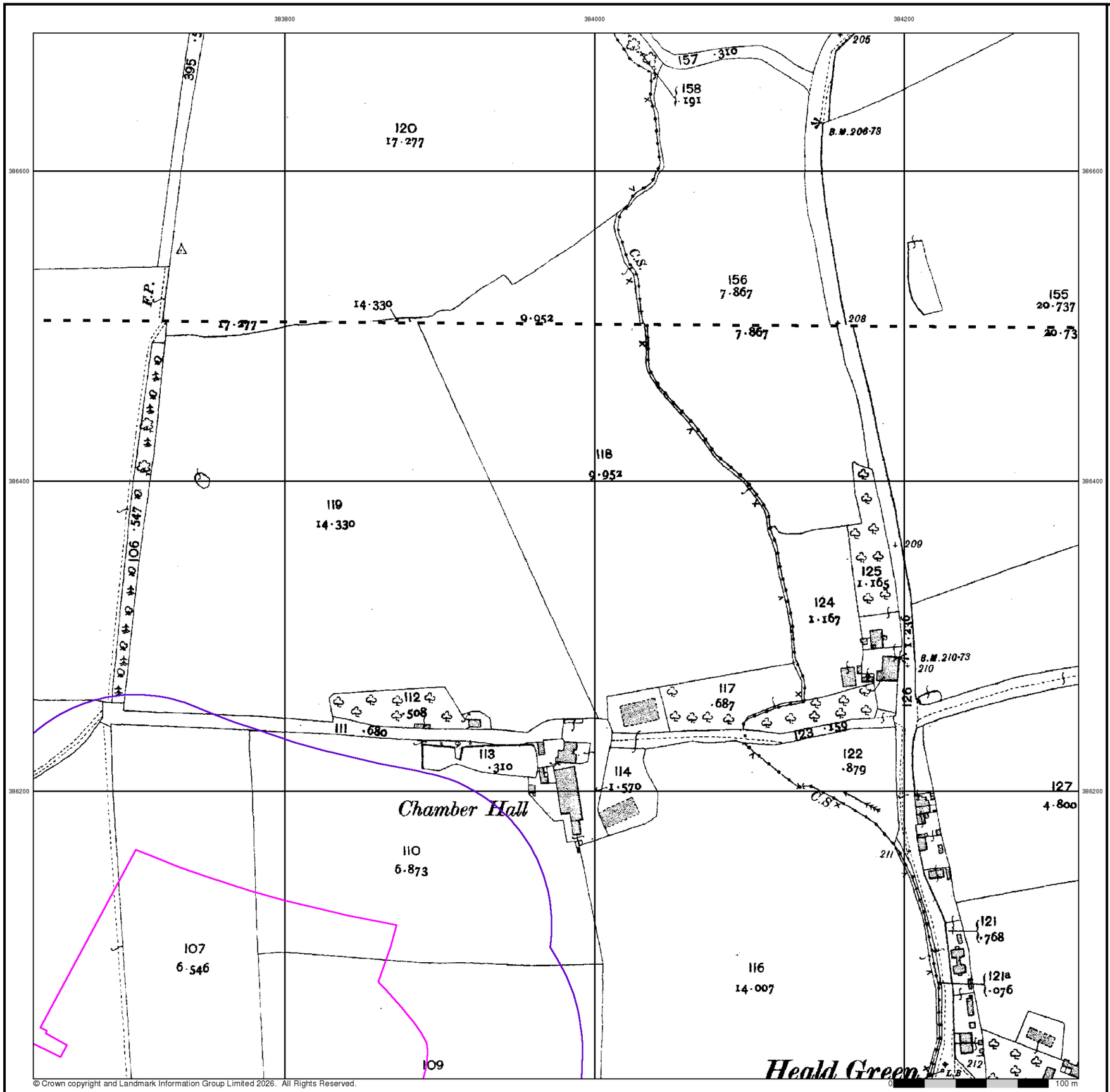
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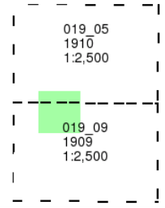
Cheshire

Published 1909 - 1910

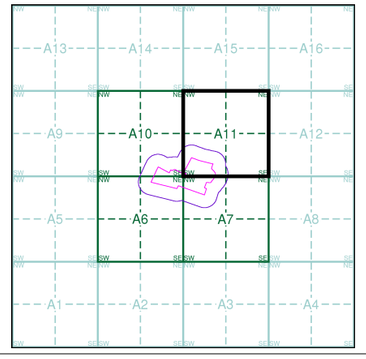
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A11



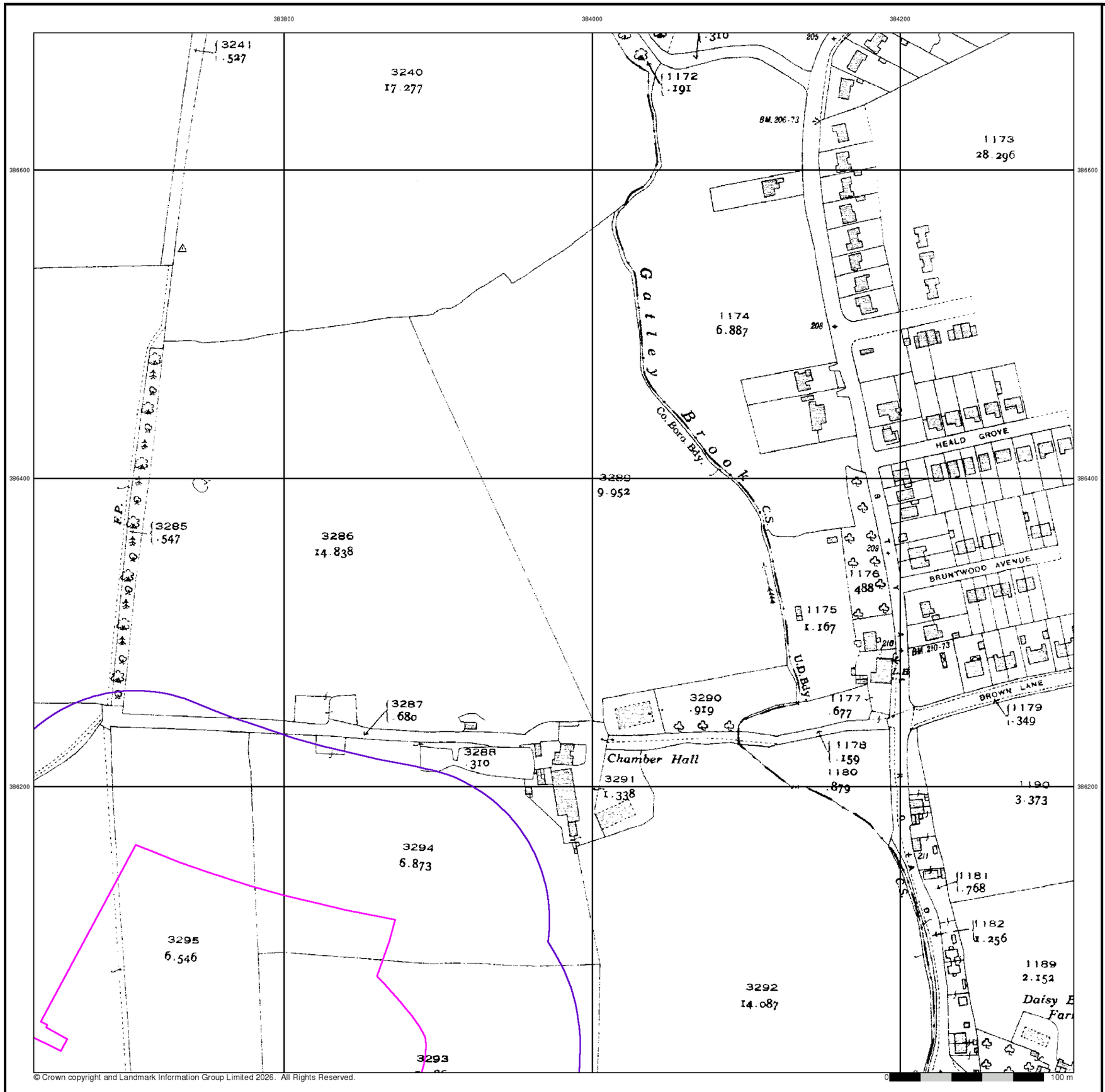
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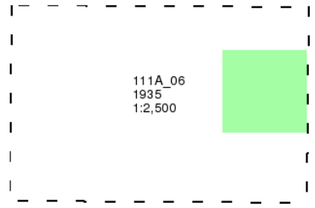
Lancashire And Furness

Published 1935

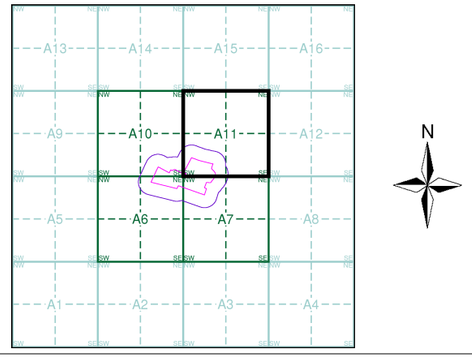
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A11



Order Details

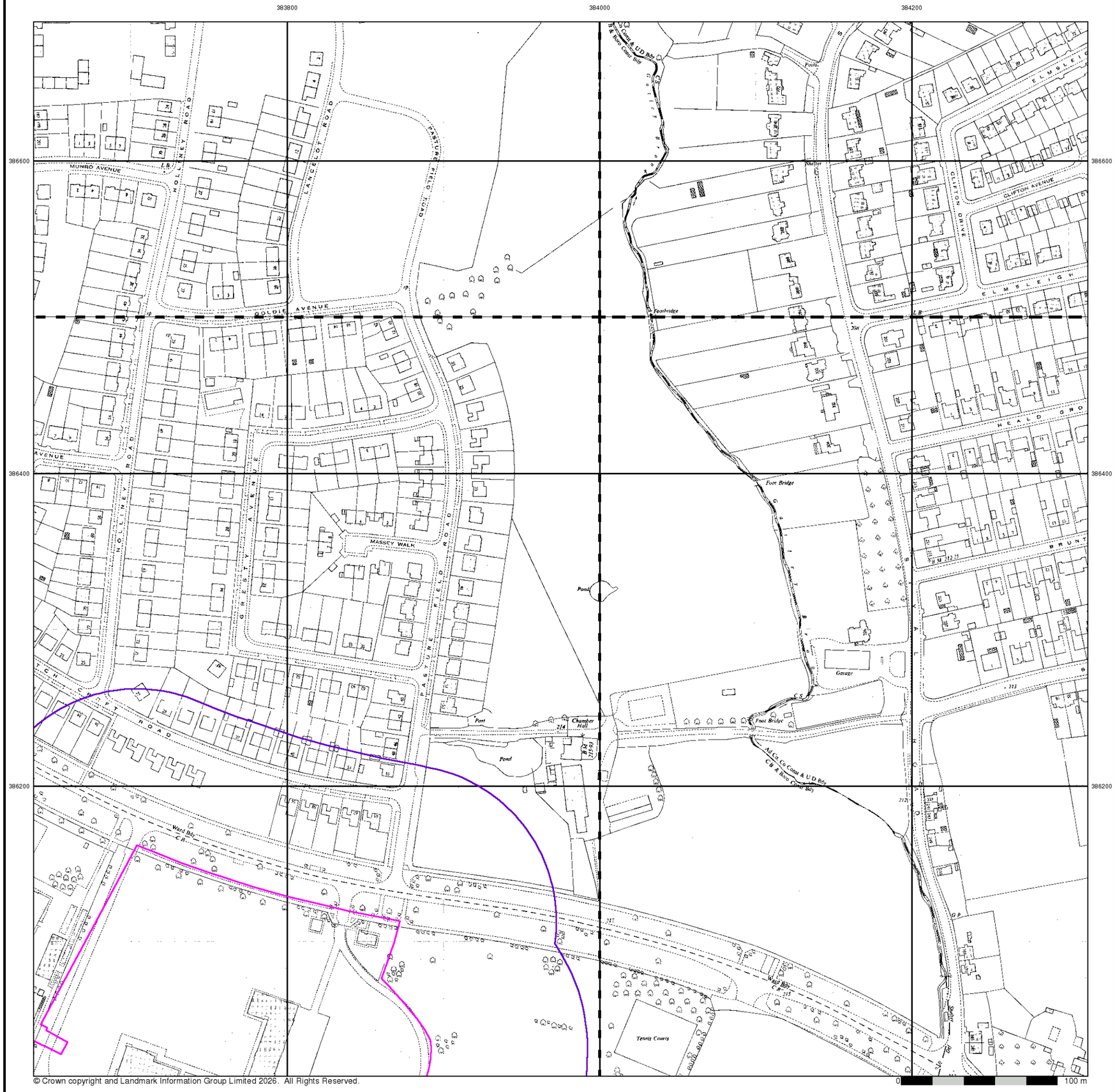
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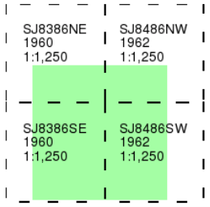
Ordnance Survey Plan

Published 1960 - 1962

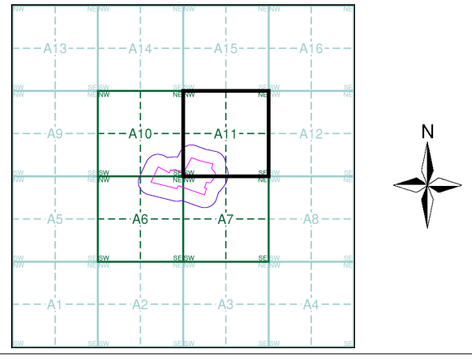
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A11



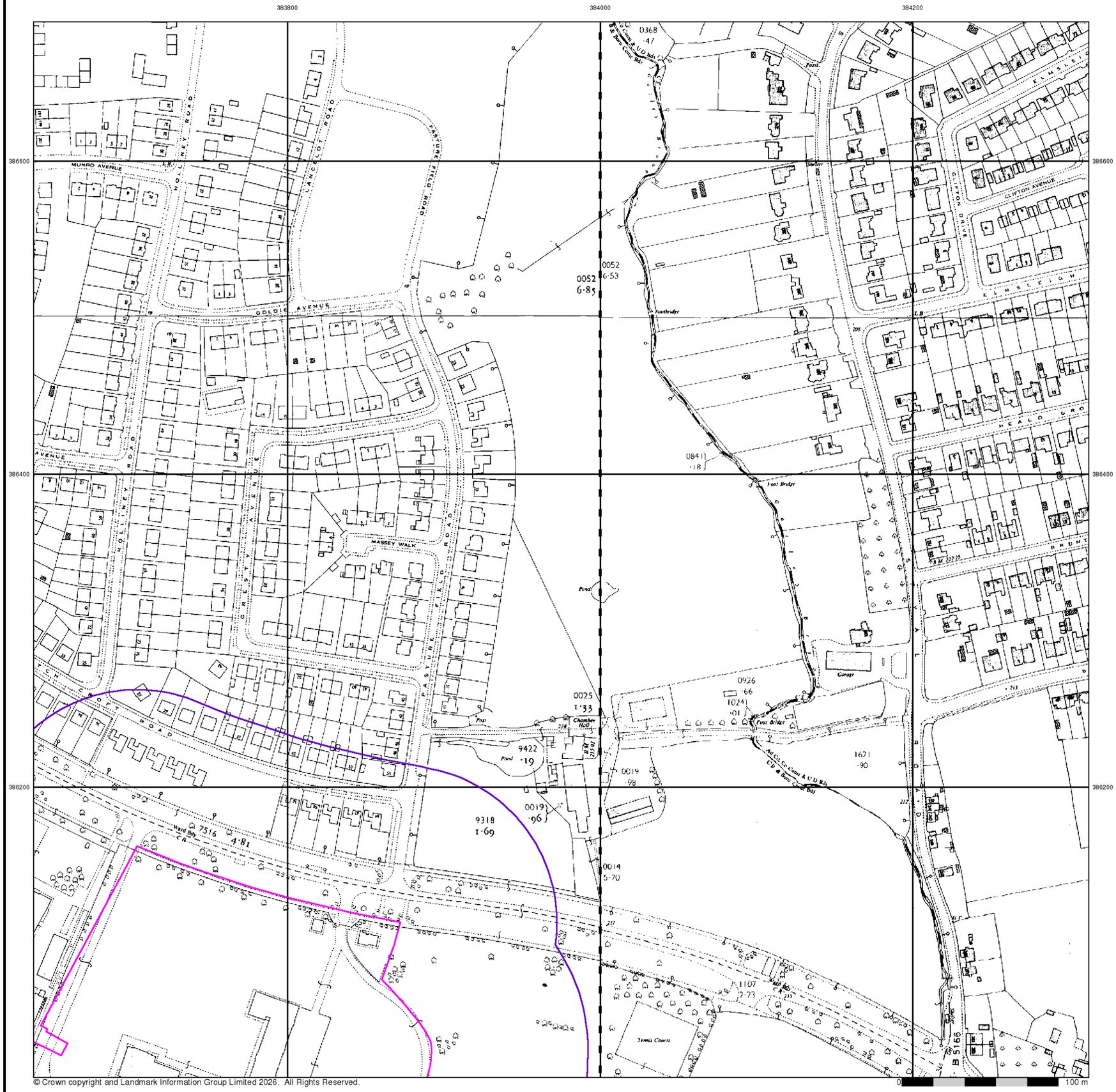
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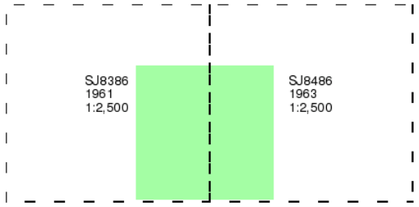
Ordnance Survey Plan

Published 1961 - 1963

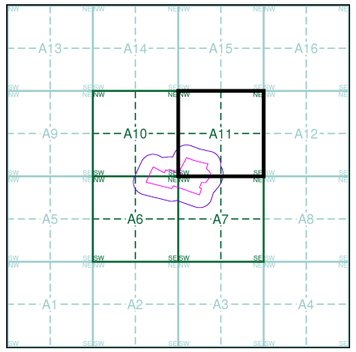
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A11



Order Details

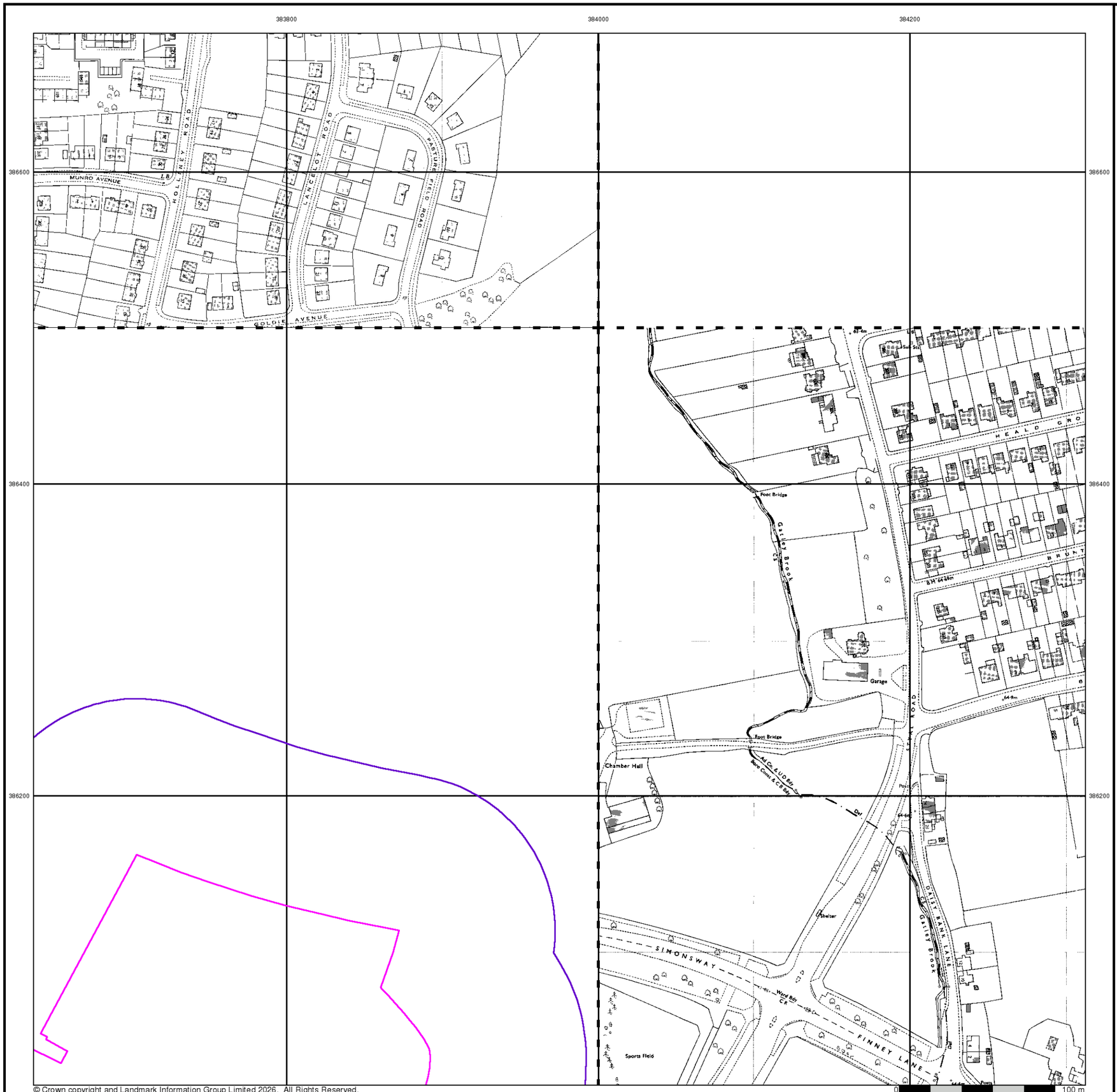
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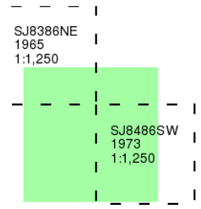
Ordnance Survey Plan

Published 1965 - 1973

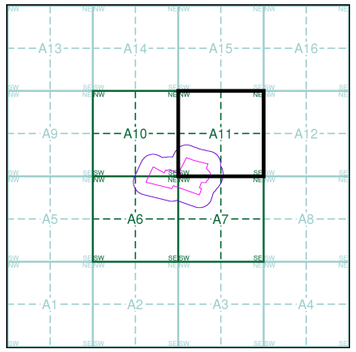
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A11



Order Details

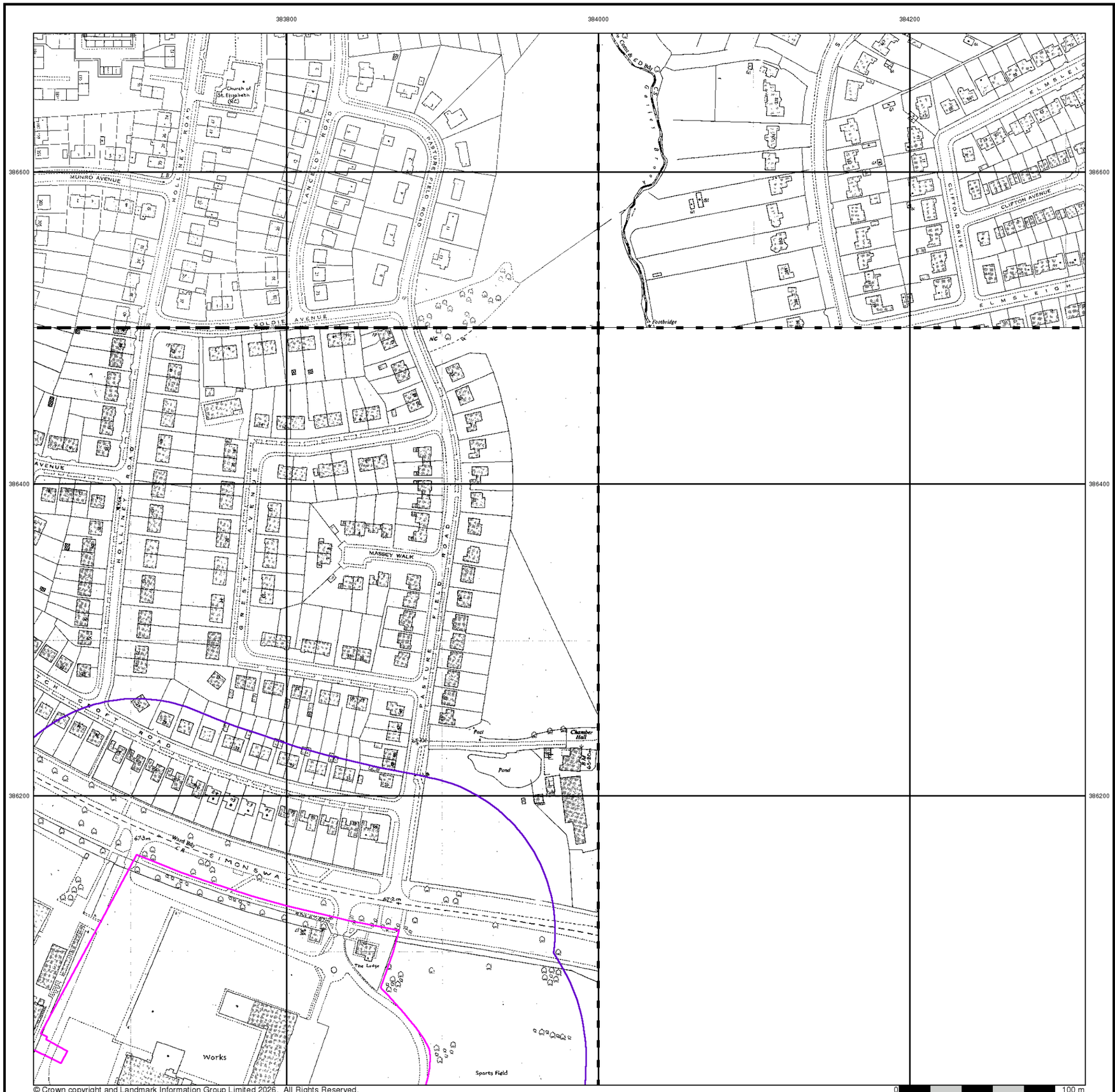
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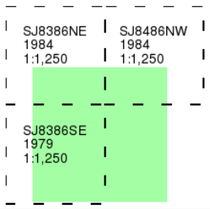
Additional SIMs

Published 1979 - 1984

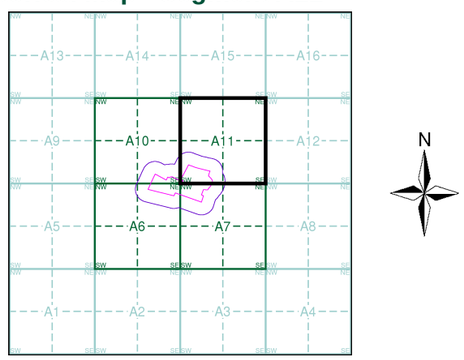
Source map scale - 1:1,250

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 A11



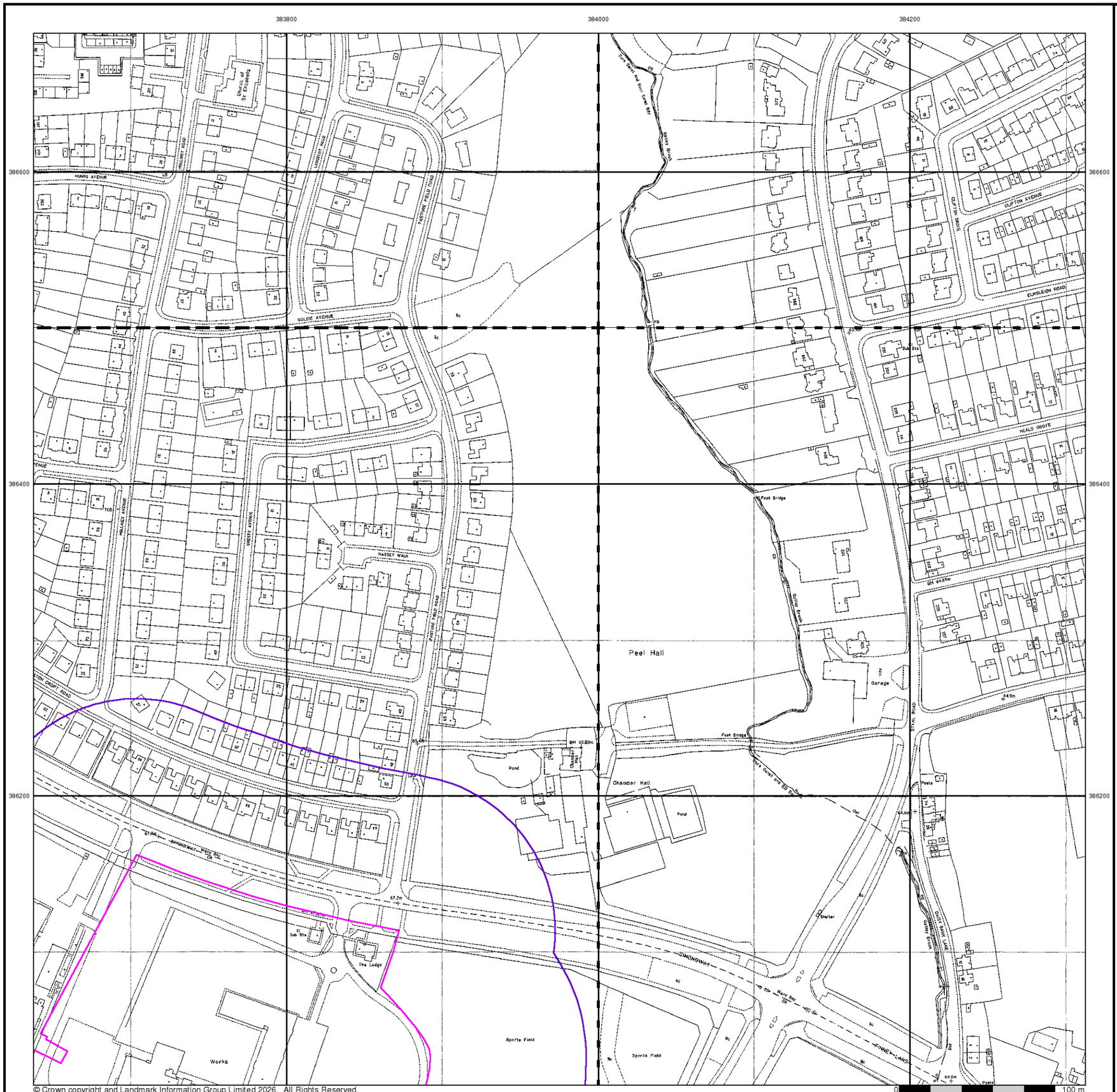
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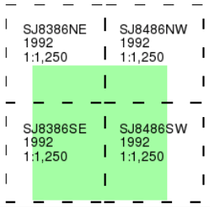
Large-Scale National Grid Data

Published 1992

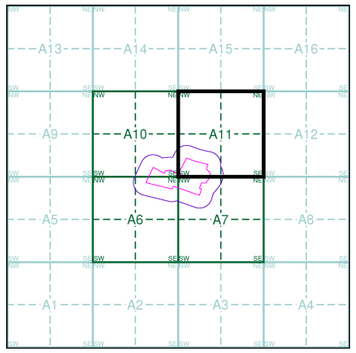
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A11



Order Details

Order Number:	404873443_1_1
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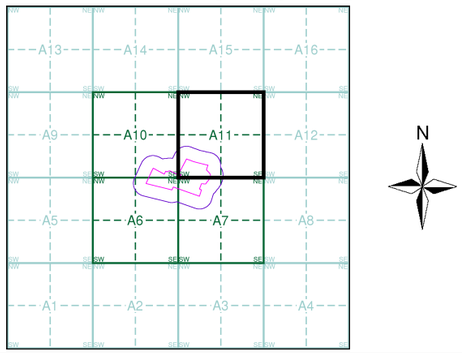
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Historical Aerial Photography

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 A11



Order Details

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Geology 1:50,000 Maps Legends

Superficial Geology

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

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	BOM	Bollin Mudstone Member	Mudstone	Not Supplied - Anisian
	HEY	Helsby Sandstone Formation	Sandstone, Pebbly (Gravelly)	Not Supplied - Anisian
	TPSF	Tarporley Siltstone Formation	Siltstone, Mudstone and Sandstone	Not Supplied - Olenekian
	WLSF	Wilmslow Sandstone Formation	Sandstone	Not Supplied - Early Triassic
		Faults		

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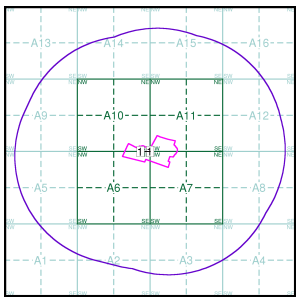
Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.
The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID:	**1**
Map Sheet No:	**098**
Map Name:	**Stockport**
Map Date:	**1962**
Bedrock Geology:	**Available**
Superficial Geology:	**Available**
Artificial Geology:	**Not Available**
Faults:	**Not Supplied**
Landslip:	**Available**
Rock Segments:	**Not Supplied**

Geology 1:50,000 Maps - Slice A



Order Details:

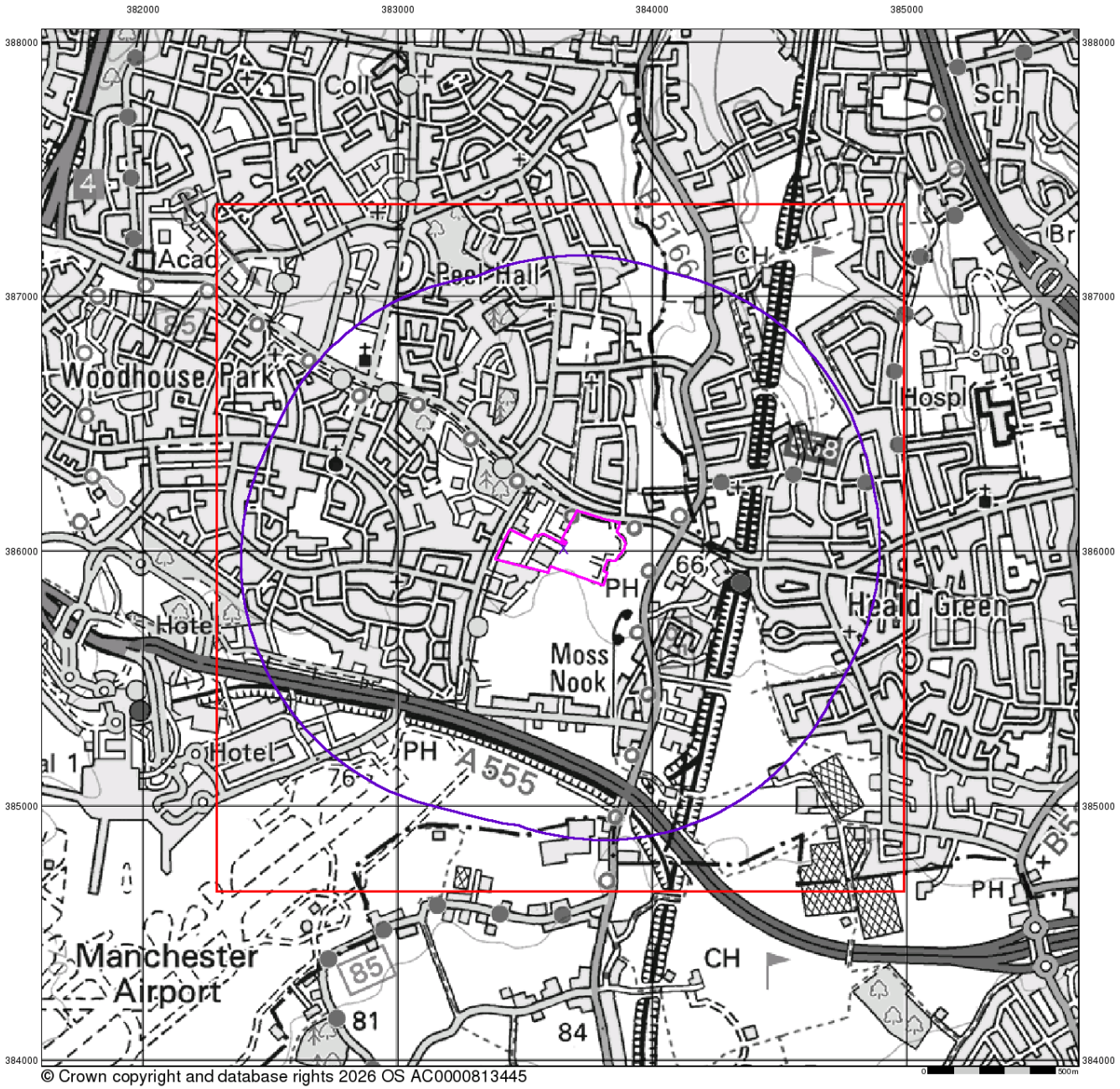
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Customer Reference:	28248
National Grid Reference:	383650, 386010
Slice:	A
Site Area (Ha):	7.9
Search Buffer (m):	1000

Site Details:

Atlas Business Park, Simonsway, Manchester, M22 5PP

Landmark INFORMATION GROUP

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Artificial Ground and Landslip

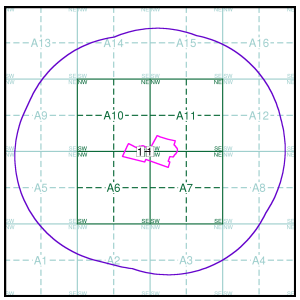
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions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

Artificial ground includes:

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

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

Artificial Ground and Landslip Map - Slice A



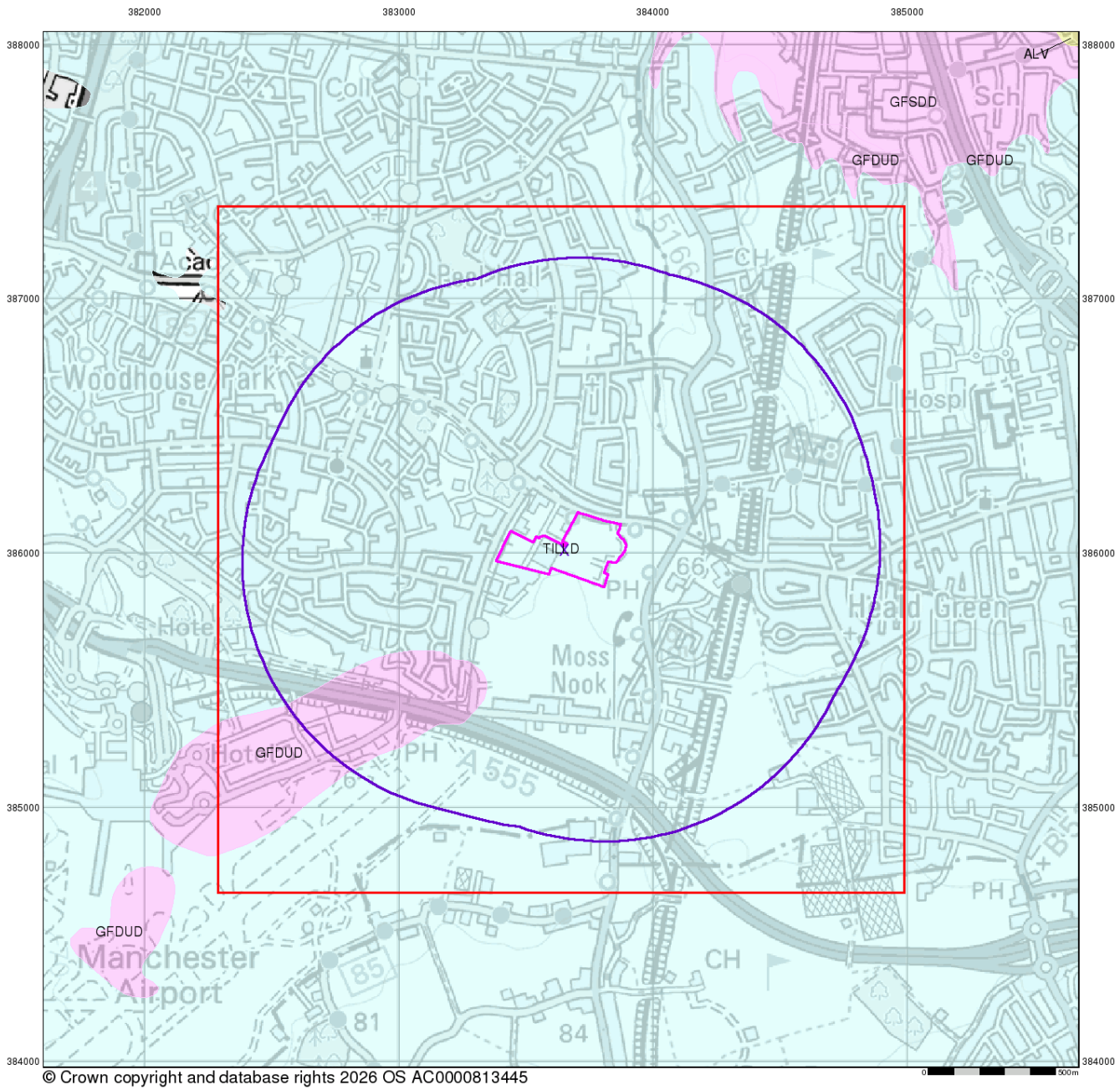
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Customer Reference:	28248
National Grid Reference:	383650, 386010
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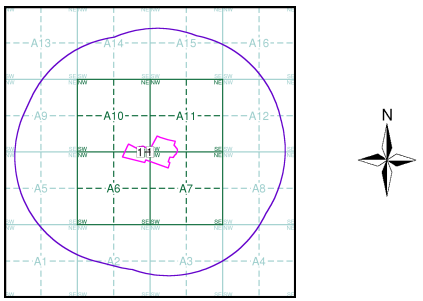
Superficial Geology

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

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

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

Superficial Geology Map - Slice A



Order Details:

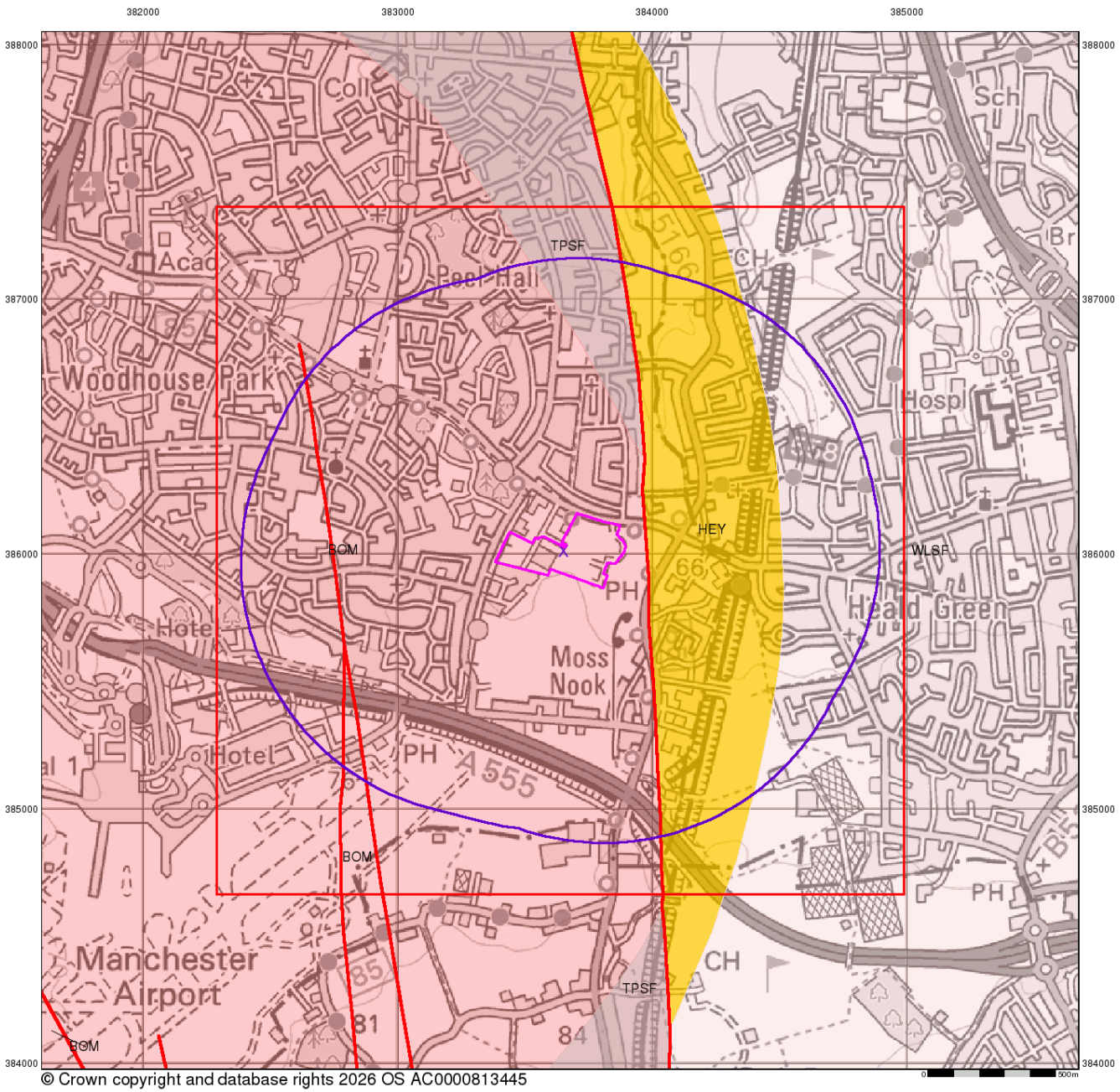
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Customer Reference:	28248
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Slice:	A
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Bedrock and Faults

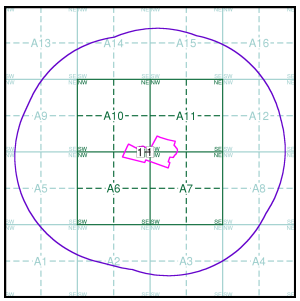
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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

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

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

Bedrock and Faults Map - Slice A



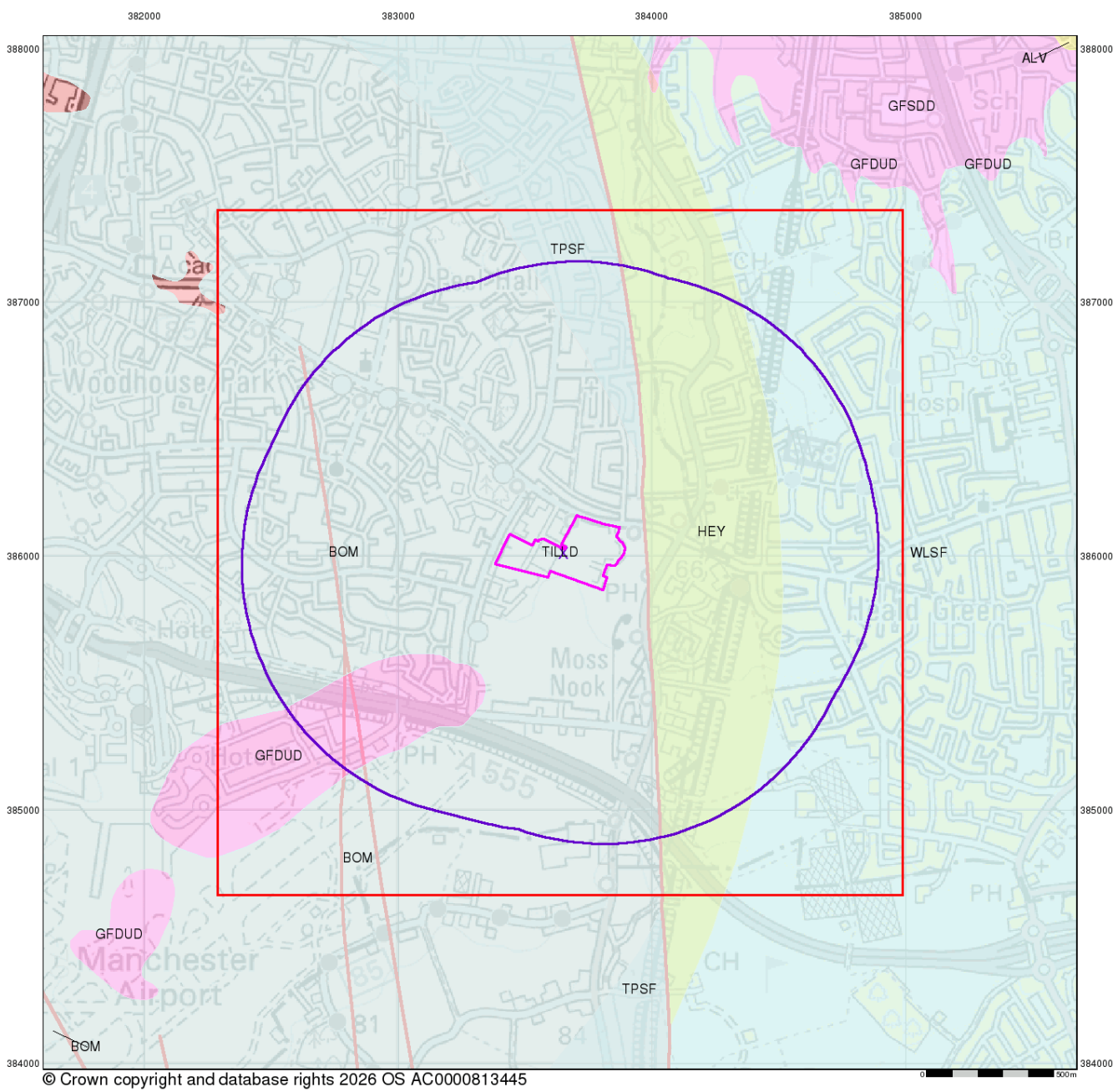
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Combined Surface Geology

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

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

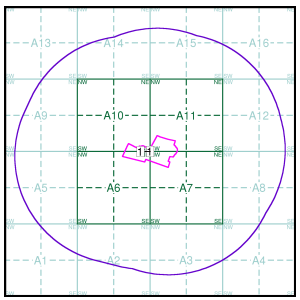
Additional Information

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

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Kingsley Dunham Centre
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website: www.bgs.ac.uk

Combined Geology Map - Slice A



Order Details:

Order Number:	404873443_1_1
Customer Reference:	28248
National Grid Reference:	383650, 386010
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Site Details:

Atlas Business Park, Simonsway, Manchester, M22 5PP

Appendix F – Detailed Unexploded Ordnance Risk Assessment Report

Stage 2 Detailed Explosive Ordnance Risk Assessment

Project: Atlas Business Park, Manchester | **Client:** Aviva Life and Pensions UK Limited



The Client

Aviva Life and Pensions UK Limited

Project

Atlas Business Park, Manchester

Report Reference Number

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2	**Electronic**	**the Client**
3	Client Hardcopy	-

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As detailed a search for pertinent information as possible within the stated timeframe and budget has been conducted. Although unlikely, additional significant information (e.g. local anecdotal accounts) may exist, however future emergence of such evidence would not constitute a failure of this risk assessment.
This report has been prepared for the exclusive use of the Client. Any third party relying on any information, conclusion or recommendation contained within this report, does so at their own risk.

EXECUTIVE SUMMARY

Conclusion	Explosive ordnance (EO) poses a **Low-to-Moderate Risk** to the anticipated ground works.
Recommendation(s)	► **Explosive Ordnance Site Safety Instructions** in support of development phase ground works only. ► **Explosive Ordnance Safety & Awareness Briefings** in support of SI phase and development phase ground works.
The Site	Site address: Simonsway, Woodhouse Park, Wythenshawe, Manchester, M22 5JT. The Site is centred on the approximate National Grid Ref: SJ 83846 85996. The Site comprises brownfield land (unmaintained grassland / shrubland), hardstanding, a section of Atlas Park (road), a small circular gatehouse (in the northeast), and a large post-WW2 constructed commercial use building with car park.
Proposed works	A commercial development comprising several large warehouse type units with loading bays / service yards, and car parks. Various shallow mechanical excavations will be required for buried services, highway construction, soft landscaping, etc. At the time of writing, the foundation solution had not yet been designed. Therefore, both traditional (shallow) and deeper foundations (piled or ground improvement techniques) will be considered. Prior to redevelopment, GI works are anticipated. As none were proposed at the time of writing, a standard GI exercise (average number of boreholes and trial pits throughout the Site) will be assumed.
Risk Assessment - Key Findings	
Historic Site occupancy	During WW2 the Site was occupied by farmland.
Likelihood of EO contamination:	► The Manchester / Salford / Stretford conurbation experienced some 41No. individual air raids during WW2. Most were small-scale, however several medium-scale and four major-scale raids were also mounted. The Site was located several kilometres south of the Luftwaffe's primary target area, however within 2km of a confirmed individual bombing target. ► Analysis of the available records confirms that the study area experienced a low bombing density, with no bombing incidents recorded within 500m of the Site. The closest incident, a pair of high explosive (HE) bombs, occurred >600m away. The orientation of this bomb-stick (not aligning with the Site) combined with its significant distance from the Site, indicates a low likelihood that the aircraft responsible flew over the Site whilst releasing an unexploded bomb (UXB). ► Up to 76No. heavy anti-aircraft (AA) guns within firing range of the Site, expended a very large quantity of ammunition during WW2. Consequently, there is an elevated likelihood of unexploded heavy AA shells striking the Site. ► Any German UXB or British unexploded heavy AA projectile strike on Site could have easily occurred unwitnessed and remained undetected (unreported). Note, the entry hole of any such UXO item could have been obscured by dense crop growth or ploughed up soil, the wider study area was sparsely populated, and all local air raids occurred during the hours of darkness. However, there is a low likelihood of German UXB strikes within the Site boundary. ► Although Home Guard (HG) soldiers were active in the local area during WW2, no evidence of such activity affecting the immediate study area has been found and the Site's wartime occupancy, indicates a low likelihood that any unrecorded activity affected the Site. Soldiers could conceivably have accessed the Site whilst on patrol or during large-scale training exercises, however they are unlikely to have carried any hazardous EO (e.g. grenades) during such activities and even less likely to have discarded / buried such EO on arable land.

Likelihood of EO remaining	► Any very shallow buried EO contamination will probably have been unearthed, observed and removed from Site during years of post-war agricultural ploughing, if not, during the subsequent construction works. ► Any British unexploded heavy AA shell contamination beneath existing greenfield land or ground laid to hardstanding post-war is more likely to remain in-situ today, at an approximate depth range of 0.5m to 1.5m bgl. Although unlikely, it is conceivable that such EO could also remain under the footprint of post-war low-rise buildings (since demolished), occupying small volumes of undisturbed WW2-era soil in between strip foundation trenches. ► Any deep buried EO (chiefly German HE bombs weighing ≥50kg) is highly likely to remain in-situ today, as the likelihood that such EO contaminated the Site in the first instance, is low.
Likelihood of EO encounter and initiation	► The EO contamination risk is uniform across the Site area, although the likelihood that EO remains in-situ today is greater within the southwest and northeast areas of existing green space. As proposed building footprints are planned for these areas, risk pathways will be created during associated ground works, exposing them to a potential EO encounter (chiefly a British heavy AA shell within natural soil at a depth within 1.5m of the current ground level). Note, the possibility of such a EO encounter cannot however be completely discounted within the brownfield areas of the Site also. ► The anticipated SI will disturb a much smaller volume of soil / geology within the zone of potential EO contamination (ZPC) than the subsequent development works. As such, there is a much lower likelihood of encountering anything buried (e.g. EO) during this initial phase of works. ► Boreholes and piling may be required. These works raise the possibility of encountering the most severe EO hazard, a very heavy (deep buried) German UXB. However, the likelihood of such EO remaining on Site today is low. ► There is a very low likelihood of encountering EO within the post-WW2 created made ground on Site. ► A borehole / pile drill head striking a relatively small, unexploded AA shell occupying shallow depth relatively soft / uncompacted soil is more likely to result in a glancing blow that pushes the EO device to one side, dissipating much of the force. Such a strike on a large / heavy German bomb occupying stiffer (deeper) geology would presumably not have the same effect. This perhaps limits the likelihood of initiating the primary Site-specific hazard item (a heavy AA shell) during the borehole and (any subsequent) piling works.

The executive summary covers the key points only. The main body of this report contains the majority of the Site-specific detail and the limitations of the assessment. Should the proposed works be significantly modified or additional works be considered, IAL should be contacted as a reassessment of EO risk may be required.

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Glossary

AA	Anti-Aircraft
AAA	Anti-Aircraft Artillery
ALARP	As Low As Reasonably Practicable
AP	Anti-Personnel
ARP	Air Raid Precautions
AT	Anti-Tank
AXO	Abandoned Explosive Ordnance
BD	Bomb Disposal
bgl	below ground level
BGS	British Geological Survey
BPD	Bomb Penetration Depth
CIRIA	Construction Industry Research & Information Association
DA	Delayed Action (bomb type)
EO	Explosive Ordnance (UXO and AXO)
EOC	Explosive Ordnance Clearance
EOD	Explosive Ordnance Disposal
FAA	Fleet Air Arm (Royal Navy)
FP	Fire Pot (WW2 German bomb)
GP	General Purpose (bomb type)
ha	hectare(s)
HAA	Heavy Anti-Aircraft (gun)
HC	High Capacity (bomb type)
HE	High Explosive
HMNB	Her/His Majety's Naval Base
HMS	Her/His Majesty's Service (shore establishment)
HO	Home Office
HQ	Headquarters
HSE	Health & Safety Executive
IB	Incendiary Bomb
kg	kilogram(s)
km	kilometre(s)
LAA	Light Anti-Aircraft (gun)
LM	Land Mine
LRRB	Long Range Rocket Bomb (V2 rocket)
LSA	Land Service Ammunition
m	metre(s)
MC	Medium Capacity (bomb type)
mm	millimetre(s)
MOD	Ministry of Defence
MU	Maintenance Unit
NEQ	Net Explosive Quantity
NFF	National Filling Factory
NGR	National Grid Reference
OB	Oil Bomb
OS	Ordnance Survey
PAC	Pilotless Aircraft (V1 missile)
PB	Phosphorus Bomb
PM	Parachute Mine (bomb type)
POW	Prisoner of War
RADAR	Radio Detection And Ranging
RAF	Royal Air Force
RDX	Research Department Explosive
REF	Royal Explosive Factory
RFC	Royal Flying Corps (1912-1918)
RN	Royal Navy
RNAD	Royal Naval Armaments Depot
RNAS	Royal Naval Air Station
ROF	Royal Ordnance Factory
SAA	Small Arms Ammunition
SI	Site Investigation
SIP	Self-Igniting Phosphorus (grenade type)
TA	Territorial Army
TNT	Trinitrotoluene (explosive)
UK	United Kingdom
UN	United Nations
UP	Unrotating Projectile (AA rocket)
USAAF	United States Army Air Force (1941-1947)
USAF	United States Air Force (since 1947)
UX	Unexploded
UX AA	Unexploded Anti-Aircraft (projectile)
UXB	Unexploded Bomb
UXO	Unexploded Ordnance
V1	Vergeltungswaffe 1 (German cruise missile)
V2	Vergeltungswaffe 2 (German ballistic missile)
WAAF	Women's Auxiliary Air Force (1939-1949)
WO	War Office (1857-1964)
WW1	World War One (1914-1918)
WW2	World War Two (1939-1945)

1 Introduction

1.1 Instruction

Aviva Life and Pensions UK Limited (referred to hereon in as the Client) has commissioned Impartial Assessments Limited (referred to hereon in as IAL) to carry out a Stage 2 Detailed EO Risk Assessment of the proposed works at the Atlas Business Park, Manchester site (referred to hereon in as the Site).

1.2 Objective

The objective of this report is to assess the likelihood of encountering buried explosive ordnance (EO) during intrusive ground works and to assess the consequences of any such encounter. If an intolerable risk level is identified, risk mitigation measures will be recommended.

1.3 Using This Report

In the UK, EO risk is not always considered or fully understood and is often misunderstood. This report aims to provide a comprehensive and coherent account, including introductory text and details on location-specific types of EO. We believe it is important to provide sufficient information to allow the layman to form a good understanding of the potential EO risks.

However, we also appreciate that some readers will not require the full contextual information and therefore the report is structured with this in mind. From **Chapters 3 to 13**, all Site-specific text that affects the outcome of this risk assessment can be found under the highlighted Site-Specific subheadings.

1.4 Explosive Ordnance Risk in the UK

The term EO describes both unexploded ordnance (UXO) and abandoned explosive ordnance (AXO). The former describes devices and projectiles that have been armed (and in some cases fired, dropped, placed, etc) yet failed to function. The latter describes devices and projectiles that have simply been abandoned (discarded or buried).

Fortunately, inadvertent EO initiations (detonations) in the UK are very rare, however, buried EO can cause significant delays to construction projects with associated increases in costs. The origin of UK EO can be broadly categorised as such:

- **Enemy Action (UXO):** the German air force bombed targets throughout the UK during WW1 and WW2. The German Navy bombarded coastal targets in eastern England during WW1 and German long-range artillery bombarded Kent during WW2.
- **Allied Military Activity (UXO and AXO):** several Allied nations used the UK as a staging area for military action in the European theatre of conflict (most notably the US and Canada) during WW1 and WW2.
- **UK Military Activity (UXO and AXO):** domestic British Army, Royal Air Force (RAF) and Royal Navy (RN) training activities as well as anti-aircraft (AA) weapons used during WW1 and WW2.

1.5 Guidelines for Risk Assessment

1.5.1 CIRIA

This assessment has been designed and written in accordance with the relevant Construction Industry Research and Information Association (CIRIA) guidelines: **C681** 'Unexploded Ordnance - A Guide for the Construction Industry' (published 2009) and **C785** 'Unexploded Ordnance Risk Management Guide for Land-Based Projects' (published 2019). C681 and C785 were written (with the support of the UK Health and Safety Executive) to provide the construction industry with accurate and authoritative information regarding matters of onshore EO risk in the UK.

1.5.2 Legislation

There is no specific UK legislation covering the assessment and management of EO risk. However, there is legislation that more broadly covers the consideration of EO hazards:

- Health & Safety at Work Act (1974) and Management of Health & Safety at Work Regulations 1999
- Construction (Design & Management) Regulations (CDM) 2015
- Corporate Manslaughter and Corporate Homicide Act 2007

1.5.3 MOD

EO finds in the UK are handled by the MOD's Joint Service Explosive Ordnance Disposal Operations Centre (JSEODOC). At any site where an identifiable EO risk was not highlighted at project design stage, JSEODOC will not provide EOD services for frequent callouts to EO encounters. Instead, the client will be required to employ the services of a commercial EO risk management contractor to manage the ongoing EO risk.

The delay caused by retrospectively carrying out a risk assessment can have significant cost implications as site works are halted. Therefore, it is essential that EO risk is considered at the earliest possible stage, ideally through the commissioning of a Stage 1 or Stage 2 EO risk assessment.

1.6 Assessment Methodology

1.6.1 Introduction

This report is based on a traditional source-pathway-receptor-consequence (SPRC) assessment methodology and semi-quantitative risk model. The following subheadings describe how this risk assessment structure is applied to buried EO risk (in the UK).

1.6.2 Source

In the UK there are numerous sources of potential EO contamination. Three main factors govern the likelihood of buried EO being present at a given site today:

- **Contamination:** The likelihood that EO came to be buried at a site.
- **Subsequent Detection:** The likelihood that EO (chiefly UXO) contamination went unobserved and reported.
- **Degree of (any) Risk Mitigation:** Could subsequent earthworks or Explosive Ordnance Clearance (EOC) activities have mitigated the buried EO risk?

1.6.3 Pathway

The activities that could result in the EO hazard reaching sensitive receptors and the specific type of EO hazard.

- **Encounter:** The likelihood of buried EO being encountered during the proposed works depends on the total volume of soil disturbed and the type(s) of intrusion methodology. Note, site-specific bomb penetration depth (BPD) calculations must be conducted where appropriate.
- **Initiation:** The likelihood that an encounter results in the EO initiating.

1.6.4 Receptor

The number and sensitivity of receptors will vary from site to site. In the context of an EO initiation, the receptors present at the time of the event will almost always include the most sensitive category; human health.

1.6.5 Consequence

The consequences of an inadvertent EO initiation event vary from none to catastrophic. However, the likelihood of initiating EO is far lower than that of encountering EO. The negative consequences of an EO encounter are much more likely to be financial, resulting from project delays.

1.6.6 Semi-Quantitative Risk Calculation

Once all project-specific factors have been assessed, a semi-quantitative risk assessment (likelihood versus consequence risk matrix) will be carried out or multiple calculations will be carried out if the factors described above vary considerably across the site. In the latter scenario, a risk map will be drawn to illustrate the differing risk zones.

1.6.7 Recommendations

If a significantly elevated risk level(s) is concluded, industry standard risk mitigation measures (appropriate to the project specific intrusive methodologies) will be recommended to reduce the elevated risk level(s) to as low as reasonably practicable (ALARP) level.

1.7 Information Sources

To guarantee a robust assessment of risk, primary source records form the basis of this report. The following information types and information sources were accessed / contacted during the research process:

- The National Archives, Greater Manchester Record Office, The University of Manchester. Historic England, Council for British Archaeology, Greater Manchester Historic Environment Record, British Geological Society, The MoD, the local authority, the Client.
- Historic OS mapping, historic aerial photography and various web resources.
- Our PIEO (potential indicators of explosive ordnance) GIS map and our physical library. Note, PIEO is the result of over 15 years of research and is constantly growing.

1.8 Reporting Conditions

The accuracy of original records relating to bombing is difficult to verify. Wartime bombing records were only as detailed and accurate as the availability of time, personnel, and ease of access to information would allow. The conditions under which information was gathered in many urban locations, i.e. intense aerial bombardment, will not have been conducive to accurate record keeping. Air raids within sparsely populated locations are less likely to have been witnessed, limiting the accuracy of any corresponding records. Furthermore, such records were often based on unverifiable second-hand eyewitness accounts.

Many records of historic military activity have not survived and some of those that have are only declassified and released into the public domain decades after their creation. Consequently, pertinent records can be inaccessible at the time of requirement. Impartial Assessments cannot accept liability for any missing historic records, inaccuracies or omissions within the available historic records.

It is never possible to accurately determine, through desktop study alone, the precise location, type and condition of buried EO at a given site. Furthermore, some factors (human behavioural) make assessment of EO risk partly subjective.

2 The Site

2.1 Location

The Site address: Simonsway, Woodhouse Park, Wythenshawe, Manchester, M22 5JT.

The Site is centred on the approximate National Grid Ref: SJ 83846 85996.

A recent aerial photograph is displayed at **FIGURE 1**.

2.2 Description

The Site comprises brownfield land (unmaintained grassland / shrubland), hardstanding, a section of Atlas Park (road), a small circular gatehouse (in the northeast), and a large post-WW2 constructed commercial use building with car park.

2.3 Proposed Works

A commercial development comprising several large warehouse type units with loading bays / service yards, and car parks. Various shallow mechanical excavations will be required for buried services, highway construction, soft landscaping, etc. At the time of writing, the foundation solution had not yet been designed. Therefore, both traditional (shallow) and deeper foundations (piled or ground improvement techniques) will be considered.

Prior to redevelopment, GI works are anticipated. As none were designed / proposed at the time of writing, a standard GI exercise (average number of boreholes and trial pits throughout the Site) will be assumed.

A proposed development plan is displayed at **FIGURE 2**.

3 Site History Assessment

3.1 OS Mapping

3.1.1 Introduction

Bomb damage resulting from German air raids can be identified by comparing historic OS maps. These maps can also help identify examples of historic military activity. Note, 19th / 20th Century military structures had a typical shape and were distributed in typical patterns.

The table below includes a review of the relevant OS maps. Note, the process adopted in generating these maps (mapping intervals, scale, exclusion of some features in the interests of national security, etc), may result in an incomplete account of a site's history.

Latest pre-WW2 and earliest post-WW2 OS maps are displayed at **FIGURE 3**.

3.1.2 Site-Specific

	Date	Scale	Observations
Pre-WW1	1872	1:10,560	No evidence of military activity on Site or in the vicinity.
			The Site occupies parts of several agricultural fields in a wider undeveloped (presumably agricultural) area. A footpath crosses the Site.
	1907	1:2,500	No evidence of military activity on Site or in the vicinity.
			No significant changes on or adjacent to the Site.

Pre-WW2	1936	1:2,500	No evidence of military activity on Site or in the vicinity.
			No significant changes on or adjacent to the Site.
	1938	1:10,560	No evidence of military activity on Site or in the vicinity.
			No significant changes on or adjacent to the Site. Note, this small-scale map lacks detail.
Post-WW2	1954	1:10,560	No evidence of military activity on Site or in the vicinity.
			No significant changes on or adjacent to the Site. Note, this small-scale map lacks detail.
	1960	1:1,250	No evidence of military activity on Site or in the vicinity.
			The Site has been developed with several buildings (varying size) all labelled 'Works', hard surfaced areas and access roads all built in central positions on Site. The eastern extent of the Site encroaches into a 'Sports Field'. The southwest corner of the Site and the central northern area remain undeveloped.
	1977	1:10,000	No evidence of military activity on Site or in the vicinity.
			No significant changes on Site.
	1990	1:10,000	No evidence of military activity on Site or in the vicinity.
			Two of the larger buildings in the west have been extended.
	2010	1:10,000	No evidence of military activity on Site or in the vicinity.
			No significant changes on Site.

TABLE 1: Historical OS Mapping Review

3.2 Aerial Photography

3.2.1 Introduction

Historical aerial photography is often key in identifying temporary wartime activity. As well as clarifying historic site occupancy, aerial photographs can elucidate the degree of bomb damage to structures and show the locations of German high explosive (HE) bomb craters. Note, the latter usually only persisted for a short time.

WW2-era aerial photography is displayed at **FIGURE 4**.

3.2.2 Site-Specific

	Date	Angle	Observations
Pre-WW2	Mar 1927	Oblique	This image, showing most of the Site from the south, was taken approximately 14No. years before the first WW2 air raids in the region. The Site and its environs appear as they do on the period OS mapping. The fields occupying the Site appear to be arable use.

Post-WW2	Aug 1945	Vertical	This image was taken several months after the end of WW2 (in Europe). The Site remains largely unchanged. No obvious evidence of German bombing (craters in open ground or ruined / demolished buildings) is visible in the local area. No obvious evidence of temporary (wartime) military activity is visible on or near the Site.
	Jun 1973	Vertical	This high-resolution image records the post-war development of the Site. Much of the unbuilt ground on Site is shown to be grass covered. Two hard surfaced car parks are present on Site, in central north and central south positions. The 'works' buildings all appear to be single or two-storeys in height.

TABLE 2: Historical Aerial Photography Review

3.3 Additional Historical Information

If a site encompasses a historic landmark, significant building etc, further research might locate a written account providing details on the site's historic occupancy. Such details could prove significant when assessing the various variables relating to, for example, the likelihood of a German UXB strike going unnoticed and unreported.

No such information was located.

4 WW2 Enemy Action Assessment: Aerial Bombing

4.1 German bombing during WW2

Between 1939 and 1945, the German air force (the Luftwaffe) dropped approximately 75,000 tonnes of HE bombs and over two million incendiary bombs (IBs) on the four nations of the UK. Almost all counties were affected to some degree.

At the time, bombing was still in its infancy. Testing showed that the accuracy of daylight, level flight bombardment would put 50% of the bombload within 91m of the centre of the target from an altitude of 3,000m. At double this altitude the error exceeded 400m. In poor visibility and at night, the error could increase by >250%.

Furthermore, these tests were conducted within an uncontested environment. The various British AA defences and navigational countermeasures greatly hindered bombing. Luftwaffe aircraft frequently abandoned their intended target and jettisoned their bombloads indiscriminately. Consequently, numerous bombing incidents occurred in open countryside throughout the UK, many miles from intended targets.

Bombs were only rarely dropped individually. The normal procedure was to drop an internally carried bombload in a single sequence, with release spacings pre-set from 10m to 100m. 20No. 50kg bombs (the most numerous HE bombload) could thus extend in a line (called a bomb-stick) varying between 200m and 2km in length. These patterns (when accurately plotted) can aid in locating unreported UXBs. It should be noted however that externally carried bombs could be released individually, creating uneven bomb-stick patterns or solitary bomb strikes.

For other types of commonly deployed ordnance, inaccuracy was inherent. 1kg / 2kg IBs and parachute retarded mines (high-capacity blast bombs) were easily blown off course by the wind.

4.2 Explosive Ordnance Hazards Overview

4.2.1 Introduction

During WW2 the Luftwaffe deployed a variety of ordnance against the UK. The most frequently deployed large bombs achieved significant ground penetration due to their 'thick-skinned' steel construction and are therefore more likely to remain buried in the ground today. These HE (and some incendiary type) bombs are termed 'iron' bombs. The 50kg and 250kg 'iron' bombs accounted for approximately 93% of 'iron' bombs dropped on the UK.

Descriptions of these different bomb types are presented below. Data sheets detailing those bombs most likely to be encountered today are displayed at **APPENDIX 1**.

Note, the Italian Air Force participated in a small number of air raids in Essex and Kent during 1940. The Italian bombs were comparable to German general purpose 'iron' bombs, however any UXB find would be extremely rare.

4.2.2 More Likely to be Unearthed in the UK Today

- **High Explosive 'iron' bombs - General Purpose:** The SC series accounted for the majority of HE bombs dropped on the UK. This design had a moderate charge to weight ratio, approximately 50% charge. The most common weights were 50kg (SC50), 250kg (SC250) and 500kg (SC500). 6No. additional models (1,000kg, 1,200kg, 1,400kg, 1,800kg, 2,000kg and 2,500kg) were deployed in much smaller numbers.
- **High Explosive 'iron' bombs - Semi Armour Piercing:** The SD series were very similar in appearance to the SC bombs but had lower charge to weight ratios, approximately 30% charge. The casing was thicker, allowing for greater penetration through structures. There were six 'iron' bombs models ranging from 50kg to 1,700kg.
- **Incendiary 'iron' bombs:** The Brand C50A used a SC50 type casing but contained a mixture of incendiary liquids (including phosphorus) that ignited on contact with the air. The C50B was the same size but mostly phosphorus filled. The Sprengbrand C50 (Firepot) also utilised a thick 'iron' bomb casing, however contained both Thermite incendiary containers and a 7kg HE charge. These bombs weighed approximately 41kg and 50kg respectively and were introduced later in the war.
- **Incendiary Sub-Munitions:** The 1kg B1E IB was the most frequently dropped German bomb. Up to 620No. B1Es could be packed into a sub-munition canister, which opened at a pre-determined height, scattering the IBs over a wide area. The Thermite fill burns at extremely high temperature. The longer 2kg B2E model incorporated a small HE charge with delay fuze. The B2E is therefore more hazardous than the B1E, however was dropped in smaller numbers. Although light weight, both had the potential to fully penetrate soft ground.

4.2.3 Less Likely to be Unearthed in the UK Today

- **High Explosive 'iron' bombs - Armour Piercing:** The PC series (four models between 500kg and 1,600kg) were used against reinforced military structures and warships. Consequently, they were not commonly used against the UK mainland. Charge to weight ratios were low, approximately 15% charge.
- **High Explosive Blast Bombs - Parachute Mines:** Converted naval influence mines were dropped on urban targets. Their thin steel bodies allowed for very high charge to weight ratios, approximately 73% charge. Luftmine A (LMA) and Luftmine B (LMB) weighed 500kg and 1,000kg respectively. Each was parachute retarded, enabling detonation at ground level and therefore no ground penetration. Consequently, the only unexploded parachute mines found today, wash up along the coastline or remain on river or lake beds.
- **Oil Incendiary Bombs:** The Flam 250 and Flam 500 bombs contained a mixture of benzine and petroleum, ignited by a small HE charge. They were constructed of thin metal which broke up on impact, spreading the incendiary mixture across an area. As such they are unlikely to remain buried in the UK today. The bombs proved unreliable, often failing to ignite, and consequently were withdrawn from service in 1941.

- **Anti-Personnel (AP) Sub-Munitions:** The 2kg SD2 'Butterfly' bomb was dropped on several British cities and towns. It was a nuisance weapon incorporating both time-delay and anti-handling fuzes. It contained a small 225g HE charge, however had no ground penetration ability. A sub-munition canister could hold up to 108No. SD2s. The SD10 was a larger (10kg) AP bomb. It could achieve full penetration, however this model was dropped in very small numbers on the UK. A sub-munition canister could hold 17No. SD10s.
- **Miscellaneous:** The Luftwaffe dropped various other devices on the UK. Flares (for target illumination) were by far the most numerous, however had no ground penetration potential. Photoflash bombs (to aid reconnaissance photography) are similar in appearance to 50kg bombs. Inert concrete-filled bombs were dropped to cause disruption and unnecessarily tie up bomb disposal (BD) resources.

4.2.4 'Iron' Bomb Penetration Depths

The Research & Experiments Department of the Ministry of Home Security (MoHS) used BD records to study German HE UXB penetration depths, publishing their findings in 1949. The British Army's BD headquarters provided details of 1,304 UXB recoveries. In addition, the ministry carried out their own tests, involving 24No. bombs dropped into Chalk under controlled conditions.

The average penetration depth of 430No. 50kg bombs (the most commonly dropped HE bomb) in London Clay was 4.6m and 6.1m for the 250kg model. Note, these bombs landed in open ground and were therefore unaffected by structures or hardstanding. Once the distribution of bomb weights against penetration depths was plotted, the mean line was extrapolated for each bomb weight to produce probable maximum depth figures.

For each bomb weight, the mean average of all observed penetration depths was calculated for each geology. The resulting figures, plus the observed minimum penetration depths, are presented in the table below. Note, bombs weighing >1,000kg have been omitted from the table as only several such UXBs were recovered during WW2.

	Clay			Chalk			Gravel			Sand			Sandstone		
Bomb (Kg)	Min (m)	Average (m)	Max (m)	Min (m)	Average (m)	Max (m)	Min (m)	Average (m)	Max (m)	Min (m)	Average (m)	Max (m)	Min (m)	Average (m)	Max (m)
50	0.7	4.0	9.1	1.0	3.5	7.7	1.0	2.8	7.8	1.0	2.8	7.8	1.8	2.7	6.0
250	1.5	6.8	15.8	1.0	6.0	13.1	0.7	4.8	13.7	1.8	4.8	13.7	2.5	4.6	10.3
500	3.8	8.7	19.8	4.0	7.6	16.4	2.5	6.0	17.3	3.0	6.0	17.3	-	5.8	13.1
1,000	4.8	10.9	24.9	4.2	9.6	20.7	2.0	7.6	21.9	6.8	7.6	21.9	-	7.3	16.4

TABLE 3: WW2 German UXB Penetration Depths Data

Although most German HE UXBs came to rest after several metres travel through the ground, these weapons can be encountered at any depth between just below WW2 ground level and the maximum BPD. There are three reasons why heavy bombs might be found at surprisingly shallow depths:

- **Low Altitude Release:** Some Luftwaffe raids (particularly those involving fast fighter-bombers) were executed at very low altitudes, to avoid RADAR detection. Bombs released over soft ground from very low altitude would impact at a shallower angle, resulting in extreme J-Curve Effect (see **Subheading 4.2.5**).
- **Deflection:** 'iron' bombs had conical nosecones and were therefore susceptible to deflection. A bomb striking a structure (above or below ground), could deflect and come to rest at a shallower depth.
- **Aircraft Crash Site:** For several reasons, a pilot may not have been able to dump his bombload before impacting the ground. Any internally or externally fitted bombs could have become shallow buried on impact.

4.2.5 'Iron' Bomb J-Curve Effect

WW2 BD units reported that most deep buried German HE UXBs were observed in a horizontal or up-turned orientation. As a HE UXB penetrates the ground at an angle slightly offset from the vertical, it begins to turn, creating a curved passage through the soil.

This phenomenon can be significant when assessing the risk of UXO as the J-Curve Effect results in a horizontal offset from the point of UXB entry. A HE UXB could impact soft ground adjacent to a building and then come to rest beneath that building. The degree of lateral offset is typically one third (approximately) of the bomb's ultimate penetration depth. Therefore, for locations which experienced high-altitude bombing raids, J-Curve offsets will typically be between 2.0m and 4.0m. In extreme conditions, a low altitude attack resulting in a low angle UXB strike could produce even greater horizontal offset, up to 15.0m.

4.3 British Records of Bombing

4.3.1 Official Records

The Bomb Census was undertaken by the MoHS. The Bomb Census was compiled using information primarily gathered by ARP (Air Raid Precautions) wardens. Standardised forms were used to keep a written record of each incident. In many areas, these reports were used to create bomb plot maps. The Ministry also calculated bombing density statistics for every administrative area and created Daily Intelligence Reports, recording the date and location of every single air raid.

The Bomb Census commenced in September 1940, more than three months after the German bombing campaign commenced. Initially, only information relating to London, Birmingham and Liverpool was collated. It was not until September 1941 that the Bomb Census was extended to cover the entire UK. Consequently, many pre-September 1941 records were not standardised and, in some cases, were poor quality.

The level of detail varied greatly with location. Furthermore, the Bomb Census did not cover air raids on military property. The armed forces had no formal process for recording air raids and processing associated records.

As well as bombing incident records, some local authorities produced war damage maps. Council engineers carried out street by street surveys to create a record of the varying degrees of damage sustained by buildings.

Today, many original (archived) bombing records are incomplete, some collections are missing altogether and in some cases, entire records were destroyed at the time by German bombs.

4.3.2 Unofficial Records

In some parts of the UK where official bombing records are incomplete or missing, historic eyewitness accounts, newspaper articles, aerial photographs, etc can be used to build up a picture of WW2 air raids. The credibility of any such information, however, must be addressed and assessed.

4.4 Luftwaffe Targets

4.4.1 Brief Overview

The Luftwaffe carried out reconnaissance flights over the UK. Numerous aerial photographs were taken with subsequent German annotations earmarking various facilities for attack. Luftwaffe crews were also given British OS maps with German annotations highlighting their target area. In the absence of detailed bombing records, the presence of a known target increases the likelihood that bombs fell locally.

Although official German doctrine did not specifically target civilian residential areas, the Blitz raids on individual targets were gradually replaced by what was, for all intents and purposes, unrestricted indiscriminate bombing. This was due to the effectiveness of British countermeasures. The Luftwaffe identified city centre aiming points for some attacks, as well as identifying individual targets. Typical types of target:

- **Common Primary (strategic) Targets:** RAF airfields, Royal Navy bases, commercial docks, weapons (chiefly aircraft) factories and RADAR installations.
- **Common Secondary Targets:** engineering works, steel works, factories, depots, railway marshalling yards, gasworks, power stations, army camps / barracks, AA artillery batteries, coastal gun batteries etc.

Note, the inherent inaccuracies in WW2-era aerial bombardment resulted in many wayward bomb strikes in areas surrounding targeted facilities.

4.4.2 Site-Specific

Original Luftwaffe target maps and aerial reconnaissance photographs of the wider study area were reviewed.

Target Category	Relevance and Proximity to the Site
Confirmed primary aiming point (indiscriminate bombing)	Manchester city centre (~11km north)
Confirmed primary individual target(s)	RAF Ringway (1.6km southwest) Fairey Aviation Co Factory (1.6km southwest)
Confirmed secondary target(s)	-
Unconfirmed but potential secondary target(s)	Railway line (470m east)

TABLE 4: WW2 Bombing Targets

4.5 Bombing Decoy Installations

4.5.1 Brief Overview

British decoys were intended to draw enemy bombers away from the true targets. 839No. decoys were built at 602No. sites in England, with approximately 200No. more established in Wales, Scotland and Northern Ireland. Although success rates varied greatly, the confirmed presence of a bombing decoy significantly increases the likelihood that bombs fell near or on that location. 5No. types were fielded:

- **'K' and 'Q' Sites - Dummy Aerodromes**. 230No. were established. 'K' decoys (landing field, mock-up buildings, and inflatable aircraft) were for daylight use. 'Q' decoys used lights to create a flarepath simulating a runway at night.
- **'QL' Sites - Urban Lighting**. Electric lights were used to simulate poorly implemented blackout procedures. As a bomber force approached, the lights would be extinguished erratically.
- **'SF' and 'QF' Sites - Diversionary Fires**. The largest and most sophisticated decoys. When lit, 'Starfish' sites gave the impression of an urban area set alight by incendiary bombing. They were installed near cities. Similar to, however smaller than 'SF' decoys, 'QF's were installed near and for the protection of specific vulnerable points (VPs) such as factories, military sites, oil storage tank farms, etc. Some 100No. 'QF' sites were established in England.
- **'M' and 'C' Sites - Dummy Factories and AA Batteries**. The former comprised a scale model of a specific factory, vital to the war effort. They were made from wood and canvas and had other features, such as access roads and equipment.
- **ASQL - Assault.** During August and September 1943, 18No 'QL' sites were installed along the south coast of England during a deception operation. These temporary decoys received very little attention.

Between 1942 and 1943, most 'K' sites were dismantled, however many of the other decoys were used up until late 1944 when Luftwaffe activity over the UK had all but ceased. By the end of 1941, the airfield decoys had received 359No. attacks compared with 358No. raids carried out against the real airfields. By June 1944, approximately 730No. attacks had been recorded on all decoy types. At least 5% of the total weight of German bombs dropped are estimated to have been aimed at Britain's decoy sites.

4.5.2 Site-Specific

None within a significant distance of the Site. The closest was approximately 6.7km to the southeast.

4.6 Local Air Raids Information

4.6.1 Brief Summary

- Between 29th July 1940 and 30th July 1942, Manchester County Borough experienced 41No. individual air raids during 31No. days of local Luftwaffe activity. Most were small in scale, often executed by a solitary bomber. Several medium scale attacks and four major scale raids were also mounted. Note, 'major' was a Luftwaffe designation that described a raid delivering >100No. tonnes of HE (in addition to incendiaries) onto a target area.
- The first significant (medium-scale) raids affecting the borough, occurred on the 28th August and 1st October 1940. Two consecutive major attacks on the nights of the 22nd / 23rd and 23rd / 24th December 1940 (the 'Christmas Blitz') devastated parts of Manchester, Salford and Stretford. These two attacks saw 441No. German bombers drop 272No. tonnes of HE on the first night and 195No. tonnes of HE on the second night. Seven conflagrations and 600No. smaller fires were reported, the result of tens of thousands of small (1kg / 2kg) incendiary bombs (IBs).
- During 1941, two additional major* raids targeted Manchester on the 9th January and 1st June. Although each involved half as many aircraft as the 22nd December 1940 raid, they still delivered a further 208No. tonnes of HE bombs and thousands of IBs. Three medium-scale raids were also mounted during the spring of 1941.

  *The fourth and final major raid actually only delivered 97No. tonnes of HE, however is close enough to 100No. tonnes to be considered 'major'.
- The Christmas Blitz alone caused the total destruction of >4,000No. houses with a further 12,000No. sustaining serious damage. Manchester County Borough suffered 1,546No. casualties during these two raids.
- This intensity of air raid activity resulted in many indiscriminate 'tip and run' bombing incidents in the surrounding districts. Such incidents were the result of solitary aircraft either lost or under fire, jettisoning remaining ordnance, mostly indiscriminately, before flying back to base. Therefore, even though the study area was predominantly insignificant farmland, it would still have been vulnerable to bombing.

4.6.2 Bombing Density

The table below records the MoHS's bombing density calculations for the former administrative areas of Manchester County Borough and Cheadle & Gatley Urban District. Note, the Site was located within the former however just 150m west of the border with the latter. It gives a breakdown of the number of large Luftwaffe bombs reported within the administrative area. These figures do not include UXBs, 1kg / 2kg IBs, or 2kg AP bombs. The adjacent table displays IAL's bombing density parameters.

Administrative Area	M.CB	C&G.UD
Administrative Area Size (Acres)	27,255	5,299
HE 'iron' bombs (all types)	712	36
HE Parachute Mines	18	0
'Flam' Oil IBs	17	0
Phosphorus IBs	0	0
'Fire Pot' Phosphorus IBs	0	0
V1 Flying Bomb	1	0
V2 Long Range Rocket	0	0
Total (excluding V Weapons)	737	36
Bombs Per 1,000 Acres (405ha)	**27**	**6.8**

Qualitative	Quantitative
Very Low	<5 bombs per 1,000 acres (405ha)
Low	5 to 15 bombs per 405ha
Low to Moderate	15 to 30 bombs per 405ha
Moderate	30 to 75 bombs per 405ha
Moderate to High	75 to 150 bombs per 405ha
High	150 to 300 bombs per 405ha
Very High	>300 bombs per 405ha

TABLE 5: Bombing Statistics and Parameters - National Source

Secondary source data (Cooper G. 2018) states that during the first major air raid alone, some 37,000No. small IBs were dropped. Luftwaffe records list 1,925No. 1kg / 2kg IB canisters dropped during the four heaviest raids on the conurbation. The smallest Luftwaffe canister held just 36No. 1kg IBs and therefore it can be said that at least 70,000No. 1kg / 2kg IBs were dropped. Note, this number is likely far greater, as larger models of IB canister (containing hundreds of IBs) were almost certainly used and small IBs would have been dropped during the many small and medium-scale raids.

4.6.3 Site-Specific

Note, the bombing density figure for a whole administrative area is not always a good indication of the bombing density over a specific site. Within larger districts, particularly rural districts, bombing density figures may be skewered by the presence of a heavily bombed target.

Despite the major-scale air raids, the overall bombing density figure for Manchester Borough is not high because the Luftwaffe's primary target area incorporated parts of Manchester County Borough, Salford County Borough (to the west) and Stretford Municipal Borough (to the south-west). Consequently, the weight of Luftwaffe ordnance dropped was divided between these three administrative areas, for reporting purposes. Furthermore, Manchester County Borough was a very large administrative area, most of which did not contain any Luftwaffe bombing targets and as a result was not specifically targeted.

According to the bombing density calculation above, the Site occupied an area that experienced a low or low to moderate bombing density. Further analysis indicates that **the study area experienced a low bombing density**.

4.7 Bomb Failure Rate

4.7.1 Brief Overview

There are three reasons why German 'iron' bombs dropped during WW2 failed to function as designed:

- **Human Error:** failure of the aircraft's crew to charge the electrical condenser in the fuze.
- **Very Low Altitude Release:** the fuze would not have enough time to arm itself before impact.
- **Faulty Fuze:** inadvertently during manufacture or sabotage by POWs working in German factories.

The Bomb Census recorded a daily average of 84No. German 'iron' bomb UXBs dropped on civilian targets throughout Britain, between 21st September 1940 and 5th July 1941. 8.5% of these were Delayed Action (DA) bombs (time bombs) which exploded sometime later. The remainder were unintentional 'duds' (UXBs).

By the end of WW2, the MoHS calculated a total figure of 200,195No. HE bombs recorded as exploded in Britain. An additional 25,195No. HE UXBs were recorded, giving a HE bomb failure rate of 12.6%.

The Luftwaffe figure for the total number of bombs dropped on the UK was approximately 11% higher than the number observed and reported by UK authorities. This suggests that the total number of UXBs remaining buried in the UK today is greater. However, anecdotal evidence suggests that German sources overstated their bombing statistics for propaganda reasons.

The average HE bomb failure rate of all boroughs and districts making up the London Civil Defence Region (the most heavily bombed part of the UK) was calculated as 10%, with rates ranging from 6% to 15%. Note, those areas of the capital that suffered the most damage, had the most ruins into which subsequent UXBs could fall unnoticed / go unrecorded. This limits the accuracy of the observed failure rates in those areas.

The discrepancy between the British and German records combined with the fact that HE UXBs are still consistently being discovered in the UK today (averaging five per year), confirms that the UK's 12.6% rate is inaccurate and is in fact higher. As rates of 15% were observed in some areas, this is considered to be a more accurate estimate of the true failure rate.

4.7.2 Site-Specific

No evidence has been found to suggest that the local HE bomb failure rate differs significantly from the national average. Note, records of exploded and unexploded HE bombs dropped on Manchester, Salford and Stretford during the Christmas Blitz produce a failure rate of 16.6% (Smith P J C. 2003).

4.8 Site-Specific Bombing Incident Records

4.8.1 Introduction

The catalogues of relevant archive offices were searched. No complete collection of original incident reports, describing all individual bomb strikes within the study area (produced locally by the ARP, police, fire service or borough engineer and surveyor) were held. One complete record of bomb strikes locations for Manchester Borough was available, however no such record for Cheadle & Gatley Urban District was available.

4.8.2 Manchester Borough Council - Bomb and Damage Plot Maps

This series of maps were produced by Manchester City Council's Architect's Department (Building Surveyor's Division) during the war and were updated throughout the conflict to reflect all raids on the county borough.

No original legend / key accompanies the maps, however contemporary descriptions confirm most of the symbols. No symbol for UXBs was identified and the degrees of damage sustained are unidentified. Any IB strike symbol with a number written within it represents the number of individual IBs falling at that location.

All maps covering the wider study area were accessed and two maps (stitched together) showing the closest plotted incident are displayed at **FIGURE 5**.

- No bomb strikes are plotted and no structural damage is highlighted within 500m of the Site boundary.
- The closest incident to the Site (a pair of two HE bombs) is recorded 740 to 860m southeast. These bombs were dropped by the same aircraft on the 11th October 1940.

4.8.3 Manchester Borough Council - Damage to Property Report Cards

Two collections of original report cards detailing German bomb and British anti-aircraft (AA) shell damage to individual properties throughout the county borough, was accessed. This record type, produced by the borough council's Building Surveyor's Division, is understood to cover the entire bombing campaign.

These collections were searched for those road names local to the study area, however no such report cards were included.

4.8.4 MoHS - Regional Situation Reports

A complete collection of original reports describing all air raids on Civil Defence Region 10 (created by a central government department) was accessed. These reports represent a broad record of local air raids and do not list the precise locations of individual bomb strikes and any damage caused. Only general locations affected are given.

A review of this collection highlights several raids affecting the wider study area:

- **11th October 1940** - HE bomb(s) at Wythemshawe (940m - 2.8km north of the Site). Cottage demolished. Some casualties.
- **11th October 1940** - at 22:40hrs. 50No. IBs at Cheadle (probably >2km northeast of the Site). No casualties. Fires under control by the 12th October.
- **18th November 1940** - at 21:45hrs. six HE bombs in Wythemshawe (940m - 2.8km north of the Site). Two houses demolished. 15No. casualties.
- **22nd December 1940** - Whythenshawe hit (940m - 2.8km north of the Site).
- **23rd December 1940** - at 21:00hrs. HE bomb damaged three houses and injured one person at Gatley (probably >1.5km north of the Site). Also, at Cheadle (probably >2km northeast of the Site), one HE bomb demolished three houses. Three dead and 10No. injured.

Note, this record confirms that the RAF Ringway / Fairey Aviation Factory site (the closest confirmed bombing target to the Site) was never the specific subject of a medium or large-scale air raid, involving numerous aircraft. Instead, it experienced just three solitary aircraft attacks.

4.8.5 MoHS - Bombing Incident Reports

Multiple air raid incident and damage reports relating to several air raids on Manchester Borough (created by a central government department) were accessed. None of these detailed reports describe bombing incidents within close proximity to the Site. Note, this record only represents a fraction of all the bombing incidents that occurred in the borough during WW2. One report for the 11th October 1940 raid includes the following information:

The air raid occurred between 22:00hrs and 23:11hrs. Several planes dropped 25No. HE bombs (mostly 50kg variant with a few 250kg), three oil 'Flam' IBs and a large number of 1kg IBs. Most bombs fell on a densely populated district. The assumed target was the Fairey Aviation Factory and possibly a nearby railway line. The nearest bombs to the factory fell ¼ mile away and another group fell close to a nearby railway line.

Note, this latter remark may relate to the pair of HE bomb strikes closest to the Site.

4.8.6 MoHS - Bomb Census Trace Maps

A collection of trace maps (created by a central government department) covering Manchester Borough was accessed. This collection includes maps that plot bombing incidents during 14No. air raids. However, each map is specific to a part of the borough and does not necessarily plot all bombs dropped during that raid.

A search of this collection confirms that none of the maps cover the study area and no bomb strikes are plotted within 1km of the Site.

4.8.7 Manchester Civilian Fatalities Records

A contemporary digital map of Greater Manchester recording the locations of every 'Christmas Blitz' bombing incident that resulted in at least one fatality, was reviewed. This map (published by the Manchester Evening News) was compiled using data from the Commonwealth War Graves Commission, however only covers the two heaviest air raids on the city. No fatalities are recorded within 2km of the Site.

A separate 'Christmas Blitz' fatalities record - collection of official casualty records (CWDs) - was also accessed and searched, however again no local incidents were included.

4.8.8 Anecdotal and Secondary Source Evidence

A search of online resources and local history publications was carried out with the intention of locating any relevant anecdotal / eyewitness accounts or secondary source information relating to local bombing incidents. Local history publications detailing the air raids against Greater Manchester were accessed, however no relevant information relating to the study area was included.

4.9 Abandoned Bombs

4.9.1 Brief Overview

When a WW2 BD team arrived at the scene of a confirmed UXO strike, they would classify the incident by its potential hazard, Categories A, B, C and D, with A the highest priority for immediate removal and disposal. Occasionally, BD engineers could not find or recover the UXO and its location was simply recorded as an 'abandoned bomb'. The reasons for abandonment could be inaccessibility, extremely soft ground (extreme burial depth) or simply a harmless location (e.g. an isolated field). Note, BD teams in heavily bombed areas were constantly overstretched due to the sheer number of UXBs reported.

The archive office of the British Army's 29 EOD&S Group holds an Abandoned Bomb Register for Britain, as does the Ministry of Housing, Communities & Local Government. The registers lack detail, particularly with regards to locations. A general address rather than a precise position (grid refence) is usually given. Some of the abandoned bombs are likely to have been subsequently recovered or discredited, however remain on the register.

4.9.2 Site-Specific

No abandoned bombs are listed in the vicinity. The closest is approximately 4.6km away.

4.9.3 WW2 Bombing Incident Records Conclusion

- **Number and intensity of local air raids**: a comparison of the available records suggests that just one medium-scale raid (experienced locally as a single aircraft sortie) probably affected a 1km radius around the Site.
- **Number of local bombing incidents**: within Manchester Borough, no bomb strikes occurred within 500m of the Site boundary. Although the available records indicate a low likelihood, the possibility cannot be completely ruled out that a bomb(s) fell within 500m of the east Site boundary, within the adjacent urban district.

- **Local bomb-stick orientations**: the orientation of the one confirmed local bomb-stick does not align with the Site. Furthermore, these bombs fell a significant distance from the Site. This greatly reduces the likelihood that the aircraft responsible dropped a third bomb over the study area (unwitnessed / unrecorded) that landed within the Site boundary and failed to detonate. Note, although unlikely it is not inconceivable that the aircraft changed course and did fly over the Site.

4.10 Aircraft Crash Sites

4.10.1 Brief Overview

Numerous German aircraft came down over the UK during WW2. In most cases, the pilot was able to jettison any remaining bombload prior to impact or the aircraft belly-landed resulting in only superficial damage to the fuselage. However, in some cases, mechanical malfunction and / or crew injury meant bombs were not released. If the aircraft struck the ground at a steep angle and at high velocity, high density objects (engines and bombs) became buried, sometimes to significant depths.

4.10.2 Site-Specific

No Luftwaffe aircraft crashes occurred locally.

5 WW2 Enemy Action Assessment: Other

5.1 V Weapons

5.1.1 Brief Overview

In mid-1944 Germany launched the V1 Flying Bomb campaign. The V1 was a primitive cruise missile carrying an 848kg HE warhead. Between 13th June 1944 and 29th March 1945, V1s were launched from static sites in France and Belgium. 5,823No. missiles landed in England, 2,419No. of which reached London, their intended target.

Not long after, Germany launched the V2 Rocket campaign. The V2 was a primitive ballistic missile carrying a slightly smaller HE warhead (735kg). Between 8th September 1944 and 27th March 1945, V2s were launched from static and mobile sites in Holland. 1,102No. rockets landed in England, 516No. of which hit London, the initial target area. Later on, Norwich was targeted, sustaining 43No. strikes.

Both weapons were constructed of thin sheet steel and consequently had very limited ground penetration ability, if they failed to function. Therefore, V Weapons do not themselves pose a UXO risk, however the damage they caused can hamper the accurate assessment of Luftwaffe UXB risk.

5.1.2 Site-Specific

The closest V1 Bomb landed >3km north of the Site. V weapons can be discounted as a direct UXO hazard (due to the Site's wartime ground conditions) and as an indirect UXO risk indicator.

5.2 Artillery Bombardment

5.2.1 Brief Overview

Six German Navy artillery batteries (comprising 20No. guns of between 21cm and 40.6cm calibre) were established in the German occupied Pas-de-Calais area from July 1940. In addition, the German army brought railway-mounted guns to this area of France, seven of which (six 28.0cm calibre guns and one 21.0cm gun) were capable of striking inland targets in Kent.

The first shells were fired at Kent on the 12th August 1940 with frequent attacks occurring during each of the next four years until the final bombardment on the 26th September 1944. In all, at least 1,000No. attacks (each involving multiple projectiles fired) were recorded, an average of one every two days. The towns of Folkestone, Deal and Dover were targeted, however many shells landed in the surrounding countryside. UXO finds of this type are rare.

5.2.2 Site-Specific

The study area was located beyond the range of the German cross-channel artillery batteries.

6 WW1 Enemy Action Assessment

6.1 Aerial Bombing

6.1.1 Brief Overview

Between December 1914 and August 1918, the German navy air wing and army air wing carried out 51No. Zeppelin airship raids and 52No. fixed-wing aircraft raids (involving multiple aircraft) against England and south-east Scotland. Note, many more attacks involving solitary fixed-wing aircraft occurred. An estimated total of 9,000No. HE bombs and IBs were dropped, with London and the east Kent towns experiencing the most raids. During the four years long campaign, Britain suffered 4,820No. casualties.

The German bombing campaign of WW1 was significantly smaller in scale than the WW2 campaign, in terms of the number of raids, number of aircraft per raid, and size of bombloads (for fixed-wing aircraft). As it was the first time Britain had experienced aerial bombardment, the small-scale daytime attacks often attracted spectators, which increased the chance of any UXB being observed and reported. When combined with the fact that most WW1 bombsites have been redeveloped, c

6.1.2 Site-Specific

Neither Manchester Borough or Cheadle & Gatley Urban District were bombed during WW1.

6.2 Naval Bombardment

6.2.1 Brief Overview

Several coastal towns in Yorkshire, Norfolk, Suffolk, and Kent were subjected to naval bombardment from German warships during seven raids in 1914, 1916 and 1917. These raids varied in intensity, both in terms of duration (number of shells expended) and calibre of artillery employed. The heaviest attack resulted in >1,000No. shells fired, with the lightest raid expending only several rounds. The relatively short firing distances during these bombardments resulted in many shells failing to explode, as there was not enough time for some shells to arm themselves before striking the coast. German WW1 UX naval shell finds are extremely rare.

6.2.2 Site-Specific

The study area was not subjected to naval bombardment during WW1.

7 Domestic Military Activity Assessment

7.1 Sources of Potential Explosive Ordnance Contamination

The table below lists all the modern and historical sites and activities that could have potentially resulted in British / Allied UXO and AXO contamination in the UK.

Source of EO	Examples	Associated EO Hazard Items	Relevance
Military Bases and Installations	Army camps, RAF, RN or USAAF airfields, RN shore establishments, signals or communications installations, military training centres, etc.	Various conventional and chemical EO. The types of EO will depend on the type of site and branch of the military utilising it. Plus AXO (SAA, LSA and AA ammunition) for WW2 site defence, if applicable.	INSIGNIFICANT
Military Training Areas and Weapons Ranges	Inland and costal RAF and USAAF bombing ranges. Army / Royal Marines / RAF Regiment etc weapons ranges.	Various conventional and chemical EO. The types of EO will depend on the type of range / training area and branch of the military utilising it.	INSIGNIFICANT
Munitions and Explosives Factories	Royal Ordnance Factories, National Filling Factories, National Explosives Factories, Royal Naval Cordite Factories, etc.	Various conventional and chemical EO. The types of EO and explosives contamination will depend on the type of factory. Potentially plus AXO (SAA, LSA and AA ammunition) for WW2 defence.	INSIGNIFICANT
Munitions Storage Depots	Royal Naval Armaments Depot, Royal Naval Ordnance Depots, RAF Ammunition Depots, Air Ammunition Parks, Reserve / Forward Ammunition Depots, Central Ammunition Depots, etc	Various conventional and chemical EO. The types of EO potentially present will depend on the branch of the military utilising it. Potentially plus AXO (SAA, LSA and AA ammunition) for WW2 defence.	INSIGNIFICANT
Fortifications and Defence Measures	Pillboxes, fortified houses, various earthworks (e.g. trenches) etc at: Nodal Points, Stop-Lines, VPs, etc.	SAA, regular army LSA, AA ammunition, Flame Fougasse, and Home Guard-specific weapons / ammunition.	**UNLIKELY**
Military Requisitioned Sites: WW1 and WW2	During WW1 and WW2 many private properties were requisitioned by the War Office for military use, including training.	SAA, regular army LSA and Home Guard specific weapons / ammunition.	INSIGNIFICANT
Pipe Mines and Conventional Minefields: WW2	Pipe mines and improvised mines at military bases. Conventional minefields at beaches and some Nodal Points.	Canadian pipe mines, various British landmines (AT and AP) and IEDs.	INSIGNIFICANT
RAF and USAAF Crash Sites	Numerous British and American aircraft crashed in the UK, chiefly during WW2. Munitions and ammunition not always fully recovered.	Various conventional air-delivered ordnance (bombs and rockets) and machine gun / autocannon ammunition.	INSIGNIFICANT
Home Guard Activity: WW2	Volunteer army tasked with home defence during WW2. An armed branch of the British Army. Battalions were active in all British counties.	SAA, regular army LSA, Home Guard specific ammunition e.g. 29mm Spigot Mortar, 3-inch Smith Gun, No.73, No.74, No.75 and No.76 grenades, etc.	**POTENTIALLY SIGNIFICANT**
Anti-Aircraft Weaponry: WW1 and WW2	Light AA (machine gun and autocannon), Heavy AA (QF guns), and ZAA (rocket projectors).	SAA, autocannon shells (20mm, 37mm, 40mm), QF shells (3, 3.7, 4.5-inch), UP rockets (2 and 3-inch).	**POTENTIALLY SIGNIFICANT**

TABLE 6: Sources of Potential Domestic Explosive Ordnance

Potentially significant sources of EO contamination are discussed under **Subheadings 7.2** and **7.3**.

7.2 WW2 Invasion Defence Activities

7.2.1 Brief Overview

From mid-1940, the threat of imminent German invasion resulted in the fortification of many coastlines, cities and towns in Britain. Army units were concentrated in the most vulnerable / likely invasion areas and local Home Guard (HG) battalions were raised throughout the country.

Urban centres were ringed with roadblocks, rail-blocks, pillboxes and anti-tank obstructions. Trenches and weapons pits were dug, barbed wire entanglements were placed and minefields were laid. Such defence measures were also established along inland stop-lines and around the most important vital / vulnerable points (VPs).

The HG comprised men either too old or young, or in reserved occupations. Almost all populated areas in Britain stood up a HG battalion and some organisations (infrastructure organisations and large industrial works) created their own private units.

By mid-1940, over one million had signed up. Initially, only basic and improvised weapons were available, however by mid WW2, weapons specifically designed for the HG (e.g. SIP grenades and the Blacker Bombard spigot mortar) as well as conventional weapons, were widely deployed.

HG soldiers patrolled their areas of responsibility and manned fixed defence positions. They guarded local VPs, aided local Civil Defence when necessary and (later in the war) operated HAA / ZAA batteries. HG units visited military bases and large established training areas to conduct training. A variety of other locations were requisitioned by the War Office for smaller scale ad-hoc training (including live firing of weapons). The HG also participated in anti-invasion training exercises in both urban and rural locations.

Historically, an ‘out of sight out of mind’ culture (with regards to ammunition disposal) has been widespread in the British armed forces (including the regular army and HG). This is evidenced by numerous post-war AXO finds in the UK. Troops appear to have discarded unwanted or faulty items (including surplus ammunition) on civilian land, most likely when the threat from invasion had passed and when the HG was disbanded in 1944. Ammunition caches are also believed to have been buried at defended positions, for quick / easy access in the event of an invasion. Inevitably some were forgotten and can therefore remain in-situ today.

7.2.2 Site-Specific

- The study area was the responsibility of the 47th Lancashire (Wythenshawe) HG Battalion. Although details of this unit’s defence scheme are unavailable, the Site could conceivably have been accessed by armed HG soldiers on patrol and / or during large-scale training exercises.
- Original WW2 army war diaries describing invasion defence activities in the region do not reference the study area.
- No written, mapped, photographic or archaeological evidence of wartime defence measures / fortifications within 1km of the Site boundary has been identified.
- No reference to local land requisitioned by the War Office for ad-hoc military training has been found. As arable land, the Site is highly unlikely to have been a candidate for military requisition.

7.3 British Anti-Aircraft Weaponry

7.3.1 WW1

AA artillery was in its infancy during WW1 and therefore British AA gun deployments were on a far smaller scale than during WW2. Initial activity saw guns installed on top of some buildings and at other key facilities in London and Kent during 1914. By the end of WW1, the London Air Defence Area comprised 286No. guns.

London was the most heavily defended region. Some other cities were defended, however Kent had the most AA batteries outside of the capital. Note, many of Britain's AA guns were not static. Single guns were mounted on trucks and moved around. RN installations also received protection. At the beginning of the conflict, 58No. guns were distributed between naval facilities at Dover, Harwich, Liverpool, the Tyne and the Humber.

The 3-inch QF gun was the mainstay of British AA artillery. UX 3-inch shells typically landed between 8km and 10km away. The smaller calibre 1-Pounder QF autocannon was also used in the LAA role.

7.3.2 WW2

During WW2, the British Army's AA Command utilised three types of AA weapon for home defence: heavy AA (HAA) guns, light AA (LAA) guns, and Unrotated Projectile (UP) rocket projectors. From 1940 to 1945, BD units dealt with approximately 7,000No. UX AA projectiles in the UK, however such UXO is still unearthed today.

- **HAA Guns:** The vast majority of HAA guns (3.7 and 4.5-inch calibre) were deployed in static batteries of between four and eight guns. HAA batteries were used to engage bombers at high altitudes and were the main constituent of most city's (and some town's) Gun Defence Area (GDA). Mobile gun mounts were also available for temporary deployments to key military and civilian targets. Note, a very small number of British 5.25-inch guns were deployed from 1942 onwards, as well as batteries of US Army 90mm guns during 1944.

  Some 2,000No. of these guns were available during the 1940 / 1941 Blitz. GDAs could expend vast quantities of ammunition during each engagement. The most numerous 3.7-inch gun variant had a firing ceiling of approximately 9km. Although a number of factors will have affected the range of falling UX shells, most typically landed 10km to 15km away. Note, greater distances were achievable.

- **LAA Guns:** Smaller calibre guns (machine guns, 20mm and 40mm autocannon) were used for point (individual target) defence of strategic targets / vulnerable points (VPs). At the time, government policy mandated that (where possible) every VP should be protected, however in reality, a chronic shortage of effective LAA guns (autocannon) during the early years meant that only priority VPs received adequate protection. These smaller guns were easily transportable, and LAA regiment deployments were often temporary. British WW2 40mm guns had a firing ceiling of approximately 7.1km. Although a number of factors will have affected the range of falling UX shells, most typically landed <10km away.

- **ZAA Rockets:** A ZAA battery comprised a grid of typically 64No. UP rocket projectors firing single and (later) multiple 2-inch (UP-2) and 3-inch (UP-3) rockets in a volley, creating a 'box of effect' at preselected altitudes. Although a number of factors will have affected the range of falling UX rockets, they typically landed within 10km of the battery.

  Prototype ZAA weapons were fielded in late 1940 and deployed in cities around Britain from 1941. However, they were only deployed in significant numbers after the initial nine-month Blitz campaign had ended. Consequently, ZAA batteries saw far less action than AA guns. By the end of the war, >50No. ZAA batteries were operational across Britain.

7.3.3 Site-Specific

- One static HAA battery (comprising a single 3-inch calibre gun) was active within firing range of the Site during WW1. Some WW1 AA guns were mounted on trucks and therefore mobile. However, these were prioritised for the most vital vulnerable points, none of which were present within firing range of the Site. The lack of air raids over the Greater Manchester area suggests that a negligible quantity of ammunition was expended.

- 19No. static HAA batteries (totalling up to 76No. gun emplacements) were active within firing range of the Site during WW2. Firing between 10No. and 20No. rounds per minute over a frequently and heavily bombed British city, these guns would have expended a very large quantity of ammunition over Greater Manchester. Consequently, there is an elevated likelihood of UX HAA shells striking the Site.
- One LAA battery (defending RAF Ringway) was active within autocannon firing range of the Site. During the 1940 air raids, this airfield was only protected by machine guns (posing no UXO hazard). However, it is possible (although unlikely) that later in the war defences at this base were upgraded to 20mm or 40mm calibre guns. These AA guns probably expended ammunition on a few occasions, with each engagement relatively short. There is a low likelihood that a UX autocannon shell struck the Site.
- Two ZAA rocket batteries were active within firing range of the Site during WW2. However, these appear to have been established during July 1942, after almost all air raids on the region had occurred. Therefore, it is considered highly unlikely that any UX AA rockets fell locally.

7.4 Explosive Ordnance Hazards Overview

7.4.1 Introduction

The following subheadings detail the EO hazards most likely to be relevant to the study area. Note, this is not an exhaustive list of potential local EO contaminates.

7.4.2 Artillery Projectiles: Anti-Armour and Anti-Aircraft

AT guns, AA guns, and howitzers have been in use with the British Army for over a hundred years. The former ranged from the Ordnance QF 2 Pounder (40mm) to the Ordnance QF 17 Pounder (76mm) in calibre. The latter ranged from the Ordnance QF 25 Pounder (87.6mm) to the BL 60 Pounder (127mm). HAA gun calibres are medium. Note, from 1942 / 1943, many HG units were armed with a variety of small / medium calibre AT guns.

A wide variety of artillery projectiles have been deployed in the UK historically, by British and allied nation armies. In general, projectiles fall into two categories; shot and shell. The former are inert; solid metal projectiles containing no hazardous element, whereas the latter are hollow (like bombs), containing a variety of potentially hazardous fills.

Solid shot falls into four categories, mainly for gun proofing, target practice, and AT use, however as they are inert they are relatively irrelevant with regards to present day UXO risk. Historically, there were three types of WW2-era British artillery shell:

- **Bursting Type** - The filling (or part of it) caused the shell to burst. The most common filling was HE where the shell caused damage to material by the force of the burst or to personnel and aircraft by fragmentation of the shell casing producing shrapnel. WW2 HAA shells were of the bursting type. Note, bursting shells were also used with chemical fillings.
- **Shrapnel Type** - These usually burst in the air and projected their 'payload' forwards acting like a shotgun. The usual payload was shrapnel bullets however Thermite 'pots' were used during WW1. By the start of WW2 shrapnel shells were obsolete for field artillery.
- **Carrier Type** - These also burst in the air, however ejected their payload backwards after blowing the base plate off the shell. The most common fills used were smoke, star and flare shells. The latter two being designed to illuminate an area or target. Smoke shells were used to produce smoke screens and used various fillings (the most common being white Phosphorus).

Artillery projectiles were always painted, this protected the steel from rust but was also used to indicate the nature of the ammunition. The basic body colours for artillery were; Yellow (HE), Light Green (smoke), Black (Flare / Star) and Grey (chemical). Note, artillery shell fuzes found on their own can also represent a hazard. Although small, such items can contain enough HE to cause serious injury if mishandled.

With regards to HAA shells, British mechanical time-delay and barometric pressure fuzes of WW2 were poorly designed, resulting in high HAA ammunition failure rates (around 30%) during 1940 and 1941. By 1944 however, new fuzes had reduced the rate to approximately 2%.

Unlike bombs, AA shells were not designed to strike the ground nose first and therefore UX AA shell strikes on soft ground did not always create recognisable circular entry holes. This, combined with their lower mass (compared to a UXB) resulted in shallower ground penetration depths, typically <1.0m bgl in soil. Although, in very soft / saturated ground, UX HAA shells were observed to penetrate to >1.5m bgl.

Data sheets detailing examples of this EO type are displayed at **APPENDICES 2** and **3**.

7.4.3 Grenades

Grenades are the most commonly encountered type of WW2-era British LSA in the UK. Other types of LSA include mortars, artillery projectiles (e.g. AT guns), infantry rocket systems and mines (AP and AT).

Hand grenades and rifle (projected) grenades are small devices with a delay fuze that detonates three to five seconds after initiation / launch. They are divided into two categories, explosive (fragmentation or blast) and carrier. The latter are used for signalling (smoke) and incendiary (chiefly white phosphorus for AP and AT use).

A wide variety of grenades have been deployed in the UK historically. The first modern British fragmentation grenade (the Mills Bomb) was used from 1915 onwards, with later models used well into the post-WW2 period. Consequently, this model accounts for the majority of UX grenade finds in Britain. A Mills Bomb (the No.36 grenade in British service) is approximately 95mm x 61mm and contains approximately 71g of HE.

Another common UK grenade find is the No.76 Self-Igniting Phosphorus (SIP) grenade. These cheap and simple devices comprised a glass bottle (152mm x 63mm) containing a composition that reacts with air (when broken) creating an intense white phosphorus incendiary effect (burns hazard). They equipped most HG units during WW2.

Data sheets detailing examples of this EO type are displayed at **APPENDIX 3**.

7.4.4 Mortars

A mortar is a compact infantry support weapon that fires a projectile (mortar bomb) in a high-arcing ballistic trajectory, at low velocity. The first British mortars were used during WW1.

A mortar bomb / round is usually tear-drop shaped or cylindrical, nosed-fused and fitted with its own propelling charge. A small tail fin assembly stabilises the round in flight and a ‘spigot tube’ containing the propellant charge is screwed or welded to the base of the round.

During WW2, the 2-inch and 3-inch calibre mortars were the most commonly used by the British Army. These systems utilised several different types of ammunition (HE, smoke, illumination, signal, chemical and drill). The most commonly deployed round (the 2-inch HE variant) weighed approximately 1kg, 200g of which was the HE bursting charge. As such, mortars pose a hazard similar to grenades.

Data sheets detailing examples of this EO type are displayed at **APPENDIX 3**.

7.4.5 Autocannon Shells

In Britain, two types of autocannon were used in the LAA home defence role by the Royal Artillery and later the RAF Regiment, the Hispano (20mm calibre) and Bofors (40mm calibre). These guns are similar to machine guns, however fire larger calibre rounds at a lower rate of fire (<750 rounds / min and 120 rounds / min, respectively).

Although cannon ammunition looks similar to SAA, these larger projectiles incorporate a small, simple impact fuse and hazardous charge. 20mm projectiles were typically 41mm in length and included a 6g - 11g HE and / or incendiary composition charge. 40mm projectiles were typically 130mm in length and included a 70g HE charge. Although small, when compared to artillery shells, each projectile still has the potential to cause serious injury.

Most WW2 autocannon ammunition incorporated a self-destruct mechanism, detonating the projectile after five seconds if no impact occurred. This resulted in less collateral damage and far less unexploded shells falling back to earth. If this mechanism failed, a UXO strike would occur at ground level.

Data sheets detailing examples of this EO type are displayed at **APPENDIX 2**.

7.4.6 Small Arms Ammunition

SAA (or bullets colloquially) is primarily cartridge-type ammunition with a calibre of <20mm. Each 'round' comprises a cartridge case, projectile (bullet), propellant and primer. Side arms (pistols), rifles and light to heavy machine guns utilise SAA.

Generally, SAA poses a relatively low EO hazard due to the small amount of explosive contained within the cartridge case and the low sensitivity / stable nature of the complete round. Although a cache of unspent rounds subjected to high temperatures (e.g. fire) could function and create a hazard.

Expended SAA (the projectile) is almost always solid shot, i.e. inert. Note, During WW1, experimental incendiary and explosive .303-inch SAA saw limited use with the Royal Flying Core and the RAF. Consequently, such SAA encounters today are very rare.

In the UK, the most commonly encountered historic SAA is .303-inch calibre. This was the standard cartridge used by British and Commonwealth armed forces from 1889 until the 1950s. However, many other calibres have been deployed in the UK by British and Allied forces.

8 Explosive Ordnance Migration

8.1 Introduction

Any fill material deposited on a site is unlikely to be contaminated with EO, as the material will have experienced excavation, transport, and processing during which any large objects are likely to have been observed and removed. However, EO encounters within such material do occur, confirming that items can be missed.

One known reason is WW2 Blitz rubble. The Blitz resulted in vast quantities of bombsite rubble. This material was put to use in a variety of ways. >750,000No. tonnes of London’s rubble were used to build runways for new military airfields and Liverpool’s rubble was used to create and maintain flood defences throughout Merseyside. Blitz rubble was also commonly used for smaller scale construction works, immediately following WW2.

In 2010, two German HE UXBs were encountered in, what was later identified as, Blitz rubble at a Plymouth building site. Such incidents are rare however, and such contamination is much more likely to take the form of smaller items e.g. UX AA projectiles or UX 1kg / 2kg German IBs.

8.2 Site-Specific

There is a very low likelihood that any bombsite rubble was deposited on Site during or post-WW2.

9 Local Explosive Ordnance Encounters

9.1 Introduction

Even if research does not identify potential sources of EO contamination at a given site, knowledge of a recent EO encounter in the vicinity could indicate an elevated risk at that site. EO encounters on civilian land are often reported in the media and therefore a web search of media outlets was carried out.

9.2 Site-Specific

No evidence of an EO incident on or adjacent to the Site has been identified.

However, in March 2013, a dog dug up a WW2-era No.36 type hand grenade in the back garden of a residential property on Peakdale Avenue, Heald Green (410 to 570m east northeast of the Site).

Every year, a small number of items of wartime LSA (e.g. grenades, artillery projectiles, etc) are unearthed in the back gardens of residential properties all over the UK. Most of these finds appear to be the result of previous occupants burying inherited (unwanted) war souvenirs. As the area now occupied by Peakdale Avenue was a couple of agricultural fields bound by residential streets with no evidence of invasion defences nearby, during WW2, it is more likely that this grenade was buried in the garden at a later (post-war) date, and would therefore not be indicative local military activity.

10 Site-Specific Risk Assessment

10.1 Introduction

Two key Site-specific considerations must be assessed, the likelihood of an EO linkage (source-pathway-receptor) becoming complete and the severity of the resulting consequences. The 'likelihood' consideration itself is a function of the likelihood of contamination, the degree of subsequent risk mitigation (if any), the likelihood of encounter and the likelihood of initiation. These factors (in relation to the Site) are assessed at **Subheadings 10.2 to 10.5**.

10.2 The Likelihood of Contamination

10.2.1 Hazard Items

The table below details the most common EO types encountered in the UK today. The / those EO type(s) relevant to the Site (the Site-specific hazard item / items) are:

- German WW2 bombs
- British WW2 AA projectiles
- British LSA and SAA

EO Type	NEQ or Incendiary Hazard	Likely Contamination Depth	Hazard Class
German HE 'iron' bombs	25kg to 220kg HE (most common) 530kg to 990kg HE (least common)	Deep (3.0m to 10.0m+)	**Very High**
German 41kg and 50kg Incendiary 'iron' bombs	13kg incendiary composition or 7kg HE	Shallow / Deep (2.0m to 6.0m)	**High**
British HE HAA Shells and Rockets	1.1kg - 2.2kg HE	Shallow (0.5m to 2.0m)	
Some British HE Land Service Ammunition	1 - 2kg HE	Very Shallow (<1.0m)	

Some British HE Land Service Ammunition	<1kg HE	Very Shallow (<1.0m)	**Moderate**
German 2kg Incendiary + HE Bombs	680g thermite (incendiary) + 100g HE	Very Shallow (<1.0m)	
German 1kg Incendiary Bombs	680g thermite	Very Shallow (<1.0m)	**Low to Moderate**
British HE LAA Autocannon Shells	4g to 70g HE and / or incendiary composition	Very Shallow (<0.5m)	
British Small Arms Ammunition	Small quantity of black powder. Inert projectile or <1g incendiary composition	Very Shallow (<0.5m)	**Low**

TABLE 7: Most Common Hazard Items

10.2.2 Subsequent Detection

There are many variables that affect the likelihood that a German UXO or British UX AA projectile strike was detected and reported, either as it fell to the ground or subsequently. Accurately assessing the precise conditions that existed at a given site >75 years ago is problematic. The most pertinent variables are addressed below.

Historic Ground Cover	
Risk Elevating Ground Cover	Site-Specific Comment
Bombsite: a UXO strike to a building in ruin will likely have remained undetected. The entry hole of a UXO will have been easily obscured under the rubble / debris. However, a small UX AA projectile or UX 1kg / 2kg IB may not have achieved ground penetration, instead coming to rest within the rubble.	n/a
Water: UXO landing in a stream, canal, river, pond, lake or the sea would have been immediately lost beneath the waterline and would not have resulted in any persistent evidence of its incidence.	A very small pond existed in the southeast corner of the Site during WW2.
Soft / Waterlogged / Unconsolidated Ground: a UXO entry hole within marshland, tidal riverbank sediment, tidal coastal sediment / sand dunes, etc will have closed up / collapsed relatively soon after it occurred.	n/a
Dense Vegetation: Peripheral unmaintained vegetation or woodland in an urban location. Or rural forest, heathland, etc. A UXO entry hole within inaccessible vegetation could have been overlooked. Note, WW2-era woodland obscures the view of the ground cover beneath and therefore it must be assumed that vegetation exists beneath the canopy.	The fields on Site appear to have been bound by hedgerows.
Arable Land: a field under dense crop growth or ploughed soil. A UXO entry hole within this dense foliage or broken soil could have been overlooked.	The Site appears to have been occupied by arable farmland during WW2.
Risk Reducing Ground Cover	Site-Specific Comment
Undamaged Building / Structures: any UXO strike would have caused substantial damage and incontrovertible evidence of the incident.	n/a
Undamaged Hardstanding: A UXO strike on historic hard surfacing (roads, pavements, commercial yards, etc) would have created an easily recognisable entry hole.	n/a

Maintained Grass Lawns: a grass lawn known to have been in use throughout WW2 and therefore subject to regular grounds maintenance, e.g playing fields, parkland, sports pitches, golf course fairways. A UXO strike would have created an easily recognisable entry hole.	n/a
Less Easily Assessed Ground Cover Types	Site-Specific Comment
Waste / scrap / aggregate etc storage area: a UXO strike to a heap of unconsolidated material could have collapsed / become obscured. However, if the ground cover beneath was hard surfaced, a large UXB entry hole could have been subsequently observed and reported.	n/a
Wasteland: the ground cover on such land may not be easily identifiable. Weed-covered bare earth or broken up made ground could conceivably obscure a UXO entry hole. Alternatively, a UXO strike to hard unvegetated earth ground could have been recognisable.	n/a
Railway Tracks: a small UXO entry hole within unconsolidated track ballast material in between tracks could conceivably have collapsed. Alternatively, a large UXB strike to rail track would have caused obvious damage.	n/a
Quarry: clay pit, gravel pit, etc. The type and condition of the ground cover might not be easily identifiable. Note, disused quarries could easily become flooded.	n/a

TABLE 8: Historic Ground Cover

Historic Site Occupancy and Access	
UXO Observed as it Occurred	Site-Specific Comment
Air Raid Timing: If most local air raids occurred during the hours of darkness, there is a greater chance that any UXO fall occurred unobserved. If the study area only experienced daylight attacks, there is a greater chance that any UXO strike was witnessed as it occurred.	All local raids occurred during the hours of darkness.
Population Density: If the study area was sparsely populated, there is a greater chance that any UXO strike could occur unobserved. Within a densely populated built up area, the opposite is true. Note however, most people would have been sheltering during large scale night raids.	The study area was sparsely populated during WW2.
Civil Defence and Military Defence: Many vital facilities (factories, dockyards, etc) had their own teams of Fire Watchers tasked with extinguishing small IBs. These observers would have also reported any UXB strikes. AA batteries, searchlight batteries, barrage balloon sites, and Royal Observer Corps posts. Associated personnel would have reported any UXB strikes.	n/a
Civil Defence Requisition: many schools, churches and other public buildings in frequently bombed areas were requisitioned by Civil Defence for use as first aid posts, reception centres and canteens for bombed out civilians. Such buildings were therefore in use during night raids.	n/a
UXO Subsequently Observed	Site-Specific Comment
Bomb Damage: If substantial bomb damage occurred, parts or all of a site would have been abandoned for the remainder of the war. Any subsequent evidence of a UXO strike is more likely to have remained unobserved for a significant period.	n/a

Site Occupancy: If a site was occupied by buildings that survived the war intact, it likely remained inhabited or in use during the bombing campaign. Probably accessed on a daily basis, evidence of a UXO strike is highly unlikely to have gone unreported. Undeveloped sites could have been neglected for significant periods. Any UXO is more likely to have remained unobserved and gone unreported.	As arable land, the Site would have been neglected for long periods.
UXB Searches: the Luftwaffe used delayed-action (DA) bombs, designed to detonate up to 72hrs after impact. As a result, ARP wardens, residents and workers often carried out specific searches for DA / UXB entry holes within the environs of their buildings, following local raids. Undeveloped isolated land is unlikely to have been searched.	Highly unlikely to have been conducted on Site.

TABLE 9: Historic Site Occupancy and Access

10.2.3 Site-Specific Conclusion

- Any German UXB or British UX AA projectile strike on Site could have easily occurred unwitnessed and remained undetected (unreported). Note, the entry hole of any such UXO item could have been obscured by tall and / or dense crop growth, the wider study area was sparsely populated, and all local air raids occurred during the hours of darkness.
- However, although the possibility that a German UXB was released over the Site and landed within its boundary during WW2 cannot be ruled out entirely, bombing incident records analysis suggests that such a scenario is unlikely. There is however an increased probability of unexploded HAA shells striking the Site during WW2.
- Although Home Guard soldiers were active in the local area during WW2, no evidence of such activity affecting the immediate study area has been found and the Site's wartime occupancy indicates a low likelihood that any unrecorded activity affected the Site. Soldiers could conceivably have accessed the Site whilst on patrol or during large-scale cross-country training exercises, however they are unlikely to have carried any hazardous EO (i.e. LSA) during such activities and even less likely to have discarded / buried such EO on arable land.

10.3 Degree of Risk Mitigation

10.3.1 Ground Works

Ground works on an EO contaminated site could have resulted in the partial or complete removal of the buried EO threat. If EO was uncovered during intrusive ground works, the incident would have been reported and dealt with by the armed forces. Note, it is usually not possible to accurately determine the volume of soil disturbance associated with historic or even recent ground works at a given site.

10.3.2 Explosive Ordnance Clearance

EOC was not as effective historically as it is today. Surveys were not always undertaken to set parameters and degrees of certainty. Recent EO finds on land known to have been previously surveyed for EO confirm that older detection equipment was ineffective. Furthermore, some EOC tasks did not result in 100% clearance of all EO, by design. Magnetometer surveys can be calibrated to ignore magnetic anomalies that model under a certain mass.

A standard notice accompanying British Army EOC documentation states that 'the presence of EO can never be completely discounted. Although considered unlikely, there still remains the possibility of buried or stray [EO] items.' EOC tasks are not conducted on all MOD land prior to disposal / sale. An EOC task will only be carried out on land where there is a known risk of EO contamination, e.g. a former firing range.

IAL has access to a database of historic EOC tasks carried out by the British Army's 33 Engineer Regiment EOD (now part of 29 EOD&S Group). However, this database is only complete up until the early 2000s and only provides basic details on each task. Freedom of Information requests lodged by IAL confirm that the MOD will almost always withhold any historic EOC task documentation for civilian sites in the UK.

10.3.3 Site-Specific Conclusion

Ground Works: Post-WW2 / Post Military Use	Site-Specific Comment
EOC Activity: evidence of EOC task(s) affecting the Site. Or, is there an increased chance that the Site has experienced partial or complete EOC?	No.
Phases of Development / Redevelopment: How many phases of ground work have affected the Site?	One.
Greenfield Land: Does the Site contain any significant areas of undisturbed greenfield land?	Possibly - the southwest and northeast extents.
Very Shallow Buried EO: Have any parts of the Site experienced very shallow level soil / made ground disturbance? e.g. demolition works, soil stripping, site enabling works, minor grading works, agricultural ploughing, etc.	Yes. Agricultural ploughing affecting almost the entire Site area and subsequent development works affecting most of the Site area.
Shallow Buried EO: Have any parts of the Site experienced shallow level soil disturbance? e.g. grading works, strip / pad foundations, buried services installation (drainage), etc.	Yes. The footprint of post-war (since demolished) buildings.
Deep Buried German 'Iron' UXBs: Have any parts of the Site experienced deep level soil disturbance? e.g. bulk excavations (basement levels), dense pile layout, installation of large subsurface tanks, cut and fill, etc.	Unlikely (unknown).

Conclusion
Any very shallow buried EO contamination (British SAA, LSA, LAA shells or German 1kg / 2kg IBs) will probably have been unearthed, observed and removed from Site during years of post-war agricultural ploughing, if not, during the subsequent construction works. Any British UX HAA shell contamination beneath existing greenfield land or ground laid to hardstanding post-war is more likely to remain in-situ today, at an approximate depth range of 0.5m to 1.5m bgl. Although unlikely, it is conceivable that such EO could also remain under the footprint of post-war low-rise buildings (since demolished), occupying small volumes of undisturbed WW2-era soil in between strip foundation trenches. Any deep buried EO (chiefly German HE bombs weighing ≥50kg) is highly likely to remain in-situ today, as the likelihood that such EO contaminated the Site in the first instance, is low.

TABLE 10: The Degree of Risk Mitigation: Site-Specific Comments

10.4 The Likelihood of Encounter

10.4.1 Introduction

The likelihood of an EO encounter at a given site will vary depending on the hazard items, the EO burial depth and the type(s) of intrusive methodology employed. The greater the volume of soil disturbed within the Zone of Potential EO Contamination (ZPC), the greater the likelihood of an EO encounter.

Most domestic AXO and UXO (LSA and SAA), British UXAA projectiles and small (1kg and 2kg) German IBs will typically be encountered at very shallow or shallow burial levels (<1.0m and <2.0m). Whereas heavy German 'iron' bombs will typically be encountered at deeper levels.

The ZPC is defined as the site-specific volume of soil which could contain EO. The size of a ZPC will depend on the history of the site. At a site where the hazard items are German UXBs only, the ZPC will exist between just below WW2 ground level and the maximum BPD. Alternatively, at an active military site where the threat items are known to be British AXO only, the ZPC will exist between just below present-day ground level and approx. 1.0m bgl.

The smaller the mass of the individual EO threat item, the shallower the likely 'as found' depth, generally speaking. There are however some noteworthy exceptions regarding German 'iron' UXBs. In extreme cases, heavy UXBs can be encountered at shallow depths (see **Subheading 4.2.5**).

10.4.2 Bomb Penetration Depth Calculations

To calculate BPDs for a given site, one must make assumptions based on the most likely bomb impact scenario:

- **Impact Velocity:** The majority of German HE bombs dropped on the UK resulted from large-scale carpet-bombing raids. These attacks were carried out at altitudes exceeding 5,000m which would have resulted in a 500kg HE UXB impacting the ground at approximately 260m/s.
- **Impact Angle:** Luftwaffe high altitude bombing resulted in bomb impact angles of 10 to 15 degrees from the vertical. Note, it will be assumed that the bomb was stable at the point of impact.
- **Bomb Design:** Some larger German bombs had metal 'Kopfrings' fitted around the nose of the bomb to limit ground penetration. It must be assumed that no such retarder units were fitted.

10.4.3 Site-Specific Maximum Bomb Penetration Depth

The likelihood of German 'iron' UXB contamination of the Site is not significantly elevated. Therefore, a Site-specific calculation of the maximum BPD unnecessary.

Note, BGS data states that the Site is underlain by approximately 4.0m of glacial Diamicton (gravelly sand and gravelly sandy clay) above >4.0m of mudstone bedrock. Any UX HAA shell striking the Site during WW2 would probably have fully penetrated the (presumably) thin band of topsoil, coming to rest within the Diamicton layer.

10.4.4 Site-Specific Conclusion

- The EO contamination risk is uniform across the Site area, although the likelihood that EO remains in-situ today is greater within the southwest and northeast areas of existing green space. As proposed building footprints are planned for these areas, risk pathways will be created during associated ground works, exposing them to a potential EO encounter (chiefly a British HAA shell within natural soil at a depth within 1.5m of the current ground level). Note, the possibility of such a EO encounter cannot however be completely discounted within the brownfield areas of the Site also.
- The anticipated SI will disturb a much smaller volume of soil / geology within the ZPC than the subsequent development works. As such, there is a much lower likelihood of encountering anything buried (e.g. EO) during this initial phase of works.
- Boreholes and piling may be required. These works raise the possibility of encountering the most severe EO hazard, a very heavy (deep buried) German UXB. However, the likelihood of such EO remaining on Site today is low.
- There is a very low likelihood of encountering EO within the post-WW2 created made ground on Site.

10.5 The Likelihood of Initiation

10.5.1 Introduction

The likelihood of initiating EO depends on the type of EO and how aggressively it is encountered. Various types of EO buried in the UK require an impact, vibration or heat to initiate. Most EO contains a fuze and most fuzes contain a small quantity of shock-sensitive primary explosive. An impact to a fuze can therefore cause it to initiate, in turn detonating the main explosive charge.

German UXBs buried in the UK do not spontaneously self-detonate. The vast majority of German WW2 'iron' bombs contained an electrical fuze. Decades of burial (exposure to environmental conditions) will have caused these fuzes to corrode and lose their electrical charge. Consequently, during any such UXO encounter, it would be almost impossible for the fuze to initiate via its original (electrical) explosive train.

In theory, German UXBs could still initiate if the bomb were impacted with enough force. Percussive piling and bore-holing are engineering works that could impart enough force to detonate the main explosive charge of an EO, without requiring the fuze to function. Furthermore, the 'blind' nature of these intrusions elevates the likelihood of an EO impact.

Excavators and loaders impart less energy via their buckets and site workers might be able to notice a partially unearthed EO and halt works prior to an impact. For these reasons, IAL conducts separate risk rating calculations for different intrusive methodologies.

During WW2, the Allied air forces used mechanical (not electrical) fuzes, which pose a greater long-term UXB hazard on the continent. Furthermore, in Germany, 1No. buried Allied WW2 HE bomb per year (on average) self-detonates due to degradation of the chemical detonator in its time-delay fuze.

Sensitive types of EO include German 2kg (mechanically fuzed) 'Butterfly' bombs, types of British (mechanically fuzed) unexploded LSA ('blind' / 'dud' items), and bombs with chemical time-delay fuzes.

10.5.2 Site-Specific Conclusion

- There is no reason to believe that the Site-specific hazard items are more sensitive to an initiation when compared to similar EO contamination elsewhere in the UK.
- As 'blind' and potentially percussive intrusive methodologies, borehole and piling works would be at a greater risk of initiating EO (chiefly a German HE UXB), when compared to 'open' mechanical excavations.
- A borehole / pile drill head striking a relatively small, unexploded AA shell occupying shallow depth relatively soft / uncompacted soil is more likely to result in a glancing blow that pushes the EO device to one side, dissipating much of the force. Such a strike on a large / heavy German bomb occupying stiffer (deeper) geology would presumably not have the same effect. This perhaps limits the likelihood of initiating the primary Site-specific hazard item (a HAA shell) during the borehole and (any subsequent) piling works.

11 The Historical Record: Extent and Accuracy

11.1 Introduction

The availability of key documents and data will affect the completeness and accuracy of the Site-specific risk assessment. Furthermore, historical records can sometimes be proven inaccurate, when compared with other records. Some inaccuracies could significantly affect the outcome of a risk assessment and therefore a Site-specific review must be conducted.

11.2 Site-Specific

No significant inconsistencies between the records have been identified. The lack of a complete record identifying bombing incident locations within Cheadle & Gatley Urban District is not considered to be significant. Analysis of the other available records suggests a low likelihood that additional bombs (not highlighted as part of this risk assessment) fell within 500m of the Site's eastern boundary. Consequently, IAL is confident that an accurate risk assessment can be conducted.

12 Site-Specific Risk Calculation

12.1 Introduction

The first stage of the semi-quantitative risk model considers potential sources of buried EO on Site. The next stage evaluates the possible linkages, identifying whether significant harm could occur (as a result of the proposed Site works) and the impact of such harm. To provide a numerical evaluation of risk, the two key considerations must be assigned a score and then multiplied together to provide a final risk rating / risk level:

- The likelihood of an EO linkage becoming complete: **FACTOR 3** (= Factors 1 x 2)
- The severity of the consequence(s) resulting from this linkage completion: **FACTOR 6** (= Factors 4 x 5)

12.2 Factor 1 (F1): Explosive Ordnance Presence

The Likelihood of EO contamination of the Site combined with the degree of subsequent risk mitigation. This factor is described and scored in the table below.

Classification	Example Descriptions	F1 Rating
Impossible	No EO contamination due to complete subsequent excavation / removal of the ZPC.	**0**
Highly Unlikely	EO contamination is highly unlikely to have occurred. Most of the ZPC subsequently excavated or EOC task(s) have been conducted.	**1**
Unlikely	EO contamination is unlikely to have occurred. Part of the ZPC subsequently excavated or EOC task(s) have been conducted.	**2**
Possible	EO contamination could have occurred. Part or none of the ZPC subsequently excavated.	**3**
Likely	EO contamination is likely to have occurred. Only a fraction or none of the ZPC subsequently excavated.	**4**
Almost Certain	Confirmed evidence of local EO contamination. Greenfield land / ZPC remains undisturbed.	**5**

TABLE 11: Factor 1 Scoring

12.3 Factor 2 (F2): Explosive Ordnance Initiation

The likelihood of encountering EO during the proposed works combined with the likelihood of initiating EO during the proposed works. This factor is described and scored in the table below.

Classification	Example Descriptions	F2 Rating
Impossible	The ZPC will not be disturbed during the proposed ground works.	**0**
Highly Unlikely	Fraction of the ZPC will be intruded / excavated. Hand-dug trial pits. Vegetation clearance / soil stripping. Hazard items include relatively insensitive EO.	**1**
Unlikely	Part of the ZPC will be intruded / excavated. Mechanically excavated trial pits. Shallow excavations for traditional foundations. Piling or boreholes. Hazard items include relatively insensitive EO.	**2**
Possible	Moderate to high intrusion / excavation of the ZPC. Large-scale shallow excavations for traditional foundations. Single basement level construction. Piling or boreholes. Hazard items include relatively insensitive and possibly sensitive EO.	**3**
Likely	Almost the entire ZPC will be excavated. Multi-level basement construction. Large scale piling works (including percussive piling). Hazard items include sensitive EO.	**4**
Almost Certain	The entire ZPC will be excavated. Multi-level basement construction. Large scale piling works (including percussive piling). Hazard items include highly sensitive EO.	**5**

TABLE 12: Factor 2 Scoring

12.4 Factor 3 (F3): Calculating the Likelihood of an Explosive Ordnance Initiation Event

The table below includes the calculations of 'Likelihood' and descriptions of the resulting scores.

F1 x F2 = F3	Classification	Example Descriptions	F3 Rating
F3 = 0	**Impossible**	Confirmed evidence that no EO is present or no pathway to sensitive receptors present.	**0**
F3 = 1 to 4	**Highly Unlikely**	EO is highly unlikely to be present. No pathway to sensitive receptors present. Initiation of EO is highly unlikely.	**1**
F3 = 5 to 8	**Unlikely**	EO is unlikely to be present. There is an established pathway to sensitive receptors. Initiation of EO unlikely.	**2**
F3 = 9 to 13	**Possible**	EO could be present. There is an established pathway to sensitive receptors. Initiation of EO is unlikely but possible.	**3**
F3 = 14 to 20	**Likely**	EO is likely to be present. There is an established pathway to sensitive receptors. Initiation of EO could occur.	**4**
F3 = 21 to 25	**Almost Certain**	Confirmed evidence of EO contamination. There is an established pathway to sensitive receptors. Initiation of EO is likely.	**5**

TABLE 13: Factor 3 Scoring

12.5 Factor 4 (F4): Explosive Ordnance Event Magnitude

The potential hazard associated with each hazard item combined with the likely depth of EO initiation. This factor is described and scored in the table below.

Classification	Example Descriptions	F4 Rating
None	British military training device (inert).	**0**
Very Small	British SAA at depth. 1kg German bomb at depth.	**1**
Small	British LSA or HAA projectile at depth. British LAA projectile near the surface. 2kg German bomb at depth. 1kg German bomb near the surface. British SAA near the surface.	**2**
Medium	British LSA or HAA projectile near the surface. 2kg German bomb near the surface. Medium German 'iron' bombs at depth.	**3**
Large	Large German 'iron' bombs at depth. Medium German 'iron' bombs near the surface.	**4**
Very Large	Large German 'iron' bombs near the surface.	**5**

TABLE 14: Factor 4 Scoring

12.6 Factor 5 (F5): Sensitive Receptors

The presence and sensitivity of receptors in the vicinity at the time of the proposed works. This factor is described and scored in the table below.

Classification	Example Descriptions	F5 Rating
Single	Plant / equipment.	**1**
Few	Human, plant / equipment.	**2**
Medium	Human, plant / equipment, buried services.	**3**

Most	Human, plant / equipment, buried services, buildings.	**4**
All	Human, plant / equipment, buried services, buildings, listed buildings, scheduled ancient monuments, protected environment (e.g. TPO).	**5**

TABLE 15: Factor 5 Scoring

12.7 Factor 6 (F6): Calculating the Consequence of an Explosive Ordnance Initiation Event

The table below includes the calculations of 'Consequence' and descriptions of the resulting scores.

F4 x F5 = F6	Classification	Example Descriptions	F6 Rating
F6 = 0	**None**	Contact with inert military device. No initiation event. No risk to human health or damage sustained.	**0**
F6 = 1 to 4	**Insignificant**	Very small magnitude inadvertent initiation at depth. Possible cosmetic damage to plant. No risk to human health or buildings damaged.	**1**
F6 = 5 to 8	**Mild**	Small magnitude inadvertent initiation. Possible damage to plant. Possible risk to human health (minor first aid injury).	**2**
F6 = 9 to 13	**Moderate**	Medium magnitude inadvertent initiation. Damage to plant. Possible damage to buried services. Possible cosmetic damage to buildings. Possible risk to human health (minor injury).	**3**
F6 = 14 to 20	**Severe**	Large magnitude inadvertent initiation. Severe damage to plant, buried services and buildings. Fatality and / or severe injuries.	**4**
F6 = 21 to 25	**Catastrophic**	Large magnitude inadvertent initiation. Catastrophic damage to plant, buried services and buildings (including listed buildings, scheduled ancient monuments, etc). Multiple fatalities and severe injuries.	**5**

TABLE 16: Factor 6 Scoring

12.8 Calculating the Final Risk Level(s)

The 'Likelihood' and 'Consequence' factors are combined in the risk matrix below to produce a final risk score.

		Consequence (F6)						
		0	**1**	**2**	**3**	**4**	**5**	
Likelihood (F3)	**5**	**0**	**5**	**10**	**15**	**20**	**25**	Final Risk Score
	4	**0**	**4**	**8**	**12**	**16**	**20**	
	3	**0**	**3**	**6**	**9**	**12**	**15**	
	2	**0**	**2**	**4**	**6**	**8**	**10**	
	1	**0**	**1**	**2**	**3**	**4**	**5**	
	0	**0**	**0**	**0**	**0**	**0**	**0**	

Final Risk Rating (score)						
0 - 1	**2 - 5**	**6 - 9**	**10 - 12**	**15 - 16**	**20**	**25**
Very Low	**Low**	**Low-to-Moderate**	**Moderate**	**Moderate-to-High**	**High**	**Very High**
Risk Levels						

TABLE 17: Risk Matrix

12.9 Conceptual Site Model

Site-specific risk model calculations have identified one risk zone. The conceptual model is displayed below. Note, in lieu of detailed information regarding the scope of the proposed ground works, average / standard values have been used.

	Low-to-Moderate Risk Table						
	Hazard Item	Pathway	Receptor	Likelihood (F3)	Consequence (F6)	Final Risk Rating	Risk Level
German	**WW2 'iron' HE Bombs**	SI works. Blast + frag.	Human, Plant, Structures.	**1** (F1:1 x F2:2)	**4** (F4:4 x F5:4)	**4** (1 x 4)	**Low**
		Piling. Blast + frag.	Human, Plant, Structures.	**1** (F1:1 x F2:3)	**4** (F4:4 x F5:4)	**4** (1 x 4)	
		Mech excavations. Blast + frag.	Human, Plant, Structures.	**1** (F1:1 x F2:3)	**4** (F4:4 x F5:4)	**4** (1 x 4)	
	WW2 'iron' Incendiary Bombs	SI works. Blast + frag + heat.	Human, Plant, Structures.	**1** (F1:1 x F2:2)	**4** (F4:4 x F5:4)	**4** (1 x 4)	**Low**
		Piling. Blast + frag + heat.	Human, Plant, Structures.	**1** (F1:1 x F2:3)	**4** (F4:4 x F5:4)	**4** (1 x 4)	
		Mech excavations. Blast + frag + heat.	Human, Plant, Structures.	**1** (F1:1 x F2:3)	**4** (F4:4 x F5:4)	**4** (1 x 4)	
	WW2 1kg and 2kg Incendiary + HE Bombs	SI works. Blast + heat.	Human, Plant	**1** (F1:1 x F2:2)	**3** (F4:3 x F5:3)	**3** (1 x 3)	**Low**
		Piling. Blast + heat.	Human, Plant	**1** (F1:1 x F2:2)	**3** (F4:3 x F5:3)	**3** (1 x 3)	
		Mech excavations. Blast + Heat.	Human, Plant.	**1** (F1:1 x F2:3)	**3** (F4:3 x F5:3)	**3** (1 x 3)	
British	**WW2 Anti-Aircraft Projectiles**	SI works. Blast + frag.	Human, Plant, Structures.	**2** (F1:3 x F2:2)	**3** (F4:3 x F5:3)	**6** (2 x 3)	**Low-to-Moderate**
		Piling. Blast + frag.	Human, Plant, Structures.	**2** (F1:3 x F2:2)	**3** (F4:3 x F5:3)	**6** (2 x 3)	
		Mech excavations. Blast + frag.	Human, Plant, Structures.	**3** (F1:3 x F2:3)	**3** (F4:3 x F5:3)	**9** (3 x 3)	
	Land Service Ammunition	SI works. Blast + frag.	Human, Plant, Structures.	**1** (F1:1 x F2:2)	**3** (F4:3 x F5:3)	**3** (1 x 3)	**Low**
		Piling. Blast + frag.	Human, Plant, Structures.	**1** (F1:1 x F2:3)	**3** (F4:3 x F5:3)	**3** (1 x 3)	
		Mech excavations. Blast + frag.	Human, Plant, Structures.	**1** (F1:1 x F2:3)	**3** (F4:3 x F5:3)	**3** (1 x 3)	
	Small Arms Ammunition	SI works.	Human.	**1** (F1:1 x F2:1)	**1** (F4:1 x F5:1)	**1** (1 x 1)	**Very Low**
		Piling.	Human.	**1** (F1:1 x F2:1)	**1** (F4:1 x F5:1)	**1** (1 x 1)	
		Mech excavations.	Human.	**1** (F1:1 x F2:2)	**1** (F4:1 x F5:1)	**1** (1 x 1)	

TABLE 18: Low-to-Moderate Risk Table

13 Risk Mitigation

13.1 ALARP Principle

ALARP is a risk principle associated with the Health and Safety at Work Act 1974. It is used in the regulation and management of construction industry risks and states that risk must be averted unless there is a gross disproportion between the costs and benefits of doing so.

The ALARP principle arises from the fact that infinite time, effort and money could be spent attempting to eliminate a risk entirely. It should not be understood as simply a quantitative measure of benefit against detriment. Instead, a best common practice of judgement, balancing risk and societal benefit.

13.2 Risk Levels and Risk Tolerance

The table below outlines the relationship between final risk scores / levels (the output of the IAL semi-quantitative risk model), risk tolerance and the available industry standard risk mitigation measures. An elevated UXO risk should always be reduced to ALARP level.

Risk Level	IAL Recommendation	Risk Tolerance	Mitigation Measures
Very High	**Proactive** mitigation measures considered essential	Intolerable risk level in all but extreme circumstances.	► EOD Engineer supervision of ground works ► Magnetometer surveying prior to ground works ► Explosive Ordnance Safety & Awareness Briefing(s) ► Explosive Ordnance Site Safety Instructions
High			
Moderate-to-High	**Proactive** mitigation measures recommended	Intolerable level of risk where risk mitigation to ALARP is cost effective. A client may consider the risk tolerable due to impracticability of the available risk mitigation measures or disproportionately high cost of mitigation.	
Moderate		Tolerable risk level providing the recommended mitigation measures have been adopted.	
Low-to-Moderate	**Reactive** mitigation measures recommended	Possibly tolerable risk level, however **reactive** risk mitigation measures would be the prudent course of action. For sensitive, high value sites, a zero-tolerance policy may exist, mandating **proactive** risk mitigation measures.	► Explosive Ordnance Safety & Awareness Briefing(s) ► Explosive Ordnance Site Safety Instructions
Low	**Reactive** mitigation measures considered prudent (not recommended)	Likely to be a tolerable risk level for most clients. However, adoption of the basic precautionary mitigation measure would be the prudent (and very cost effective) course of action, especially for greenfield sites.	► Explosive Ordnance Safety & Awareness Briefing(s) considered prudent. ► Explosive Ordnance Site Safety Instructions considered prudent.
Very Low	No mitigation measures	N/A	N/A

TABLE 19: Risk Levels and Risk Tolerance

13.3 Site-Specific Recommendation(s)

The following table describes the available industry standard risk mitigation measures and identifies those (if any) that are recommended to reduce an elevated risk to ALARP level.

Mitigation Measure	Appropriate For	Site-Specific
Explosive Ordnance Site Safety Instructions: EO Safety Instructions (compiled by an EO specialist) provide a written record of the key points that make up an EO Safety & Awareness Briefing. Including instructions on making a preliminary suspicious object threat assessment, a visual catalogue of commonly found EO types, and the steps to take in the event of a potential EO find. The instructions should be included within the site-specific Health & Safety Manual.	► Provided to Site personnel prior to commencement of excavations. ► Not appropriate for 'blind' intrusions (e.g. boreholes)	**Recommended** In support of development phase grounds works only.
Explosive Ordnance Safety & Awareness Briefings: All personnel conducting ground works on Site should receive this briefing. It should feature as a key element of the CDM Regulations 2015 Health & Safety training package for the site. The briefing should be conducted by a trained EO specialist. Such briefings instruct recipients in the identification of EO hazards and actions to be taken in the event of an EO incident.		**Recommended** In support of SI phase and development phase grounds works.
Explosive Ordnance Disposal (EOD) Engineer Supervision: An EOD engineer (banksman) providing a 'watching brief' of mechanical excavations. Any suspicious objects will be quickly identified, allowing works to continue if the object is not EO. This reduces the risk of delays to the project. EOD engineers can use portable / handheld magnetometer instruments to scan ground ahead of boreholes.	► SI (including some boreholes) ► Small volume earthworks on greenfield land ► Excavations within made ground	**Not Recommended**
Intrusive Magnetometer Probe Survey: A range of intrusive magnetometer methodologies can be deployed. Which equipment is most appropriate will depend upon the ground conditions and site access. This survey will scan the ground down to the maximum bomb penetration depth and therefore is the most appropriate option for clearing pile locations ahead of 'blind' piling works. Multiple overlapping surveys can be conducted, providing matrix clearance of made ground, e.g basement dig.	► Pile locations ► Boreholes ► Large volume earthworks on brownfield land	**Not Recommended**
Non-Intrusive Magnetometer Survey: A range of non-intrusive magnetometer survey methodologies can be deployed to survey ground to a limited depth. Such surveys can typically detect a 50kg 'iron' bombs at a depth of 4.5m bgl, providing the ground is 'magnetically clean'. Such surveys are not appropriate for brownfield land where 'magnetic noise' will result in unusable data.	► Large volume earthworks on magnetically clean land	**Not Recommended**

TABLE 20: Recommendations for Risk Mitigation

Figures: 1 - 5



Figure: 01.0

Figure Title:
Recent Aerial Photograph

Legend:

Approx. Site boundary

Notes:

Source: Google

N

Project: Atlas Business Park, Manchester

Client: Aviva Life and Pensions UK Limited

Doc Ref: DRA.10073.22 **Version: 2**

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Figure: 02.0

Figure Title:
Proposed Development Plan



Legend:

Site boundary

Notes:

Source: Aviva Life and Pensions UK Limited

N

Project: Atlas Business Park, Manchester

Client: Aviva Life and Pensions UK Limited

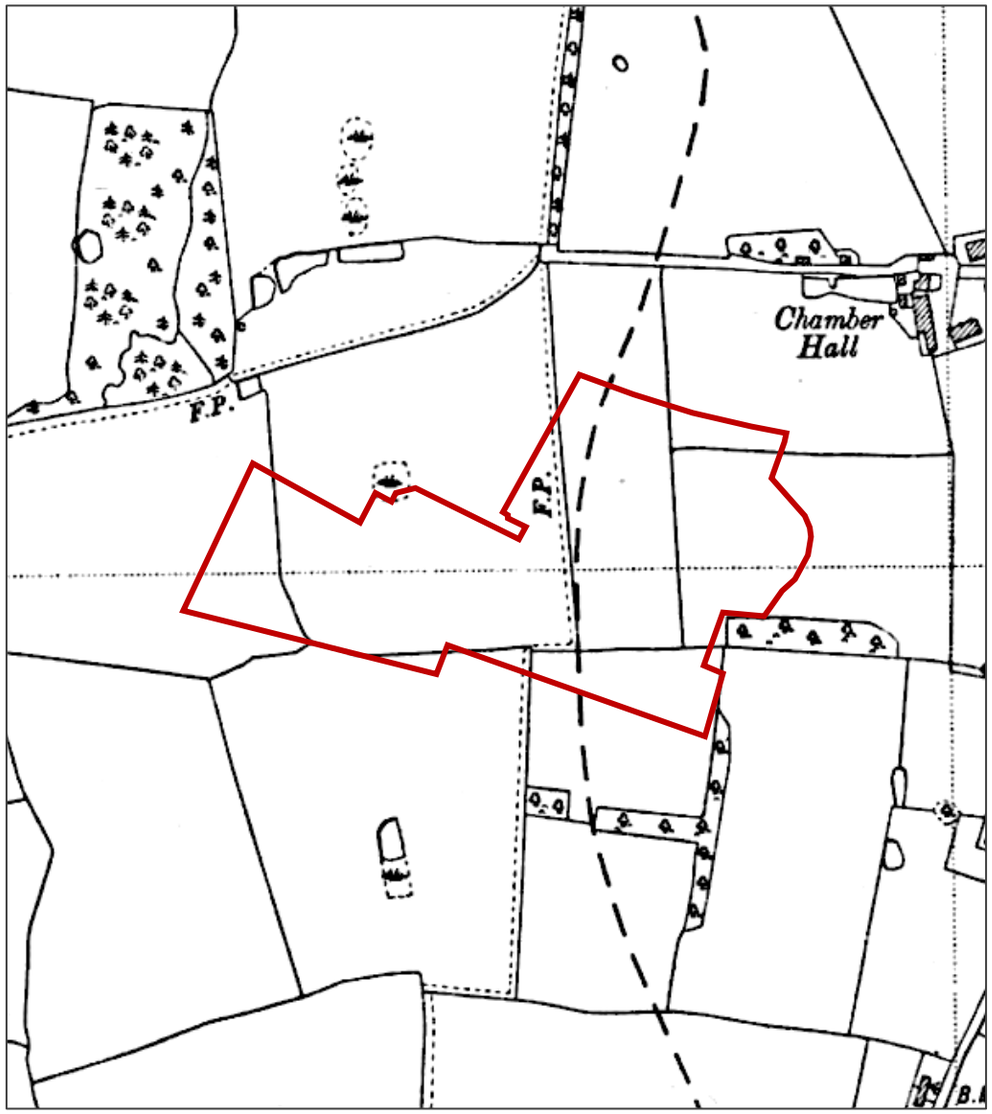
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1938



1954

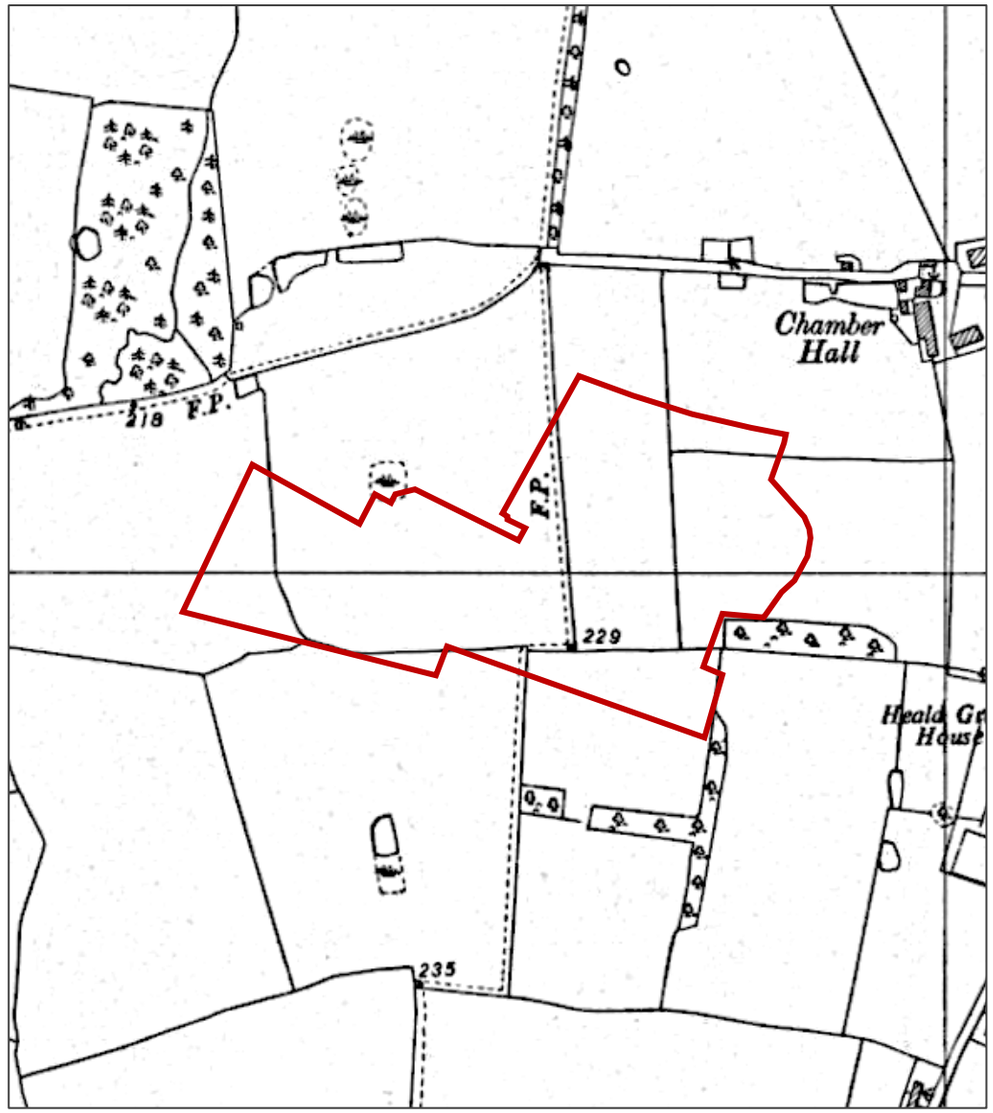


Figure: 03.0

Figure Title:
Historic OS Mapping

Legend:

Approx. Site boundary

Notes:

Latest pre-WW2 and earliest post-WW2 OS maps comparison.

Source: Groundsure

N

Project: Atlas Business Park, Manchester

Client: Aviva Life and Pensions UK Limited

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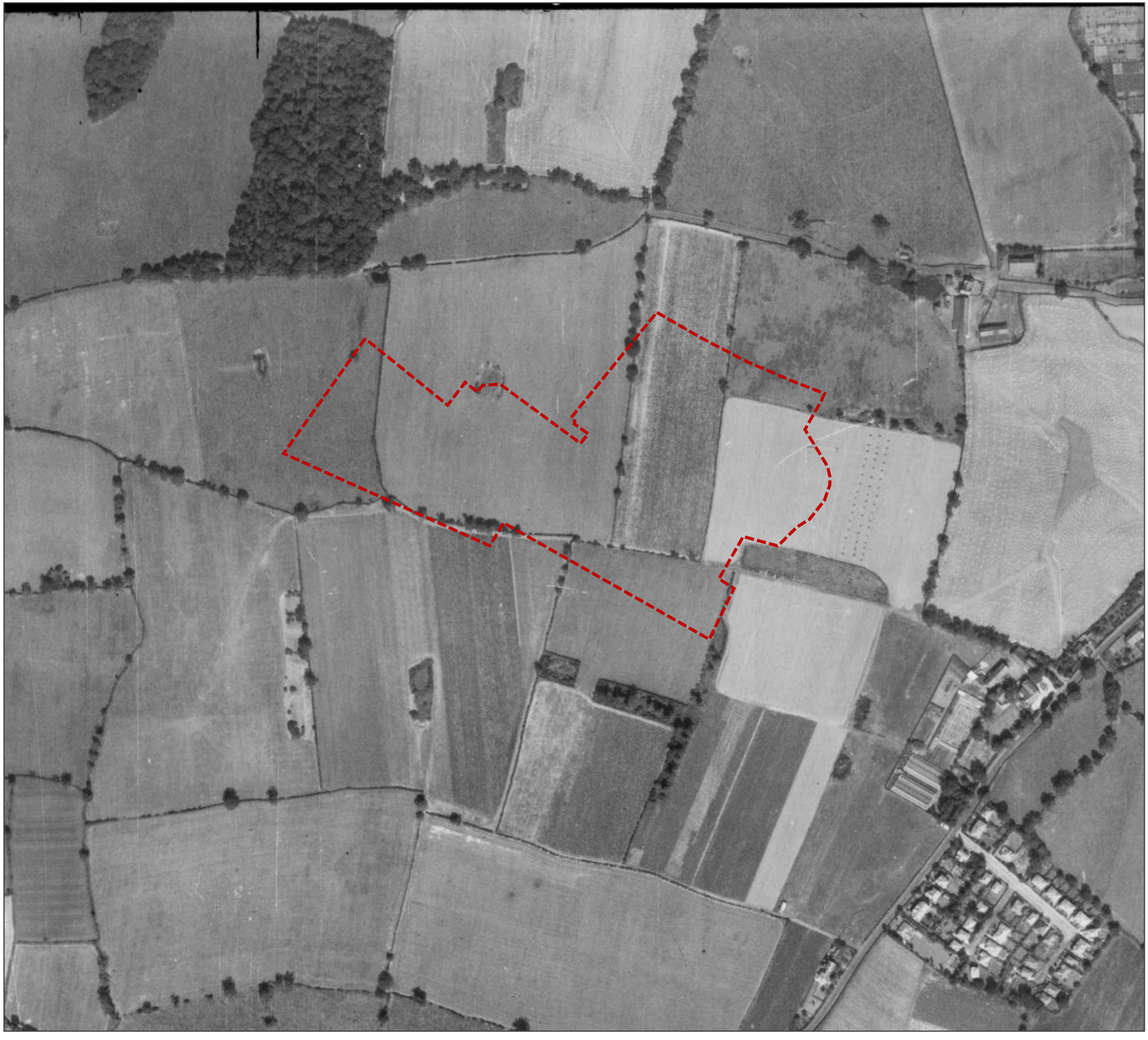


Figure: 04.0

Figure Title:
Historic Aerial Photography: August 1945

Legend:

Approx. Site boundary

Notes:

Source: Historic England

N

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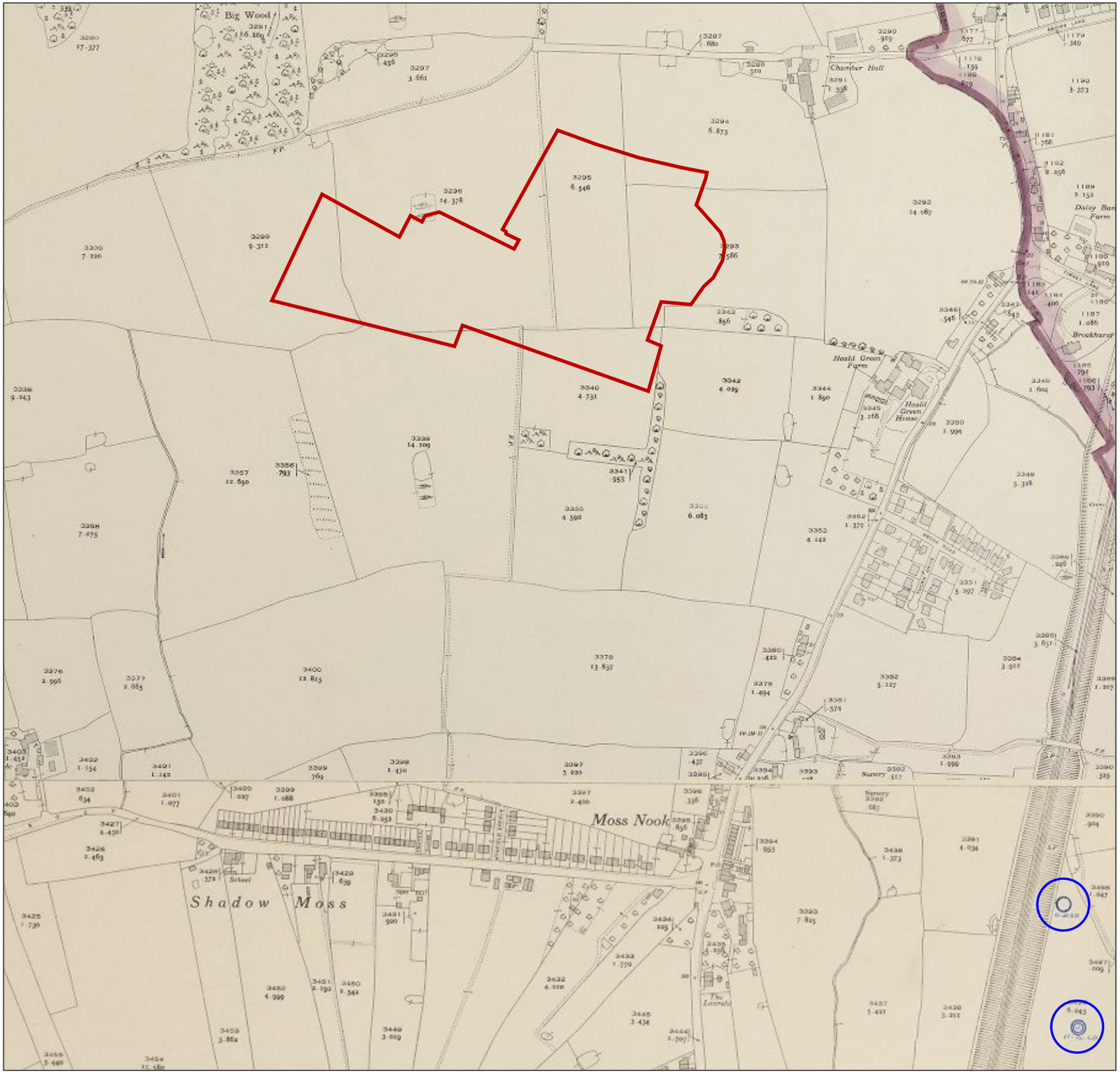


Figure: 05.0

Figure Title:
Manchester Bomb and Damage Plot Map

Legend:

- Approx. Site Boundary
- HE bomb strike

Notes:

Source: University of Manchester

N

Project: Atlas Business Park, Manchester

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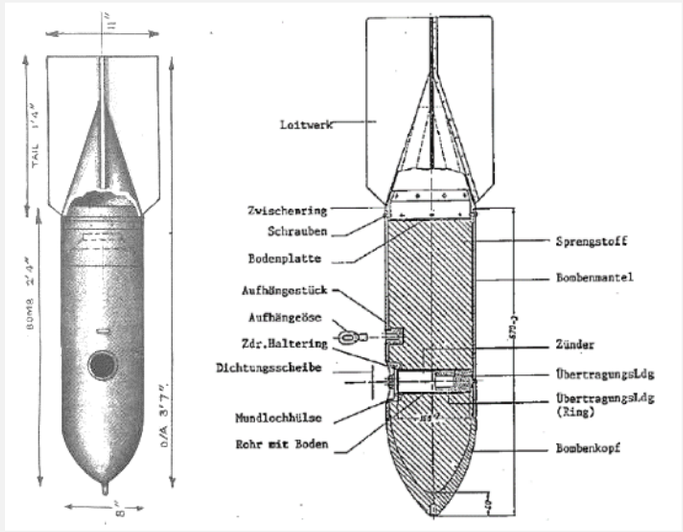
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Appendices: 1 - 4

German WW2 High Explosive ‘Iron Bombs’ - most likely to be encountered

SC 50

Bomb Weight:	54kg (119lb)
Explosive Weight:	25kg (55lb)
Filling:	TNT, Amatol or Trialen
Charge/Weight Ratio:	46%
Fuze Type:	Side fuzed. Electrical impact or mechanical delay
Body Dimensions:	670 to 762mm x 203mm
Material:	Steel
Appearance:	Grey/green with yellow stripe on the tail unit
Variants:	Grades I, II and III. Body length / construction

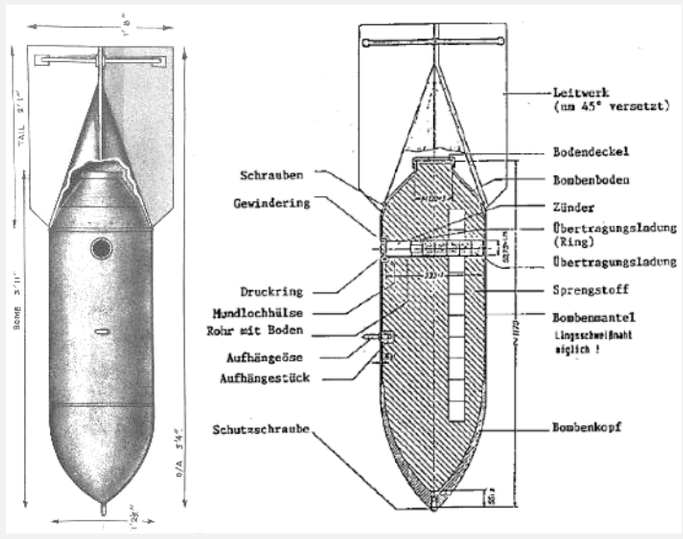






SC 250

Bomb Weight:	256kg (564lb)
Explosive Weight:	125 to 130kg (276 to 287lb)
Filling:	TNT, Amatol or Trialen
Charge/Weight Ratio:	44%
Fuze Type:	Side fuzed. Electrical impact or mechanical delay
Body Dimensions:	1,173 to 1,193mm x 368mm
Material:	Steel
Appearance:	Grey/green with yellow stripe on the tail unit
Variants:	Grades I and II. Body length and doubled fuzed type

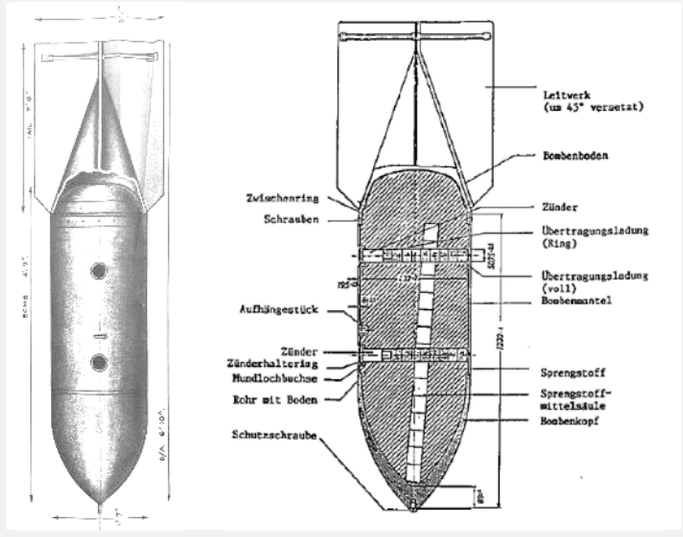






SC 500

Bomb Weight:	480 to 520kg (1,058 to 1,146lb)
Explosive Weight:	220kg (485lb)
Filling:	TNT, Amatol or Trialen
Charge/Weight Ratio:	44%
Fuze Type:	Side fuzed. Electrical impact or mechanical delay
Body Dimensions:	1,414 to 1,486mm x 470mm
Material:	Steel
Appearance:	Grey/green or buff with yellow stripe on the tail unit
Variants:	Grades I, II and III. Body length / construction







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Appendix: 01.1

Appendix Title:
Data Sheets - Commonly Deployed German WW2 Bombs

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Version:	2

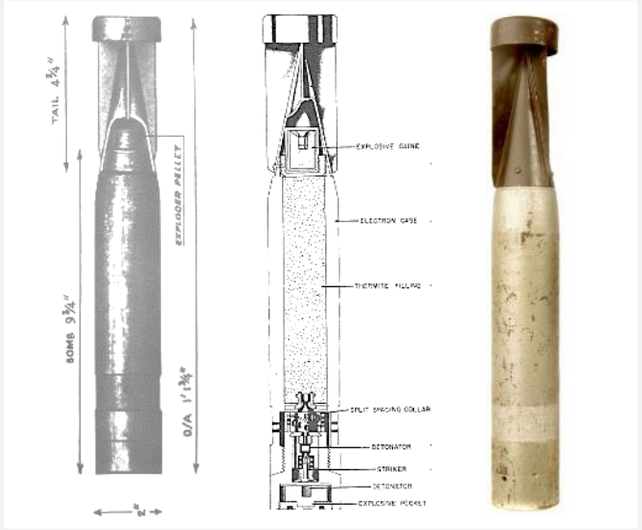
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German WW2 Incendiary Bombs - most likely to be encountered

B1 Series Sub-Munition

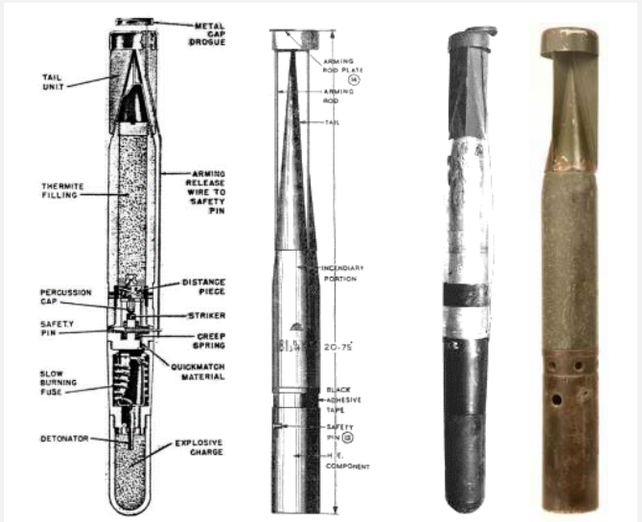
Bomb Weight:	1.0 to 1.3kg (2.20 to 2.87lb)
Incendiary Weight:	680g
Filling:	Thermite
Fuze Type:	Nose fuzed, impact
Body Dimensions:	247mm x 50mm
Material:	Magnesium alloy body, steel tail
Appearance:	Grey body, dark green tail unit
Variants:	Four types. Two delayed action and one steel nosed
Bomb Container:	Various sizes holding between 36No. and 620No. B1s

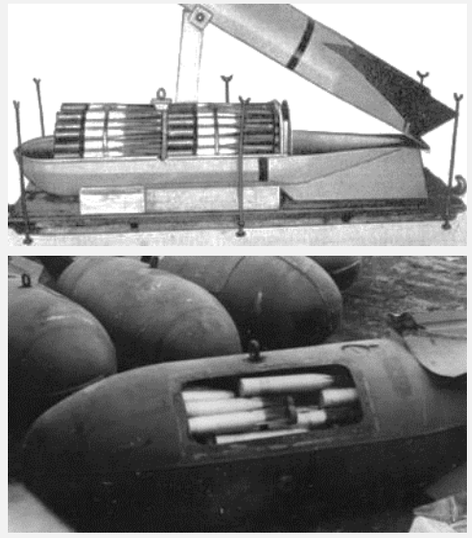




B2 Series Sub-Munition

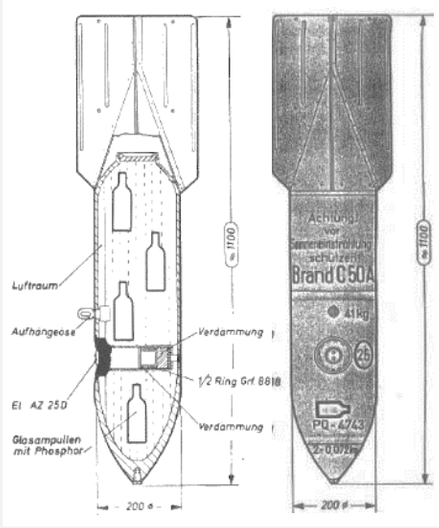
Bomb Weight:	2.0 to 2.2kg (4.40 to 4.85lb)
Fill Weight:	680g incendiary plus 100g HE
Filling:	Thermite and Penthrite or TNT
Fuze Type:	Nose fuzed, impact
Body Dimensions:	311mm x 50mm
Material:	Magnesium alloy and steel body, steel tail
Appearance:	Green body and tail, explosive black, red or unpainted
Variants:	Two types; round nose or flat nose plus longer tail unit
Bomb Container:	Various sizes holding up to 372No. B2s. Usually mixed with B1s.





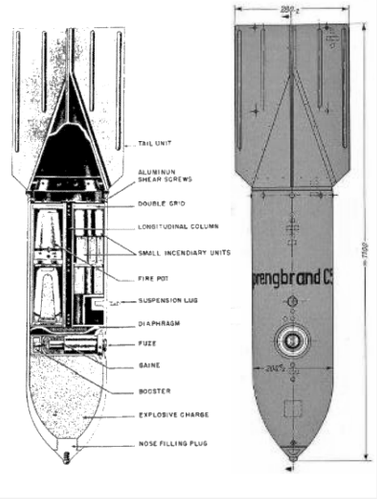
Brand C50 A

Bomb Weight:	41kg (75lb)
Incendiary Weight:	13kg (30lb)
Filling:	15 litres (86% Benzine, 10% Rubber, 4% Phosphorus)
Fuze Type:	Side fuzed. Electrical impact
Body Dimensions:	762mm x 203mm
Material:	Steel
Appearance:	Grey or green body, red base, red band around the centre of the body
Variants:	C50 B (77% Phosphorus fill)



Sprengbrand C50 'Fire Pot'

Bomb Weight:	50kg (110lb)
Fill Weight:	10kg (22lb)
Filling:	7kg TNT and 3kg Thermite in multiple small containers
Fuze Type:	Side fuzed. Electrical impact
Body Dimensions:	711mm x 203mm
Material:	Steel
Appearance:	Grey or green body, red or brown stencilling on body
Variants:	None



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Appendix: 01.2

Appendix Title:
Data Sheets - Commonly Deployed German WW2 Bombs

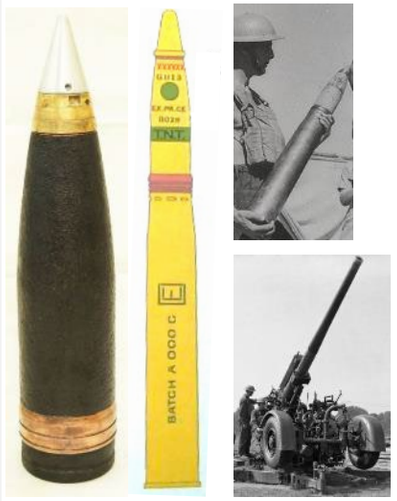
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British WW1 and WW2 Anti-Aircraft Projectiles

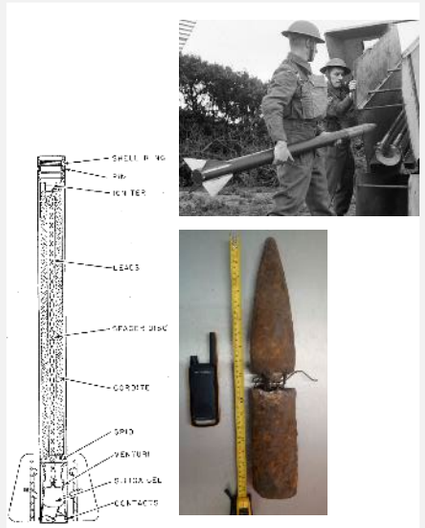
3.7-inch QF Heavy AA Gun (WW2)

Shell Weight:	12.7kg
Fill Weight:	1.1kg
Filling:	Amatol, TNT or RDX and TNT
Fuze Type:	Nose mechanical time delay fuze
Shell Dimensions:	94mm x 360 or 438mm
Shell Appearance:	Yellow or Grey body, copper driving bands, brass neck, grey nose fuze
Max Range:	12,000m
Rate of Fire:	10 to 20rpm



3-inch UP Rocket - Z Battery (WW2)

Rocket Weight:	24.5kg
Warhead Weight:	3.4kg
Fill Weight:	0.96kg
Filling:	TNT warhead. Black Powder solid fuel rocket motor
Fuze Type:	Nose mechanical time delay fuze
Rocket Dimensions:	1,930mm x 82mm
Shell Appearance:	Pointed bronze or black nose
Max Range:	6,770m



20mm Light AA Gun (WW2)

Shell Weight:	123g or 116g or 130g
Fill Weight:	6.0 to 11.0g
Filling:	Incendiary comp and/or TNT or Tetryl
Fuze Type:	Nose impact fuze
Shell Dimensions:	20mm x 110mm or 128mm
Shell Appearance:	Blue, orange, red or green bodies indicate TNT fill
Max Range:	4,389m
Rate of Fire:	250 to 450rpm



40mm Light AA Gun (WW2)

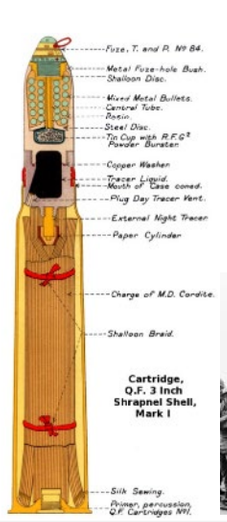
Shell Weight:	0.84kg
Fill Weight:	68g
Filling:	TNT
Fuze Type:	Nose impact fuze
Shell Dimensions:	40mm x 180mm
Shell Appearance:	Yellow or orange body, copper driving band, grey nose fuze
Max Range:	7,160m
Rate of Fire:	120rpm





3 inch QF Heavy AA Gun (WW1)

Shell Weight:	5.7kg or 7.3kg
Fill Weight:	<0.6kg (explosive)
Filling:	TNT or TNT plus ball bearings
Fuze Type:	Nose mechanical time delay fuze
Shell Dimensions:	76.2mm x 384mm or 420mm
Shell Appearance:	Black body, copper driving bands, brass nose fuze
Max Range:	6,700m
Rate of Fire:	16 to 18rpm

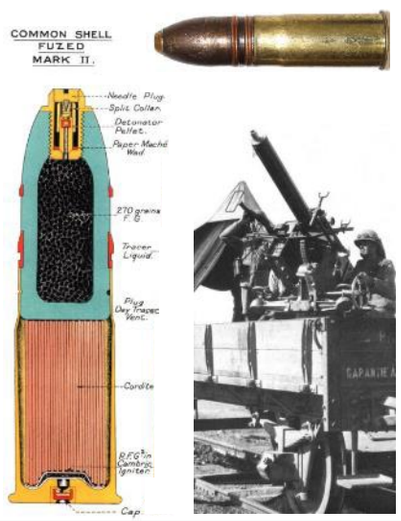






37mm Light AA Gun (WW1)

Shell Weight:	0.45kg
Fill Weight:	17.0g
Filling:	Gunpowder / black powder
Fuze Type:	Nose impact fuze
Shell Dimensions:	93mm x 37mm
Shell Appearance:	Brown body, copper driving bands and brass fuze.
Max Range:	4,110m
Rate of Fire:	300rpm



Appendix: 02.0

Appendix Title:
Data Sheets - Commonly Deployed British Anti-Aircraft Projectiles

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British Army WW2-era Land Service Ammunition

2-inch SBML Mortar (HE)

Shell Weight:	1.02kg
Fill Weight:	200g
Filling:	RDX or TNT (high explosive)
Dimensions:	51mm x 290mm
Material:	Steel
Appearance:	Cylindrical shape. Brown body, green and red bands, five finned.
Variants	Smoke, signal multi-star, parachute illumination, white phosphorus.

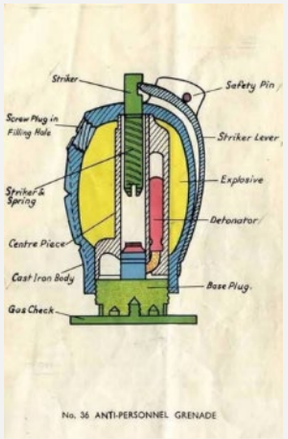




No.36 Hand Grenade - Frag

Weight:	760g
Fill Weight:	71g
Filling:	Baratol (high explosive)
Dimensions:	95mm x 61mm
Material:	Cast iron
Appearance:	Black grooved lemon shaped body. Fragmentation 'pineapple' design.
Fuze:	4 second time delay fuze.





3-inch ML Mortar (HE)

Shell Weight:	4.5kg
Fill Weight:	882g
Filling:	RDX or TNT (high explosive)
Dimensions:	81mm x 490mm
Material:	Steel
Appearance:	Pear-drop shape. Brown body, green and red bands, five finned tail.
Variants	Smoke, signal multi-star, parachute illumination, white phosphorus.

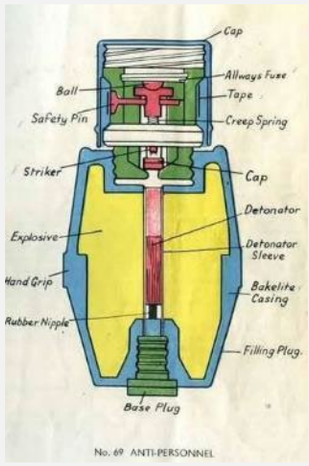




No.69 Hand Grenade - Blast

Weight:	383g
Fill Weight:	92g
Filling:	Baratol, Amatol or Lyddite (high explosive)
Dimensions:	114mm x 60mm
Material:	Bakelite (plastic)
Appearance:	Smooth black lemon shaped body. Green band.
Fuze:	4 second time delay fuze.





Ordnance QF 2-pounder Gun - HE

HE Round Weight:	1.86kg (full cartridge)
Fill Weight:	85g (plus propellant)
Filling:	RDX or TNT (high explosive)
Dimensions:	40mm x 304mm
Material:	Steel projectile. Brass case.
Appearance:	Brass body. Buff nose with red and green bands.
Remark	Note, the HE round was brough into service in 1942.



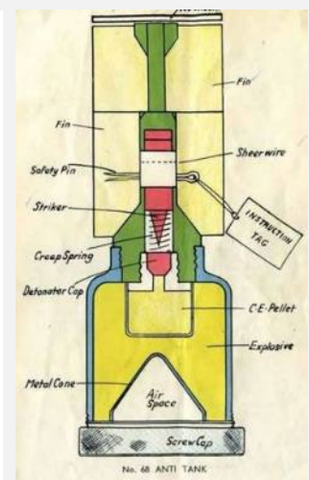


Anti-tank solid shot variant pictured

No.68 Anti-Tank Rifle Grenade

Weight:	893g
Fill Weight:	425g
Filling:	DX, Lyddite or Pentolite (high explosive)
Dimensions:	178mm x 64mm
Material:	Steel
Appearance:	Bell-shaped buff coloured body. Tail unit. Red and green bands.
Remark	These grenades were fired from a rifle using a special 'cup' attachment.





Appendix: 03.0

Appendix Title:
Data Sheets - Commonly Deployed WW2-era British Army Land Service Ammunition

Project:	Atlas Business Park, Manchester
Client:	Aviva Life and Pensions UK Limited
Doc Ref:	DRA.10073.22
Version:	2

Explosive Ordnance Risk Assessments

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Bates H - **Flying Bombs Over England** - Frogletts Publications Ltd - 1994

Castle I - **London 1914-17 The Zeppelin Menace** - Osprey - 2008

Castle I - **London 1917-18 The Bomber Blitz** - Osprey - 2010

CIRIA C681 - **Unexploded Ordnance (UXO), A Guide for the Construction Industry** - Construction Industry Research & Information Association (CIRIA) - 2009

CIRIA C785 - **Unexploded ordnance (UXO) Risk Management Guide for Land-Based Projects** - Construction Industry Research & Information Association (CIRIA) - 2019

Clarke N - **Adolf Hitler's Holiday Snaps: Luftwaffe Target Reconnaissance 1939-1942** - 1995

Clarke N - **Adolf Hitler's Home Counties Holiday Snaps: Luftwaffe Target Reconnaissance 1939-1942** - 1996

Clarke N - **Adolf's British Holiday Snaps: Luftwaffe Aerial Reconnaissance Photographs of England**, **Scotland and Wales** - 2011

Cocroft W - **Dangerous Energy** - Historic England - 2000

Dobinson C - **Fields of Deception, Britain's Bombing Decoys of World War II** - Methuen Publishing Ltd - 2000

Dobinson C - **Twentieth Century Fortifications in England Volume I Anti-Aircraft Artillery** - Council for British Archaeology - 1996

Dobinson C - **Twentieth Century Fortifications in England Volume II Anti-Invasion Defences of WWII** - Council for British Archaeology - 1996

Dobinson C - **Twentieth Century Fortifications in England Volume VIII Civil Defence in WWII** - Council for British Archaeology - 1996

Fleischer W - **German Air-Dropped Weapons to 1945 - Midland Publishing** - 2004

Groves C - **The Home Guard of Britain** - Hutchinson & Co – 1943

HMG Ministry Of Home Security - **Front Line 1940-41, The Official Story of the Civil Defence of Britain** - Ministry Of Home Security - 1942

Jappy M - Danger UXB: The Remarkable Story of the Disposal of Unexploded Bombs during the Second World War - Channel 4 Books - 2001

Longmate N - **The Real Dad's Army: The Story of the Home Guard** - Amberley Publishing - 2016

Morris J - **German Air Raids on Britain: 1914-1918** - Naval and Military Press - 2009

Osborne M - **Defending Britain, Twentieth-Century Military Structures in the Landscape** - The History Press – 2004

Pavelec M - **The Luftwaffe: Facts, Figures and Data for the German Air Force 1933-45** - Amber Books Ltd - 2010

Price A - **Blitz on Britain 1939-45** - Sutton Publishing Ltd - 2000

Ramsey W - **The Blitz Then and Now: Volume I - Battle of Britain Prints International Limited** - Battle of Britain Prints International Ltd - 1987

Ramsey W - **The Blitz Then and Now: Volume II - Battle of Britain Prints International Limited** - Battle of Britain Prints International Ltd - 1988

Ramsey W - **The Blitz Then and Now: Volume III - Battle of Britain Prints International Limited** - Battle of Britain Prints International Ltd - 1990

Ransted C - **Bomb Disposal in WWII** - Pen & Sword History - 2018

TNA Ref AIR 20 (various docs) **Air Ministry and Ministry of Defence: Papers accumulated by the Air Historical Branch**

TNA Ref DEFE 15 (various docs) **Technical reports and memoranda from the Royal Armament Research & Development Establishment**

TNA Ref HO 195 (various docs) **Ministry of Home Security: Research & Experiments Department, Civil Defence**

TNA Ref HO 198 (various docs) **Ministry of Home Security: Research & Experiments Department, Bomb Census Papers**

TNA Ref HO 199 (various docs) **Ministry of Home Security: Intelligence Branch: Registered Files**

TNA Ref WO 195 (various docs) **MOD and predecessors: Advisory Council of Scientific Research and Technical Development**

TNA Ref WO 199 (various docs) **War Office: Home Forces: Military Headquarters Papers**

Whiting C - **Britain Under Fire: The Bombing of Britain's Cities 1940-1945** - Century London - 1986

Wood D *et al* - The Narrow Margin: The Battle of Britain & the Rise of Air Power 1930-1940 - Pen & Sword Military - 2010

Project Specific:

Cooper G - **Manchester at War 1939-45** - Pen & Sword Military - 2018

Pythian G - **Blitz Britain: Manchester and Salford** - The History Press - 2015

Smith P J C - **Luftwaffe over Manchester: The Blitz Years 1940-1945** - Richmond Books - 2003

Appendix: 04.0

Appendix Title:
Bibliography

Project:	Atlas Business Park, Manchester
Client:	Aviva Life and Pensions UK Limited
Doc Ref: DRA.10073.22	**Version: 2**

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