Benchill Road, Wythenshawe

Combined Phase 1 Preliminary Risk Assessment and Phase 2 Geo-Environmental Investigation, Risk Assessment and Remediation Strategy

Job Number	Report Date	Client
LKC251240	**30th June 2025**	**Black Cat Consultancy**

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DOCUMENT QUALITY ASSURANCE

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EXECUTIVE SUMMARY

Site Details

Location	Area in west of Benchill School, to the east of Greenhill Road, Wythenshawe. Centred at National Grid Reference 382285N, 388630E.
Topography	45.6-46.2 metres above ordnance datum (AOD). Level change present on site, with a drop of 0.60m down to the playground in the south-west.
Current Site Use	Benchill Primary School grounds occupy all of site, which consists of hardstanding ground. The area around the proposed currently comprises a two-storey standalone school building surrounded by hardstood tarmacadam, with a playground to the south at approximately 0.60m below the level of the building.
Proposed Development	Extension to the southern end of existing school building, with a proposed canopy area on the eastern side.

Site Setting

Main Historical Features	Onsite: Undeveloped land, school grounds, school building. Surrounding area: Embankments, Baguley Brook.
Geology / Hydrogeology	Artificial: No BGS recorded artificial. Superficial: Glaciofluvial deposits (sand and gravel). Secondary B Aquifer. Bedrock: Tarporley Siltstone Formation (siltstone, mudstone and sandstone). Secondary A Aquifer.
Landfills / Infilled Ground	No recorded landfills. Offsite potentially infilled ground identified.

Preliminary Conceptual Model

PL	Contaminant	Risk	Recommendations
1	Asbestos, PAHs, metal.	No pollutant linkage, therefore there is no risk with regard to PL1. No further assessment required.	
2	Naphthalene.	Low	Soil sampling required subject to ground conditions encountered.
3	Hazardous / ground gas: methane, carbon dioxide.	Moderate / Low	No gas monitoring required unless significant organic / putrescible material identified.
4	PAHs, metals.	Low	No water sampling or leaching tests required unless evidence of significant potentially mobile contamination is identified in the soil.
5	Naphthalene.	Low	Sampling and analysis of soils if made ground / impacted natural ground at anticipated pipeline depths (c. 0.75-1.35mbgl). Water pipe assessment required if deep made ground / impacted natural soils are encountered

Ground Investigation Work Undertaken

Date of Investigation:	27th May 2025
Intrusive Investigation Work Undertaken:	3no. window sample boreholes. 3no. hand excavated foundation pits. 2no. falling head tests.

Ground Conditions

Made Ground	Present to depths of 1.20-1.80mbgl and comprising gravel or silt, anthropogenic material including ash, brick and glass.
Superficial	Firm becoming very stiff clay to 2.40-2.92mbgl. A strata if silty clayey sand was noted in WS102 at 0.70-0.90mbgl.
Bedrock	Not encountered.
Groundwater	Not encountered.
Permeability	Slow progress was observed for both falling head tests. H/Ho of 0.37 was not reached, the permeability is not been calculated.

Geotechnical Assessment

Exposed Existing Foundations	Existing foundation minimum 0.80m or in excess of 1.20mmbgl.
Allowable Bearing Pressure	150kN/m^2 at 1.5m for 1m wide foundations.
Anticipated Foundation Type	Traditional shallow foundations from approximately 1.5mbgl. If soft ground is encountered, foundations may need to be deepened / widened.
Concrete Requirements	Based on BRE Digest 2005[1] – DS-1 AC-1 recommended.

Contamination Risk Assessment

PL	Contaminant	Risk	Recommendations
1	Asbestos, PAHs, metal.	No pollutant linkage, therefore there is no risk with regard to PL1.	Although there is asbestos noted within the made ground, the proposed development is hardstood therefore there is no viable pathway, and no pollutant linkage. No remediation required.
2	Naphthalene.	Low	No remediation recommended.
3	Hazardous / ground gas: methane, carbon dioxide.	Moderate / Low	No remediation recommended.
4	PAHs, metals.	Low	No remediation recommended.
5	Naphthalene, hydrocarbons.	Moderate	Remediation recommended. Water pipeline risk assessment to be undertaken.

Recommendations and Remedial Strategy

PL	Recommendation
1	No remediation required.
2	No remediation required.
3	No remediation required.
4	No remediation required.
5	Potable water pipe assessment required. Barrier pipe likely required.

Other Considerations

Other Considerations
Unexpected Contamination
Disposal
Asbestos in Soils Management Plan

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1. Introduction

1.1. Background

LK Consult Ltd (LKC) has been commissioned to carry out a Combined Phase 1 Preliminary Risk Assessment and Phase 2 Geo-Environmental Investigation, Risk Assessment and Remediation Strategy for Benchill Road, Wythenshawe.

In accordance with current guidance (including LCRM[2] and the National Planning Policy Framework (NPPF)[3]), the Phase 1 Preliminary Risk Assessment (PRA) will include a site reconnaissance, site history, geology, hydrogeology, hydrology, mineral search, and a landfill search. Information gathered from the desk study and site reconnaissance will be used to develop a contamination conceptual model for the site.

A Phase 2 Geo-Environmental Ground Investigation has also been undertaken on the site, in support of the proposed 3no. temporary classrooms for the school, and to confirm the ground conditions below the site and to allow a contamination and geotechnical assessment to be undertaken. The investigation will aim to confirm the risks of the potential pollutant linkages identified in the PRA and recommend further assessment / remediation, as required.

A summary of the site details is presented in Table 1-1. Figure 1 indicates the site location and boundary plan. Figure 2 indicates the proposed development.

Location	Area in west of Benchill School, to the east of Greenhill Road, Wythenshawe. Centred at National Grid Reference 382285N, 388630E.
Topography	46.5 metres above ordnance datum (AOD). 45.6-46.2 metres above ordnance datum (AOD). Level change present on site, with a drop of 0.60m down to the playground in the south-west.
Current Site Use	Benchill Primary School grounds occupy all of site, which consists of hardstanding ground. The area around the proposed currently comprises a two-storey standalone school building surrounded by hardstood tarmacadam, with a playground to the south at approximately 0.60m below the level of the building.
Proposed Development	Extension to the southern end of existing school building, with a proposed canopy area on the eastern side.

Table 1-1: Summary of site details.

2. Historical Review

In compiling the site history, LKC consulted Envirocheck historical mapping (Appendix B) and other public domain maps / aerial photography.

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

Site Features	Location on Site	Dates Present		Comments
		From	To	
Undeveloped Land	Whole site	1877	1954	Footpath heading in a N-S direction no longer present by 1911 mapping. No longer undeveloped by 1978 mapping.
School Grounds	Whole site	1945	2025	Likely becomes hard standing in 1978 due to construction of new school building.
School Building	NE	2024	2025	Along the north-east site boundary.

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

Surrounding Area Features	Distance (m)	Direction	Dates Present		Comments
			From	To	
Embankments	30	W	1978	2025	Associated with the construction with the construction of the M56 motorway.
Baguley Brook	138	NW	1887	2025	Brook is partially culverted by 1978 mapping.

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

3. Environmental Setting

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

Categories(data sources)			Details
Geology[1, 2, 3]	Artificial Ground		No BGS recorded artificial ground.
	Superficial Deposits		Glaciofluvial deposits (sand and gravel).
	Bedrock		Tarporley Siltstone Formation (siltstone, mudstone and sandstone).
	BGS Logs (100m)		None.
Hydro-geology[1]	Aquifer Designation	Superficial	Secondary B Aquifer.
		Bedrock	Secondary A Aquifer.
	Source Protection Zone (SPZ)		Site not within an SPZ.
	Groundwater Abstractions (100m)		None.
Hydrology[1]	Surface Watercourses (100m)		None.
	Flooding Risk[1, 4]		Flood Zone 1.
	Surface Water Abstractions (100m)		None.
	Discharge Consents (onsite)		None.
	Pollution Incidents (onsite)		None.
Minerals & Mining[1,5]	Coal Mining		Not within a Coal Reporting Area. Not within a Development High Risk Area.
	Surface Mineral Extractions (250m)		None.
	Non-Coal Mining Area		No hazard.
Ground Stability[1]	Collapsible Ground		Very low hazard.
	Compressible Ground		No hazard.
	Ground Dissolution		No hazard.
	Landslide		Very low hazard.
	Running Sand		No hazard.
	Shrinking / Swelling Clay		No hazard.
Landfill Sites (250m)[1]	Known / Registered		None.
	Potentially Infilled Land (non-water and water), based on Envirocheck Report		1no. feature: 138m NW.
	Potentially Infilled Sites, based on LKC historical review		1no. feature: 138m NW.
Radon Potential[1]			<1% of homes above Action Level. No protective measures are necessary in the construction of new dwellings or extensions.

Table 3-1: Summary of the environmental setting.

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

Data Sources:

1 Envirocheck Report (Appendix B & C).
2 BGS Sheet 98 1:50,000
3 http://mapapps2.bgs.ac.uk/geoindex/home.html
4 https://flood-map-for-planning.service.gov.uk/location
5 The Mining Remediation Authority Web Mapping Services (WMS) /

Categories(data sources)		Details
Designated Sites (50m)[1]		None.
Contemporary Trade Directory (50m)[1]		None.
Fuel Station Entries (50m)[1]		None.
Unexploded Ordnance Risk (UXO)	Zetica Risk Map[6]	Bomb Risk: Moderate. Strategic Targets: None identified within 100m.
	Pre-Desk Study Assessment[7]	A detailed desk study, whilst always prudent, is not considered essential in this instance.

Table 3-2: Summary of the environmental setting.

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

Data Sources:

1 Envirocheck Report (Appendix B & C).

6 Zetica UXO Unexploded Bomb Risk Map (Appendix D).

7 Zetica Pre-Desk Study Assessment (PDSA) (Appendix E).

4. Preliminary Conceptual Model

4.1. Introduction

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

The sections below are therefore divided into potential contaminant, potential pathway and potential receptor as described in LCRM[4], on the premise that, if there is no pollutant linkage, then there will be no risk to the receptor. The final section provides an assessment of the potential pollutant linkages that may still be present on the site if redevelopment were to occur.

4.2. Potential Contaminants

Potential viable contamination sources are detailed in Table 4-1. These are split into onsite sources, offsite sources and underlying geology.

Potential Source	Contaminants
On site	
Shallow made ground below some or all of site (school grounds / building)	Assuming predominantly reworked natural soils with possible demolition rubble, ash and clinker: asbestos, heavy metals, sulphates, PAHs[5]. Not expected to be a significant source of gas given anticipated depth and nature of made ground.
Surrounding Area	
Embankments for M56	Embankments constructed for structural purposes are not expected to contain putrescible or organic material and, therefore they are not expected to be a significant source of hazardous gas.
Potentially infilled land (culverted Baguley Brook)	Becomes infilled and culverted with embankments used for structural purposes for the M56 and not expected to be infilled with putrescible or organic material and, therefore they are not expected to be a significant source of hazardous gas.
Underlying Geology	
Radon Affected Area	<1% of homes above Action Level. No protective measures are necessary in the construction of new dwellings or extensions. No further consideration required.
Superficial / Bedrock	Glaciofluvial deposits (sand and gravel) over Tarporley Siltstone Formation (siltstone, mudstone and sandstone). No significant contamination sources identified.

Table 4-1: Potential contamination sources.

4.3. Potential Receptors

Potential receptors are detailed in Table 4-2.

Receptors	
Human health	Future site users (including, visitors, and site users).
Controlled waters	Secondary A Aquifer (bedrock) nd Secondary B Aquifer (superficial).
Buildings.	
Potable water pipes.	

Table 4-2: Potential receptors.

4.4. Potential Pathways

Potential pathways are detailed in Table 4-3.

Pathways		
Soil	Human health[6] (Proposed development is an extension to existing school building on hardstood ground, therefore residential use with no soft landscaping has been used as a conservative measure)	Inhalation of vapours outside. Inhalation of vapours inside. Omitted: ingestion of soil, ingestion of soil-derived indoor dust, dermal contact with soil, dermal contact with soil-derived indoor dust, inhalation of soil-derived outdoor dust, inhalation of soil-derived indoor dust, ingestion of contaminated home-grown produce and ingestion of soil attached to home-grown produce.
Soil	Windblown dust and fibres to adjacent receptors.	
	Direct contact with receptors (services).	
Groundwater	Infiltration into the ground, through potentially contaminated material (contamination possibly going into solution).	
Groundwater and gas	Migration through potentially permeable strata and preferential pathways. Superficial (sand and gravel) is likely to be relatively permeable. Bedrock (mudstone, siltstone, sandstone) likely to variably permeable. Preferential pathways: services.	
Gas	Migration into buildings (e.g., via services) and accumulation of gases in confined spaces (potentially causing explosion if methane is present).	

Table 4-3: Potential pathways.

4.5. Preliminary Contamination Conceptual Model

The Preliminary Contamination Conceptual Model is illustrated in Table 4-4.

Generic potential pollutant linkages are described along with an assessment of the risk based upon guidance on probabilities and consequences outlined in CIRIA C552[7].

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

The probability is based on the site history, site reconnaissance, environmental setting, pathways, and receptors.

Reasonable worst-case consequence has been assumed at this stage.

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

Where the risk falls into the moderate/low risk, LKC will undertake an assessment to establish what further work will be required.

Where LKC identifies a moderate or higher risk, intrusive investigation work or precautionary remediation is recommended.

Due to the minor consequence associated with the phytotoxic effect to flora (i.e., loss of plants in a landscaping scheme), the overall risk for the majority of sites will be very low to low. Where soils contain significant concentrations of heavy metals, in general there will other pollutant linkages (i.e., the risk to human health) that will trigger the requirement for remediation (e.g., a clean environmental

cover system). As such the risk to flora associated with phytotoxic contaminants will not be considered further.

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

It should be noted that there may be risk from short term exposure from contaminated soil to site workers. The Preliminary Contamination Conceptual Model deals with long term exposure to key receptors. Acute risks can be easily mitigated by good environmental management of the site during site works. Standard health and safety precautions (as per HSE guidance[8]) should be adopted by all workers involved with site enabling and construction works. Therefore, this receptor is not considered in the contamination conceptual model.

PL	Contaminants of Concern (source)	Pathway	Receptor	Probability	Consequence	Risk	Assessment and Recommendations
1	Asbestos, PAHs, metals (made ground)	Proposed development is hardstood. No viable pathways.	Future site users.	No pollutant linkage, therefore there is no risk with regard to PL1.			No viable pathway as ground is hardstanding. **Recommendations:** No assessment required.
2	Naphthalene (made ground)	Inhalation of vapours. Migration via permeable strata and preferential pathways.	Future site users.	Unlikely	Medium	Low	Unlikely probability as ash-derived naphthalene made ground is not expected to produce significant vapours. **Recommendations:** Soil sampling required subject to ground conditions encountered.
3	Hazardous / ground gas: methane, carbon dioxide.	Migration via permeable strata and preferential pathways. Inhalation of gas. Explosion in confined spaces.	Future site users. Buildings.	Unlikely	Severe	Moderate / Low	Unlikely probability considering there is no significant source of hazardous gas. **Recommendations:** No gas monitoring required unless significant organic / putrescible material identified.
4	PAHs & metals (made ground)	Surface run-off. Migration via permeable strata and preferential pathways. Perched waters migration.	Groundwater	Unlikely	Medium	Low	Unlikely probability as no mobile contaminants are excepted given site history. Hardstanding ground would limit any downward migration into the groundwater **Recommendations**: No water sampling or leaching tests required unless evidence of significant potentially mobile contamination is identified in the soil.
5	Naphthalene (made ground)	Ingestion of tainted water supply.	Future site users. Water pipes.	Unlikely	Medium	Low	Unlikely probability given the historic land use and expected shallow made ground. **Recommendations:** Sampling and analysis of soils if made ground / impacted natural ground at anticipated pipeline depths (c. 0.75-1.35mbgl). Water pipe assessment required if deep made ground / impacted natural soils are encountered

Table 4-4: Preliminary Contamination Conceptual Model.

Notes: PL = Pollutant Linkage. Contaminant of Concern (CoC) - See Table 4-1 for contamination sources.

5. Preliminary Geotechnical Risk Assessment

Table 5-1 summarises the possible geotechnical constraints of the site, based on the site history, environmental settings and site reconnaissance. Investigation work will be required to confirm the risks and provide a detailed geotechnical assessment and foundation design.

Coal Mining	Site is not within a Development High Risk Area. No further assessment required.
Slope Stability	There is a slight level change which may need to be considered during development.
Envirocheck Ground Stability Hazards	No to very low hazard identified. No further action required.
Made Ground	Unknown depth and constituent of made ground across the site. Initial information indicates relatively shallow made ground. Possible in-ground structures from previous developments.
Superficial	Unknown strength of soils for foundation design. Sand and gravel anticipated below the site. Strata may be variable giving differential settlement.
Bedrock	Unknown depth to bedrock.
Groundwater	Unknown depth and variability of groundwater.
Plasticity	Clay not expected on site.
Sulphate	Unknown sulphate content of the made ground and natural.
Road / Pavement Design	Unknown CBR values for footpath and road design.

Table 5-1: Summary of geotechnical constraints.

6. Ground Investigation

6.1. Site Investigation Design and Methodology

The investigation was carried out on 27th May 2025 and comprised the following:

- 3no. window sample boreholes drilled to 2.36-2.92 metres below ground level (mbgl) (ref. WS101 to WS105).
- 3no. hand excavated foundation pits (using hand auger / spade) excavated to 0.90-1.20mbgl (ref. FP101 to FP103).
- 2no. falling head tests undertaken within window sample boreholes WS101 and WS102 (ref. FHT101 and FHT102). All site investigation locations are shown in Figure 3.

The locations were chosen to allow adequate assessment of ground conditions across the site. Table 6-1 details the site investigation locations.

Site Investigation Locations	Rationale
FP101-FP103	Target current foundations in area of proposed development.
WS101 and WS102/FHT102	Target proposed building area.
WS103/FHT102	Target proposed canopy area.

Table 6-1: Summary of Sampling Locations.

All profile logs are provided in Appendix F and are in line with BS14688-1[9] and BS5930[10].

6.2. Sampling Protocol

6.2.1. Soil Sampling (Contamination)

Standard sampling protocol and preservation of samples was undertaken as described in the EA guidance on site investigation[11].

Soil was collected for onsite testing for total volatile organic compounds (TVOCs) using a photoionisation detector (PID) fitted with a 10.6eV lamp and moisture trap. A plastic zip bag was half filled with soil allowing a suitably sized headspace. The bag was sealed and stored for at least 20 minutes before being tested. Results of the PID readings are presented on the profile logs (Appendix F). The onsite monitoring was carried out in line CIRIA C665[12] to aid in screening samples for volatile analysis.

Soil samples of approximately 500g were recovered in amber jars and plastic tubs. All the samples were sent to DETS laboratory for chemical testing.

Many of the contamination tests are UKAS or MCERTS accredited and further details are given in the Certificate of Analysis presented in Appendix G. Table 6-2 shows the soil testing undertaken.

Testing	No. Samples	Justification
Metals / metalloids, pH, water soluble sulphate, cyanide suite, phenol, TPHCWG, BTEX, MTBE, speciated PAHs, SOM and asbestos screen.	1	A more detailed suite undertaken within the made ground of WS102 which contained with frequent ash, occasional clinker, brick and bitumen fragments.
Metals / metalloids, pH, water soluble sulphate, speciated PAHs, SOM and asbestos screen.	2	A basic suite with a broad selection of contaminants where evidence of contamination was identified less evidence contamination was identified (brick, ash clinker and bitumen).

Table 6-2: Summary of Soil Testing.

Notes:

If asbestos present during screen identification and quantification will be undertaken.

Metal/metalloids=arsenic, cadmium, chromium, (total and hexavalent), copper, lead, mercury, nickel, selenium, vanadium, zinc, and boron; TPHCWG=carbon banded and aromatic/aliphatic split petroleum hydrocarbons; PAH=polycyclic aromatic hydrocarbons, BTEX=benzene, toluene, ethylbenzene, and xylenes; MTBE=Methyl tert-butyl ether, SOM=Soil Organic Matter.

6.2.2. Soil Sampling (Geotechnical)

Soil samples taken during the investigation were collected in tubs and bulk bags and sent to Murray Rix Laboratories for geotechnical testing.

Further details are given in the laboratory report presented in Appendix H. Table 6-3 shows the geotechnical testing undertaken.

Testing	No. Samples
Atterberg Limits (plasticity testing)	3
Moisture Content	2
BRE Suite Short	2

Table 6-3: Summary of Geotechnical Testing Undertaken.

6.2.3. Water Sampling / Leaching Testing

Groundwater sampling / leaching testing was not carried out as part of this investigation.

A low risk was identified in the preliminary contamination conceptual model for controlled waters (Pollutant Linkage 4) and further action was only recommended if significant soil contamination was identified on site. Based on the ground conditions encountered, LKC did not consider testing to be required. This is discussed further in Section 9.4.

6.3. In-situ Testing

6.3.1. Geotechnical Testing

In-situ geotechnical tests were performed in the boreholes to further characterise the sub-soil conditions. The following tests were undertaken:

- Standard Penetration Tests (SPTs) were performed in the window sample boreholes at approximately 1m intervals.
- Pocket penetrometer tests (giving undrained shear strength) were performed in the window sample boreholes within cohesive strata.

Pocket penetrometer tests were not possible in window sample WS101 due to the friable nature of the clay deposits.

The results are provided within Appendix F.

6.3.2. Falling Head Tests

LKC undertook falling head tests in WS101 and WS102 (ref. FHT101 and FHT102) to assess the permeability of the ground. The tests were carried out in general accordance with guidance given in BS5930[13] and BS22282[14].

The tests were carried out in monitoring wells installed within the boreholes / cased window sample boreholes during drilling work.

The results are presented in Appendix I.

6.4. Gas Monitoring

Gas monitoring was not carried out as part of this investigation.

A low / moderate risk was identified in the preliminary contamination conceptual model for gas (Pollutant Linkage 3) and further action was only recommended if significant organic / putrescible material was identified on site. Based on the ground conditions encountered, LKC did not consider gas monitoring to be required. This is discussed further in Section 9.3.

7. Ground Conditions

7.1. Geology

The ground conditions beneath the site are summarised below. Logs are provided in Appendix F. it should be noted that WS102 was undertake at a level approximately 0.4m below that of the other 2 boreholes and the ground level of the proposed structure.

7.1.1. Made Ground

Made ground was recorded in all boreholes to depths of 1.20-1.80mbgl. The made ground comprised gravel (WS102 and WS103) and silt (WS101), with anthropogenic material including ash, brick and glass.

7.1.2. Natural Strata

Superficial strata comprised firm becoming very stiff clay to 2.40-2.92mbgl. A strata of silty clayey sand was noted in WS102 at 0.70-0.90mbgl.

7.1.3. Contamination

Visual / olfactory evidence of contamination was identified as follows:

- WS102 0.30-0.70mbgl: Moderate bituminous odour.
- WS103 0.55-0.85mbgl: Moderate bituminous odour.

The PID recorded a maximum of 0.4ppm TVOC in the samples.

7.1.4. Obstructions

No obstructions were identified within any investigation location.

7.2. Groundwater

No groundwater strikes were noted during the investigation within the boreholes or foundation pits.

7.3. Permeability Tests

7.3.1. Falling Head Tests

The results of the falling head tests are presented in Appendix I.

BS5930[15] indicates that if 'H_o' is taken as the groundwater 'Head' above baseline conditions following the addition of water at the start of the permeability test; and 'H' is the measured groundwater 'Head' above baseline conditions at any given time during the test, then the time taken to reach a head ratio (H/H_o) of 0.37 is used to calculate the permeability of the soils.

Due to the slow draining in WS101 and WS102, only one test was carried out in each borehole and H/H_o of 0.37 was not reached, therefore the permeability has not been calculated.

8. Geotechnical Assessment

8.1. Proposed Development

It is understood that the proposed development will comprise an extension to the southern end of existing school building, with a canopy area on the eastern side.

Details of the proposed loadings are not known and therefore a line loading of 75kN/m has been assumed for preliminary assessment purposes only.

The finished ground levels have not been provided, and it is therefore anticipated that they will not vary significantly from current levels. However, should the development proposals or finished levels be altered then the comments/recommendations in this section may require revising.

Given the nature of the proposed development the structure meets the criteria of Geotechnical Category 1 of Eurocode 7[16].

Given the nature of the development the acceptable risk from settlement is a total settlement value of 25mm.

8.2. Summary of Ground Conditions

Ground conditions identified at the site are detailed in Section 7.1, and typically comprise Made ground to depths of 1.20-1.80mbgl underlain by superficial strata comprised firm becoming very stiff clay to 2.40-2.92mbgl. This is interpreted as the Glacial Till, the underlying bedrock of the Tarporley Siltstone Formation has not been encountered.

8.3. Site Preparation

The site should be cleared in accordance with Series 200 of the Specification for Highway Works[17]. This should include:

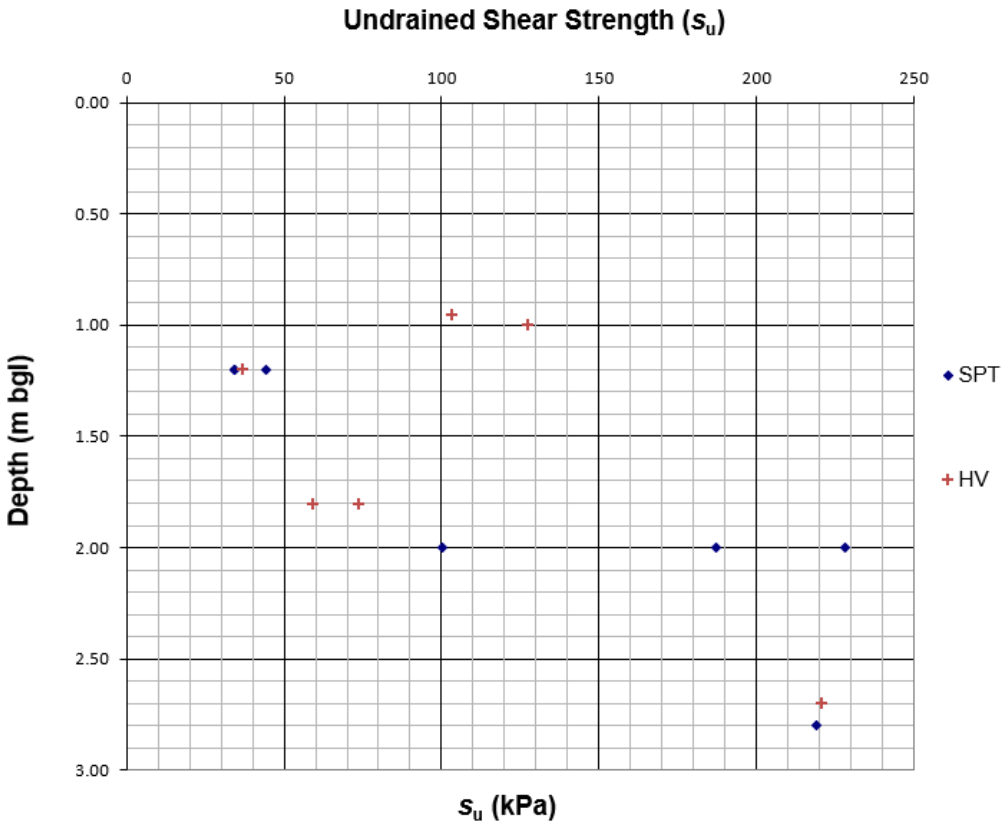
- Redundant services should be sealed off and grubbed out and replaced with suitable compacted engineered fill; and,
- Buried structures and old foundations have been encountered on site. These should be excavated from below the proposed development footprint with the resulting void backfilled.

The near surface soils may potentially be disturbed by weathering and site traffic. Precautions should be taken to avoid this, as excessive disturbance may result in more onerous floor slab design, road cap thickness and increased amount of site disposal etc. Based on site observations the near surface soils may require at least some treatment or reinforcing to allow safe movement of construction plant and labour.

8.4. Foundation Conditions and Bearing Capacity

8.4.1. General

The natural cohesive material has been assessed using in-situ testing by SPT testing to obtain the undrained shear strength (su) of the material. The results of the testing have been plotted against depth and is shown in Graph 8-1.



Graph 8-1: Summary of S_u Vs. Depth from In-Situ SPT Testing.

Graph 8-1 demonstrates a general increase in strength with depth of the clays down to refusal below 2-2.5m.

8.4.2. Plasticity

Clay samples were subjected to Atterberg Limits (plasticity) and Moisture Content testing. Results are provided in Appendix H. The clay is classified as low plasticity.

The modified plasticity index as detailed in Chapter 4.2-D5 of the NHBC standards (modified plasticity index = plasticity index x % less than 425µm sieve / 100%) characterises the clay as having a low volume change potential.

8.4.3. Foundations Options

The made ground is not suitable for a founding material due to the inherent variability of the material.

Strip or pad foundations can be constructed into the underlying stiff clay at depth sog 1.5-2.0m with Allowable Bearing Capacities of 150kN/m² and 100kN/m² for 1m and 2m wide foundations respectively.

An assessment of settlement has been undertaken using the following:

- Allowable Bearing Capacity of 100 kN/m².
- Foundation width of 0.75m.
- Coefficient of Volume Compressibility (Mv) of 0.2m²/MN taken from correlations with clay strength. The Mv value is taken from the stress range representative of the design foundation loading..

Based on this settlement is estimated to be less than 25mm.

8.5. Ground Floor Slabs

Warranty providers such as NHBC will require suspended floor slabs where Made Ground is in excess of 600mm. Due to the presence of varying thickness' up to 1.0m depth of Made Ground across the site, it is considered that a suspended floor slab will be required for the proposed structures.

8.6. Concrete Durability

Based upon the results of the chemical analyses (Appendix G), subsurface concrete can be designed in accordance with Design Sulphate Class DS-1, Aggressive Chemical Environment for Concrete Classification (ACEC) AC-1s in accordance with the recommendations provided in BRE Special Digest 1 (2005).

8.7. Excavations

Due to the variability of the made ground all excavations should be supported or battered back in accordance with guidance contained in CIRIA R97[18]. It is anticipated that the undercroft will be formed either with an open excavation, in which case the side slopes should be suitably battered, or the excavation will be supported with sheet pile or secant bored pile wall. Groundwater seepages were noted in several trial pits; however, these were minor, and that conventional sump pumping should be adequate.

9. Generic Risk Assessment

9.1. Introduction

Current good practice requires that the findings from a site investigation should be evaluated on a site-specific basis, using a risk-based approach. Risk assessment involves identification and evaluation of the hazards presented by the concentrations of contaminants measured followed by an evaluation of the risks which are associated with these hazards (LCRM[19]). Information gathered from the risk assessment has been collated in the revised contamination conceptual model in Section 9.6.

9.2. Soil Risk Assessment

9.2.1. Methodology

With regards to the soil risk assessment LKC will use the following hierarchy:

- Category 4 Screening Levels (C4SLs) [20, 21].
- LQM Suitable 4 Use Levels (S4ULs) [22, 23, 24, 25].

The proposed development is for a school building extension with additional canopied area. There is no soft landscaping proposed and therefore no direct contact exposure pathway. As a conservative measure, the assessment criteria for residential without plant uptake has been used.

All criteria have been generated using the CLEA V1.06 model[26] based either on 1%, 2.5% and 6% Soil Organic matter (SOM). Results will be compared to the nearest appropriate SOM.

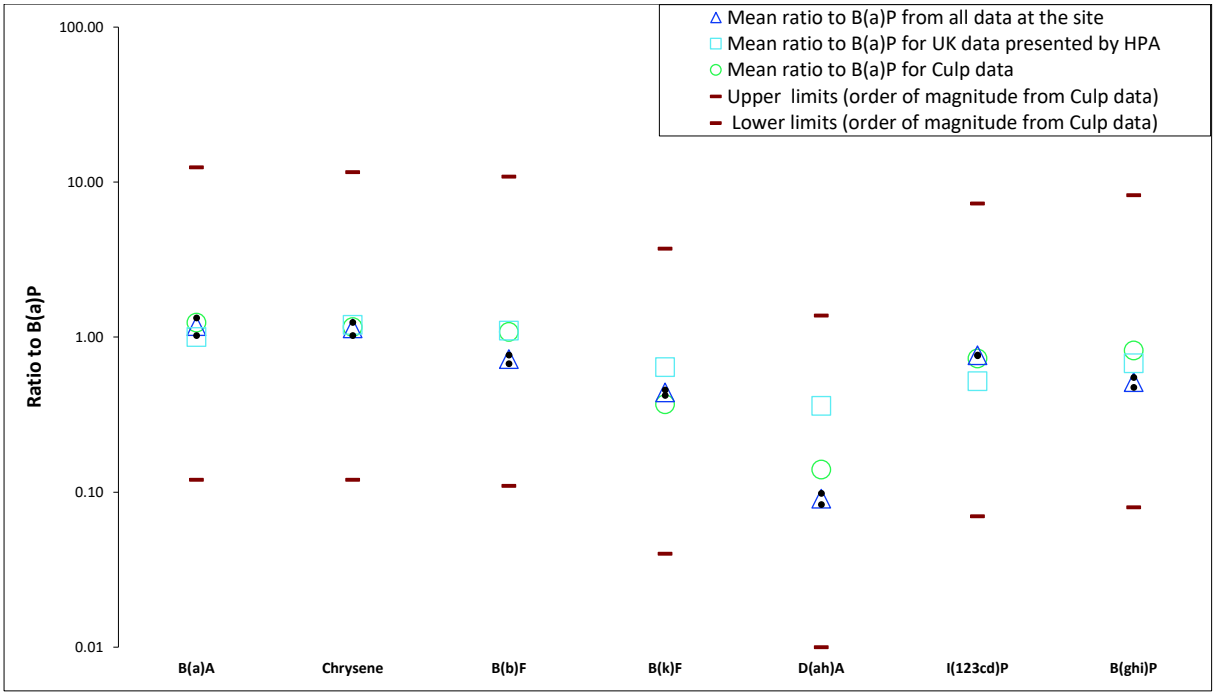
A summary of the generic assessment criteria used in this assessment is provided in Appendix J.

B(a)P as Surrogate Marker

LKC consider the main risk drivers for PAHs are benzo(a)pyrene (B(a)P) and naphthalene. This is due to B(a)P possibly being a carcinogen and most toxic of the PAHs[27,28] and naphthalene the most volatile and soluble[29]. The C4SLs indicate B(a)P as a surrogate marker for carcinogenic PAHs, if it falls within appropriate limits, since the risk from other non-carcinogenic PAHs are considered negligible[30]. For B(a)P to be used as a surrogate marker it should follow the profile described by the HPA (2008)[31] and CL:AIRE (2013). Naphthalene will be treated separately using the LQM S4ULs.

LKC undertook an assessment of the PAH data for the site with regards to using B(a)P as a surrogate marker for carcinogenic PAHs as per HPA and CL:AIRE guidelines. The primary toxicological study related to Culp *et.al*[32], which was based on coal tar mixtures (>80,000mg/kg of total PAHs) fed in food to mice over a two-year carcinogenicity study.

Graph 9-1 summarises the study site data with respect to how the ratios of carcinogenic PAHs relate to B(a)P, within the confidence limits provided in the HPA document.



Graph 9-1: The ratio of PAH to B(a)P in soil for all available data at the site based on 3 samples (where values were >LOD to allow the calculation of a ratio).

Notes:

B(a)P=Benzo(a)pyrene; D(ah)A=Dibenzo(ah)anthracene; B(a)A=Benzo(a)anthracene; B(b)F=Benzo(b)fluoranthene; B(k)F=Benzo(k)fluoranthene; I(123cd)P=Indeno(123cd)pyrene; B(ghi)P=Benzo(ghi)perylene.

All the data points that could be used to calculate ratios fall inside the upper or lower limits.

Based on this distribution of data LKC considers B(a)P can be used as a surrogate marker for carcinogenic PAHs and the C4SL criteria is suitable for this dataset.

An assessment of the data should be undertaken to confirm B(a)P is a suitable surrogate marker by assessing the ratios of carcinogenic PAHs to B(a)P. However, as most of the PAHs were recorded as less than detection limits, the assessment could not be undertaken.

9.2.2. Soil Results Comparison against Assessment Criteria

All analysis sheets are presented in Appendix G.

Results have been compared to the relevant assessment criteria and no elevated contaminants were identified.

Asbestos was identified, as detailed in Table 9-1.

Sample Location	ID	Type	Total Asbestos (%)
WS102 (0.30-0.70)	Amosite	Bundles of Amosite fibres	0.001
WS103 (0.55-0.75)	Amosite	Bundles of Amosite fibres	0.001

Table 9-1: Details of Asbestos Identified.

9.2.3. Direct Contact Risk – Pollutant Linkage 1

No elevated PAHs, metals or hydrocarbons were identified on site.

The primary conceptual model identified that there is no pollutant linkage, as the proposed development is hardstood with no viable pathways. Therefore there is no risk with regard to PL1, and no remediation is recommended.

Asbestos was identified in 2no. samples. The locations on site are under hardstood ground, and under the proposed new extension, therefore there is no direct pathway to the receptor. Therefore, the

probability of asbestos affected site users is considered to be unlikely. With a medium consequence, the risk is low and remediation is not required.

Additional consideration should also be given to the risk to workers and offsite receptors during groundworks and construction. This is discussed further in Section 11.2.

9.2.4. Risk from Inhalation of Vapours – Pollutant Linkage 2

No visual / olfactory evidence of volatile contaminants was identified during the investigation. The PID recorded a maximum value of 0.4pp. Confirmatory soil analysis did not detect any TPHCWG OR BTEX above assessment criteria.

LKC therefore consider the probability of volatile contaminants affecting site users as unlikely. The consequence is expected to be medium, giving a low risk and no remediation is required.

9.3. Gas Risk Assessment

Gas monitoring was not carried out as part of this assessment. The PRA identified a moderate risk and recommended gas monitoring if a significant depth of organic / putrescible material was identified.

No organic / putrescible material was encountered on site. Made ground was recorded to depths of 1.20-1.80mbgl and comprised gravel and / or silt with anthropogenic material including ash, brick and glass.

Given the ground conditions encountered, LKC considers the probability of gas posing a risk to site users as unlikely. The consequence is severe, which gives a moderate / low risk. Given the known ground conditions, LKC considers there to be a low risk and no further action is required with respect to Pollutant Linkage 3.

9.4. Controlled Water Assessment

The PRA identified a low risk with respect to controlled waters as no significant source of mobile contamination was anticipated. Furthermore, although a Principal Aquifer is present below the site, no abstractions have been identified within influencing distance and the site is not located in a Source Protection Zone. The surface water is not considered to be a significant receptor.

No evidence of significant mobile contamination was identified on the site, and no elevated metals, PAHs or hydrocarbons were identified within the soils from the soil testing results. This confirms an unlikely probability of onsite contamination affecting controlled waters. With a medium consequence the risk is anticipated to be low, and no remediation is required.

9.5. Potable Water Supply (Pollutant Linkage 5)

Soil results were compared to United Utilities (UU) guidelines for the selection of potable water pipes in land potentially affected by contamination. Only contaminants of concern, based on the preliminary conceptual model and ground conditions encountered, were analysed.

Elevated VOCs (based on naphthalene only), TPH EC10-16 and TPH EC16-40 has been identified. Based on the ground conditions, this is likely to be site wide within the made ground, where bitumen fragments, clinker and ash were identified.

The probability of organic contaminants affecting potable water pipes is likely. Given the consequence is considered to be medium, the risk (Pollutant Linkage 5) is anticipated to be low / moderate risk and remediation is likely to be required.

9.6. Revised Contamination Conceptual Model

The preliminary contamination conceptual model (Table 4-4) has been revised following the risk assessments undertaken in Sections 9.1-9.4. The revised contamination conceptual model follows the

same methodology and guidance used in the preliminary contamination conceptual model. The risk matrix is provided in Appendix A.

The revised contamination conceptual model is presented in Table 9-2.

Where a very low risk or low risk is identified no specific remediation is required.

Where there is a moderate / low risk is identified, some form of remediation may be required depending on the pollutant linkage, the type and concentration of contaminants present and the proposed development.

Where LKC identifies a moderate or higher risk, remediation or further investigation work is recommended.

PL	Contaminants of Concern (source)	Pathway	Receptor	Probability	Consequence	Risk	Recommendations
1	Asbestos, PAHs, metals (made ground).	Proposed development is hardstood. No viable pathways.	Future site users.	No pollutant linkage, therefore there is no risk with regard to PL1.			Although there is asbestos noted within the made ground, the proposed development is hardstood therefore there is no viable pathway, and no pollutant linkage. No remediation required.
2	Naphthalene (made ground).	Inhalation of vapours. Migration via permeable strata and preferential pathways.	Future site users.	Unlikely	Medium	Low	No remediation recommended.
3	Hazardous / ground gas: methane, carbon dioxide.	Migration via permeable strata and preferential pathways. Inhalation of gas. Explosion in confined spaces.	Future site users. Buildings.	Unlikely	Severe	Moderate / Low	No remediation recommended.
4	PAHs & metals (made ground)	Surface run-off. Migration via permeable strata and preferential pathways. Perched waters migration.	Groundwater	Unlikely	Medium	Low	No remediation recommended.
5	Naphthalene, hydrocarbons (made ground)	Ingestion of tainted water supply.	Future site users. Water pipes.	Likely	Medium	Moderate	Water pipeline risk assessment to be undertaken. Barrier pipe is likely to be required

Table 9-1: Revised Contamination Conceptual Model.

10. Conclusions

10.1. Ground Conditions

Ground conditions are summarised in Table 10-1 below.

Made Ground	Present to depths of 1.20-1.80mbgl and comprising gravel or silt, anthropogenic material including ash, brick and glass.
Superficial	Firm becoming very stiff clay to 2.40-2.92mbgl. A strata if silty clayey sand was noted in WS102 at 0.70-0.90mbgl.
Groundwater	Not encountered.
Obstructions	Not encountered.
Permeability	Slow progress was observed for both falling head tests. H/Ho of 0.37 was not reached, the permeability is not been calculated.

Table 10-1: Summary of Ground Conditions.

10.2. Geotechnical

Geotechnical observations and conclusions are contained in Table 10-2 below, more detailed discussions are contained within Section 8.0.

Exposed Existing Foundations	Existing foundation minimum 0.80m or in excess of 1.20mbgl.
Allowable Bearing Pressure	150kN/m^2 at 1.5m for 1m wide foundations.
Anticipated Foundation Type	Traditional shallow foundations from approximately 1.5mbgl. If soft ground is encountered, foundations may need to be deepened / widened.
Concrete Requirements	Based on BRE Digest 2005[33] – DS-1 AC-1 recommended.

Table 10-2: Geotechnical Conclusions Table.

10.3. Contamination Assessment

A revised contamination conceptual model has been produced by LKC which is summarised in Table 10-3 below (more detailed model provided in Section 9).

PL	Contaminant	Risk	Recommendations
1	Asbestos, PAHs, metal.	No pollutant linkage, therefore there is no risk with regard to PL1.	Although there is asbestos noted within the made ground, the proposed development is hardstood therefore there is no viable pathway, and no pollutant linkage. No remediation required.
2	Naphthalene.	Low	No remediation recommended.
3	Hazardous / ground gas: methane, carbon dioxide.	Moderate / Low	No remediation recommended.
4	PAHs, metals.	Low	No remediation recommended.
5	Naphthalene, hydrocarbons.	Moderate	Remediation recommended. Water pipeline risk assessment to be undertaken.

Table 10-3: Summary Risk Table.
PL=Pollutant Linkage, see Table 9-2 for details.

11. Recommendations and Remediation Strategy

The recommendations/requirements provided below are considered appropriate for the site based on the site investigation work undertaken. LKC should stress that no remediation, enabling works or designing works should take place until Regulatory approval has been obtained.

The local authority may require a standalone Build-Phase Remediation Strategy and Verification Plan in accordance with LCRM Stage 3 remediation and verification[34]. This should be produced once details of design, contractors and installation are known.

A summary of remediation requirements is included in Table 11-1.

PL	Recommendation
1	No remediation required.
2	No remediation required.
3	No remediation required.
4	No remediation required.
5	Potable water pipe assessment required. Barrier pipe likely required.

Table 11-1: Remediation Summary.

11.1. Remediation and Validation Recommendations

11.1.1. Potable Water Pipe Remediation (PL5)

It is recommended that a Water Pipeline Assessment[35] is undertaken once the location and depth of potable water pipes are known. If the made ground is not removed from site, it is likely that barrier pipe will be required.

Validation of pipeline installation should include delivery notes of pipe materials, photographs of installed pipe and confirmation of connections.

11.2. Other Considerations

11.2.1. Unexpected Contamination

The relevant contractors should be briefed that during development works at the site should any unusual ground conditions and / or visual or olfactory evidence of contamination (including asbestos containing material) be encountered at the site, LKC and the Local Authority should be informed, and further assessment of the material may be required.

Impacted soils should be placed on an impermeable surface to await further assessment, treatment, or removal from site (this may be subject to chemical testing to confirm suitable waste facility). The work should be done under the supervision and instruction of an environmental consultant.

To determine that significantly impacted soils have been removed, verification samples will be collected from the base and sides of the excavation. If all impacted ground cannot be removed and contamination remains on the ground, further remediation may need to be considered.

Validation requirements should include a log of work undertaken, including photographs and details of any sampling undertaken and validation of any potential additional remedial work.

11.2.2. Disposal

Material required to be removed from site should be undertaken under an appropriate duty of care and the results of chemical analysis should be provided to a licensed landfill for confirmation of waste classification.

Waste records such as disposal tickets and waste carrier licences should be provided in the Site Completion Report. Photographic evidence of removal and waste removal tickets should be retained and included in the validation report.

11.2.3. Asbestos in Soils Management Plan

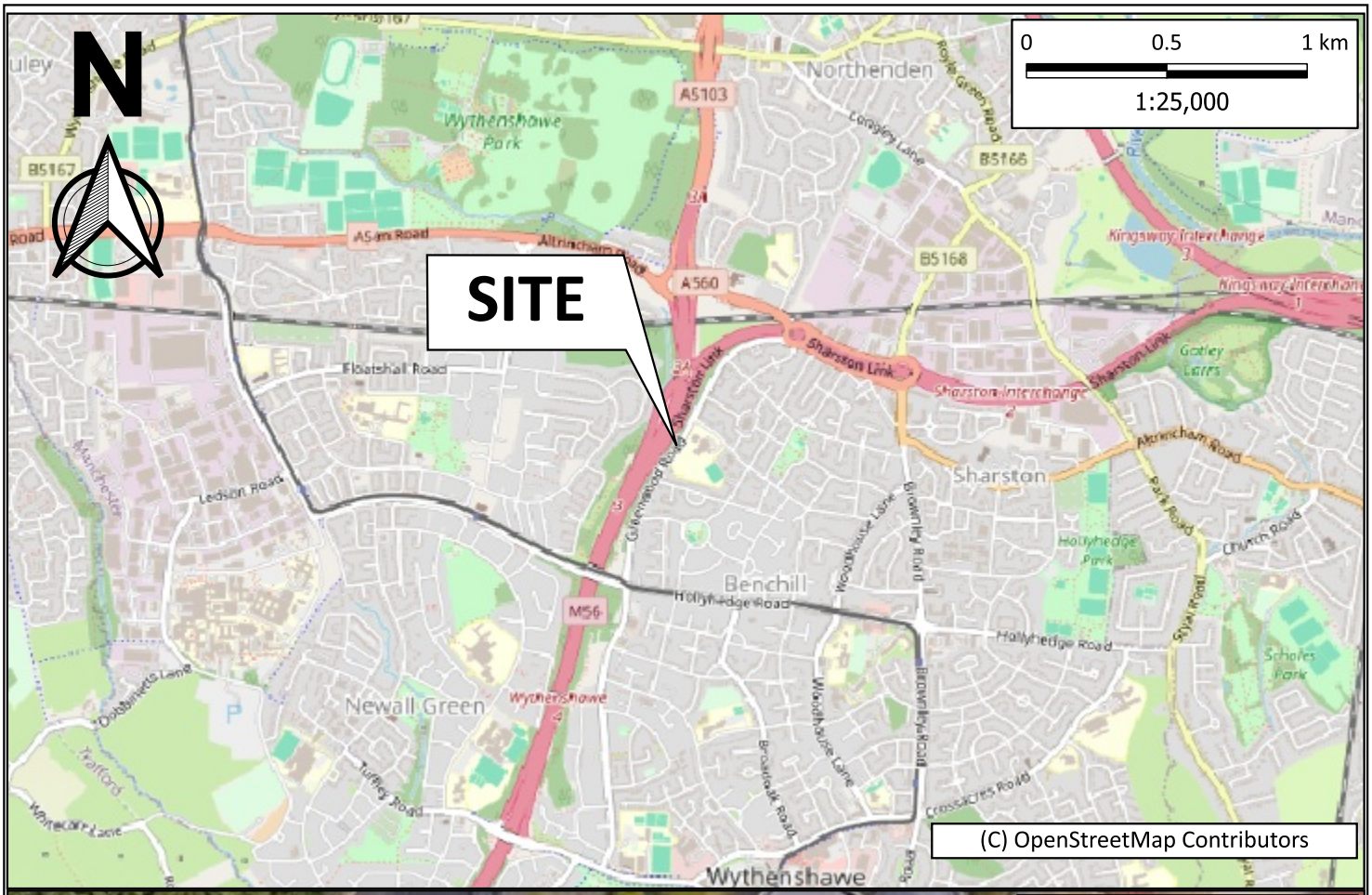
Due to the presence of asbestos containing material, it is recommended that additional precautions are taken during site clearance, earthworks, and construction in the area of concern. The presence of asbestos in the made ground at the site presents a potential risk of generation of airborne fibres if this material is disturbed, such as for excavations to construct new foundations.

LKC recommend that an appropriate 'Asbestos Management Strategy' is developed in line with CIRIA C733[36].

11.3. Site Completion Report

All remediation and validation work should be documented in a Site Completion Report. The Site Completion Report will allow discharge of relevant planning conditions.

Figures





Client: Black Cat Building Consultancy Ltd		Title: Site Location & Boundary Plan	
Site: Benchill Road, Wythenshawe		Scale (see scale bar): 1:25,000 & 1:500 @ A4	Figure: 1
Job No.: LKC251240	Drawn By: JL / Checked By: JW / Drawn: May 2025		Revision:

LK CONSULT



KEY

- Site Boundary
- Existing building areas maintained for access by the main school to classrooms
- Existing building areas to have minor refurbishement ready for use by SEND
- Existing building areas to extension alterations ready for use by SEND
- New extension to create addtional areas for use by SEND
- Alternations to external areas to provide secure play area to be used by SEND

Notes on Building areas

Proposals based typical alternative provision for pupils been ambulant/abled users with no additional needs. Any additional needs need to be confimed to ensure suitable accomodation is further provided.

Dining

No allowance has been made for Dining areas and children shall use the main school facilities, where children are unable to use main school classroom areas shall be used.

Practical Lessons/Teaching

No allowance has been made for Practical areas and children shall use the main school facilities

Staff areas

Minor allowance has been made for staff areas and the staff shall use the main school facilities for larger meetings, traing, staffroom etc

Medical Treatment

Small provision has been made fro Medical treatment this is to be supplemeted by the main school facilities.

All proposals subject to services design input and survey

All proposals subject to structural design input and survey

All proposals subject to statuatory approval requirements

All proposals subject full measured survey

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

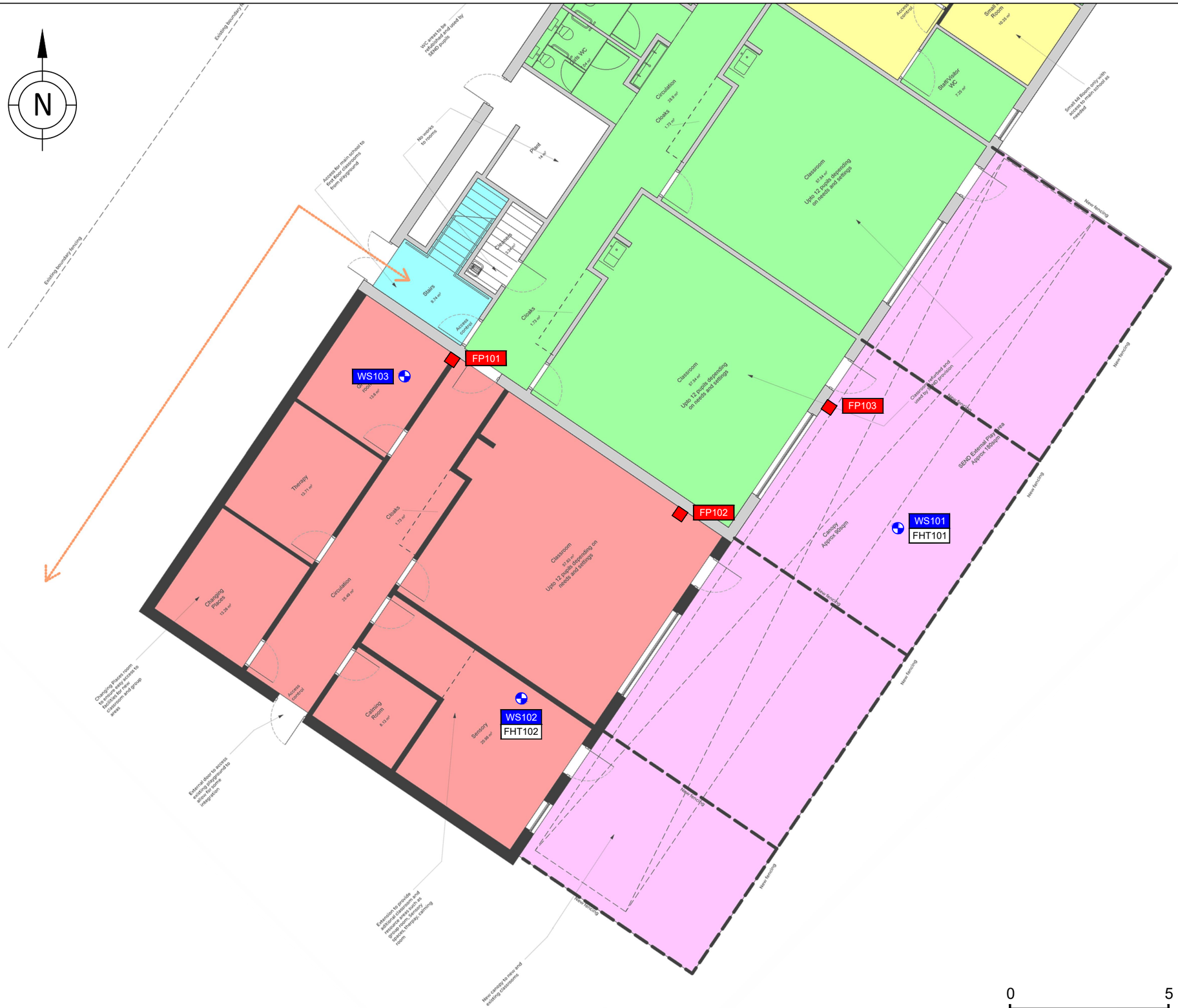
LK CONSULT

Client:	Black Cat Building Consultancy Ltd
Site:	Benchill Road, Wythenshawe
Title:	Proposed Development Plan

Job No.:	Scale (See Scale Bar):	Figure:	Revision:
LKC251240	See Scale Bar	2	

Drawn By:	Checked By:	Drawn:
AC	JW	Jun 2025

Extract From: Blackcat Building Consultancy
Drawing Ref: Proposed Floor Plan, No.BPS-SP-00-P-00-0002, Rev:A (08/04/2025)



0 5

SCALE (Metres)

Extract From: Blackcat Building Consultancy
Drawing Ref: Proposed Floor Plan, No.BPS-SP-00-P-00-0002, Rev:A (08/04/2025)

KEY

- Site Boundary
- Window Sample Borehole (WS)
- Falling Head Test (FHT)
- Foundation Inspection Pit (FP)

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

LK CONSULT

Client: Black Cat Building Consultancy Ltd

Site: Benchill Road, Wythenshawe

Title: Proposed Development Plan

Job No.:	Scale (See Scale Bar):	Figure:	Revision:
LKC251240	1:125 @ A3	2	

Drawn By:	Checked By:	Drawn:
AC	JW	Jun 2025

Appendix A – Risk Matrix

RISK EVALUATION

The method for risk evaluation is a qualitative method of interpreting the output from the risk estimation stage of the assessment, based on CIRIA 552[37]. It involves the classification of the:

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

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

Table A. Classification of Consequence

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

Table B. Classification of Probability.

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

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

Table C. Comparison of Consequence against Probability

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

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

Table D. Description of the Classification and Likely Action Required.

Where a very low risk is identified no specific remediation is required.

Where a low risk is identified, some form of remediation may be required depending on the pollutant linkage, the type and concentration of contaminants present and the proposed development.

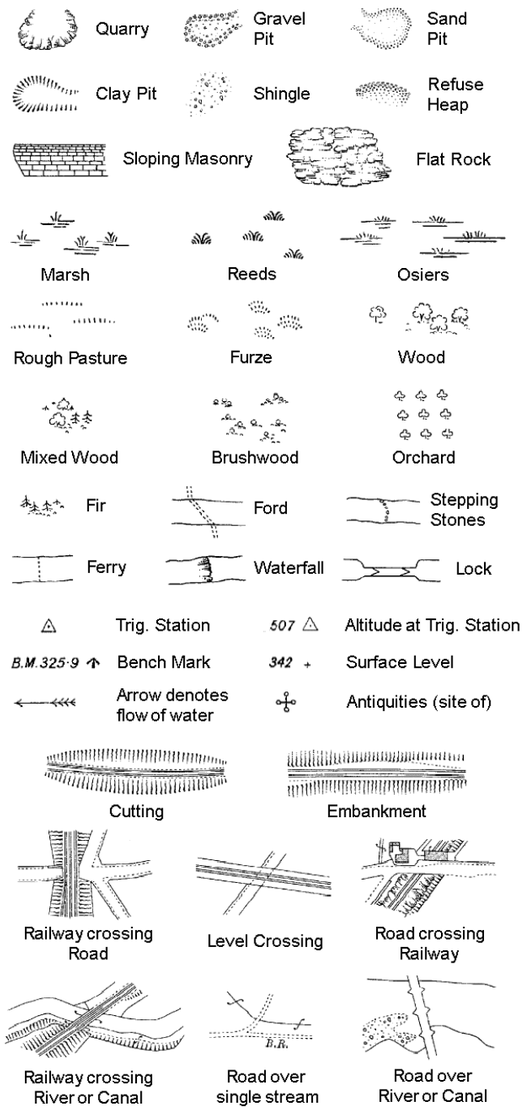
Where there is a moderate/low risk is identified, an assessment will be undertaken to establish what category the pollutant linkage will fall into.

Where LKC identifies a moderate or higher risk, remediation or further investigation work is recommended.

Appendix B – Historical Maps

Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

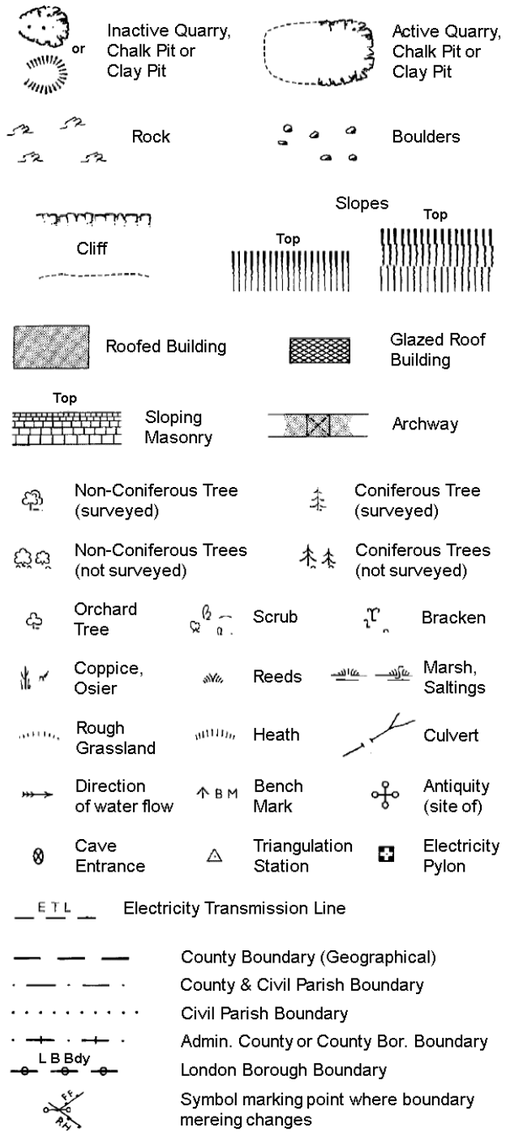
Administrative County & Civil Parish Boundary

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

Co. Burgh Bdy. County Burgh Boundary (Scotland)

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

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



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

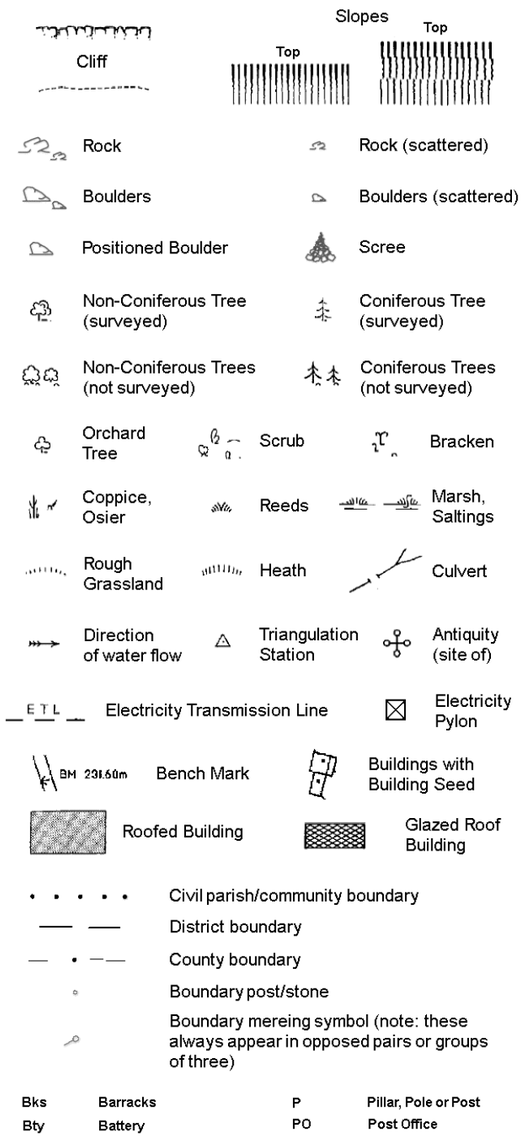
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

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

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



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

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

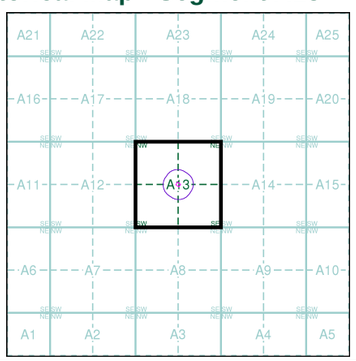
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity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

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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cheshire	1:2,500	1877	2
Lancashire And Furness	1:2,500	1893	3
Cheshire	1:2,500	1898	4
Lancashire And Furness	1:2,500	1907	5
Cheshire	1:2,500	1910	6
Lancashire And Furness	1:2,500	1922	7
Lancashire And Furness	1:2,500	1934 - 1935	8
Ordnance Survey Plan	1:1,250	1960	9
Ordnance Survey Plan	1:2,500	1960 - 1961	10
Additional SIMs	1:1,250	1960	11
Ordnance Survey Plan	1:1,250	1974 - 1978	12
Supply of Unpublished Survey Information	1:1,250	1974	13
Large-Scale National Grid Data	1:1,250	1992	14
Large-Scale National Grid Data	1:1,250	1995	15
Historical Aerial Photography	1:2,500	2000	16

Historical Map - Segment A13



Order Details

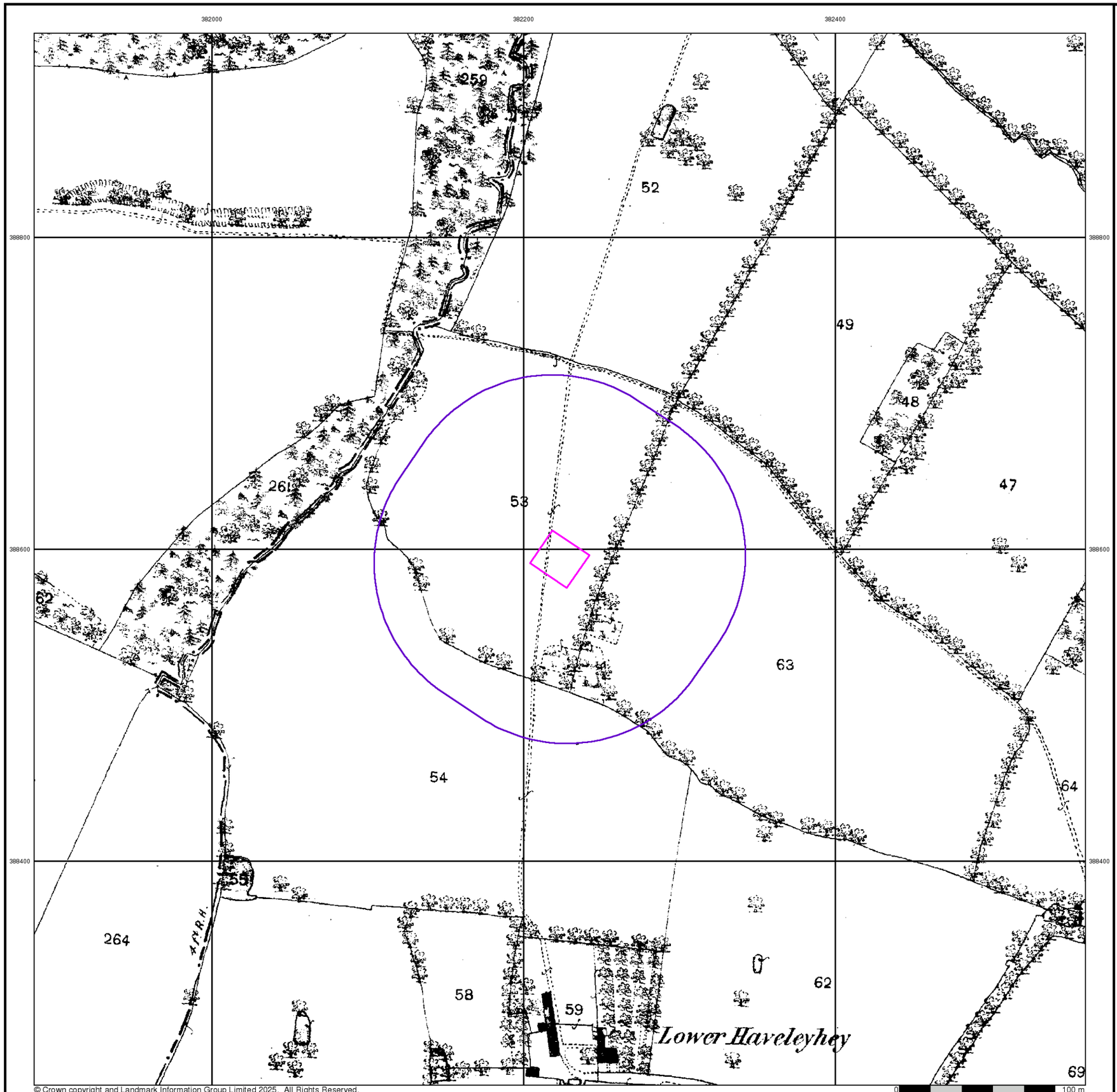
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Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	100

Site Details

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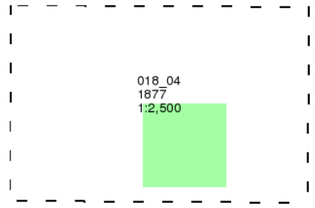
Cheshire

Published 1877

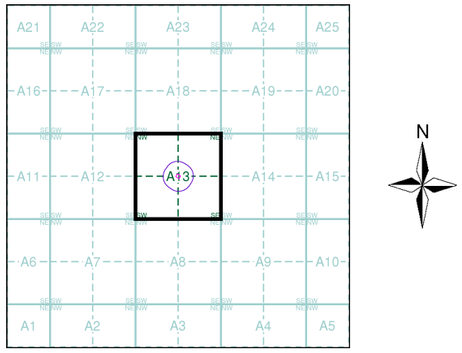
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13

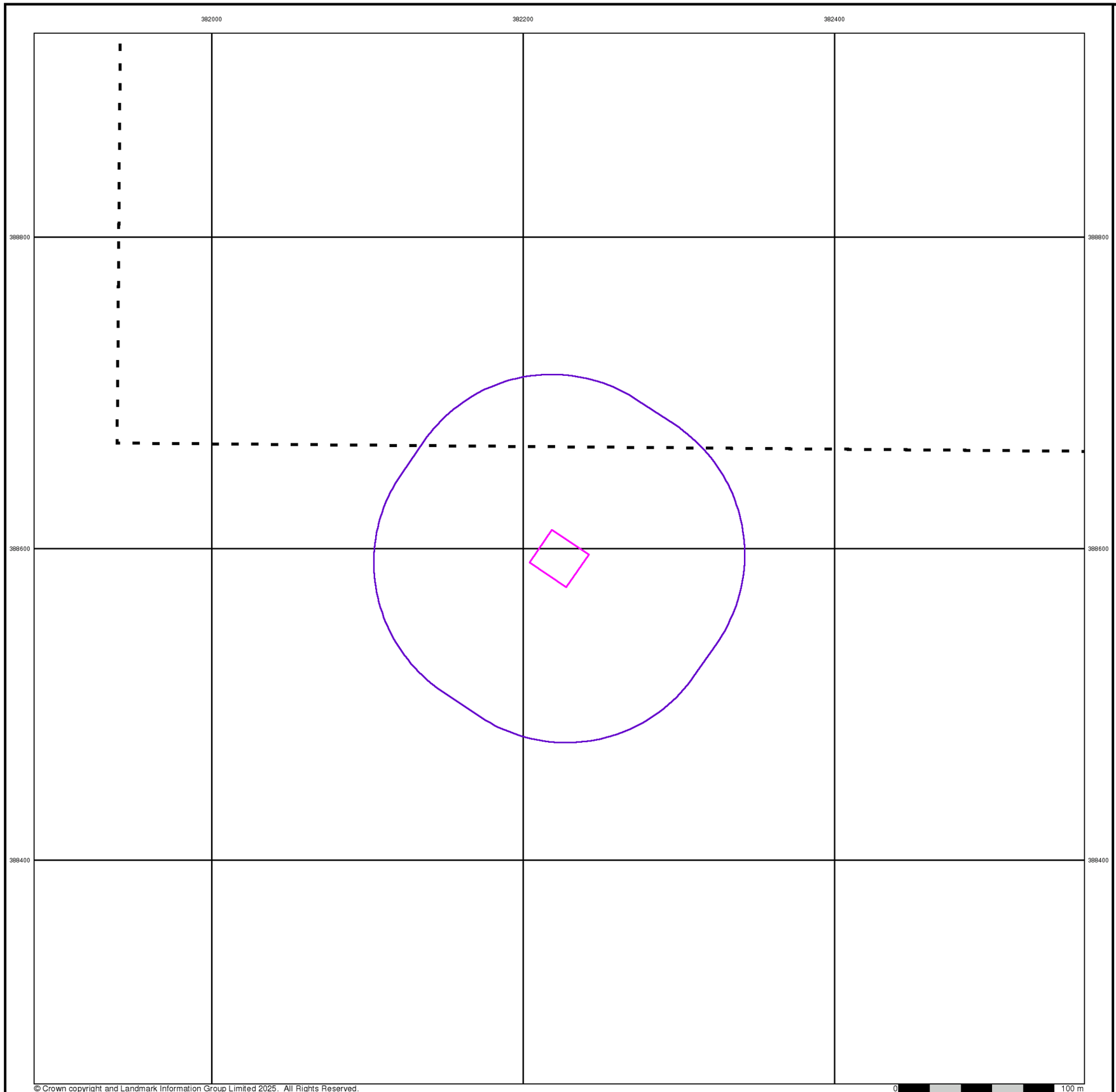


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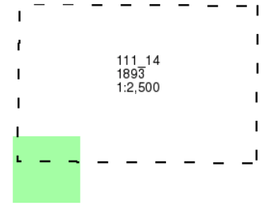
Lancashire And Furness

Published 1893

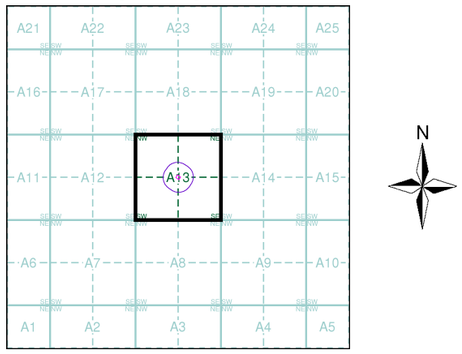
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



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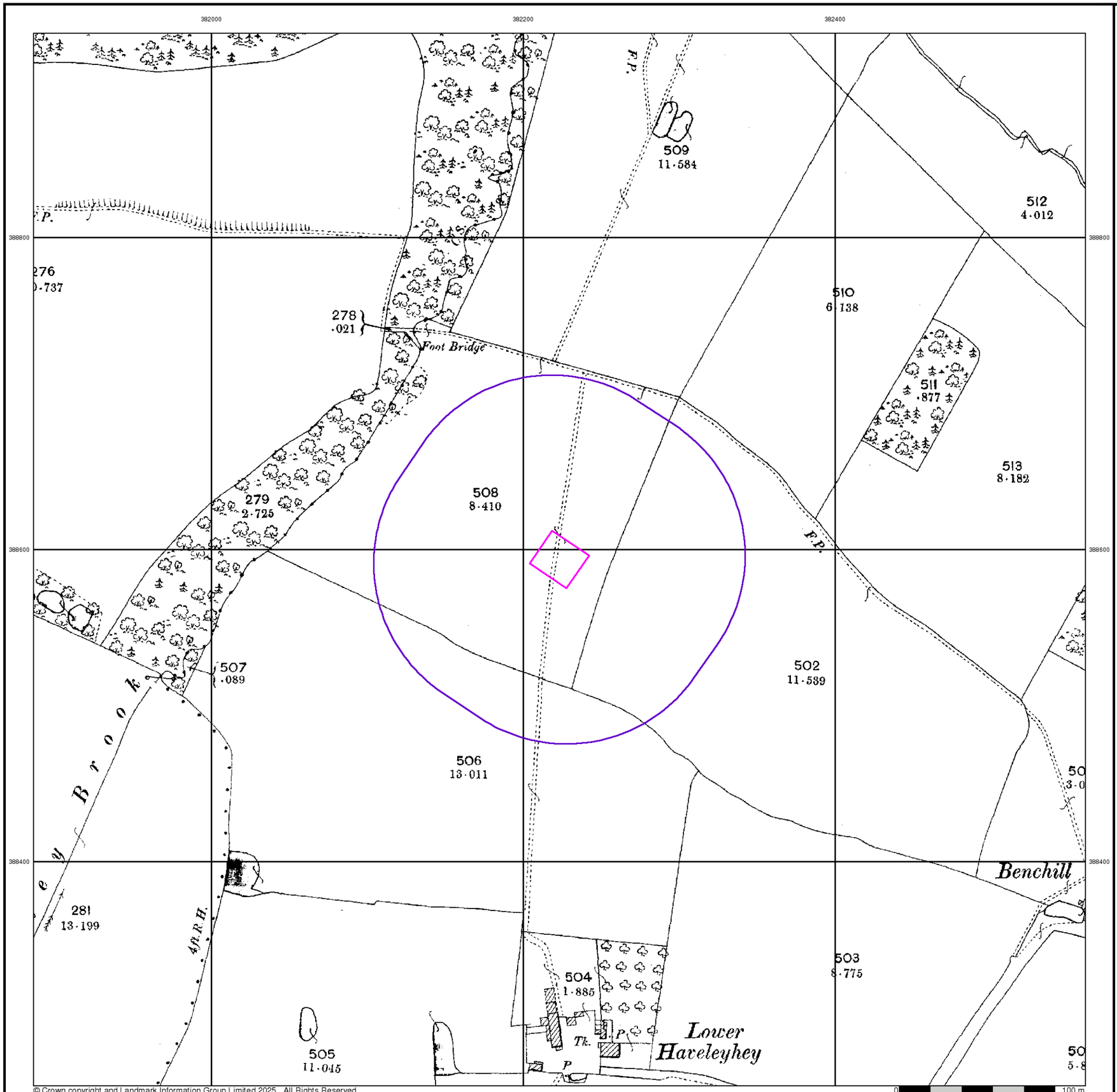
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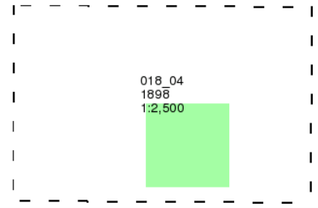
Cheshire

Published 1898

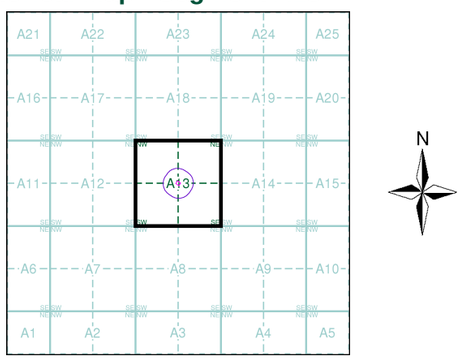
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13

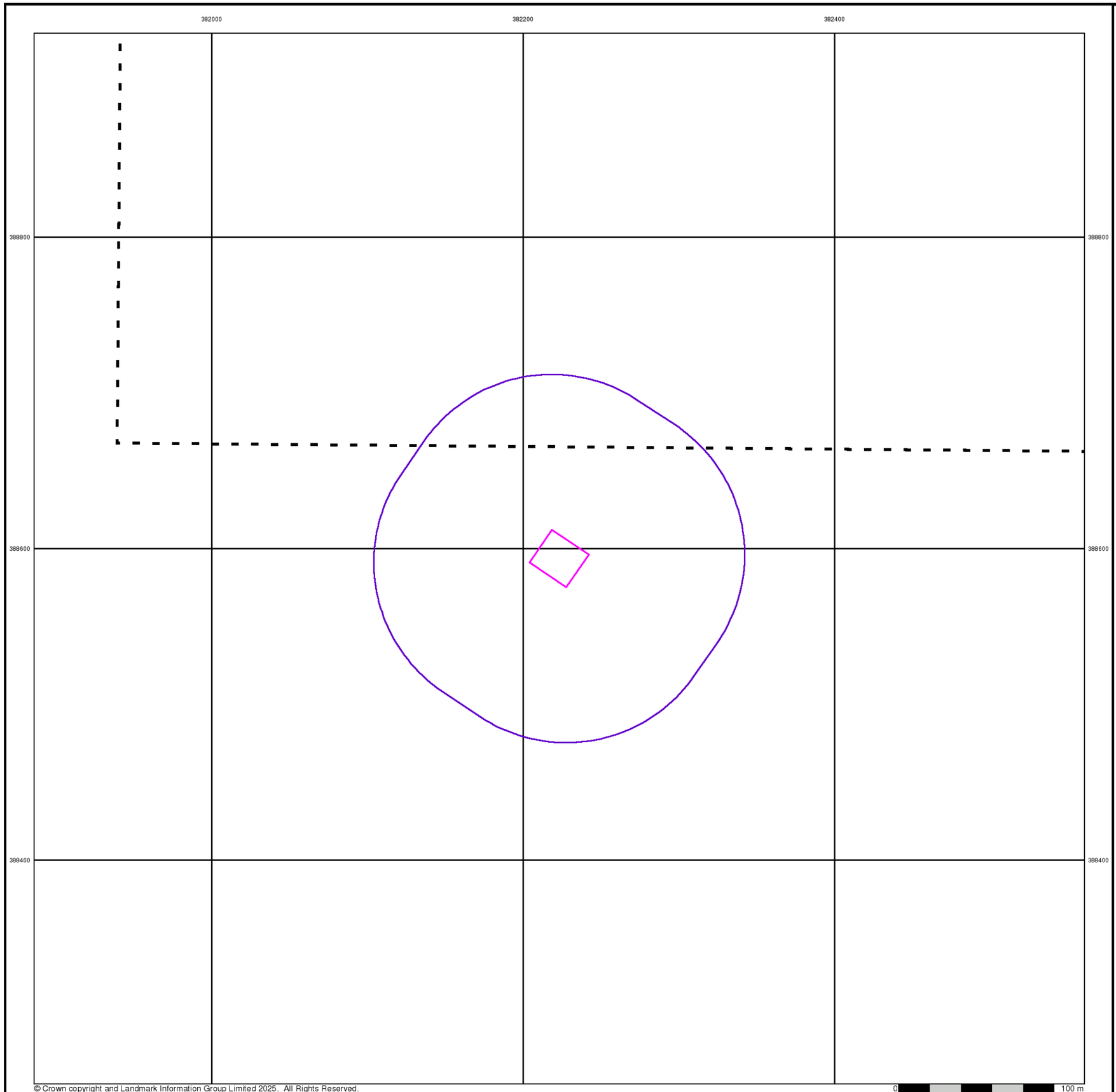


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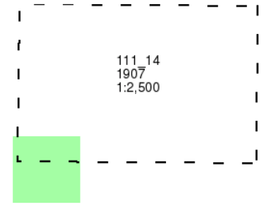
Lancashire And Furness

Published 1907

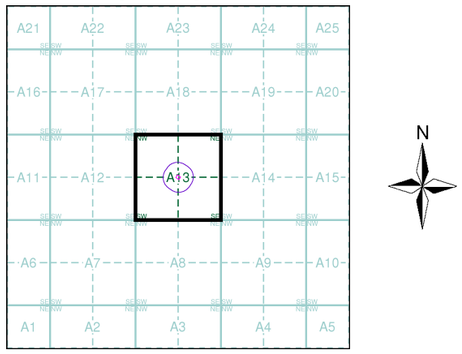
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



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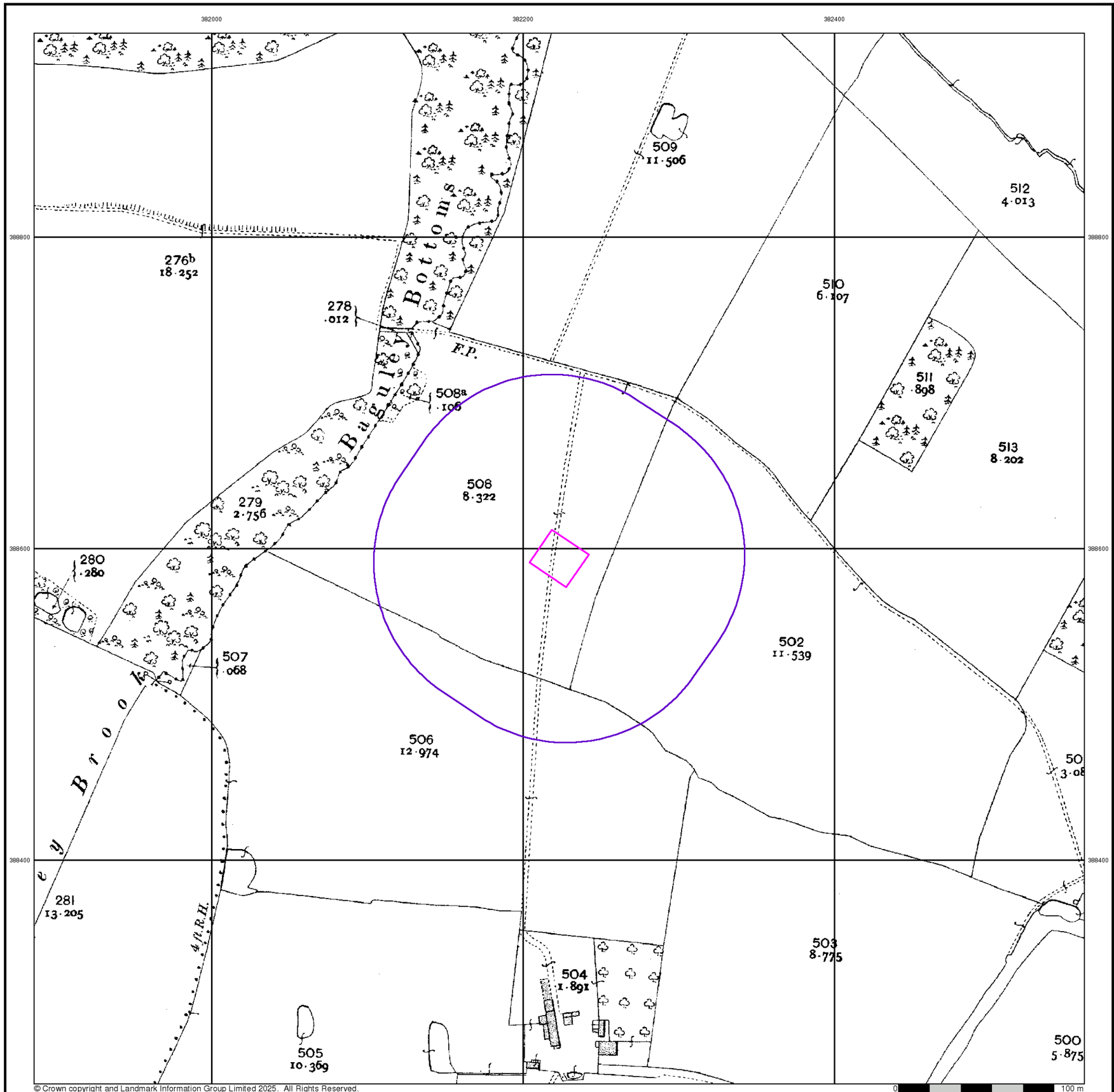
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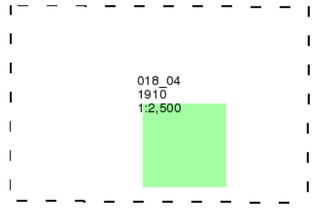
Cheshire

Published 1910

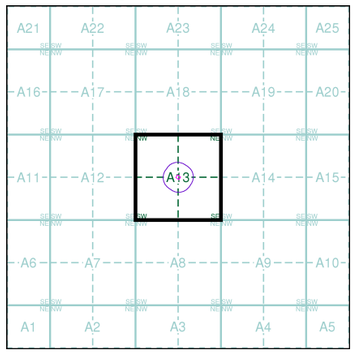
Source map scale - 1:2,500

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Historical Map - Segment A13



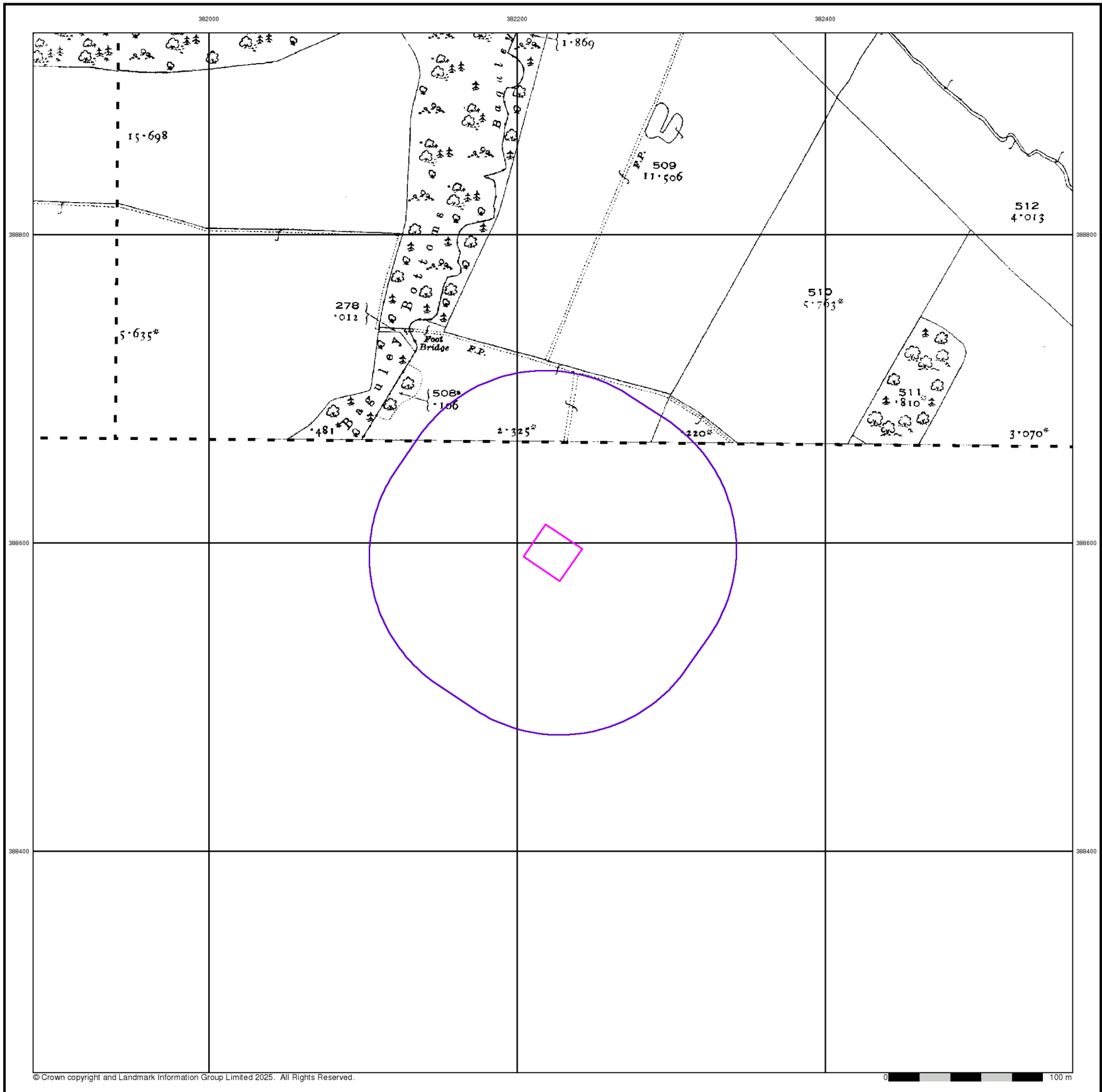
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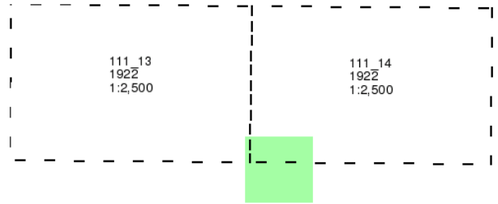
Lancashire And Furness

Published 1922

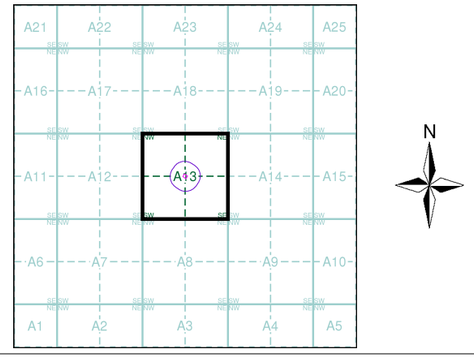
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



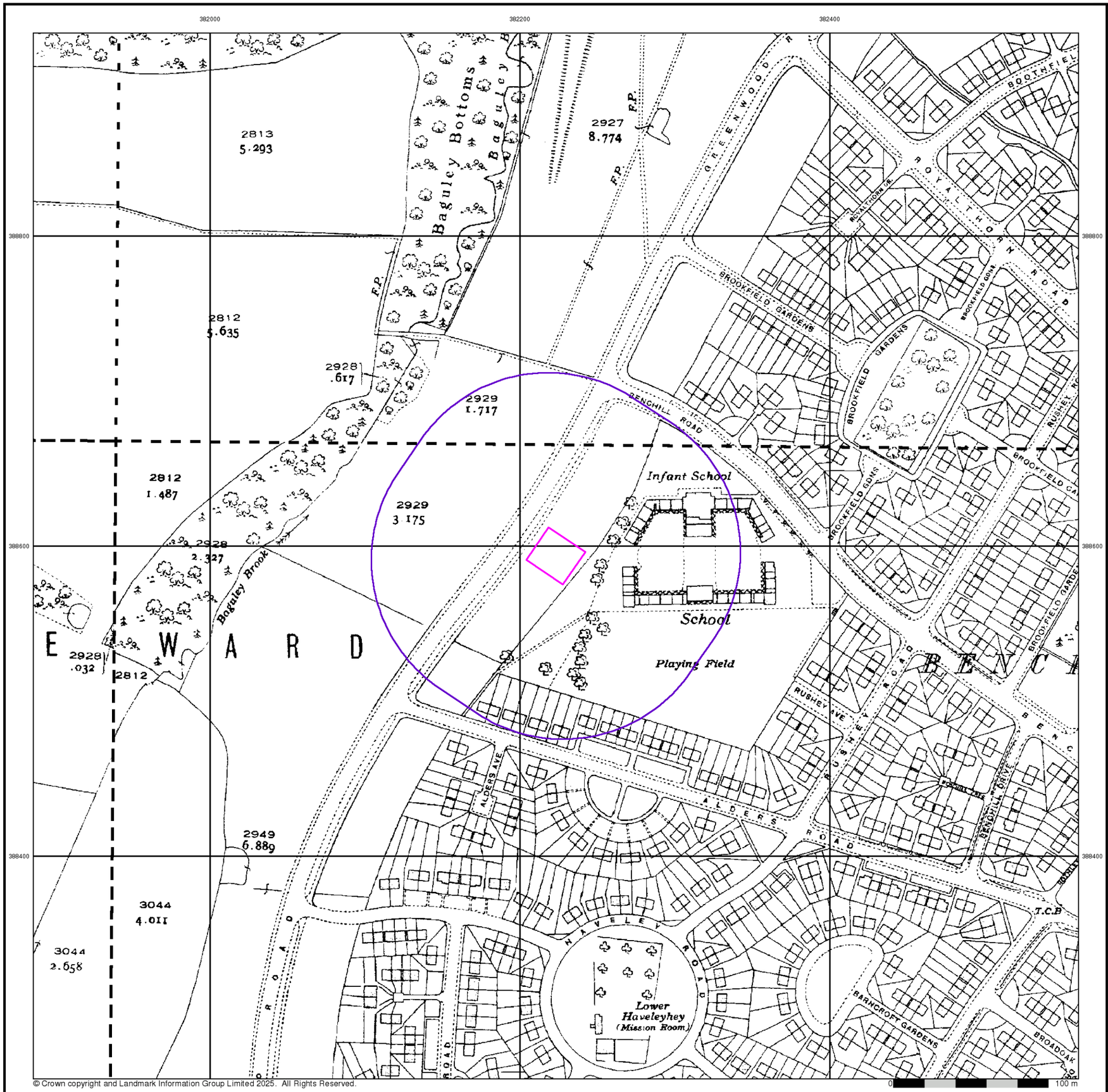
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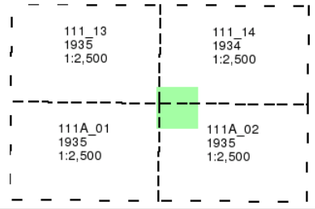
Lancashire And Furness

Published 1934 - 1935

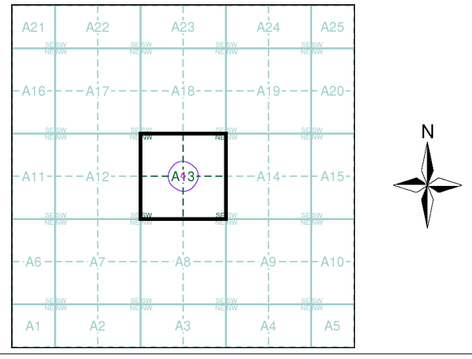
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



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Ordnance Survey Plan

Published 1960

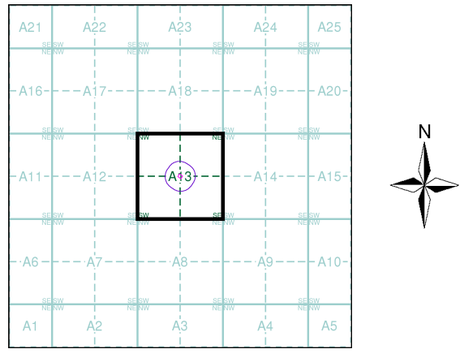
Source map scale - 1:1,250

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Map Name(s) and Date(s)

SJ8188NE 1960 1:1,250	SJ8288NW 1960 1:1,250	SJ8288NE 1960 1:1,250
SJ8188SE 1960 1:1,250	SJ8288SW 1960 1:1,250	SJ8288SE 1960 1:1,250

Historical Map - Segment A13



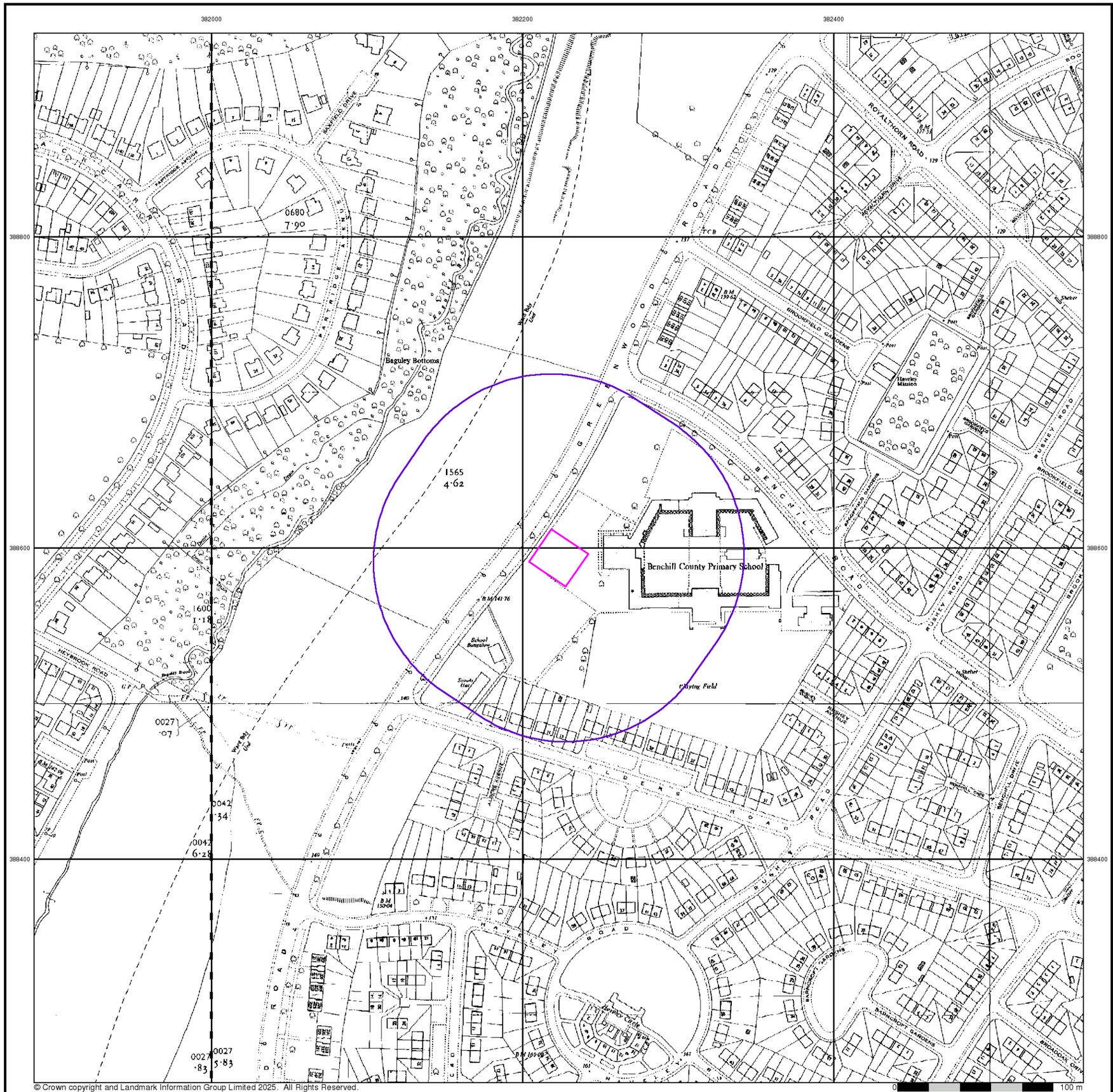
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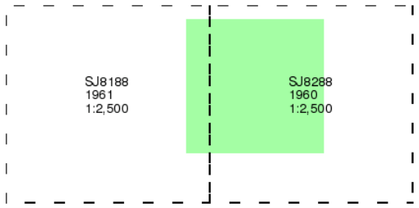
Ordnance Survey Plan

Published 1960 - 1961

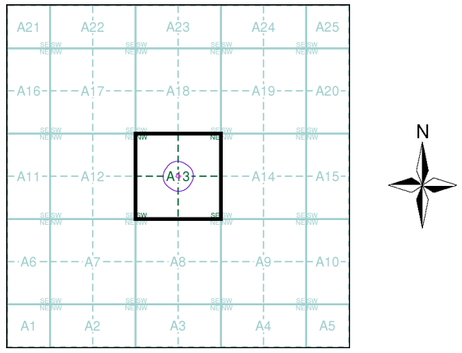
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



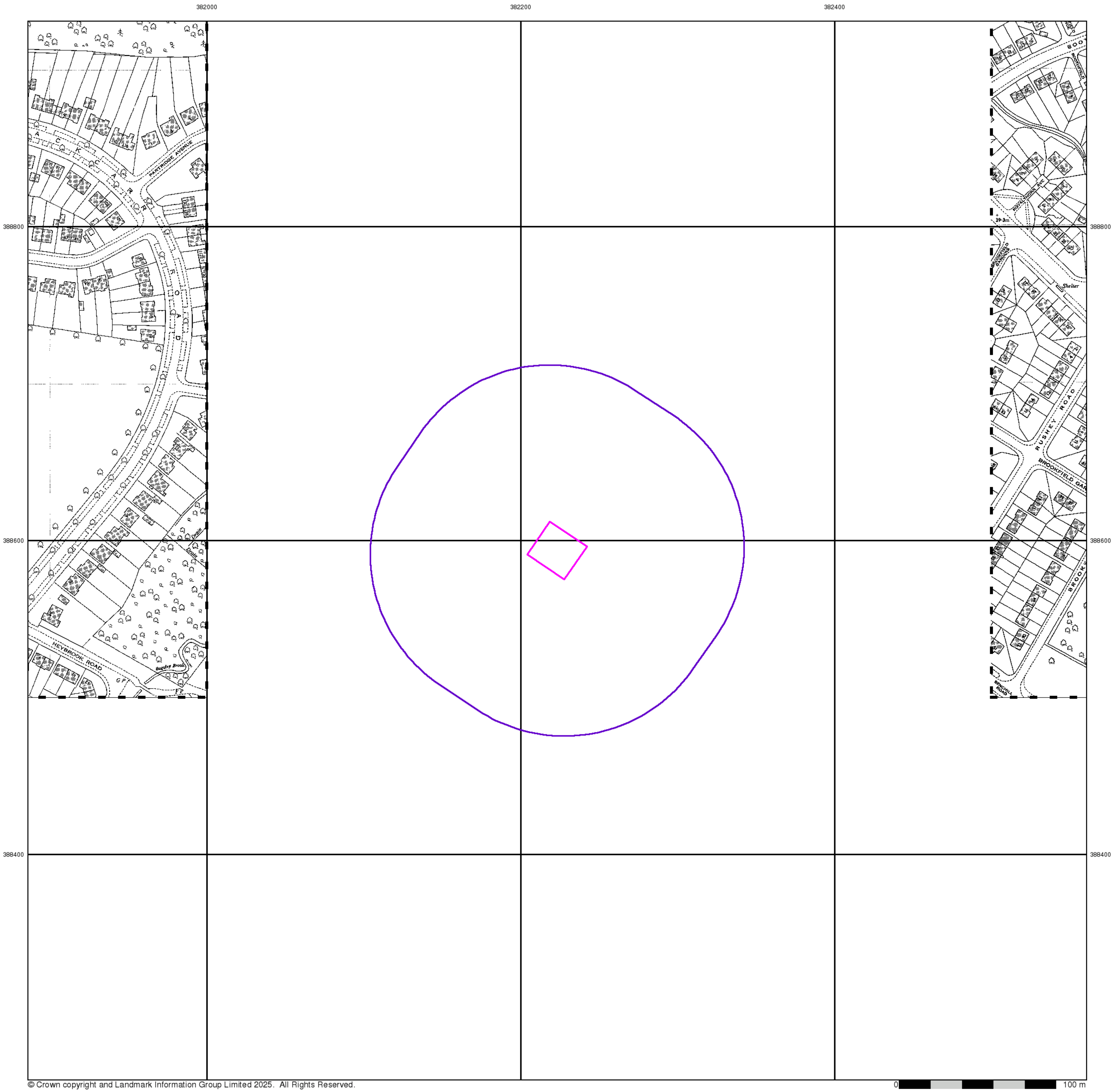
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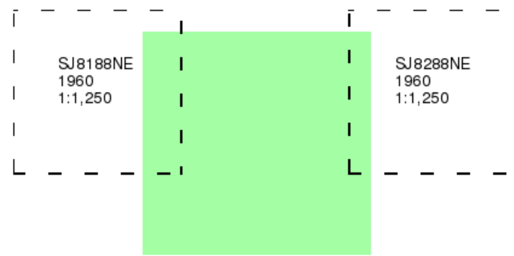
Additional SIMs

Published 1960

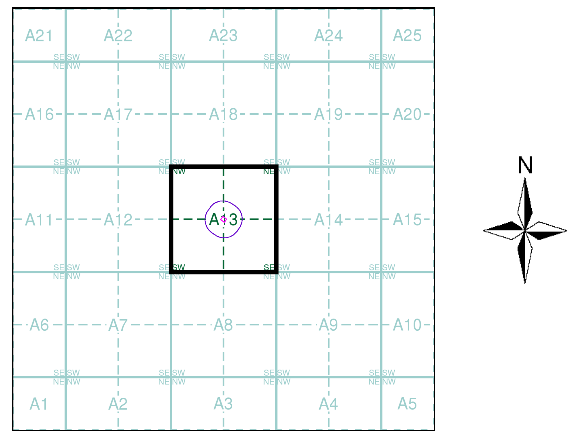
Source map scale - 1:1,250

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 A13



Order Details

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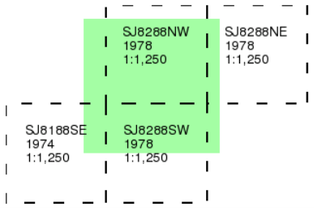
Ordnance Survey Plan

Published 1974 - 1978

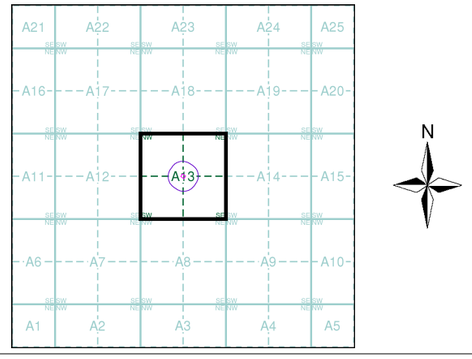
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13

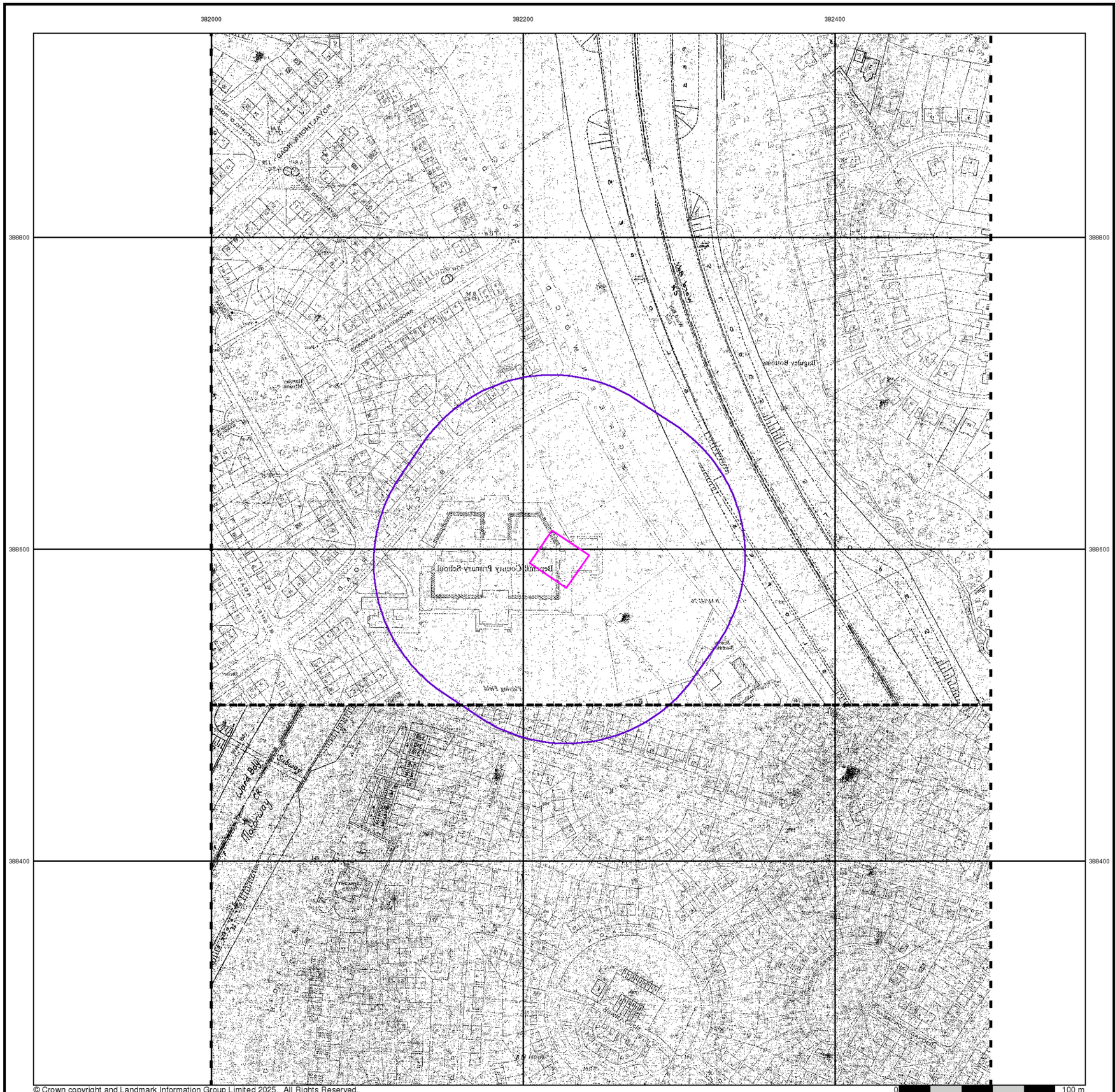


Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	100

Site Details

Benchill



LK CONSULT

Supply of Unpublished Survey Information

Published 1974

Source map scale - 1:1,250

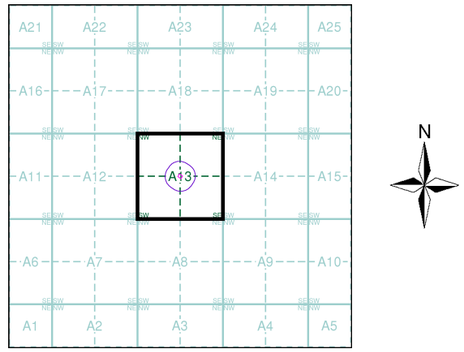
SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a `work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment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

Map Name(s) and Date(s)

SJ8288NW
1974
1:1,250

SJ8288SW
1974
1:1,250

Historical Map - Segment A13



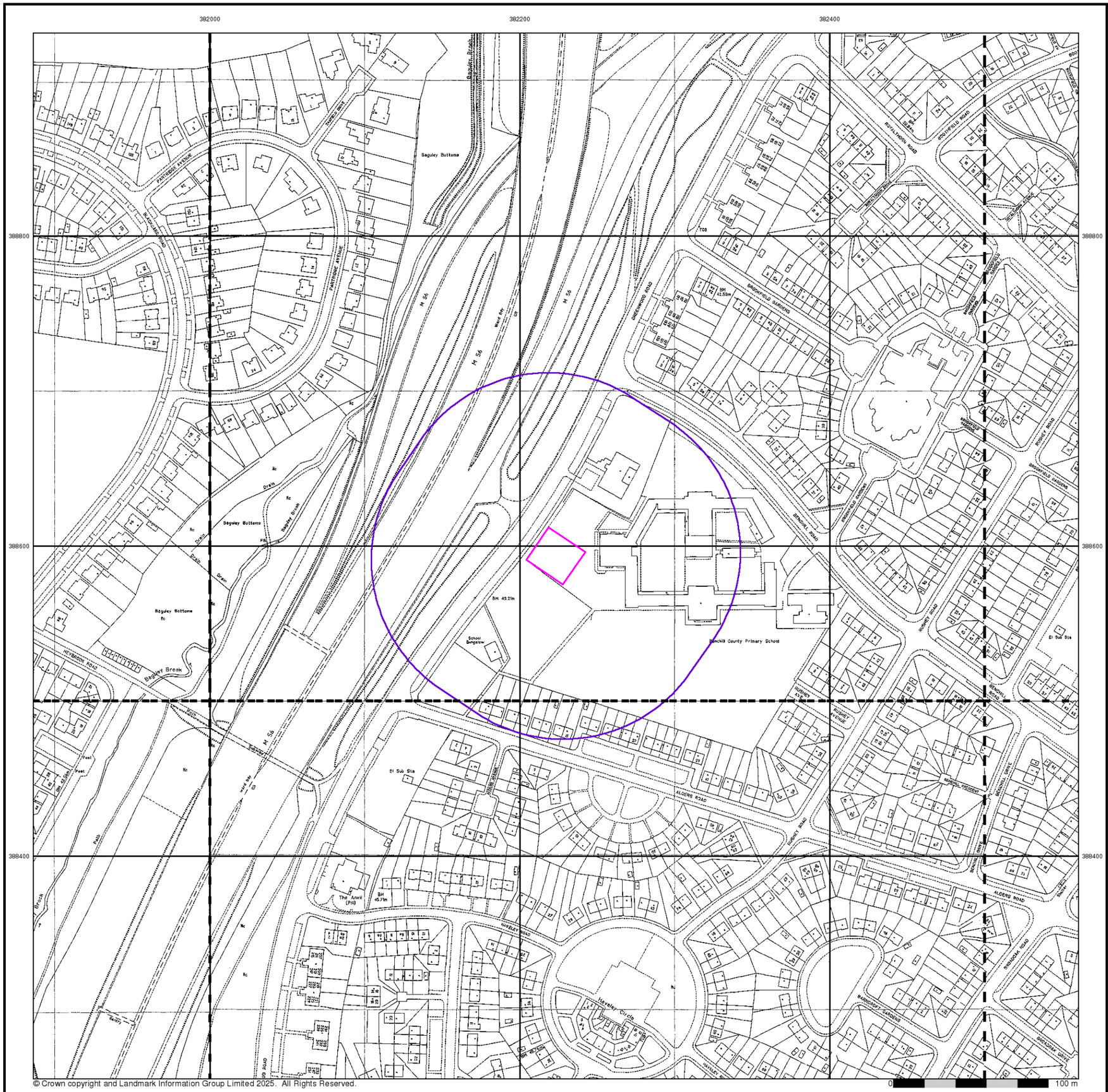
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Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	100

Site Details

Benchill

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Large-Scale National Grid Data

Published 1992

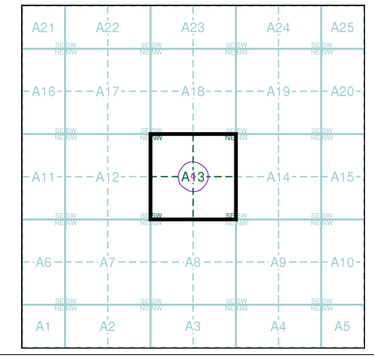
Source map scale - 1:1,250

'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)

SJ8188NE 1992 1:1,250	SJ8288NW 1992 1:1,250	SJ8288NE 1992 1:1,250
SJ8188SE 1992 1:1,250	SJ8288SW 1992 1:1,250	SJ8288SE 1992 1:1,250

Historical Map - Segment A13



Order Details

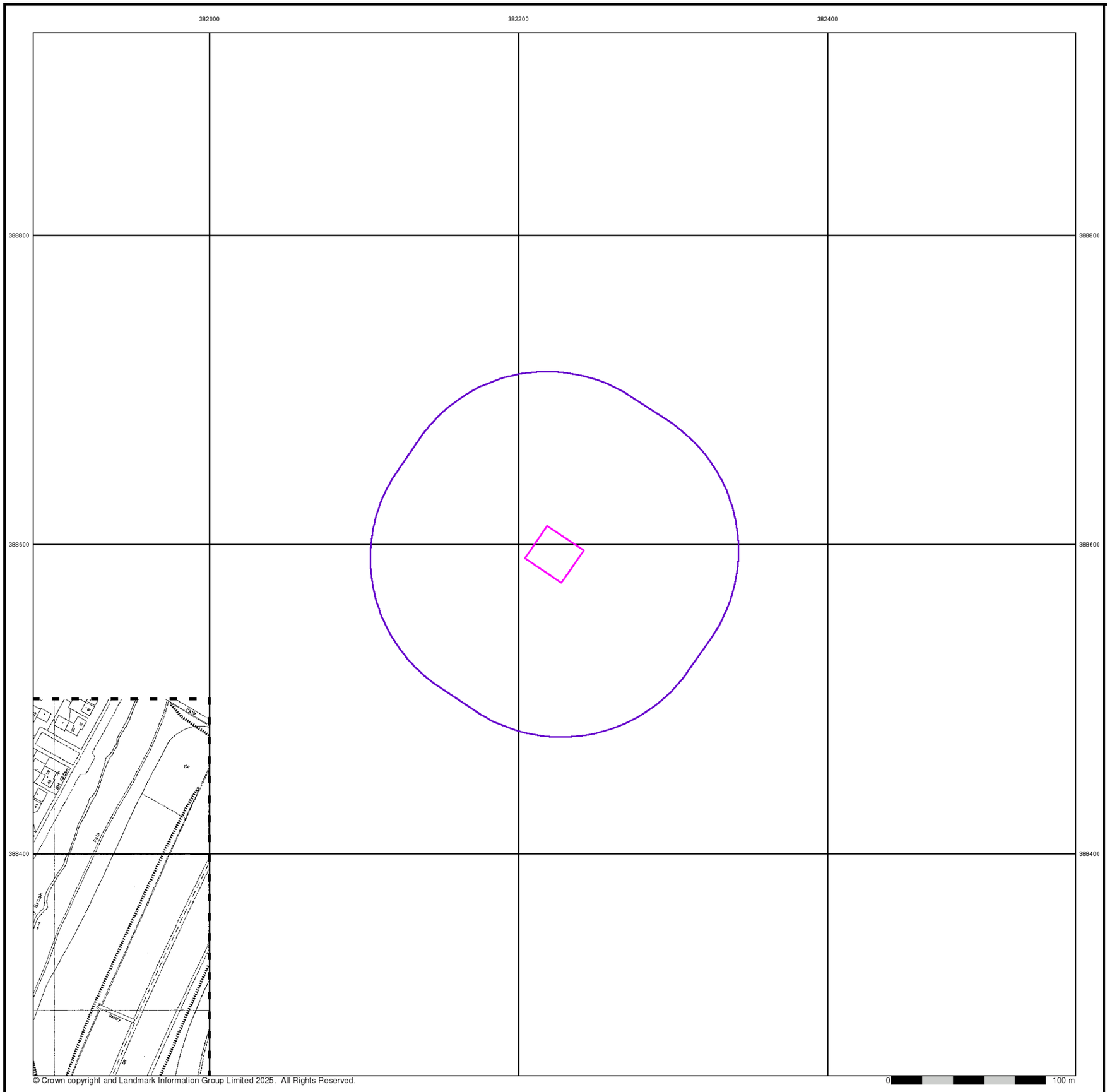
Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
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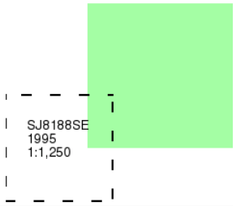
Large-Scale National Grid Data

Published 1995

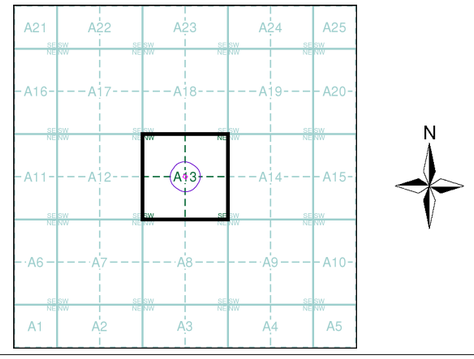
Source map scale - 1:1,250

'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 A13



Order Details

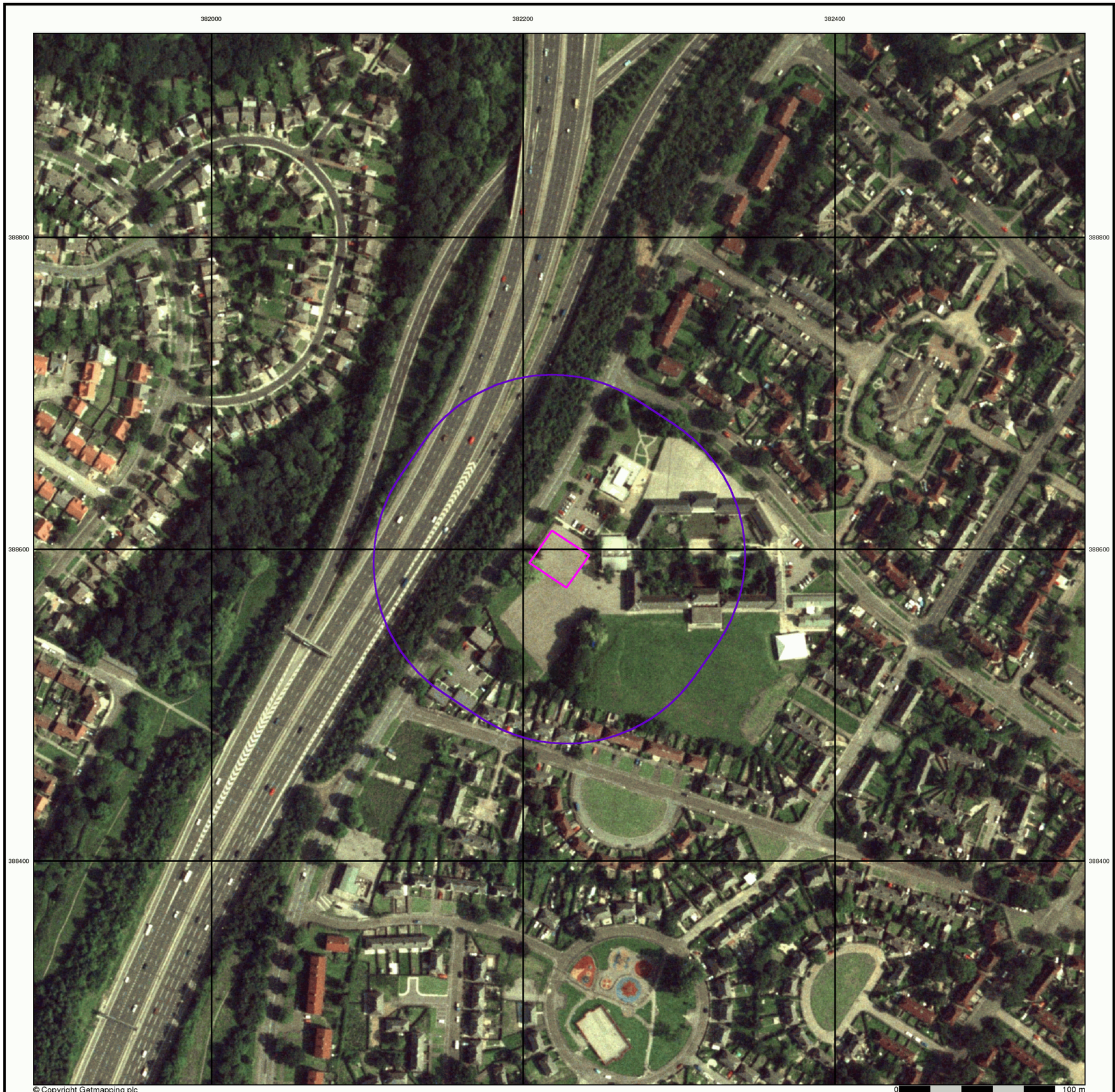
Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	100

Site Details

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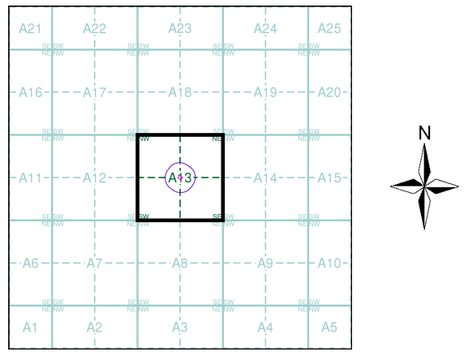
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Historical Aerial Photography

Published 2000

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

Historical Aerial Photography - Segment A13



Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	100

Site Details

Benchill

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

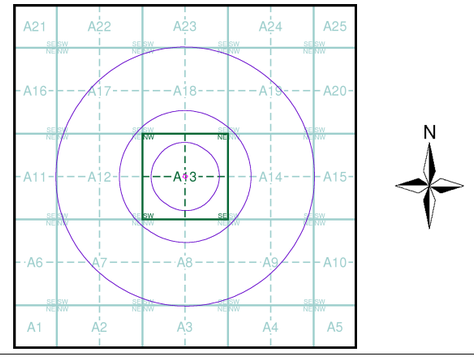
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community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

LK CONSULT

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1848	3
Cheshire	1:10,560	1882	4
Lancashire And Furness	1:10,560	1894	5
Cheshire	1:10,560	1899	6
Lancashire And Furness	1:10,560	1911	7
Cheshire	1:10,560	1911	8
Cheshire	1:10,560	1911	9
Cheshire	1:10,560	1911	10
Lancashire And Furness	1:10,560	1923	11
Cheshire	1:10,560	1938	12
Lancashire And Furness	1:10,560	1938	13
Ordnance Survey Plan	1:10,000	1954	14
Ordnance Survey Plan	1:10,000	1967	15
Manchester	1:25,000	1975	16
Ordnance Survey Plan	1:10,000	1977	17
Ordnance Survey Plan	1:10,000	1990	18
Ordnance Survey Plan	1:10,000	1996	19
10K Raster Mapping	1:10,000	1999	20
10K Raster Mapping	1:10,000	2006	21
VectorMap Local	1:10,000	2024	22

Historical Map - Slice A



Order Details

Order Number: 377992989_1_1
Customer Ref: LKC251240
National Grid Reference: 382220, 388590
Slice: A
Site Area (Ha): 0.08
Search Buffer (m): 1000

Site Details

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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
- Factory or Mill without Chimney
- Mine or Open Pit Mine
- Operating Shaft or Mine
- Non-Operating Shaft or Mine
- Salt Mine
- Tailings Pile
- Pit
- Stone Quarry
- Gas Pump or Service Station
- Fuel Storage or Natural Gas Tank
- Oil or Natural Gas Derrick
- Small Hydroelectric Power Station
- Power Station
- Transformer Station
- Cemetery
- Burial Mound (height in metres)
- Triangulation Point on Burial Mound
- Triangulation Point
- Bench Mark
- Bench Mark (monumented)
- Telegraph Office
- Telephone Station
- Radio Station
- Radio Tower
- Airfield or Seaplane Base
- Landing Strip
- Main Highway
- Highway under Construction
- Improved Dirt Road (former truck road)
- Double-track Railroad with First Class Station
- Dismantled Railroad
- Railroad Under Construction
- Shore Embankment
- River or Ditch with Embankment
- Well
- Water Reservoir or Rain Water Pit
- Spring
- Isobath with value
- Heavy (Index) Contour Line
- Contour Line and Value
- Half Contour Line
- Spot Elevation Value
- Coniferous
- Deciduous
- Mixed
- Scrub

Key to Numbers on Mapping

SJ88_Manchester

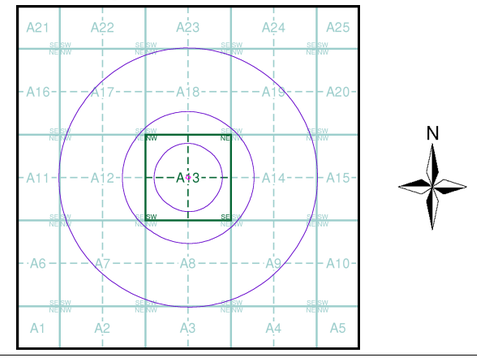
No.	Description
29	Depot (Fire Service)
172	Post Office

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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1848	3
Cheshire	1:10,560	1882	4
Lancashire And Furness	1:10,560	1894	5
Cheshire	1:10,560	1899	6
Lancashire And Furness	1:10,560	1911	7
Cheshire	1:10,560	1911	8
Cheshire	1:10,560	1911	9
Cheshire	1:10,560	1911	10
Lancashire And Furness	1:10,560	1923	11
Cheshire	1:10,560	1938	12
Lancashire And Furness	1:10,560	1938	13
Ordnance Survey Plan	1:10,000	1954	14
Ordnance Survey Plan	1:10,000	1967	15
Manchester	1:25,000	1975	16
Ordnance Survey Plan	1:10,000	1977	17
Ordnance Survey Plan	1:10,000	1990	18
Ordnance Survey Plan	1:10,000	1996	19
10K Raster Mapping	1:10,000	1999	20
10K Raster Mapping	1:10,000	2006	21
VectorMap Local	1:10,000	2024	22

Russian Map - Slice A



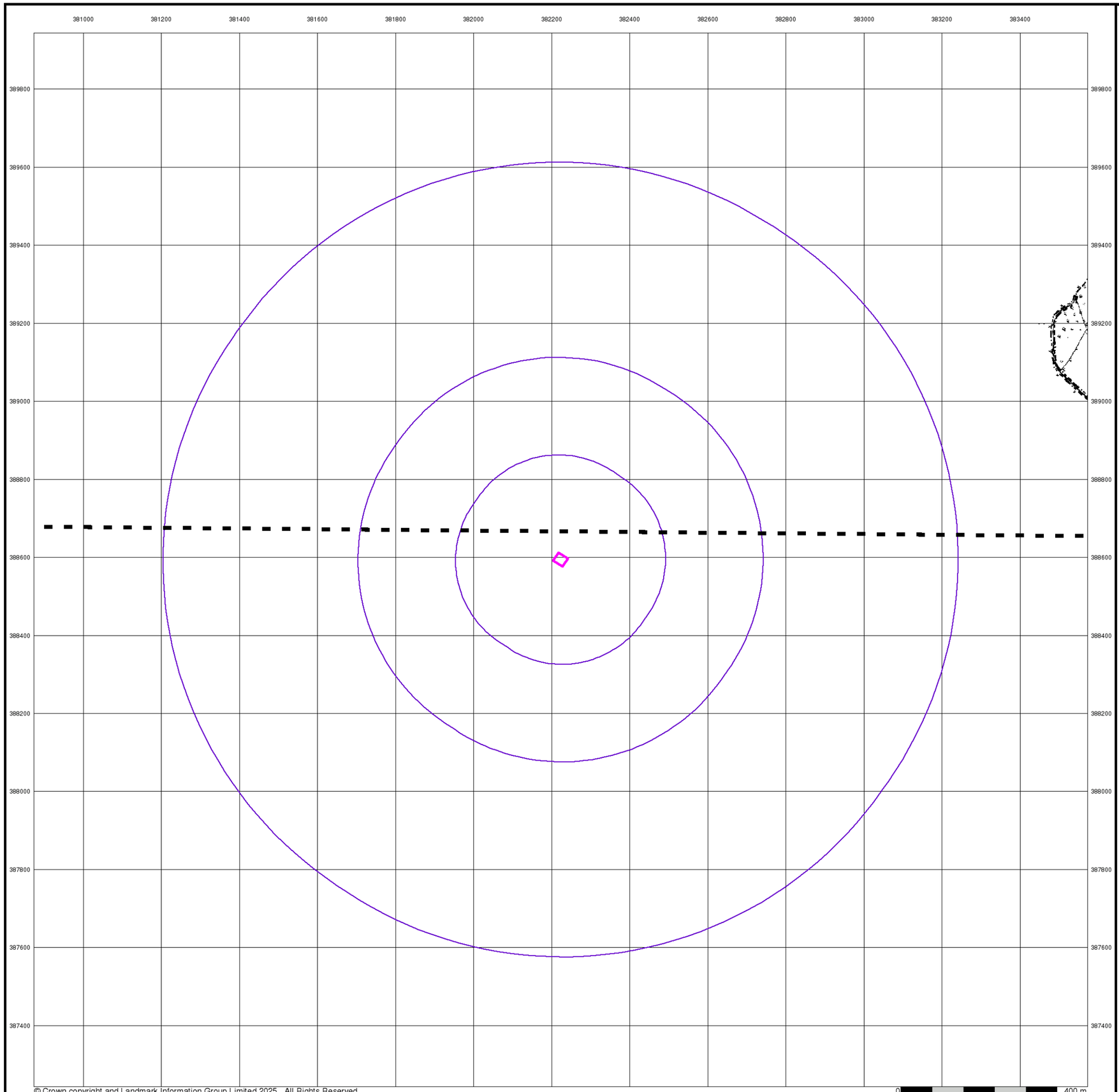
Order Details

Order Number: 377992989_1_1
Customer Ref: LKC251240
National Grid Reference: 382220, 388590
Slice: A
Site Area (Ha): 0.08
Search Buffer (m): 1000

Site Details

Benchill

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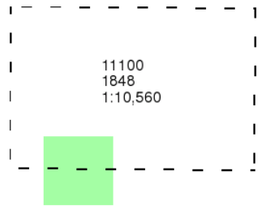
Lancashire And Furness

Published 1848

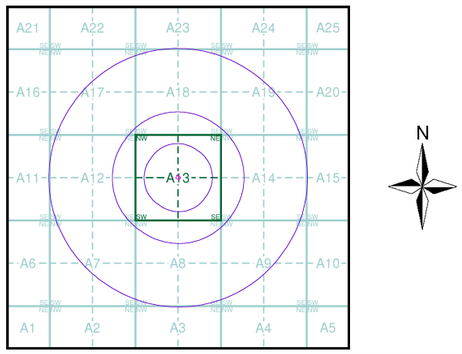
Source map scale - 1:10,560

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

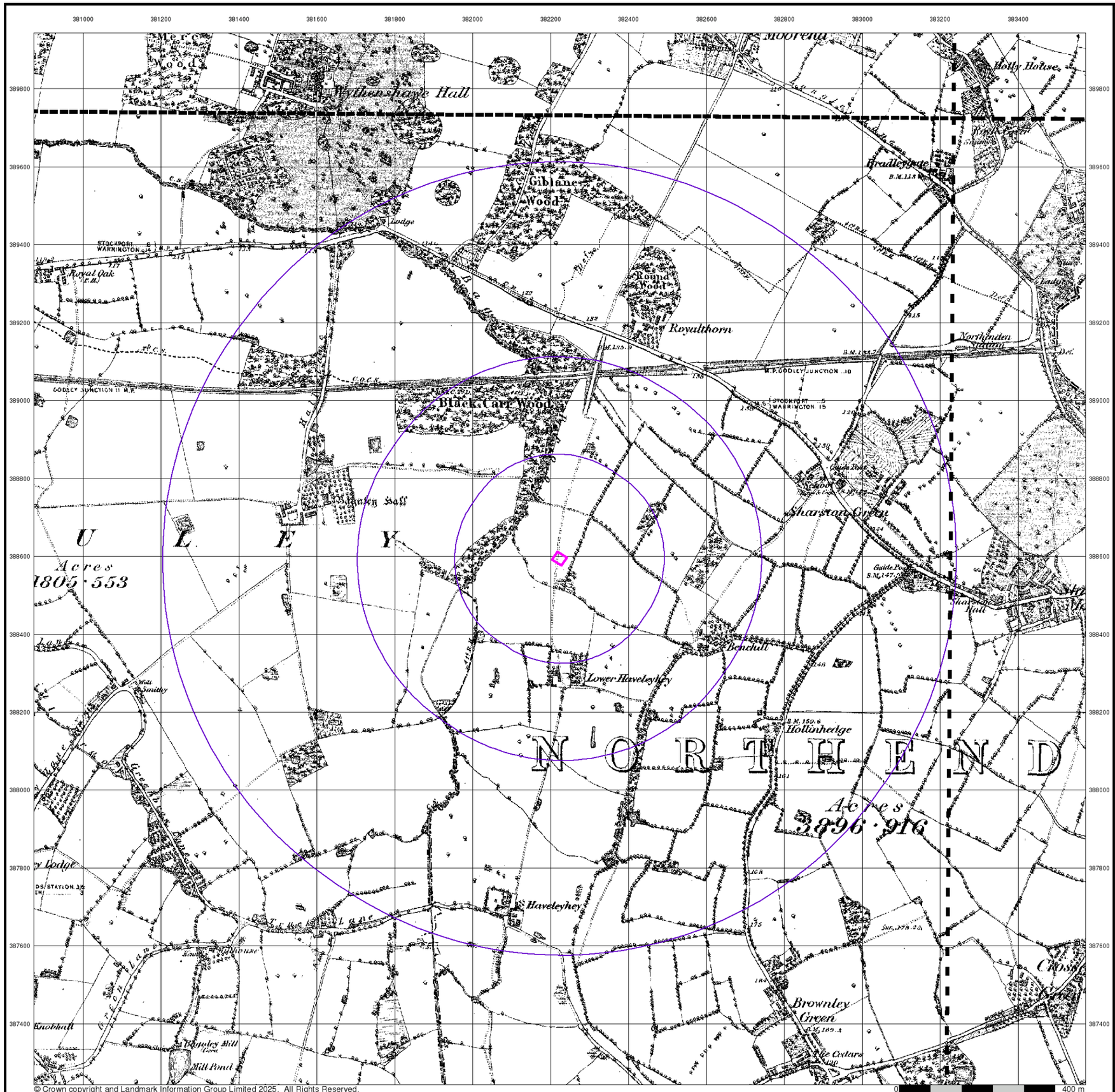
Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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Cheshire

Published 1882

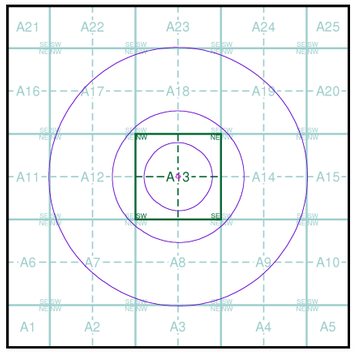
Source map scale - 1:10,560

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)

00900 1882 1:10,560	01000 1882 1:10,560
01800 1882 1:10,560	01900 1882 1:10,560

Historical Map - Slice A



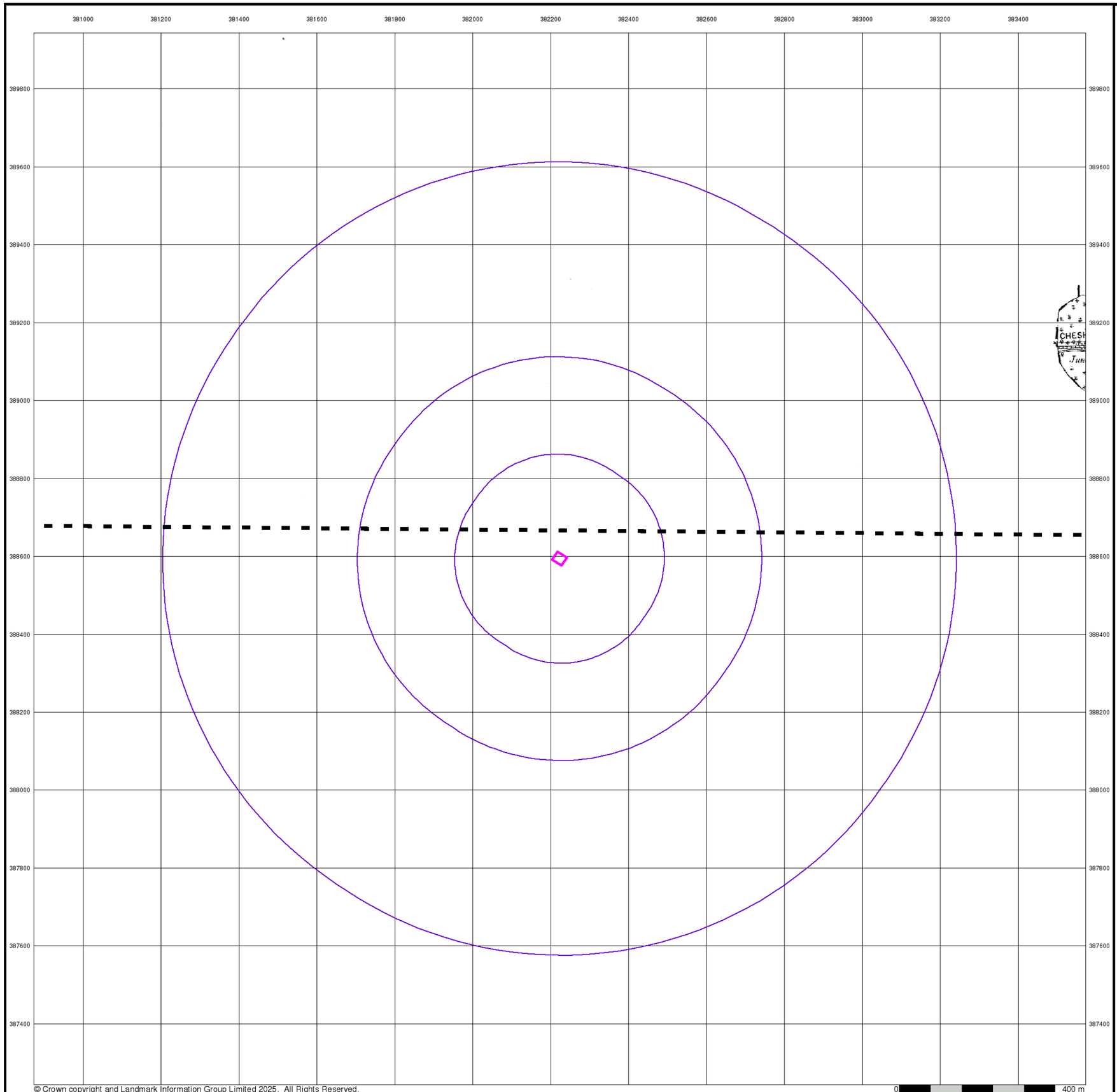
Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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Web: www.envirocheck.co.uk



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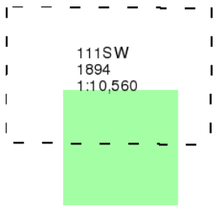
Lancashire And Furness

Published 1894

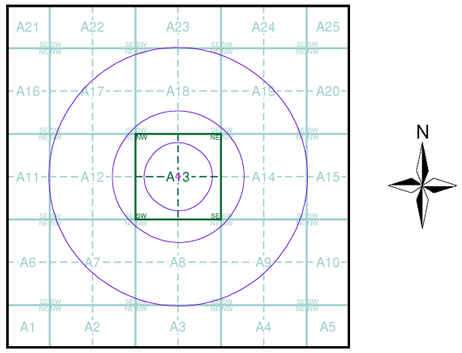
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



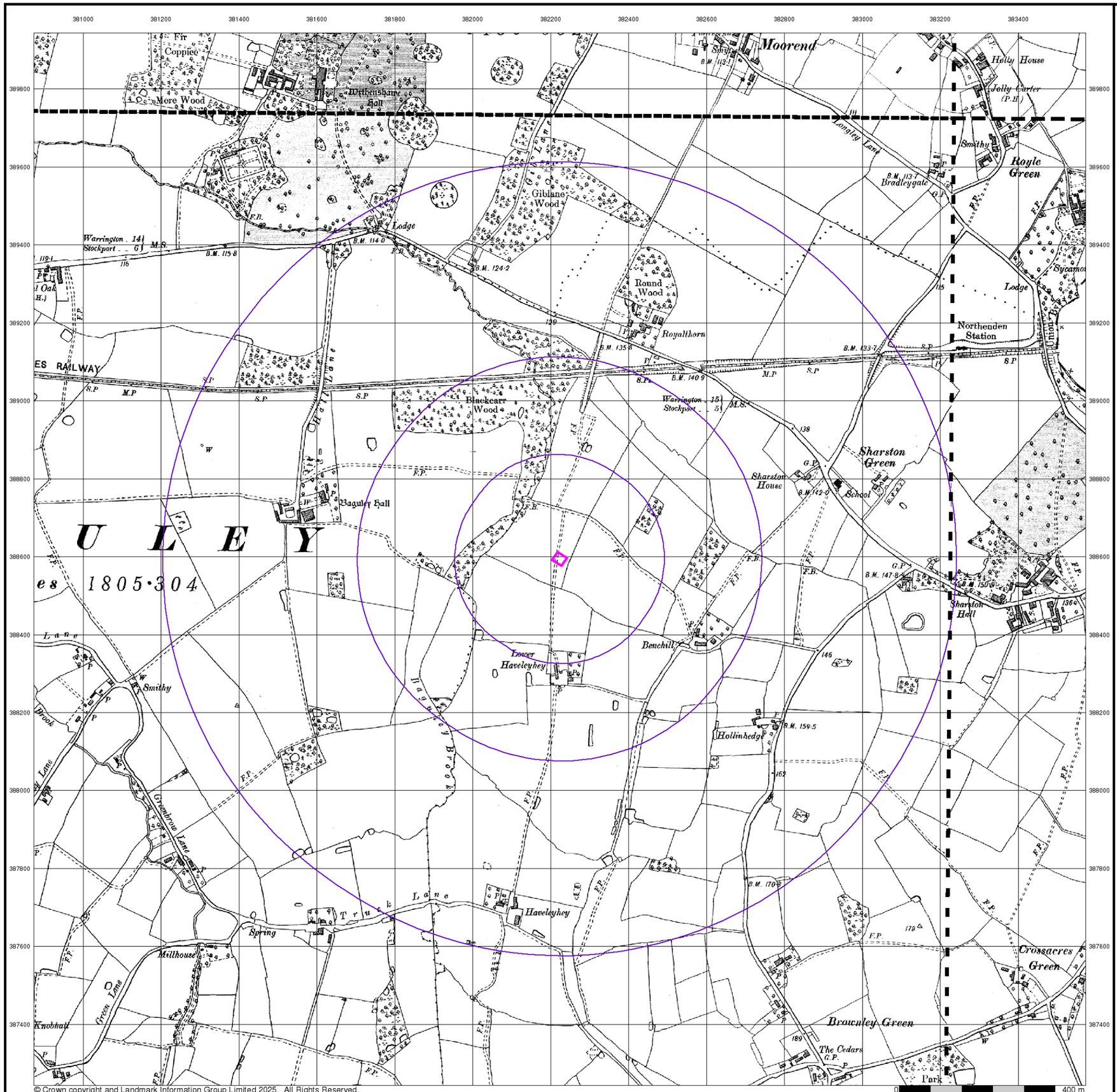
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Site Details

Benchill

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LK CONSULT

Cheshire

Published 1899

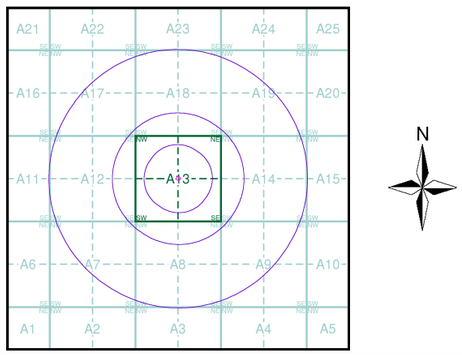
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Map Name(s) and Date(s)

009SE 1899 1:10,560	010SW 1899 1:10,560
018NE 1899 1:10,560	019NW 1899 1:10,560

Historical Map - Slice A



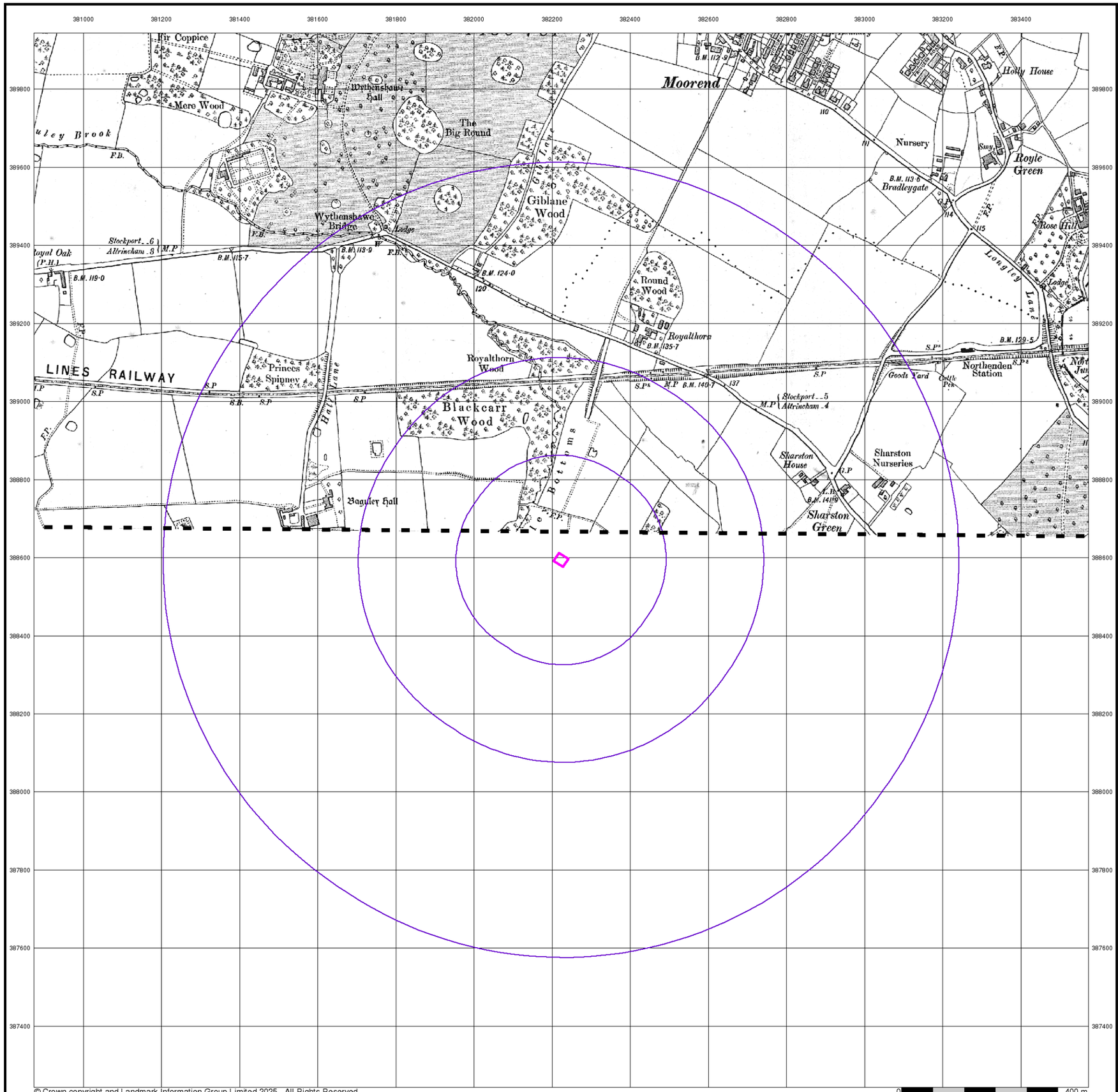
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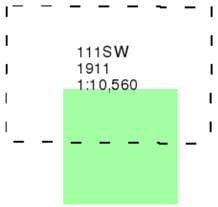
Lancashire And Furness

Published 1911

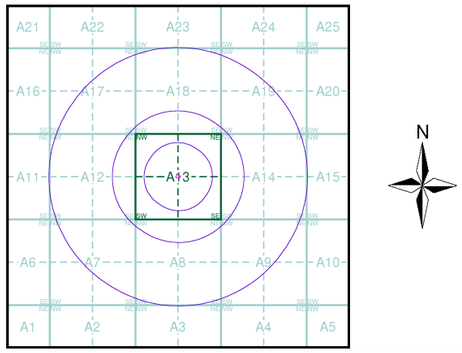
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Map Name(s) and Date(s)



Historical Map - Slice A



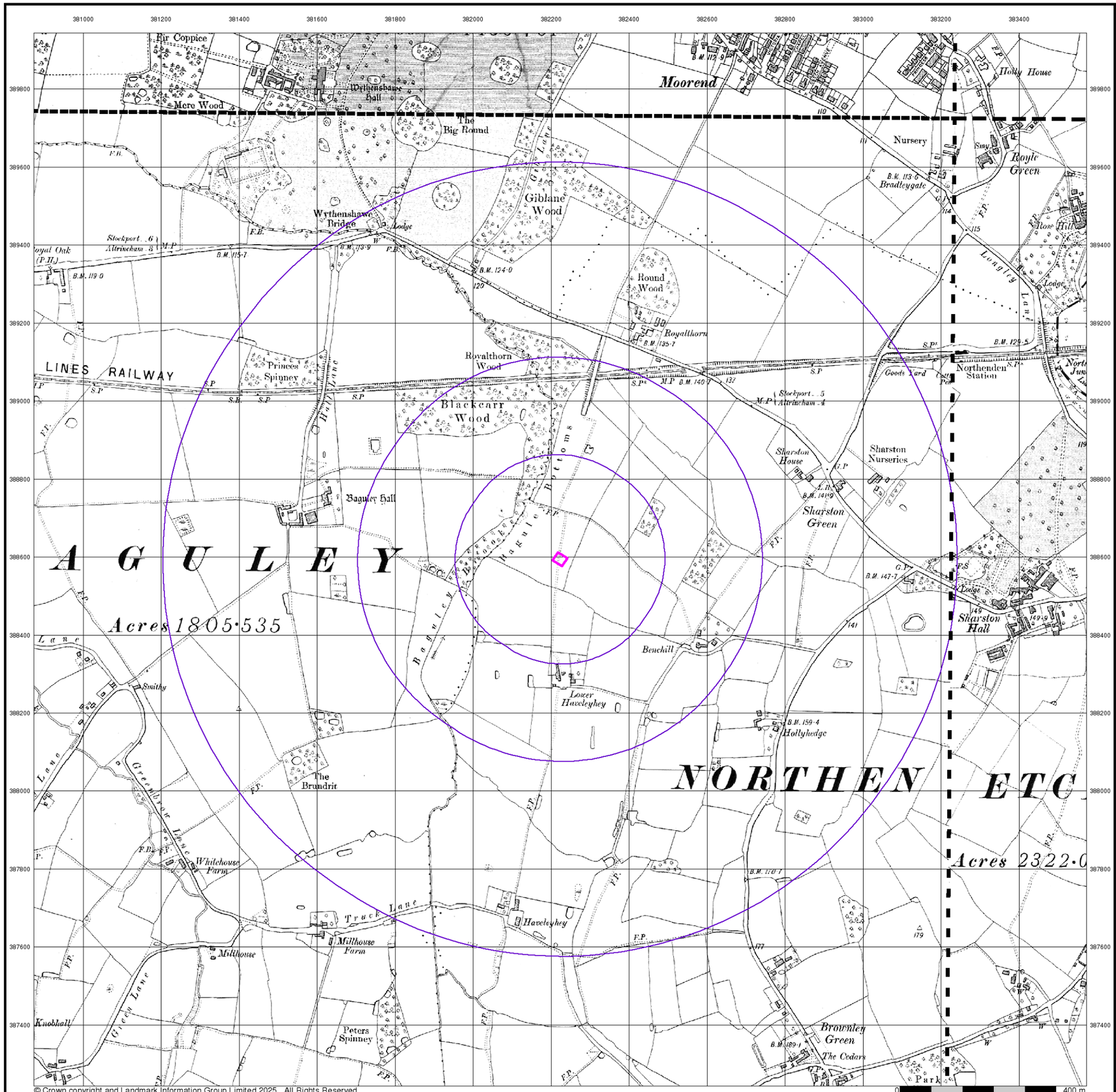
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Cheshire

Published 1911

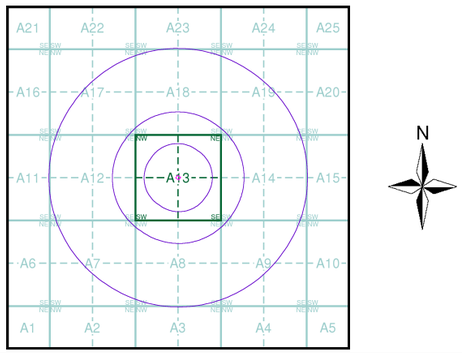
Source map scale - 1:10,560

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Map Name(s) and Date(s)

009SE 1911 1:10,560	010SW 1911 1:10,560
018NE 1911 1:10,560	019NW 1911 1:10,560

Historical Map - Slice A



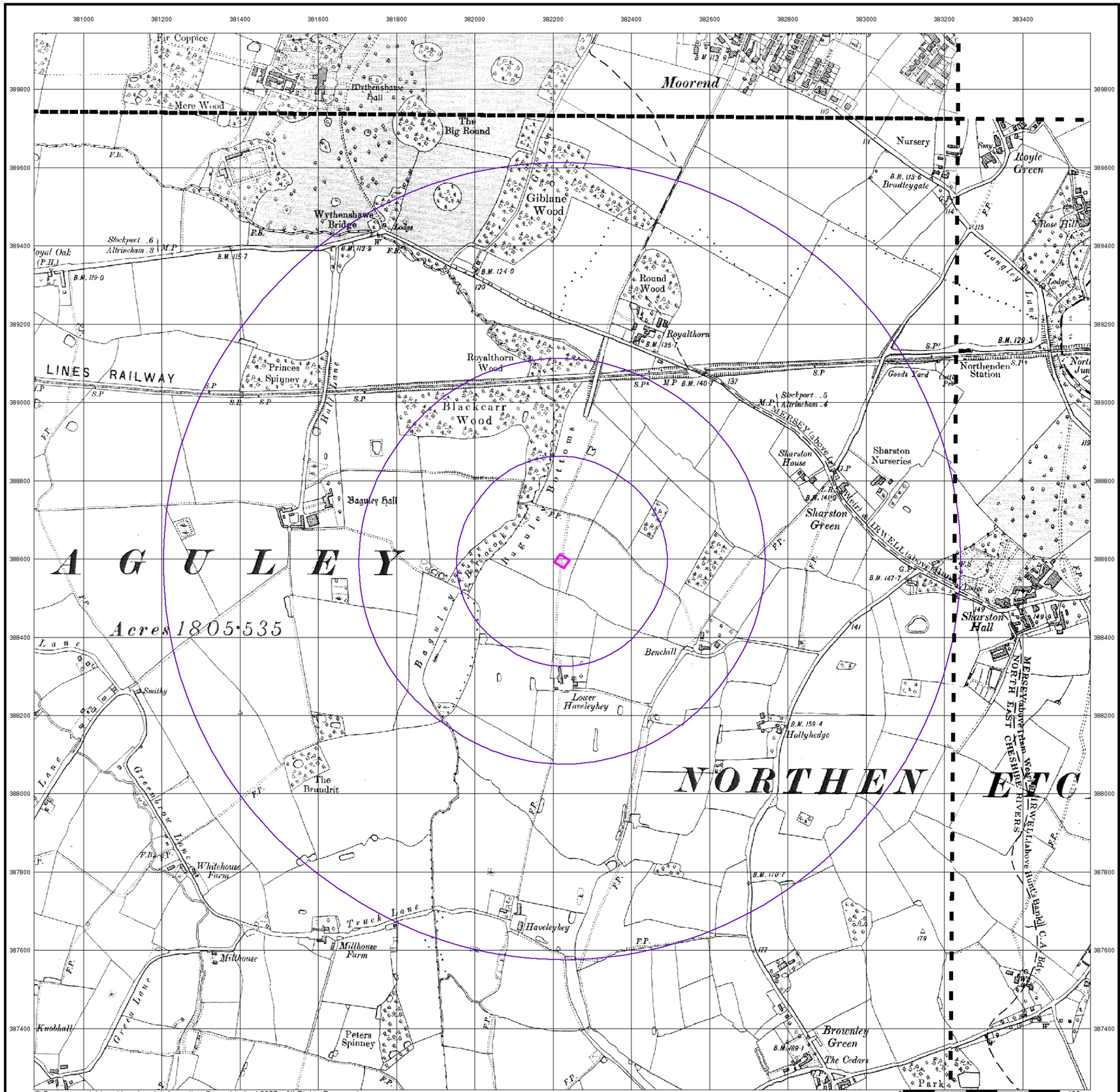
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Cheshire

Published 1911

Source map scale - 1:10,560

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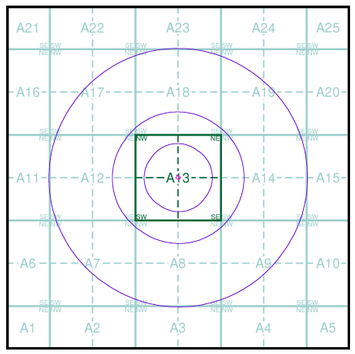
Map Name(s) and Date(s)

009SE
1911
1:10,560

018NE
1911
1:10,560

019NW
1911
1:10,560

Historical Map - Slice A



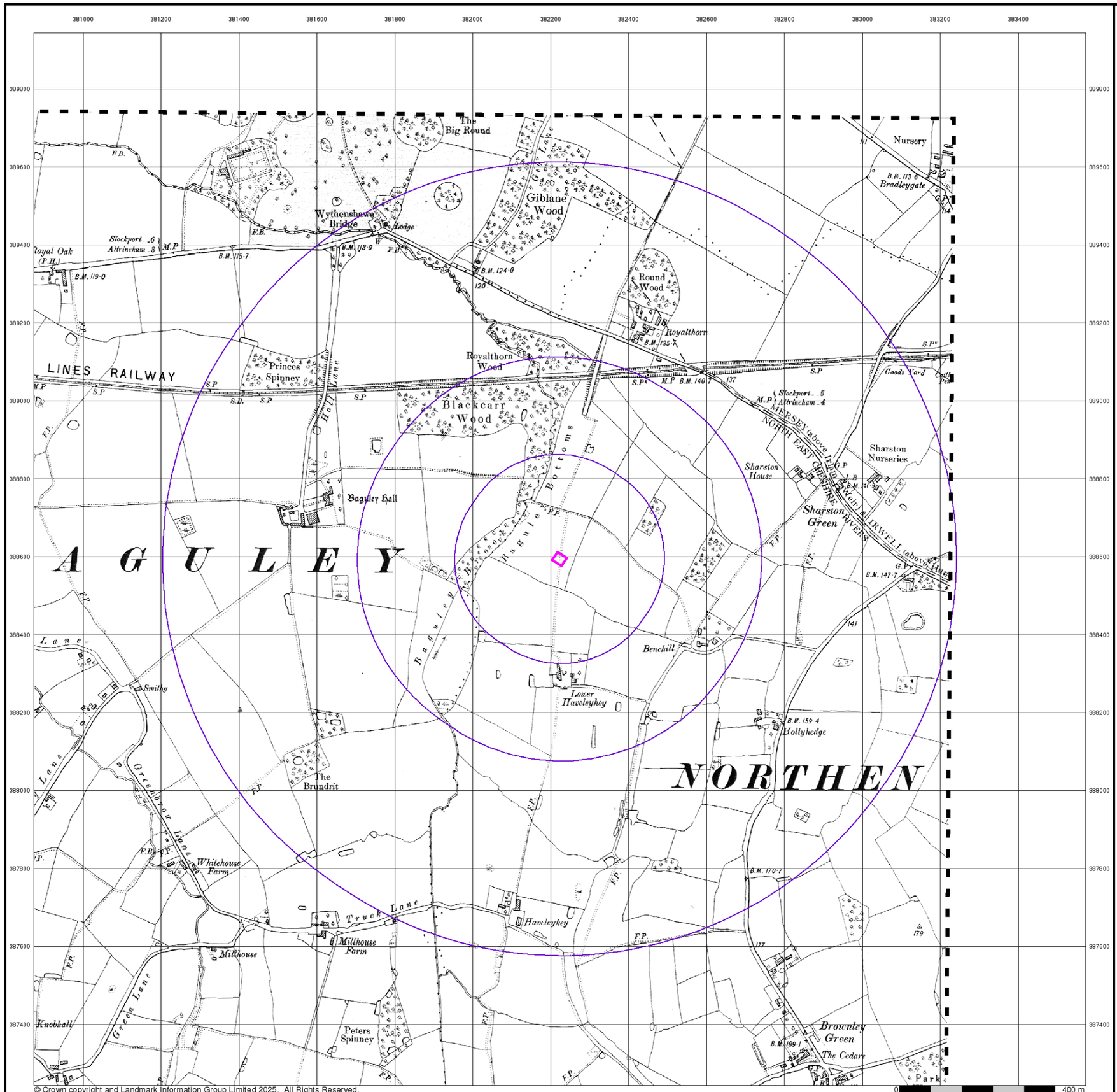
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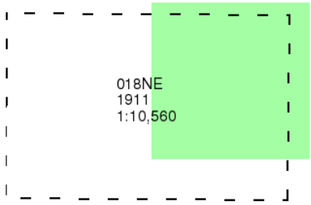
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Published 1911

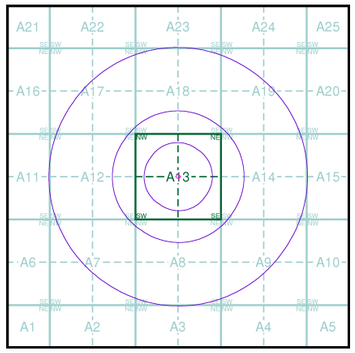
Source map scale - 1:10,560

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Map Name(s) and Date(s)



Historical Map - Slice A



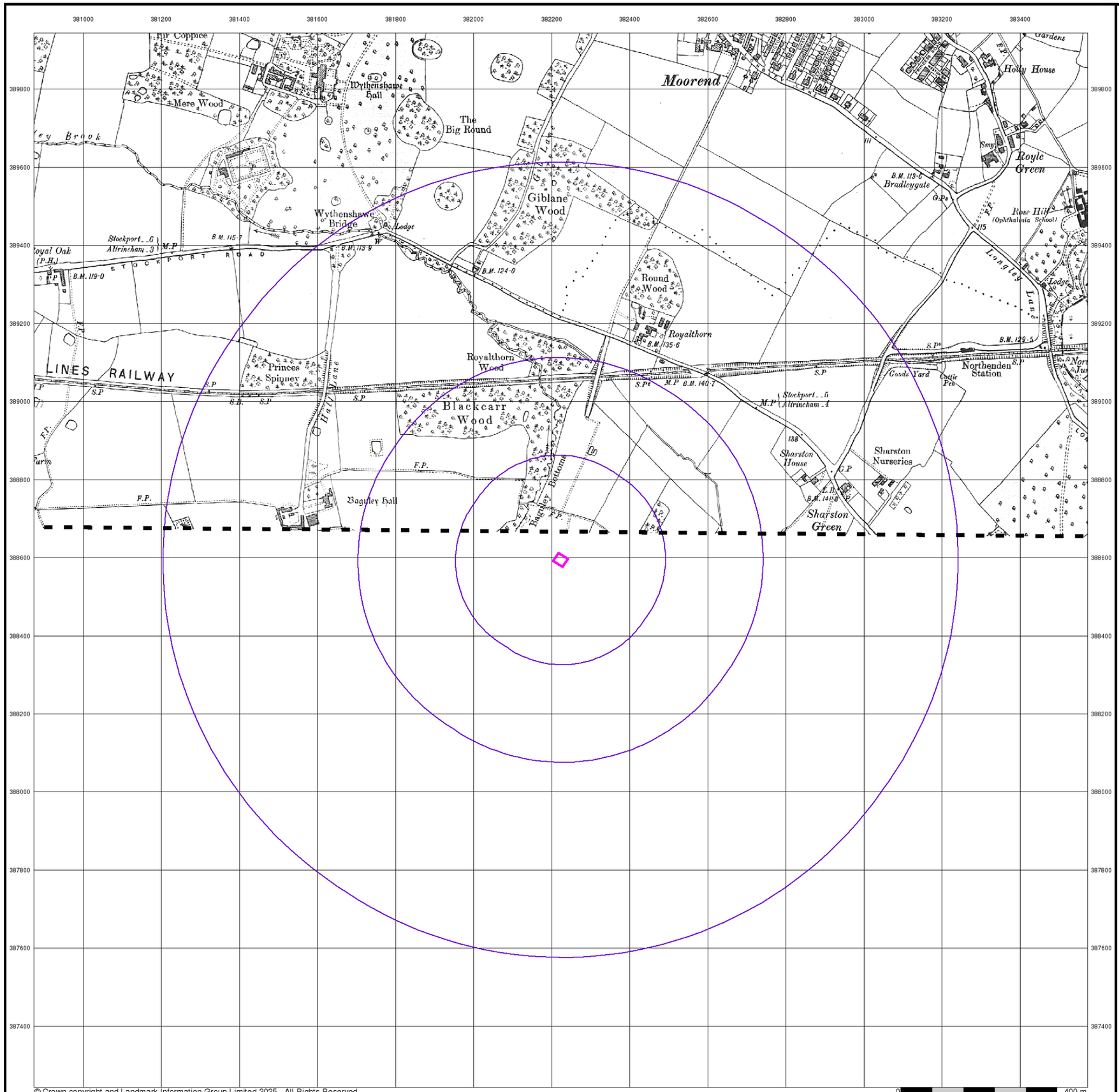
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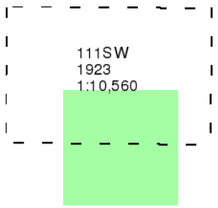
Lancashire And Furness

Published 1923

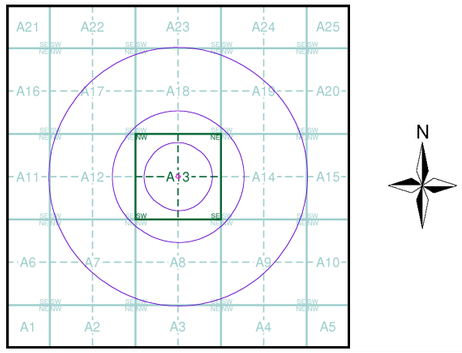
Source map scale - 1:10,560

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Map Name(s) and Date(s)



Historical Map - Slice A



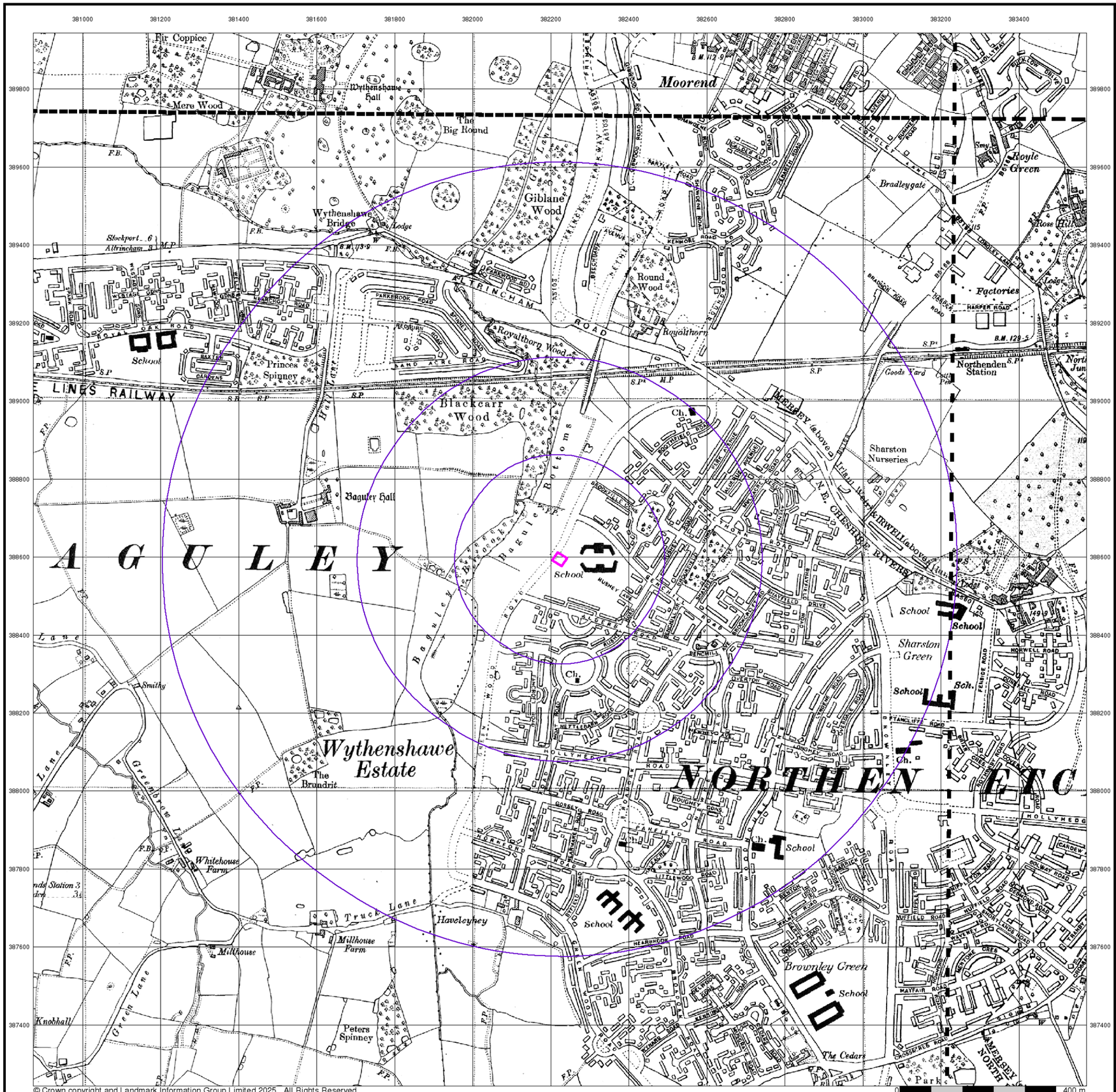
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Cheshire

Published 1938

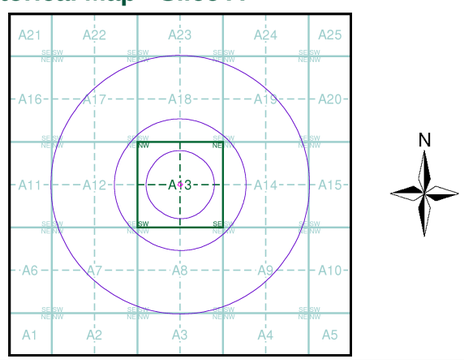
Source map scale - 1:10,560

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Map Name(s) and Date(s)

009SE 1938 1:10,560	010SW 1938 1:10,560
018NE 1938 1:10,560	019NW 1938 1:10,560

Historical Map - Slice A



Order Details

Order Number:	377992989_1_1
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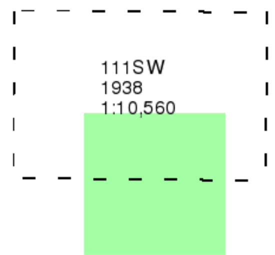
Lancashire And Furness

Published 1938

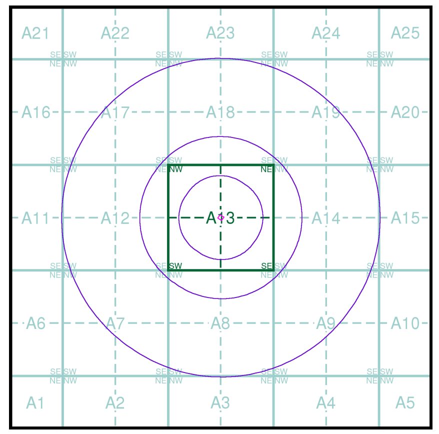
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Map Name(s) and Date(s)



Historical Map - Slice A



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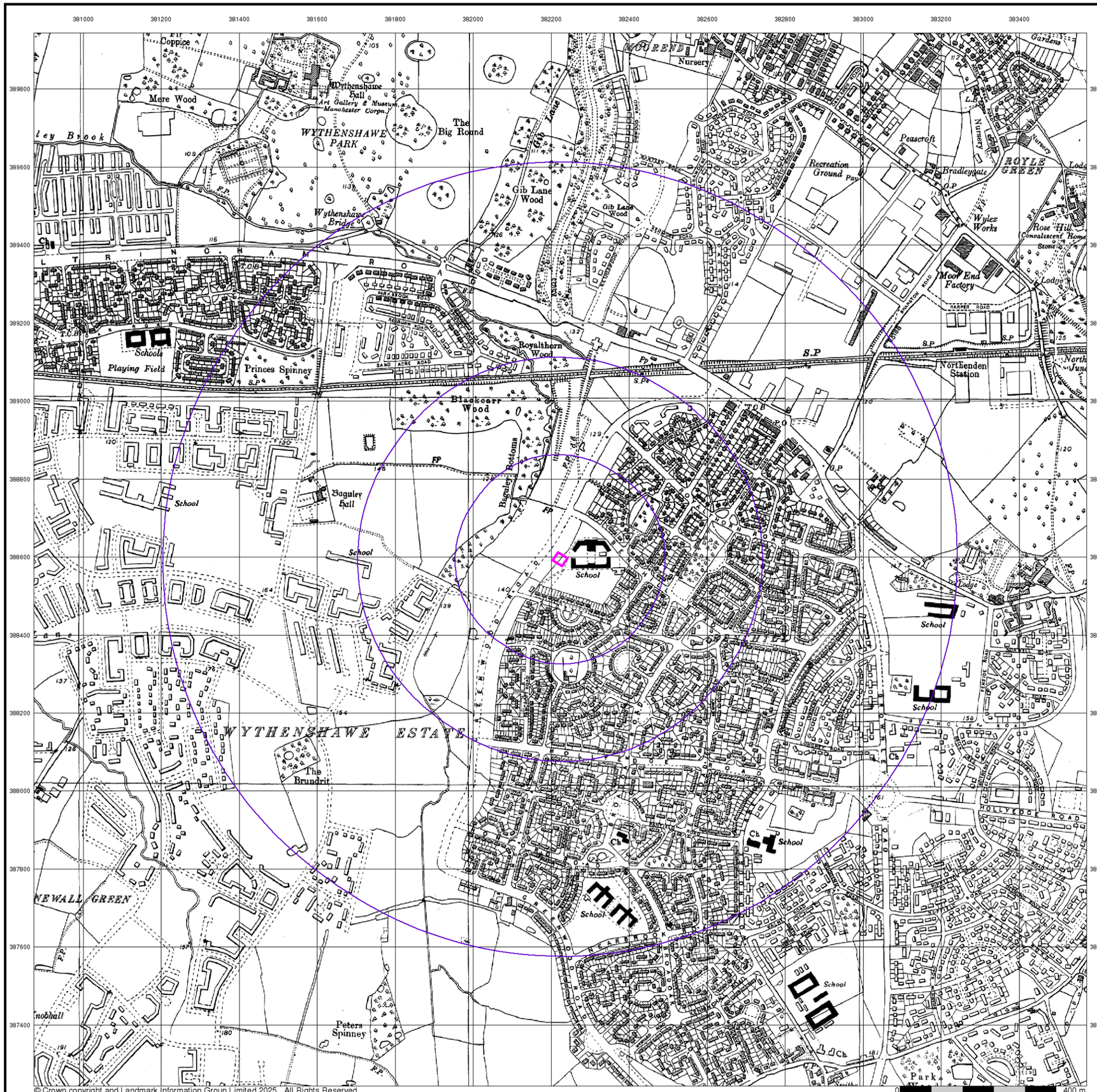
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Ordnance Survey Plan

Published 1954

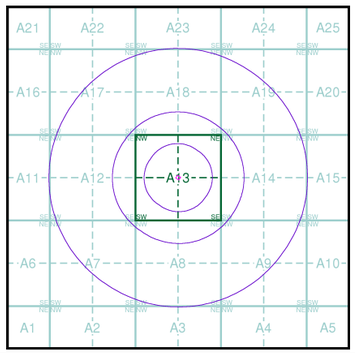
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SJ88NW
1954
1:10,560

Historical Map - Slice A



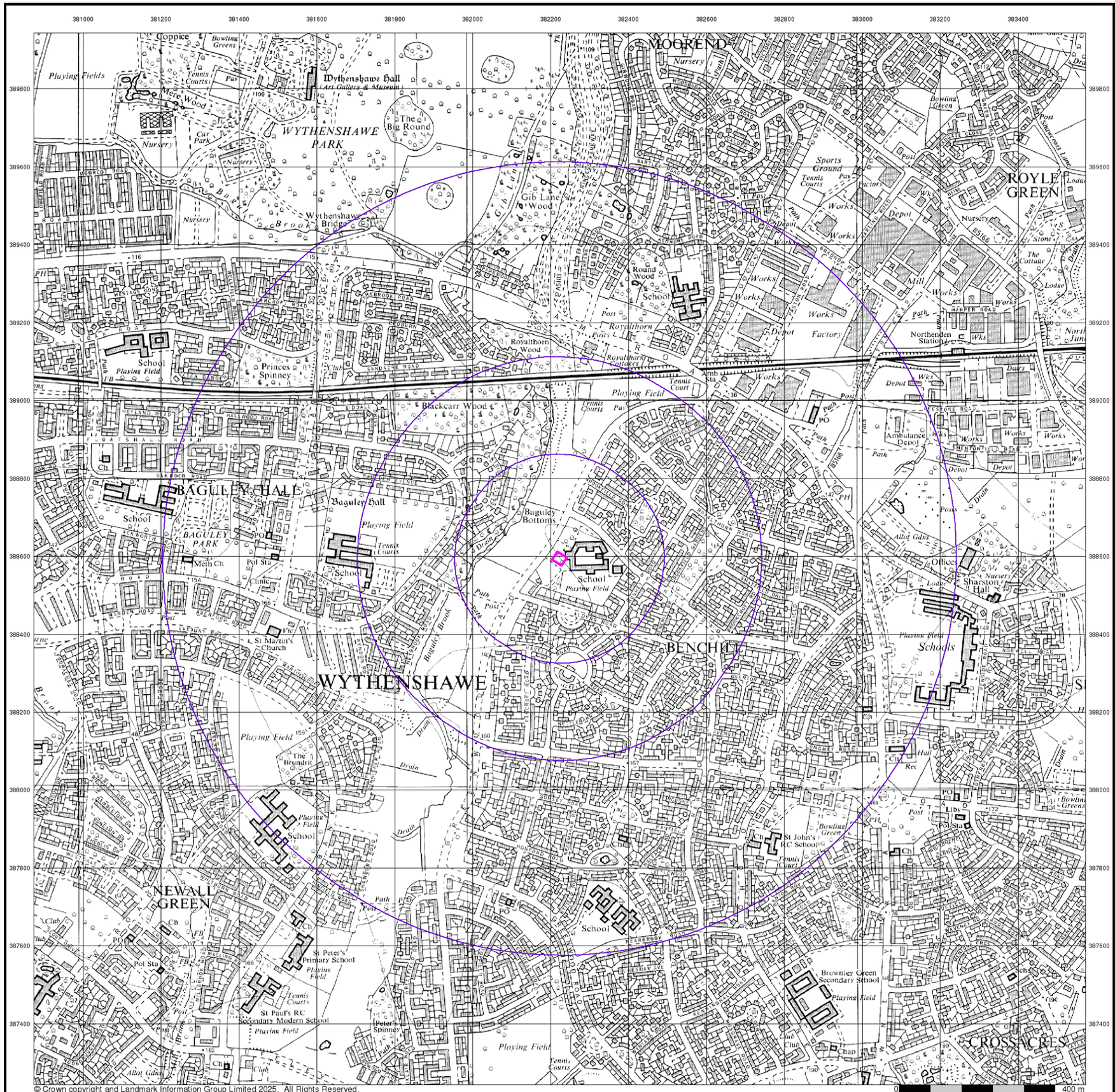
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Ordnance Survey Plan

Published 1967

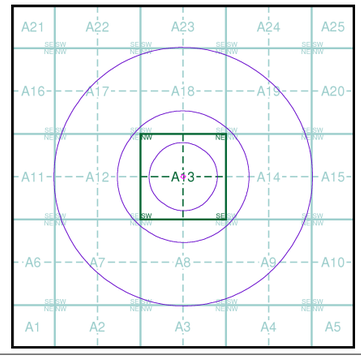
Source map scale - 1:10,000

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Map Name(s) and Date(s)

SJ88NW
1967
1:10,560

Historical Map - Slice A



Order Details

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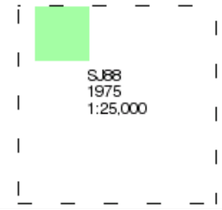
Manchester

Published 1975

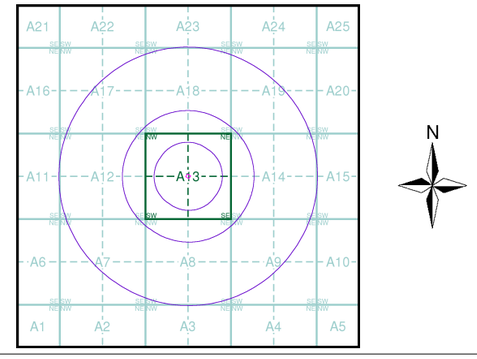
Source map scale - 1:25,000

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

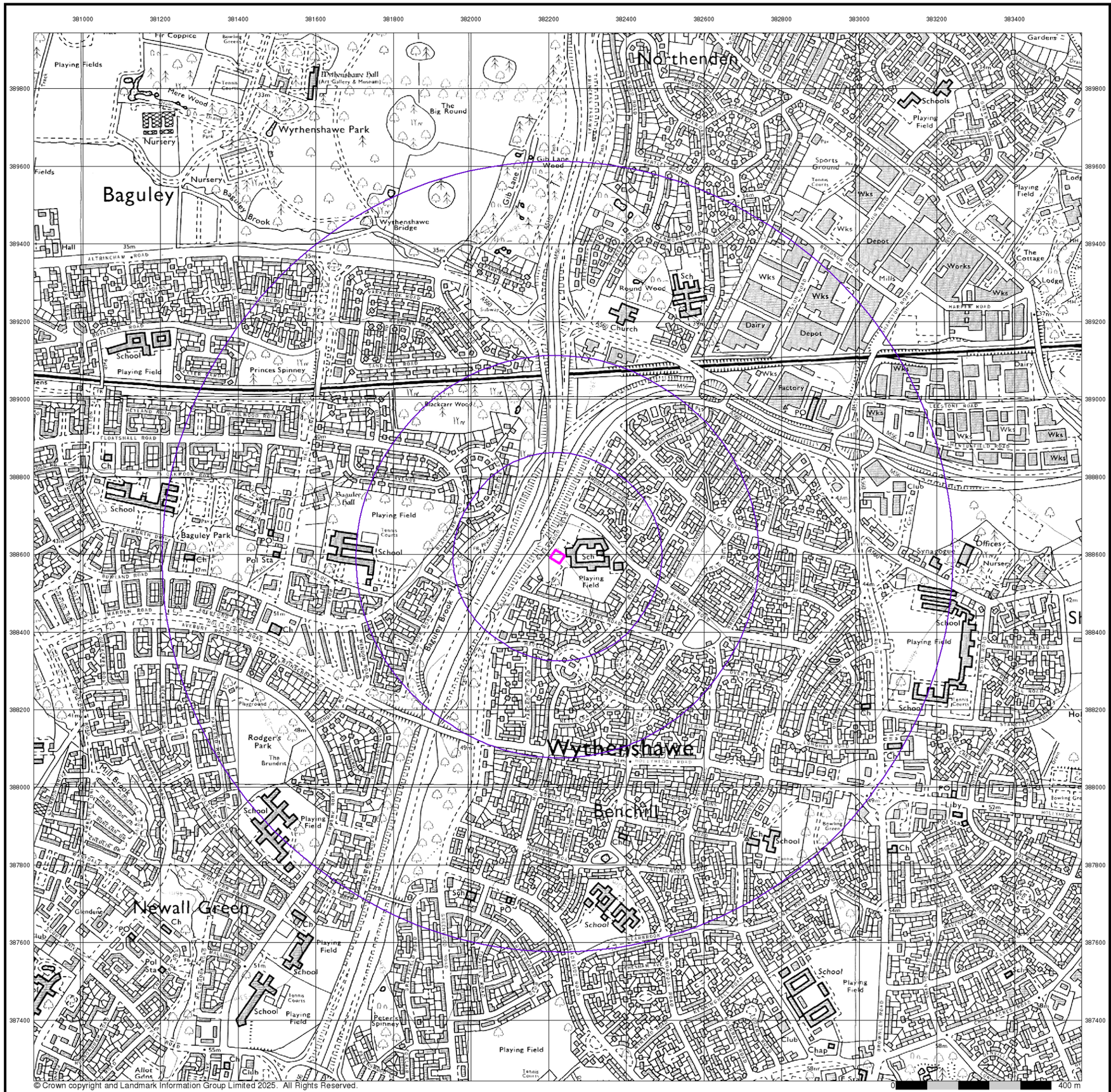


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Ordnance Survey Plan

Published 1977

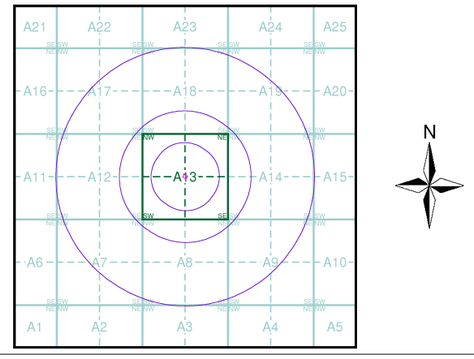
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SJ88NW
1977
1:10,000

Historical Map - Slice A



Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

Benchill

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



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0 400 m

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Ordnance Survey Plan

Published 1990

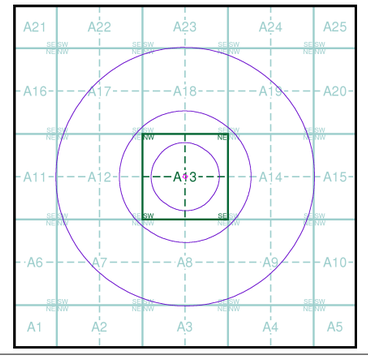
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SJ88NW
1990
1:10,000

Historical Map - Slice A



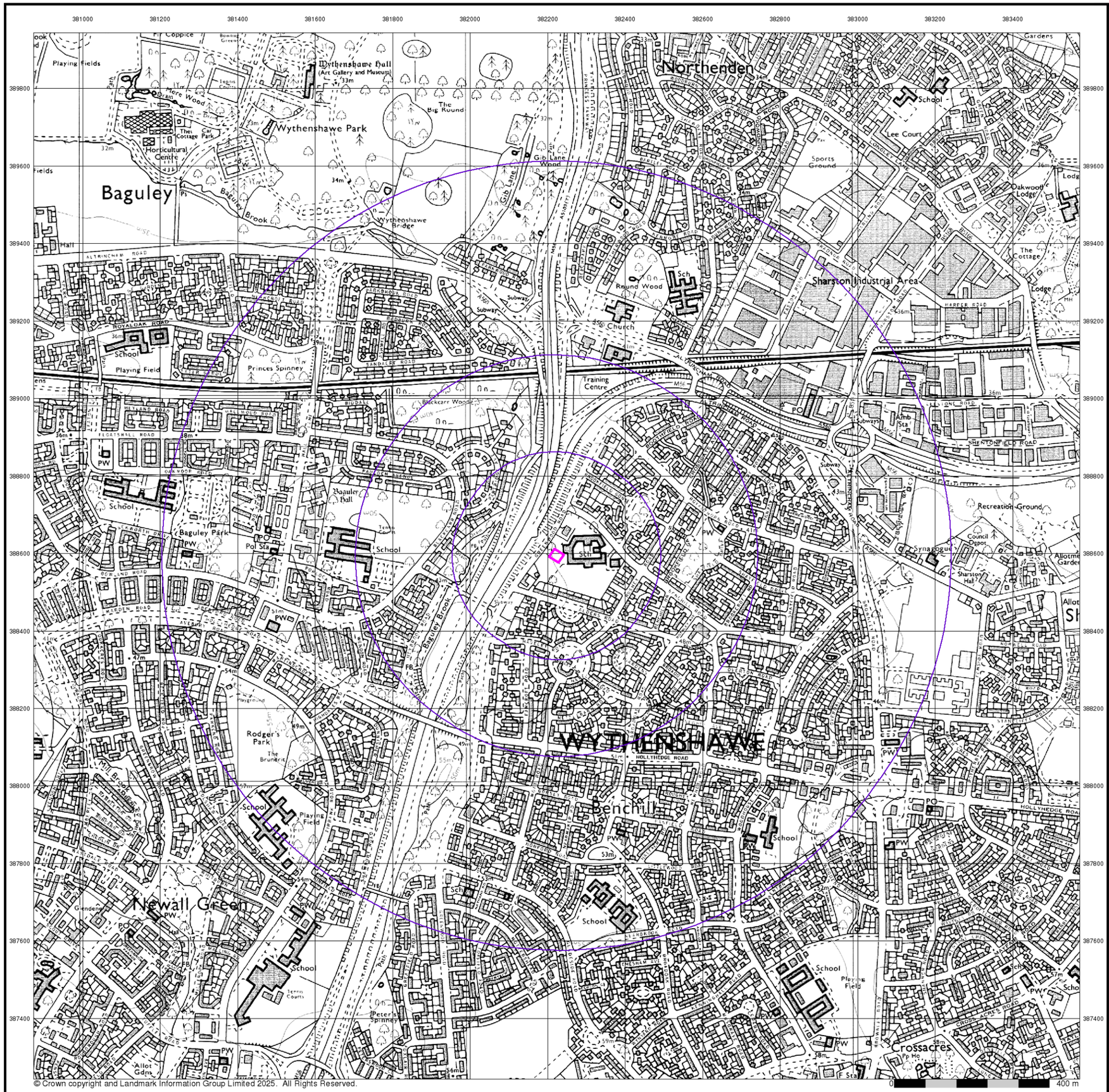
Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
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Ordnance Survey Plan

Published 1996

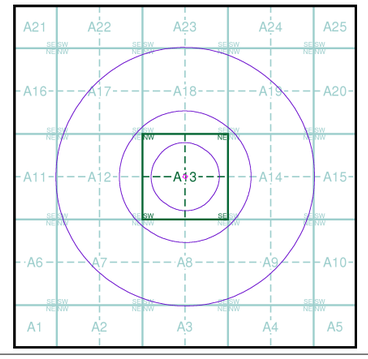
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SJ88NW
1996
1:10,000

Historical Map - Slice A



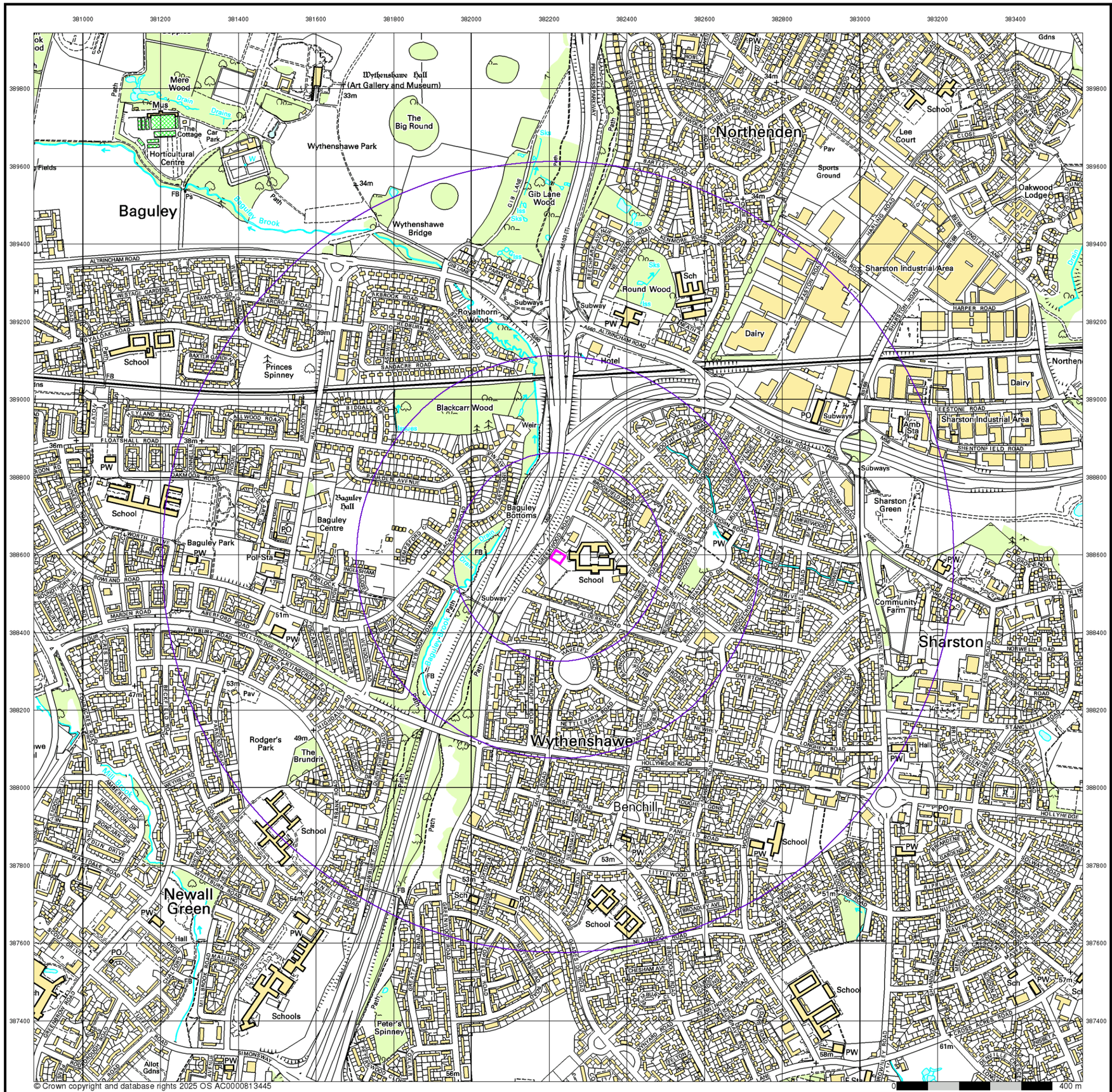
Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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10k Raster Mapping

Published 1999

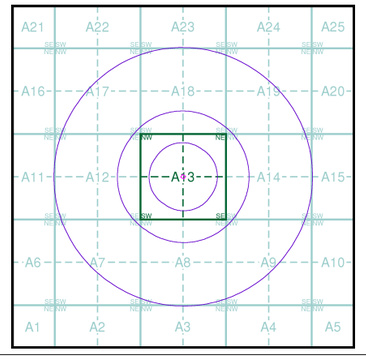
Source map scale - 1:10,000

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

Historical Map - Slice A



Order Details

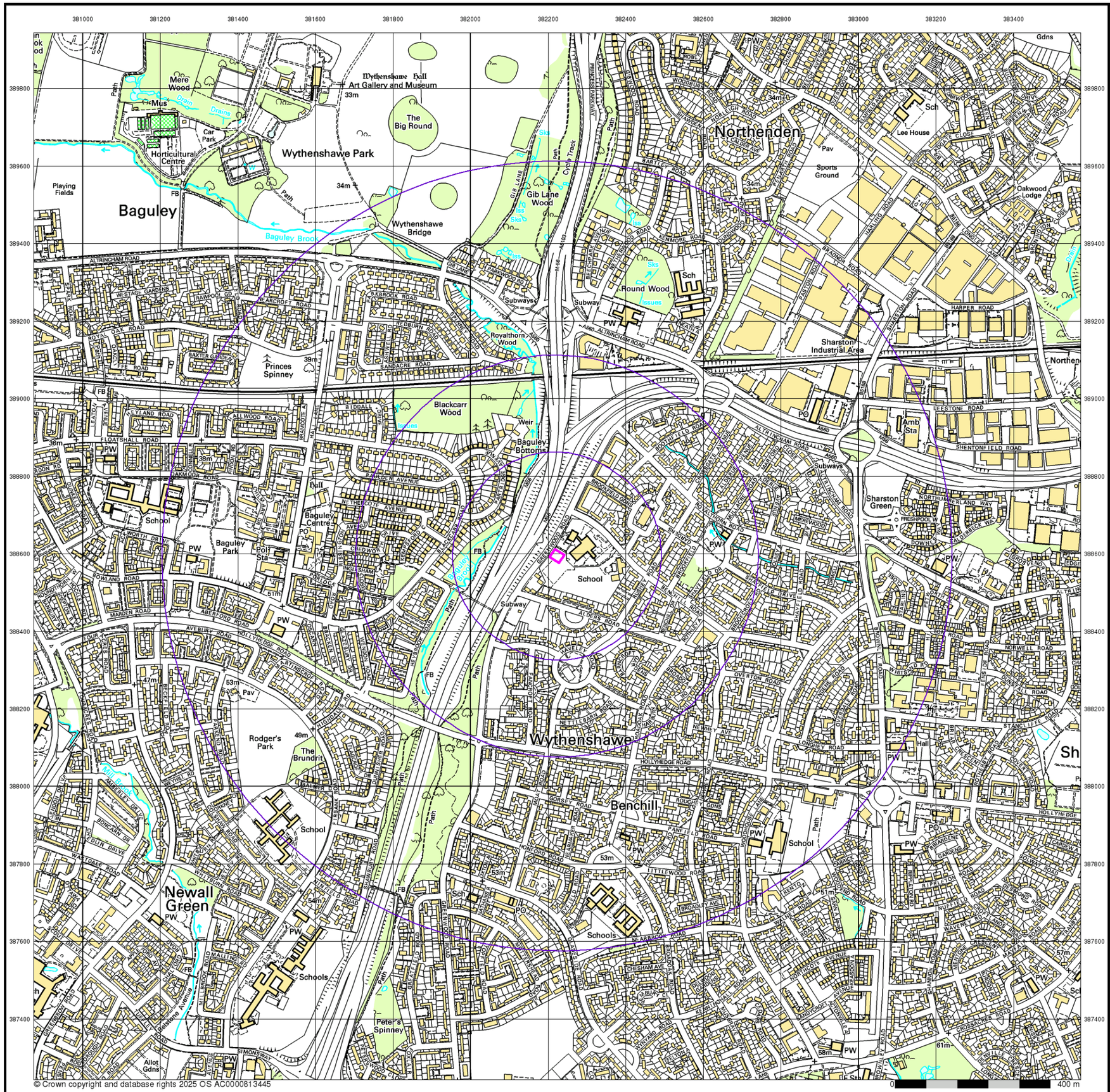
Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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10k Raster Mapping

Published 2006

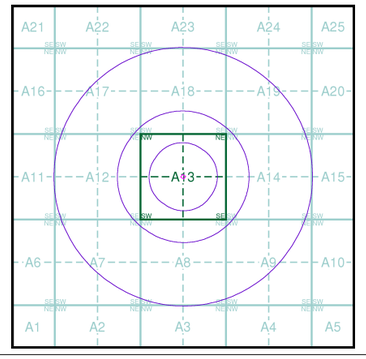
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SJ88NW
2006
1:10,000

Historical Map - Slice A



Order Details

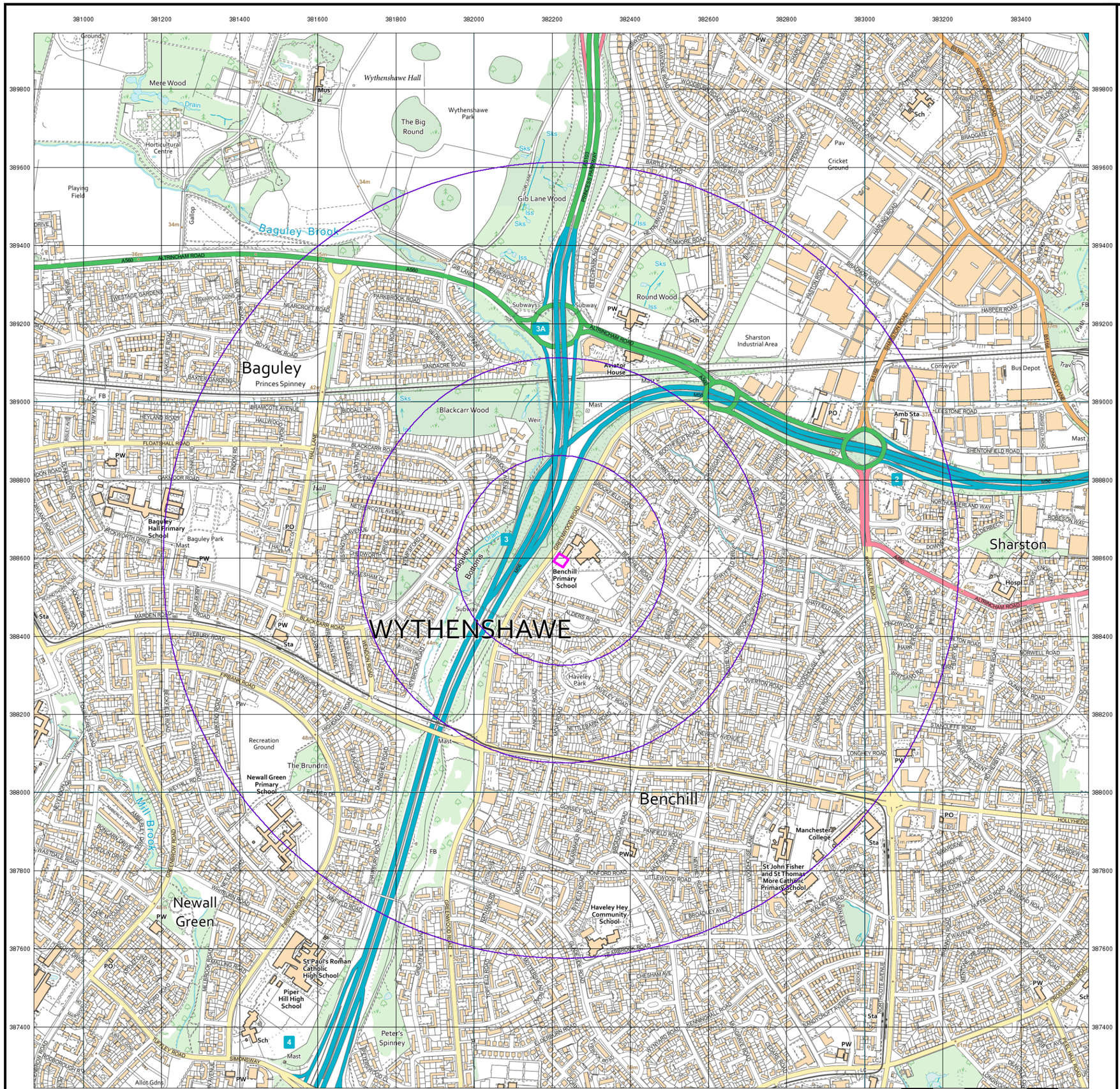
Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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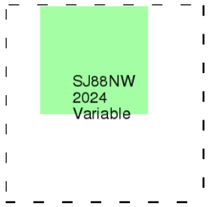
VectorMap Local

Published 2024

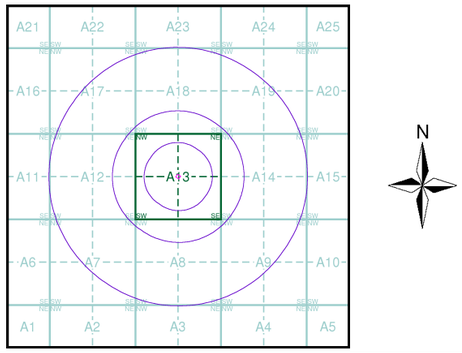
Source map scale - 1:10,000

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)



Historical Map - Slice A



Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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Appendix C – Envirocheck Report

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
377992989_1_1

Customer Reference:
LKC251240

National Grid Reference:
382220, 388590

Slice:
A

Site Area (Ha):
0.08

Search Buffer (m):
1000

Site Details:

Benchill

Client Details:

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

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Contents

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	12
Hazardous Substances	-
Geological	15
Industrial Land Use	18
Sensitive Land Use	27
Data Currency	28
Data Suppliers	34
Useful Contacts	35

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	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents					
Prosecutions					
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control	pg 1				2
Local Authority Integrated Pollution Prevention And Control	pg 1				1
Local Authority Pollution Prevention and Controls	pg 1				1
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 1		Yes		
Pollution Incidents to Controlled Waters	pg 2		1	4	2
Historical Prosecutions					
Registered Radioactive Substances					
Substantiated Pollution Incident Register					
Water Abstractions	pg 3				(*2)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 3	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 4	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 4	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences	pg 4		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 4		Yes	n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 4		7	14	41
Water Framework Directive - Catchment	pg 11	Yes			Yes
Water Framework Directive - Groundwater	pg 11	Yes			
Water Framework Directive - Surface Waters					

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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					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 12	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)					
Potentially Infilled Land (Water)	pg 12		1	16	30
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 15	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 15	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 16	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 16	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 16	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 16	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 18			5	60
Fuel Station Entries					
Points of Interest - Commercial Services	pg 23				20
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 25			2	2
Points of Interest - Public Infrastructure	pg 25			2	
Points of Interest - Recreational and Environmental	pg 26		1	1	5
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	pg 27			1	2
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves	pg 27				1
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 to Occur at Surface	A13SW (SW)	37	1	382200 388550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	145	1	382300 388450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	351	1	381950 388350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	357	1	381850 388550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (SW)	371	1	382050 388250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (W)	404	1	381800 388594
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A7NE (SW)	492	1	381850 388250
1	**Integrated Pollution Prevention And Control** Name: Arla Foods Uk Services Limited Location: Arla Foods Manchester, Arla Foods, .,Arla Foods Manchester, Paston Road,,, Manchester, West Yorkshire, M22 4UA Authority: Environment Agency, North West Region Permit Reference: Yp3830bb Original Permit Ref: Yp3830bb Effective Date: 10th February 2010 **Status: Surrendered** Application Type: Surrender App. Sub Type: Not Supplied Positional Accuracy: Automatically positioned to the address Activity Code: 6.8 A(1) (E) Activity Description: Animal Vegetable And Food; Treating Etc Milk Greater Than 200T/Day Primary Activity: Y	A19SW (NE)	781	2	382733 389202
2	**Integrated Pollution Prevention And Control** Name: Arla Foods Uk Services Ltd Location: Arla Foods Manchester, .,Arla Foods, Paston Road,,, Manchester, Lancashire, M22 4UA Authority: Environment Agency, North West Region Permit Reference: YP3830GX Original Permit Ref: Yp3830bb Effective Date: 10th February 2010 **Status: Surrender Effective** Application Type: Surrender App. Sub Type: Whole Positional Accuracy: Manually positioned to the road within the address or location Activity Code: 6.8 A(1) (E) Activity Description: Animal Vegetable And Food; Treating Etc Milk Greater Than 200T/Day Primary Activity: Y	A19NW (NE)	942	2	382870 389298
3	**Local Authority Integrated Pollution Prevention And Control** Name: Regalead Ltd Location: Columbus House, Altringham Road, Sharston, MANCHESTER, M22 9AF Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/01/03/AW Dated: 30th April 2003 Process Type: Production and Processing of Metals Description: Non-Ferrous Metals **Status: Permit Issued** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	681	3	382767 389029
4	**Local Authority Pollution Prevention and Controls** Name: Walls Developments Location: Paston Road, Sharston Industrial Estate, Manchester, M22 4tf Authority: Manchester City Council, Environmental Health Department Permit Reference: M74/95 Dated: 12th May 1995 Process Type: Local Authority Air Pollution Control Description: PG3/8 Quarry processes including roadstone plants and the size reduction of bricks, tiles and concrete **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	960	3	382836 389350
	Nearest Surface Water Feature	A13NW (NW)	137	-	382093 388670

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Combined Sewer Overflow Location: Bagley Brook, Black Carr Road, Withenshawe Authority: Environment Agency, North West Region Pollutant: Sewage Debris/Litter Note: Human Waste Incident Date: 16th January 1998 Incident Reference: SO980118 Catchment Area: Sinderland Brook Receiving Water: Freshwater Stream/River Cause of Incident: CSO Normal Operation Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SW (SW)	224	2	382000 388500
6	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Petrol Note: Not Supplied Incident Date: 12th September 1995 Incident Reference: 95512302 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	A13SW (SW)	280	2	382000 388400
7	**Pollution Incidents to Controlled Waters** Property Type: Private Sewage (Non-PLC): Sewerage Systems Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Storm Sewage Note: Baguely Brook Incident Date: 12th July 1995 Incident Reference: 95511739 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Miscellaneous/Other Pollution Type Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SW (SW)	356	2	382000 388300
8	**Pollution Incidents to Controlled Waters** Property Type: Industrial: Other Location: Benchill, WYTHENSHAWE Authority: Environment Agency, North West Region Pollutant: Oils - Gas Oil Note: Tributary Baguley Bk; Gas Oil Incident Date: 27th March 1997 Incident Reference: 97510508 Catchment Area: Sinderland Brook Receiving Water: Freshwater Stream/River Cause of Incident: Vandalism Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14SW (SE)	409	2	382600 388400
9	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Combined Sewer Overflow Location: Sewage In Baguley Brook, Heybrook Road Authority: Environment Agency, North West Region Pollutant: Crude Sewage Note: Baguley Brook; Sewage Incident Date: 23rd October 1997 Incident Reference: 97511829 Catchment Area: Sinderland Brook Receiving Water: Freshwater Stream/River Cause of Incident: Blocked Sewer Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12SE (SW)	498	2	381800 388300
10	**Pollution Incidents to Controlled Waters** Property Type: Connection To Surface Drains Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Sewage Debris/Litter Note: Baguely Brook Incident Date: 14th July 1994 Incident Reference: 94511561 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	563	2	381800 388200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	**Pollution Incidents to Controlled Waters** Property Type: Boats/Ships Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Seen Incident Date: 18th October 1994 Incident Reference: 94512306 Catchment Area: Mersey - Non-Tidal Receiving Water: Groundwater Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14SW (E)	592	2	382800 388400
	Water Abstractions Operator: Norwest Co-Op Society Ltd. Licence Number: 2569015001 Permit Version: Not Supplied Location: Borehole, Wythenshawe, MANCHESTER Authority: Environment Agency, North West Region Abstraction: Cooling Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 318 Yearly Rate (m3): 115923 Details: Licence Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20SW (NE)	1263	2	383400 389100
	Water Abstractions Operator: Mr Khalid Saleem Licence Number: 2569014037 Permit Version: 1 Location: Underground Strata: Borehole At Sharston, Manchester Authority: Environment Agency, North West Region Abstraction: Industrial; Commercial And Public Services: Laundry Use Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Borehole At Premises, Sharston, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 15th November 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A15NE (E)	1393	2	383610 388860
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: >70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: Low	A13NW (W)	0	2	382223 388594
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: >70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: Low	A13NE (N)	0	2	382223 388595

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - B	A13NW (W)	0	4	382223 388594
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	A13NW (W)	0	4	382223 388594
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13NE (N)	0	4	382223 388595
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NW (NW)	136	2	382093 388669
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NW (N)	208	2	382146 388806
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NW (NW)	136	2	382093 388669
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NW (N)	208	2	382146 388806
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
12	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 145.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A13NW (NW)	138	5	382092 388671
13	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 129.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A13NW (NW)	138	5	382092 388671
14	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 113.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (NW)	150	5	382073 388663
15	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 103.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A13SW (W)	191	5	382014 388571

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 36.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SW (W)	191	5	382014 388571
17	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 223.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A13NW (N)	210	5	382143 388807
18	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 15.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (W)	218	5	381986 388594
19	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.3 Watercourse Level: Underground Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A13SW (W)	257	5	381961 388509
20	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 291.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A13SW (W)	261	5	381958 388505
21	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 10.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	366	5	382128 388966
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 57.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	375	5	382131 388977
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 404.5 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NE (NE)	381	5	382447 388917
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 233.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NE (NE)	384	5	382501 388880

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
25	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 63.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	394	5	382627 388676
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 25.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	394	5	382627 388681
27	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 25.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A18SW (N)	414	5	382165 389022
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	423	5	382664 388631
29	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 114.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	431	5	382671 388627
30	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.9 Watercourse Level: Underground Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A18SW (N)	439	5	382162 389047
31	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 273.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A18SW (N)	453	5	382161 389061
32	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1216.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A8NW (SW)	473	5	381893 388236
33	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 152.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SW (N)	501	5	382169 389110

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
34	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 104.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NE (NW)	512	5	381809 388919
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 18.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (E)	532	5	382774 388578
36	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 53.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (E)	550	5	382791 388572
37	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 18.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (E)	603	5	382844 388566
38	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 168.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A18SW (N)	611	5	382054 389200
39	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 71.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (E)	621	5	382862 388564
40	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 53.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SE (N)	669	5	382435 389244
41	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 11.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	688	5	382927 388539
42	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 48.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SE (E)	699	5	382938 388537

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
43	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 52.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	721	5	382452 389294
44	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	721	5	382452 389294
45	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 8.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	722	5	382450 389295
46	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 52.3 Watercourse Level: Underground Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A18NW (N)	733	5	381957 389296
47	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 29.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	756	5	382105 389359
48	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 5.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	773	5	382103 389375
49	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 3.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	775	5	382080 389374
50	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	778	5	382101 389380
51	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 1.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	779	5	382078 389377

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
52	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 2.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	779	5	382079 389378
53	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	781	5	382078 389380
54	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 12.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	781	5	382097 389383
55	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 207.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A18NW (N)	783	5	381924 389337
56	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 7.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	854	5	382139 389462
57	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 11.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	859	5	382408 389450
58	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	861	5	382134 389469
59	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 11.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	871	5	382414 389460
60	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 14.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	884	5	382125 389490

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
61	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 3.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A18NW (N)	892	5	382137 389500
62	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A18NW (N)	895	5	382135 389502
63	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	897	5	382129 389504
64	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 17.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	902	5	382130 389510
65	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 98.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	918	5	382137 389526
66	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 7.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	932	5	382233 389544
67	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 16.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	936	5	382227 389548
68	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 11.8 Watercourse Level: Underground Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A17NE (NW)	940	5	381751 389427
69	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	944	5	382213 389555

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
70	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	948	5	382206 389559
71	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 11.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	949	5	382203 389560
72	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1129.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A17NE (NW)	950	5	381741 389433
73	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 20.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	954	5	382194 389566
	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	A13NW (W)	0	2	382223 388594
	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	A19SW (NE)	699	2	382850 388940
	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	A13NW (W)	0	2	382223 388594

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: Manchester City Council - Had landfill data but passed it to the relevant environment agency		0	6	382223 388594
74	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A13NW (NW)	133	-	382106 388682
75	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A13SW (SW)	274	-	382018 388390
76	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A13NE (N)	275	-	382290 388877
77	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SW (W)	297	-	381909 388566
78	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A13SW (S)	304	-	382145 388283
79	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A13NW (N)	313	-	382206 388924
80	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SW (SW)	335	-	382066 388283
81	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A18SE (N)	359	-	382359 388942
82	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A18SE (NE)	366	-	382390 388935
83	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A13SE (SE)	376	-	382550 388381
84	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8NE (S)	382	-	382371 388222
85	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A18SE (NE)	407	-	382411 388970
86	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A18SE (NE)	430	-	382405 388999
87	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8NE (S)	441	-	382307 388143
88	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8NE (SE)	445	-	382459 388196
89	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A7NE (SW)	486	-	381884 388226
90	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A18SE (N)	499	-	382295 389105
91	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A8NW (SW)	533	-	381943 388126
92	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12NE (NW)	548	-	381744 388888
93	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A9NW (SE)	578	-	382628 388159

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
94	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8NW (S)	603	-	382165 387976
95	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8NE (S)	616	-	382384 387980
96	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A9NW (SE)	663	-	382749 388167
97	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A12NE (W)	664	-	381589 388838
98	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A18SE (N)	667	-	382410 389250
99	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8NE (S)	669	-	382412 387933
100	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A12SW (W)	691	-	381523 388478
101	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1923	A12NE (NW)	694	-	381592 388919
102	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A7NE (SW)	702	-	381642 388171
103	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A9NW (SE)	704	-	382755 388110
104	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A7NE (SW)	728	-	381594 388195
105	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A14NE (E)	731	-	382952 388769
106	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8SE (S)	766	-	382348 387820
107	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A7SE (SW)	840	-	381746 387887
108	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A7NW (SW)	842	-	381540 388074
109	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A14NE (E)	873	-	383105 388728
110	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A8SE (S)	887	-	382251 387689
111	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A14SE (E)	904	-	383133 388440
112	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A7SE (SW)	918	-	381678 387839
113	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A18NW (N)	940	-	382199 389552
114	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A12NW (W)	948	-	381261 388683

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
115	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A8SW (S)	949	-	382165 387629
116	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A12NW (W)	950	-	381301 388886
117	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1923	A17SW (NW)	967	-	381414 389149
118	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A8SW (S)	977	-	382214 387599
119	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A9SW (SE)	984	-	382798 387773
120	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A7SE (SW)	994	-	381563 387833

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Triassic Rocks (Undifferentiated)	A13NW (W)	0	1	382223 388594
	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	A13NE (N)	0	1	382223 388595
	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	A13NW (W)	0	1	382223 388594
	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	A18SW (NW)	416	1	382000 388966
	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	A18SE (NE)	456	1	382458 389000
	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	A12NE (W)	668	1	381582 388833
	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	A18NW (N)	702	1	382000 389279

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <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	A19SE (NE)	837	1	382975 389000
	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	A9NE (SE)	964	1	383000 388000
	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)	998	1	381354 388068
	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				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	382223 388594
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	382223 388594
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	382223 388594
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	382223 388594
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	382223 388594
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	121	1	382114 388673
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	382223 388594
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	0	1	382223 388595

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	382223 388594
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	382223 388594

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
121	**Contemporary Trade Directory Entries** Name: T K Gardens Location: 14, Royalthorn Road, Manchester, M22 8AR Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	310	-	382467 388809
121	**Contemporary Trade Directory Entries** Name: L.K Pet Supplies Location: 14, Royalthorn Road, Manchester, M22 8AR Classification: Pet Foods & Animal Feeds **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	310	-	382467 388809
122	**Contemporary Trade Directory Entries** Name: Arc Maintenance Services Ltd Location: 4, Heybrook Road, Manchester, Lancashire, M23 1PQ Classification: Boilers - Servicing, Replacements & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SW (W)	320	-	381892 388522
123	**Contemporary Trade Directory Entries** Name: Ukglassandmirrors.Co.Uk Location: 1, Benchill Drive, Manchester, M22 8FH Classification: Mirrors & Decorative Glass **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	325	-	382534 388454
124	**Contemporary Trade Directory Entries** Name: A & A Electrical Location: 3, Partridge Avenue, Manchester, M23 1PJ Classification: Vacuum Cleaners - Sales & Service **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	352	-	381975 388866
125	**Contemporary Trade Directory Entries** Name: David Phillips Location: 16, Paulden Avenue, Manchester, M23 1PD Classification: French Polishing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (W)	528	-	381714 388787
126	**Contemporary Trade Directory Entries** Name: J J Motors Mobile Mechanic Location: 54, Alderue Avenue, Manchester, M22 8DD Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	535	-	382716 388844
126	**Contemporary Trade Directory Entries** Name: Jj Motor Mechanic (Mobile) Location: 54, Alderue Avenue, Manchester, M22 8DD Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	535	-	382716 388844
127	**Contemporary Trade Directory Entries** Name: Danwood Group Ltd Location: 353, Altrincham Road, Manchester, M22 4BJ Classification: Copying & Duplicating Machines & Supplies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	552	-	382304 389157
128	**Contemporary Trade Directory Entries** Name: G & M Fire Protection Ltd Location: 129, Roundwood Road, Manchester, M22 4AD Classification: Firefighting Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	640	-	382598 389127
129	**Contemporary Trade Directory Entries** Name: D S V Air & Sea Ltd Location: Enterprise Point, Altrincham Road, MANCHESTER, M22 4NY Classification: Freight Forwarders **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	648	-	382712 389042
129	**Contemporary Trade Directory Entries** Name: D F D S Location: Enterprise Point, Altrincham Road, Manchester, M22 4NY Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	648	-	382712 389042

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
129	**Contemporary Trade Directory Entries** Name: Regalead Ltd Location: Columbus House,Altrincham Road, Manchester, Greater Manchester, M22 9AF Classification: Metal Products - Fabricated **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	650	-	382758 388991
129	**Contemporary Trade Directory Entries** Name: Dennis Moss & Sons Ltd Location: Columbus House,Altrincham Rd, Manchester, Lancashire, M22 9AF Classification: Textile Manufacturing **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	650	-	382758 388991
129	**Contemporary Trade Directory Entries** Name: Regalead Location: Altrincham Road, Manchester, M22 9AF Classification: Stained Glass Designers & Producers **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	658	-	382744 389021
130	**Contemporary Trade Directory Entries** Name: All Star Domestics Location: 65, Hall Lane, Manchester, M23 1NP Classification: Washing Machines - Servicing & Repairs **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (NW)	658	-	381609 388872
130	**Contemporary Trade Directory Entries** Name: R I J Recovery Services Location: 63, Hall Lane, Manchester, M23 1NP Classification: Car Breakdown & Recovery Services **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (NW)	662	-	381610 388881
131	**Contemporary Trade Directory Entries** Name: Flying Freight Location: 61, Sandacre Road, Manchester, M23 1AP Classification: Airfreight Services **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	707	-	381698 389089
131	**Contemporary Trade Directory Entries** Name: Flying Freight Location: 61, Sandacre Road, Manchester, M23 1AP Classification: Road Haulage Services **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	707	-	381698 389089
132	**Contemporary Trade Directory Entries** Name: Havatune Fault Code Reading Location: 27, Sir Williams Court, 196, Hall Lane, Manchester, M23 1DL Classification: Car Engine Tuning & Diagnostic Services **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	727	-	381480 388647
133	**Contemporary Trade Directory Entries** Name: Superb Clean Location: Lyndene rd, Manchester, Lancashire, M22 4QA Classification: Cleaning Services - Domestic **Status:** **Inactive** Positional Accuracy: Manually positioned within the geographical locality	A14SE (SE)	742	-	382914 388283
134	**Contemporary Trade Directory Entries** Name: Specialised Ability Centre Location: Ability House,Altrincham Road, Manchester, Greater Manchester, M22 4NY Classification: Disability Equipment - Manufacturers & Suppliers **Status:** **Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	747	-	382971 388760
135	**Contemporary Trade Directory Entries** Name: Smiths Location: South Court,Sharston Rd, Manchester, Lancashire, M22 4BB Classification: Cleaning Services - Domestic **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	771	-	382932 388939

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
135	**Contemporary Trade Directory Entries** Name: St Pierre Groupe Location: South Court, Sharston Road, Manchester, M22 4BB Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	771	-	382932 388939
135	**Contemporary Trade Directory Entries** Name: Motor Trade Group Ltd Location: SOUTH COURT, SHARSTON ROAD, MANCHESTER, M22 4SN Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	771	-	382932 388939
135	**Contemporary Trade Directory Entries** Name: Chevron Technical Services & Aircraft Maintenance Location: Sharston Road, Manchester, M22 4SN Classification: Aviation Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	785	-	382947 388940
135	**Contemporary Trade Directory Entries** Name: Air France & K L M Cargo Location: South Court, Sharston Road, Manchester, M22 4SN Classification: Airfreight Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	785	-	382947 388940
135	**Contemporary Trade Directory Entries** Name: 3v (Uk) Ltd Location: South Court, Sharston Road, Sharston Industrial Area, Manchester, M22 4SN Classification: Plastics - Raw Materials **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	785	-	382947 388940
135	**Contemporary Trade Directory Entries** Name: Logwin Air & Ocean (Uk) Ltd Location: South Court, Sharston Road, Manchester, Lancashire, M22 4SN Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	785	-	382947 388940
135	**Contemporary Trade Directory Entries** Name: 3v Cogeim Location: South Court, Sharston Road, Manchester, Lancashire, M22 4SN Classification: Pharmaceutical Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	785	-	382947 388940
135	**Contemporary Trade Directory Entries** Name: Logwin Logistics Location: South Court, Sharston Road, Manchester, M22 4SN Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	785	-	382947 388940
136	**Contemporary Trade Directory Entries** Name: Arla Foods Location: Paston Road, Sharston Industrial Area, Manchester, M22 4UA Classification: Dairies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	781	-	382733 389202
136	**Contemporary Trade Directory Entries** Name: Arla Foods Location: Paston Road, Sharston Industrial Area, Manchester, M22 4UA Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	781	-	382733 389202
137	**Contemporary Trade Directory Entries** Name: Manchester Cleaning Co Location: 51, Roughey Gardens, Manchester, M22 9NL Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	800	-	382671 387911
138	**Contemporary Trade Directory Entries** Name: M K M Manchester South Location: Altrincham Road, Manchester, Greater Manchester, M22 9SB Classification: Builders' Merchants **Status: Active** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	813	-	382912 389056

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
139	**Contemporary Trade Directory Entries** Name: Superious Cleaning Co Location: 52, Hall Lane, Manchester, M23 1AG Classification: Commercial Cleaning Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	828	-	381586 389146
140	**Contemporary Trade Directory Entries** Name: Stericlean Location: 151, Firbank Road, Manchester, M23 2YP Classification: Commercial Cleaning Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	837	-	381675 387943
141	**Contemporary Trade Directory Entries** Name: Able Freight Logistics Ltd Location: Bell House, Leestone Road, Sharston Industrial Area, Manchester, M22 4RF Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	897	-	383063 388957
142	**Contemporary Trade Directory Entries** Name: Eco-Cleaners Location: 6, Northumberland Way, Manchester, M22 4UG Classification: Cleaning Services - Domestic **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	898	-	383125 388759
143	**Contemporary Trade Directory Entries** Name: Egertons Recovery Services Location: Paston Road, Sharston Industrial Area, Manchester, M22 4TF Classification: Car Breakdown & Recovery Services **Status: Active** Positional Accuracy: Automatically positioned in the proximity of the address	A19NW (NE)	899	-	382785 389312
143	**Contemporary Trade Directory Entries** Name: Cronin 24hr Breakdown Service Location: Paston Road, Manchester, Lancashire, m22 4tf Classification: Car Breakdown & Recovery Services **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A19NW (NE)	914	-	382817 389306
144	**Contemporary Trade Directory Entries** Name: S T V Bernard Ltd Location: Unit 3, Alpha Point, Bradnor Road, Sharston Industrial Area, Manchester, M22 4TE Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	906	-	382966 389141
144	**Contemporary Trade Directory Entries** Name: Bollore Logistics Location: Unit 3, Alpha Point, Bradnor Road, Sharston Industrial Area, Manchester, M22 4TE Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	944	-	382988 389174
144	**Contemporary Trade Directory Entries** Name: Bollore Logistics Location: Unit 3, Alpha Point, Bradnor Road, Sharston Industrial Area, Manchester, M22 4TE Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	944	-	382988 389174
145	**Contemporary Trade Directory Entries** Name: Concrete Floors Ltd Location: The Lodge, Parkend Road, Manchester, M23 2GW Classification: Concrete Contractors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (W)	911	-	381364 388241
145	**Contemporary Trade Directory Entries** Name: Fast Skips Location: The Lodge, Parkend Road, Manchester, M23 2GW Classification: Waste Disposal Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (W)	911	-	381364 388241

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
146	**Contemporary Trade Directory Entries** Name: Pro Cleaners Sharston Location: 9, Downes Way, Manchester, M22 4UD Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	917	-	383158 388645
147	**Contemporary Trade Directory Entries** Name: Supreme Clean Location: 4, Malden Grove, Manchester, M23 1BT Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	920	-	381483 389164
148	**Contemporary Trade Directory Entries** Name: Aarons Carpet Cleaning Wythenshawe Location: 7, BROWNLEY COURT ROAD, MANCHESTER, M22 8AH Classification: Carpet, Curtain & Upholstery Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	925	-	382986 388046
149	**Contemporary Trade Directory Entries** Name: Remploy Print Location: Leestone Road, Sharston Industrial Area, Manchester, M22 4RF Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	926	-	383062 389027
149	**Contemporary Trade Directory Entries** Name: Wheel Hub Location: 50, Leestone Road, Sharston Industrial Area, Manchester, M22 4RF Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	962	-	383102 389027
149	**Contemporary Trade Directory Entries** Name: Albany Location: Leestone Road, Sharston Industrial Area, Manchester, M22 4RB Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	981	-	383130 389011
149	**Contemporary Trade Directory Entries** Name: Interpart Uk Ltd Location: Warsall Road, Sharston Industrial Area, Manchester, M22 4RH Classification: Plant & Machinery Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	999	-	383140 389033
149	**Contemporary Trade Directory Entries** Name: Heald Green Garage Ltd Location: Warsall Road, Sharston Industrial Area, Manchester, M22 4RH Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	999	-	383140 389033
150	**Contemporary Trade Directory Entries** Name: Regal Cast Iron Radiators Location: 9, Banstead Avenue, Manchester, M22 4AQ Classification: Central Heating Supplies & Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	927	-	382728 389386
151	**Contemporary Trade Directory Entries** Name: County Domestic Services Location: 65, Ackworth Drive, Manchester, M23 1LB Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	957	-	381248 388619
151	**Contemporary Trade Directory Entries** Name: County Domestic Repairs Location: 65, Ackworth Drive, Manchester, M23 1LB Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	957	-	381248 388619

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
152	**Contemporary Trade Directory Entries** Name: Travis Perkins Location: Leestone Road, Sharston Industrial Area, Manchester, Greater Manchester, M22 4RF Classification: Builders' Merchants **Status: Active** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	963	-	383074 389080
153	**Contemporary Trade Directory Entries** Name: Express Cleaning Ltd Location: 155, Woodhouse Lane, Manchester, M22 9WN Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	976	-	382725 387736
154	**Contemporary Trade Directory Entries** Name: Altrincham Bathroom Services Location: 8, Bushey Drive, Manchester, M23 2GJ Classification: Bath Resurfacing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (W)	990	-	381291 388210
155	**Contemporary Trade Directory Entries** Name: Manchester Print Ltd Location: Shentonfield Road, Sharston Industrial Area, Manchester, M22 4RW Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	996	-	383201 388862
156	**Contemporary Trade Directory Entries** Name: Scotchgard Protector Services Location: Alpha Point,Bradnor Rd, Sharston Ind Area, Manchester, Lancashire, M22 4TE Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A19SE (NE)	996	-	383038 389194
157	**Contemporary Trade Directory Entries** Name: Permanent Roofing Ltd Location: 4, Coney Grove, MANCHESTER, M23 1BP Classification: Fascias and Soffits **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NW (NW)	998	-	381479 389282
158	**Contemporary Trade Directory Entries** Name: Yusen Logistics Location: Bradnor Rd, Sharston Ind Area, Manchester, Lancashire, M22 4TE Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A19NW (NE)	998	-	382873 389369
158	**Contemporary Trade Directory Entries** Name: Cheadle Breakdown Service Location: Bradnor Point, Paston Road, Sharston Industrial Area, Manchester, M22 4TF Classification: Car Breakdown & Recovery Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	999	-	382873 389369
159	**Points of Interest - Commercial Services** Name: J J Motors Mobile Mechanic Location: 54 Alderue Avenue, Manchester, M22 8DD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14NW (NE)	535	7	382716 388844
160	**Points of Interest - Commercial Services** Name: D S V Air & Sea Ltd Location: Enterprise Point, Altrincham Road, Manchester, M22 4NY Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SW (NE)	644	7	382710 389038
160	**Points of Interest - Commercial Services** Name: D F D S Location: Enterprise Point, Altrincham Road, Manchester, M22 4NY Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SW (NE)	648	7	382712 389042

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
161	**Points of Interest - Commercial Services** Name: Flying Freight Location: 61 Sandacre Road, Manchester, M23 1AP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A17SE (NW)	707	7	381698 389089
162	**Points of Interest - Commercial Services** Name: Havatune Fault Code Reading Location: 27 Sir Williams Court 196, Hall Lane, Manchester, M23 1DL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NW (W)	727	7	381480 388647
162	**Points of Interest - Commercial Services** Name: Havatune Location: 27 Sir Williams Court 196, Hall Lane, Manchester, M23 1DL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NW (W)	727	7	381480 388647
163	**Points of Interest - Commercial Services** Name: Arla Foods Location: Paston Road, Sharston Industrial Area, Manchester, M22 4UA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SW (NE)	781	7	382733 389202
164	**Points of Interest - Commercial Services** Name: Logwin Air & Ocean UK Ltd Location: South Court, Sharston Road, Manchester, M22 4SN Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SE (NE)	785	7	382947 388940
164	**Points of Interest - Commercial Services** Name: Logwin Air & Ocean (UK) Ltd Location: South Court, Sharston Road, Manchester, M22 4SN Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SE (NE)	785	7	382947 388940
164	**Points of Interest - Commercial Services** Name: Carrs Foods International Ltd Location: South Court, Sharston Road, Sharston Industrial Area, Manchester, M22 4BB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SE (NE)	785	7	382947 388940
164	**Points of Interest - Commercial Services** Name: Logwin Logistics Location: South Court, Sharston Road, Manchester, M22 4SN Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SE (NE)	785	7	382947 388940
164	**Points of Interest - Commercial Services** Name: Thirsty Drinks Location: Ground Floor South Court, Sharston Road, Manchester, M22 4SN Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SE (NE)	798	7	382956 388953
165	**Points of Interest - Commercial Services** Name: S D V Ltd Location: Unit 3 Alpha Point, Bradnor Road, Sharston Industrial Area, Manchester, M22 4TE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SE (NE)	906	7	382966 389141
165	**Points of Interest - Commercial Services** Name: Bollore Logistics Location: Unit 3 Alpha Point, Bradnor Road, Sharston Industrial Area, Manchester, M22 4TE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SE (NE)	906	7	382966 389141

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
165	**Points of Interest - Commercial Services** Name: J Bernard & Co Ltd Location: Unit 3 Alpha Point, Bradnor Road, Sharston Industrial Area, Manchester, M22 4TE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SE (NE)	906	7	382966 389141
165	**Points of Interest - Commercial Services** Name: Bollore Logistics Location: Unit 3 Alpha Point, Bradnor Road, Manchester, M22 4TE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SE (NE)	943	7	382988 389173
166	**Points of Interest - Commercial Services** Name: Professional Pest Services Location: 11 Harrier Close, Manchester, M22 4XN Category: Contract Services Class Code: Pest and Vermin Control Positional Accuracy: Positioned to address or location	A14SE (E)	926	7	383139 388368
167	**Points of Interest - Commercial Services** Name: Wheel Hub Location: 50 Leestone Road, Manchester, M22 4RF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SE (NE)	962	7	383102 389027
167	**Points of Interest - Commercial Services** Name: Motorwheel Service Distribution Location: 50 Leestone Road, Sharston Industrial Area, Manchester, M22 4RF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SE (NE)	987	7	383103 389079
167	**Points of Interest - Commercial Services** Name: Heald Green Garage Ltd Location: Warsall Road, Sharston Industrial Area, Manchester, M22 4RH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SE (NE)	998	7	383139 389033
168	**Points of Interest - Manufacturing and Production** Name: The Enterprise Centre Location: 34 Benchill Road, Manchester, M22 8LF Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A14SW (SE)	414	7	382603 388394
169	**Points of Interest - Manufacturing and Production** Name: Set in Stone Location: 24 Crossgate Avenue, Manchester, M22 8AW Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A14NW (NE)	470	7	382618 388877
170	**Points of Interest - Manufacturing and Production** Name: Tanks Location: M22 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	775	7	382857 389067
171	**Points of Interest - Manufacturing and Production** Name: Tank Location: M23 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A18NW (N)	811	7	381976 389385
172	**Points of Interest - Public Infrastructure** Name: Weir Location: M23 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	326	7	382168 388934
172	**Points of Interest - Public Infrastructure** Name: Weir Location: M23 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	327	7	382165 388934

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
173	**Points of Interest - Recreational and Environmental** Name: Playground Location: Haveley Road, M22 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A13SE (S)	248	7	382267 388331
174	**Points of Interest - Recreational and Environmental** Name: Playground Location: Brookfield Gardens, M22 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A14NW (E)	374	7	382614 388627
175	**Points of Interest - Recreational and Environmental** Name: Play Area Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	852	7	381428 388241
175	**Points of Interest - Recreational and Environmental** Name: Play Area Location: Firbank Road, M23 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	852	7	381428 388241
176	**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	A12NW (W)	915	7	381290 388633
176	**Points of Interest - Recreational and Environmental** Name: Playground Location: Ackworth Drive, M23 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	915	7	381290 388632
177	**Points of Interest - Recreational and Environmental** Name: Play Area Location: M23 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	921	7	381301 388768

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
178	**Ancient Woodland** Name: Black Carr Wood Reference: 1505488 Area(m²): 29932.7 Type: Ancient and Semi-Natural Woodland	A13NW (NW)	350	8	382065 388926
179	**Ancient Woodland** Name: Rounds Wood Reference: 1505493 Area(m²): 17449.19 Type: Ancient and Semi-Natural Woodland	A18SE (N)	665	8	382454 389233
180	**Ancient Woodland** Name: Black Field Wood Reference: 1505487 Area(m²): 7592.78 Type: Ancient and Semi-Natural Woodland	A18NE (N)	855	8	382430 389440
181	**Local Nature Reserves** Name: Wythenshawe Park Multiple Area: N Area (m2): 854545.24 Source: Natural England Designation Date: Not Supplied	A18NW (N)	732	8	382183 389343

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Macclesfield Borough Council (now part of Cheshire East Council) - Health and Public Safety	July 2008	
Trafford Metropolitan Borough Council - Renewal and Environmental Protection	November 2013	Annual Rolling Update
Environment Agency - Head Office	November 2023	Annually
Manchester City Council - Environmental Health Department	October 2017	Annual Rolling Update
Stockport Metropolitan Borough Council - Environment Team (Land & Water)	October 2017	Annual Rolling Update
Cheshire East Council - Environmental Health Department	October 2017	Annually
Discharge Consents		
Environment Agency - North West Region	April 2025	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 2025	Quarterly
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	April 2025	
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 - Head Office	May 2023	
Environment Agency - North West Region	May 2023	
Substantiated Pollution Incident Register		
Environment Agency - North West Region - South Area	April 2025	Quarterly
Water Abstractions		
Environment Agency - North West Region	April 2025	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	September 2022	Bi-Annually
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	January 2024	Quarterly
Flood Defences Environment Agency - Head Office	August 2022	
OS Water Network Lines Ordnance Survey	April 2025	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 2024	Annually
Water Framework Directive - Groundwater Environment Agency - Head Office	July 2024	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	October 2024	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - North West Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - North West Region - South Area	May 2025	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - North West Region - South Area	April 2025	Quarterly
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	

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	September 2024	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		
Trafford Metropolitan Borough Council	April 2016	Variable
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

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	April 2025	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	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	As notified
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	November 2024	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	November 2024	Annually
Industrial Land Use	**Version**	**Update Cycle**
Contemporary Trade Directory Entries Thomson Directories	March 2025	Quarterly
Fuel Station Entries Green Street Advisor (UK) Ltd	February 2025	Quarterly
Points of Interest - Commercial Services PointX	March 2025	Quarterly
Points of Interest - Education and Health PointX	March 2025	Quarterly
Points of Interest - Manufacturing and Production PointX	March 2025	Quarterly
Points of Interest - Public Infrastructure PointX	March 2025	Quarterly
Points of Interest - Recreational and Environmental PointX	March 2025	Quarterly
Underground Electrical Cables National Grid	January 2024	

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	March 2025	Bi-Annually
Areas of Adopted Green Belt		
Cheshire East Council - Planning Department	July 2024	Quarterly
Macclesfield Borough Council (now part of Cheshire East Council)	July 2024	Quarterly
Manchester City Council	July 2024	Quarterly
Stockport Metropolitan Borough Council	July 2024	Quarterly
Trafford Metropolitan Borough Council	July 2024	Quarterly
Areas of Unadopted Green Belt		
Cheshire East Council - Planning Department	July 2024	Quarterly
Macclesfield Borough Council (now part of Cheshire East Council)	July 2024	Quarterly
Manchester City Council	July 2024	Quarterly
Stockport Metropolitan Borough Council	July 2024	Quarterly
Trafford Metropolitan Borough Council	July 2024	Quarterly
Areas of Outstanding Natural Beauty		
Natural England	May 2025	Bi-Annually
Environmentally Sensitive Areas		
Natural England	August 2023	
Forest Parks		
Forestry Commission	May 2023	Not Applicable
Local Nature Reserves		
Natural England	March 2025	Bi-Annually
Marine Nature Reserves		
Natural England	February 2025	Bi-Annually
National Nature Reserves		
Natural England	January 2025	Bi-Annually
National Parks		
Natural England	September 2024	Bi-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	November 2024	Annually
Ramsar Sites		
Natural England	February 2025	Bi-Annually
Sites of Special Scientific Interest		
Natural England	May 2025	Bi-Annually
Special Areas of Conservation		
Natural England	January 2025	Bi-Annually
Special Protection Areas		
Natural England	May 2025	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	

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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	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
5	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.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	**PointX** 5-6 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
8	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
9	**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
10	**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
11	**Trafford Metropolitan Borough Council** P O Box 14, Trafford Town Hall, Talbot Road, Stretford, Greater Manchester, M32 0YZ	Telephone: 0161 912 1212 Fax: 0161 873 7783 Website: www.trafford.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.

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
	GFDUD	Glaciofluvial Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	TILLD	Till, Devensian	Diamicton	Not Supplied - Devensian
	GFSDD	Glaciofluvial Sheet Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	SSA	Shirdley Hill Sand Formation	Sand	Not Supplied - Devensian
	RTDU	River Terrace Deposits (Undifferentiated)	Sand and Gravel	Not Supplied - Quaternary

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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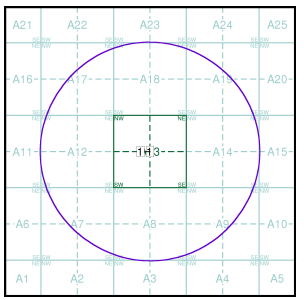
Geology 1:50,000 Maps

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

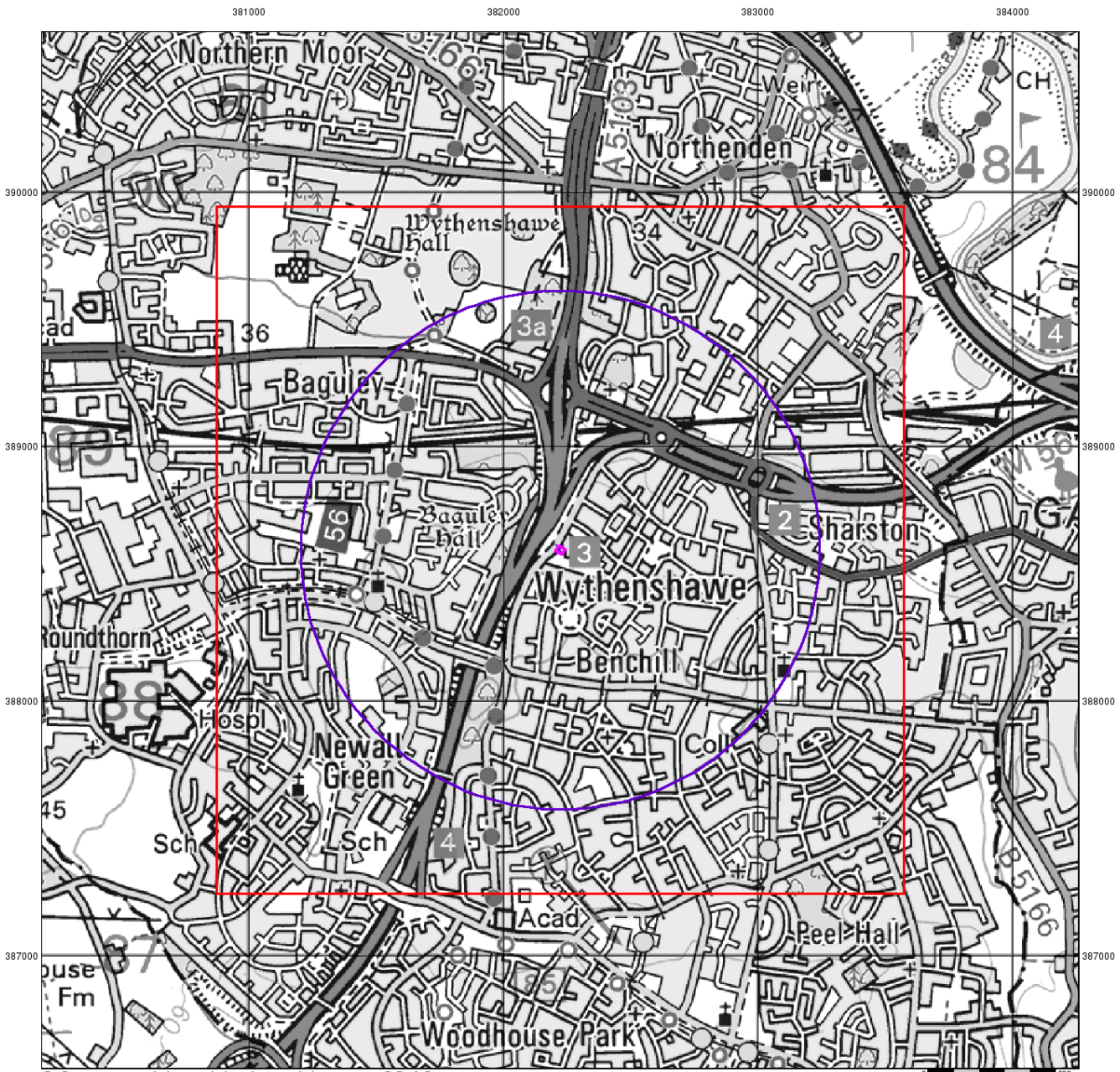


Order Details:

Order Number:	377992989_1_1
Customer Reference:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details:

Benchill



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Artificial Ground and Landslip

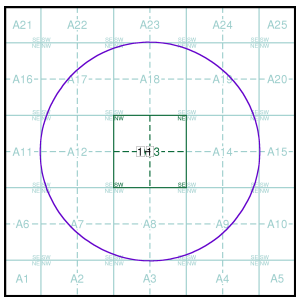
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions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

Artificial ground includes:

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

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

Artificial Ground and Landslip Map - Slice A



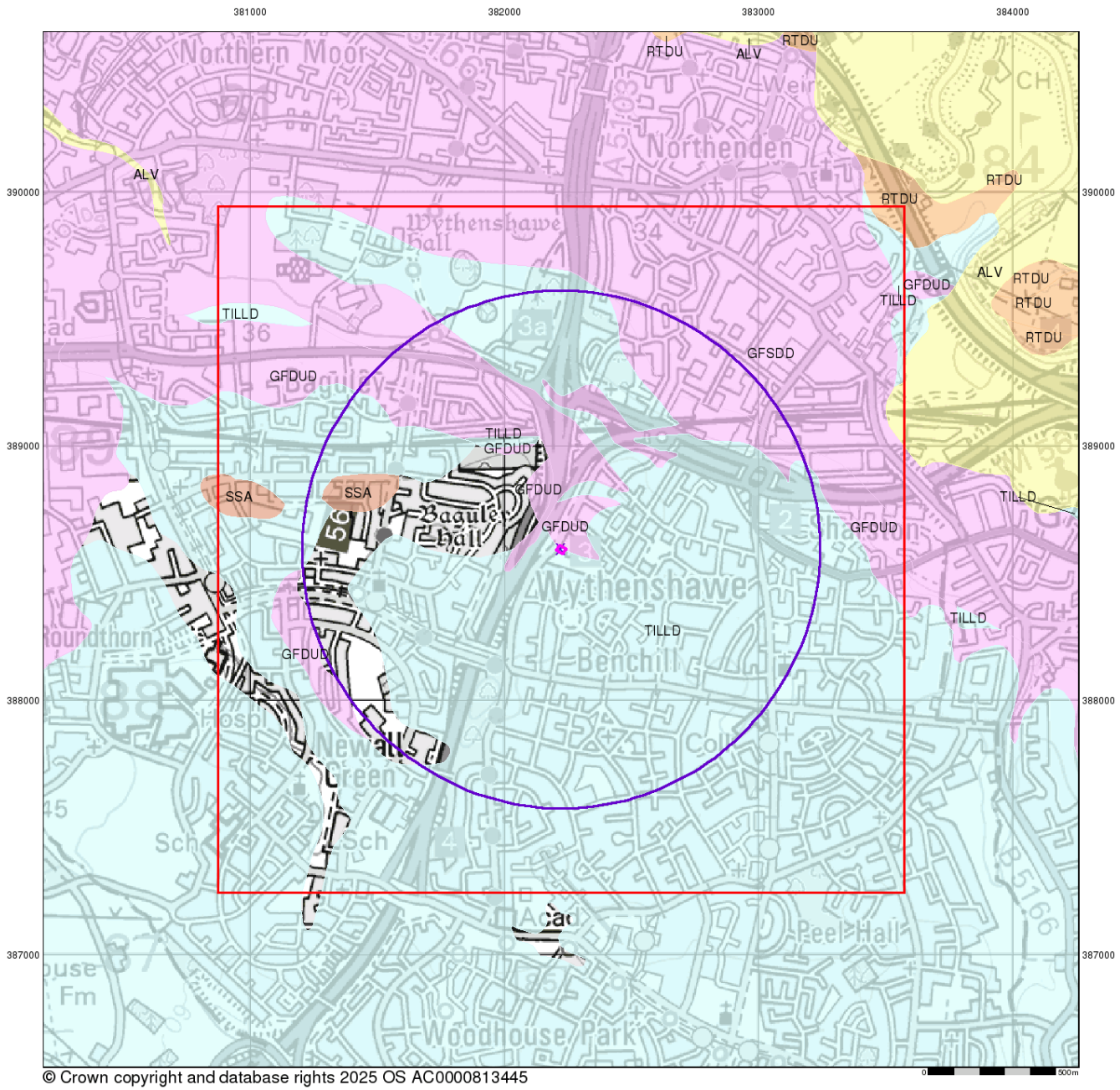
Order Details:

Order Number:	377992989_1_1
Customer Reference:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details:

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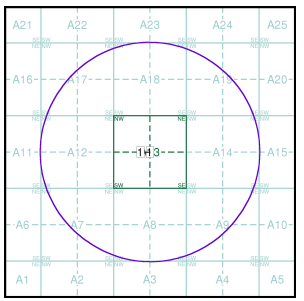
Superficial Geology

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

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

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

Superficial Geology Map - Slice A



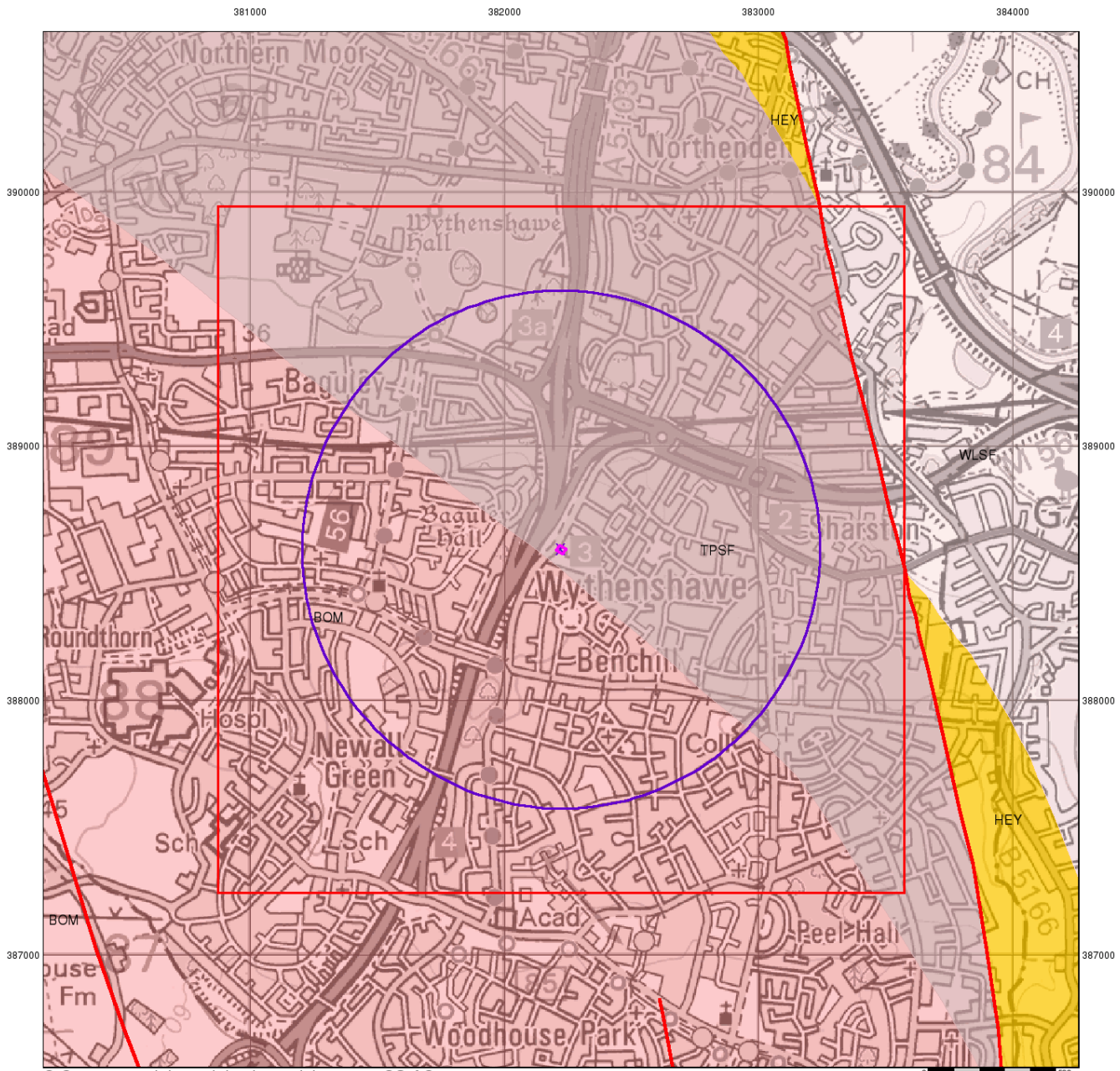
Order Details:

Order Number:	377992989_1_1
Customer Reference:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
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Bedrock and Faults

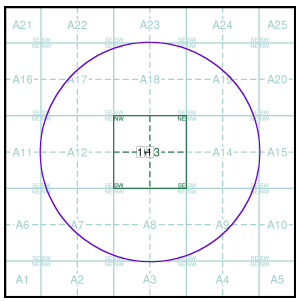
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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



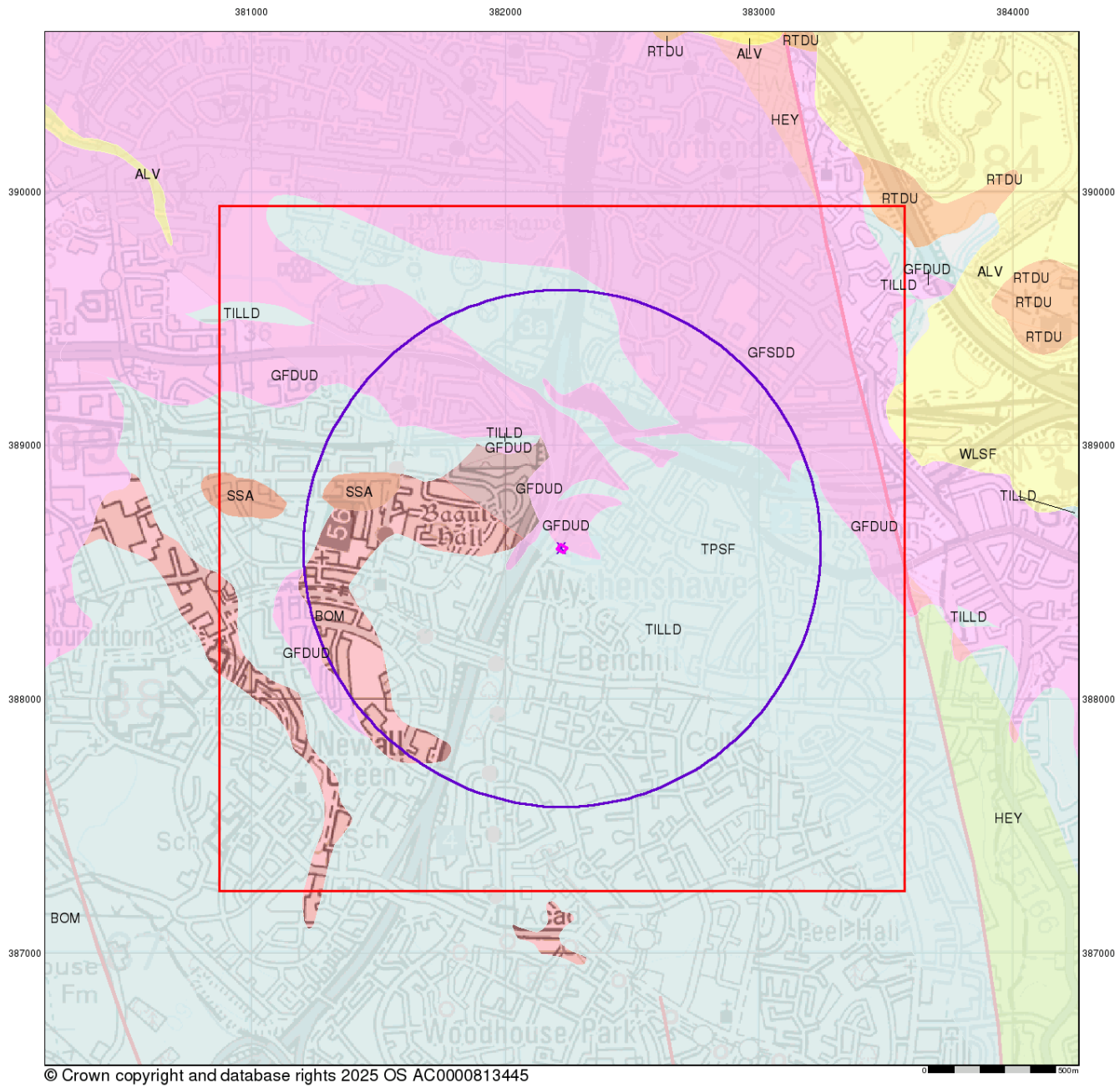
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Customer Reference:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

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Combined Surface Geology

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

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

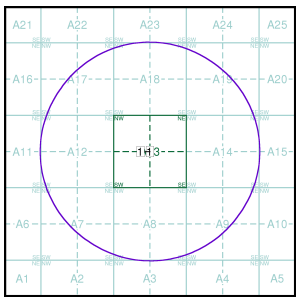
Additional Information

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

Contact

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

Combined Geology Map - Slice A

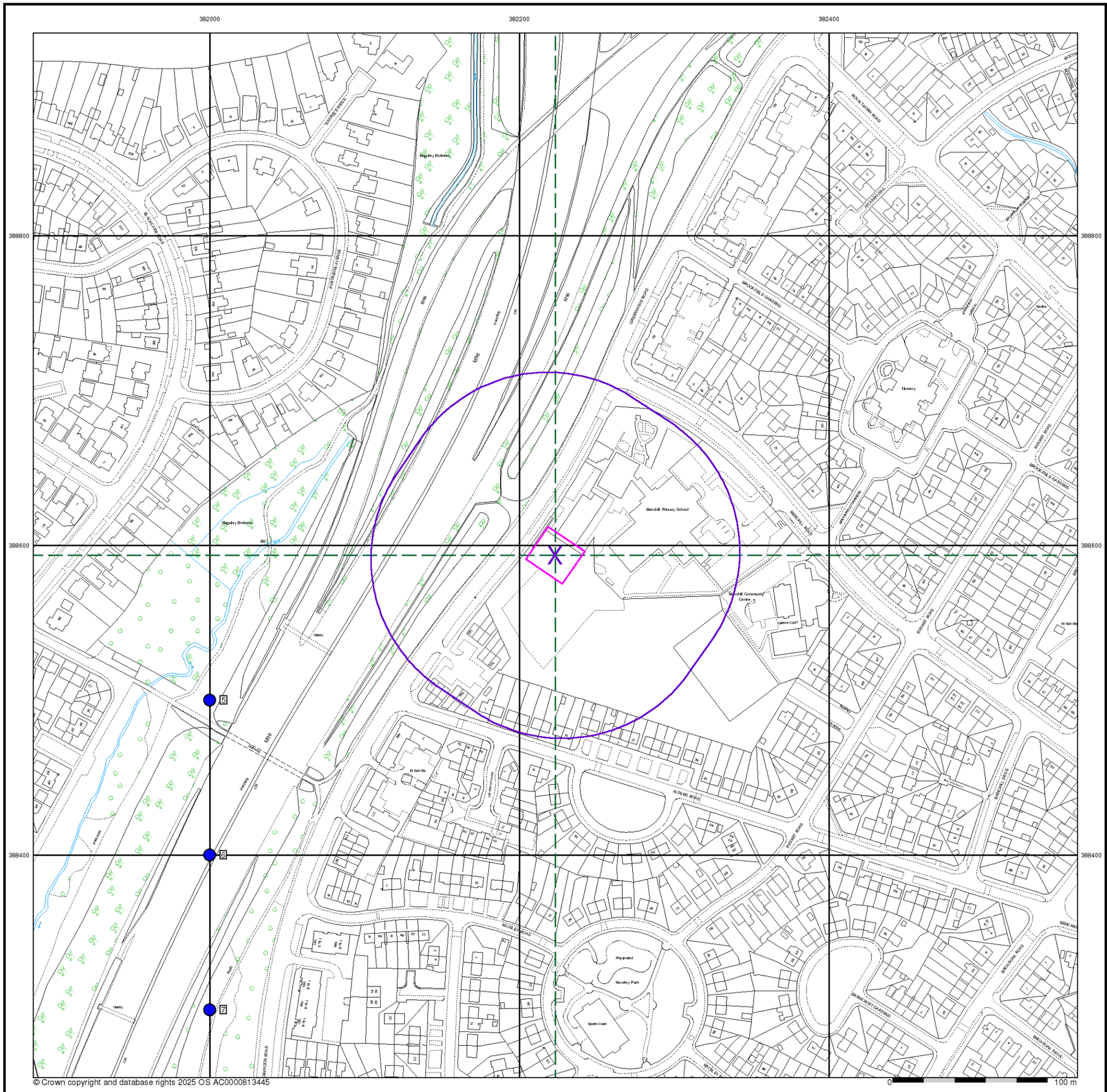


Order Details:

Order Number:	377992989_1_1
Customer Reference:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details:

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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

Waste

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

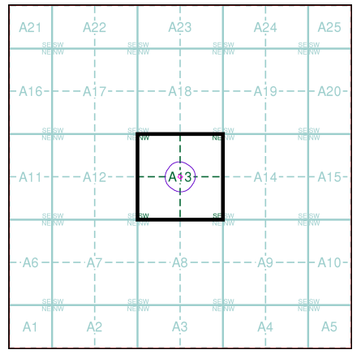
Hazardous Substances

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

Geological

- BGS Recorded Mineral Site

Site Sensitivity Map - Segment A13



Order Details

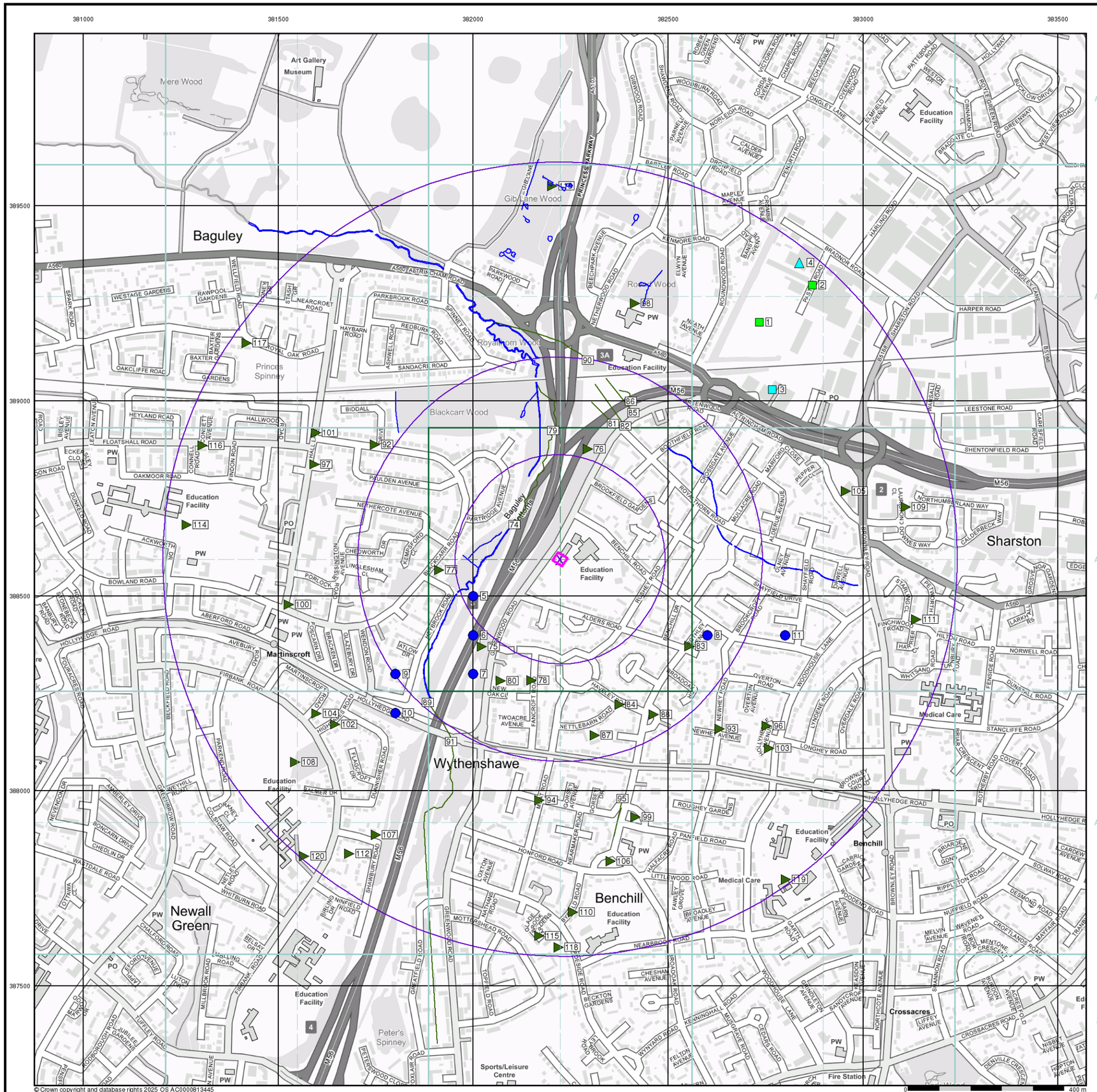
Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Plot Buffer (m):	100

Site Details

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General

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

Agency and Hydrological

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

Waste

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- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
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- Local Authority Recorded Landfill Site
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- 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

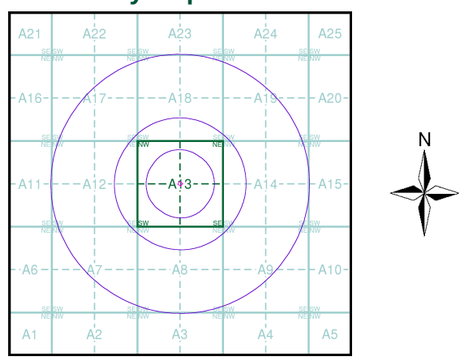
Hazardous Substances

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

Geological

- BGS Recorded Mineral Site

Site Sensitivity Map - Slice A



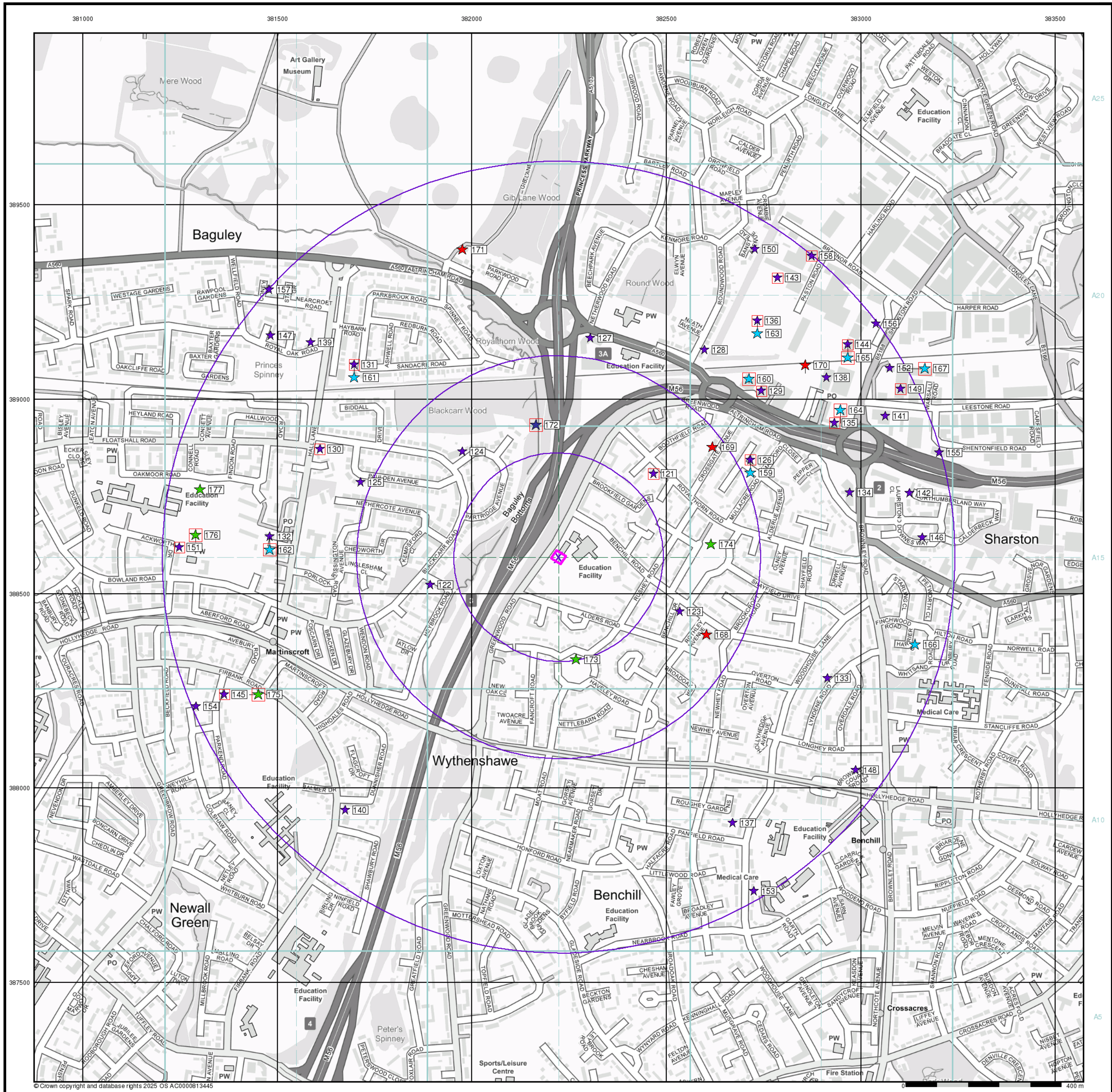
Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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Industrial Land Use Map

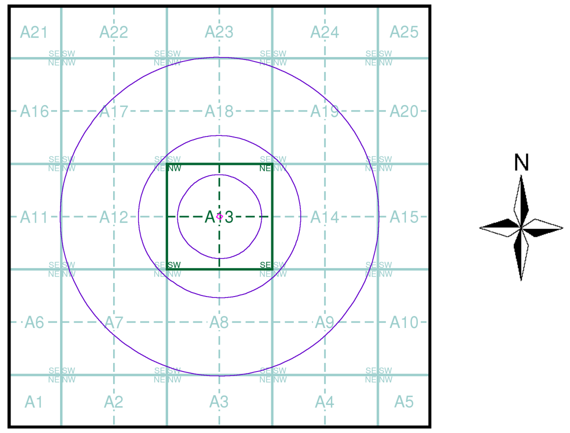
General

- 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
- Underground Electrical Cables

Industrial Land Use Map - Slice A

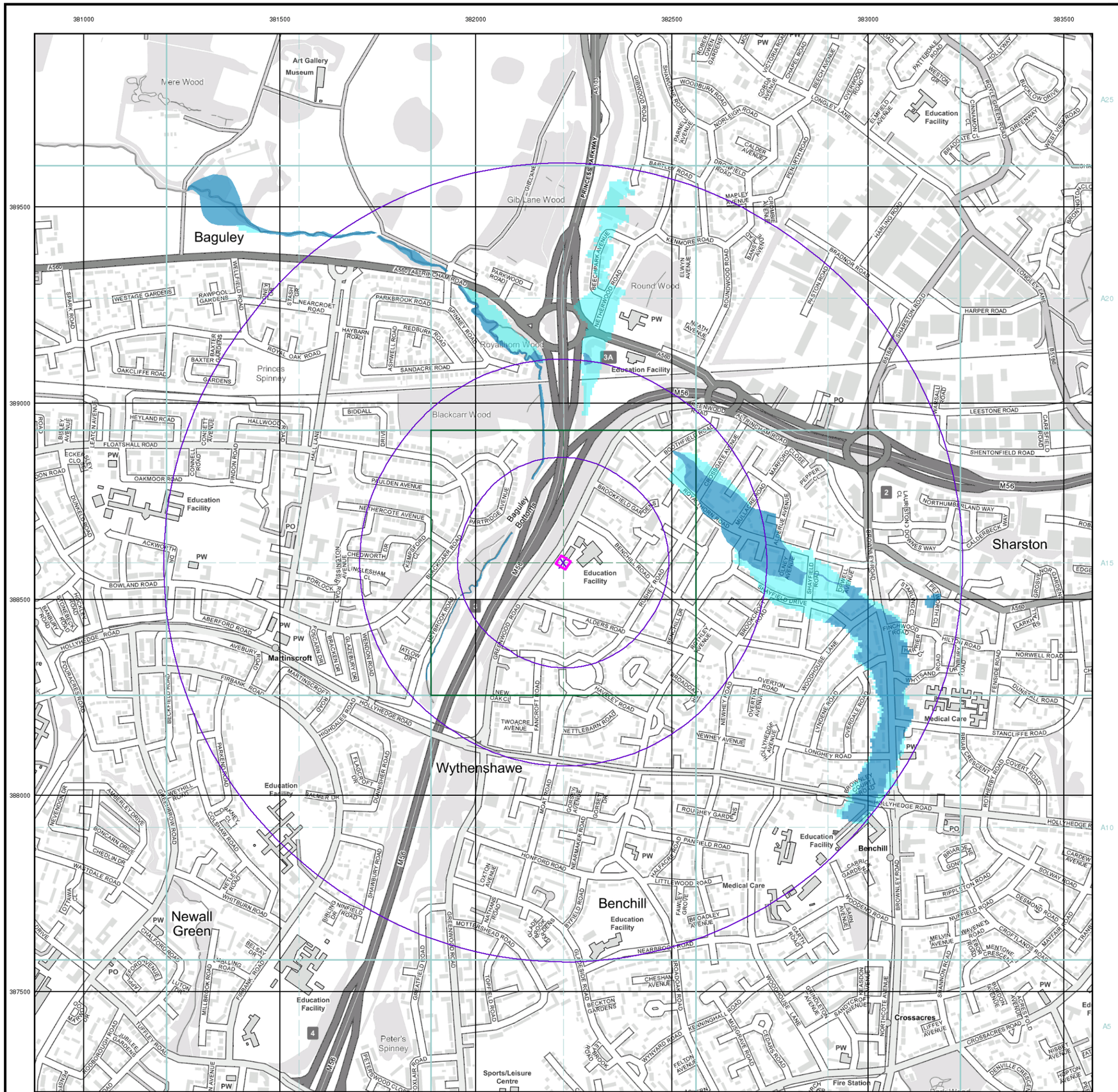


Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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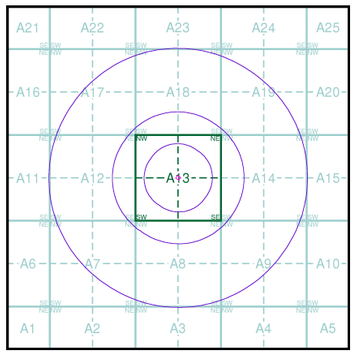
General

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

Agency and Hydrological (Flood)

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

Flood Map - Slice A



Order Details

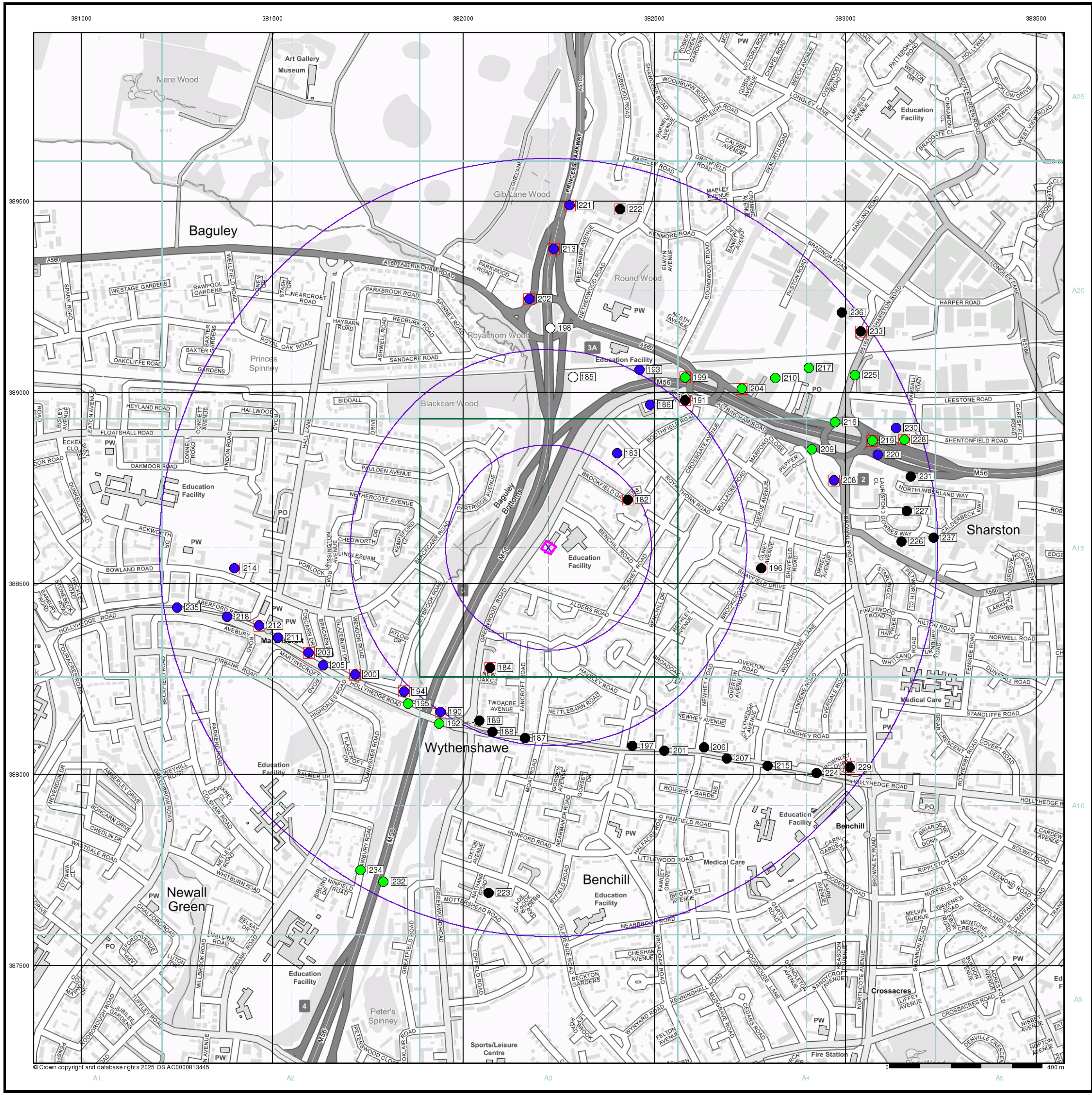
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Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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General

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

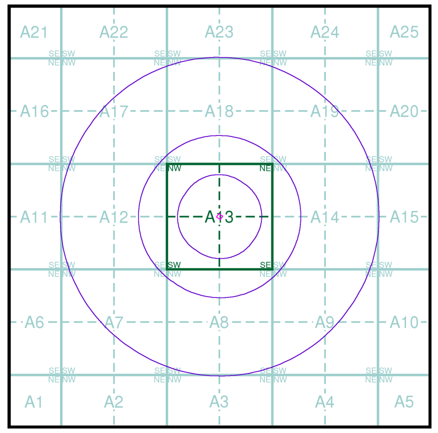
Agency and Hydrological (Boreholes)

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

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

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

Borehole Map - Slice A



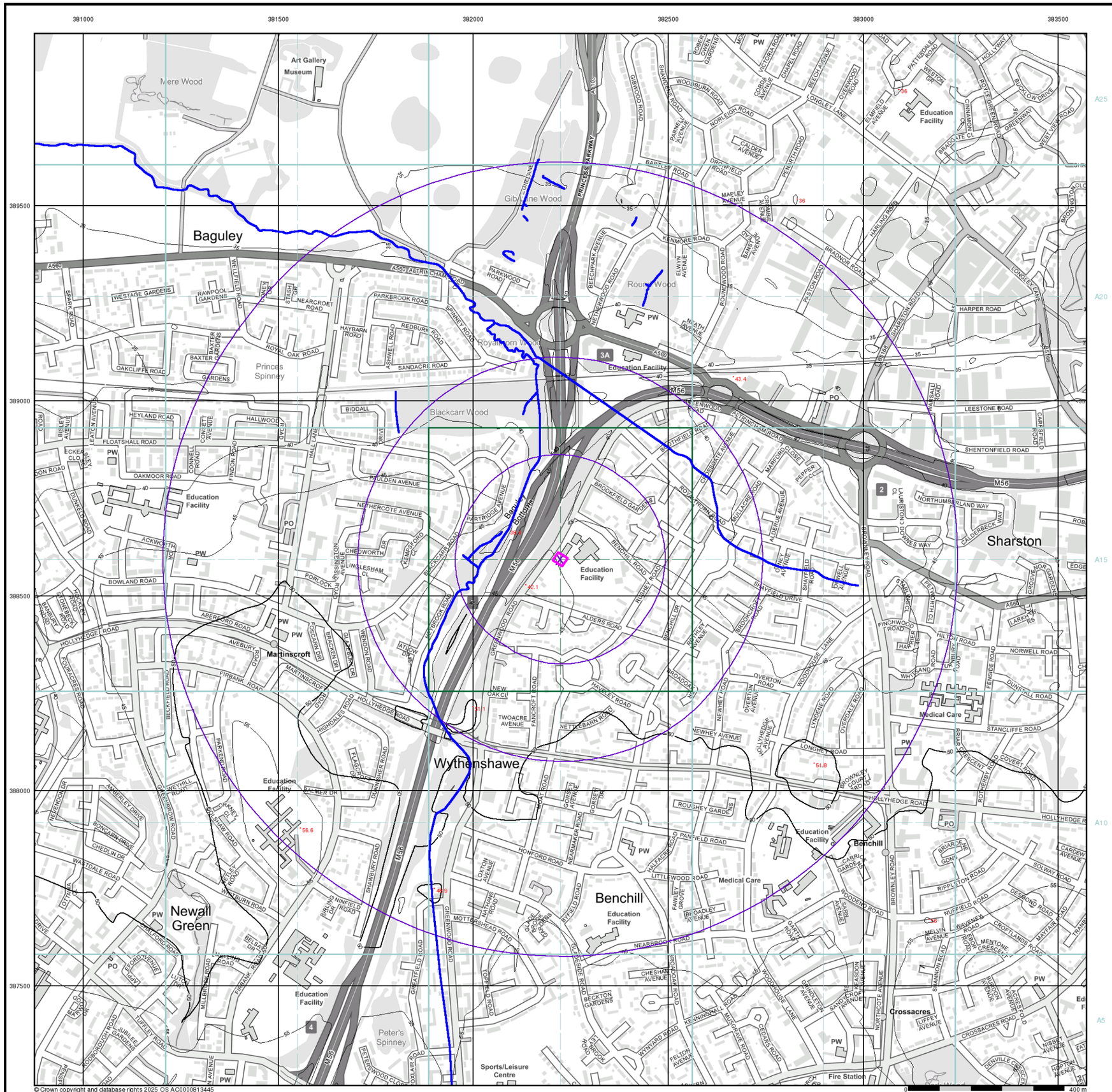
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Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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General

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

OS Water Network Data

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

Contours (height in meters)

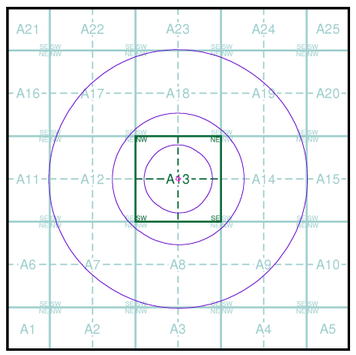
Standard Contour 105 100 95

Master Contour

Spot Height 167.3

- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

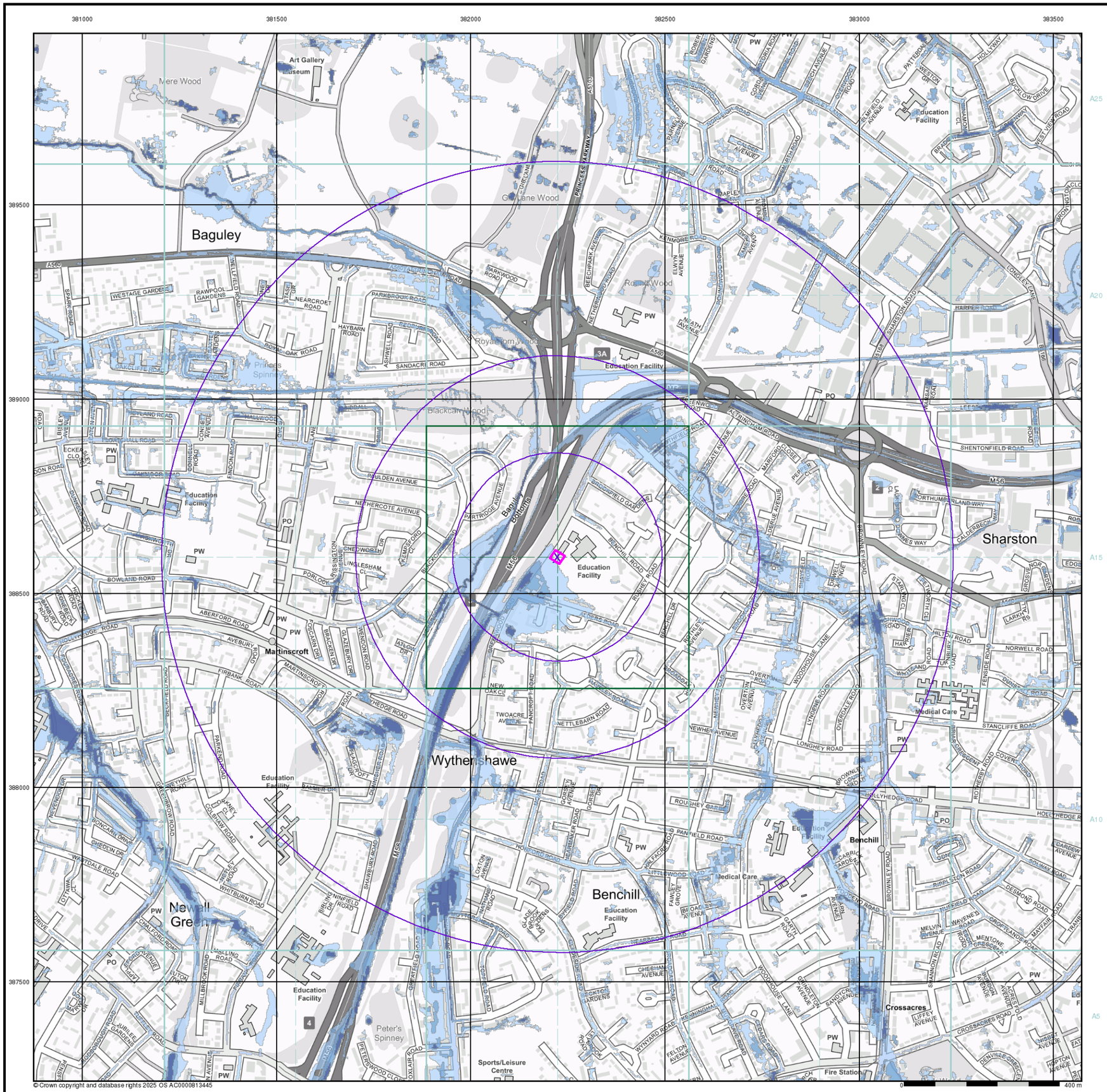
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Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

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General

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

Risk of Flooding from Surface Water

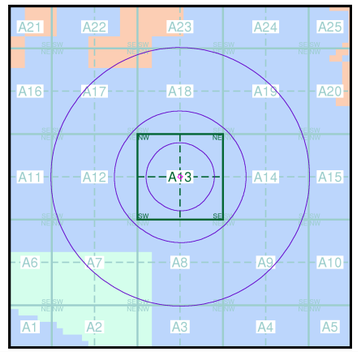
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

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

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site 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

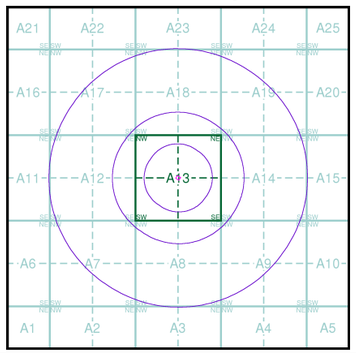
Contours (height in meters)

Standard Contour | Master Contour | Spot Height 167.3

MLW Mean Low Water

MHW Mean High Water

WFD Surface Waters Map - Slice A



Order Details

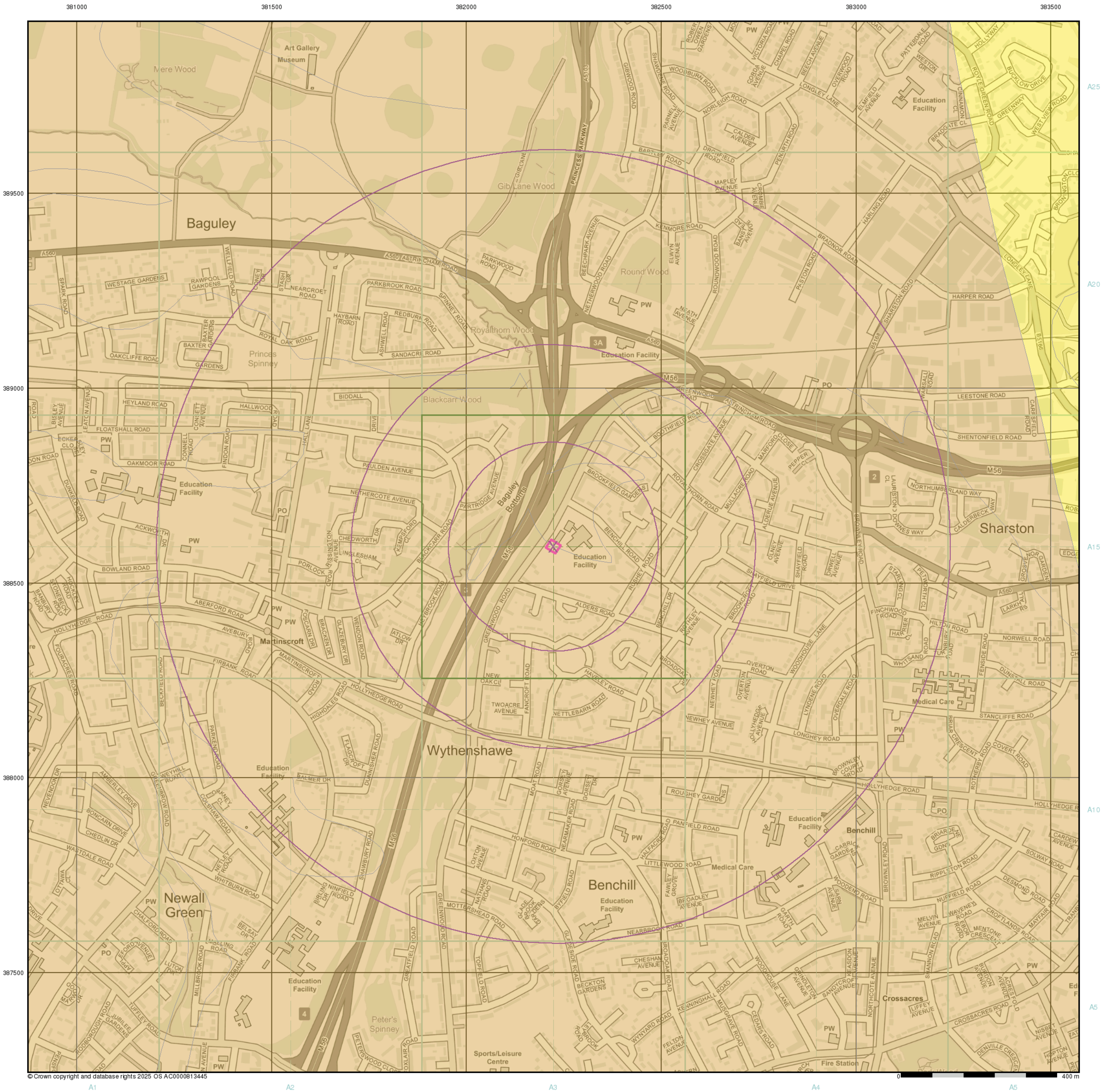
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National Grid Reference:	382220, 388590
Slice:	A
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Site Details

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LK CONSULT

General

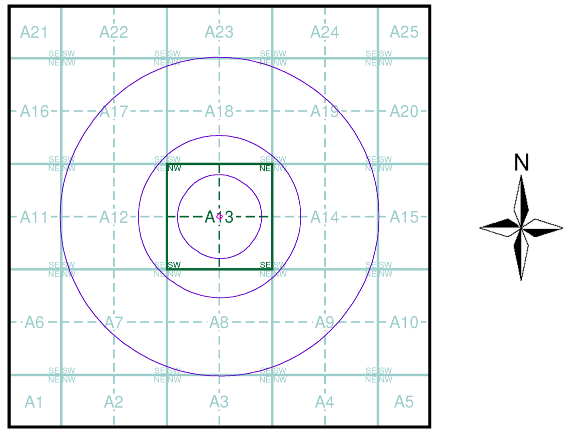
Specified Site
Specified Buffer(s)
X Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

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

Estimated Soil Chemistry Arsenic - Slice A

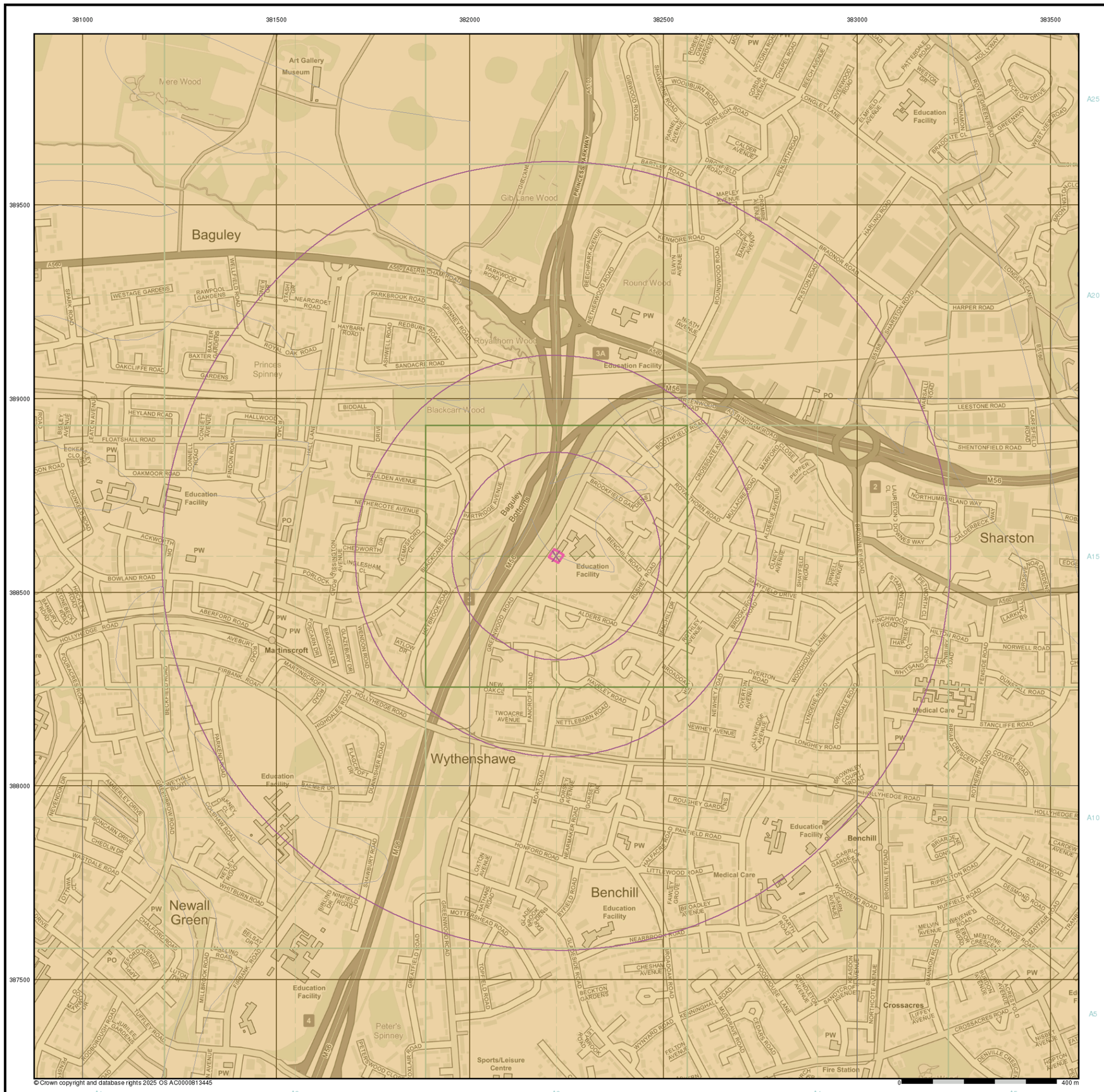


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Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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General

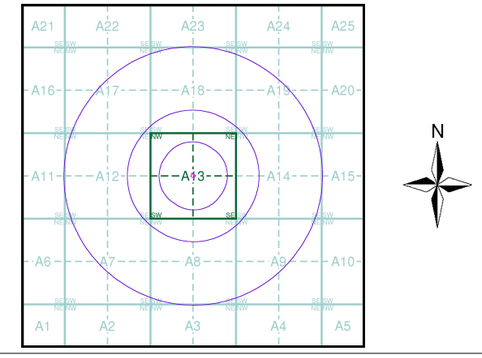
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg

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

Estimated Soil Chemistry Cadmium - Slice A



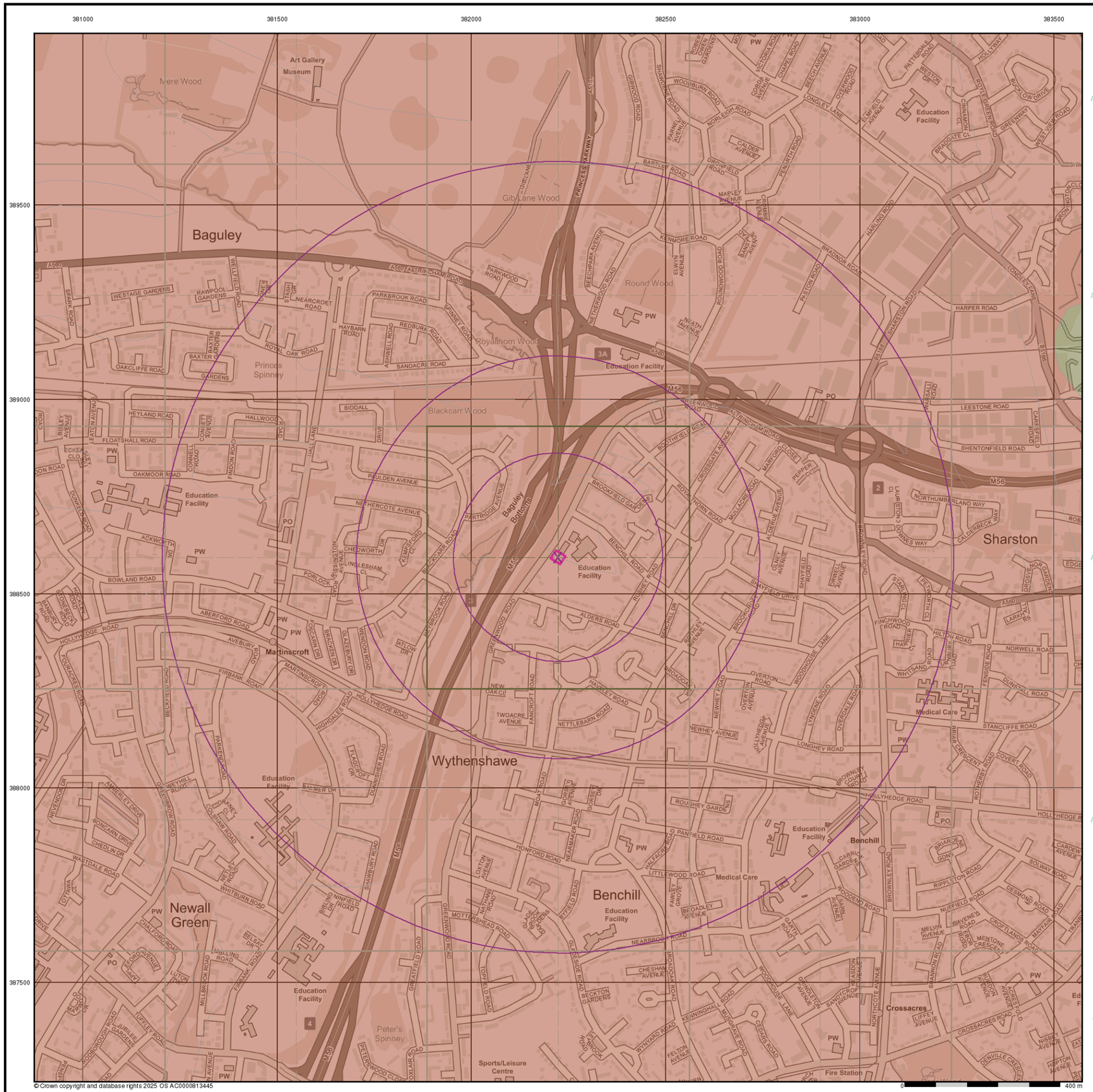
Order Details

Order Details:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
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General

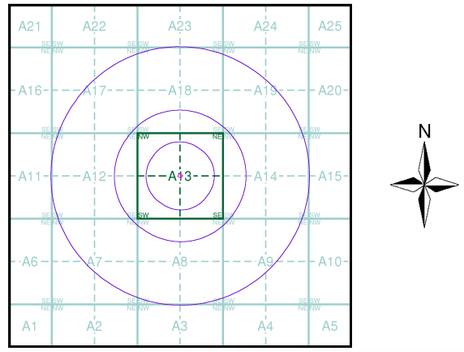
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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



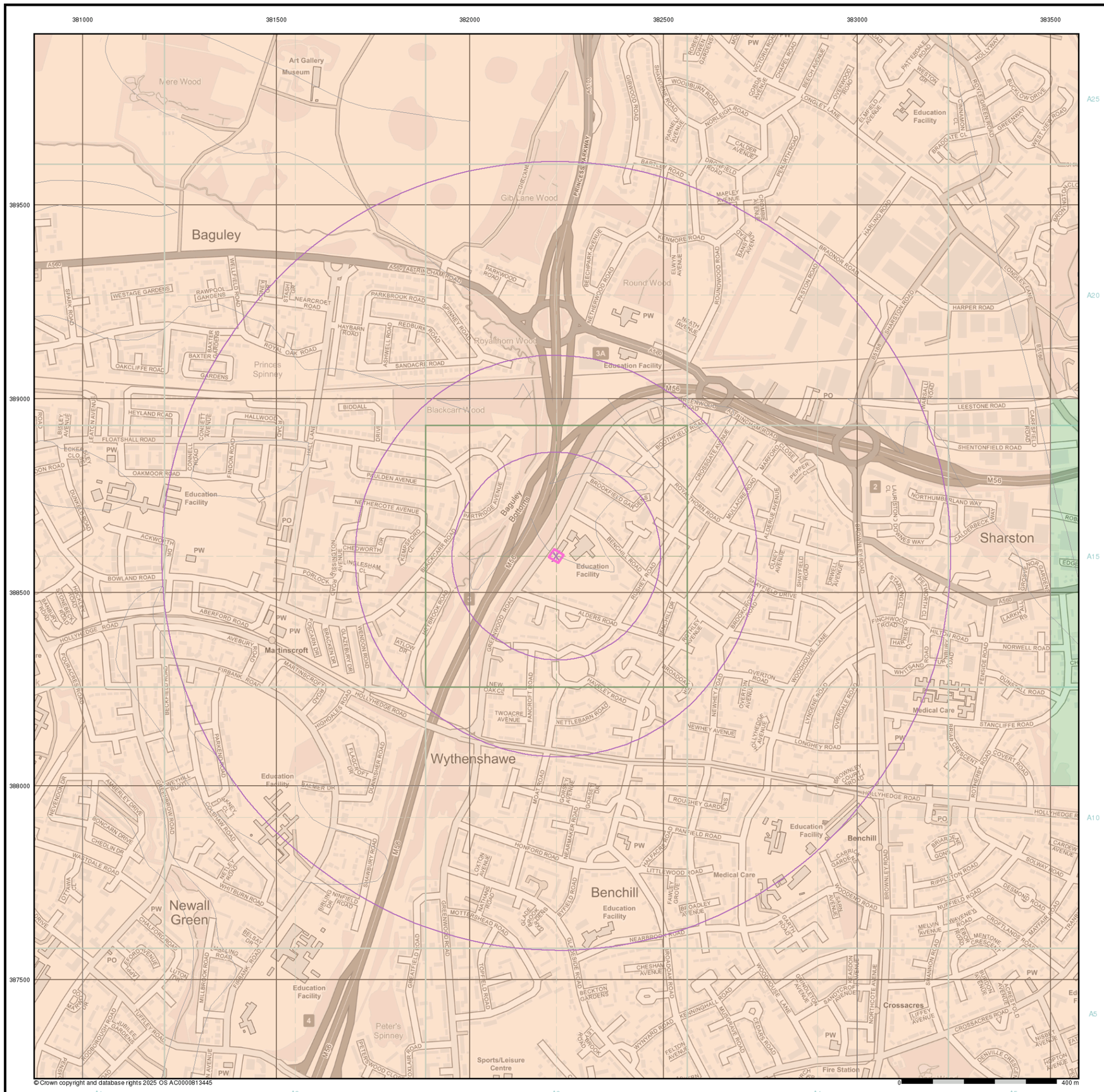
Order Details

Order Details:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

Benchill

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



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General

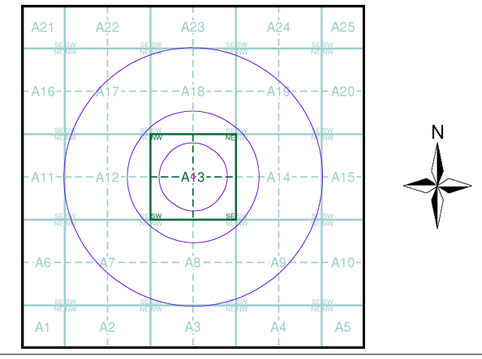
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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



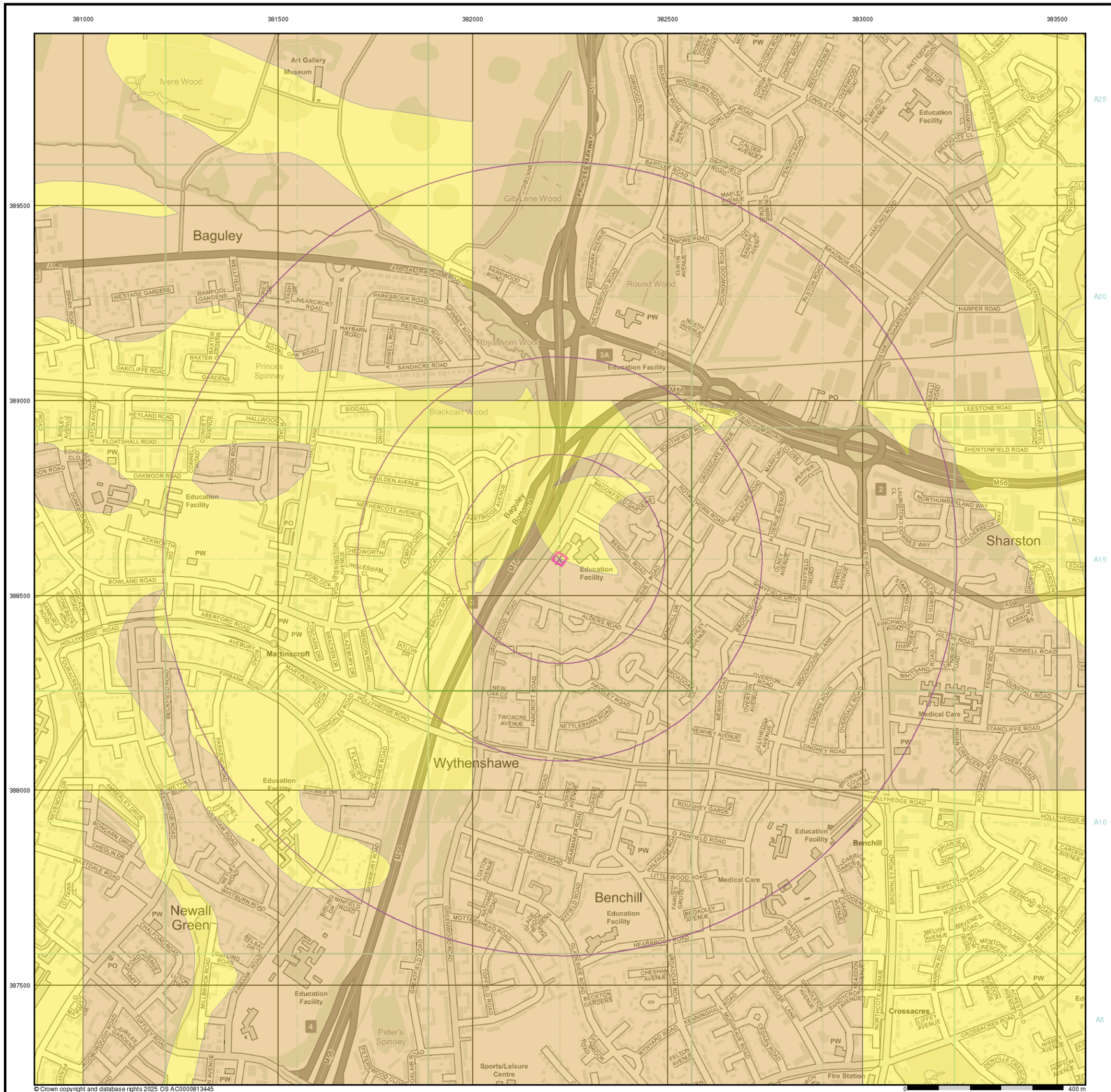
Order Details

Order Details:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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General

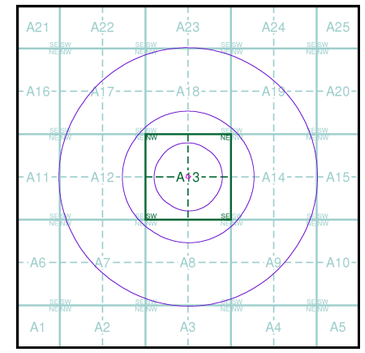
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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

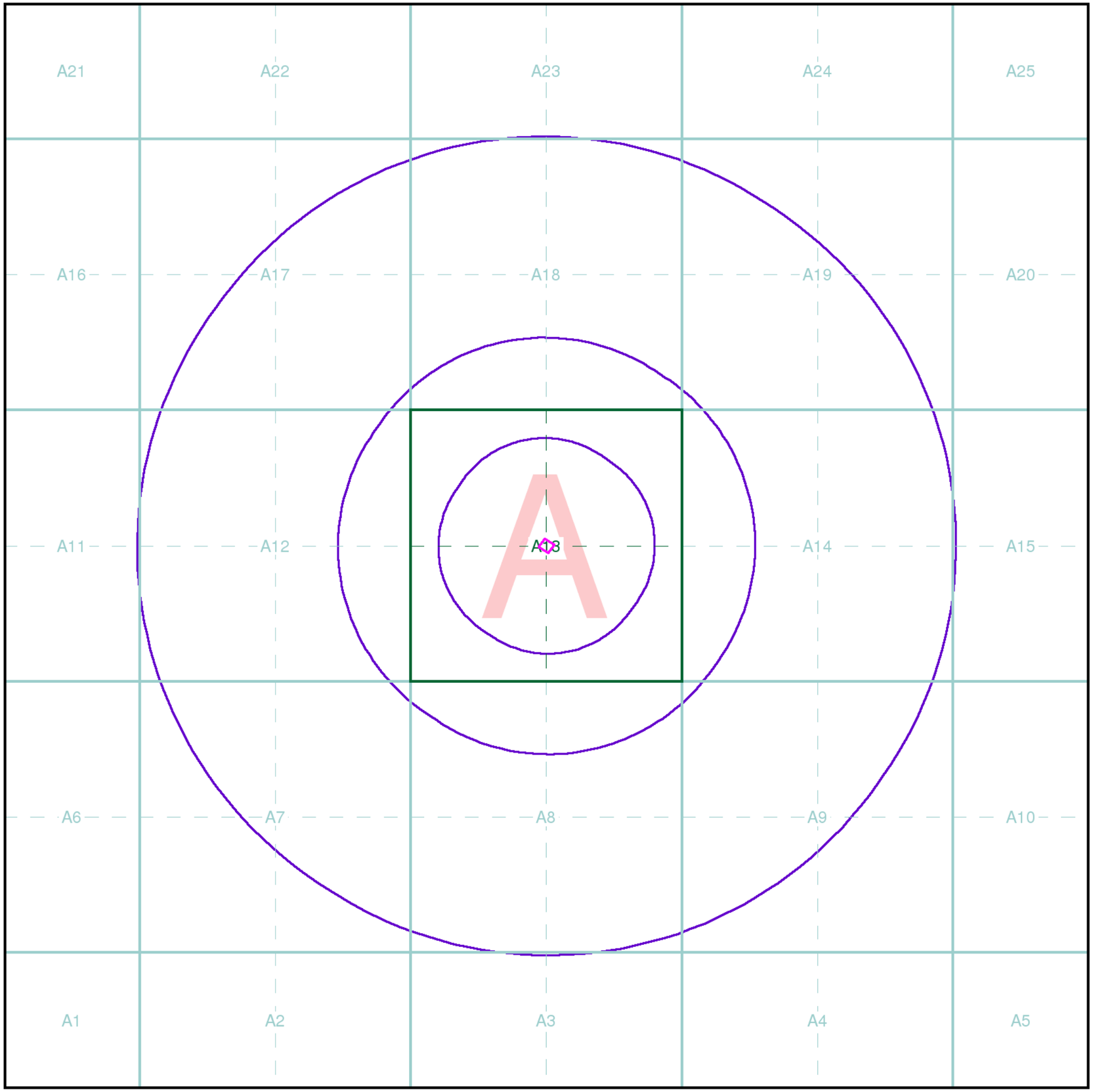
Order Details:	377992989_1_1
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Index Map

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

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

Order Details

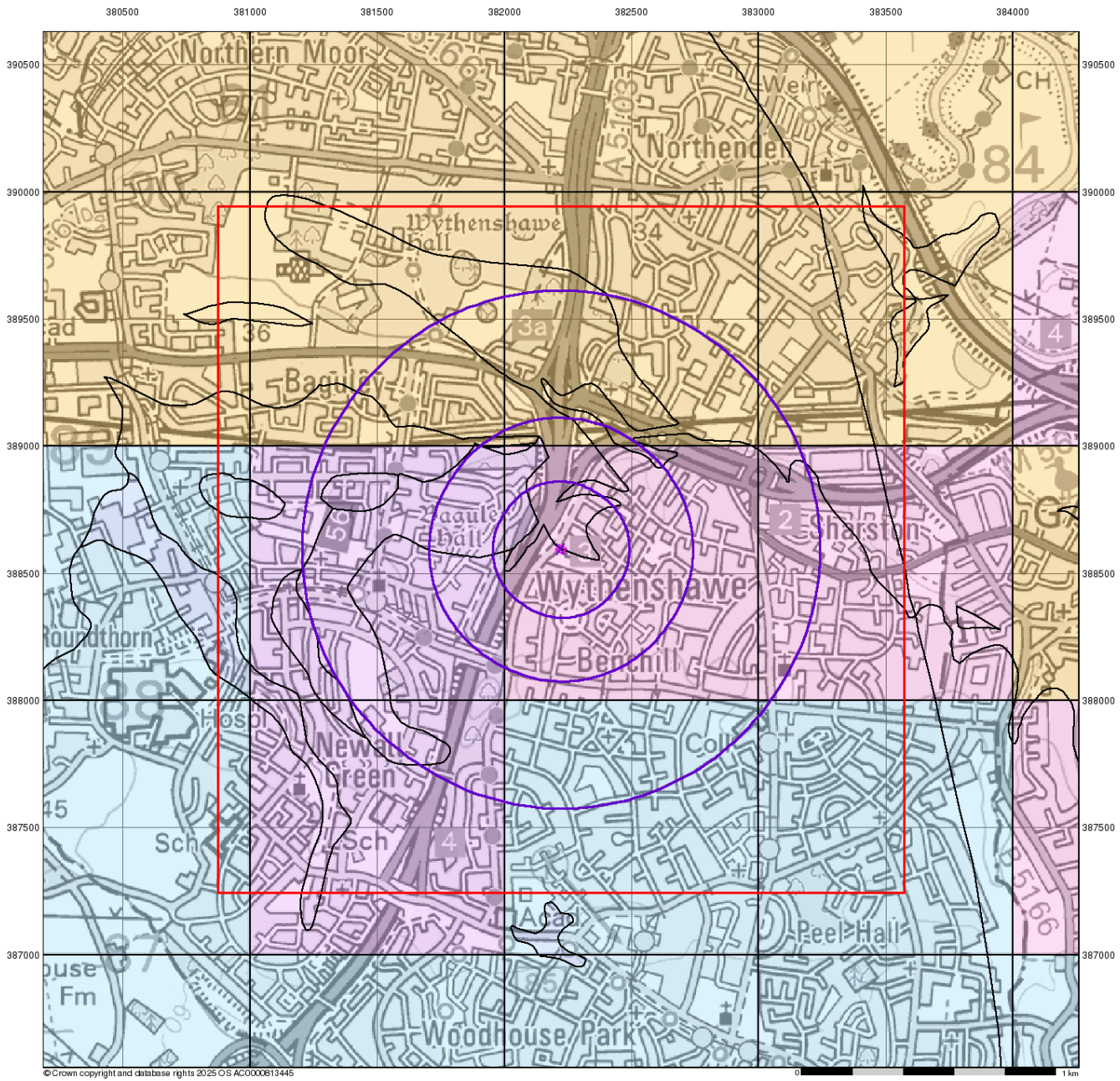
Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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

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Groundwater Vulnerability

General

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

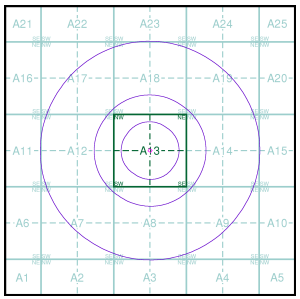
Agency and Hydrological

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

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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Bedrock Aquifer Designation

General

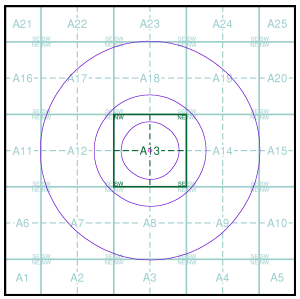
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

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

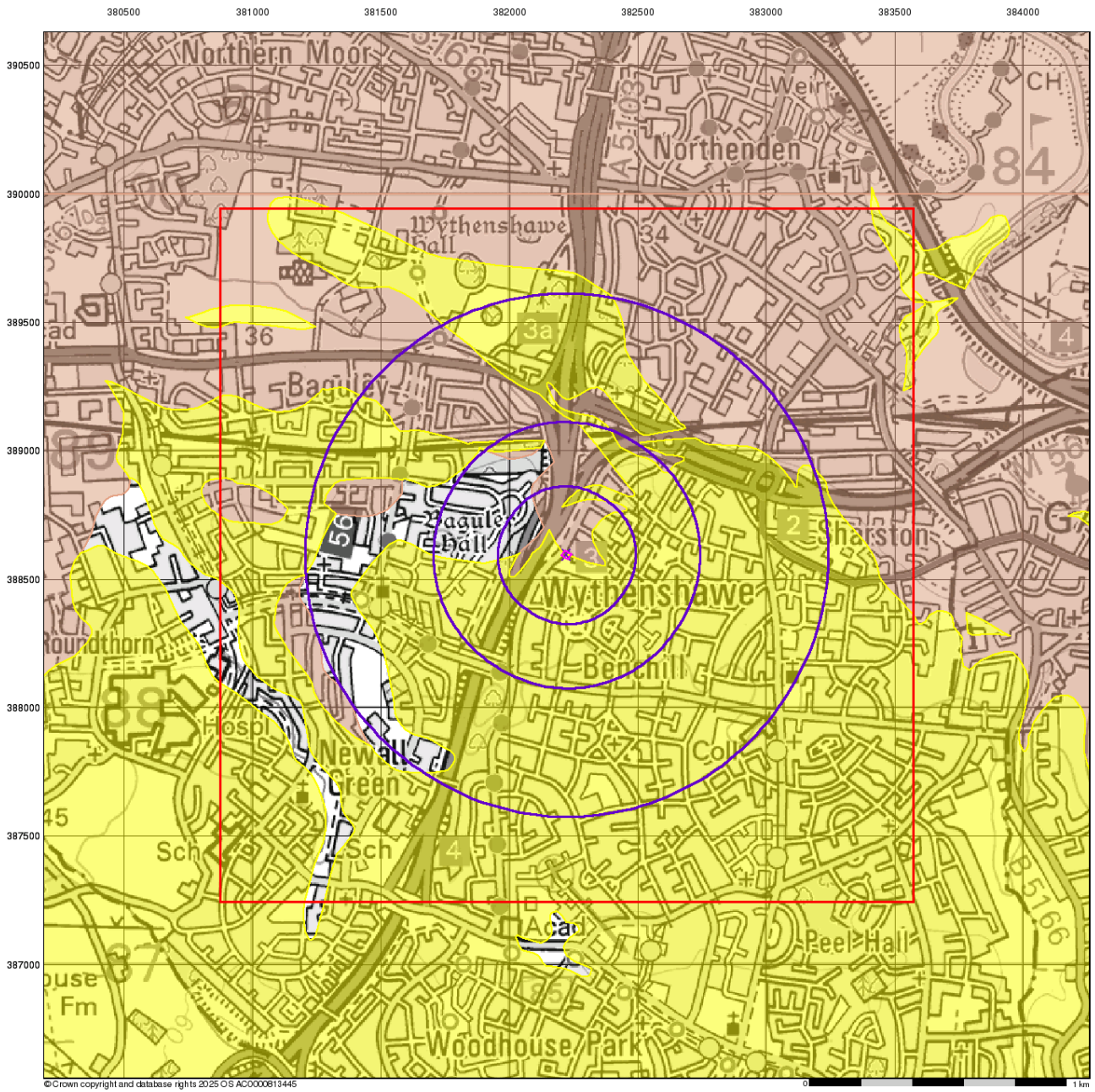


Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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Superficial Aquifer Designation

General

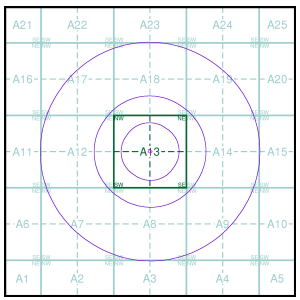
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

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

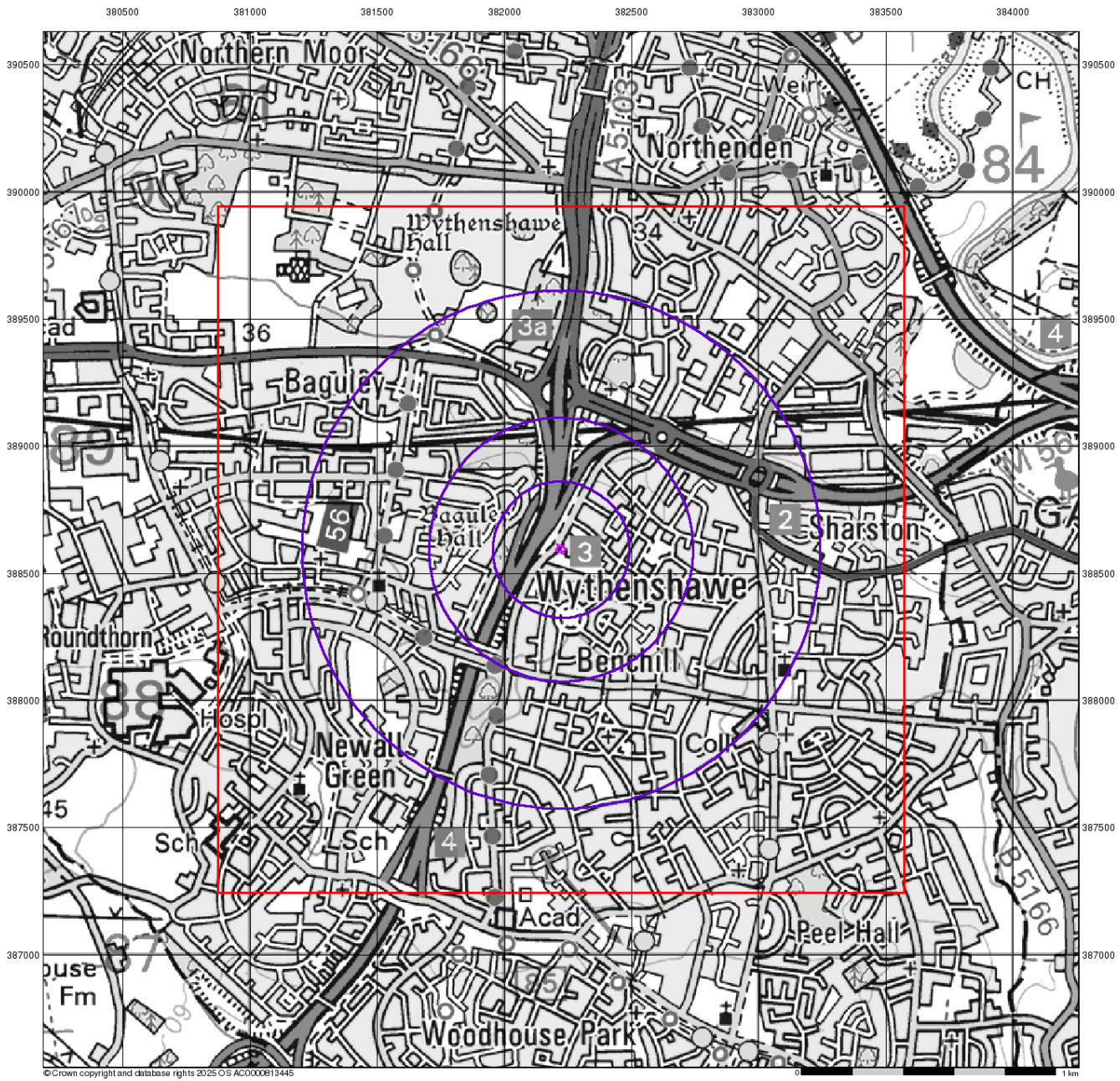


Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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Source Protection Zones

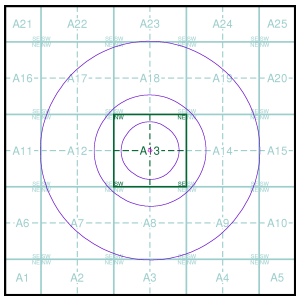
General

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



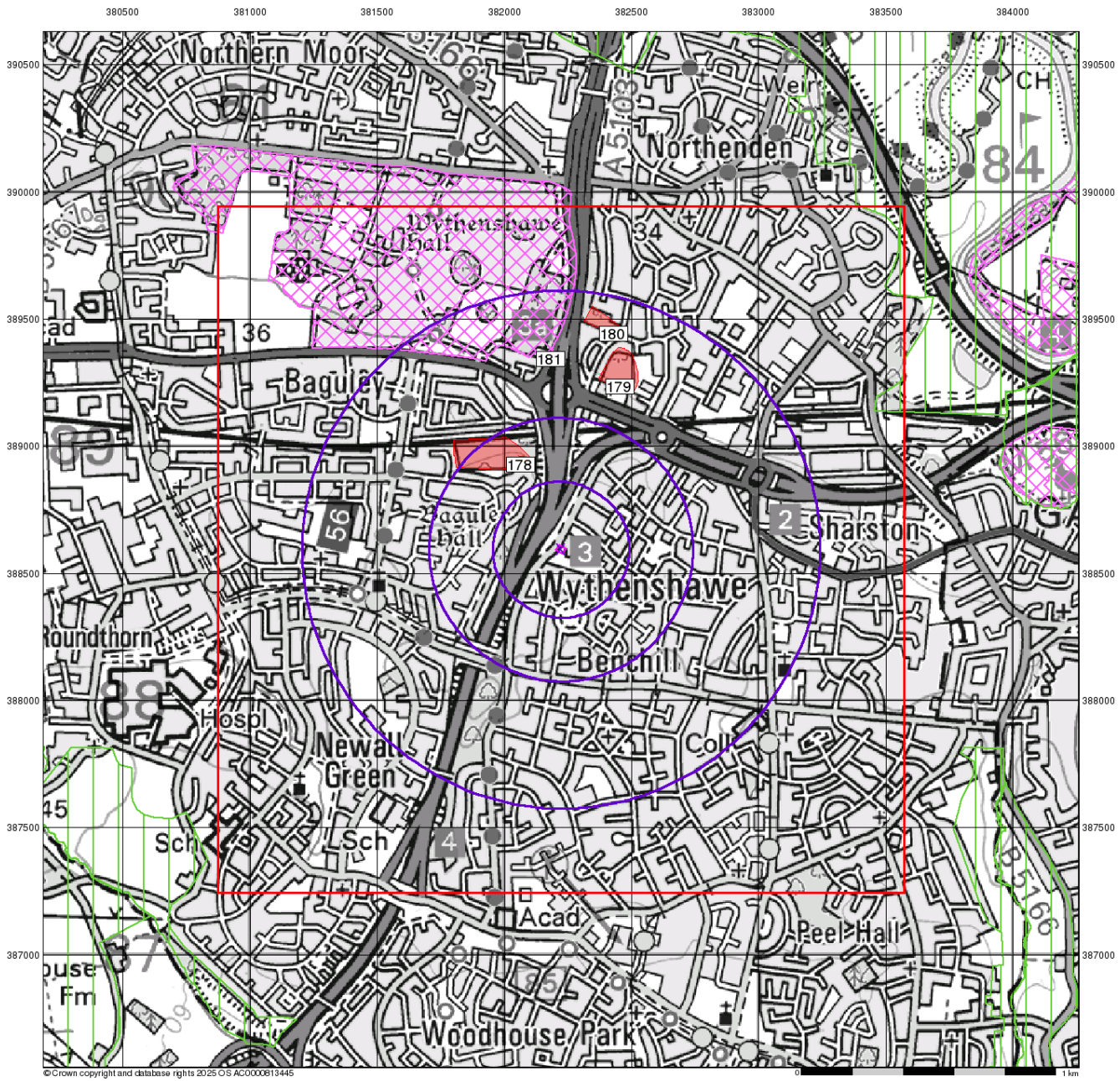
Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

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Sensitive Land Uses

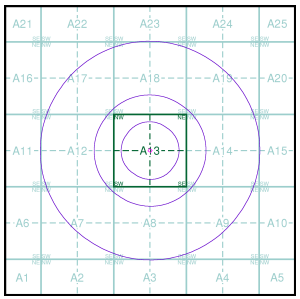
General

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

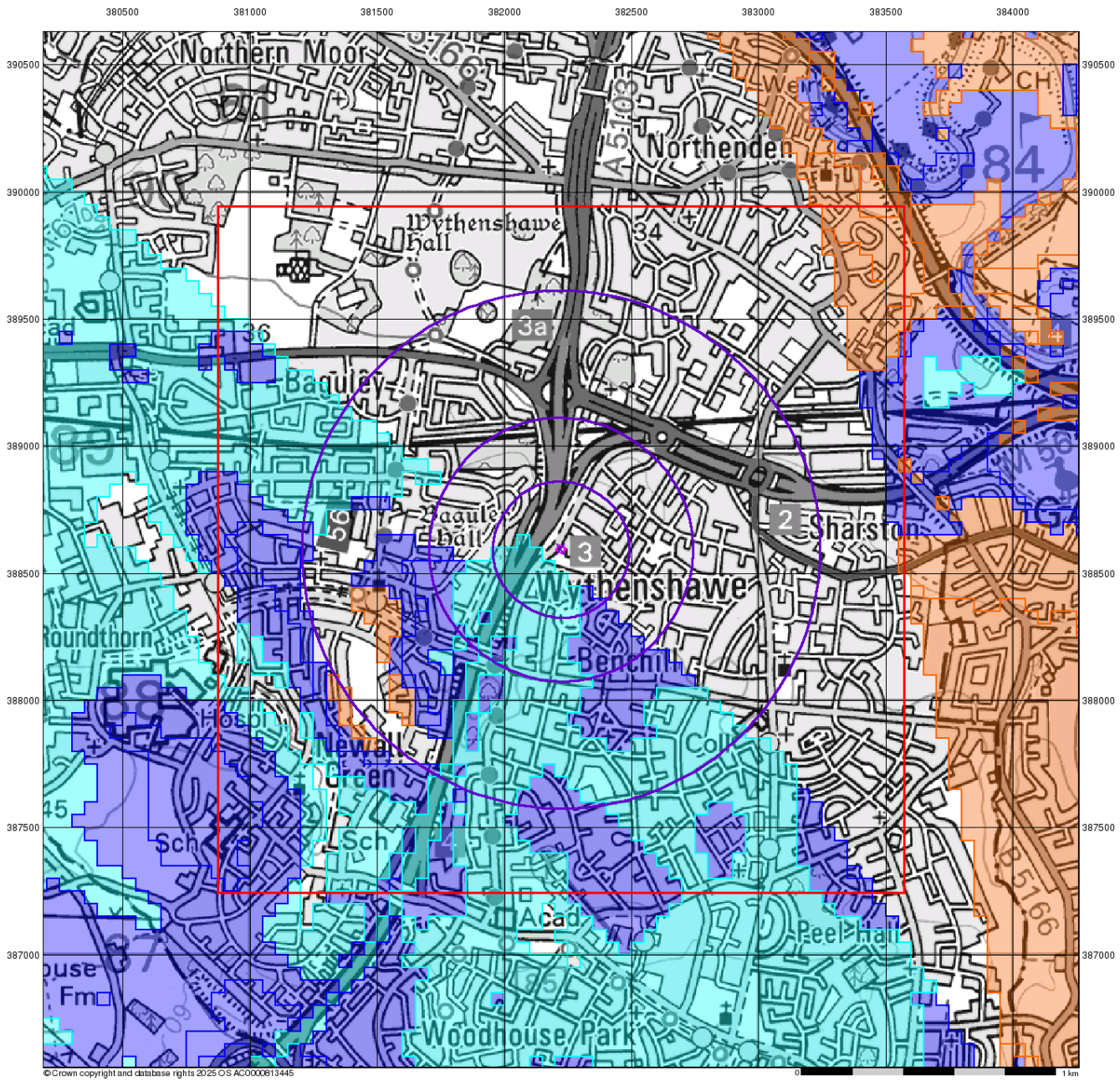


Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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BGS Flood GFS Data

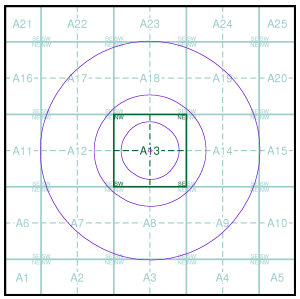
General

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

Agency and Hydrological (Flood)

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

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	377992989_1_1
Customer Ref:	LKC251240
National Grid Reference:	382220, 388590
Slice:	A
Site Area (Ha):	0.08
Search Buffer (m):	1000

Site Details

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Appendix D – Zetica UXO Unexploded Bomb Risk Map

UNEXPLODED BOMB RISK MAP

SITE LOCATION

Location: M22 8FJ,
Map Centre: 382365,388676



This map principally indicates a hazard from Unexploded Bombs (UXB) due to WWII bombardment. Other sources of Unexploded Ordnance (UXO) may be present. It should be noted that this map does not represent UXO risk and should not be reported as such when reproduced.

LEGEND

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

Miltary | **Industry** | **UXO find** | **Other**
Transport | **Docks** | **Luftwaffe targets**
Utilities | **Bombing decoy** | **Airfields**

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

This map indicates the potential for UXBs to be present because of World War Two (WWII) bombing. It can be incorporated into a technical report, such as a Phase 1 Desk Study, or similar document as an indication of the potential for UXO encounter on a Site. Other sources of UXO may also be indicated, although note that these are not comprehensive and more detailed research is required to confirm their presence.

What if my Site is in a moderate or high density area?

We typically recommend that a detailed UXO desk study and risk assessment is undertaken for sites in an area with a moderate or high bombing density.
Additionally, if your site is in close proximity to a strategic target, military establishment, airfield or bombing decoy, then additional detailed research is recommended.

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

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

If you are unsure whether other sources of UXO may be present, you can request one of our pre-desk study assessments (PDSA) by emailing a site boundary and location to pdsa@zetica.com.

You should never plan site work or undertake a risk assessment using these maps alone. More detail is required, to include an assessment of the likelihood of a source of UXO hazard from other military activity not reflected on these maps.

If I have any questions, who do I contact?

tel: +44 (0) 1993 886682 **email:** uxo@zetica.com **web:** www.zeticauxo.com

The information in this UXB risk map is derived from a range of sources and should be used with the accompanying notes on our website.

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

Appendix E – Zetica Pre-Desk Study Assessment (PDSA)

PA023545 — BENCHILL ROAD, WYTHENSHAWE

DOCUMENT DETAILS			
Site name:	Benchill Road, Wythenshawe		
Reference:	PA023545	**Client:**	LK Group
Date:	4th June 2025	**Contact:**	Jacob Lythgoe

RECOMMENDATION

While always prudent, a detailed desk study is not considered essential in this instance.

SUMMARY OF FINDINGS

Military Activity	No significant military activity affecting the Site has been identified.
WWI Bombing	Potential targets within approximately 5km of the Site: ▪ Transport infrastructure and public utilities. ▪ Engineering works. ▪ Anti-Aircraft (AA) defences. No readily available records have been found indicating that the Site was bombed.
WWII Bombing	The Site was located in Manchester County Borough (CB), which officially recorded 737No. High Explosive (HE) bombs, with a density of 27.0 bombs per 405 hectares (ha). The Manchester and Salford area was heavily bombed between the 22nd and 24th December 1940 (the 'Manchester Blitz'). Over 400No. HE bombs and more than 30,000No. Incendiary Bombs (IBs) fell across the region. Bombing was concentrated on Manchester city centre, approximately 9.8km from the Site. Potential targets within approximately 5km of the Site: ▪ Transport infrastructure and public utilities. ▪ Aircraft manufacturing and engineering works. ▪ Royal Air Force (RAF) Ringway. ▪ AA and anti-invasion defences. No readily available records have been found indicating that the Site was bombed.
Bombing Decoys	None identified within 5km of the Site.

FURTHER INFORMATION

These findings are based on a cursory review of readily available records; caution is advised if you plan to action work based on this PDSA.

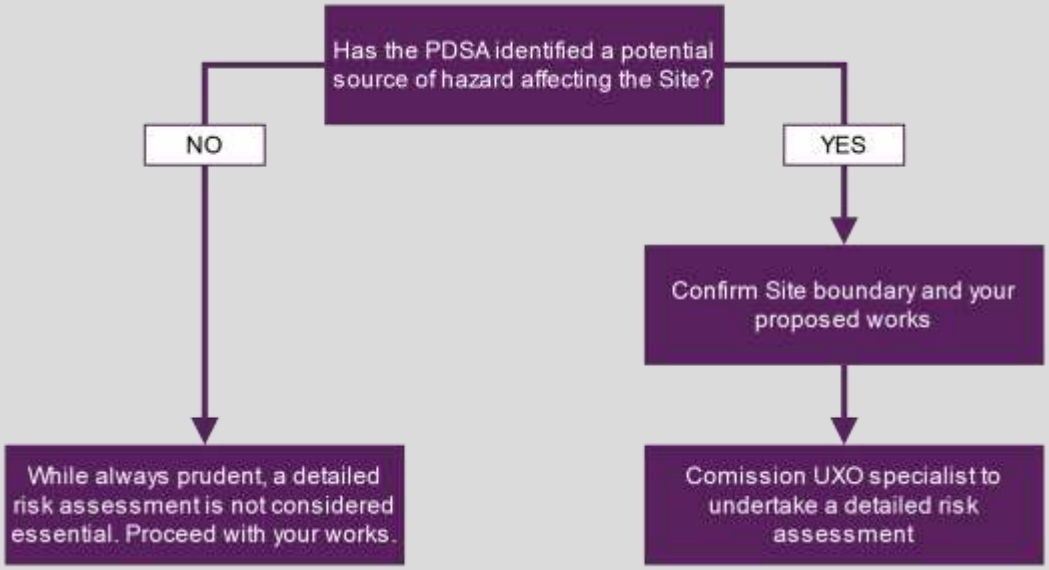
Where a potentially significant UXO hazard source has been identified on the Site, no further research has been undertaken. A detailed UXO desk study and risk assessment may identify other potential UXO hazard sources on the Site.

Visit www.zeticauxo.com to learn more about Zetica's detailed UXO desk studies and other UXO services. Click here for more information about the most common UXO hazard sources in the UK.

If you have any further queries, please don't hesitate to contact us at uxo@zetica.com or 01993 886 682.

NEXT STEPS

Follow the steps below to determine the appropriate course of action:



Potential UXO hazard identified? If the PDSA has identified a potential source of UXO hazard affecting your site, then a detailed UXO risk assessment is recommended.

No obvious source of UXO hazard? If the PDSA has not identified any obvious source of potential UXO, works can proceed.

It is good practice to raise awareness of the background UXO risk in the UK as part of a standard site induction. This will ensure that appropriate action is taken in the unlikely event that UXO is discovered.

Don't skip a stage: If you skip the detailed risk assessment stage, you could end up undertaking unnecessary work (e.g. trying to detect a UXO hazard that has already been removed).

Similarly, a detailed risk assessment might find that the UXO hazard is worse than expected and has a greater potential to cause harm, requiring a different mitigation approach than would otherwise be undertaken.

Appendix F – Profile Logs

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Window Sample Borehole Log

Location Number: **WS101**

Project Name: Benchill Primary School, Wythenshawe	Client: Black Cat Building Consultancy Ltd	Date: 27/05/2025
Project No. : LKC251240	Contractor: D & I Drilling Ltd	
Equipment: Window Sample Rig: Competitor Dart	Level	Logged By: JW; Scale: 1:25; Page Number: Sheet 1 of 1

Depth (m)	Samples / Tests	Depth (m)	Legend	Stratum Description	Level (m)
0.00 - 0.30 0.00 - 0.30	ES PID=0.0ppm			MADE GROUND: Dark brown slightly gravelly slightly sandy SILT with frequent rootlets and occasional brick fragments. Sand is fine to coarse. Gravel is fine to coarse, subangular to subrounded comprising sandstone. (Topsoil)	
0.30 - 0.60 0.30 - 0.60	ES PID=0.0ppm	0.30		MADE GROUND: Dark brown slightly gravelly slightly sandy SILT with occasional rootlets, brick fragments, ash and clinker. Sand is fine to coarse. Gravel is fine to coarse, subangular to subrounded comprising sandstone.	
0.60 - 1.00 0.60 - 1.00	ES PID=0.0ppm	0.70		Brown sandy silty CLAY with occasional rootlets. Sand is fine to coarse. Strata is friable.	
1.20 - 1.65 1.20 - 1.65	D N=7 (2,2/1,2,2,2)				
2.00 - 2.40 2.00 - 2.40	D N=50 (4,7/50 for 250mm)				
		2.40		End of Borehole at 2.40m	

1
2
3
4
5

Remarks:

Falling head test undertaken at 0.93-1.93mbgl (ref. FHT101).
SPT refusal at 2.40mbgl on very stiff clay.
Borehole dry and stable.

Window Sample Borehole Log

LK CONSULT

Location Number: **WS102**

Project Name: Benchill Primary School, Wythenshawe	Client: Black Cat Building Consultancy Ltd	Date: 27/05/2025
Project No. : LKC251240	Contractor: D & I Drilling Ltd	
Equipment: Window Sample Rig: Competitor Dart	Level	Logged By: JW; Scale: 1:25; Page Number: Sheet 1 of 1

Depth (m)	Samples / Tests	Depth (m)	Legend	Stratum Description	Level (m)
0.10 - 0.30 0.10 - 0.30	ES PID=0.0ppm	0.10		MADE GROUND: Tarmacadam.	
0.30 - 0.70 0.30 - 0.70	ES D PID=0.0ppm	0.30		MADE GROUND: Red slightly sandy GRAVEL. Sand is fine to coarse. Gravel is fine to coarse, subangular to angular comprising brick fragments.	
0.70 - 0.90 0.70 - 0.90	ES D PID=0.0ppm	0.70		MADE GROUND: Grey sandy slightly silty GRAVEL with frequent ash, occasional clinker, brick and bitumin fragments. Sand is fine to coarse. Gravel is fine to coarse, subangular to subrounded comprising sandstone.	
0.95	PP=103.0kPa	0.90		Brown slightly silty slightly clayey SAND. Sand is fine to coarse.	
1.20 - 1.65 1.20 1.20 - 1.65	D PP=36.8kPa N=7 (2,2/2,2,1,2)			Firm to very stiff consistency low to very high strength reddish brown slightly sandy silty CLAY. Sand is fine to coarse. 0.90m to 1.10mbgl - Strata is firm consistency high strength . 1.10m to 1.65mbgl - Strata is firm consistency low strength. 1.50m to 1.60mbgl - Band of sand. Sand is fine to coarse. 1.65m to 2.00mbgl - Strata is firm consistency medium strength.	1
1.80	PP=58.9kPa				
2.00 - 2.45	N=41 (5,5/6,9,11,15)			2.00m to 2.60mbgl - Strata is stiff consistency.	2
2.70 2.80	PP=220.7kPa 50 (25 for 145mm/50 for 75mm)			2.60m to 2.92mbgl - Strata is very stiff consistency very high strength.	
		2.92		End of Borehole at 2.92m	3
					4
					5

Remarks:

Falling head test undertaken at 1.00-2.00mbgl (ref. FHT102).
Sampler refusal at 2.70mbgl. SPT undertaken at 2.70mbgl.
SPT refusal at 2.92mbgl on very stiff clay.
Borehole dry and stable.

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Window Sample Borehole Log

Location Number: **WS103**

Project Name: Benchill Primary School, Wythenshawe	Client: Black Cat Building Consultancy Ltd	Date: 27/05/2025
Project No. : LKC251240	Contractor: D & I Drilling Ltd	
Equipment: Window Sample Rig: Competitor Dart	Level	Logged By: JW
Scale: 1:25	Page Number: Sheet 1 of 1	

Depth (m)	Samples / Tests	Depth (m)	Legend	Stratum Description	Level (m)
				MADE GROUND: Tarmacadam.	
0.10 - 0.55 0.10 - 0.55	ES PID=0.0ppm	0.10		MADE GROUND: Cream sandy GRAVEL. Sand is fine to coarse. Gravel is fine to coarse, subangular to subrounded comprising sandstone.	
0.55 - 0.85 0.55 - 0.85	ES PID=0.0ppm	0.55		MADE GROUND: Grey sandy slightly silty GRAVEL with frequent brick fragments, occasional ash clinker and bitumin fragments. Sand is fine to coarse. Gravel is fine to coarse, subangular to subrounded comprising sandstone.	
0.85 - 1.00 0.85 - 1.00 1.00	ES D PID=0.0ppm PP=127.5kPa	0.85		Firm to stiff consistency medium to high strength slightly sandy silty CLAY with occasional coal fragments. Sand is fine to coarse. 0.85m to 1.20mbgl - Strata is stiff consistency high strength.	1
1.20 - 1.65 1.20 - 1.65	D N=8 (2,2/2,2,2,2)			1.20m to 2.10mbgl - Strata is firm consistency medium strength.	
1.80	PP=73.6kPa				
2.00 - 2.36 2.00	D 50 (3,4/50 for 210mm)			2.10m to 2.36mbgl - Strata is very stiff consistency and gravelly. Gravels are subrounded to subangular, fine to coarse comprising sandstone.	2
		2.36		End of Borehole at 2.36m	
					3
					4
					5

Remarks:

SPT refusal at 2.36mbgl on very stiff clay.
Borehole dry and stable.

Trial Pit Log

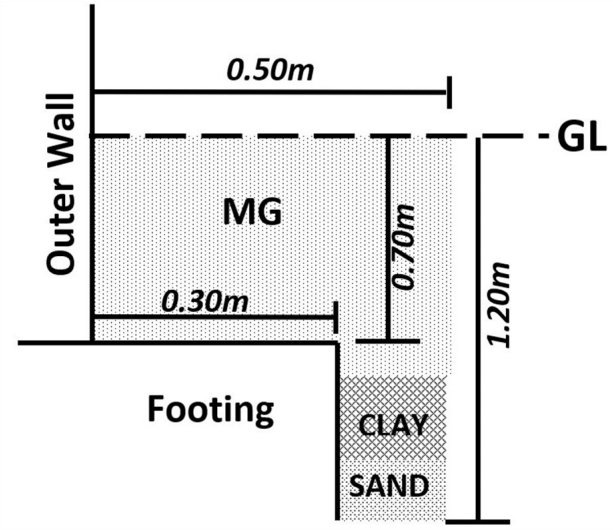
LK CONSULT

Location Number: **FP101**

Project: Benchill Primary School, Wythenshawe	Client: Black Cat Building Consultancy Ltd	Date: 27/05/2025
Project No. : LKC251240	Contractor: D & I Drilling Ltd	
Equipment: Hand Excavation Tools	Level	Logged By: JW; Scale: 1:15; Page Number: Sheet 1 of 1

Depth (m)	Samples / Tests	Depth (m)	Legend	Stratum Description	Level (m)
0.10 - 0.60	ES D	0.10		MADE GROUND: Tarmacadam.	
				MADE GROUND: Cream sandy GRAVEL. Sand is fine to coarse. Gravel is fine to coarse, subangular to subrounded comprising sandstone.	
0.60 - 0.85	ES D	0.60		MADE GROUND: Grey sandy slightly silty GRAVEL with frequent brick fragments, occasional ash clinker and bitumin fragments. Sand is fine to coarse. Gravel is fine to coarse, subangular to subrounded comprising sandstone.	
0.85 - 1.00	D	0.85		Firm to stiff consistency slightly sandy silty CLAY with occasional coal fragments. Sand is fine to coarse.	
1.00 - 1.20	D	1.00		Brown slightly silty slightly clayey SAND. Sand is fine to coarse.	
		1.20		End of Trial Pit at 1.20m	

0.5
1.0
1.5





Pit Dimensions			Pit Stability
Pit Length (m)	Pit Width (m)	Pit Depth (m)	Unstable at 0.00-0.70mbgl
0.50	0.40	1.20	

Remarks:
Foundation pit undertaken to 1.20mbgl.
Unable to find depths extent of foundation. Foundation extends below 1.20mbgl.

Trial Pit Log

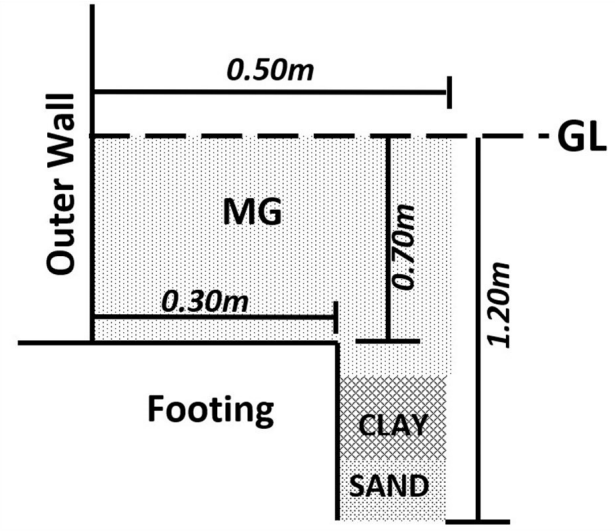
LK CONSULT

Location Number: **FP102**

Project: Benchill Primary School, Wythenshawe	Client: Black Cat Building Consultancy Ltd	Date: 27/05/2025
Project No. : LKC251240	Contractor: D & I Drilling Ltd	
Equipment: Hand Excavation Tools	Level	Logged By: JW; Scale: 1:15; Page Number: Sheet 1 of 1

Depth (m)	Samples / Tests	Depth (m)	Legend	Stratum Description	Level (m)
0.10 - 0.60	ES D	0.10		MADE GROUND: Tarmacadam.	
				MADE GROUND: Cream sandy GRAVEL. Sand is fine to coarse. Gravel is fine to coarse, subangular to subrounded comprising sandstone.	
0.60 - 0.85	ES D	0.60		MADE GROUND: Grey sandy slightly silty GRAVEL with frequent brick fragments, occasional ash clinker and bitumin fragments. Sand is fine to coarse. Gravel is fine to coarse, subangular to subrounded comprising sandstone.	
0.85 - 1.05	D	0.85		Firm to stiff consistency slightly sandy silty CLAY with occasional coal fragments. Sand is fine to coarse.	
1.05 - 1.20	D	1.05		Brown slightly silty slightly clayey SAND. Sand is fine to coarse.	
		1.20		End of Trial Pit at 1.20m	

0.5
1.0
1.5





Pit Dimensions			Pit Stability
Pit Length (m)	Pit Width (m)	Pit Depth (m)	Unstable at 0.00-0.70mbgl
0.50	0.40	1.20	

Remarks:
Foundation pit undertaken to 1.20mbgl.
Unable to find depths extent of foundation. Foundation extends below 1.20mbgl.

LK CONSULT

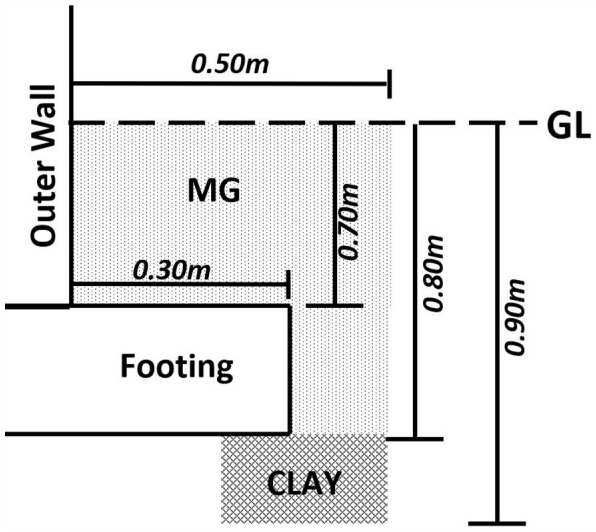
Trial Pit Log

Location Number: **FP103**

Project: Benchill Primary School, Wythenshawe	Client: Black Cat Building Consultancy Ltd	Date: 27/05/2025
Project No. : LKC251240	Contractor: D & I Drilling Ltd	
Equipment: Hand Excavation Tools	Level	Logged By: JW; Scale: 1:15; Page Number: Sheet 1 of 1

Depth (m)	Samples / Tests	Depth (m)	Legend	Stratum Description	Level (m)
0.10 - 0.60	ES D	0.10		MADE GROUND: Tarmacadam.	
				MADE GROUND: Cream sandy GRAVEL. Sand is fine to coarse. Gravel is fine to coarse, subangular to subrounded comprising sandstone.	
		0.60			
0.70 - 0.90	D	0.70		MADE GROUND: Grey sandy slightly silty GRAVEL with frequent brick fragments, occasional ash clinker and bitumin fragments. Sand is fine to coarse. Gravel is fine to coarse, subangular to subrounded comprising sandstone.	
				Firm to stiff consistency slightly sandy silty CLAY with occasional coal fragments. Sand is fine to coarse.	
		0.90		End of Trial Pit at 0.90m	

0.5
1.0
1.5





Pit Dimensions			Pit Stability
Pit Length (m)	Pit Width (m)	Pit Depth (m)	Unstable at 0.00-0.70mbgl
0.50	0.40	0.90	

Remarks:
Foundation pit undertaken to 0.90mbgl.
Foundation encountered at 0.80-0.90mbgl.

Appendix G – Certificates of Analysis (Soil)

Certificate of Analysis

Certificate Number	25-12077	*Issued:*	09-Jun-25

Client LK Consult Limited
Unit 29
Eton Business Park
Eton Hill Road
Radcliffe
Manchester
M26 2ZS

Our Reference	25-12077
Client Reference ~	LKC251240
Order No ~	PO-C001391
Contract Title ~	Benchill Primary School, Wythenshaw
Description	4 Soil samples.
Date Received	30-May-25
Date Started	30-May-25
Date Completed	09-Jun-25
Test Procedures	Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By [redacted]
Louise Cook
Contracts Manager

2139

Summary of Chemical Analysis
Soil Samples

Our Ref 25-12077
Client Ref ~ LKC251240
Contract Title ~ Benchill Primary School, Wythenshaw

			Lab No	2516110	2516111	2516112	2516113
			Sample ID ~	WS101	WS102	WS103	WS103
			Depth ~	0.30-0.60	0.30-0.70	0.55-0.85	0.85-1.50
			Other ID ~				
			Sample Type ~	SOIL	SOIL	SOIL	SOIL
			Sampling Date ~	27/05/2025	27/05/2025	27/05/2025	27/05/2025
			Sampling Time ~	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
Asbestos Quantification (Gravimetric)	DETSC 1102	0.001	%		0.001	0.001	
Metals							
Arsenic	DETSC 2301#	0.2	mg/kg	16	14	3.8	
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg		0.3		
Cadmium	DETSC 2301#	0.1	mg/kg	0.4	0.2	0.2	
Chromium	DETSC 2301#	0.15	mg/kg	14	15	8.2	
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	
Copper	DETSC 2301#	0.2	mg/kg	59	30	11	
Lead	DETSC 2301#	0.3	mg/kg	34	14	15	
Magnesium Aqueous Extract (2:1)	DETSC 2076*	10	mg/l			< 10	< 10
Mercury	DETSC 2325#	0.05	mg/kg	0.06	< 0.05	< 0.05	
Nickel	DETSC 2301#	1	mg/kg	24	20	11	
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	
Vanadium	DETSC 2301#	0.8	mg/kg	37	32	12	
Zinc	DETSC 2301#	1	mg/kg	52	30	15	
Inorganics							
pH	DETSC 2008#		pH	8.0	8.5	8.6	6.8
Cyanide, Total	DETSC 2130#	0.1	mg/kg		0.2		
Cyanide, Free	DETSC 2130#	0.1	mg/kg		< 0.1		
Organic matter	DETSC 2002#	0.1	%	1.7	2.5	2.1	
Chloride Aqueous Extract (2:1)	DETSC 2055	1	mg/l			32	11
Nitrate Aqueous Extract as NO3 (2:1)	DETSC 2055	1	mg/l			< 1.0	< 1.0
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	45	40	27	19
Petroleum Hydrocarbons							
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg		< 0.01		
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg		< 0.01		
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg		< 0.01		
Aliphatic C10-C12: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg		< 1.5		
Aliphatic C12-C16: EH_CU_1D_AL	DETSC 3072#	1.2	mg/kg		< 1.2		
Aliphatic C16-C21: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg		16		
Aliphatic C21-C35: EH_CU_1D_AL	DETSC 3072#	3.4	mg/kg		120		
Aliphatic C35-C40: EH_CU_1D_AL	DETSC 3072*	3.4	mg/kg		55		
Aliphatic C10-C44: EH_CU_1D_AL	DETSC 3072*	10	mg/kg		170		
Aliphatic C5-C40: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg		190		
Aliphatic C5-C44: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg		170		
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg		< 0.01		
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg		< 0.01		
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg		< 0.01		
Aromatic C10-C12: EH_CU_1D_AR	DETSC 3072#	0.9	mg/kg		4.9		
Aromatic C12-C16: EH_CU_1D_AR	DETSC 3072#	0.5	mg/kg		13		
Aromatic C16-C21: EH_CU_1D_AR	DETSC 3072#	0.6	mg/kg		94		
Aromatic C21-C35: EH_CU_1D_AR	DETSC 3072#	1.4	mg/kg		270		

Summary of Chemical Analysis
Soil Samples

Our Ref 25-12077
Client Ref ~ LKC251240
Contract Title ~ Benchill Primary School, Wythenshaw

			Lab No	2516110	2516111	2516112	2516113
			Sample ID ~	WS101	WS102	WS103	WS103
			Depth ~	0.30-0.60	0.30-0.70	0.55-0.85	0.85-1.50
			Other ID ~				
			Sample Type ~	SOIL	SOIL	SOIL	SOIL
			Sampling Date ~	27/05/2025	27/05/2025	27/05/2025	27/05/2025
			Sampling Time ~	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
Aromatic C35-C40: EH_CU_1D_AR	DETSC 3072*	1.4	mg/kg		< 1.4		
Aromatic C10-C44: EH_CU_1D_AR	DETSC 3072*	10	mg/kg		400		
Aromatic C5-C40: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg		380		
Aromatic C5-C44: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg		400		
TPH Ali/Aro C5-C40: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg		570		
TPH Ali/Aro C5-C44: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg		570		
Ali/Aro C10-C44: EH_CU_1D_Total	DETSC 3072*	10	mg/kg		570		
Benzene	DETSC 3321#	0.01	mg/kg		< 0.01		
Ethylbenzene	DETSC 3321#	0.01	mg/kg		< 0.01		
Toluene	DETSC 3321#	0.01	mg/kg		< 0.01		
Xylene	DETSC 3321#	0.01	mg/kg		< 0.01		
m+p Xylene	DETSC 3321#	0.01	mg/kg		< 0.01		
o Xylene	DETSC 3321#	0.01	mg/kg		< 0.01		
MTBE	DETSC 3321	0.01	mg/kg		< 0.01		
PAHs							
Naphthalene	DETSC 3301	0.1	mg/kg	< 0.1	0.3	0.2	
Acenaphthylene	DETSC 3301	0.1	mg/kg	< 0.1	0.4	0.4	
Acenaphthene	DETSC 3301	0.1	mg/kg	< 0.1	2.3	1.5	
Fluorene	DETSC 3301	0.1	mg/kg	< 0.1	3.9	1.7	
Phenanthrene	DETSC 3301	0.1	mg/kg	0.2	29	14	
Anthracene	DETSC 3301	0.1	mg/kg	< 0.1	8.1	3.5	
Fluoranthene	DETSC 3301	0.1	mg/kg	0.4	35	20	
Pyrene	DETSC 3301	0.1	mg/kg	0.4	31	18	
Benzo(a)anthracene	DETSC 3301	0.1	mg/kg	0.2	16	7.3	
Chrysene	DETSC 3301	0.1	mg/kg	0.1	15	7.3	
Benzo(b)fluoranthene	DETSC 3301	0.1	mg/kg	< 0.1	9.2	4.8	
Benzo(k)fluoranthene	DETSC 3301	0.1	mg/kg	< 0.1	5.5	3.0	
Benzo(a)pyrene	DETSC 3301	0.1	mg/kg	< 0.1	12	7.1	
Indeno(1,2,3-c,d)pyrene	DETSC 3301	0.1	mg/kg	< 0.1	9.2	5.4	
Dibenzo(a,h)anthracene	DETSC 3301	0.1	mg/kg	< 0.1	1.0	0.7	
Benzo(g,h,i)perylene	DETSC 3301	0.1	mg/kg	< 0.1	5.7	3.9	
PAH 16 Total	DETSC 3301	1.6	mg/kg	< 1.6	180	99	
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg		< 0.3		

Summary of Asbestos Analysis
Soil Samples

Our Ref 25-12077
Client Ref ~ LKC251240
Contract Title ~ Benchill Primary School, Wythenshaw

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2516110	WS101 0.30-0.60	SOIL	NAD	none	Darryl Fletcher
2516111	WS102 0.30-0.70	SOIL	Amosite	Bundles of Amosite fibres	Darryl Fletcher
2516112	WS103 0.55-0.85	SOIL	Amosite	Bundles of Amosite fibres	Darryl Fletcher

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Summary of Asbestos Quantification Analysis
Soil Samples

Our Ref 25-12077
Client Ref ~ LKC251240
Contract Title ~ Benchill Primary School, Wythenshaw

Lab No	2516111	2516112
Sample ID ~	WS102	WS103
Depth ~	0.30-0.70	0.55-0.85
Other ID ~		
Sample Type ~		
Sampling Date ~	27/05/2025	27/05/2025
Sampling Time ~		

Test	**Method**	**LOQ**	**Units**		
Total Mass% Asbestos (a+b+c)	DETSC 1102	< 0.001	Mass %	**0.001**	**0.001**
Gravimetric Quantification (a)	DETSC 1102	< 0.001	Mass %	na	na
Detailed Gravimetric Quantification (b)	DETSC 1102	< 0.001	Mass %	0.001	0.001
Quantification by PCOM (c)	DETSC 1102	< 0.001	Mass %	na	na
Potentially Respirable Fibres (d)	DETSC 1102	< 0.001	Fibres/g	na	na
Breakdown of Gravimetric Analysis (a)					
Mass of Sample			g	958.79	956.80
ACMs present*			type		
Mass of ACM in sample			g		
% ACM by mass			%		
% asbestos in ACM			%		
% asbestos in sample			%		
Breakdown of Detailed Gravimetric Analysis (b)					
% Amphibole bundles in sample			Mass %	0.001	0.001
% Chrysotile bundles in sample			Mass %	na	na
Breakdown of PCOM Analysis (c)					
% Amphibole fibres in sample			Mass %	na	na
% Chrysotile fibres in sample			Mass %	na	na
Breakdown of Potentially Respirable Fibre Analysis (d)					
Amphibole fibres			Fibres/g	na	na
Chrysotile fibres			Fibres/g	na	na

* Denotes test or material description outside of UKAS accreditation.
% asbestos in Asbestos Containing Materials (ACMs) is determined by
by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
# denotes deviating sample
The results are based on dry weight.

Information in Support of the Analytical Results

Our Ref 25-12077
Client Ref ~ LKC251240
Contract ~ Benchill Primary School, Wythenshaw

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2516110	WS101 0.30-0.60 SOIL	27/05/25	GJ 250ml, GJ 60ml, PT 1L		
2516111	WS102 0.30-0.70 SOIL	27/05/25	GJ 250ml, GJ 60ml, PT 1L		
2516112	WS103 0.55-0.85 SOIL	27/05/25	GJ 250ml, GJ 60ml, PT 1L		
2516113	WS103 0.85-1.50 SOIL	27/05/25	GJ 250ml, GJ 60ml, PT 1L		

Key: G-Glass P-Plastic J-Jar T-Tub
Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve
Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Information in Support of the Analytical Results

List of HWOL Acronyms and Operators

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det	Acronym
Aliphatic C5-C6	HS_1D_AL
Aliphatic C6-C8	HS_1D_AL
Aliphatic C8-C10	HS_1D_AL
Aliphatic C10-C12	EH_CU_1D_AL
Aliphatic C12-C16	EH_CU_1D_AL
Aliphatic C16-C21	EH_CU_1D_AL
Aliphatic C21-C35	EH_CU_1D_AL
Aliphatic C35-C40	EH_CU_1D_AL
Aliphatic C10-C44	EH_CU_1D_AL
Aliphatic C5-C40	EH_CU+HS_1D_AL
Aliphatic C5-C44	EH_CU+HS_1D_AL
Aromatic C5-C7	HS_1D_AR
Aromatic C7-C8	HS_1D_AR
Aromatic C8-C10	HS_1D_AR
Aromatic C10-C12	EH_CU_1D_AR
Aromatic C12-C16	EH_CU_1D_AR
Aromatic C16-C21	EH_CU_1D_AR
Aromatic C21-C35	EH_CU_1D_AR
Aromatic C35-C40	EH_CU_1D_AR
Aromatic C10-C44	EH_CU_1D_AR
Aromatic C5-C40	EH_CU+HS_1D_AR
Aromatic C5-C44	EH_CU+HS_1D_AR
TPH Ali/Aro C5-C40	EH_CU+HS_1D_Total
TPH Ali/Aro C5-C44	EH_CU+HS_1D_Total
Ali/Aro C10-C44	EH_CU_1D_Total

Key:

~ Sample details are provided by the client and can affect the validity of the results
***** -not accredited.
# -MCERTS (accreditation only applies if report carries the MCERTS logo).
$ -subcontracted.
n/s -not supplied.
I/S -insufficient sample.
U/S -unsuitable sample.
t/f -to follow.
nd -not detected.

End of Report Ver 25.03.04d

Appendix H – Certificates of Analysis (Geotechnical)

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client LK Consult Ltd

Address Unit 29 Eton Business Park
Eton Hill Road
Radcliffe
Greater Manchester
M26 2ZS

Contract LKC 25 1240 -
Benchill Primary School, Wythenshawe

Job Number MRN 25007/77
Date of Issue 19 June 2025

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD
PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

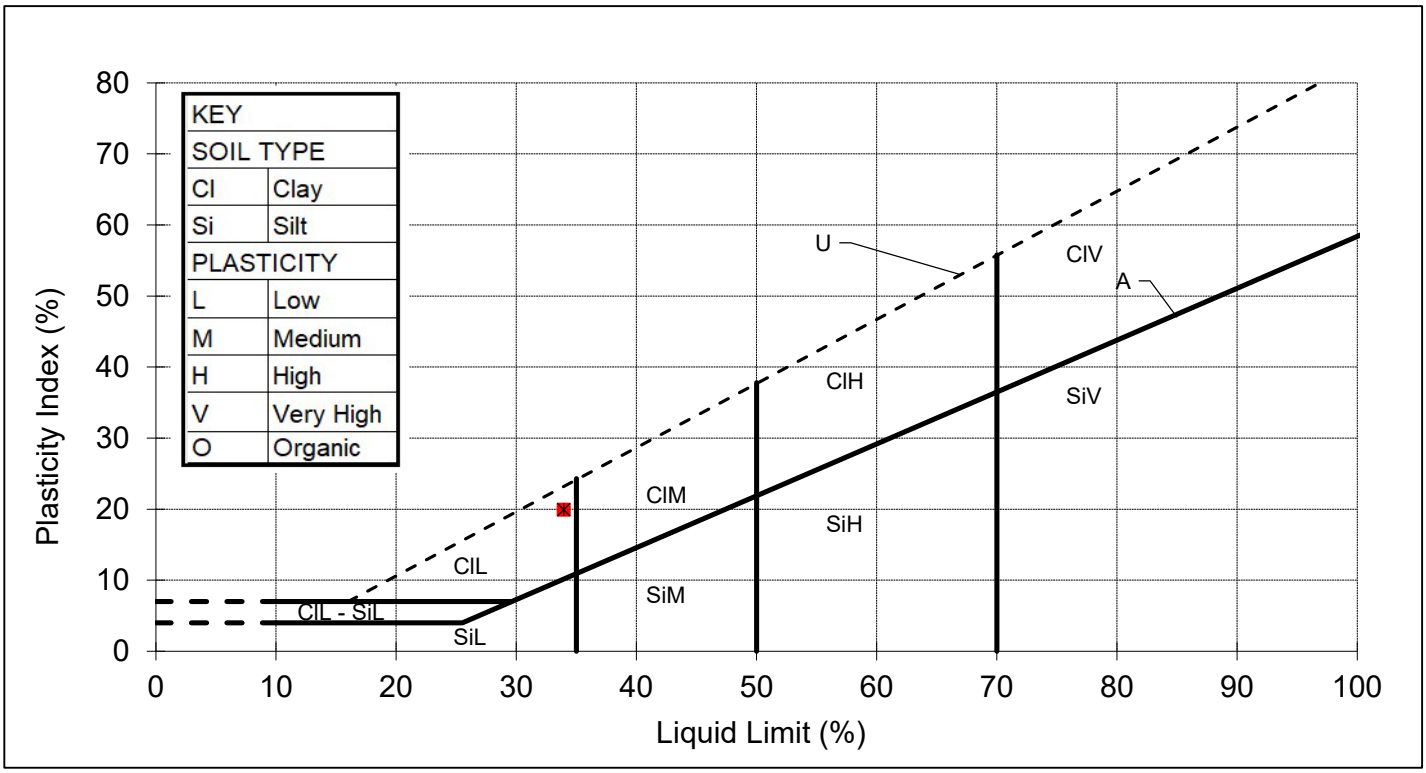
CLIENT	LK Consult Ltd
SITE	LKC 25 1240 - Benchill Primary School, Wythenshawe
JOB NUMBER	MRN 25007/77

SAMPLE LABEL	WS102 1.2-1.65m D	DATE SAMPLED	27-May-25
SAMPLE No.	5097601	DATE RECEIVED	02-Jun-25
DATE TESTED	05-Jun-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	19.6	33.8	1.006	
Determination 2 (avg)	19.6	33.7		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
17.2	34	14	20	89



REMARKS

SIGNED [redacted]

NAME O.P. Davies BA (Hons) DATE 19-Jun-25
(Director / Head of Laboratory)

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD
PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

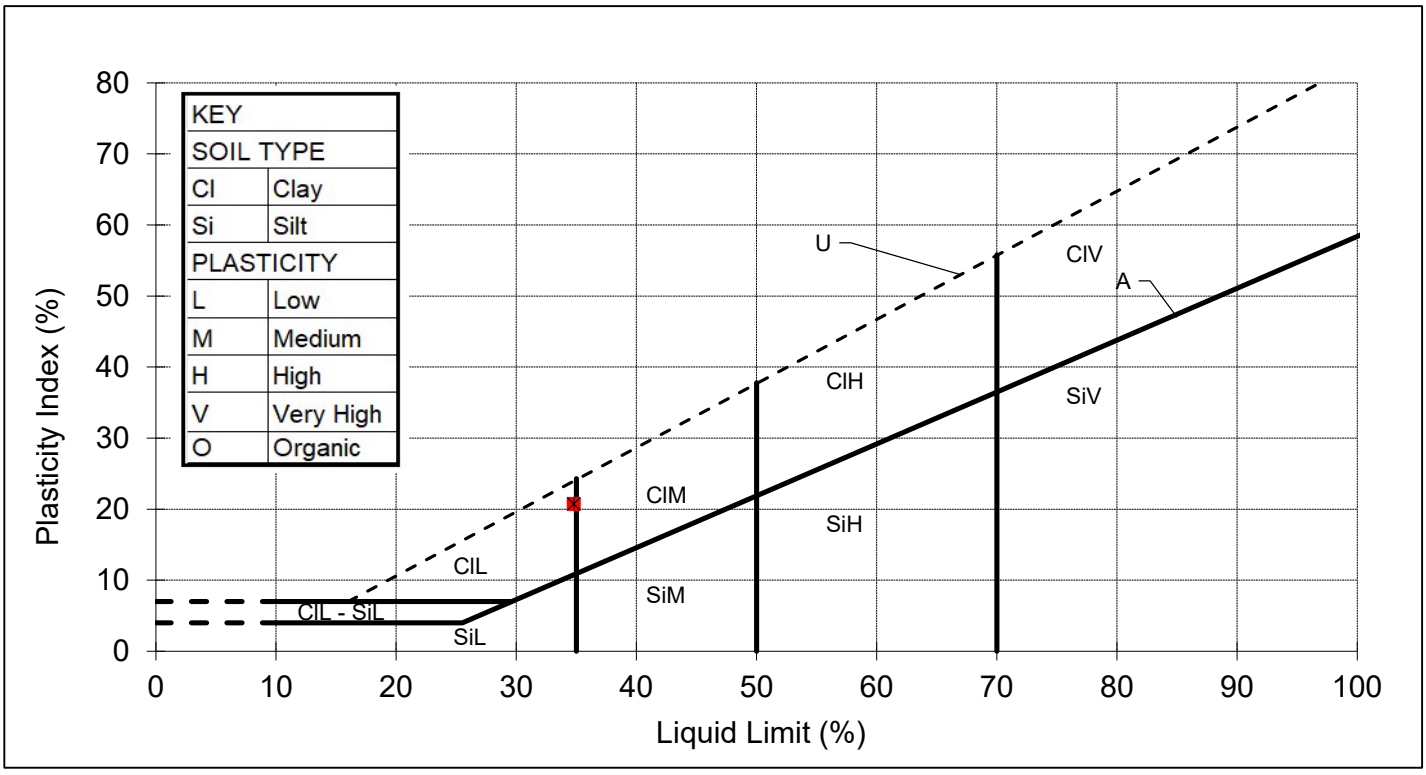
CLIENT	LK Consult Ltd
SITE	LKC 25 1240 - Benchill Primary School, Wythenshawe
JOB NUMBER	MRN 25007/77

SAMPLE LABEL	WS103 1.2-1.65m D	DATE SAMPLED	27-May-25
SAMPLE No.	5097602	DATE RECEIVED	02-Jun-25
DATE TESTED	05-Jun-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	20.0	34.8	0.998	
Determination 2 (avg)	20.3	34.9		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
18.6	35	14	21	93



REMARKS

SIGNED [redacted]

NAME O.P. Davies BA (Hons) DATE 19-Jun-25
(Director / Head of Laboratory)

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD
PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

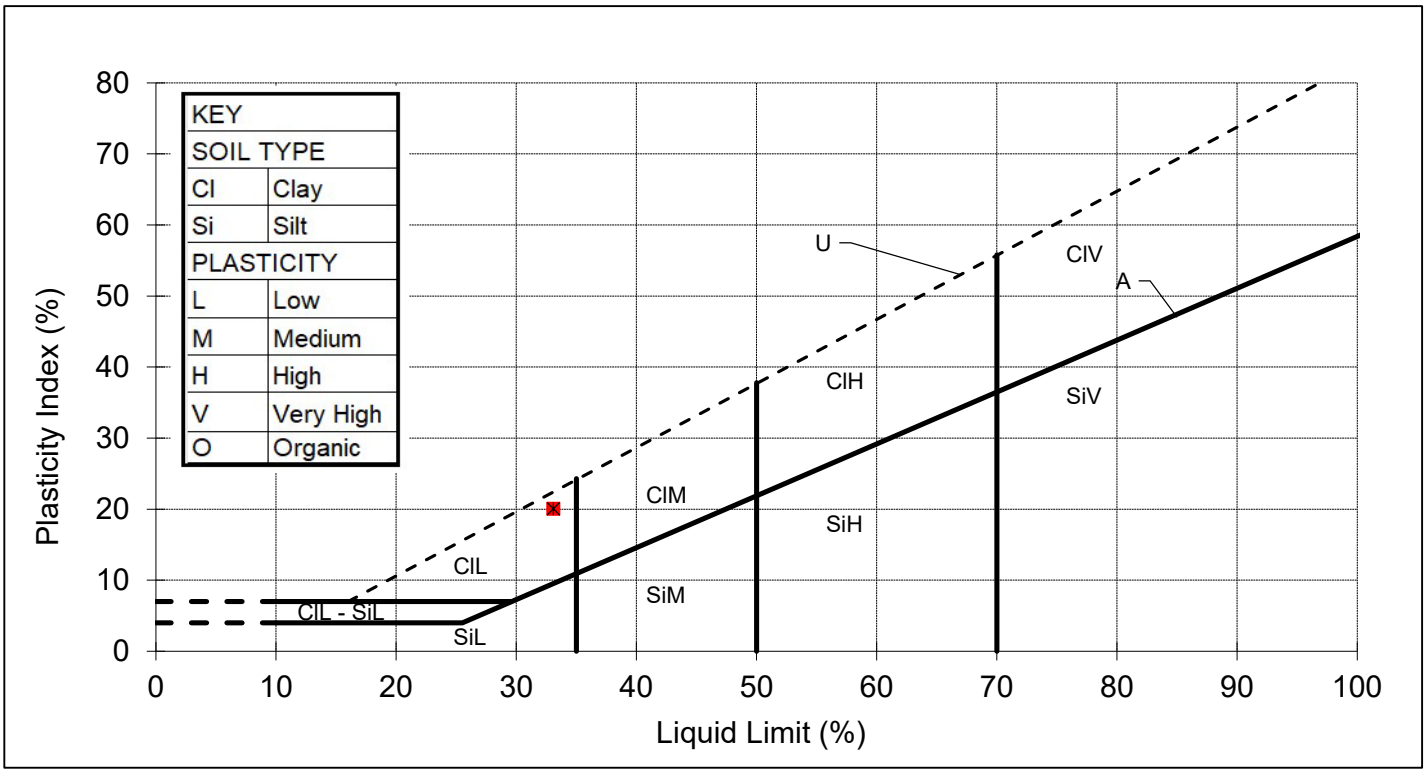
CLIENT	LK Consult Ltd
SITE	LKC 25 1240 - Benchill Primary School, Wythenshawe
JOB NUMBER	MRN 25007/77

SAMPLE LABEL	WS103 2.0-2.36m D	DATE SAMPLED	27-May-25
SAMPLE No.	5097603	DATE RECEIVED	02-Jun-25
DATE TESTED	05-Jun-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	19.9	32.9	0.999	
Determination 2 (avg)	20.2	33.3		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
15.3	33	13	20	86



REMARKS

SIGNED [redacted]

NAME O.P. Davies BA (Hons) DATE 19-Jun-25
(Director / Head of Laboratory)

Appendix I – Falling Head Tests

VARIABLE HEAD PERMEABILITY TEST

LK GROUP

Site Name	**Benchill Road, Wythenshawe**
Job Number	**LKC251240**
Location	**WS101**
Type of test	FALLING HEAD
Strata	Made Ground to 0.70m, clay to >2.00m
Date of Test	27/05/2025
Staff	JW

CONDITIONS OF TEST ZONE (BS5930:1999 Figure 6)

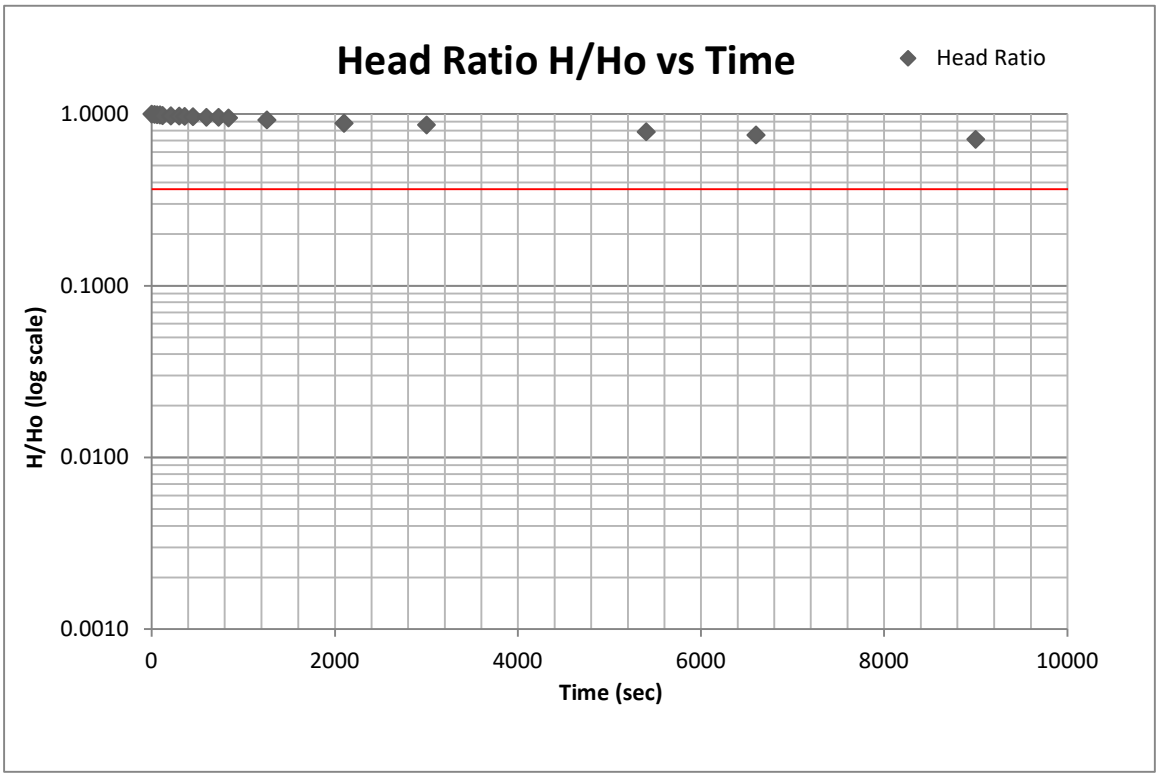
Select 'Case' from Figure 6	D	
Diameter of Borehole (D)	101	mm
L (see BS5930:1999 Figure 6)	1020	mm
Intake Factor (F)	2.1306	
Initial GW Depth	2	mbgl
Base of Installation	2	mbgl
Standpipe Diameter	101	mm
Standpipe X sec Area (A)	8.04E-03	m2
Depth to response zone	2	m
BASIC TIME LAG (T) (from Plot)	N/A	seconds

CALCULATED VALUES

Permeability k = A/F x T

k = N/A

FIELD MEASUREMENTS			
Time	Depth	Head H	Head Ratio
seconds	mbgl	m	H/Ho
0	0	2.000	1.0000
30	0.01	1.990	0.9950
60	0.02	1.980	0.9900
90	0.03	1.970	0.9850
120	0.04	1.960	0.9800
210	0.05	1.950	0.9750
300	0.06	1.940	0.9700
360	0.065	1.935	0.9675
450	0.075	1.925	0.9625
600	0.09	1.910	0.9550
730	0.1	1.900	0.9548
840	0.12	1.880	0.9495
1260	0.18	1.820	0.9239
2100	0.27	1.730	0.8827
3000	0.32	1.680	0.8615
5400	0.47	1.530	0.7887
6600	0.54	1.460	0.7545
9000	0.63	1.370	0.7117



VARIABLE HEAD PERMEABILITY TEST

LK GROUP

Site Name	**Benchill Road, Wythenshawe**
Job Number	**LKC251240**
Location	**WS102**
Type of test	FALLING HEAD
Strata	Made Ground to 0.70m, sand to 0.90m, clay to >2.00m
Date of Test	27/05/2025
Staff	JW

CONDITIONS OF TEST ZONE (BS5930:1999 Figure 6)

Select 'Case' from Figure 6	D	
Diameter of Borehole (D)	101	mm
L (see BS5930:1999 Figure 6)	1020	mm
Intake Factor (F)	2.1306	
Initial GW Depth	2	mbgl
Base of Installation	2	mbgl
Standpipe Diameter	101	mm
Standpipe X sec Area (A)	8.04E-03	m2
Depth to response zone	2	m
BASIC TIME LAG (T) (from Plot)	N/A	seconds

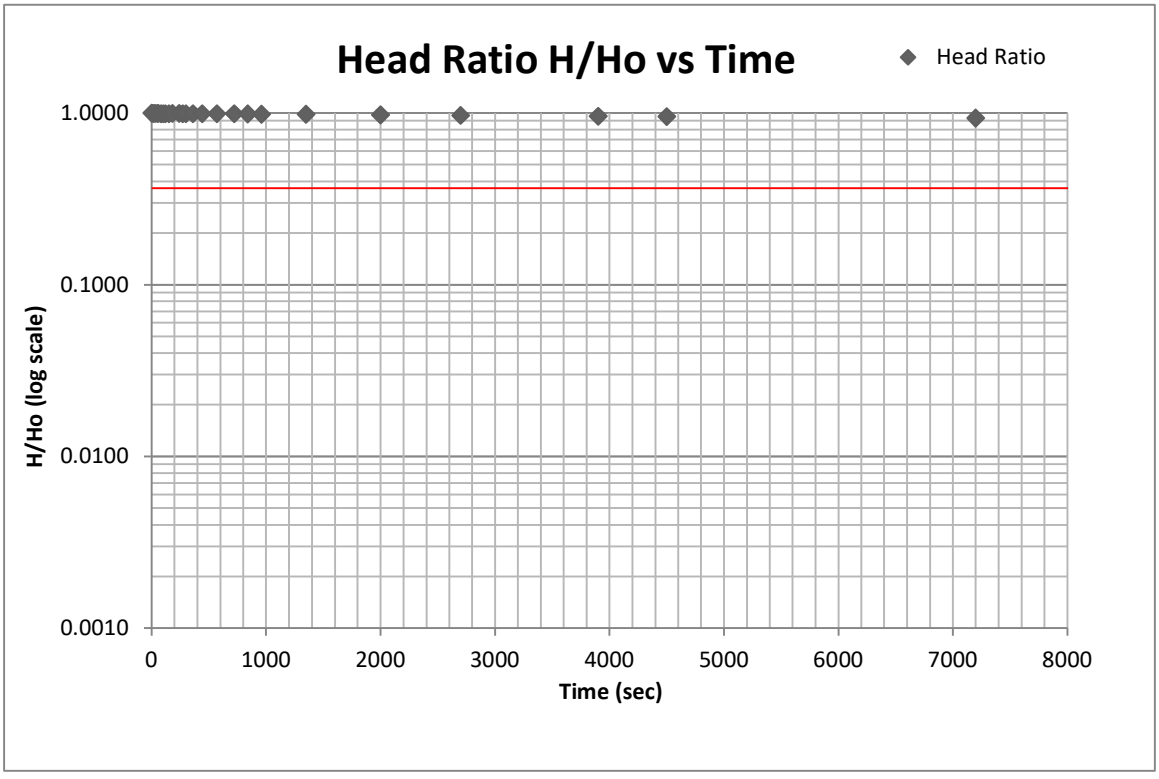
CALCULATED VALUES

Permeability k = A/F x T

k = N/A

FIELD MEASUREMENTS

Time seconds	Depth mbgl	Head H m	Head Ratio H/Ho
0	0.03	1.970	1.0000
10	0.04	1.960	0.9949
20	0.04	1.960	0.9949
35	0.04	1.960	0.9949
50	0.04	1.960	0.9949
60	0.04	1.960	0.9949
80	0.045	1.955	0.9924
100	0.045	1.955	0.9924
120	0.05	1.950	0.9898
150	0.05	1.950	0.9898
180	0.05	1.950	0.9949
240	0.05	1.950	0.9949
270	0.055	1.945	0.9923
300	0.055	1.945	0.9923
360	0.055	1.945	0.9923
440	0.06	1.940	0.9923
570	0.065	1.935	0.9898
720	0.07	1.930	0.9897
840	0.075	1.925	0.9872
960	0.08	1.920	0.9846
1350	0.085	1.915	0.9821
2000	0.105	1.895	0.9743
2700	0.12	1.880	0.9666
3900	0.14	1.860	0.9563
4500	0.15	1.850	0.9536
7200	0.19	1.810	0.9354



Appendix J – Generic Assessment Criteria Values

Generic Assessment Criteria Values

	Contaminant	SOM	Res +	Res -	Allot.	Comm.	POSresi	POSpark	Source
Metals	Inorganic Arsenic	N/A	37	40	49	640	79	168	DEFRA C4SL
	Beryllium	N/A	1.7	1.7	35	12	2.2	63	LQM S4UL
	Boron	N/A	290	11,000	45	240,000	21,000	46,000	LQM S4UL
	Cadmium	N/A	26	149	4.9	410	220	880	DEFRA C4SL
	Chromium (III)	N/A	910	910	18,000	8,600	1,500	33,000	LQM S4UL
	Chromium (VI)	N/A	21.0	21.0	170.0	49	23.0	250	DEFRA C4SL
	Copper	N/A	2,400	7,100	520	68,000	12,000	44,000	LQM S4UL
	Lead	N/A	200	310	80	2,330	630	1,300	DEFRA C4SL
	Elemental Mercury	N/A	1.2	1.2	21	58 (25.8) vap	16	30 (25.8) vap	LQM S4UL
	Inorganic Mercury	N/A	40	56	19	1,100	120	240	LQM S4UL
	Methylmercury	N/A	11	15	6.0	320	40	68	LQM S4UL
	Nickel (2015 update)	N/A	130	180	53	980	230	800	LQM S4UL
	Selenium	N/A	250	430	88	12,000	1,100	1,800	LQM S4UL
	Vanadium	N/A	410	1,200	91	9,000	2,000	5,000	LQM S4UL
	Zinc	N/A	3,700	40,000	620	730,000	81,000	170,000	LQM S4UL
Polycyclic Aromatic Hydrocarbons (PAHs)	Acenaphthene	1%	210	3,000 (57.1) sol	34	84,000 (57.0) sol	15,000	29,000	LQM S4UL
		2.5%	510	4,700 (141) sol	85	97,000 (141) sol	15,000	30,000	LQM S4UL
		6%	1,100	6,000 (336) sol	200	100,000	15,000	30,000	LQM S4UL
	Acenaphthylene	1%	170	2,900 (86.1) sol	28	83,000 (86.1) sol	15,000	29,000	LQM S4UL
		2.5%	420	4,600 (212) sol	69	97,000 (212) sol	15,000	30,000	LQM S4UL
		6%	920	6,000 (506) sol	160	100,000	15,000	30,000	LQM S4UL
	Anthracene	1%	2,400	31,000 (1.17) vap	380	520,000	74,000	150,000	LQM S4UL
		2.5%	5,400	35,000	950	540,000	74,000	150,000	LQM S4UL
		6%	11,000	37,000	2,200	540,000	74,000	150,000	LQM S4UL
	Benz(a)anthracene	1%	7.2	11	2.9	170	29	49	LQM S4UL
		2.5%	11	14	6.5	170	29	56	LQM S4UL
		6%	13	15	13	180	29	62	LQM S4UL
	Benzo(a)pyrene (only)	1%	5.0	5.3	5.70	77	10.0	21	DEFRA C4SL
		2.5%	5.0	5.3	5.70	77	10.0	21	DEFRA C4SL
		6%	5.0	5.3	5.70	77	10.0	21	DEFRA C4SL
	Benzo(a)pyrene (surrogate marker Coal Tar)	1%	0.8	1.2	0.32	15	2.2	4	LQM S4UL
		2.5%	1.0	1.2	0.67	15	2.2	5	LQM S4UL
		6%	1.1	1.2	1.20	15	2.2	5	LQM S4UL
	Benzo(b)fluoranthene	1%	2.6	3.9	0.99	44	7.1	13	LQM S4UL
		2.5%	3.3	4.0	2.1	44	7.2	15	LQM S4UL
		6%	3.7	4.0	3.9	45	7.2	16	LQM S4UL
	Benzo(ghi)perylene	1%	320	360	290	3,900	640	1,400	LQM S4UL
		2.5%	340	360	470	4,000	640	1,500	LQM S4UL
		6%	350	360	640	4,000	640	1,600	LQM S4UL
	Benzo(k)fluoranthene	1%	77	110	37	1,200	190	370	LQM S4UL
		2.5%	93	110	75	1,200	190	410	LQM S4UL
		6%	100	110	130	1,200	190	440	LQM S4UL
	Chrysene	1%	15	30	4.1	350	57	93	LQM S4UL
		2.5%	22	31	9.4	350	57	110	LQM S4UL
		6%	27	32	19	350	57	120	LQM S4UL
	Dibenzo(ah)anthracene	1%	0.24	0.31	0.14	3.5	0.57	1.1	LQM S4UL
		2.5%	0.28	0.32	0.27	3.6	0.58	1.3	LQM S4UL
		6%	0.3	0.32	0.43	3.6	0.58	1.4	LQM S4UL
	Fluoranthene	1%	280	1,500	52	23,000	3,100	6,300	LQM S4UL
		2.5%	560	1,600	130	23,000	3,100	6,300	LQM S4UL
		6%	890	1,600	290	23,000	3,100	6,400	LQM S4UL
	Fluorene	1%	170	2,800 (36.0) sol	27	63,000 (30.9) sol	9,900	20,000	LQM S4UL
		2.5%	400	3,800 (76.5) sol	67	68,000	9,900	20,000	LQM S4UL
		6%	860	4,500 (183) sol	160	71,000	9,900	20,000	LQM S4UL
	Indeno(123-cd)pyrene	1%	27	45	9.5	500	82	150	LQM S4UL
		2.5%	36	46	21	510	82	170	LQM S4UL
		6%	41	46	39	510	82	180	LQM S4UL
	Naphthalene	1%	15	15	65	1,600*	11,000*	8,400*	DEFRA C4SL
		2.5%	36	36	130	3,700*	15,000*	17,00*	DEFRA C4SL
		6%	85	85	200	8,400*	1,200*	1,900*	DEFRA C4SL
	Phenanthrene	1%	95	1,300 (36.0) sol	15	22,000	3,100	6,200	LQM S4UL
		2.5%	220	1,500	38	22,000	3,100	6,200	LQM S4UL
		6%	440	1,500	90	22,000	3,100	6,300	LQM S4UL
	Pyrene	1%	620	3,700	110	54,000	7,400	15,000	LQM S4UL
		2.5%	1,200	3,800	270	54,000	7,400	15,000	LQM S4UL
		6%	2,000	3,800	620	54,000	7,400	15,000	LQM S4UL
	Coal Tar (B(a)P as surrogate marker)	1%	0.79	1.2	0.32	15	2.2	4.4	LQM S4UL
		2.5%	0.98	1.2	0.67	15	2.2	4.7	LQM S4UL
		6%	1.1	1.2	1.2	15	2.2	4.8	LQM S4UL

Generic Assessment Criteria Values

	Contaminant	SOM	Res +	Res -	Allot.	Comm.	POSresi	POSpark	Source
BTEX Compounds	Benzene	1%	0.87	0.38	0.017	27	72	90	LQM S4UL
		2.5%	0.17	0.70	0.034	47	72	100	LQM S4UL
		6%	0.37	1.4	0.075	90	73	110	LQM S4UL
	Toluene	1%	130	880 (869) vap	22	56,000 (869) vap	56,000	87,000 (869) vap	LQM S4UL
		2.5%	290	1,900	51	110,000 (1,920) vap	56,000	95,000 (1,920) vap	LQM S4UL
		6%	660	3,900	120	180,000 (4,360) vap	56,000	100,000 (4,360)	LQM S4UL
	Ethylbenzene	1%	47	83	16	5,700 (518) vap	24,000	17,000 (518) vap	LQM S4UL
		2.5%	110	190	39	13,000 (1,220) vap	24,000	22,000 (1,220) vap	LQM S4UL
		6%	260	440	91	27,000 (2,840) vap	25,000	27,000 (2,840) vap	LQM S4UL
	o-xylene	1%	60	88	28	6,600 (478) sol	41,000	17,000 (478) sol	LQM S4UL
		2.5%	140	210	67	15,000 (1,120) sol	42,000	24,000 (1,120) sol	LQM S4UL
		6%	330	480	160	33,000 (2,620) sol	43,000	33,000 (2,620) sol	LQM S4UL
	m-xylene	1%	59	82	31	6,200 (625) vap	41,000	17,000 (625) vap	LQM S4UL
		2.5%	140	190	74	14,000 (1,470) vap	42,000	24,000 (1,470) vap	LQM S4UL
		6%	320	450	170	31,000 (3,460) vap	43,000	32,000 (3,460) vap	LQM S4UL
	p-xylene	1%	56	79	29	5,900 (576) sol	41,000	17,000 (576) sol	LQM S4UL
		2.5%	130	180	69	14,000 (1,350) sol	42,000	23,000 (1,350) sol	LQM S4UL
		6%	310	430	160	30,000 (3,170) sol	43,000	31,000 (3,170) sol	LQM S4UL
Petroleum Hydroc	**Aliphatic**								
	EC 5-6	1%	42	42	730	3,200 (304) sol	570,000(304)sol	95,000 (304) sol	LQM S4UL
	EC>6-8	1%	100	100	2,300	7,800 (144) sol	600,000	150,000 (144) sol	LQM S4UL
	EC>8-10	1%	27	27	320	2,000 (78) sol	13,000	14,000 (78) vap	LQM S4UL
	EC>10-12	1%	130 (48) vap	130 (48) vap	2,200	9,700 (48) sol	13,000	21,000 (48) vap	LQM S4UL
	EC>12-16	1%	1,100 (24) sol	1,100 (24) sol	11,000	59,000 (24) sol	13,000	25,000 (24) sol	LQM S4UL
	EC>16-35	1%	65,000 (8.48)	65,000 (8.48) f ,sol	260,000 f	160,000 f	250,000 f	450,000 f	LQM S4UL
	EC>35-44	1%	65,000 (8.48)	65,000 (8.48) f ,sol	260,000 f	160,000 f	250,000 f	450,000 f	LQM S4UL
	Aliphatic								
	EC 5-6	2.5%	78	78	1,700	5,900 (558) sol	590,000	130,000 (558) sol	LQM S4UL
	EC>6-8	2.5%	230	230	5,600	17,000 (322) sol	610,000	220,000 (322) sol	LQM S4UL
	EC>8-10	2.5%	65	65	770	4,800 (190) vap	13,000	18,000 (190) vap	LQM S4UL
	EC>10-12	2.5%	330 (118) vap	330 (118) vap	4,400	23,000 (118) vap	13,000	23,000 (118) vap	LQM S4UL
	EC>12-16	2.5%	2,400 (59) sol	2,400 (59) sol	13,000	82,000 (59) sol	13,000	25,000 (59) sol	LQM S4UL
	EC>16-35	2.5%	92,000 (21)	92,000 (21) f ,sol	270,000 f	1,700,000 f	250,000 f	480,000 f	LQM S4UL
	EC>35-44	2.5%	92,000 (21)	92,000 (21) f ,sol	270,000 f	1,700,000 f	250,000 f	480,000 f	LQM S4UL
	Aliphatic								
	EC 5-6	6%	160	160	3,900	12,000 (1,150) sol	600,000	180,000 (1,150)	LQM S4UL
	EC>6-8	6%	530	530	13,000	40,000 (736) sol	620,000	320,000 (736) sol	LQM S4UL
	EC>8-10	6%	150	150	1,700	11,000 (451) vap	13,000	21,000 (451) vap	LQM S4UL
	EC>10-12	6%	760 (283) vap	760 (283) vap	7,300	47,000 (283) vap	13,000	24,000 (283) vap	LQM S4UL
	EC>12-16	6%	4,300 (142) sol	4,400 (142) sol	13,000	90,000 (142) sol	13,000	26,000 (142) sol	LQM S4UL
	EC>16-35	6%	110,000f	110,000f	270,000 f	1,800,000f	250,000 f	490,000 f	LQM S4UL
	EC>35-44	6%	110,000f	110,000f	270,000 f	1,800,000f	250,000 f	490,000 f	LQM S4UL
	Aromatic								
	EC5-7(benzene as non-	1%	70	370	13	26,000 (1,220) sol	56,000	76,000 (1,220) sol	LQM S4UL
	EC>7-8(toluene)	1%	130	860	22	56,000 (869) vap	56,000	87,000 (869) vap	LQM S4UL
	EC>8-10	1%	34	47	8.6	3,500 (613) vap	5,000	7,200 (613) vap	LQM S4UL
	EC>10-12	1%	74	250	13	16,000 (364) sol	5,000	9,200 (364) sol	LQM S4UL
	EC>12-16	1%	140	1,800	23	36,000 (169)sol	5,100	10,000	LQM S4UL
	EC>16-21	1%	260 f	1,900 f	46 f	28,000 f	3,800 f	7,600 f	LQM S4UL
	EC>21-35	1%	1,100 f	1,900 f	370 f	28,000 f	3,800 f	7,800 f	LQM S4UL
	EC>35-44	1%	1,100 f	1,900 f	370f	28,000 f	3,800 f	7,800 f	LQM S4UL
	Aromatic								
	EC5-7(benzene as non-	2.5%	140	690	27	46,000 (2,260) sol	56,000	84,000 (2,260) sol	LQM S4UL
	EC>7-8(toluene)	2.5%	290	1,800	51	110,000 (1,920) sol	56,000	95,000 (1,920) sol	LQM S4UL
	EC>8-10	2.5%	83	110	21	8,100 (1,500) vap	5,000	8,500 (1,500) vap	LQM S4UL
	EC>10-12	2.5%	180	590	31	28,000 (899) sol	5,000	9,700 (899) sol	LQM S4UL
	EC>12-16	2.5%	330	2,300 (419) sol	57	37,000	5,100	10,000	LQM S4UL
	EC>16-21	2.5%	540 f	1,900 f	110 f	28,000 f	3,800 f	7,700 f	LQM S4UL
	EC>21-35	2.5%	1,500 f	1,900 f	820 f	28,000 f	3,800 f	7,800 f	LQM S4UL
	EC>35-44	2.5%	1,500 f	1,900 f	820 f	28,000 f	3,800 f	7,800 f	LQM S4UL
	Aromatic								
	EC5-7(benzene as non-	6%	300	1,400	57	86,000 (4,710) sol	56,000	92,000 (4,710) sol	LQM S4UL
	EC>7-8(toluene)	6%	660	3,900	120	180,000 (4,360)vap	56,000	100,000 (4,360)	LQM S4UL
	EC>8-10	6%	190	270	51	17,000 (3,580) vap	5,000	9,300 (3,580) vap	LQM S4UL
	EC>10-12	6%	380	1,200	4	34,000 (2,150) sol	5,000	10,000	LQM S4UL
	EC>12-16	6%	660	2,500	130	38,000	5,100	10,000	LQM S4UL
	EC>16-21	6%	930f	1,900 f	260 f	28,000 f	3,800 f	7,800 f	LQM S4UL
	EC>21-35	6%	1,700 f	1,900 f	1,600 f	28,000 f	3,800 f	7,900 f	LQM S4UL
	EC>35-44	6%	1,700 f	1,900 f	1,600 f	28,000 f	3,800 f	7,900 f	LQM S4UL
	Aliphatic +Aromatic >EC44	1%	1,600 f	1,900 f	1,200 f	28,000 f	3,800 f	7,800 f	LQM S4UL
		2.5%	1,800 f	1,900 f	2,100 f	28,000 f	3,800 f	7,800 f	LQM S4UL
		6%	1,900 f	1,900 f	3,000 f	28,000 f	3,800 f	7,900 f	LQM S4UL

	Contaminant	SOM	Res +	Res -	Allot.	Comm.	POSresi	POSpark	Source
Chloalkanes and Alkenes & Explosives	1,2 Dichloroethane (DCA)	1%	0.0071	0.0092	0.0046	0.67	29	21	LQM S4UL
		2.5%	0.0110	0.0130	0.0083	0.97	29	24	LQM S4UL
		6%	0.0190	0.0230	0.0160	1.7	29	28	LQM S4UL
	1,1,1 Trichloroethane (TCA)	1%	8.8	9.0	48	660	140,000	57,000 (1,425) vap	LQM S4UL
		2.5%	18	18	110	1,300	140,000	76,000 (2,915) vap	LQM S4UL
		6%	39	40	240	3,000	140,000	100,000 (6,392)	LQM S4UL
	1,1,2,2-Tetrachloroethanes (PCA)	1%	1.6	3.9	0.41	270	1,400	1,800	LQM S4UL
		2.5%	3.4	8.0	0.89	550	1,400	2,100	LQM S4UL
		6%	7.5	17	2.0	1,100	1,400	2,300	LQM S4UL
	1,1,1,2-Tetrachloroethanes (PCA)	1%	1.2	1.5	0.79	110	1,400	1,500	LQM S4UL
		2.5%	2.8	3.5	1.9	250	1,400	1,800	LQM S4UL
		6%	6.4	8.2	4.4	560	1,400	2,100	LQM S4UL
	Tetrachloroethene (PCE)	1%	0.31	0.32	2.00	24	3,200	1400	DEFRA C4SL
		2.5%	0.70	0.71	4.8	55	3,300	1900	DEFRA C4SL
		6%	1.60	1.60	11.0	130	3,400	2,500	DEFRA C4SL
	Tetrachloromethane (carbon tetrachloride)	1%	0.03	0.03	0.45	2.9	890	190	LQM S4UL
		2.5%	0.06	0.06	1.0	6.3	920	270	LQM S4UL
		6%	0.13	0.13	2.4	14	950	400	LQM S4UL
	Trichloroethene (TCE)	1%	0.009	0.010	0.032	0.7	76.0	41.0	DEFRA C4SL
		2.5%	0.020	0.020	0.072	1.5	78.0	51.0	DEFRA C4SL
		6%	0.043	0.045	0.160	3.4	79.0	69.0	DEFRA C4SL
	cis 1,2-dichloroethene	1%	0.46	0.50	0.890	38	3,800	2,000	DEFRA C4SL
		2.5%	0.78	0.84	1.70	64	3,800	2,400	DEFRA C4SL
		6%	1.50	1.60	3.60	120	3,900	3,100	DEFRA C4SL
	Trichloromethane (chloroform)	1%	0.91	1.2	0.42	99	2,500	2,600	LQM S4UL
		2.5%	1.7	2.1	0.83	170	2,500	2,800	LQM S4UL
		6%	3.4	4.2	1.7	350	2,500	3,100	LQM S4UL
	Trans-1,2 Dichloroethene	1%	0.9	0.9	3.7	69	13,000	5,600	DEFRA C4SL
		2.5%	1.6	1.7	7.5	120	13,000	7,000	DEFRA C4SL
		6%	3.3	3.4	16.0	260	13,000	9,100	DEFRA C4SL
	Chloroethene (vinyl chloride)	1%	0.006	0.015	0.0017	1.1E+00	7.8	18.0	DEFRA C4SL
		2.5%	0.010	0.019	0.0031	1.4E+00	7.8	19.0	DEFRA C4SL
		6%	0.017	0.029	0.0058	2.20	7.8	19.0	DEFRA C4SL
	2,4,6-Trinitritoluene (TNT)	1%	1.6	65	0.24	1,000	130	260	LQM S4UL
		2.5%	3.7	66	0.58	1,000	130	270	LQM S4UL
		6%	8.1	66	1.4	1,000	130	270	LQM S4UL
	RDX	1%	120	13,000	17	210,000	26,000	49,000 (18.7) sol	LQM S4UL
		2.5%	250	13,000	38	210,000	26,000	51,000	LQM S4UL
		6%	540	13,000	85	210,000	27,000	53,000	LQM S4UL
	HMX	1%	5.7	6,700	0.86	110,000	13,000	23,000 (0.35) vap	LQM S4UL
		2.5%	13	6,700	1.9	110,000	13,000	23,000 (0.39) vap	LQM S4UL
		6%	26	6,700	3.9	110,000	13,000	24,000 (0.48) vap	LQM S4UL
Pesticides	Aldrin	1%	5.7	7.3	3.2	170	18	30	LQM S4UL
		2.5%	6.6	7.4	6.1	170	18	31	LQM S4UL
		6%	7.1	7.5	9.8	170	18	31	LQM S4UL
	Dieldrin	1%	0.97	7.0	0.17	170	18	30	LQM S4UL
		2.5%	2.0	7.3	0.41	170	18	30	LQM S4UL
		6%	3.5	7.4	0.96	170	18	31	LQM S4UL
	Atrazine	1%	3.3	610	0.5	9,300	1,200	2,300	LQM S4UL
		2.5%	7.8	620	1.2	9,400	1,200	2,400	LQM S4UL
		6%	17.4	620	2.7	9,400	1,200	2,400	LQM S4UL
	Dichlorvos	1%	3.2E-02	6.4	4.9E-03	140	16	26	LQM S4UL
		2.5%	6.6E-02	6.5	1.0E-02	140	16	26	LQM S4UL
		6%	0.14	6.6	2.2E-02	140	16	27	LQM S4UL
	Endosulfanns (2 isomers)	1%	7.4	160 (3.0E-03) vap	1.2	5,600 (3.0E-03) vap	1,200	2,300	LQM S4UL
		2.5%	18	280 (7.0E-03) vap	2.9	7,400 (7.0E-03) vap	1,200	2,400	LQM S4UL
		6%	41	410 (1.6E-02) vap	6.8	8,400 (1.6E-02) vap	1,200	2,500	LQM S4UL
	Hexachlorocyclohexane (3 isomers), inc Lindane	1%	8.5E-02	3.7	1.3E-02	65	8.1	15	LQM S4UL
		2.5%	0.2	3.8	3.2E-02	65	8.1	15	LQM S4UL
		6%	0.46	3.8	7.7E-02	65	8.1	16	LQM S4UL
Chlorobenzenes	Chlorobenzene	1%	0.46	0.46	5.9	56	11,000	1,300 (675) sol	LQM S4UL
		2.5%	1.0	1.0	14	130	13,000	2,000 (1,520) sol	LQM S4UL
		6%	2.4	2.4	32	290	14,000	2,900	LQM S4UL
	Dichlorobenzenes (3 isomers)	1%	23	24	94	2,000 (571) sol	90,000	24,000 (571) sol	LQM S4UL
		2.5%	55	57	230	4,800 (1,370) sol	95,000	36,000 (1,370) sol	LQM S4UL
		6%	130	130	540	11,000 (3,240) sol	98,000	51,000 (3,270) sol	LQM S4UL
	Trichlorobenzenes (3 isomers)	1%	2.6	2.6	55	220	15,000	1,700 (318) vap	LQM S4UL
		2.5%	6.4	6.4	140	530	17,000	2,600 (786) vap	LQM S4UL
		6%	15	15	320	1,300	19,000	4,000 (1,880) vap	LQM S4UL
	Tetrachlorobenzenes (3 isomers)	1%	0.66	0.75	0.38	49 (39.4) vap	78	110 (39) vap	LQM S4UL
		2.5%	1.6	1.9	0.90	120 (98.1) vap	79	120	LQM S4UL
		6%	3.7	4.3	2.2	240 (235) vap	79	130	LQM S4UL
	Pentachlorobenzene	1%	5.8	19	1.2	640 (43.0) sol	100	190	LQM S4UL
		2.5%	12	30	3.1	770 (107) sol	100	190	LQM S4UL
		6%	22	38	7.0	830	100	190	LQM S4UL
	Hexachlorobenzene	1%	1.8 (0.20) vap	4.1 (0.20) vap	0.47	110 (0.20) vap	16	30	LQM S4UL
		2.5%	3.3 (0.50) vap	5.7 (0.50) vap	1.1	120	16	30	LQM S4UL
		6%	4.9	6.7 (1.2) vap	2.5	120	16	30	LQM S4UL

Generic Assessment Criteria Values

	Contaminant	SOM	Res +	Res -	Allot.	Comm.	POSresi	POSpark	Source
Chlorophenol	Chlorophenols (4 congeners)	1%	0.87 [g]	94	0.13 [g]	3,500	620	1,100	LQM S4UL
		2.5%	2.0	150	0.30	4,000	620	1,100	LQM S4UL
		6%	4.5	210	0.70	4,300	620	1,100	LQM S4UL
	Pentachlorophenol	1%	0.22	27 (16.4) [vap]	3.0E-02	400	60	110	LQM S4UL
		2.5%	0.52	29	8.0E-02	400	60	120	LQM S4UL
		6%	1.2	31	0.19	400	60	120	LQM S4UL
Others	Carbon Disulphide	1%	0.14	0.14	4.8	11	11,000	1,300	LQM S4UL
		2.5%	0.29	0.29	10	22	11,000	1,900	LQM S4UL
		6%	0.62	0.62	23	47	11,000	2,700	LQM S4UL
	Hexachlorobutadiene	1%	0.29	0.32	0.25	31	25	48	LQM S4UL
		2.5%	0.7	0.78	0.61	66	25	50	LQM S4UL
		6%	1.6	1.8	1.4	120	25	51	LQM S4UL
	Phenol	1%	120	440 (460)	23	440 [dir] (26,000)	440 [dir] (10,000)	440 [dir] (7,600)	LQM S4UL
		2.5%	200	690	42	690 [dir] (30,000)	690 [dir] (10,000)	690 [dir] (8,300)	LQM S4UL
		6%	380	1,200	83	1,300 [dir] (34,000)	1,300 [dir] (10,000)	1,300 [dir] (9,300)	LQM S4UL

sol/vap = solubility/vapour limit (potenitally use if free product identified, although highly conservative)
*=naphthalene C4SL exceeds the CLEA calculated soil saturation concentration (76 mg kg-1 for 1% SOM,
183 mg kg-1 for 2.5% SOM and 432 mg kg-1 for 6% SOM)
f = oral, dermal and inhalation exposures compared to oral HCV
dir = S4ULs based on threshold protective of direct skin contact with phenol)brackets long term exposure for illustration purposes)
g = derived based on 2,3,4-tetrachlorophenol

Appendix K – References

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