

Network Space Limited

PARCEL 1, ALCHEMY WAY, KNOWSLEY

Phase 1 Preliminary Risk Assessment



Network Space

Parcel 1, Alchemy Way, Knowsley

Phase 1 Preliminary Risk Assessment

TYPE OF DOCUMENT (VERSION) PUBLIC

PROJECT NO. 11110

OUR REF. NO. 11110-DTS-001

DATE: MAY 2026

ADS Consult
107 Mere Grange Business Park,
Leaside,
St Helens,
WA9 5GG
Phone: +44 (0) 151 541 4000

www.adsstructural.com

QUALITY CONTROL

Issue/revision	ISSUE	
Remarks		
Date	30.05.26	
Prepared by	Abubakar Ali BSc.	
Signature		
Checked by	A. Moore BSc. MSc. FGS CGeol. MICE CEng. SiLC QP SQP	
Signature		
Authorised by	A. Moore BSc. MSc. FGS CGeol. MICE CEng. SiLC QP SQP	
Signature		
Project number	11110	
Report number	11110-DTS-001	
Comments		



CONTENTS

EXECUTIVE SUMMARY	1
1 INTRODUCTION	2
1.1 TERMS OF REFERENCE	2
1.2 SCOPE AND OBJECTIVES	2
1.3 PROPOSED DEVELOPMENT	2
1.4 PLANNING HISTORY	2
1.5 REFERENCES	2
1.6 LIMITATIONS	3
2 ENVIRONMENTAL REVIEW	4
2.1 SITE LOCATION AND SETTING	4
2.2 SITE WALKOVER	4
2.3 SITE HISTORY	4
3 ENVIRONMENTAL SETTING	6
3.1 GEOLOGY	6
3.2 PREVIOUS SITE REPORTS	6
3.2.1 PHASE 1 DESK STUDY (WYG, 2016)	6
3.2.2 PHASE 2 SITE INVESTIGATION (RPS, 2022)	6
3.3 MINING	7
3.4 HYDROGEOLOGY	7
3.5 HYDROLOGY	8
3.6 GEOLOGICAL HAZARDS AND INSTABILITY	8
3.7 ENVIRONMENTAL ISSUES	8
3.8 SENSITIVE LAND USES	9
3.9 RADON	9
3.10 UNEXPLODED ORDNANCE	9
3.11 PFAS	9
3.12 CONSULTATIONS	9
4 PRELIMINARY CONCEPTUAL SITE MODEL	10
4.1 CONTAMINATION SOURCES	10
4.2 SENSITIVE RECEPTORS	10
4.3 PATHWAYS	11
4.4 POTENTIALLY COMPLETE POLLUTANT LINKAGES	11

FIGURES

FIGURE A.1	SITE LOCATION PLAN
FIGURE A.2	SITE BOUNDARY PLAN
FIGURE A.3	SITE DEVELOPMENT PLAN

TABLES

Table 2-1 – Summary of Site History	4
Table 3-1 – Potential Ground Stability Hazards (within 50m of the Site)	8
Table 4-1 – Potential sources and types of contamination	10
Table 4-2 - Matrix of consequence against probability to gain a risk classification.	11
Table 4-3 – Risk Rating Terminology	11
Table 4-4 – Classification of probability	12
Table 4-5 – CIRIA C552 Qualitative Risk Assessment	13

APPENDICES

APPENDIX A	FIGURES
APPENDIX B	ENVIRONMENTAL DATA SEARCH
APPENDIX C	HISTORICAL MAPS
APPENDIX D	PREVIOUS SI BOREHOLE LOGS
APPENDIX E	SITE WALKOVER PHOTOS

EXECUTIVE SUMMARY

Site Details	The site is approximately 3.54 Ha. and referred to as Land off Alchemy Way, Knowsley.
Surrounding site uses	The site is bound to the South and East by large industrial units (Mercedes dealership and 'Perfect Shutters' respectively). To the South lies the East Lancashire Road (A580), a busy 60mph speed limit dual carriageway
Proposed Development	It is understood the site will undergo the construction of two further industrial units.
Historical Land Use	From 1892 the site was predominantly farming/vegetative land for much of its history until the 1960's when there was extensive industrial development in the surrounding areas. The site loses a stream feature at this time and there an indication of earthworks. There are no significant changes to the site since then.
UXO	The Site is in an area of low risk of UXO presence.
Geology	Published geology is likely to comprise Made Ground over Devensian Diamicton Till (Clays and Silts). Bedrock is recorded as the Chester Formation, comprising red sandstones and mudstones. Previous site investigation (2022) indicates Made Ground over a relict topsoil/peaty layer which lies directly over the Chester Formation ie the Devensian Till is not proven.
Coal and non-coal mining	The Site is not located in a Coal Mining Reporting Area. No Britpits are recorded within 500m of the site.
Hydrogeology	The Superficial deposits are defined as a Secondary Undifferentiated Aquifer designation. The bedrock is defined as a Principal Aquifer. The Site does not lie in the vicinity of a Source Protection Zone for groundwater abstraction.
Hydrology	Historical maps shows a stream running across site however, this has not been present since the 1960's. There are 34 active or historical groundwater abstraction licences within 2000m of the Site, the nearest active one 1320m East. Three historical pollution events have been recorded on site.
Contamination Conclusions	The Preliminary Conceptual Site Model indicates that risk posed by the site is moderate and specifically: • Risk to Human Health to current/future site users is moderate/low. • Risk to controlled waters from current use and the proposed development is moderate. • Risk to future site users from ground gas is moderate.
Preliminary Geotechnical Assessment	Potential geotechnical constraints have been identified associated with development of the site, relating to the extensive presence of Made Ground up to 3.80m depth across site proven by previous site investigation and includes brick/concrete fragments.
Recommendations	The Site has been established as having significant industrial use in the surrounding areas. Based on the available information the Site is considered to present an overall moderate risk of contamination from past use and adjacent land use for continued use. It is recommended that additional site investigation is undertaken to assess the nature of Made Ground and to include testing for potential contaminants as well as monitoring for potential gases. The investigation will supplement the previous site investigation (2022).

1 INTRODUCTION

1.1 TERMS OF REFERENCE

ADS Consult (ADS), a subsidiary of ADS Structural Limited, was instructed by Network Space Limited (the Client) to provide a Phase 1 Preliminary Risk Assessment for the Site referred to as Parcel 1, Land off Alchemy Way, Knowsley L33 7AQ.

A Site Location Plan and Site Boundary are presented as Figure A.1 and A.2 (Appendix A).

1.2 SCOPE AND OBJECTIVES

The purpose of this report is to identify and examine readily available information relating to the:

- Past and current uses of the Site and surrounding area.
- Environmental setting including geology, mining, hydrogeology and hydrology.
- Potential contamination sources, pathways and receptors as part of a preliminary conceptual model.

The objective of this report is to provide a Phase 1 Preliminary Risk Assessment with a preliminary conceptual site model.

The scope of this report has been designed with consideration of LCRM (Environment Agency, 2020) and BS 10175:2011+A2:2017 (BSI, 2013).

1.3 PROPOSED DEVELOPMENT

It is understood that the developer wishes to develop two industrial units adjacent to the existing units that form Element Business Park.

1.4 PLANNING HISTORY

It is understood that the development is subject to planning permission. Previous relevant planning applications are summarised below:

- Erection of 2 No. Units (Use Class E (G) (li) (lii) or B2 or B8 Use) With Ancillary Office Space, Car Parking and Vehicular, Pedestrian Circulation with access onto Alchemy Way Ref: 23/00456/FUL

1.5 REFERENCES

The Site has been subject to an environmental database search which is referenced below and attached to this report as Appendices B.

- Groundsure Report for Land off Alchemy Way, Knowsley Ref: GS-E93-1N8-UQ6-7FL

Historical reports are available with respect to ground conditions at the site and are:

- Phase 1 Geo-Environmental Desk Top Study for Land at Alchemy, Knowsley prepared by WYG on behalf of Network Space Limited reference A094359, dated June 2016
- Phase 2 Geo-Environmental and Geotechnical Report for Land at Alchemy Way, Knowsley Industrial Park, Kirby, L33 7AQ prepared by RPS on behalf of Network Space Limited reference JER9563 dated October 2022.

1.6 LIMITATIONS

This report is addressed to and may be relied upon by:

Network Space Limited
Centrix House,
Crow Lane East,
Newton Le Willows,
St Helens,
Merseyside,
WA12 9UY

This document has been prepared for the sole use and reliance of the above-named party. This report shall not be relied upon or transferred to any other parties without the express written authorisation of ADS.

ADS neither owes nor accepts any duty to any third party and shall not be liable for any loss, damage or expense of whatsoever nature which is caused by their reliance on the information contained in this report.

The findings and opinions in this report are based upon information derived from a variety of information sources. ADS has endeavoured to assess all information provided and believe these information sources to be reliable.

This report includes summaries of information from external sources and cannot offer any guarantees or warranties for the completeness or accuracy of information relied upon.

2 ENVIRONMENTAL REVIEW

2.1 SITE LOCATION AND SETTING

The Site is located to the West of Alchemy Way, Knowsley which is accessible via the East Lancashire Road (A580). It comprises an 'L' shaped parcel of disused land to the North of the existing Mercedes Benz dealership. The Site has an approximate area of 3.54 hectares (ha) and is at National Grid Reference (NGR) SJ 42541 97039 as shown on Figure A.1 and Figure A.2 (Appendix A).

2.2 SITE WALKOVER

ADS completed a site walkover on 30/04/26. Photographs are attached as Appendix E. The site walkover showed the ground conditions to be a field with many large 'ruts' and some areas of the field are waterlogged. There is also raised ground along the North and East borders of The Site understood to be a 'bund' and comprising of Made Ground.

Installations of boreholes WS05, WS06, WS07 and CP03 from a previous site investigation (2022) were located and inspected and found to be serviceable. CP04 had no protective cover or bung in the pipe and a plastic bailer was suspended on string within it. The probe was removed and appeared to be covered in a black film which has been established as a biodegradable 'poop' bag believed to have been dropped down the hole by a dog walker.

2.3 SITE HISTORY

The history of the land-use and development of the Site and surrounding area has been assessed based on historical Ordnance Survey (OS) maps attached as Appendix C.

Reference to historical maps provides information regarding the land use history of the site, however historical evidence may be incomplete for the period predating the first edition and between successive maps. The development history of the Site and surrounding area from the above sources is summarised below.

Table 2-1 – Summary of Site History

Date/Scale	Features On-site	Features Off-site
1892 1:10560	Farmland with possible field boundaries shown across and within site.	Sparse woodland in surrounding areas. A building (Ainsworth House) to the Southwest of the site boundary and Ainsworth Lane 50m to the West of the Site.
1893 1:2,500	Previous field boundary from north east corner to west of site appears to be a stream flowing south west.	No significant change.
1907 1:10560	South west corner possibly located in garden/enclosed space by trees to properties outside south west corner of site.	No significant change.
1925 1:10560	No significant change.	No significant change.

1938 1:10560	No significant change.	East Lancashire Road (A580) constructed 50m South of the Site.
1956 1:10560	No significant change.	No significant change.
1959-60 1:2,500	Site featureless but indications of bund along eastern boundary and cut down to site level at northern site boundary.	Stream appears to terminate at north east corner of site. Industrial factory to west of site. Sports ground to the East of the Site.
1966 1:10560	Garden/enclosed area in south west corner no longer present. Stream no longer present.	Sports ground to the East of the Site. Industrial factories erected around the Site.
1978 1:10000	Site possibly utilised as part of the adjacent sports ground.	Increased residential housing to the Northwest of the Site. Increased number of factories erected to the South of the A580.
1988 1:10000	No significant change.	No significant change.
2001 1:10000	No significant change.	Increased development of surrounding roads and residential areas.
2010 1:10000	No significant change.	Alchemy Way, Platinum Court and roundabout offshooting from the A580 constructed.
2015 1:10000	No significant change.	No significant change.
2025 1:10000	No significant change.	Road and car park constructed between the Site and the A580.

Aerial photographs available since 21/07/2000 indicate the site was initially open space with grass/shrubs/trees. This extends south to the East Lancs Road, north and west to a factory site. A sports pitch is present to the south east. By 11/06/2015 Alchemy Way is present along the eastern site boundary with commercial development beyond. The current commercial development is shown to the south of the site by 18/10/2022. The site area appears disturbed with plant tracks. There are no significant changes to the most recent photograph dated 20/05/23.

3 ENVIRONMENTAL SETTING

3.1 GEOLOGY

The BGS Geology of Britain Viewer, Groundsure and BGS Geology Mapping of Bedrock and Superficial Deposits (1:50,000 Runcorn Sheet 97) indicate the site to have superficial deposits of Devensian Diamicton Till comprising silts and clays underlain by bedrock of the Chester Formation comprising mudstones and red sandstones.

3.2 PREVIOUS SITE REPORTS

3.2.1 PHASE 1 DESK STUDY (WYG, 2016)

This report covers a wider area than the current Parcel 1. Parcel 1 is located in the north of Phase 3 as discussed in the report although it is difficult to extract information relevant to the current development area only. This report supercedes the historical Phase 1 report. The report had access to historical reports that are not available to this report and some additional information includes:

- Between 1946 and 1962 topsoil was stripped from the site in preparation for the development of a jet engine factory which was never built. The stripping reduced the overall site level by approximately 1.0m however tipping operations in the south western corner, restored the site levels back to original.
- From 1962 to 1988 Kraft Foods designated the site as expansion land which was never developed and in 1988 Kraft Meadow Nature Reserve was created which was designated as a 'Site of Biological and/or Geological Interest' by the Knowsley Unitary Development Plan.
- A preliminary ground investigation was completed in 2002 and ground conditions generally comprised topsoil to depths of up to 0.50m bgl underlain by Made Ground up to 2.70m bgl. Made Ground generally comprised reworked Glacial Till consisting of firm brown slightly sandy, gravelly Clay with gravel of brick, concrete and timber. A localised 50mm thick lens of black ash and clinker with a hydrocarbon odour was encountered in the south western part of the site (TP122) at approximately 1.0m depth. Slightly organic Clay was encountered at the base of the Made Ground across the site between 1.0m and 3.5m bgl. Very weak reddish brown Sandstone was encountered beneath the Till from depths of between 1.1m and 4.1m bgl. The Sandstone was generally encountered at shallower depths in the eastern areas of site. A slight hydrocarbon film was observed on the perched water in the north western part of the site.

The Desk Study report is difficult to match to the site and the information may add context rather than be factually accurate.

3.2.2 PHASE 2 SITE INVESTIGATION (RPS, 2022)

In 2022 RPS completed a site investigation which comprised of 4 no. window samples (WS04 – WS07), 2 no. cable percussion boreholes (CP03-04) and 6 no. trial pits (TP04-09). A summary of the ground conditions encountered is as follows:

- Made Ground to depths of between 1.20m and >3.80m bgl.
- At the base of the Made Ground was a black organic rich deposit depths of 1.45m to 3.1m bgl (25.9m to 24.73 m AOD) and at a thickness of between 0.10 and 0.30m. The locations where this was encountered are in similar locations to the former streams and ponds on site. Organic rich soils may also represent a former topsoil, on which the Made Ground may have been placed during upfilling.
- The Chester Formation was encountered underlying the sediment deposits/Made Ground at depths between 1.65m and 3.20m bgl (25.78m to 24.63 m AOD).

- Groundwater was encountered during drilling within the Chester Formation between 3.60m and 9.00m bgl. Shallow groundwater was encountered within trial pits between 1.10m and 1.90m bgl.
- No visual or olfactory evidence of contamination was observed.
- No contaminants of concern were recorded at concentrations above their respective assessment criteria within the soil samples collected from either Made Ground or natural strata.
- Asbestos was identified as free fibres within three of the 17 samples submitted for screening. One positive identification was detected within the Made Ground sample taken from CP03 (0.50m bgl). Asbestos quantification analysis undertaken on the sample did not identify asbestos above the limit of detection (0.001%).
- Marginal exceedances of the assessment criteria for groundwater have been detected for Nickel in WS04 and Fluoranthene in CP04.

3.3 MINING

The Site is not located in a Coal Mining Reporting Area as designated by the Mining Remediation Authority (MRA).

There are no BritPits (currently active and closed surface and underground mineral workings on database maintained by the British Geological Survey) records within 500m of the site.

The environmental database indicates 10 surface ground workings within 250m of the site, most locally 109m West.

The environmental database indicates 0 records of underground workings within 1000m.

3.4 HYDROGEOLOGY

On-line Environment Agency (EA) maps show the Site is located over the following aquifer designations:

- Secondary Undifferentiated – Devensian Diamicton Till
- Principal – Chester Formation Sandstone

A Secondary Undifferentiated designation is assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.

A Principal designation is assigned where geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

The site is located over the Lower Mersey Basin and North Merseyside Permo-Triassic Sandstone Aquifers Groundwater Body. The EA have defined Groundwater Source Protection Zones (SPZs) for countrywide groundwater sources such as wells, boreholes and springs used for public drinking water supply. These zones are designated to protect the location from the risk of contamination from any activities that might cause pollution in the area, i.e. the closer the activity, the greater the risk. The third-party database and EA website indicate that the Site is located within a Groundwater Source Protection Zone 3.

According to the database, there are 7 active groundwater abstraction licences within 2000m, most locally 1320m East.

There are 27 historical groundwater abstraction licences within 2000m, most locally 109m West.

The EA have classified the Site as having high soil leaching potential - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.

3.5 HYDROLOGY

A surface water watercourse runs as close as 199m to the east of the site. An inland river not influenced by normal tidal action and contains water year-round under normal circumstances.

Historical maps indicate a stream was present on site that has since been infilled.

According to the Environmental Data Search (Appendix B), there are:

- No active or historical surface water abstraction licences within 2km of the Site.
- 9 active or historical potable water abstraction licenses within 2km of the Site, most locally 1320m East. License number: 2569031016
- No records of Red List Discharge Consents (potentially harmful discharges to Controlled Waters) within 500m of the Site.
- 2 historical licenced Discharge Consents to controlled water within 500m of the site, most locally 451m South, revoked 22/07/2013.
- There are 0 active List 2 substance discharges recorded within 500m..
- There have been 3 pollution incidents within 500m, 2 of which relating to organic chemicals/products and 1 of which relating to Inert materials and wastes.

The site is located within a Flood Zone 1, with a flood risk category of low within 0-50m. There are no historical flood events recorded within 250m.

3.6 GEOLOGICAL HAZARDS AND INSTABILITY

Historical coal mining extraction has not been identified locally and under the site. No natural cavities or solution features are identified on-Site or within 50m of the Site.

Table 3-1 – Potential Ground Stability Hazards (within 50m of the Site)

Hazard	Risk on-Site
Clay shrinkage/swelling	Very Low
Collapsible ground	Very Low
Compressible ground	Very Low
Ground dissolution	Negligible
Landslide	Very low
Running sand	Very low

The database entries indicate that there is a very low potential for the Site to be affected by ground instability due to naturally occurring geological conditions.

3.7 ENVIRONMENTAL ISSUES

The Groundsure report (Appendix B) considers that the Site is located (within 500m) of 52 Historical Industrial Land Use Areas of a potentially contaminative land use:

- There are 35 historical tanks within 500m, most locally 68m Southwest in 1974.
- There are 15 historical energy features within 500m, most locally an electricity substation 266m South from 1974-1994.
- There are 5 historical garages within 500m, most locally 130m northeast in 1976.

The Environment Agency data within the Groundsure report records the following environmental issues at or in the vicinity (500m) of the Site:

- There are 2 records of historical Control of Major Accidents and Hazards (COMAH), most locally 255m South.
- There are 3 consents granted for a Site to hold certain quantities of hazardous substances, most locally 331m South relating to the storage of LPG.
- There are 65 active licensed industrial activities (Part A (1)), most locally 407m West relating to the disposal of non-hazardous waste
- There are 22 historical licensed industrial activities (IPC) most locally 486m Southeast relating to the manufacture and use of organic chemicals.
- There are 2 active licensed industrial activities (Part A(2)/B) of Part B permit type, most locally 160m Northwest relating to coating processes.
- There are no active discharges of List 1 substances identified.
- There are no active discharges of List 2 substances identified.
- There is 1 site registered as storing pollution inventory substances 407m West relating to animal or vegetable raw materials.
- There are no active/recent landfill identified from the Local Authority records.
- There are no historical landfill sites identified from the Local Authority records.
- There are no records of Red List discharge consents.

It is considered that the above recorded industrial uses have the potential for contamination of the site. Primarily by way of fuel leaks and asbestos deposits.

3.8 SENSITIVE LAND USES

There are no Sites of Special Scientific Interest (SSSI) or conservation areas (Ramsar, SAC, SPA, NNR) within 2km of the site.

3.9 RADON

The Site is within a lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level), therefore no radon protective measures are necessary.

3.10 UNEXPLODED ORDNANCE

The Site is in an area of low risk of UXO presence. Further UXO consultation is not anticipated to be required.

3.11 PFAS

Per- and polyfluoroalkyl substances (PFAS) are not anticipated to be present because of current/historical land use.

3.12 CONSULTATIONS

Due to timing constraints, a written request for information has not been submitted to the Local Authority, Environment Agency or Petroleum Licensing Authority.

4 PRELIMINARY CONCEPTUAL SITE MODEL

A preliminary Conceptual Site Model (CSM) is derived from the desk data which defines the key sources, pathways and receptors that have been identified as being relevant to this site.

4.1 CONTAMINATION SOURCES

Based on the information from the desk study, historical maps and published information, a summary of potential contaminant sources is provided below. These have been divided into sources resulting from current and historic uses both on and off-site.

Table 4-1 – Potential sources and types of contamination

Potential sources	Contaminants of potential concern
On-Site (current and historical)	
Made Ground potentially including demolition material relating to previous local developments.	Unknown fill material to locally level the site (potentially including heavy metals, polycyclic aromatic hydrocarbons, asbestos and localised hydrocarbon impacted shallow perched waters).
Farmland and construction machinery	Potential for leakages and spillages associated with vehicles.
Off-Site (current and historical)	
Made Ground	Unknown fill material to locally level surrounding plots (potentially including heavy metals, polycyclic aromatic hydrocarbons, asbestos).
Historic Electricity Substations Historic Garages Historic Pollution Events Historic Tanks	Potentially including volatile organic compounds (VOCs), heavy metals, oils/fuels, solvents, polychlorinated biphenyls (PCBs)

4.2 SENSITIVE RECEPTORS

Sensitive receptors that might be impacted by Contaminants of potential concern at this site include:

- Groundwater (i.e. Secondary Undifferentiated Aquifer – Devensian Diamicton Till and Principal Aquifer- Chester Formation Sandstone).
- Surface water (i.e. drains etc.).
- Future site users.
- On-site and off-site terrestrial ecology.
- Third-party land (i.e. the possibility of contamination migrating off-site onto third party land via contaminated groundwater, surface water run-off etc.).

4.3 PATHWAYS

Exposure pathways are the potential routes and mechanisms by which potential on-site sources could be linked to the identified potential receptors and thereby expose them to potential harm. Only plausible pathways need be considered. Plausible pathways for the migration of contamination between sources of receptors are summarised below:

- Direct contact via ingestion/dermal contact, dust and fibre inhalation.
- Direct contact via vapour inhalation.
- Leachate and ground/surface water migration.
- Ground gas migration and ingress to properties.
- Root uptake.
- Chemical attack of infrastructure (including water supply pipes) and buildings.

4.4 POTENTIALLY COMPLETE POLLUTANT LINKAGES

A preliminary qualitative risk assessment has been undertaken based on the findings of the CSM and the potential pollutant linkages that may exist at the site in accordance with CIRIA C552. The risk rating is summarised in Table 4.5 and the tables it is based on are presented at Tables 4.3 and 4.4.

Table 4-2 - Matrix of consequence against probability to gain a risk classification.

		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 4-3 – Risk Rating Terminology

Risk Rating	Description
Severe	Short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short term risk of pollution (note; Water Resources Act contains no scope for considering significant pollution) of sensitive water resource. Catastrophic damage to building/property. A short-term risk to a particular ecosystem, or organism forming part of such ecosystem. (Note the definitions of ecological systems within the Draft Circular on Contaminated Land DETR, 2000).
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 significant pollution). A significant change in a particular ecosystem, or an organism forming part of such an ecosystem. (Note the definitions of ecological systems within the Draft Circular on Contaminated Land DETR, 2000).

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.
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 effects of damage to buildings, structures, and services.

Table 4-4 – Classification of probability

Classification	Definition
High likelihood	There is a pollution linkage and an event that either appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution.
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 pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period that such an event would take place and is even less likely in the shorter term.
Unlikely	There is a pollution linkage, but circumstances are such that it is improbable that an event would occur even in the very long term.

An estimate of the risk associated with each linkage is summarised in Table 4.5.

Table 4-5 – CIRIA C552 Qualitative Risk Assessment

Source/Medium	Receptor	Potential Exposure Route	Risk Rating	Current Status and mitigation
Onsite				
Made Ground potentially including demolition material relating to previous unit alterations.	Future Site Users	Direct ingestion of soil & dust, inhalation of gas/vapours and dermal contact.	Moderate/Low	Previous site investigation indicates Made Ground is likely across the site to level locally. Hydrocarbons, asbestos and cyanide contamination was identified. Devensian Till may be locally permeable so may allow migration of contaminants from the Made Ground.
	Construction Workers	Direct ingestion of soil & dust, inhalation of gas/vapours and dermal contact.	Moderate	It is understood the site will undergo construction for additional industrial units. Potential risks can be mitigated through use of PPE and control measures.
	Off-site users	Lateral migration of contaminants then direct ingestion of soil & dust, inhalation of particulates & gas/vapours and dermal contact.	Moderate/Low	Underlying Devensian Till and may be locally permeable so may allow migration of contaminants from the Made Ground.
	Secondary Undifferentiated Aquifer – Devensian Diamicton Till	Lateral/vertical migration of contaminants within groundwater.	Moderate	Devensian Till not proven as present across site in previous site investigation. If present, potential to be locally permeable so may allow migration of contaminants from the Made Ground. There is no active groundwater abstraction within 500m.
	Principal Aquifer- Chester Formation Sandstone	Vertical and horizontal migration of contaminants within groundwater.	Moderate/Low	Principal aquifer bedrock likely to allow contaminant migration due to higher permeability. There are 7 active groundwater abstractions within 2000m.
	Future buildings and structures	Accumulation/migration of gases within building space. Aggressive attack of building materials	Moderate/Low	No sources of volatile contaminants identified. Made Ground is likely across the site to level locally. Made Ground has gas production potential. Localised spillages of fuel are unlikely but can be removed, if encountered, from any proposed excavations.

Source/Medium	Receptor	Potential Exposure Route	Risk Rating	Current Status and mitigation
Onsite				
Potential contamination because of construction machinery. (oils, fuels etc.)	Future Site Users	Direct ingestion of soil & dust, inhalation of gas/vapours and dermal contact.	Low	Potential for fuel leakages/spillages of oils, fuels and heavy metals.
	Construction Workers	Direct ingestion of soil & dust, inhalation of gas/vapours and dermal contact.	Low	It is understood the site will undergo construction for additional industrial units. Potential risks can be mitigated through use of PPE and control measures. Asbestos contamination identified in previous site investigation.
	Off-site users	Lateral migration of contaminants then direct ingestion of soil & dust, inhalation of particulates & gas/vapours and dermal contact.	Low	Devensian Till not proven as present across site in previous site investigation. If present, potential to be locally permeable so may allow migration of contaminants from the Made Ground.
	Secondary Undifferentiated Aquifer – Devensian Diamicton Till	Lateral/vertical migration of contaminants within groundwater.	Low	Secondary Undifferentiated Aquifer classification results in occasional permeable layers. The underlying Devensian Till may be locally permeable so may allow migration of contaminants. There are 7 active groundwater abstractions within 2000m.
	Principal Aquifer- Chester Formation Sandstone	Vertical and horizontal migration of contaminants within groundwater.	Moderate/Low	Principal aquifer bedrock likely to allow contaminant migration due to higher permeability. There are 7 active groundwater abstractions within 2000m. PAH and Cyanide contamination identified within groundwater during previous site investigation.

Source/Medium	Receptor	Potential Exposure Route	Risk Rating	Current Status and mitigation
Off-site				
Potential contamination because of historic industrial uses including garages, tanks, electrical stations (VOCs, solvents, PCBs, oils, fuels, etc...)	Future Site Users	Direct ingestion of soil & dust, inhalation of gas/vapours and dermal contact.	Moderate/Low	Potential for fuel leakages/spillages of oils, fuels, heavy metals, and asbestos fibres. Devensian Till may allow migration of contaminants.
	Construction Workers	Direct ingestion of soil & dust, inhalation of gas/vapours and dermal contact.	Low	It is understood the site will undergo construction for additional industrial units. Potential risks can be mitigated through use of PPE and control measures.
	Off-site users	Lateral migration of contaminants then direct ingestion of soil & dust, inhalation of particulates & gas/vapours and dermal contact.	Low	Potential for leaks contaminating. The underlying Devensian Till may be locally permeable so may allow migration of contaminants from the Made Ground.
	Secondary Undifferentiated Aquifer – Devensian Diamicton Till	Lateral/vertical migration of contaminants within groundwater.	Low	Secondary Undifferentiated Aquifer classification results in occasional permeable layers. The underlying Devensian Till may be locally permeable so may allow migration of contaminants. There are 7 active groundwater abstractions within 2000m.
	Principal Aquifer-Chester Formation Sandstone	Vertical and horizontal migration of contaminants within groundwater.	Moderate/Low	Principal aquifer bedrock likely to allow contaminant migration due to higher permeability. There are 7 active groundwater abstractions within 2000m. PAH and Cyanide contamination identified within groundwater during previous site investigation.

Source/Medium	Receptor	Potential Exposure Route	Risk Rating	Current Status and mitigation
Offsite				
Potential migration of ground gases produced by unknown Made Ground material and local cut and fill.	Future Site Users	Direct ingestion of soil & dust, inhalation of gas/vapours and dermal contact.	Very Low	Made Ground likely around the site and is a potential source of ground gases (elevated methane and carbon dioxide concentrations identified in previous site investigation). Secondary Undifferentiated Aquifer classification results in occasional permeable layers. The Devensian Till was not encountered in the previous investigations and, if present, may be locally permeable so may allow migration of contaminants. Acute risk to construction workers. Potential risks can be mitigated through use of PPE and control measures. There are 7 active groundwater abstractions within 2000m. Principal aquifer bedrock likely to allow contaminant migration due to higher permeability.
	Construction Workers	Direct ingestion of soil & dust, inhalation of gas/vapours and dermal contact.	Low	
	Off-site users	Lateral migration of contaminants then direct ingestion of soil & dust, inhalation of particulates & gas/vapours and dermal contact.	Very Low	
	Secondary Undifferentiated Aquifer – Devensian Diamicton Till	Lateral/vertical migration of contaminants within groundwater.	Low	
	Principal Aquifer-Chester Formation Sandstone	Vertical and horizontal migration of contaminants within groundwater.	Very Low	
	Future buildings and structures	Accumulation/migration of gases within building space. Aggressive attack of building materials	Low	

5 CONCLUSIONS AND RECOMMENDATIONS

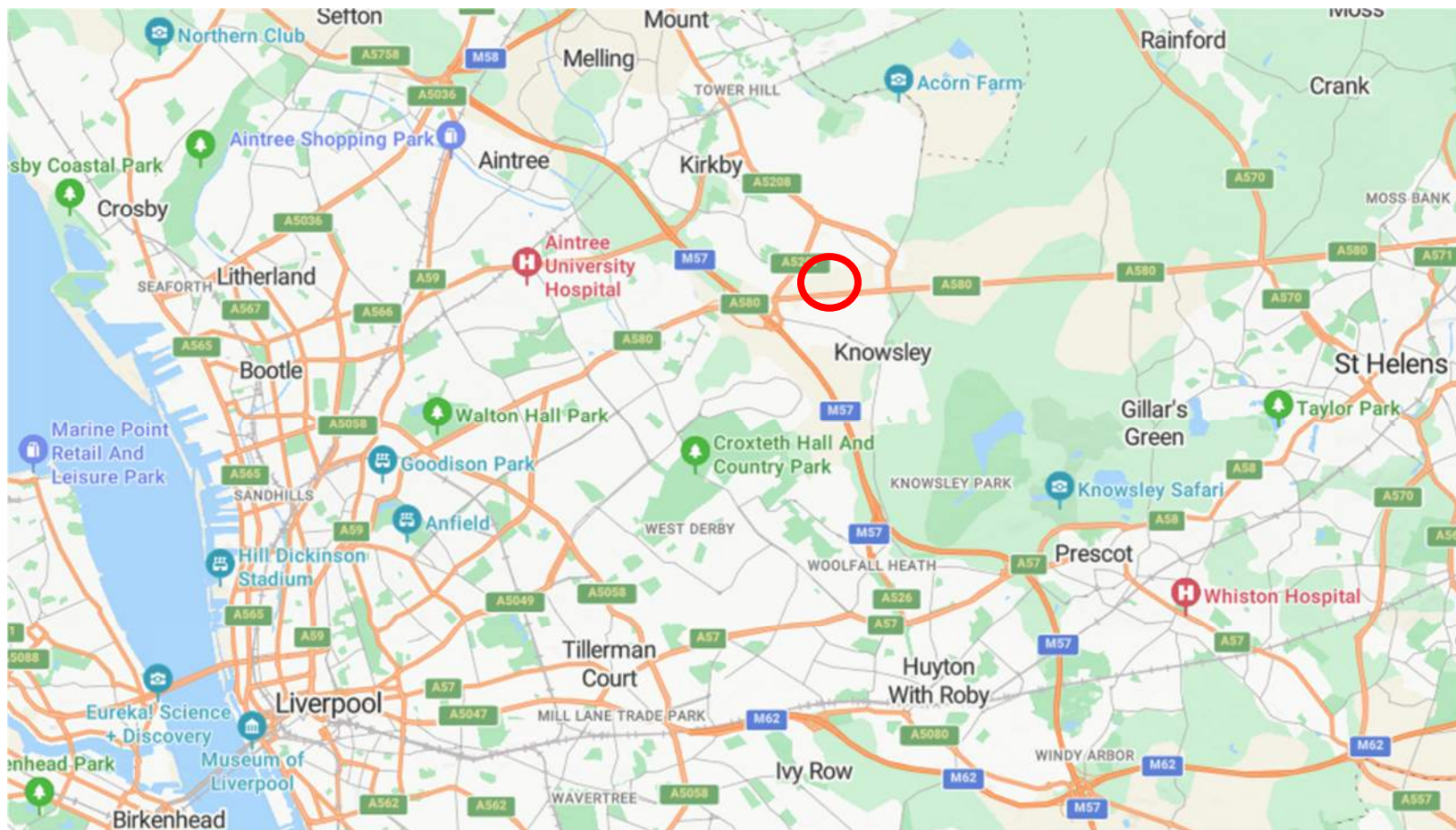
The Site has been established as having significant industrial use during its history as well as in the surrounding areas. The previous site investigation would suggest the likely presence of Made Ground up to 3.80m and for contamination to be present. This would include PAH compounds, Asbestos and Cyanide.

Based on the available information summarised in this report the Site is considered to present an overall **moderate** risk of contamination from past use and adjacent land use for continued use.

Off-site contamination sources include multiple tanks, electrical substations and roads. It is recommended that a site investigation is undertaken to assess the nature of Made Ground and to include testing for potential contaminants as well as monitoring for potential gases. The investigation should target the proposed development areas as well as the 'bund' on the northern border of the site.

Appendix A

FIGURES



Key



Development Boundary



ADS Consult
107 Mere Grange Business Park
Leaside
St Helens
WA9 5GG
Tel: +44 (0) 203 823 2800

**Figure A.1
Site Location Plan**

Project:
Alchemy Way, Knowsley

Project No.:
11110

Client:
Network Space



Key



Development Boundary



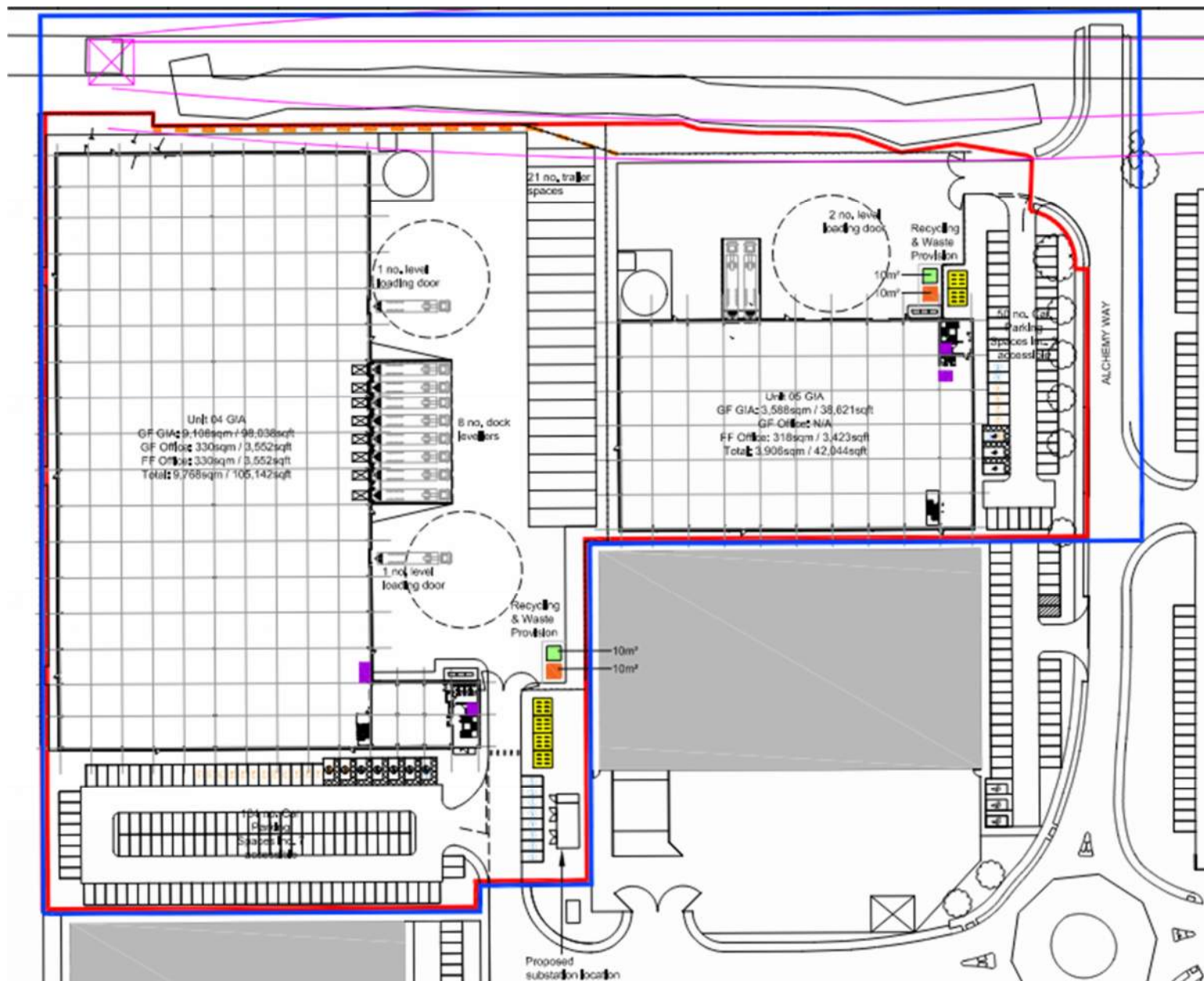
ADS Consult
107 Mere Grange Business Park
Leaside
St Helens
WA9 5GG
Tel: +44 (0) 203 823 2800

Figure A.2 Site Boundary Plan

Project:
Alchemy Way, Knowsley

Project No.:
11110

Client:
Network Space



Key



ADS Consult
 107 Mere Grange Business Park
 Leaside
 St Helens
 WA9 5GG
 Tel: +44 (0) 203 823 2800

Figure A.3
Site Development Plan

Project:
Alchemy Way, Knowsley

Project No.:
11110

Client:
Network Space

Appendix B

ENVIRONMENTAL DATA SEARCH

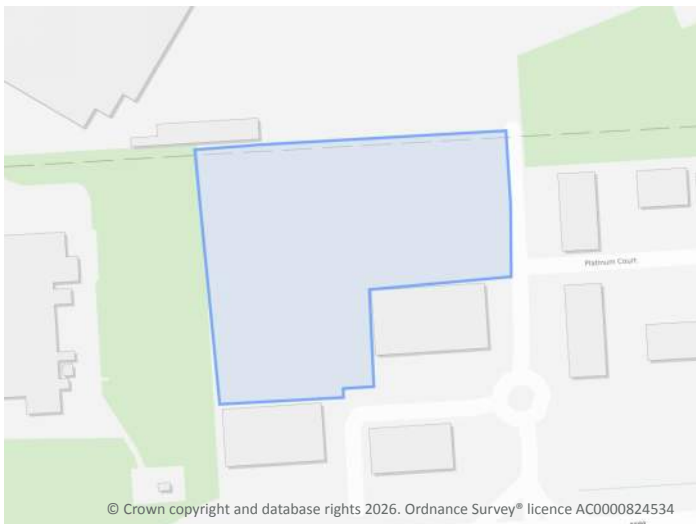
Alchemy Way, Knowsley

Order Details

Date: 05/05/2026
Your ref: PO-0584
Our Ref: GS-E93-1N8-UQ6-7FL

Site Details

Location: 342550 397038
Area: 3.57 ha
Authority: [Knowsley Metropolitan Borough Council](#)
↗

Site plan**Quick Links**

Summary of findings [p. 2 >](#)
OS MasterMap site plan [p.14 >](#)
Aerial image [p. 9 >](#)

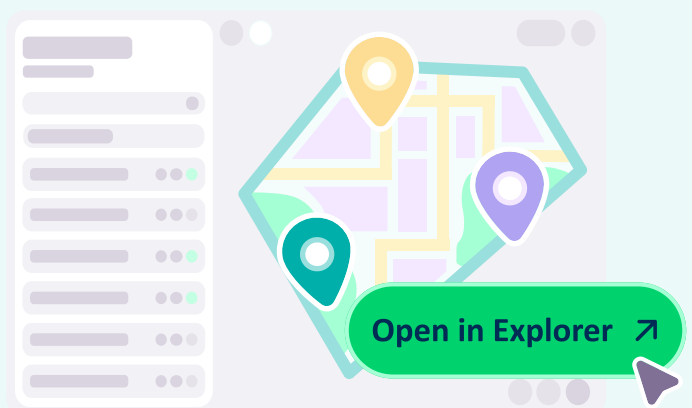
[Insight User Guide](#) ↗

Open this site in Explorer!

Access the data now in our interactive workspace.

- Map and interpret 130+ datasets across 170 years
- Generate insights and visuals quickly
- Revisit and collaborate with your team

Access to Groundsure Explorer requires an Insights account.
12 months access begins at purchase.



Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	3	0	29	20	-
18 >	1.2 >	Historical tanks >	0	0	12	23	-
19 >	1.3 >	Historical energy features >	0	0	0	15	-
20	1.4	Historical petrol stations	0	0	0	0	-
20 >	1.5 >	Historical garages >	0	0	1	4	-
21	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
22 >	2.1 >	Historical industrial land uses >	3	0	37	26	-
25 >	2.2 >	Historical tanks >	0	0	35	38	-
28 >	2.3 >	Historical energy features >	0	0	0	23	-
29	2.4	Historical petrol stations	0	0	0	0	-
29 >	2.5 >	Historical garages >	0	0	2	5	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
31	3.1	Active or recent landfill	0	0	0	0	-
31	3.2	Historical landfill (BGS records)	0	0	0	0	-
32	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
32	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
32	3.5	Historical waste sites	0	0	0	0	-
32	3.6	Licensed waste sites	0	0	0	0	-
32 >	3.7 >	Waste exemptions >	0	0	12	18	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
36 >	4.1 >	Recent industrial land uses >	1	2	10	-	-
37 >	4.2 >	National Geographic Database (NGD) - Current or recent tanks >	0	0	12	-	-
38	4.3	Current or recent petrol stations	0	0	0	0	-
38	4.4	Electricity cables	0	0	0	0	-
38	4.5	Gas pipelines	0	0	0	0	-



39	4.6	Sites determined as Contaminated Land	0	0	0	0	-
39 >	4.7 >	Control of Major Accident Hazards (COMAH) >	0	0	0	2	-
39	4.8	Regulated explosive sites	0	0	0	0	-
39 >	4.9 >	Hazardous substance storage/usage >	0	0	0	3	-
40 >	4.10 >	Historical licensed industrial activities (IPC) >	0	0	0	22	-
43 >	4.11 >	Licensed industrial activities (Part A(1)) >	0	0	0	65	-
54 >	4.12 >	Licensed pollutant release (Part A(2)/B) >	0	0	1	1	-
54	4.13	Radioactive Substance Authorisations	0	0	0	0	-
54 >	4.14 >	Licensed Discharges to controlled waters >	0	0	0	2	-
55	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
55	4.16	Pollutant release to public sewer	0	0	0	0	-
55	4.17	List 1 Dangerous Substances	0	0	0	0	-
55	4.18	List 2 Dangerous Substances	0	0	0	0	-
56 >	4.19 >	Pollution Incidents (EA/NRW) >	0	0	1	2	-
56 >	4.20 >	Pollution inventory substances >	0	0	0	1	-
57 >	4.21 >	Pollution inventory waste transfers >	0	0	0	2	-
61	4.22	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
62 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
64 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
65 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
66	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
66	5.5	Groundwater vulnerability- local information	None (within 0m)				
67 >	5.6 >	Groundwater abstractions >	0	0	4	0	30
75	5.7	Surface water abstractions	0	0	0	0	0
75 >	5.8 >	Potable abstractions >	0	0	0	0	9
78 >	5.9 >	Source Protection Zones >	1	0	0	0	-
78	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m



79 >	6.1 >	Water Network (OS NGD) >	0	1	2	-	-
80 >	6.2 >	Surface water features >	0	0	4	-	-
80 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
81 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
81 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
82	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
82	7.2	Historical Flood Events	0	0	0	-	-
82	7.3	Flood Defences	0	0	0	-	-
83	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
83	7.5	Flood Storage Areas	0	0	0	-	-
84	7.6	Flood Zone 2	None (within 50m)				
84	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
85 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
87 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
88	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
89	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
89	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
89	10.4	Special Protection Areas (SPA)	0	0	0	0	0
89	10.5	National Nature Reserves (NNR)	0	0	0	0	0
90 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	2
90 >	10.7 >	Designated Ancient Woodland >	0	0	0	1	23
91	10.8	Biosphere Reserves	0	0	0	0	0
91	10.9	Forest Parks	0	0	0	0	0
92	10.10	Marine Conservation Zones	0	0	0	0	0
92 >	10.11 >	Green Belt >	0	0	0	0	3



92	10.12	Proposed Ramsar sites	0	0	0	0	0
92	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
93	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
93	10.15	Nitrate Sensitive Areas	0	0	0	0	0
93 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	0	3
94 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
95	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
96	11.1	World Heritage Sites	0	0	0	-	-
96	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
96	11.3	National Parks	0	0	0	-	-
96	11.4	Listed Buildings	0	0	0	-	-
97	11.5	Conservation Areas	0	0	0	-	-
97	11.6	Scheduled Ancient Monuments	0	0	0	-	-
97	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
98 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
99	12.2	Open Access Land	0	0	0	-	-
99	12.3	Tree Felling Licences	0	0	0	-	-
99	12.4	Environmental Stewardship Schemes	0	0	0	-	-
99	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
100 >	13.1 >	Priority Habitat Inventory >	1	1	1	-	-
101	13.2	Habitat Networks	0	0	0	-	-
101 >	13.3 >	Open Mosaic Habitat >	0	1	0	-	-
101	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
102 >	14.1 >	10k Availability >	Identified (within 500m)				
103 >	14.2 >	Artificial and made ground (10k) >	1	0	2	3	-



105 >	14.3 >	Superficial geology (10k) >	1	0	1	0	-
106	14.4	Landslip (10k)	0	0	0	0	-
107 >	14.5 >	Bedrock geology (10k) >	1	0	0	0	-
108	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
109 >	15.1 >	50k Availability >	Identified (within 500m)				
110 >	15.2 >	Artificial and made ground (50k) >	1	0	2	1	-
111 >	15.3 >	Artificial ground permeability (50k) >	1	0	-	-	-
112 >	15.4 >	Superficial geology (50k) >	1	0	1	0	-
113 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
113	15.6	Landslip (50k)	0	0	0	0	-
113	15.7	Landslip permeability (50k)	None (within 50m)				
114 >	15.8 >	Bedrock geology (50k) >	1	0	0	0	-
115 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
115	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
116 >	16.1 >	BGS Boreholes >	0	1	17	-	-
Page	Section	Natural ground subsidence >					
118 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
119 >	17.2 >	Running sands >	Very low (within 50m)				
120 >	17.3 >	Compressible deposits >	Very low (within 50m)				
121 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
122 >	17.5 >	Landslides >	Very low (within 50m)				
123 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
125	18.1	BritPits	0	0	0	0	-
126 >	18.2 >	Surface ground workings >	0	0	10	-	-
126	18.3	Underground workings	0	0	0	0	0
126	18.4	Underground mining extents	0	0	0	0	-



127	18.5	Historical Mineral Planning Areas	0	0	0	0	-
127	18.6	Non-coal mining	0	0	0	0	0
127	18.7	JPB mining areas	None (within 0m)				
127	18.8	The Coal Authority non-coal mining	0	0	0	0	-
128	18.9	Researched mining	0	0	0	0	-
128	18.10	Mining record office plans	0	0	0	0	-
128	18.11	BGS mine plans	0	0	0	0	-
128	18.12	Coal mining	None (within 0m)				
128	18.13	Brine areas	None (within 0m)				
129	18.14	Gypsum areas	None (within 0m)				
129	18.15	Tin mining	None (within 0m)				
129	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
130	19.1	Natural cavities	0	0	0	0	-
130	19.2	Mining cavities	0	0	0	0	0
130	19.3	Reported recent incidents	0	0	0	0	-
130	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
132 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
134 >	21.1 >	BGS Estimated Background Soil Chemistry >	6	0	-	-	-
134	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
135	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
136	22.1	Underground railways (London)	0	0	0	-	-
136	22.2	Underground railways (Non-London)	0	0	0	-	-
137	22.3	Railway tunnels	0	0	0	-	-
137 >	22.4 >	Historical railway and tunnel features >	0	0	7	-	-
137	22.5	Royal Mail tunnels	0	0	0	-	-



138	22.6	Historical railways	0	0	0	-	-
138	22.7	Railways	0	0	0	-	-
138	22.8	Crossrail 2	0	0	0	0	-
138	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 20/05/2023

Site Area: 3.57ha



Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

Date: 5 May 2026

Recent site history - 2022 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2026. All Rights Reserved.

Capture Date: 18/10/2022

Site Area: 3.57ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 5 May 2026

Recent site history - 2015 aerial photograph



Capture Date: 11/06/2015

Site Area: 3.57ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 5 May 2026

Recent site history - 2001 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2026. All Rights Reserved.

Capture Date: 01/05/2001

Site Area: 3.57ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 5 May 2026

Recent site history - 2000 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2026. All Rights Reserved.

Capture Date: 21/07/2000

Site Area: 3.57ha



Contact us with any questions at:

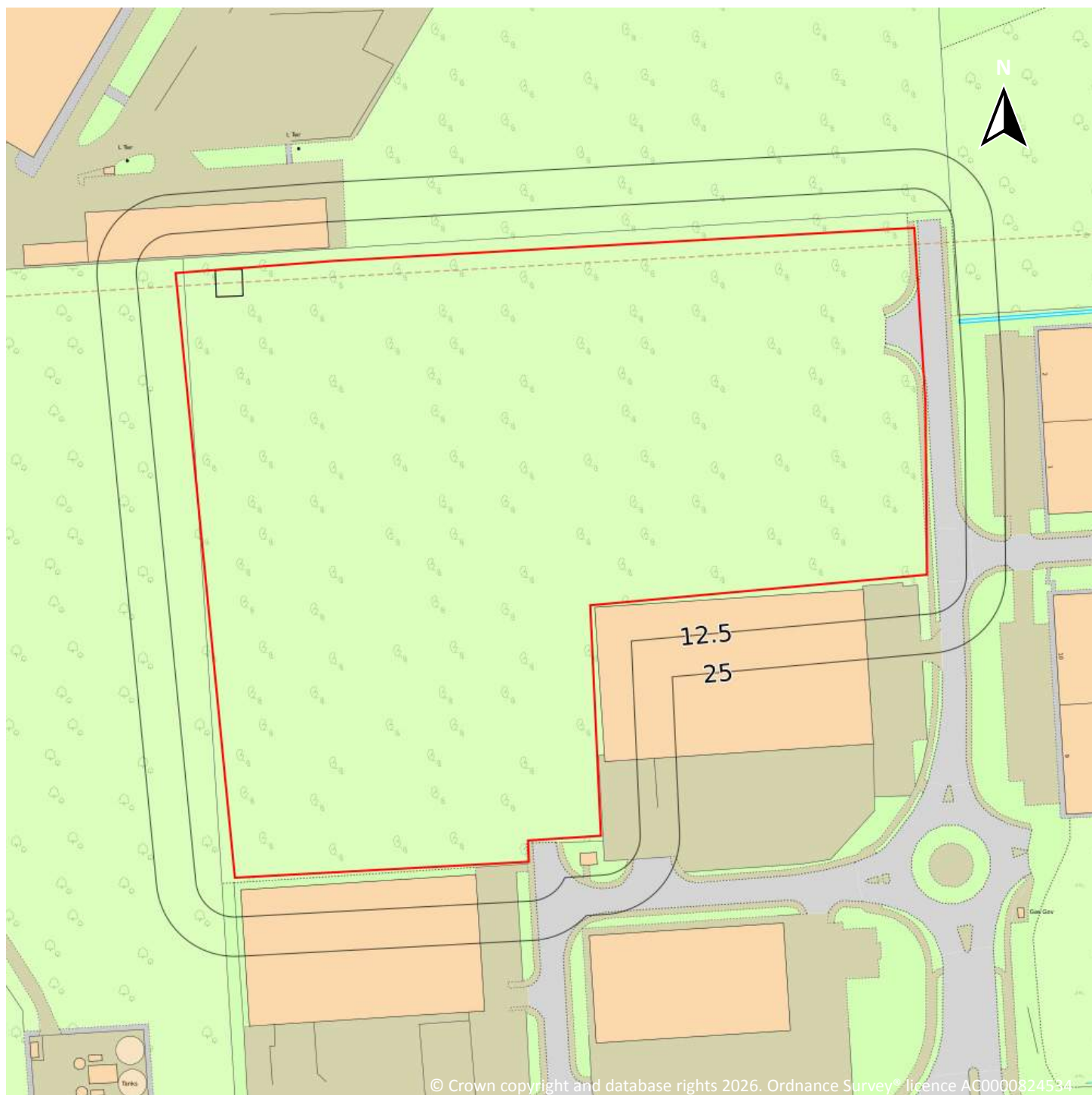
info@groundsure.com

01273 257 755

Date: 5 May 2026

13

OS MasterMap site plan



Site Area: 3.57ha



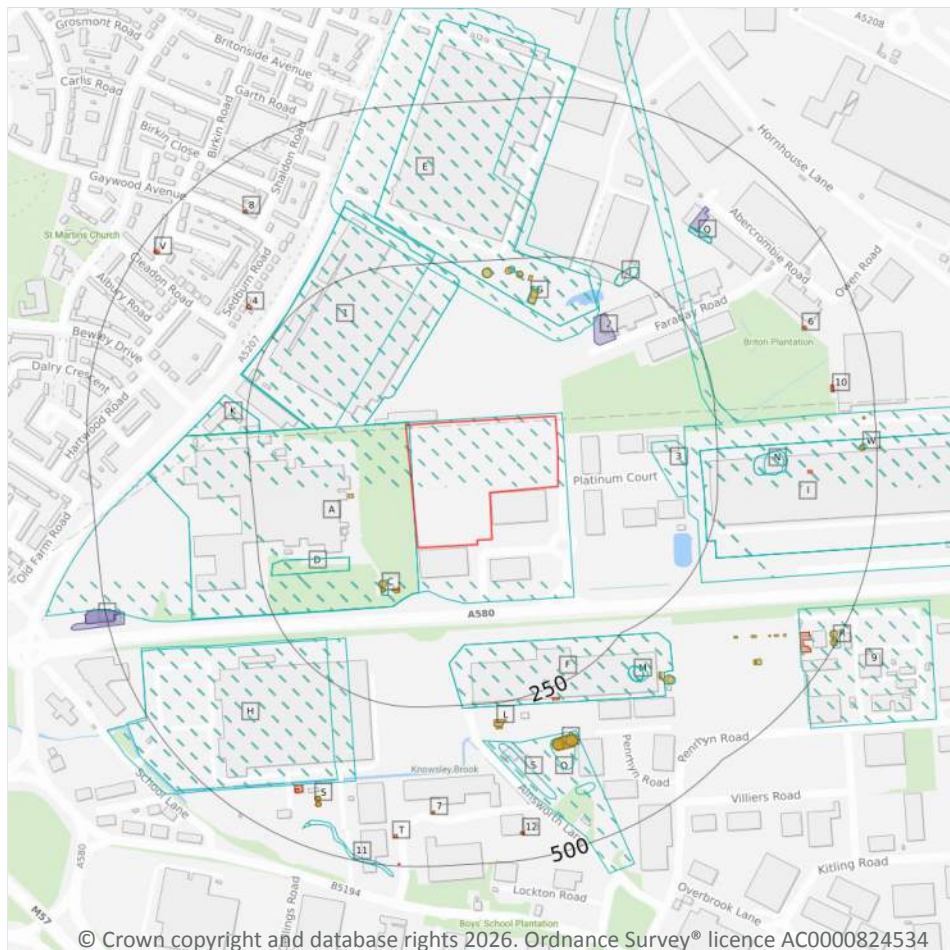
Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 5 May 2026

1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical garages

1.1 Historical industrial land uses

Records within 500m

52

Potentially contaminative land use features digitised from historical Ordnance Survey® mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15](#) >

ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Commercial/Industrial	1978	863782



ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Commercial/Industrial	1988	999273
B	On site	Unspecified Factory	1966	908185
C	70m SW	Unspecified Tanks	1988	878030
C	70m SW	Unspecified Tanks	1978	960040
1	95m NW	Unspecified Factory	1966	877939
D	109m W	Unspecified Heap	1988	903427
D	109m W	Unspecified Heap	1966 - 1978	918020
E	118m N	Unspecified Factory	1966	880028
E	141m N	Unspecified Commercial/Industrial	1988	882841
E	141m N	Unspecified Commercial/Industrial	1978	909049
3	147m E	Unspecified Heap	1966	843736
F	156m S	Unspecified Commercial/Industrial	1988	896145
F	156m S	Unspecified Commercial/Industrial	1978	916171
G	176m N	Unspecified Tanks	1966 - 1978	885833
G	176m N	Unspecified Tanks	1988	1000222
H	181m SW	Unspecified Commercial/Industrial	1988	978153
I	200m E	Railway Sidings	1955 - 1978	2405268
H	201m SW	Unspecified Commercial/Industrial	1978	956746
G	222m N	Unspecified Tank	1988	978658
G	222m N	Unspecified Tank	1966 - 1978	997912
I	223m E	Unspecified Works	1966	835705
I	223m E	Unspecified Commercial/Industrial	1988	896480
I	223m E	Unspecified Commercial/Industrial	1978	965566
G	223m N	Unspecified Tank	1966 - 1978	973879
G	223m N	Unspecified Tank	1988	996156
J	226m NE	Unspecified Heap	1966 - 1978	865859
J	226m NE	Unspecified Heap	1988	881083
G	229m N	Unspecified Tank	1978	884910



ID	Location	Land use	Dates present	Group ID
G	229m N	Unspecified Tank	1988	923790
K	230m W	Telephone Exchange	1988	897167
K	230m W	Telephone Exchange	1966 - 1978	998910
M	295m SE	Unspecified Pit	1925	896031
M	296m SE	Unspecified Pit	1907 - 1938	942930
M	301m SE	Unspecified Pit	1956	1007852
N	307m E	Unspecified Heap	1988	922817
N	307m E	Unspecified Heap	1978	999377
O	308m S	Unspecified Works	1966	835431
5	315m S	Unspecified Heap	1966	842882
N	323m E	Unspecified Heap	1966	953625
P	328m S	Unspecified Tanks	1966	895518
P	328m S	Unspecified Tanks	1956	928630
M	346m SE	Unspecified Tank	1988	888263
M	346m SE	Unspecified Tank	1978	926320
Q	358m NE	Refuse Heap	1925	988260
Q	359m NE	Refuse Heap	1938	909068
O	411m S	Unspecified Heap	1966	842881
9	423m SE	Unspecified Commercial/Industrial	1988	822358
11	453m S	Delph	1925	996312
W	475m E	Unspecified Tank	1978	973141
W	475m E	Unspecified Tank	1988	983422
R	485m SE	Unspecified Tanks	1988	819385

This data is sourced from Ordnance Survey® / Groundsure.



1.2 Historical tanks

Records within 500m

35

Tank features digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
C	68m SW	Tanks	1974	127075
C	68m SW	Tanks	1984	128537
C	70m SW	Tanks	1993	144787
C	74m SW	Unspecified Tank	1974 - 1993	136363
C	82m SW	Unspecified Tank	1993	154321
C	83m SW	Unspecified Tank	1974 - 1984	135312
B	93m W	Tanks	1996	109031
G	179m N	Tanks	1960 - 1993	144490
G	214m N	Unspecified Tank	1976 - 1993	148164
G	220m N	Unspecified Tank	1960 - 1993	148060
G	223m N	Unspecified Tank	1960 - 1993	131885
G	227m N	Unspecified Tank	1970 - 1993	150908
L	276m S	Unspecified Tank	1985 - 1994	126441
L	281m S	Unspecified Tank	1985 - 1994	149703
L	288m S	Unspecified Tank	1994	116111
P	329m S	Tanks	1974	142406
P	329m S	Tanks	1959	147347
P	329m S	Unspecified Tank	1960	116104
P	330m S	Unspecified Tank	1960	116105
M	331m SE	Tanks	1974 - 1994	144368
M	342m SE	Tanks	1974 - 1994	139728



ID	Location	Land use	Dates present	Group ID
R	363m SE	Unspecified Tank	1994	116110
R	383m SE	Tanks	1994	109046
R	405m SE	Tanks	1991	109042
R	410m SE	Tanks	1994	109048
R	412m SE	Tanks	1991	109040
R	413m SE	Tanks	1994	109047
S	419m S	Unspecified Tank	1974 - 1984	155722
S	420m S	Unspecified Tank	1993	148831
R	423m SE	Tanks	1991	109043
S	427m S	Unspecified Tank	1974 - 1984	155556
S	428m S	Unspecified Tank	1993	140286
W	473m E	Unspecified Tank	1975 - 1997	138106
W	480m E	Unspecified Tank	1959 - 1997	151400
R	484m SE	Tanks	1991	109044

This data is sourced from Ordnance Survey® / Groundsure.

1.3 Historical energy features

Records within 500m

15

Energy features digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
F	266m S	Electricity Substation	1974 - 1994	75368
4	305m NW	Electricity Substation	1984	66237
I	392m E	Electricity Substation	1997	67700
6	412m E	Electricity Substation	1975 - 1997	90152



ID	Location	Land use	Dates present	Group ID
7	414m S	Electricity Substation	1993	67705
S	414m SW	Electricity Substation	1974 - 1984	81848
8	417m NW	Electricity Substation	1996	67461
S	421m SW	Electricity Substation	1993	79205
10	434m E	Electricity Substation	1997	67701
R	443m SE	Electricity Substations	1991	68166
T	451m S	Electricity Substation	1993	67704
12	455m S	Electricity Substation	1988 - 1996	73918
V	472m NW	Electricity Substation	1996	86353
V	476m NW	Electricity Substation	1967 - 1970	88523
T	496m S	Gas Meter House	1993	68814

This data is sourced from Ordnance Survey® / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey® / Groundsure.

1.5 Historical garages

Records within 500m

5

Garages digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)



ID	Location	Land use	Dates present	Group ID
2	130m NE	Vehicle Repair Depot	1976	28878
Q	364m NE	Body Repair Works	1976	26430
U	471m W	Garage	1961	25008
U	472m W	Garage	1959	25710
U	472m W	Garage	1975	25795

This data is sourced from Ordnance Survey® / Groundsure.

1.6 Historical military land

Records within 500m

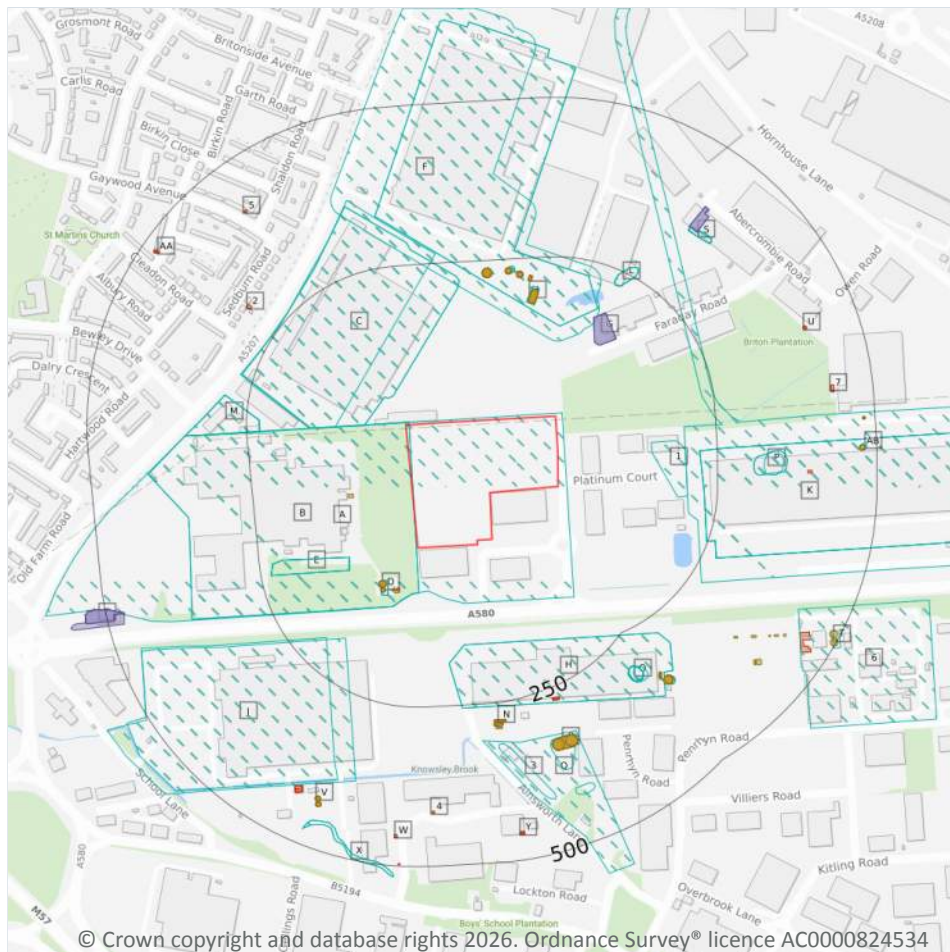
0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey® / Groundsure / other sources.



2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical garages

2.1 Historical industrial land uses

Records within 500m

66

Potentially contaminative land use features digitised from historical Ordnance Survey® mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 22](#) >

ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Factory	1966	908185
B	On site	Unspecified Commercial/Industrial	1978	863782
B	On site	Unspecified Commercial/Industrial	1988	999273



ID	Location	Land Use	Date	Group ID
C	50m NW	Unspecified Commercial/Industrial	1978	863782
C	50m NW	Unspecified Commercial/Industrial	1988	999273
D	70m SW	Unspecified Tanks	1978	960040
D	70m SW	Unspecified Tanks	1988	878030
C	95m NW	Unspecified Factory	1966	877939
E	109m W	Unspecified Heap	1966	918020
E	109m W	Unspecified Heap	1978	918020
E	109m W	Unspecified Heap	1988	903427
F	118m N	Unspecified Factory	1966	880028
F	141m N	Unspecified Commercial/Industrial	1978	909049
F	141m N	Unspecified Commercial/Industrial	1988	882841
1	147m E	Unspecified Heap	1966	843736
H	156m S	Unspecified Commercial/Industrial	1978	916171
H	156m S	Unspecified Commercial/Industrial	1988	896145
I	176m N	Unspecified Tanks	1966	885833
I	176m N	Unspecified Tanks	1978	885833
I	176m N	Unspecified Tanks	1988	1000222
J	181m SW	Unspecified Commercial/Industrial	1988	978153
K	200m E	Railway Sidings	1966	2405268
J	201m SW	Unspecified Commercial/Industrial	1978	956746
I	222m N	Unspecified Tank	1966	997912
I	222m N	Unspecified Tank	1978	997912
I	222m N	Unspecified Tank	1988	978658
K	223m E	Unspecified Works	1966	835705
K	223m E	Unspecified Commercial/Industrial	1978	965566
K	223m E	Unspecified Commercial/Industrial	1988	896480
I	223m N	Unspecified Tank	1966	973879
I	223m N	Unspecified Tank	1978	973879



ID	Location	Land Use	Date	Group ID
I	223m N	Unspecified Tank	1988	996156
L	226m NE	Unspecified Heap	1966	865859
L	226m NE	Unspecified Heap	1978	865859
L	226m NE	Unspecified Heap	1988	881083
I	229m N	Unspecified Tank	1978	884910
I	229m N	Unspecified Tank	1988	923790
M	230m W	Telephone Exchange	1966	998910
M	230m W	Telephone Exchange	1978	998910
M	230m W	Telephone Exchange	1988	897167
O	295m SE	Unspecified Pit	1925	896031
O	295m SE	Unspecified Pit	1925	896031
O	296m SE	Unspecified Pit	1938	942930
O	296m SE	Unspecified Pit	1925	942930
O	296m SE	Unspecified Pit	1907	942930
O	296m SE	Unspecified Pit	1938	942930
O	301m SE	Unspecified Pit	1956	1007852
P	307m E	Unspecified Heap	1978	999377
P	307m E	Unspecified Heap	1988	922817
Q	308m S	Unspecified Works	1966	835431
3	315m S	Unspecified Heap	1966	842882
P	323m E	Unspecified Heap	1966	953625
R	328m S	Unspecified Tanks	1966	895518
R	328m S	Unspecified Tanks	1956	928630
O	346m SE	Unspecified Tank	1978	926320
O	346m SE	Unspecified Tank	1988	888263
S	358m NE	Refuse Heap	1925	988260
S	359m NE	Refuse Heap	1938	909068
S	359m NE	Refuse Heap	1938	909068



ID	Location	Land Use	Date	Group ID
Q	411m S	Unspecified Heap	1966	842881
6	423m SE	Unspecified Commercial/Industrial	1988	822358
X	453m S	Delph	1925	996312
X	453m S	Delph	1925	996312
AB	475m E	Unspecified Tank	1978	973141
AB	475m E	Unspecified Tank	1988	983422
T	485m SE	Unspecified Tanks	1988	819385

This data is sourced from Ordnance Survey® / Groundsure.

2.2 Historical tanks

Records within 500m

73

Tank features digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 22 >](#)

ID	Location	Land Use	Date	Group ID
D	68m SW	Tanks	1974	127075
D	68m SW	Tanks	1984	128537
D	70m SW	Tanks	1993	144787
D	74m SW	Unspecified Tank	1993	136363
D	74m SW	Unspecified Tank	1974	136363
D	74m SW	Unspecified Tank	1984	136363
D	82m SW	Unspecified Tank	1993	154321
D	83m SW	Unspecified Tank	1974	135312
D	83m SW	Unspecified Tank	1984	135312
A	93m W	Tanks	1996	109031
I	179m N	Tanks	1993	144490
I	179m N	Tanks	1960	144490
I	179m N	Tanks	1970	144490



ID	Location	Land Use	Date	Group ID
I	179m N	Tanks	1960	144490
I	179m N	Tanks	1976	144490
I	179m N	Tanks	1976	144490
I	214m N	Unspecified Tank	1993	148164
I	214m N	Unspecified Tank	1976	148164
I	214m N	Unspecified Tank	1976	148164
I	220m N	Unspecified Tank	1960	148060
I	220m N	Unspecified Tank	1970	148060
I	220m N	Unspecified Tank	1993	148060
I	220m N	Unspecified Tank	1960	148060
I	220m N	Unspecified Tank	1976	148060
I	220m N	Unspecified Tank	1976	148060
I	223m N	Unspecified Tank	1993	131885
I	223m N	Unspecified Tank	1960	131885
I	223m N	Unspecified Tank	1976	131885
I	223m N	Unspecified Tank	1976	131885
I	223m N	Unspecified Tank	1960	131885
I	223m N	Unspecified Tank	1970	131885
I	227m N	Unspecified Tank	1976	150908
I	227m N	Unspecified Tank	1976	150908
I	227m N	Unspecified Tank	1993	150908
I	228m N	Unspecified Tank	1970	150908
N	276m S	Unspecified Tank	1994	126441
N	277m S	Unspecified Tank	1985	126441
N	281m S	Unspecified Tank	1994	149703
N	282m S	Unspecified Tank	1985	149703
N	288m S	Unspecified Tank	1994	116111
R	329m S	Tanks	1959	147347



ID	Location	Land Use	Date	Group ID
R	329m S	Tanks	1974	142406
R	329m S	Tanks	1974	142406
R	329m S	Unspecified Tank	1960	116104
R	330m S	Unspecified Tank	1960	116105
O	331m SE	Tanks	1974	144368
O	332m SE	Tanks	1985	144368
O	333m SE	Tanks	1994	144368
O	342m SE	Tanks	1974	139728
O	342m SE	Tanks	1974	139728
O	342m SE	Tanks	1994	139728
O	342m SE	Tanks	1985	139728
T	363m SE	Unspecified Tank	1994	116110
T	383m SE	Tanks	1994	109046
T	405m SE	Tanks	1991	109042
T	410m SE	Tanks	1994	109048
T	412m SE	Tanks	1991	109040
T	413m SE	Tanks	1994	109047
V	419m S	Unspecified Tank	1984	155722
V	420m S	Unspecified Tank	1974	155722
V	420m S	Unspecified Tank	1993	148831
T	423m SE	Tanks	1991	109043
V	427m S	Unspecified Tank	1984	155556
V	427m S	Unspecified Tank	1974	155556
V	428m S	Unspecified Tank	1993	140286
AB	473m E	Unspecified Tank	1997	138106
AB	473m E	Unspecified Tank	1975	138106
AB	480m E	Unspecified Tank	1997	151400
AB	480m E	Unspecified Tank	1959	151400



ID	Location	Land Use	Date	Group ID
AB	480m E	Unspecified Tank	1975	151400
AB	480m E	Unspecified Tank	1960	151400
AB	480m E	Unspecified Tank	1970	151400
T	484m SE	Tanks	1991	109044

This data is sourced from Ordnance Survey® / Groundsure.

2.3 Historical energy features

Records within 500m

23

Energy features digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 22 >](#)

ID	Location	Land Use	Date	Group ID
H	266m S	Electricity Substation	1985	75368
H	266m S	Electricity Substation	1974	75368
H	266m S	Electricity Substation	1974	75368
H	266m S	Electricity Substation	1994	75368
2	305m NW	Electricity Substation	1984	66237
K	392m E	Electricity Substation	1997	67700
U	412m E	Electricity Substation	1975	90152
U	412m E	Electricity Substation	1997	90152
4	414m S	Electricity Substation	1993	67705
V	414m SW	Electricity Substation	1984	81848
V	415m SW	Electricity Substation	1974	81848
5	417m NW	Electricity Substation	1996	67461
V	421m SW	Electricity Substation	1993	79205
7	434m E	Electricity Substation	1997	67701
T	443m SE	Electricity Substations	1991	68166
W	451m S	Electricity Substation	1993	67704



ID	Location	Land Use	Date	Group ID
Y	455m S	Electricity Substation	1996	73918
Y	455m S	Electricity Substation	1994	73918
Y	456m S	Electricity Substation	1988	73918
AA	472m NW	Electricity Substation	1996	86353
AA	476m NW	Electricity Substation	1970	88523
AA	476m NW	Electricity Substation	1967	88523
W	496m S	Gas Meter House	1993	68814

This data is sourced from Ordnance Survey® / Groundsure.

2.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey® / Groundsure.

2.5 Historical garages

Records within 500m

7

Garages digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 22 >](#)

ID	Location	Land Use	Date	Group ID
G	130m NE	Vehicle Repair Depot	1976	28878
G	130m NE	Vehicle Repair Depot	1976	28878
S	364m NE	Body Repair Works	1976	26430
S	364m NE	Body Repair Works	1976	26430
Z	471m W	Garage	1961	25008
Z	472m W	Garage	1959	25710

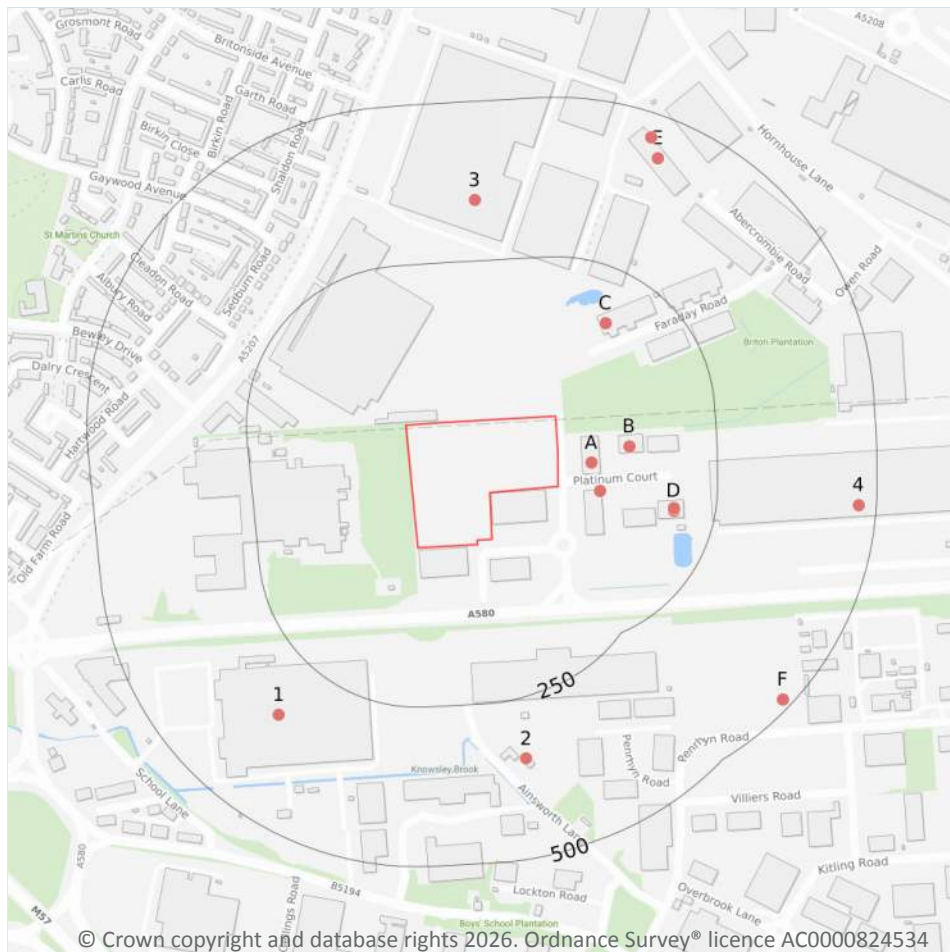


ID	Location	Land Use	Date	Group ID
Z	472m W	Garage	1975	25795

This data is sourced from Ordnance Survey® / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m

0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m**0**

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey®/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m**0**

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m**0**

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey®/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m**0**

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m**30**

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on [page 31](#) >

ID	Location	Site	Reference	Category	Sub-Category	Description
A	52m E	Smiths News, 9 Platinum Court, Alchemy Way Knowsley Industrial Park, Liverpool, L33 7xn	WEX330190	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	52m E	Smiths News, 9 Platinum Court, Alchemy Way Knowsley Industrial Park, Liverpool, L33 7xn	WEX330190	Treating waste exemption	Not on a farm	Sorting mixed waste
A	65m E	Land Development (Caddick Construction /Dgs Ltd), Alchemy Way, Knowsley Industrial Estate, Knowsley, L33 7xn	WEX138809	Using waste exemption	Not on a farm	Use of waste in construction
A	65m E	Land Development (Caddick Construction /Dgs Ltd), Alchemy Way, Knowsley Industrial Estate, Knowsley, L33 7xn	WEX138809	Treating waste exemption	Not on a farm	Screening and blending of waste
B	111m E	-	WEX465662	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	111m E	-	WEX465662	Treating waste exemption	Not on a farm	Sorting mixed waste
C	165m NE	25, Faraday Road, Knowsley Industrial Park, Liverpool, L33 7ut	WEX148902	Storing waste exemption	Not on a farm	Storage of waste in secure containers
C	165m NE	25, Faraday Road, Knowsley Industrial Park, Liverpool, L33 7ut	WEX148902	Storing waste exemption	Not on a farm	Storage of waste in a secure place
C	165m NE	25, Faraday Road, Knowsley Industrial Park, Liverpool, L33 7ut	WEX148902	Treating waste exemption	Not on a farm	Treatment of waste food
D	185m E	Unit 6 Platinum Court, Alchemy Way, Knowsley, L33 7xn	EXP/XP3841YS	Treating waste exemption	Not on a farm	Repair or refurbishment of WEEE
D	185m E	Unit 6, Platinum Court, Alchemy Way, Knowsley, L33 7xn	EA/EPR/VP398 3AH/A001	Treating waste exemption	Not on a farm	Repair or refurbishment of WEEE
D	185m E	Unit 6, Platinum Court, Alchemy Way, Liverpool, L33 7xn	EXP/VP3983A H	Treating waste exemption	Not on a farm	Repair or refurbishment of WEEE



ID	Location	Site	Reference	Category	Sub-Category	Description
1	342m SW	Saturn Business Park School Lane Prescot Merseyside L34 9gj	EPR/GF0603N R/A001	Treating waste exemption	Non- agricultural waste only	Preparatory treatments (baling, sorting, shredding etc)
2	345m S	Ainsworth Lane, Knowsley Business Park, Prescot, L34 9eu	WEX298315	Using waste exemption	Not on a farm	Use of waste in construction
3	345m N	Cgl- Knowsley Integrated Recovery Service, Unit 7, Deacon Park, Moorgate Road, Kirkby, L33 7rx	WEX172604	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
E	435m N	-	WEX476223	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	435m N	-	WEX476223	Using waste exemption	Not on a farm	Use of waste in construction
E	435m N	-	WEX476223	Storing waste exemption	Not on a farm	Storage of waste in secure containers
E	435m N	-	WEX225999	Storing waste exemption	Not on a farm	Storage of waste in secure containers
E	435m N	-	WEX225999	Using waste exemption	Not on a farm	Use of waste in construction
E	435m N	-	WEX225999	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	435m N	-	WEX351230	Storing waste exemption	Not on a farm	Storage of waste in secure containers
E	435m N	-	WEX351230	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	435m N	-	WEX351230	Using waste exemption	Not on a farm	Use of waste in construction
E	461m N	Deacon Park Moorgate Road Merseyside L33 7rx	EPR/NF0200F M/A001	Storing waste exemption	Non- agricultural waste only	Storage of waste in secure containers
E	461m N	Deacon Park Moorgate Road Merseyside L33 7rx	EPR/NF0200F M/A001	Storing waste exemption	Non- agricultural waste only	Storage of waste in a secure place
E	461m N	Deacon Park Moorgate Road Merseyside L33 7rx	EPR/NF0200F M/A001	Treating waste exemption	Non- agricultural waste only	Preparatory treatments (baling, sorting, shredding etc)

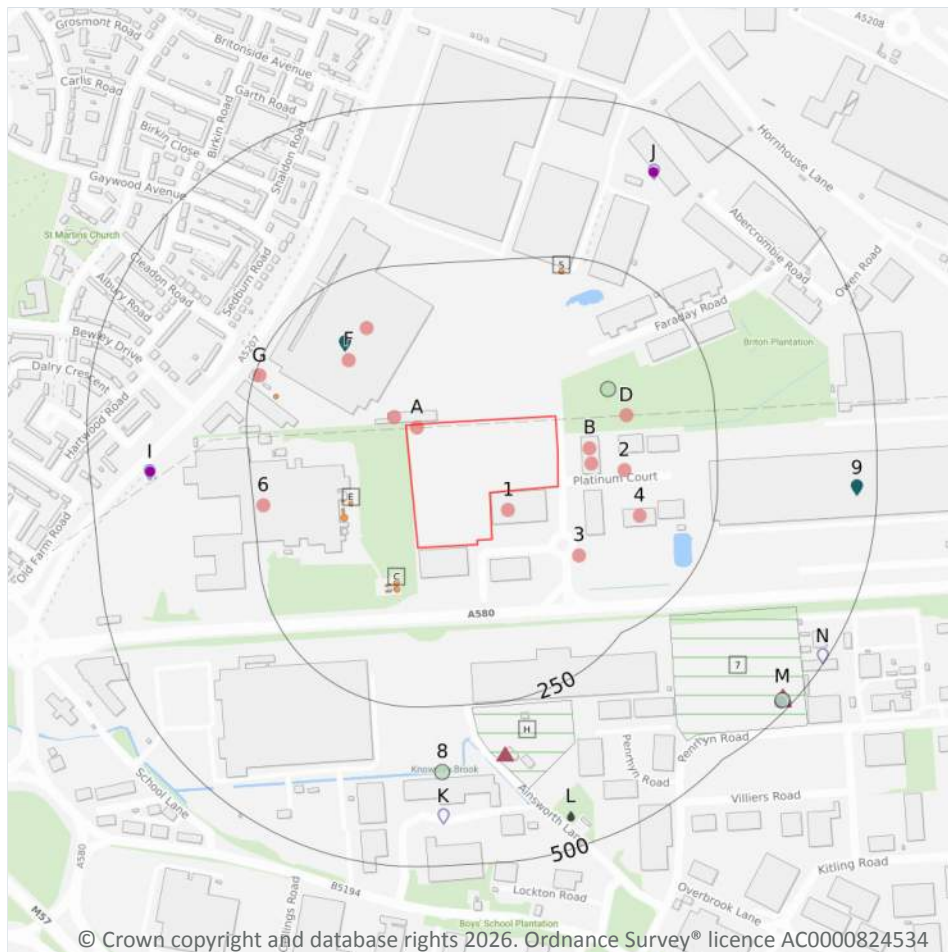


ID	Location	Site	Reference	Category	Sub-Category	Description
4	471m E	Yorkshire Copper Tube Ltd Coopers Lane East Kirkby Merseyside L33 7tu	EPR/AF0601TE /A001	Treating waste exemption	Non- agricultural waste only	Crushing waste fluorescent tubes
F	485m SE	-	WEX363291	Using waste exemption	Not on a farm	Use of waste in construction
F	485m SE	-	WEX363291	Treating waste exemption	Not on a farm	Screening and blending of waste

This data is sourced from the Environment Agency and Natural Resources Wales.



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- NGD current or recent tanks
- Control of Major Accident Hazards
- ▲ Hazardous substance storage/usage
- Historical licensed industrial activities
- Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)
- Pollution inventory substances
- Pollution inventory waste transfers

4.1 Recent industrial land uses

Records within 250m

13

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 36](#) >

ID	Location	Company	Address	Activity	Category
A	On site	Pylon	Merseyside, L33	Electrical Features	Infrastructure and Facilities
A	22m NW	Muni-serv Hire	Muni Serv 7b Moorgate Point, Moorgate Road, Southdene, Kirkby, Merseyside, L33 7XW	Vehicle Repair, Testing and Servicing	Repair and Servicing



ID	Location	Company	Address	Activity	Category
1	28m E	Estar Truck & Van	Companies House Head Office Estar Truck and Van Ltd 3, Alchemy Way, Knowsley Industrial Park, Kirkby, Merseyside, L33 7AQ	New Vehicles	Motoring
B	50m E	Northern Print	Northern Print 2 Platinum Court, Alchemy Way, Knowsley Industrial Park, Kirkby, Merseyside, L33 7XN	Published Goods	Industrial Products
B	52m E	Perfect Shutters	1 Platinum Court, Alchemy Way, Knowsley Industrial Park, Kirkby, Merseyside, L33 7XN	Curtains and Blinds	Consumer Products
2	104m E	Electricity Sub Station	Merseyside, L33	Electrical Features	Infrastructure and Facilities
D	110m E	Pylon	Merseyside, L33	Electrical Features	Infrastructure and Facilities
3	113m S	Gas Governor	Merseyside, L33	Gas Features	Infrastructure and Facilities
4	135m E	Lombard Shipping Plc	7-8 Platinum Court, Alchemy Way, Knowsley Industrial Park, Kirkby, Merseyside, L33 7XN	Distribution and Haulage	Transport, Storage and Delivery
F	137m NW	J J Smith & Company Woodworking Machinery Ltd	Moorgate Point, Moorgate Road, Southdene, Kirkby, Merseyside, L33 7XW	Tools Including Machine Shops	Industrial Products
F	164m N	Synergy Max Ltd	Suite 2a Moorgate Point, Knowsley Industrial Park, Liverpool, Merseyside, L33 7XW	Radar and Telecommunications Equipment	Industrial Products
6	235m W	Factory	Merseyside, L33	Unspecified Works Or Factories	Industrial Features
G	243m W	Electricity Sub Station	Merseyside, L33	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey®.

4.2 National Geographic Database (NGD) - Current or recent tanks

Records within 250m

12

Current or recent tanks identified from the Ordnance Survey® NGD.

Features are displayed on the Current industrial land use map on [page 36 >](#)



ID	Location	Tank description	Activity	Date first identified
C	60m SW	Open Storage Tank	Commercial Activity: Distribution Or Storage	14/12/2013
C	69m SW	Open Storage Tank	Commercial Activity: Distribution Or Storage	14/12/2013
C	70m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	14/12/2013
C	75m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	14/12/2013
C	79m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	14/12/2013
C	82m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	10/03/2017
E	95m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	10/03/2017
E	105m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	27/09/2006
E	107m W	Buried Open Storage Tank	Commercial Activity: Distribution Or Storage	18/05/2024
E	109m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	10/03/2017
G	205m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	29/07/2003
5	223m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	10/03/2017

This data is sourced from Ordnance Survey®.

4.3 Current or recent petrol stations

Records within 500m

0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

Records within 500m

0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.



4.6 Sites determined as Contaminated Land

Records within 500m

0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.7 Control of Major Accident Hazards (COMAH)

Records within 500m

2

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID	Location	Company	Address	Operational status	Tier
H	255m S	Flogas Britain Limited	Flogas Britain Limited, Liverpool, Knowsley Business Park, Ainsworth Lane, Prescot, Merseyside, L34 9EU	Current COMAH Site	COMAH Lower Tier Operator
7	268m SE	Knowsley Redevelopments Limited	Knowsley Redevelopments Limited, Prescot, Knowsley Industrial Estate, Penrhyn Road, Liverpool, Merseyside, L34 9HY	Current COMAH Site	COMAH Upper Tier Operator

This data is sourced from the Health and Safety Executive.

4.8 Regulated explosive sites

Records within 500m

0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.9 Hazardous substance storage/usage

Records within 500m

3

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

Features are displayed on the Current industrial land use map on [page 36 >](#)



ID	Location	Details	
H	331m S	Application reference number: 95/00644/HSC Application status: Approved Application date: 18/12/1995 Address: Flogas Britain Ltd, Knowsley Business Park, Ainsworth Lane, Knowsley, Merseyside, England, L34 9EU	Details: Proposal to increase storage of LPG (commercial and butane) Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
M	482m SE	Application reference number: 99/00694/HSC Application status: Historical Consent Application date: 18/10/1999 Address: CP Kelco pka Contract Chemicals Ltd, Penrhyn Road, Knowsley Business Park, Knowsley, L34 9HY	Details: Deemed consent for the storage of bromine and sodium. Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
M	485m SE	Application reference number: No Details Application status: Approved Application date: No Details Address: Knowsley Redevelopment Ltd, Knowsley Industrial Park South, Penrhyn Road, Prescot, Liverpool, Merseyside, England, L34 9HY	Details: No Details Enforcement: No Details Date of enforcement: No Details Comment: No Details

This data is sourced from Local Authority records.

4.10 Historical licensed industrial activities (IPC)

Records within 500m

22

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID	Location	Details	
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Knowsley Industrial Park, Penrhyn Road, Knowsley Industrial Park South, Prescot, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: AF9650	Original Permit Number: IPCAPP Date Approved: 2-11-1992 Effective Date: 2-11-1992 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: AK3129	Original Permit Number: IPCAIRAPP Date Approved: 23-12-1993 Effective Date: 23-12-1993 Status: Superseded By Variation



ID	Location	Details	
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Knowsley Industrial Park, Penrhyn Road, Knowsley Industrial Park South, Prescott, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: AQ8123	Original Permit Number: IPCMINVAR Date Approved: 6-4-1995 Effective Date: 13-4-1995 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescott, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: AS0871	Original Permit Number: IPCMINVAR Date Approved: 28-6-1995 Effective Date: 6-7-1995 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescott, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: AT5496	Original Permit Number: IPCMINVAR Date Approved: 21-9-1995 Effective Date: 25-9-1995 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescott, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: AW0440	Original Permit Number: IPCMINVAR Date Approved: 2-7-1996 Effective Date: 9-7-1996 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescott, Merseyside, L34 9HY Process: Inorganic Chemical Processes Permit Number: AZ7505	Original Permit Number: IPCAPP Date Approved: 19-12-1997 Effective Date: 1-1-1998 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescott, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: BA6119	Original Permit Number: IPCAPP Date Approved: 2-2-2000 Effective Date: 2-2-2000 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescott, Merseyside, L34 9HY Process: Inorganic Chemical Processes Permit Number: BA9509	Original Permit Number: IPCMAJVAR Date Approved: 16-7-1999 Effective Date: 19-7-1999 Status: Revoked - Now Ippc
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescott, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: BA9827	Original Permit Number: IPCAPP Date Approved: 5-8-1998 Effective Date: 5-8-1998 Status: Superseded By Variation



ID	Location	Details	
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: BC2149	Original Permit Number: IPCAPP Date Approved: 25-2-1999 Effective Date: 1-3-1999 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Knowsley Industrial Park, Penrhyn Road, Knowsley Industrial Park South, Prescot, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: BD1130	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: BD6352	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Inorganic Chemical Processes Permit Number: BE1259	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: BE4088	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked - Now Ippc
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: BG6715	Original Permit Number: IPCMINVAR Date Approved: 6-8-1999 Effective Date: 9-8-1999 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: BH6125	Original Permit Number: IPCMINVAR Date Approved: 22-12-1999 Effective Date: 22-12-1999 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: BI5892	Original Permit Number: IPCMINVAR Date Approved: 31-5-2000 Effective Date: 2-6-2000 Status: Superseded By Variation



ID	Location	Details	
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: BI9553	Original Permit Number: IPCMINVAR Date Approved: 29-6-2001 Effective Date: 4-7-2001 Status: Revoked - Now Ippc
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: BK5398	Original Permit Number: IPCMAJVAR Date Approved: 13-6-2001 Effective Date: 17-6-2001 Status: Superseded By Variation
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Manufacture And Use Of Organic Chemicals Permit Number: BM7375	Original Permit Number: IPCMINVAR Date Approved: 22-5-2002 Effective Date: 23-5-2002 Status: Revoked - Now Ippc
M	486m SE	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: BQ2863	Original Permit Number: IPCMINVAR Date Approved: 10-5-2002 Effective Date: 10-5-2002 Status: Revoked - Now Ippc

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed industrial activities (Part A(1))

Records within 500m

65

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID	Location	Details	
I	407m W	Operator: DAIRY CREST LIMITED Installation Name: Kirkby Creamery - EPR/VP3234NX Process: ASSOCIATED PROCESS Permit Number: VP3234NX Original Permit Number: VP3234NX	EPR Reference: EPR/VP3234NX Issue Date: 02/06/2014 Effective Date: 12/07/2019 Last date noted as effective: 07/01/2026 Status: Effective
I	407m W	Operator: DAIRY CREST LIMITED Installation Name: Kirkby Creamery - EPR/VP3234NX Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO- CHEMICAL TREATMENT Permit Number: VP3234NX Original Permit Number: VP3234NX	EPR Reference: EPR/VP3234NX Issue Date: 02/06/2014 Effective Date: 12/07/2019 Last date noted as effective: 07/01/2026 Status: Effective



ID	Location	Details	
I	407m W	Operator: DAIRY CREST LIMITED Installation Name: Kirkby Creamery - EPR/VP3234NX Process: CREATED BY IED - TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ANIMAL OR VEGETABLE RAW MATERIALS (OTHER THAN MILK ONLY) WITH FINISHED PRODUCT CAPACITY GREATER THAN FORMULA SHOWN IN REGS Permit Number: VP3234NX Original Permit Number: VP3234NX	EPR Reference: EPR/VP3234NX Issue Date: 02/06/2014 Effective Date: 12/07/2019 Last date noted as effective: 07/01/2026 Status: Effective
I	407m W	Operator: Dairy Crest Limited Installation Name: Kirkby Creamery - EPR/VP3234NX Process: ASSOCIATED PROCESS Permit Number: MP3706PH Original Permit Number: VP3234NX	EPR Reference: - Issue Date: 12/07/2019 Effective Date: 12/07/2019 Last date noted as effective: 21/03/2023 Status: Effective
I	407m W	Operator: Dairy Crest Limited Installation Name: Kirkby Creamery - EPR/VP3234NX Process: CREATED BY IED - TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ANIMAL OR VEGETABLE RAW MATERIALS (OTHER THAN MILK ONLY) WITH FINISHED PRODUCT CAPACITY GREATER THAN FORMULA SHOWN IN REGS Permit Number: MP3706PH Original Permit Number: VP3234NX	EPR Reference: - Issue Date: 12/07/2019 Effective Date: 12/07/2019 Last date noted as effective: 21/03/2023 Status: Effective
I	407m W	Operator: Dairy Crest Limited Installation Name: Kirkby Creamery - EPR/VP3234NX Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: MP3706PH Original Permit Number: VP3234NX	EPR Reference: - Issue Date: 12/07/2019 Effective Date: 12/07/2019 Last date noted as effective: 21/03/2023 Status: Effective
I	407m W	Operator: DAIRY CREST LIMITED Installation Name: Kirkby Creamery - EPR/VP3234NX Process: CREATED BY IED - TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ANIMAL OR VEGETABLE RAW MATERIALS (OTHER THAN MILK ONLY) WITH FINISHED PRODUCT CAPACITY GREATER THAN FORMULA SHOWN IN REGS Permit Number: VP3234NX Original Permit Number: VP3234NX	EPR Reference: EPR/VP3234NX Issue Date: 12/07/2019 Effective Date: 12/07/2019 Last date noted as effective: 29/10/2024 Status: Effective
I	407m W	Operator: Dairy Crest Limited Installation Name: Kirkby Creamery - EPR/VP3234NX Process: ASSOCIATED PROCESS Permit Number: AP3332JL Original Permit Number: VP3234NX	EPR Reference: - Issue Date: 14/05/2018 Effective Date: 14/05/2018 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
I	407m W	Operator: Dairy Crest Limited Installation Name: Kirkby Creamery - EPR/VP3234NX Process: CREATED BY IED - TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ANIMAL OR VEGETABLE RAW MATERIALS (OTHER THAN MILK ONLY) WITH FINISHED PRODUCT CAPACITY GREATER THAN FORMULA SHOWN IN REGS Permit Number: AP3332JL Original Permit Number: VP3234NX	EPR Reference: - Issue Date: 14/05/2018 Effective Date: 14/05/2018 Last date noted as effective: 21/03/2023 Status: Superseded
I	407m W	Operator: Dairy Crest Limited Installation Name: Kirkby Creamery - EPR/VP3234NX Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: AP3332JL Original Permit Number: VP3234NX	EPR Reference: - Issue Date: 14/05/2018 Effective Date: 14/05/2018 Last date noted as effective: 21/03/2023 Status: Superseded
J	412m N	Operator: FACTORY SERVICES UK LIMITED Installation Name: Knowsley Feed Mill - EPR/LP3837FX Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC VEGETABLE RAW MATERIALS FOR FOOD >300T/D Permit Number: LP3837FX Original Permit Number: LP3837FX	EPR Reference: EPR/LP3837FX Issue Date: 04/05/2012 Effective Date: 13/09/2022 Last date noted as effective: 07/01/2026 Status: Effective
J	412m N	Operator: Factory Services UK Ltd Installation Name: Knowsley Feed Mill - EPR/LP3837FX Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC VEGETABLE RAW MATERIALS FOR FOOD >300T/D Permit Number: JP3008MA Original Permit Number: LP3837FX	EPR Reference: - Issue Date: 06/09/2022 Effective Date: 13/09/2022 Last date noted as effective: 21/03/2023 Status: Effective
J	412m N	Operator: Factory Services UK Ltd Installation Name: Knowsley Feed Mill Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC VEGETABLE RAW MATERIALS FOR FOOD >300T/D Permit Number: MP3809PA Original Permit Number: LP3837FX	EPR Reference: - Issue Date: 06/11/2019 Effective Date: 06/11/2019 Last date noted as effective: 21/03/2023 Status: Superseded
K	423m S	Operator: DEMETAL LIMITED Installation Name: Knowsley Metal Recovery Process: INORGANIC CHEMICALS; USING ETC OF ANTIMONY ETC (UNLESS OTHERWISE PRESCRINED) (UNLESS GLAZING ETC) Permit Number: SP3738LR Original Permit Number: SP3738LR	EPR Reference: EPR/SP3738LR Issue Date: 07/07/2006 Effective Date: 20/01/2010 Last date noted as effective: 07/01/2026 Status: Surrendered



ID	Location	Details	
K	423m S	Operator: DEMETAL LTD Installation Name: Knowsley Metal Recovery Process: INORGANIC CHEMICALS; USING ETC OF ANTIMONY ETC (UNLESS OTHERWISE PRESCRIBED) (UNLESS GLAZING ETC) Permit Number: WP3339KV Original Permit Number: SP3738LR	EPR Reference: - Issue Date: - Effective Date: 20/01/2010 Last date noted as effective: 21/03/2023 Status: Surrender Effective
M	486m SE	Operator: CCK REALISATIONS (2019) LIMITED Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; ACIDS EG CHROMIC ACID Permit Number: BL8619IA Original Permit Number: BL8619IA	EPR Reference: EPR/BL8619IA Issue Date: 13/08/2004 Effective Date: 28/09/2017 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CCK REALISATIONS (2019) LIMITED Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: BL8619IA Original Permit Number: BL8619IA	EPR Reference: EPR/BL8619IA Issue Date: 13/08/2004 Effective Date: 28/09/2017 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: KNOWSLEY REDEVELOPMENTS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: INORGANIC CHEMICALS; ACIDS EG CHROMIC ACID Permit Number: BP3409LR Original Permit Number: BP3409LR	EPR Reference: EPR/BP3409LR Issue Date: 04/02/2021 Effective Date: 06/04/2022 Last date noted as effective: 07/01/2026 Status: Surrendered
M	486m SE	Operator: KNOWSLEY REDEVELOPMENTS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: INORGANIC CHEMICALS; USING HALOGENS ETC IF RELEASE TO AIR/WATER (UNLESS OTHERWISE PRESCRIBED) (UNLESS CHLORINATION OF WATER) Permit Number: BP3409LR Original Permit Number: BP3409LR	EPR Reference: EPR/BP3409LR Issue Date: 04/02/2021 Effective Date: 06/04/2022 Last date noted as effective: 07/01/2026 Status: Surrendered
M	486m SE	Operator: KNOWSLEY REDEVELOPMENTS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: ORGANIC CHEMICALS; HALOGEN CONTAINING COMPOUNDS EG HALOCARBONS Permit Number: BP3409LR Original Permit Number: BP3409LR	EPR Reference: EPR/BP3409LR Issue Date: 04/02/2021 Effective Date: 06/04/2022 Last date noted as effective: 07/01/2026 Status: Surrendered
M	486m SE	Operator: KNOWSLEY REDEVELOPMENTS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES Permit Number: BP3409LR Original Permit Number: BP3409LR	EPR Reference: EPR/BP3409LR Issue Date: 04/02/2021 Effective Date: 06/04/2022 Last date noted as effective: 07/01/2026 Status: Surrendered



ID	Location	Details	
M	486m SE	Operator: KNOWSLEY REDEVELOPMENTS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: BP3409LR Original Permit Number: BP3409LR	EPR Reference: EPR/BP3409LR Issue Date: 04/02/2021 Effective Date: 06/04/2022 Last date noted as effective: 07/01/2026 Status: Surrendered
M	486m SE	Operator: KNOWSLEY REDEVELOPMENTS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: ASSOCIATED PROCESS Permit Number: BP3409LR Original Permit Number: BP3409LR	EPR Reference: EPR/BP3409LR Issue Date: 04/02/2021 Effective Date: 06/04/2022 Last date noted as effective: 07/01/2026 Status: Surrendered
M	486m SE	Operator: KNOWSLEY REDEVELOPMENTS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: INORGANIC CHEMICALS; SALTS EG AMMONIUM CHLORIDE Permit Number: BP3409LR Original Permit Number: BP3409LR	EPR Reference: EPR/BP3409LR Issue Date: 04/02/2021 Effective Date: 06/04/2022 Last date noted as effective: 07/01/2026 Status: Surrendered
M	486m SE	Operator: KNOWSLEY REDEVELOPMENTS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: BP3409LR Original Permit Number: BP3409LR	EPR Reference: EPR/BP3409LR Issue Date: 04/02/2021 Effective Date: 06/04/2022 Last date noted as effective: 07/01/2026 Status: Surrendered
M	486m SE	Operator: CCK REALISATIONS (2019) LIMITED Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; HALOGEN CONTAINING COMPOUNDS EG HALOCARBONS Permit Number: BL8619IA Original Permit Number: BL8619IA	EPR Reference: EPR/BL8619IA Issue Date: 13/08/2004 Effective Date: 28/09/2017 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CONTRACT CHEMICALS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: INORGANIC CHEMICALS; ACIDS EG CHROMIC ACID Permit Number: SP3007PM Original Permit Number: SP3007PM	EPR Reference: EPR/SP3007PM Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CONTRACT CHEMICALS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: INORGANIC CHEMICALS; SALTS EG AMMONIUM CHLORIDE Permit Number: SP3007PM Original Permit Number: SP3007PM	EPR Reference: EPR/SP3007PM Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 07/01/2026 Status: Superseded



ID	Location	Details	
M	486m SE	Operator: CONTRACT CHEMICALS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: INORGANIC CHEMICALS; USING HALOGENS ETC IF RELEASE TO AIR/WATER (UNLESS OTHERWISE PRESCRIBED) (UNLESS CHLORINATION OF WATER) Permit Number: SP3007PM Original Permit Number: SP3007PM	EPR Reference: EPR/SP3007PM Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CONTRACT CHEMICALS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: SP3007PM Original Permit Number: SP3007PM	EPR Reference: EPR/SP3007PM Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CONTRACT CHEMICALS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: SP3007PM Original Permit Number: SP3007PM	EPR Reference: EPR/SP3007PM Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CCK REALISATIONS (2019) LIMITED Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; USING HALOGENS ETC IF RELEASE TO AIR/WATER (UNLESS OTHERWISE PRESCRIBED) (UNLESS CHLORINATION OF WATER) Permit Number: BL8619IA Original Permit Number: BL8619IA	EPR Reference: EPR/BL8619IA Issue Date: 13/08/2004 Effective Date: 28/09/2017 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CCK REALISATIONS (2019) LIMITED Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: BL8619IA Original Permit Number: BL8619IA	EPR Reference: EPR/BL8619IA Issue Date: 13/08/2004 Effective Date: 28/09/2017 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CCK REALISATIONS (2019) LIMITED Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ASSOCIATED PROCESS Permit Number: BL8619IA Original Permit Number: BL8619IA	EPR Reference: EPR/BL8619IA Issue Date: 13/08/2004 Effective Date: 28/09/2017 Last date noted as effective: 07/01/2026 Status: Superseded



ID	Location	Details	
M	486m SE	Operator: CCK REALISATIONS (2019) LIMITED Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; SALTS EG AMMONIUM CHLORIDE Permit Number: BL8619IA Original Permit Number: BL8619IA	EPR Reference: EPR/BL8619IA Issue Date: 13/08/2004 Effective Date: 28/09/2017 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CCK REALISATIONS (2019) LIMITED Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES Permit Number: BL8619IA Original Permit Number: BL8619IA	EPR Reference: EPR/BL8619IA Issue Date: 13/08/2004 Effective Date: 28/09/2017 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CONTRACT CHEMICALS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: ASSOCIATED PROCESS Permit Number: SP3007PM Original Permit Number: SP3007PM	EPR Reference: EPR/SP3007PM Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CONTRACT CHEMICALS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: ORGANIC CHEMICALS; HALOGEN CONTAINING COMPOUNDS EG HALOCARBONS Permit Number: SP3007PM Original Permit Number: SP3007PM	EPR Reference: EPR/SP3007PM Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: CONTRACT CHEMICALS LIMITED Installation Name: Contract Chemicals EPR/SP3007PM Process: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES Permit Number: SP3007PM Original Permit Number: SP3007PM	EPR Reference: EPR/SP3007PM Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 07/01/2026 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES Permit Number: JP3233JC Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 28/09/2017 Effective Date: 28/09/2017 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: JP3233JC Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 28/09/2017 Effective Date: 28/09/2017 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; ACIDS EG CHROMIC ACID Permit Number: CP3439EV Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 11/11/2013 Effective Date: 11/11/2013 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; HALOGEN CONTAINING COMPOUNDS EG HALOCARBONS Permit Number: CP3439EV Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 11/11/2013 Effective Date: 11/11/2013 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; ACIDS EG CHROMIC ACID Permit Number: XP3930WQ Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 06/10/2014 Effective Date: 06/10/2014 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: XP3930WQ Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 06/10/2014 Effective Date: 06/10/2014 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ASSOCIATED PROCESS Permit Number: XP3930WQ Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 06/10/2014 Effective Date: 06/10/2014 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES Permit Number: CP3439EV Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 11/11/2013 Effective Date: 11/11/2013 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; USING HALOGENS ETC IF RELEASE TO AIR/WATER (UNLESS OTHERWISE PRESCRIBED) (UNLESS CHLORINATION OF WATER) Permit Number: XP3930WQ Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 06/10/2014 Effective Date: 06/10/2014 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; SALTS EG AMMONIUM CHLORIDE Permit Number: CP3439EV Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 11/11/2013 Effective Date: 11/11/2013 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; USING HALOGENS ETC IF RELEASE TO AIR/WATER (UNLESS OTHERWISE PRESCRIBED) (UNLESS CHLORINATION OF WATER) Permit Number: CP3439EV Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 11/11/2013 Effective Date: 11/11/2013 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: CP3439EV Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 11/11/2013 Effective Date: 11/11/2013 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; SALTS EG AMMONIUM CHLORIDE Permit Number: JP3233JC Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 28/09/2017 Effective Date: 28/09/2017 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; SALTS EG AMMONIUM CHLORIDE Permit Number: XP3930WQ Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 06/10/2014 Effective Date: 06/10/2014 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ASSOCIATED PROCESS Permit Number: CP3439EV Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 11/11/2013 Effective Date: 11/11/2013 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: CP3439EV Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 11/11/2013 Effective Date: 11/11/2013 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ASSOCIATED PROCESS Permit Number: JP3233JC Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 28/09/2017 Effective Date: 28/09/2017 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; ACIDS EG CHROMIC ACID Permit Number: JP3233JC Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 28/09/2017 Effective Date: 28/09/2017 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: INORGANIC CHEMICALS; USING HALOGENS ETC IF RELEASE TO AIR/WATER (UNLESS OTHERWISE PRESCRIBED) (UNLESS CHLORINATION OF WATER) Permit Number: JP3233JC Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 28/09/2017 Effective Date: 28/09/2017 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; HALOGEN CONTAINING COMPOUNDS EG HALOCARBONS Permit Number: JP3233JC Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 28/09/2017 Effective Date: 28/09/2017 Last date noted as effective: 21/03/2023 Status: Superseded



ID	Location	Details	
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; HALOGEN CONTAINING COMPOUNDS EG HALOCARBONS Permit Number: XP3930WQ Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 06/10/2014 Effective Date: 06/10/2014 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES Permit Number: XP3930WQ Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 06/10/2014 Effective Date: 06/10/2014 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: XP3930WQ Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 06/10/2014 Effective Date: 06/10/2014 Last date noted as effective: 21/03/2023 Status: Superseded
M	486m SE	Operator: Contract Chemicals (Knowsley) Limited Installation Name: Knowsley Contract Chemicals EPR/BL8619IA Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: JP3233JC Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 28/09/2017 Effective Date: 28/09/2017 Last date noted as effective: 21/03/2023 Status: Superseded
N	493m SE	Operator: Algal Omega 3 Ltd Installation Name: Algal Omega 3 Ltd Process: MCP Permit Number: TB3299YL Original Permit Number: TB3299YL	EPR Reference: EPR/TB3299YL Issue Date: 03/12/2021 Effective Date: 03/12/2021 Last date noted as effective: 07/01/2026 Status: Effective
N	493m SE	Operator: Algal Omega 3 Ltd Installation Name: Algal Omega 3 Ltd Process: MCP Permit Number: TB3299YL Original Permit Number: TB3299YL	EPR Reference: EPR/TB3299YL Issue Date: 03/12/2021 Effective Date: 03/12/2021 Last date noted as effective: 29/10/2024 Status: Effective

This data is sourced from the Environment Agency and Natural Resources Wales.



4.12 Licensed pollutant release (Part A(2)/B)

Records within 500m

2

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID	Location	Address	Details	
F	160m NW	Otis, Moorgate Rd, Knowsley Industrial Park, Liverpool, L33 7XW	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
9	469m E	KME Yorkshire Ltd, Kirkby Works, East Lancs Road, L33 7TU	Process: Surface Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.13 Radioactive Substance Authorisations

Records within 500m

0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Licensed Discharges to controlled waters

Records within 500m

2

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID	Location	Address	Details	
L	451m S	MERSEYSIDE POLYMER PROCESSING LTD, CADDICK ROAD, KNOWSLEY BUSINESS PARK, MERSEYSIDE, L34 9HP	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 016990269 Permit Version: 1 Receiving Water: TRIB 69-50-101- 101-5-20	Status: SURRENDERED UNDER EPR 2010 Issue date: - Effective Date: 05/12/1977 Revocation Date: 22/07/2013



ID	Location	Address	Details	
L	451m S	MERSEYSIDE POLYMER PROCESSING LTD, CADDICK ROAD, KNOWSLEY BUSINESS PARK, MERSEYSIDE, L34 9HP	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 016990269 Permit Version: 1 Receiving Water: TRIB 69-50-101-101-5-20	Status: SURRENDERED UNDER EPR 2010 Issue date: - Effective Date: 05/12/1977 Revocation Date: 22/07/2013

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to surface waters (Red List)

Records within 500m	0
----------------------------	----------

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 Pollutant release to public sewer

Records within 500m	0
----------------------------	----------

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 1 Dangerous Substances

Records within 500m	0
----------------------------	----------

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 List 2 Dangerous Substances

Records within 500m	0
----------------------------	----------

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.



4.19 Pollution Incidents (EA/NRW)

Records within 500m

3

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID	Location	Details	
D	93m NE	Incident Date: 06/05/2005 Incident Identification: 310446 Pollutant: Inert Materials and Wastes Pollutant Description: Other Inert Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
8	353m S	Incident Date: 13/08/2013 Incident Identification: 1147204 Pollutant: Organic Chemicals/Products Pollutant Description: Other Organic Chemical or Product	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
M	486m SE	Incident Date: 24/05/2001 Incident Identification: 6634 Pollutant: Organic Chemicals/Products Pollutant Description: Other Organic Chemical or Product	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.20 Pollution inventory substances

Records within 500m

1

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID:	I, Location: 407m W, Permit: VP3234NX
Operator:	Dairy Crest Limited
Activity:	CREATED BY IED - TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ANIMAL OR VEGETABLE RAW MATERIALS (OTHER THAN MILK ONLY) WITH FINISHED PRODUCT CAPACITY GREATER THAN FORMULA SHOWN IN REGS
Address:	Kirkby Creamery Moorgate Road Kirkby Liverpool L33 7XW
Sector	Food & Drink, Sub-sector: Food & Drink
Releases:	



Route	Substance	Reporting threshold (kg)	Quantity (kg)
WASTEWATER	CHLORIDES - AS CL	-	-
WASTEWATER	NITROGEN - AS TOTAL N	-	-
WASTEWATER	PHOSPHORUS - AS TOTAL P	-	-
WASTEWATER	TOTAL ORGANIC CARBON (TOC)	-	-
AIR	CARBON DIOXIDE	-	-
AIR	AMMONIA	-	-
AIR	CARBON MONOXIDE	-	-
AIR	NITROUS OXIDE	-	-
AIR	METHANE	-	-

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.21 Pollution inventory waste transfers

Records within 500m

2

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID: I, Location: 407m W, Permit: VP3234NX
 Operator: Dairy Crest Limited
 Activity: CREATED BY IED - TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ANIMAL OR VEGETABLE RAW MATERIALS (OTHER THAN MILK ONLY) WITH FINISHED PRODUCT CAPACITY GREATER THAN FORMULA SHOWN IN REGS
 Address: Kirkby Creamery Moorgate Road Kirkby Liverpool L33 7XW
 Sector: Food & Drink, Sub-sector: Food & Drink
 Releases:

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R1	USE PRINCIPALLY AS A FUEL OR OTHER MEANS TO GENERATE ENERGY	-	ABSOLUTE VALUE	20 01 25	EDIBLE OIL AND FAT	NO



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R3	RECYCLING/RECLAMATION OF ORGANIC SUBSTANCES WHICH ARE NOT USED AS SOLVENTS (INCLUDING COMPOSTING AND OTHER BIOLOGICAL TRANSFORMATIN PROCESSES)	-	ABSOLUTE VALUE	20 01 38	WOOD OTHER THAN THAT MENTIONED IN 20 01 37	NO
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	15 01 06	MIXED PACKAGING	NO
R10	LAND TREATMENT RESULTING IN BENEFIT TO AGRICULTURE OR ECOLOGICAL IMPROVEMENT	-	ABSOLUTE VALUE	02 05 02	SLUDGES FROM ON-SITE EFFLUENT TREATMENT	NO
R1	USE PRINCIPALLY AS A FUEL OR OTHER MEANS TO GENERATE ENERGY	-	ABSOLUTE VALUE	20 03 01	MIXED MUNICIPAL WASTE	NO
D15	STORAGE PENDING ANY OF THE OPERATIONS NUMBERED D1 TO D14 (EXCLUDING TEMPORARY STORAGE PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	02 03 04	MATERIALS UNSUITABLE FOR CONSUMPTION OR PROCESSING	NO
R3	RECYCLING/RECLAMATION OF ORGANIC SUBSTANCES WHICH ARE NOT USED AS SOLVENTS (INCLUDING COMPOSTING AND OTHER BIOLOGICAL TRANSFORMATIN PROCESSES)	-	ABSOLUTE VALUE	02 07 04	MATERIALS UNSUITABLE FOR CONSUMPTION OR PROCESSING	NO
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	15 01 02	PLASTIC PACKAGING	NO



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	15 01 04	METALLIC PACKAGING	NO
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	20 01 34	BATTERIES AND ACCUMULATORS OTHER THAN THOSE MENTIONED IN 20 01 33	NO
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	16 05 05	GASES IN PRESSURE CONTAINERS OTHER THAN THOSE MENTIONED IN 16 05 04	NO
D9	PHYSIO-CHEMICAL TREATMENT NOT SPECIFIED ELSEWHERE IN THIS TABLE WHICH RESULTS IN FINAL COMPOUNDS OR MIXTURES WHICH ARE DISCARDED BY MEANS OF ANY OF THE OPERATIONS NUMBERED D1 TO D12 (EG EVAPORATION, DRYING, CALCINATION, ETC.)	-	ABSOLUTE VALUE	06 01 06	OTHER ACIDS	YES
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	13 03 07	MINERAL-BASED NON-CHLORINATED INSULATING AND HEAT TRANSMISSION OILS	YES
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	15 01 10	PACKAGING CONTAINING RESIDUES OF OR CONTAMINATED BY DANGEROUS SUBSTANCES	YES



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D10	INCINERATION ON LAND	-	ABSOLUTE VALUE	16 05 06	LABORATORY CHEMICALS, CONSISTING OF OR CONTAINING DANGEROUS SUBSTANCES, INCLUDING MIXTURES OF LABORATORY CHEMICALS	YES
D10	INCINERATION ON LAND	-	ABSOLUTE VALUE	16 09 04	OXIDISING SUBSTANCES, NOT OTHERWISE SPECIFIED	YES
D9	PHYSIO-CHEMICAL TREATMENT NOT SPECIFIED ELSEWHERE IN THIS TABLE WHICH RESULTS IN FINAL COMPOUNDS OR MIXTURES WHICH ARE DISCARDED BY MEANS OF ANY OF THE OPERATIONS NUMBERED D1 TO D12 (EG EVAPORATION, DRYING, CALCINATION, ETC.)	-	ABSOLUTE VALUE	20 01 15	ALKALINES	YES
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	14 06 03	OTHER SOLVENTS AND SOLVENT MIXTURES	YES
R13	STORAGE OF WASTES PENDING ANY OF THE OPERATIONS NUMBERED R1 TO R12 (EXCLUDING TEMPORARY STORAGE, PENDING COLLECTION, ON THE SITE WHERE IT IS PRODUCED)	-	ABSOLUTE VALUE	20 01 21	FLUORESCENT TUBES AND OTHER MERCURY-CONTAINING WASTE	YES

ID: J, Location: 412m N, Permit: LP3837FX
 Operator: Factory Services UK Ltd
 Activity: Animal vegetable and food treating etc vegetable
 Address: Knowsley Feed Mill Deacon Park, Moorgate Road, Knowsley Industrial Park L33 7RX
 Sector: Food & Drink, Sub-sector: Food & Drink
 Releases:



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R1	USE PRINCIPALLY AS A FUEL OR OTHER MEANS TO GENERATE ENERGY	-	ABSOLUTE VALUE	20 03 01	MIXED MUNICIPAL WASTE	NO
R12	EXCHANGE OF WASTES OBTAINED FROM ANY OF THE OPERATIONS NUMBERD R1 TO R11	-	ABSOLUTE VALUE	15 01 01	PAPER AND CARDBOARD PACKAGING	NO
R4	RECYCLING/RECLAMATION OF METALS AND METAL COMPOUNDS	-	ABSOLUTE VALUE	19 12 02	FERROUS METAL	NO
R3	RECYCLING/RECLAMATION OF ORGANIC SUBSTANCES WHICH ARE NOT USED AS SOLVENTS (INCLUDING COMPOSTING AND OTHER BIOLOGICAL TRANSFORMATION PROCESSES)	-	ABSOLUTE VALUE	20 01 38	WOOD OTHER THAN THAT MENTIONED IN 20 01 37	NO
D6	RELEASE INTO A WATER BODY EXCEPT SEAS/OCEANS	-	ABSOLUTE VALUE	02 03 04	MATERIALS UNSUITABLE FOR CONSUMPTION OR PROCESSING	NO
R9	OIL REFINING OR OTHER REUSES OF OIL	-	ABSOLUTE VALUE	13 02 05	MINERAL-BASED NON-CHLORINATED ENGINE, GEAR AND LUBRICATING OILS	YES

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

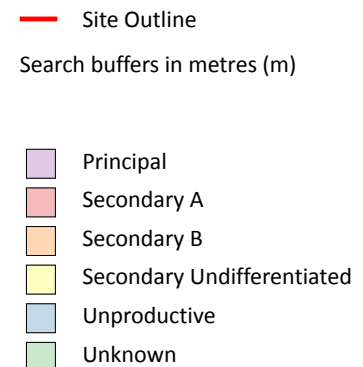
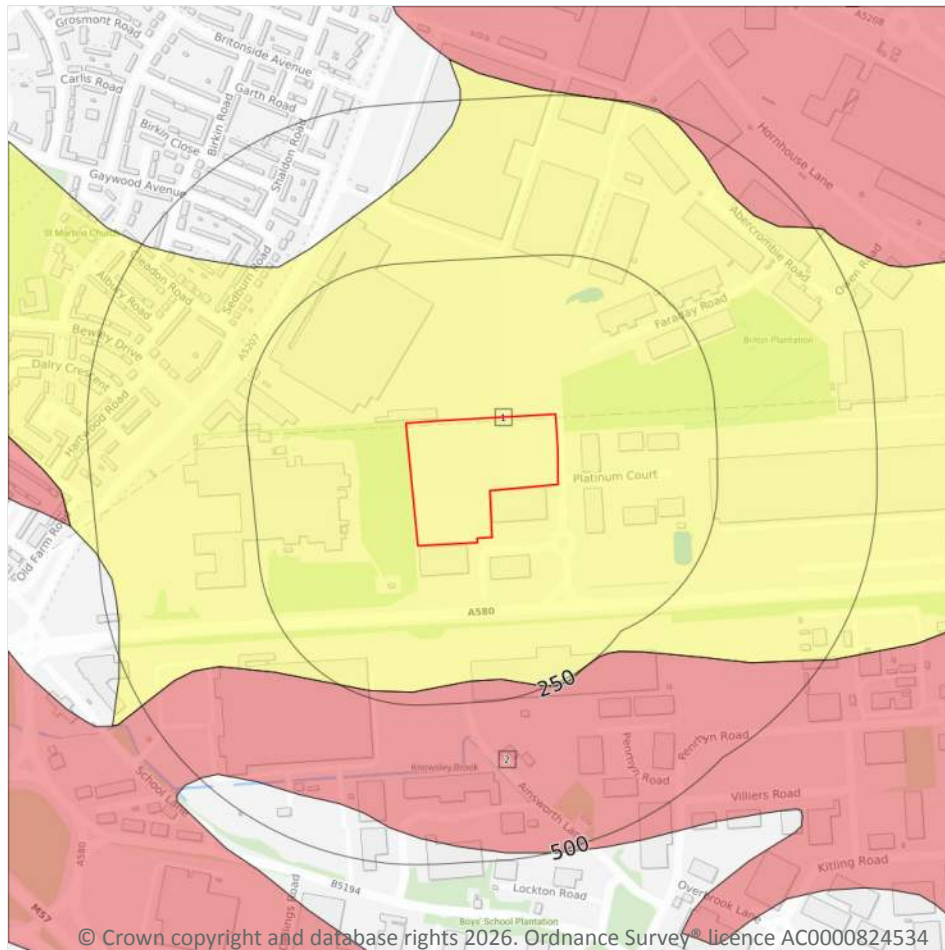
4.22 Pollution inventory radioactive waste

Records within 500m	0
----------------------------	----------

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m

2

Aquifer status of groundwater held within superficial geology.

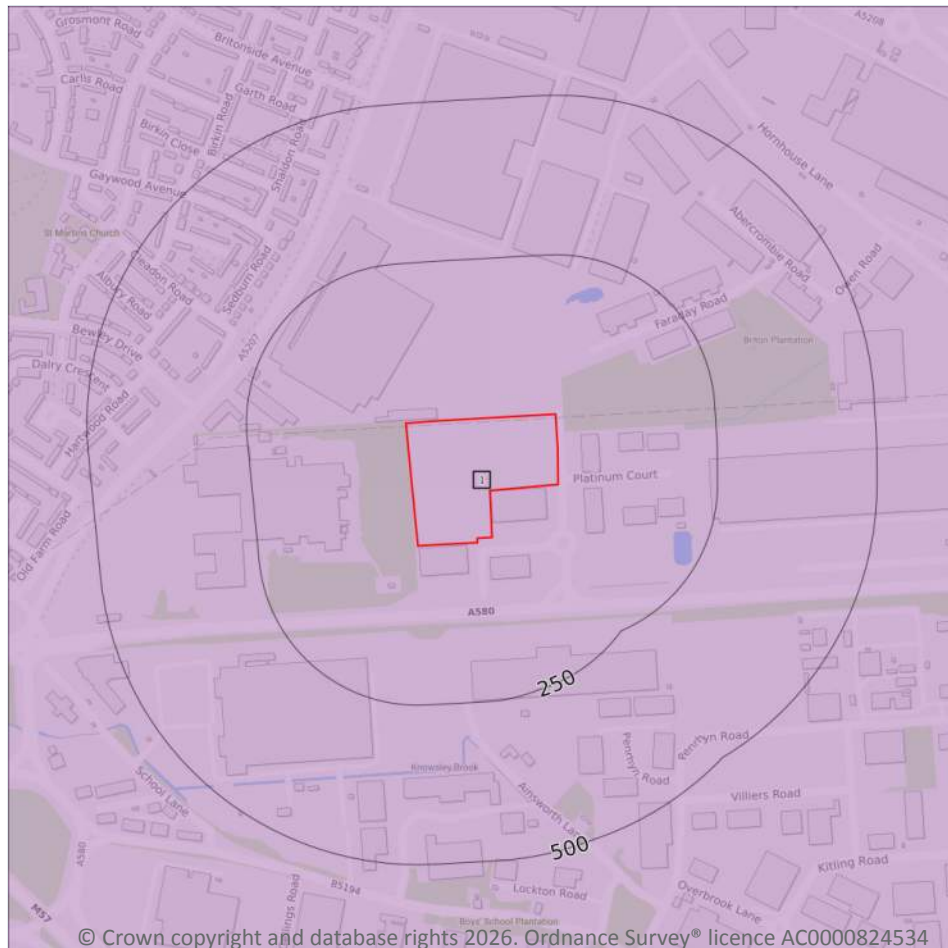
Features are displayed on the Hydrogeology map on [page 62](#) >

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	216m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

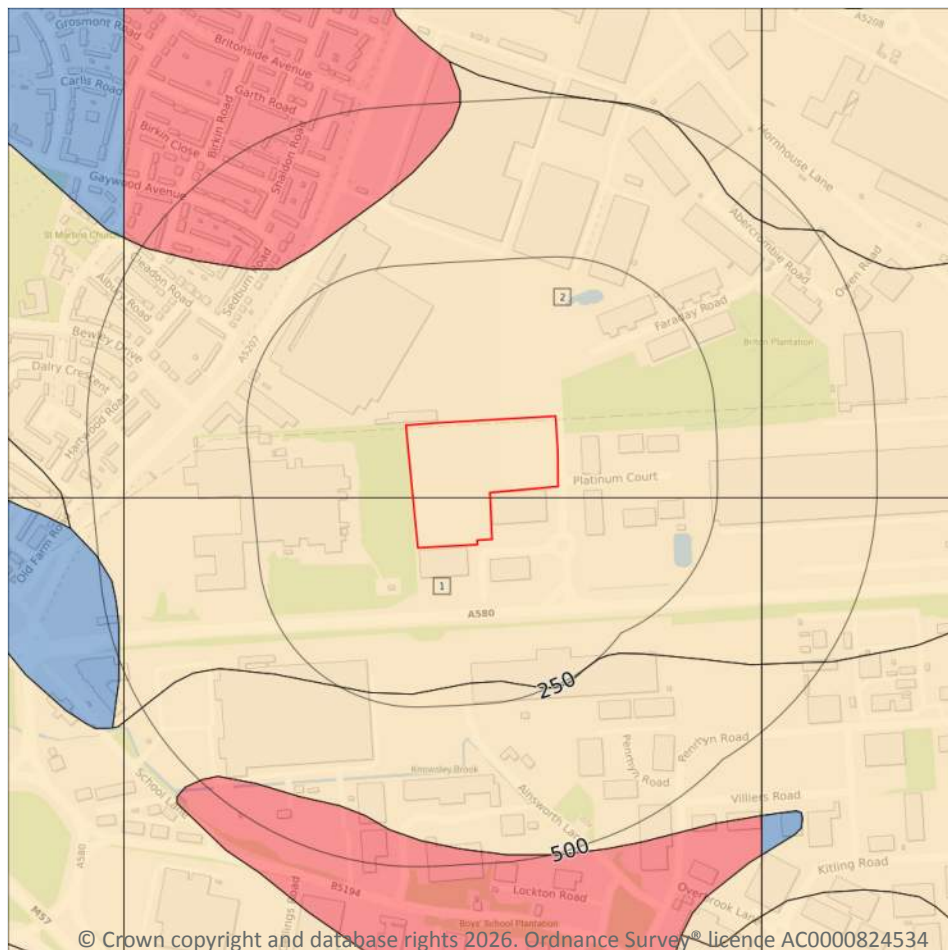
Features are displayed on the Bedrock aquifer map on [page 64](#) >

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Groundwater vulnerability



— Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m

2

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on [page 65](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Principal Flow mechanism: Mixed
2	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: Low	Vulnerability: High Aquifer type: Principal Flow mechanism: Mixed

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0
------------------------	----------

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

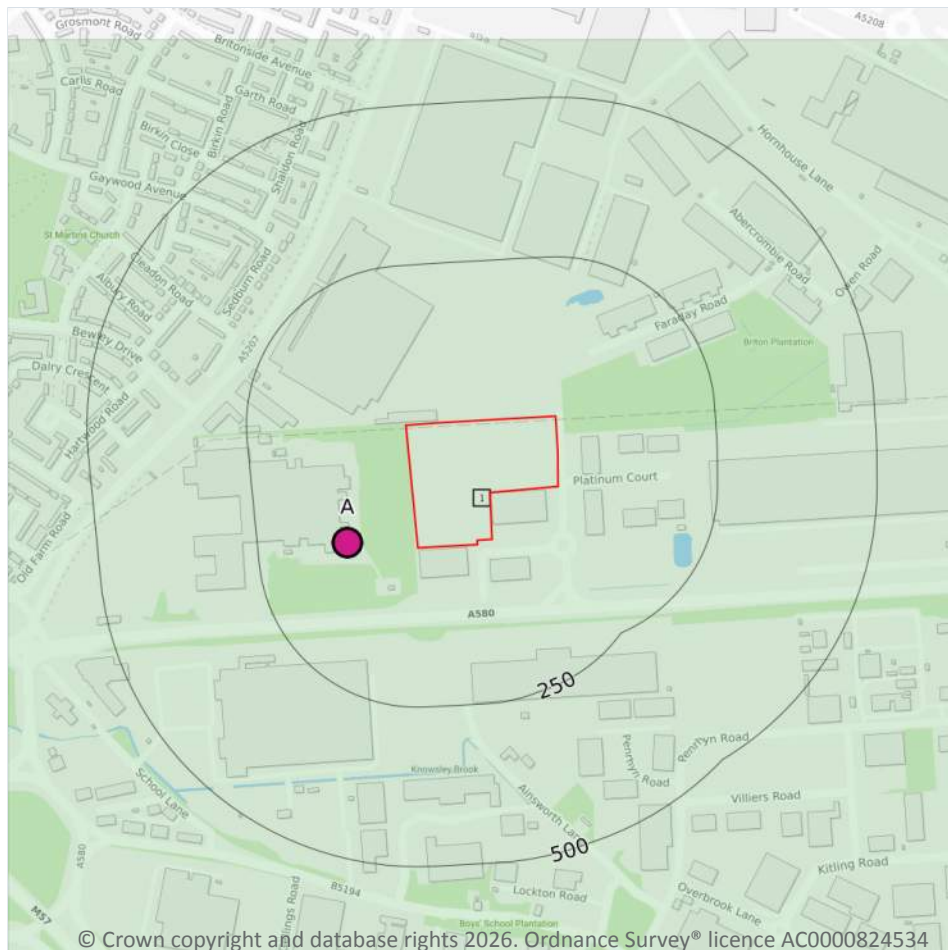
5.5 Groundwater vulnerability- local information

Records on site	0
------------------------	----------

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Point features
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

34

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 67 >](#)



ID	Location	Details	
A	109m W	Status: Historical Licence No: 2569031142 Details: Evaporative Cooling Direct Source: Ground Water - North West Region Point: LAND @ DAIRY CREST, KIRKBY Data Type: Point Name: DAIRY CREST LTD Easting: 342350 Northing: 396930	Annual Volume (m ³): 219000 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 11/08/2004 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 11/08/2004 Version End Date: -
A	109m W	Status: Historical Licence No: 2569031142 Details: Process Water Direct Source: Ground Water - North West Region Point: LAND @ DAIRY CREST, KIRKBY Data Type: Point Name: DAIRY CREST LTD Easting: 342350 Northing: 396930	Annual Volume (m ³): 219000 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 11/08/2004 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 11/08/2004 Version End Date: -
A	109m W	Status: Historical Licence No: 2569031142R01 Details: Evaporative Cooling Direct Source: Ground Water - North West Region Point: LAND @ DAIRY CREST, KIRKBY Data Type: Point Name: DAIRY CREST LTD Easting: 342350 Northing: 396930	Annual Volume (m ³): 219000 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 01/04/2015 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 13/06/2019 Version End Date: -
A	109m W	Status: Historical Licence No: 2569031142R01 Details: Process Water Direct Source: Ground Water - North West Region Point: LAND @ DAIRY CREST, KIRKBY Data Type: Point Name: DAIRY CREST LTD Easting: 342350 Northing: 396930	Annual Volume (m ³): 219000 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 01/04/2015 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 13/06/2019 Version End Date: -
-	1320m E	Status: Active Licence No: 2569031016 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: WELL BOREHOLE AND WELLS AND BOREHOLES X 2 AT KNOWSLEY Data Type: Point Name: United Utilities Water Ltd Easting: 344000 Northing: 397100	Annual Volume (m ³): 2074000 Max Daily Volume (m ³): 7500 Original Application No: NPS/WR/026423 Original Start Date: 16/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 26/11/2018 Version End Date: -



ID	Location	Details	
-	1320m E	Status: Historical Licence No: 2569031016 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: "WELL, BOREHOLE AND WELLS AND BOREHOLES (2) AT KNOWSLEY" Data Type: Point Name: UNITED UTILITIES WATER PLC Easting: 344000 Northing: 397100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 16/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/03/1966 Version End Date: -
-	1320m E	Status: Historical Licence No: 2569031016 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: WELL, BOREHOLE AND WELLS AND BOREHOLES (2) AT KNOWSLEY Data Type: Point Name: UNITED UTILITIES WATER PLC Easting: 344000 Northing: 397100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 16/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/03/1966 Version End Date: -
-	1452m N	Status: Historical Licence No: 2569031131 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: "BOREHOLE ""B"" AT KIRKBY" Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342460 Northing: 398570	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -
-	1452m N	Status: Historical Licence No: 2569031131 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE ""B"" AT KIRKBY" Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342460 Northing: 398570	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -



ID	Location	Details	
-	1452m N	Status: Historical Licence No: 2569031131 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE "B" AT KIRKBY Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342460 Northing: 398570	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -
-	1452m N	Status: Historical Licence No: 2569031131 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE "B" AT KIRKBY Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342460 Northing: 398570	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -
-	1452m N	Status: Historical Licence No: 2569031131 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE B AT KIRKBY Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342460 Northing: 398570	Annual Volume (m ³): 150000 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 28/09/1999 Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -
-	1452m N	Status: Historical Licence No: 2569031131 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE B AT KIRKBY Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342460 Northing: 398570	Annual Volume (m ³): 150000 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 28/09/1999 Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -
-	1463m N	Status: Historical Licence No: 2569031131 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE A AT KIRKBY Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342450 Northing: 398580	Annual Volume (m ³): 150000 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 28/09/1999 Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -



ID	Location	Details	
-	1463m N	Status: Historical Licence No: 2569031131 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE ""A""AT KIRKBY" Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342450 Northing: 398580	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -
-	1463m N	Status: Historical Licence No: 2569031131 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: "BOREHOLE ""A""AT KIRKBY" Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342450 Northing: 398580	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -
-	1463m N	Status: Historical Licence No: 2569031131 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE "A"AT KIRKBY Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342450 Northing: 398580	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -
-	1463m N	Status: Historical Licence No: 2569031131 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE "A"AT KIRKBY Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342450 Northing: 398580	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -
-	1463m N	Status: Historical Licence No: 2569031131 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE A AT KIRKBY Data Type: Point Name: LIVERPOOL FOOTBALL CLUB SOCCER ACADEMY Easting: 342450 Northing: 398580	Annual Volume (m ³): 150000 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 28/09/1999 Expiry Date: - Issue No: 1 Version Start Date: 28/09/1999 Version End Date: -



ID	Location	Details	
-	1493m N	Status: Active Licence No: 2569031131 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY Data Type: Point Name: Liverpool Football Club & Athletic Grounds Limited Easting: 342445 Northing: 398610	Annual Volume (m ³): 150000 Max Daily Volume (m ³): 792 Original Application No: NPS/WR/027992 Original Start Date: 28/09/1999 Expiry Date: - Issue No: 3 Version Start Date: 19/11/2019 Version End Date: -
-	1493m N	Status: Active Licence No: 2569031131 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY Data Type: Point Name: Liverpool Football Club & Athletic Grounds Limited Easting: 342445 Northing: 398610	Annual Volume (m ³): 150000 Max Daily Volume (m ³): 792 Original Application No: NPS/WR/027992 Original Start Date: 28/09/1999 Expiry Date: - Issue No: 3 Version Start Date: 19/11/2019 Version End Date: -
-	1493m N	Status: Historical Licence No: 2569031131 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY Data Type: Point Name: Liverpool Football Club & Athletic Grounds Limited Easting: 342445 Northing: 398610	Annual Volume (m ³): 150000 Max Daily Volume (m ³): 432 Original Application No: - Original Start Date: 28/09/1999 Expiry Date: - Issue No: 2 Version Start Date: 23/10/2014 Version End Date: -
-	1493m N	Status: Historical Licence No: 2569031131 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY Data Type: Point Name: Liverpool Football Club & Athletic Grounds Limited Easting: 342445 Northing: 398610	Annual Volume (m ³): 150000 Max Daily Volume (m ³): 792 Original Application No: - Original Start Date: 28/09/1999 Expiry Date: - Issue No: 3 Version Start Date: 19/11/2019 Version End Date: -



ID	Location	Details	
-	1493m N	Status: Historical Licence No: 2569031131 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY Data Type: Point Name: Liverpool Football Club & Athletic Grounds Limited Easting: 342445 Northing: 398610	Annual Volume (m ³): 150000 Max Daily Volume (m ³): 792 Original Application No: - Original Start Date: 28/09/1999 Expiry Date: - Issue No: 3 Version Start Date: 19/11/2019 Version End Date: -
-	1593m W	Status: Active Licence No: 2569031024 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: B/HOLES, WELLS,ADITS & HEADINGS AT KNOWSLEY RANGLES BRIDGE Data Type: Point Name: United Utilities Water Ltd Easting: 340900 Northing: 396600	Annual Volume (m ³): 2905000 Max Daily Volume (m ³): 9092.18 Original Application No: NPS/WR/026426 Original Start Date: 02/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 26/11/2018 Version End Date: -
-	1593m W	Status: Historical Licence No: 2569031024 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: B/HOLES, WELLS,ADITS & HEADINGS@KNOWSLEY RANGLES BRIDGE215 Data Type: Point Name: NORTH WEST WATER LTD Easting: 340900 Northing: 396600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/02/1995 Version End Date: -
-	1593m W	Status: Historical Licence No: 2569031024 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: "B/HOLES, WELLS,ADITS & HEADINGS@KNOWSLEY RANGLES BRIDGE \$215" Data Type: Point Name: UNITED UTILITIES WATER PLC Easting: 340900 Northing: 396600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/02/1995 Version End Date: -

ID	Location	Details	
-	1593m W	Status: Historical Licence No: 2569031024 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: B/HOLES, WELLS, ADITS & HEADINGS@KNOWSLEY RANGLES BRIDGE \$215 Data Type: Point Name: UNITED UTILITIES WATER PLC Easting: 340900 Northing: 396600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/02/1995 Version End Date: -
-	1731m NE	Status: Active Licence No: 2569031090 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY INDUSTRIAL ESTATE Data Type: Point Name: Baker Hughes Limited Easting: 343400 Northing: 398700	Annual Volume (m ³): 250030 Max Daily Volume (m ³): 818.28 Original Application No: NPS/WR/006045 Original Start Date: 01/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -
-	1731m NE	Status: Active Licence No: 2569031090 Details: Boiler Feed Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY INDUSTRIAL ESTATE Data Type: Point Name: Baker Hughes Limited Easting: 343400 Northing: 398700	Annual Volume (m ³): 250030 Max Daily Volume (m ³): 818.28 Original Application No: NPS/WR/006045 Original Start Date: 01/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -
-	1731m NE	Status: Active Licence No: 2569031090 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY INDUSTRIAL ESTATE Data Type: Point Name: Baker Hughes Limited Easting: 343400 Northing: 398700	Annual Volume (m ³): 250030 Max Daily Volume (m ³): 818.28 Original Application No: NPS/WR/006045 Original Start Date: 01/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -
-	1731m NE	Status: Historical Licence No: 2569031090 Details: Boiler Feed Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY INDUSTRIAL ESTATE Data Type: Point Name: Baker Hughes Limited Easting: 343400 Northing: 398700	Annual Volume (m ³): 250030 Max Daily Volume (m ³): 818.28 Original Application No: NPS/WR/006045 Original Start Date: 20/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -



ID	Location	Details	
-	1731m NE	Status: Historical Licence No: 2569031090 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY INDUSTRIAL ESTATE Data Type: Point Name: Baker Hughes Limited Easting: 343400 Northing: 398700	Annual Volume (m ³): 250030 Max Daily Volume (m ³): 818.28 Original Application No: NPS/WR/006045 Original Start Date: 20/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -
-	1731m NE	Status: Historical Licence No: 2569031090 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY INDUSTRIAL ESTATE Data Type: Point Name: Baker Hughes Limited Easting: 343400 Northing: 398700	Annual Volume (m ³): 250030 Max Daily Volume (m ³): 818.28 Original Application No: NPS/WR/006045 Original Start Date: 20/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m

0

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m

9

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 67](#) >



ID	Location	Details	
-	1320m E	Status: Active Licence No: 2569031016 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: WELL BOREHOLE AND WELLS AND BOREHOLES X 2 AT KNOWSLEY Data Type: Point Name: United Utilities Water Ltd Easting: 344000 Northing: 397100	Annual Volume (m ³): 2074000 Max Daily Volume (m ³): 7500 Original Application No: NPS/WR/026423 Original Start Date: 16/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 26/11/2018 Version End Date: -
-	1320m E	Status: Historical Licence No: 2569031016 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: "WELL, BOREHOLE AND WELLS AND BOREHOLES (2) AT KNOWSLEY" Data Type: Point Name: UNITED UTILITIES WATER PLC Easting: 344000 Northing: 397100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 16/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/03/1966 Version End Date: -
-	1320m E	Status: Historical Licence No: 2569031016 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: WELL, BOREHOLE AND WELLS AND BOREHOLES (2) AT KNOWSLEY Data Type: Point Name: UNITED UTILITIES WATER PLC Easting: 344000 Northing: 397100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 16/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/03/1966 Version End Date: -
-	1593m W	Status: Active Licence No: 2569031024 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: B/HOLES, WELLS,ADITS & HEADINGS AT KNOWSLEY RANGLES BRIDGE Data Type: Point Name: United Utilities Water Ltd Easting: 340900 Northing: 396600	Annual Volume (m ³): 2905000 Max Daily Volume (m ³): 9092.18 Original Application No: NPS/WR/026426 Original Start Date: 02/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 26/11/2018 Version End Date: -



ID	Location	Details	
-	1593m W	Status: Historical Licence No: 2569031024 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: B/HOLES, WELLS,ADITS & HEADINGS@KNOWSLEY RANGLES BRIDGE215 Data Type: Point Name: NORTH WEST WATER LTD Easting: 340900 Northing: 396600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/02/1995 Version End Date: -
-	1593m W	Status: Historical Licence No: 2569031024 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: "B/HOLES, WELLS,ADITS & HEADINGS@KNOWSLEY RANGLES BRIDGE \$215" Data Type: Point Name: UNITED UTILITIES WATER PLC Easting: 340900 Northing: 396600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/02/1995 Version End Date: -
-	1593m W	Status: Historical Licence No: 2569031024 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: B/HOLES, WELLS,ADITS & HEADINGS@KNOWSLEY RANGLES BRIDGE \$215 Data Type: Point Name: UNITED UTILITIES WATER PLC Easting: 340900 Northing: 396600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/02/1995 Version End Date: -
-	1731m NE	Status: Active Licence No: 2569031090 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY INDUSTRIAL ESTATE Data Type: Point Name: Baker Hughes Limited Easting: 343400 Northing: 398700	Annual Volume (m ³): 250030 Max Daily Volume (m ³): 818.28 Original Application No: NPS/WR/006045 Original Start Date: 01/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -



ID	Location	Details	
-	1731m NE	Status: Historical Licence No: 2569031090 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT KIRKBY INDUSTRIAL ESTATE Data Type: Point Name: Baker Hughes Limited Easting: 343400 Northing: 398700	Annual Volume (m ³): 250030 Max Daily Volume (m ³): 818.28 Original Application No: NPS/WR/006045 Original Start Date: 20/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m	1
----------------------------	----------

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination. Features are displayed on the Abstractions and Source Protection Zones map on [page 67 >](#)

ID	Location	Type	Description
1	On site	3	Total catchment

This data is sourced from the Environment Agency and Natural Resources Wales.

5.10 Source Protection Zones (confined aquifer)

Records within 500m	0
----------------------------	----------

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS NGD)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS NGD)

Records within 250m

3

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on [page 79 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
2	12m E	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
B	169m S	Drain. A manmade watercourse for the removal of excess water from an area.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	199m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey®.

6.2 Surface water features

Records within 250m

4

Covering rivers, streams and lakes (some overlap with OS NGD Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on [page 79 >](#)

This data is sourced from the Ordnance Survey®.

6.3 WFD Surface water body catchments

Records on site

1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on [page 79 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Croxteth/Knowsley Brook	GB112069060610	Alt	Alt and Crossens

This data is sourced from the Environment Agency and Natural Resources Wales.



6.4 WFD Surface water bodies

Records identified	1
---------------------------	----------

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on [page 79 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
7	299m SE	River	Croxteth/Knowsley Brook	GB112069060610 ↗	No longer applicable	Does not require assessment		2022

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	1
------------------------	----------

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on [page 79 >](#)

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Lower Mersey Basin and North Merseyside Permo-Triassic Sandstone Aquifers	GB41201G101700 ↗	Poor	Poor	Poor	2019

This data is sourced from the Environment Agency and Natural Resources Wales.



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m

0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m

0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

Records within 250m

0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m

0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.



8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site

1 in 30 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.3m - 1.0m

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on [page 85 >](#)

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

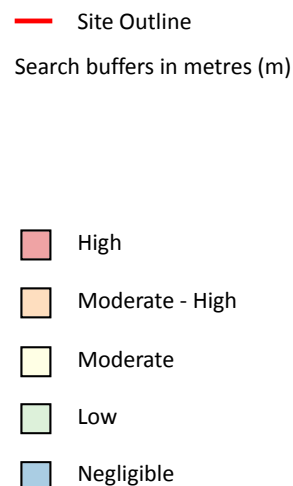
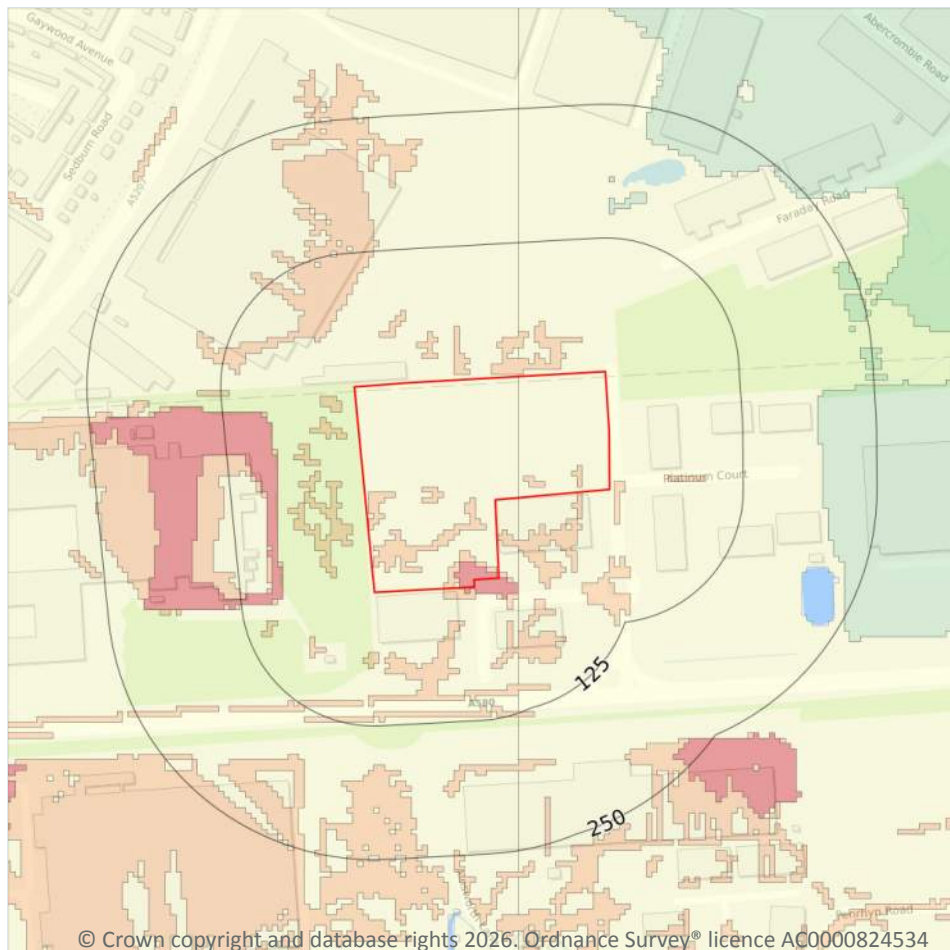
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.1m and 0.3m

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

High

Highest risk within 50m

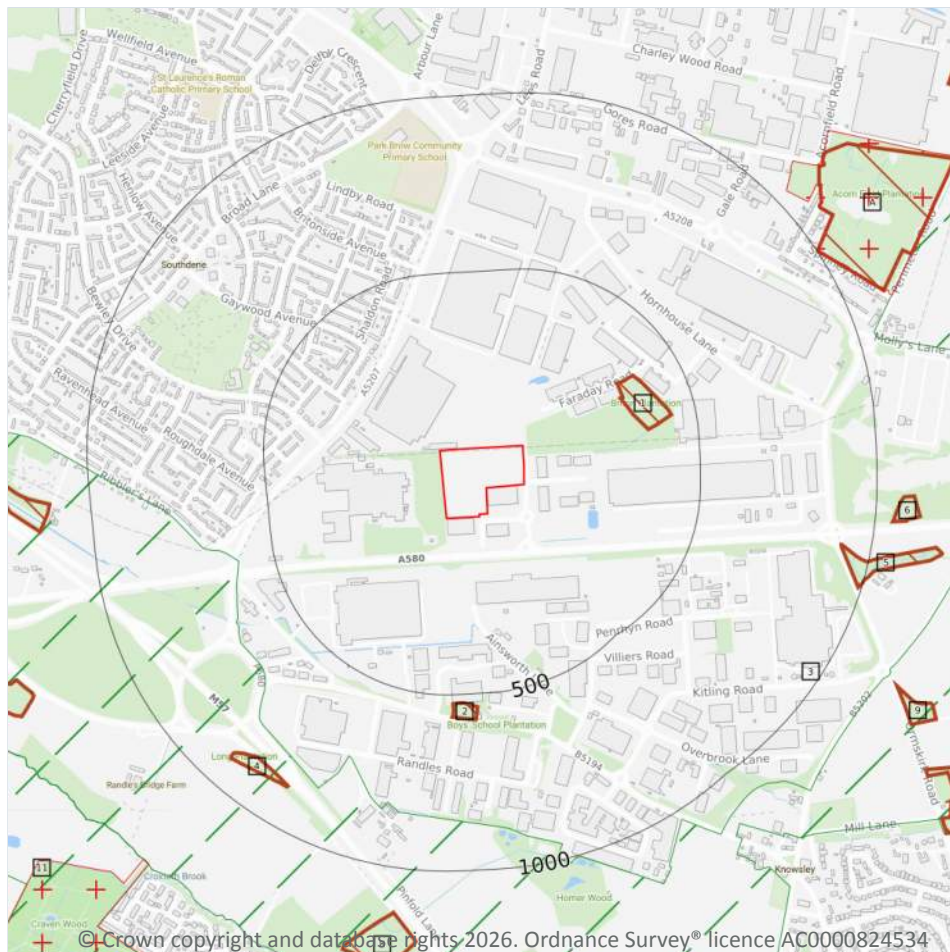
High

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on [page 87](#) >

This data is sourced from Ambient Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- + Local Nature Reserves (LNR)
- ▨ Designated Ancient Woodland
- - - Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m**0**

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m**0**

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m**0**

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m**0**

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m

2

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

Features are displayed on the Environmental designations map on [page 88 >](#)

ID	Location	Name	Data source
A	1003m NE	Acornfield Plantation	Natural England
12	1292m SW	Croxteth	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m

24

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on [page 88 >](#)

ID	Location	Name	Woodland Type
1	308m NE	Britain Plantation	Ancient & Semi-Natural Woodland
2	525m S	Woodland By School Lane	Ancient & Semi-Natural Woodland
4	863m SW	Long Plantation	Ancient & Semi-Natural Woodland
5	915m E	Goorings Plantation	Ancient & Semi-Natural Woodland
A	1003m NE	Acorn Field Plantation	Ancient Replanted Woodland
6	1050m E	Hewitt's Pits	Ancient & Semi-Natural Woodland
7	1115m W	Willow Bed Wood 2	Ancient & Semi-Natural Woodland
8	1127m S	Howard's Pits	Ancient & Semi-Natural Woodland
9	1201m SE	Deer Bolt	Ancient Replanted Woodland
10	1273m SW	Knowsley Wood	Ancient & Semi-Natural Woodland
-	1386m W	Willow Bed Wood 1	Ancient & Semi-Natural Woodland



ID	Location	Name	Woodland Type
14	1396m SE	Moss Plantation	Ancient Replanted Woodland
B	1516m SE	Moss Plantation	Ancient & Semi-Natural Woodland
-	1582m S	Meakin's Pits West	Ancient & Semi-Natural Woodland
16	1584m NE	Charley Wood 2	Ancient & Semi-Natural Woodland
-	1606m SE	Woodland By Pinfold Lane 1	Ancient & Semi-Natural Woodland
-	1612m SE	Moss Plantation	Ancient Replanted Woodland
-	1648m SE	Woodland By Pinfold Lane 2	Ancient & Semi-Natural Woodland
-	1683m NE	Charley Wood 1	Ancient & Semi-Natural Woodland
-	1771m S	Meakin's Pits 1	Ancient & Semi-Natural Woodland
-	1781m SE	Mill Plantation	Infilled Ancient Wood Pasture
-	1924m SE	New Fir Plantation	Ancient Replanted Woodland
-	1936m SE	Syder Grove	Ancient & Semi-Natural Woodland
-	1966m N	Old Rough	Ancient Wood Pasture

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m

0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m

0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.



10.10 Marine Conservation Zones

Records within 2000m

0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m

3

Areas designated to prevent urban sprawl by keeping land permanently open.

Features are displayed on the Environmental designations map on [page 88](#) >

ID	Location	Name	Local Authority name
3	601m W	Merseyside and Greater Manchester Green Belt	Knowsley
11	1290m SW	Merseyside and Greater Manchester Green Belt	Liverpool
-	1847m S	Merseyside and Greater Manchester Green Belt	Liverpool

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m

0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.



10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

4

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	ALT NVZ	Surface Water	642	Existing
939m S	ALT NVZ	Surface Water	642	Existing
1411m E	ALT NVZ	Surface Water	642	Existing
1751m SE	ALT NVZ	Surface Water	642	Existing

This data is sourced from Natural England and Natural Resources Wales.



SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- ▨ SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on [page 94](#) >

ID	Location	Type of developments requiring consultation
1	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0000000000000&notes=&location=417554,424273%20(IRZ%20polygon%20centre)

This data is sourced from Natural England.



10.18 SSSI Units

Records within 2000m

0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.



11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m

0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.



This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m

0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m

0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m

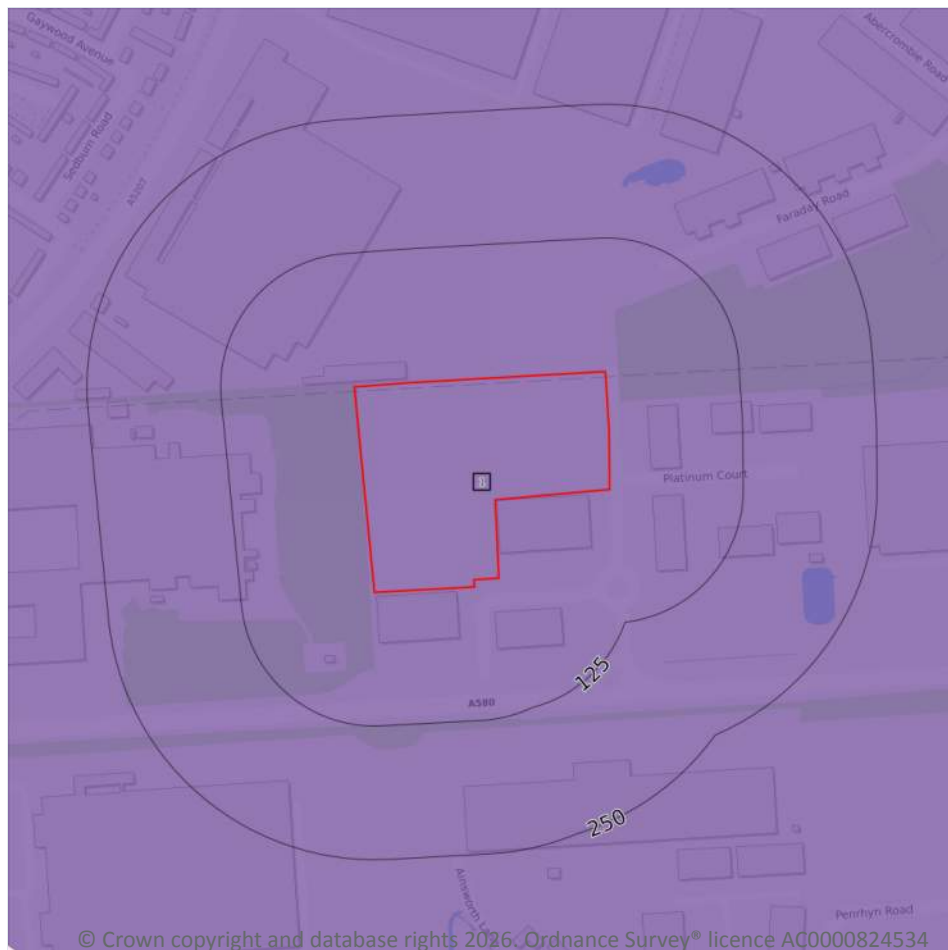
0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.



12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m

1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on [page 98](#) >

ID	Location	Classification	Description
1	On site	Urban	Non-agricultural/no quality assigned

This data is sourced from Natural England.



12.2 Open Access Land

Records within 250m

0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m

0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

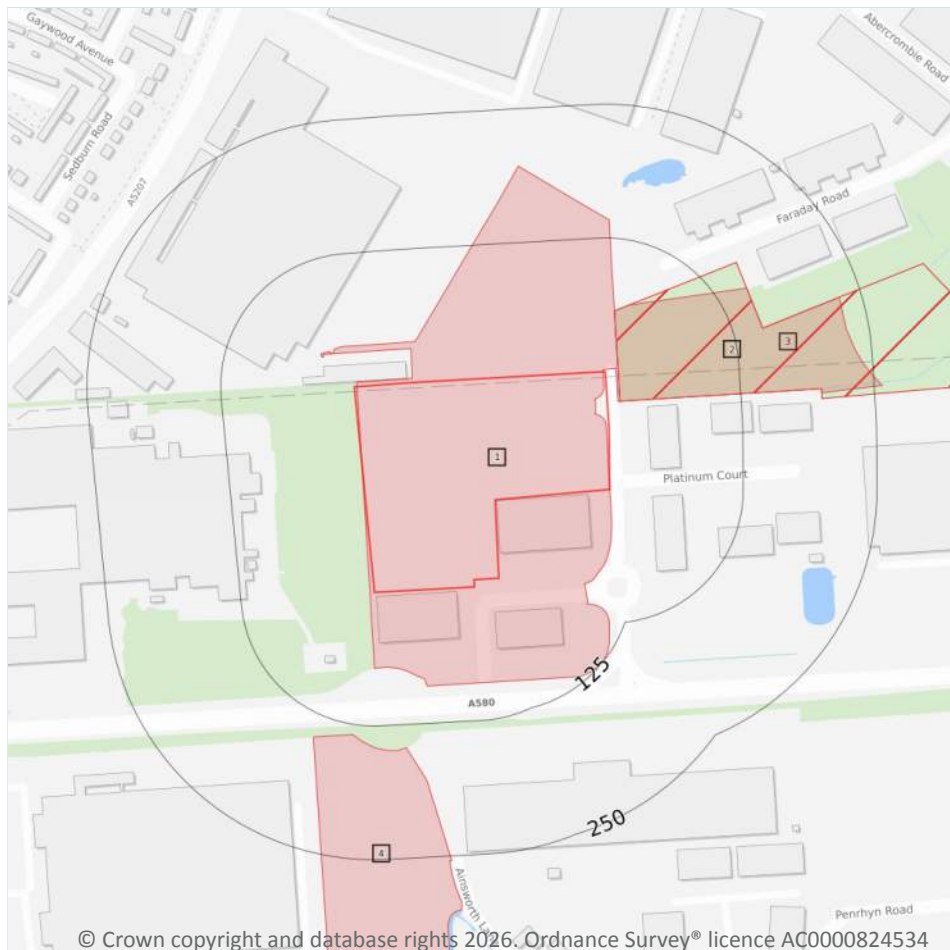
0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.



13 Habitat designations



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m

3

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on [page 100](#) >

ID	Location	Main Habitat	Other habitats
1	On site	Good quality semi-improved grassland	Main habitat: GQSIG (INV > 50%)
2	12m E	Good quality semi-improved grassland	Main habitat: GQSIG (INV > 50%)
4	135m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.



13.2 Habitat Networks

Records within 250m

0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

1

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

Features are displayed on the Habitat designations map on [page 100 >](#)

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
3	12m E	NLUD Ref: 430500230	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

1

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

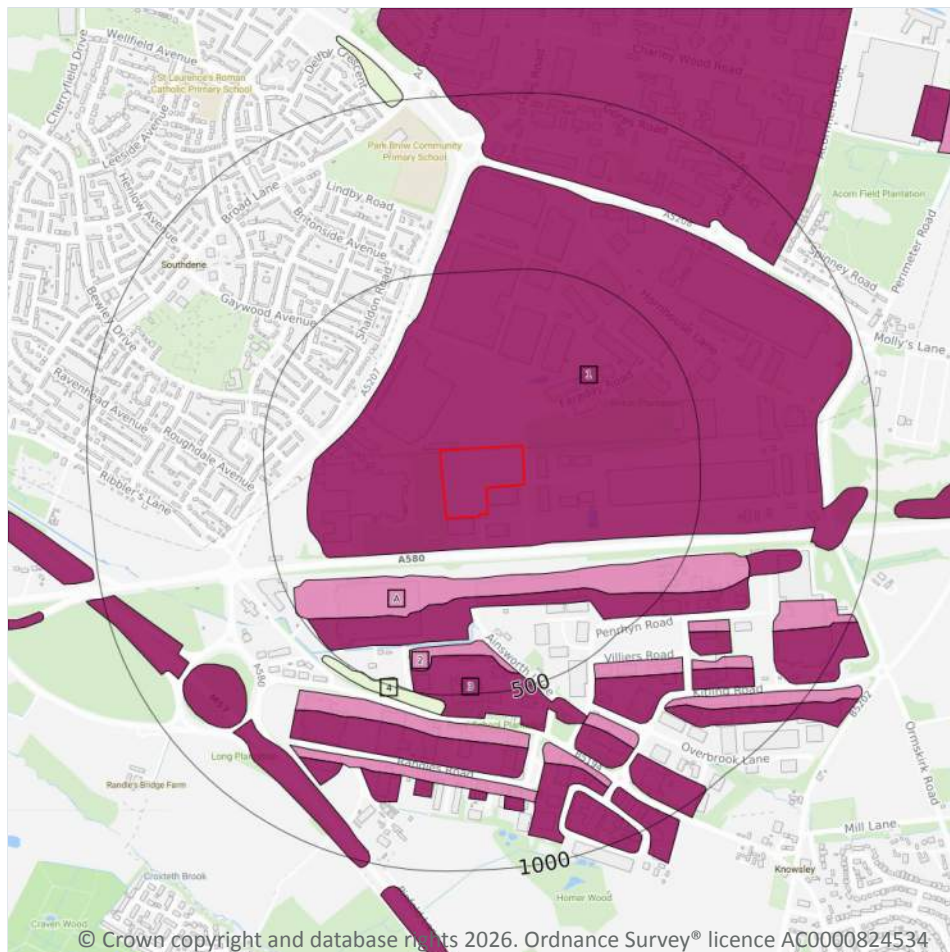
Features are displayed on the Geology 1:10,000 scale - Availability map on [page 102](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SJ49NW

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Artificial and made ground



- Site Outline**
- Search buffers in metres (m)**
- Reclaimed ground
 - Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m

6

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on [page 103](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
A	166m S	WGR-VOID	Worked Ground (Undivided)	Void
A	227m S	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
2	351m S	WGR-VOID	Worked Ground (Undivided)	Void

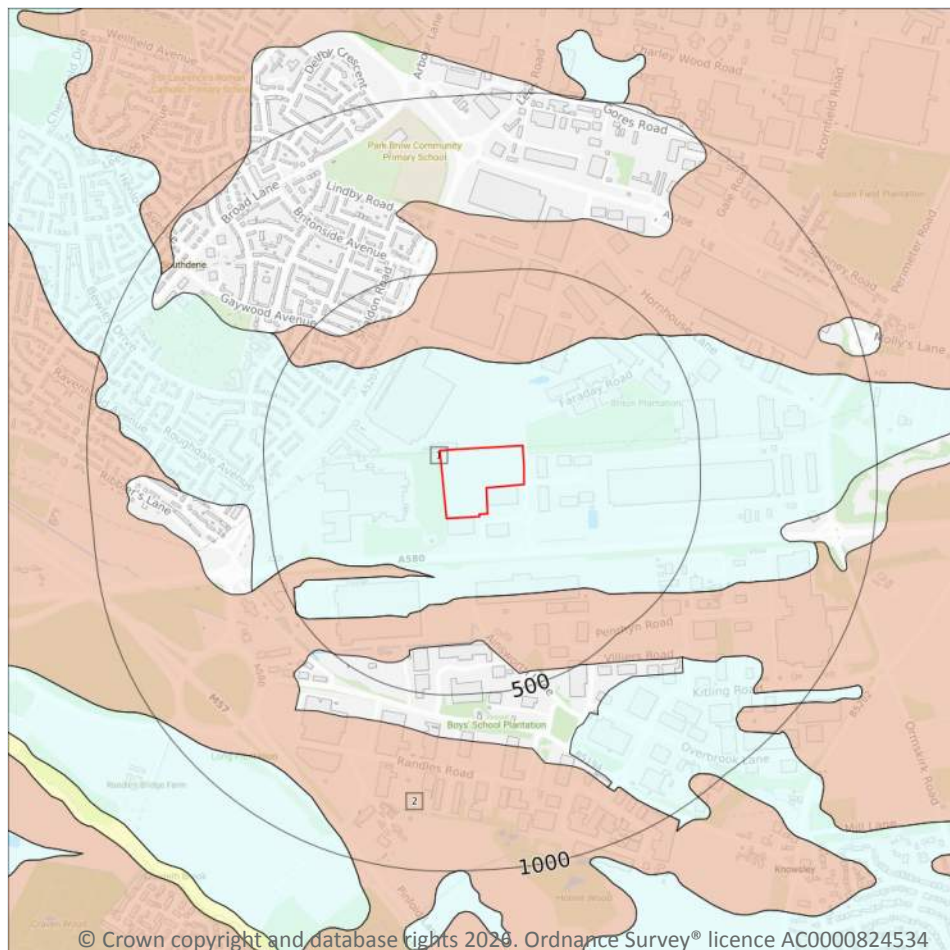


ID	Location	LEX Code	Description	Rock description
3	389m S	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
4	475m S	WMGR-ARTDP	Infilled Ground	Artificial deposit

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
- Landslip (10k)
- Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m

2

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on [page 105](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	Till, Devensian-Diamicton	Diamicton
2	170m S	SSA-S	Shirdley Hill Sand Formation-Sand	Sand

This data is sourced from the British Geological Survey.



14.4 Landslip (10k)

Records within 500m

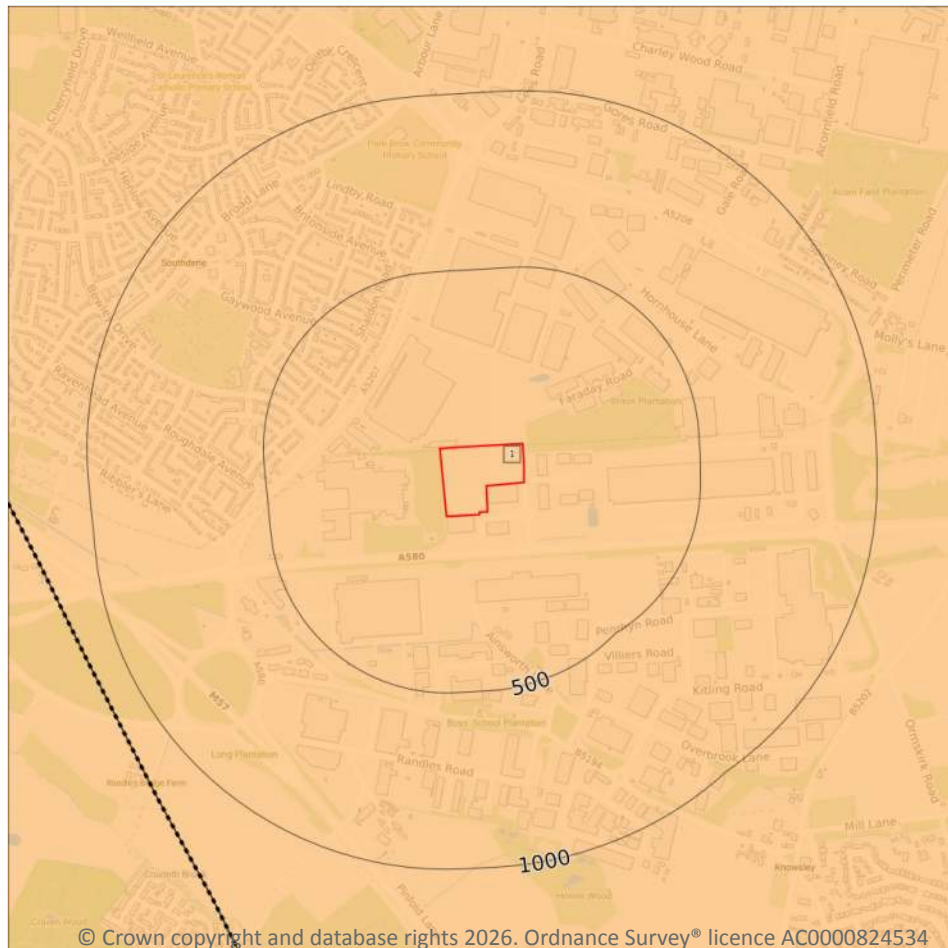
0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m

1

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 107 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	CHES-PESST	Chester Formation-Pebbly (Gravelly) Sandstone	Olenekian

This data is sourced from the British Geological Survey.



14.6 Bedrock faults and other linear features (10k)

Records within 500m

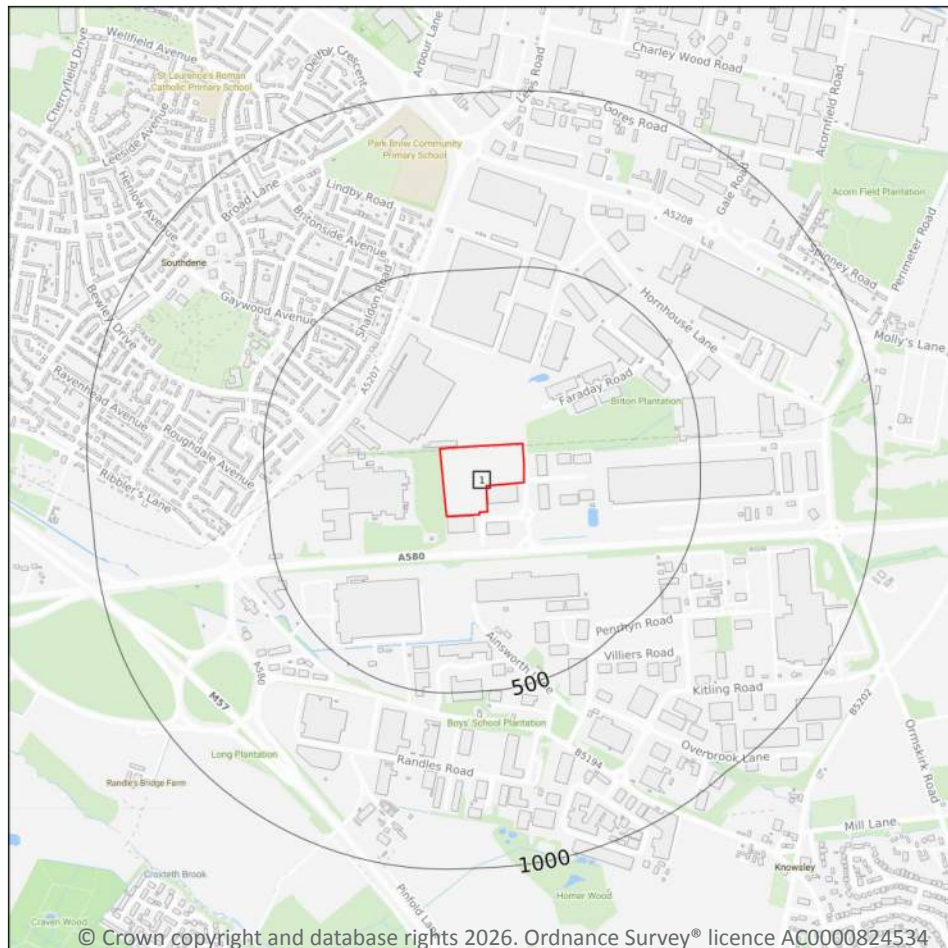
0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline
Search buffers in metres (m)

☐ Geological map tile

15.1 50k Availability

Records within 500m

1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

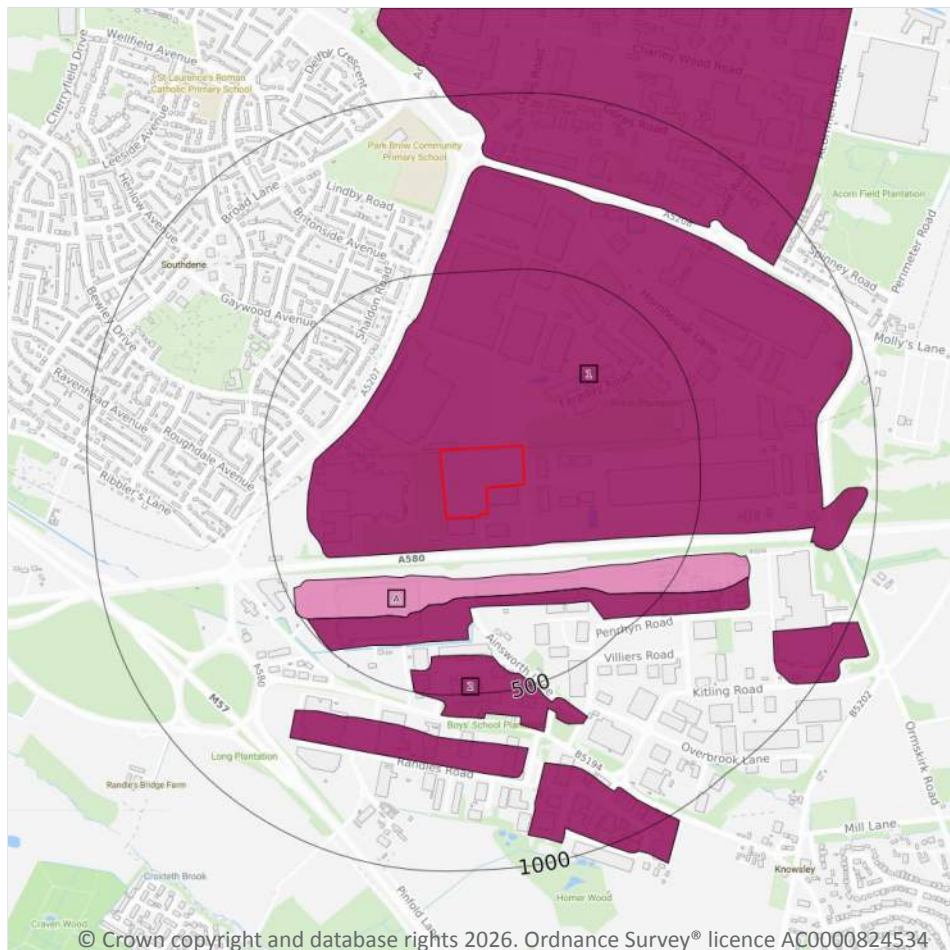
Features are displayed on the Geology 1:50,000 scale - Availability map on [page 109](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW084_wigan_v4

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Artificial and made ground



- Site Outline**
- Search buffers in metres (m)**
- Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m

4

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on [page 110](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	Made Ground	Artificial deposit
A	166m S	WGR-VOID	Worked Ground	Void
A	227m S	MGR-ARTDP	Made Ground	Artificial deposit
2	389m S	MGR-ARTDP	Made Ground	Artificial deposit



This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

1

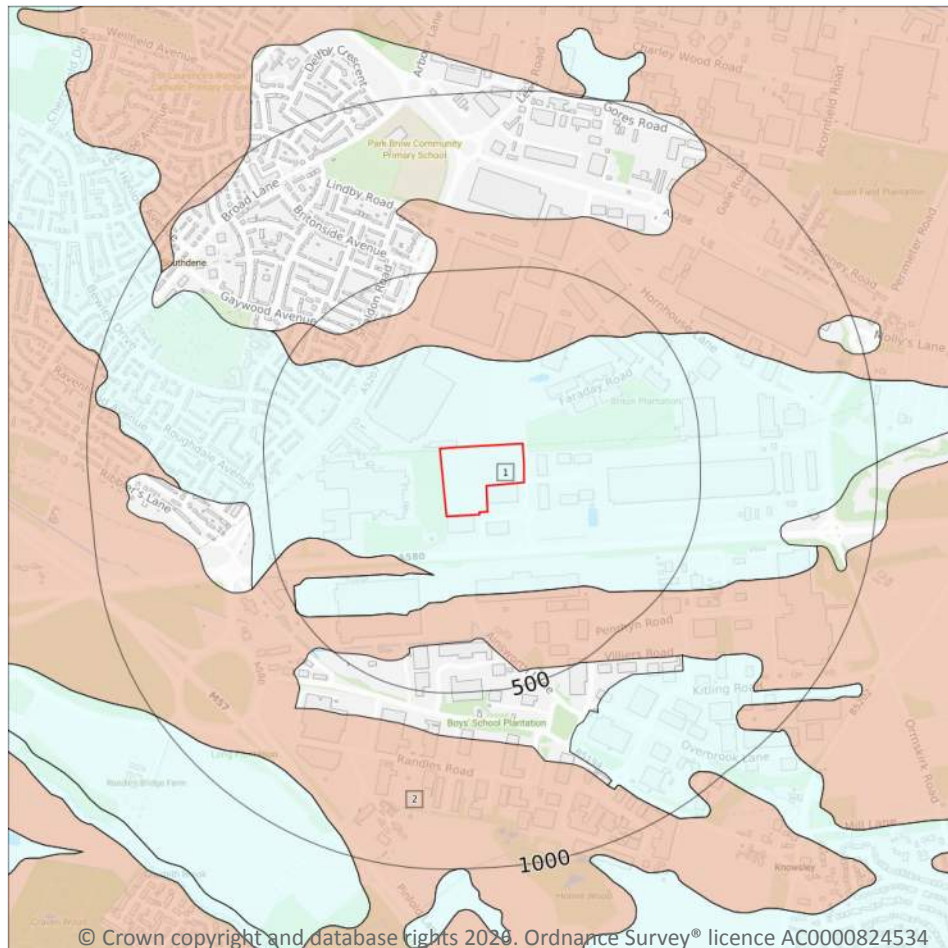
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Very High	Low

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

2

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on [page 112](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	Till, Devensian	Diamicton
2	166m SW	SSA-S	Shirdley Hill Sand Formation	Sand

This data is sourced from the British Geological Survey.



15.5 Superficial permeability (50k)

Records within 50m**1**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m**0**

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

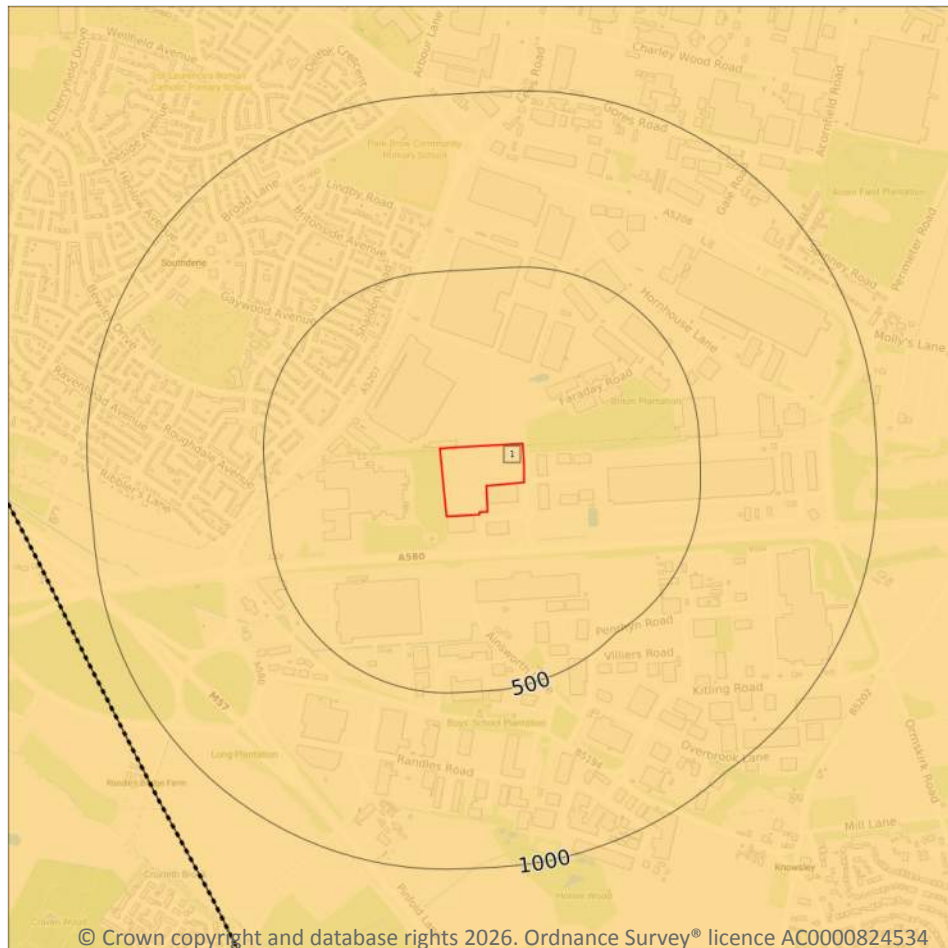
Records within 50m**0**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

1

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 114](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	CHES-SDST	Chester Formation-Sandstone	Olenekian

This data is sourced from the British Geological Survey.



15.9 Bedrock permeability (50k)

Records within 50m**1**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Moderate

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

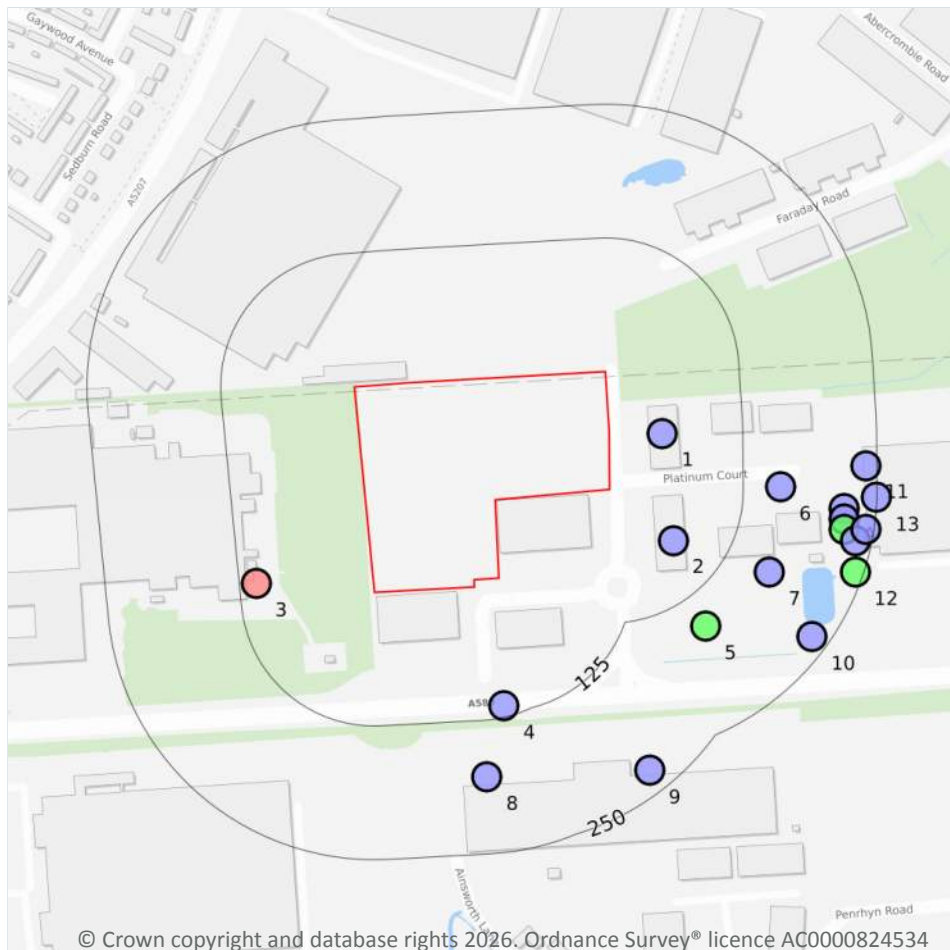
Records within 500m**0**

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

18

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on [page 116](#) >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	50m E	342730 397070	LANGTREE DEVELOPMENT KNOWSLEY 1	6.0	N	17561913 ↗
2	76m SE	342740 396970	LANGTREE DEVELOPMENT KNOWSLEY 3	6.5	N	17561915 ↗

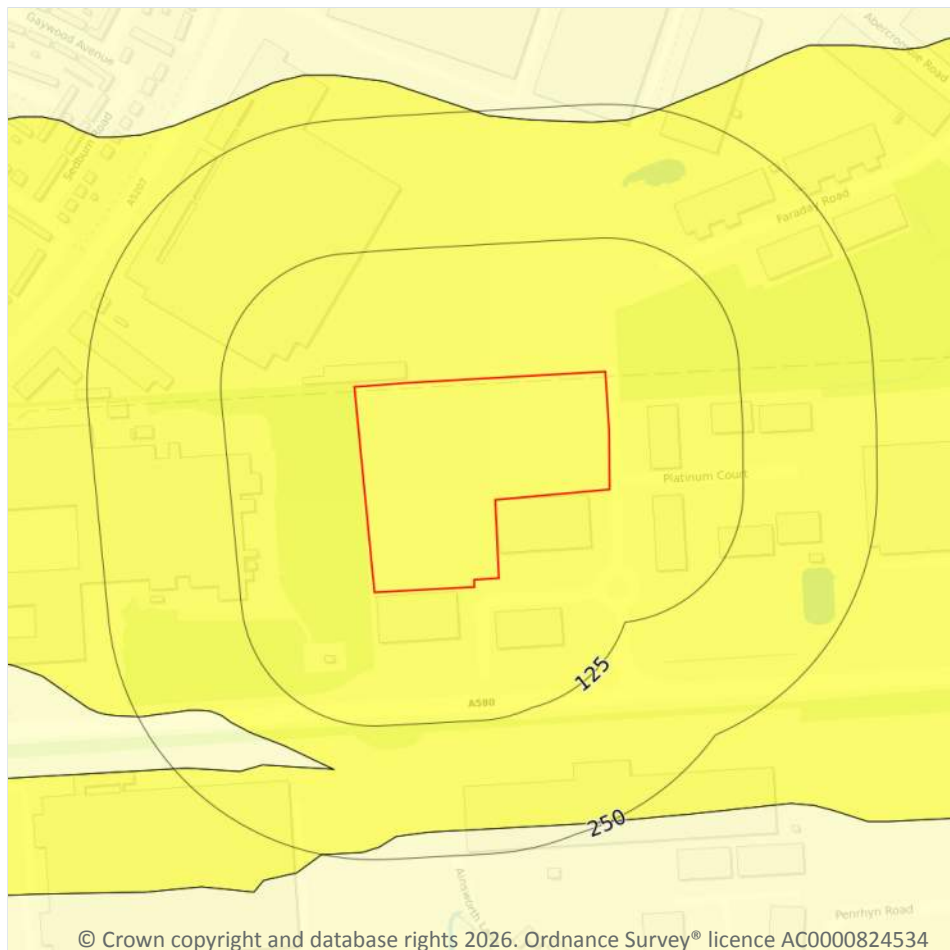


ID	Location	Grid reference	Name	Length	Confidential	Web link
3	109m W	342350 396930	DAIRY CREST, MOORGATE ROAD, KIRKBY	80.0	N	13208438 ↗
4	115m S	342582 396815	LIVERPOOL CORP. SHALLOW BORES	3.2	N	164968 ↗
5	156m SE	342770 396890	LANGTREE DEVELOPMENT KNOWSLEY 5	10.5	N	17561917 ↗
6	160m E	342840 397020	LANGTREE DEVELOPMENT KNOWSLEY 2	5.8	N	17561914 ↗
7	168m SE	342830 396940	LANGTREE DEVELOPMENT KNOWSLEY 4	5.0	N	17561916 ↗
8	178m S	342566 396749	KNOWSLEY IND ESTATE 1	6.1	N	165096 ↗
A	220m E	342900 397000	YORKSHIRE COPPER TUBE LTD PHASE IIC SITE INVESTIGATION 309	7.6	N	17561981 ↗
A	221m E	342900 396990	YORKSHIRE COPPER TUBE LTD PHASE IIC SITE INVESTIGATION 310	8.1	N	17561987 ↗
A	223m E	342900 396980	YORKSHIRE COPPER TUBE LTD PHASE IIB CONTAMINATION ASSESSMENT 206	18.0	N	17561970 ↗
9	228m SE	342718 396755	KNOWSLEY IND ESTATE 2	4.57	N	165097 ↗
10	234m SE	342870 396880	YORKSHIRE COPPER TUBE LTD PHASE II INVESTIGATION 101	6.2	N	17561950 ↗
A	234m E	342910 396970	YORKSHIRE COPPER TUBE LTD PHASE II INVESTIGATION 102	6.0	N	17561951 ↗
11	240m E	342920 397040	YORKSHIRE COPPER TUBE LTD PHASE IIC SITE INVESTIGATION 304	7.6	N	17561976 ↗
12	242m E	342910 396940	YORKSHIRE COPPER TUBE LTD PHASE IIB CONTAMINATION ASSESSMENT 204	14.5	N	17561968 ↗
A	242m E	342920 396980	YORKSHIRE COPPER TUBE LTD PHASE IIB CONTAMINATION ASSESSMENT 201	5.0	N	17561963 ↗
13	250m E	342930 397010	YORKSHIRE COPPER TUBE LTD REMEDIAL TRIALS MW311	5.1	N	17561988 ↗

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.1 Shrink swell clays

Records within 50m

1

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

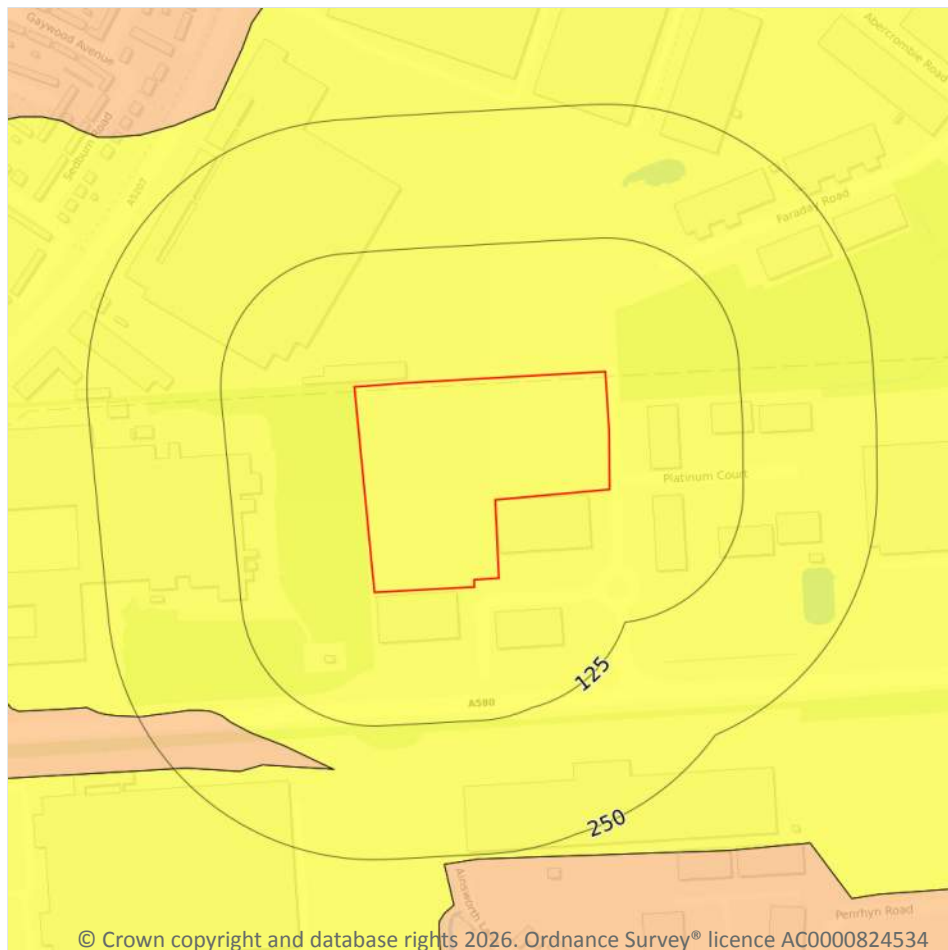
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 118](#) >

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.2 Running sands

Records within 50m

1

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

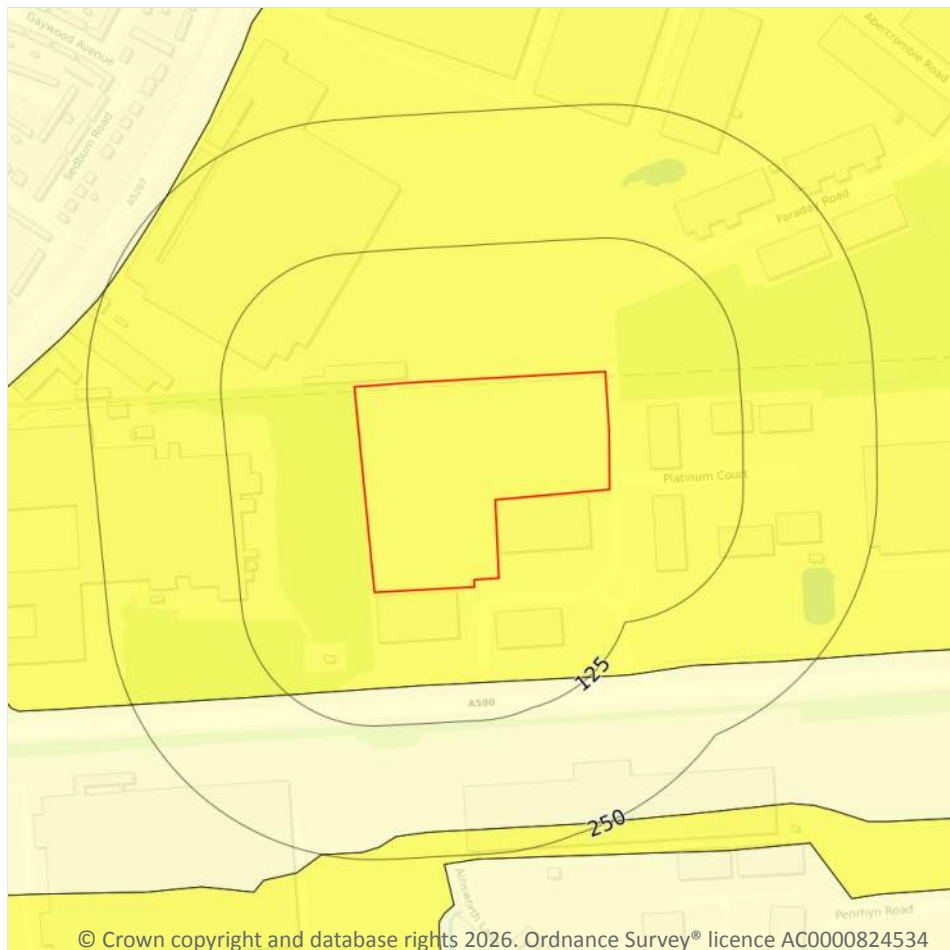
Features are displayed on the Natural ground subsidence - Running sands map on [page 119 >](#)

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.3 Compressible deposits

Records within 50m

1

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

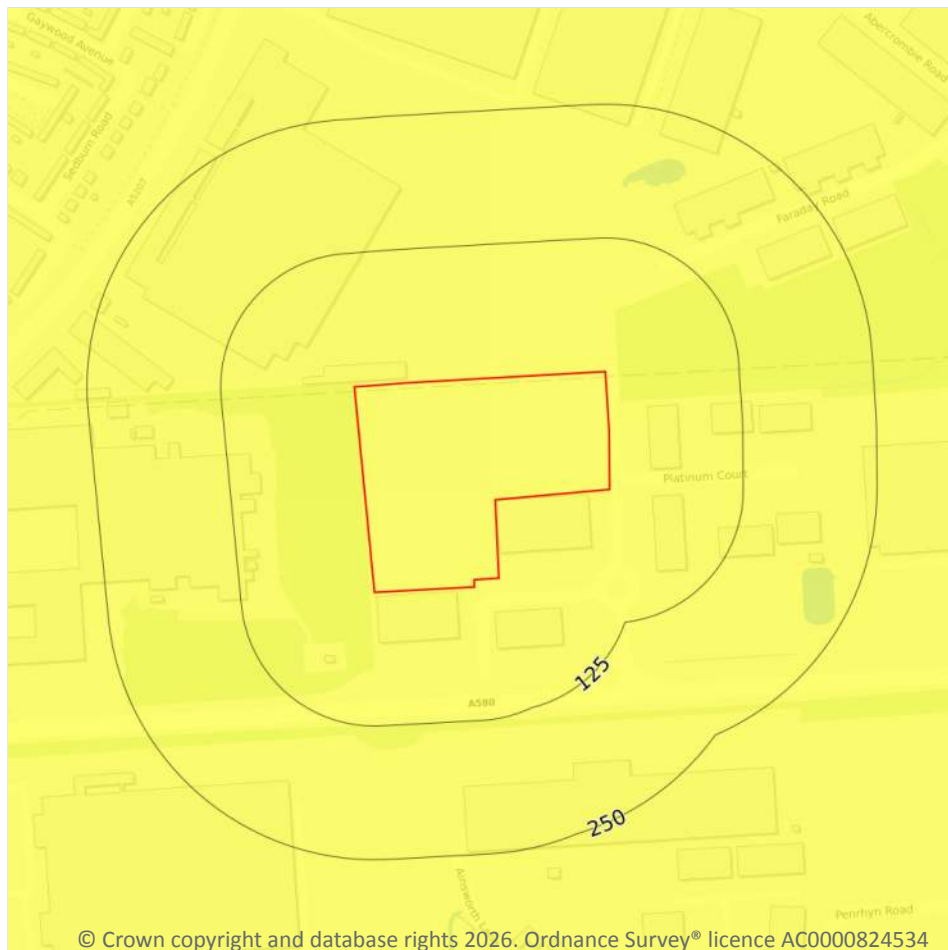
Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 120 >](#)

Location	Hazard rating	Details
On site	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.4 Collapsible deposits

Records within 50m

1

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

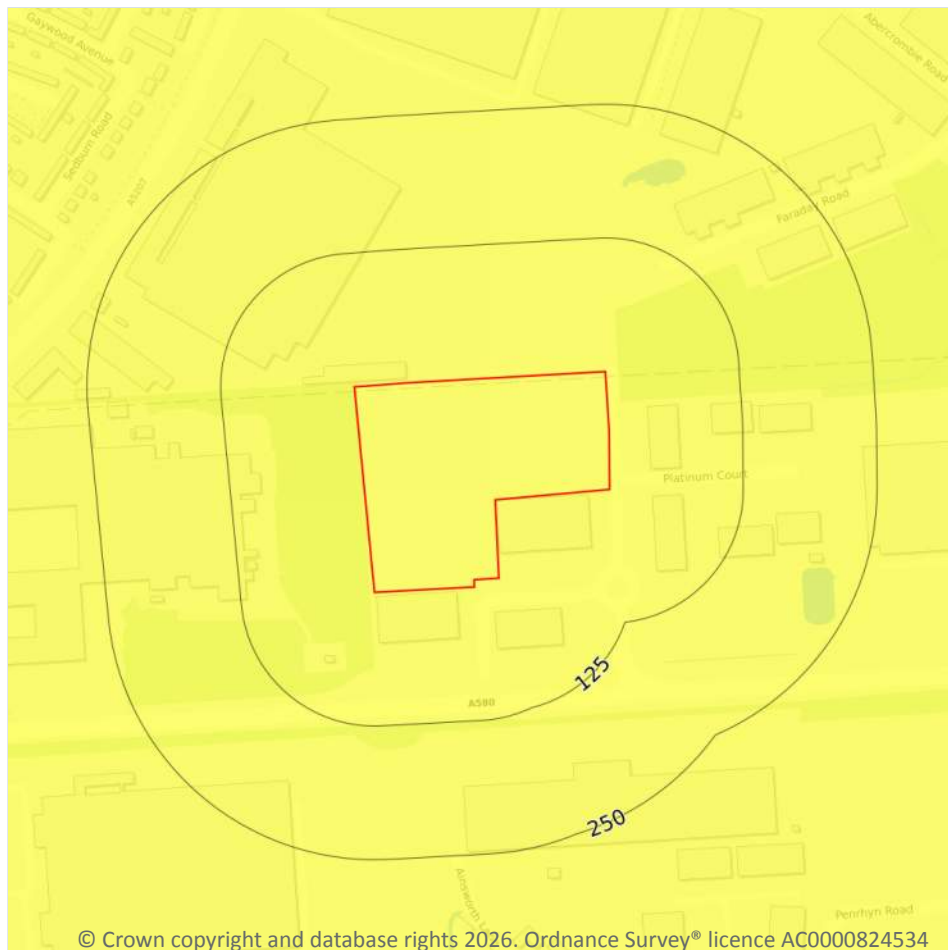
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 121 >](#)

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.5 Landslides

Records within 50m

1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

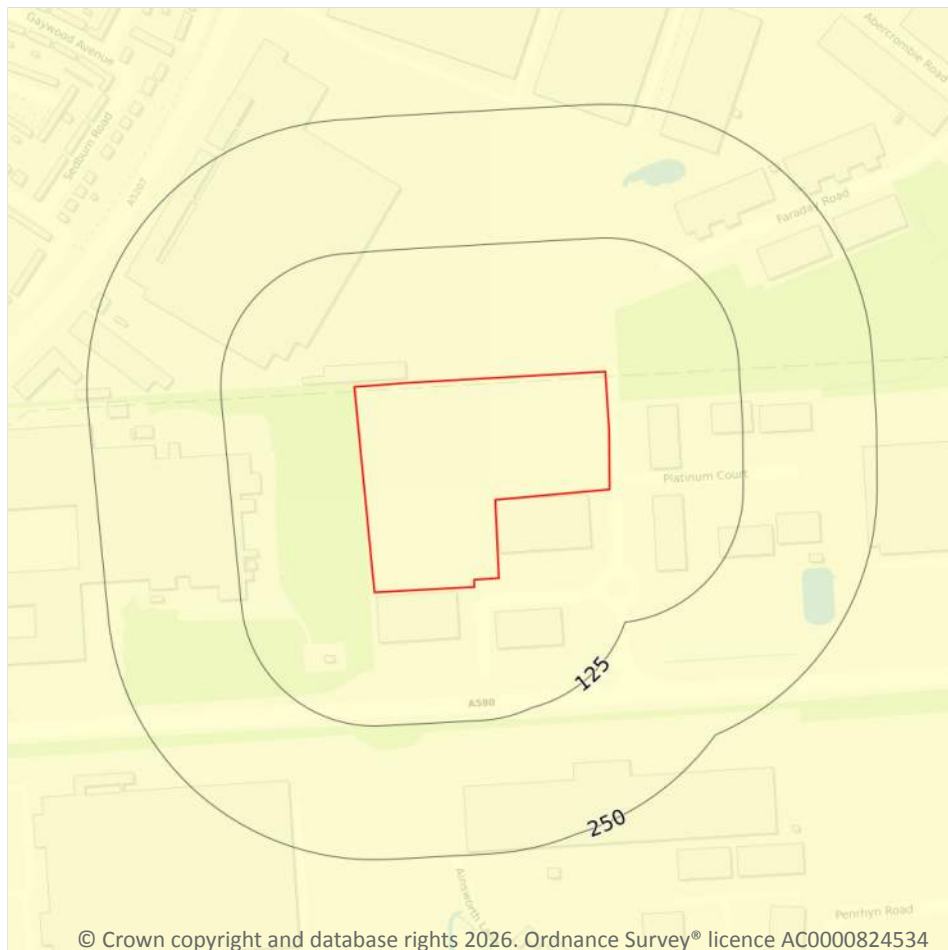
Features are displayed on the Natural ground subsidence - Landslides map on [page 122 >](#)

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.6 Ground dissolution of soluble rocks

Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 123](#) >

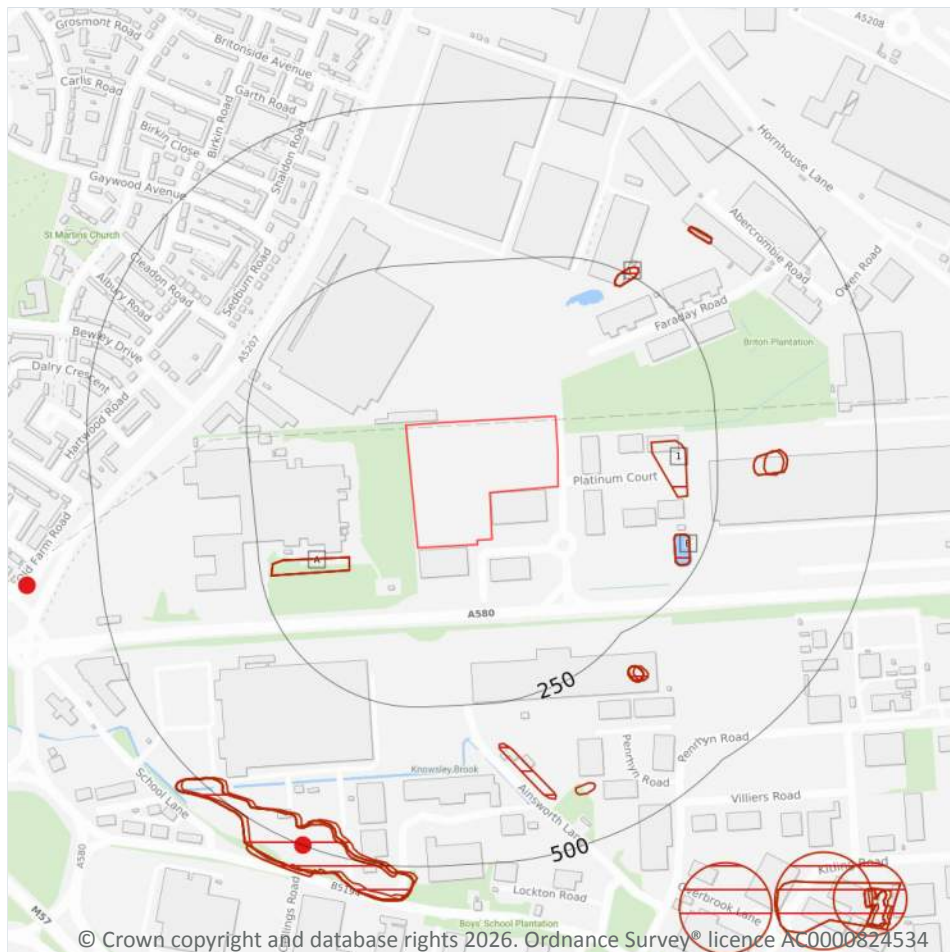
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



This data is sourced from the British Geological Survey.



18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m

0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m

10

Historical land uses identified from Ordnance Survey® mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining and ground workings map on [page 125 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
A	109m W	Unspecified Heap	1966	1:10560
A	109m W	Unspecified Heap	1978	1:10000
A	109m W	Unspecified Heap	1988	1:10000
1	147m E	Unspecified Heap	1966	1:10560
B	199m E	Pond	1966	1:10560
B	199m E	Pond	1978	1:10000
B	199m E	Pond	1988	1:10000
C	226m NE	Unspecified Heap	1966	1:10560
C	226m NE	Unspecified Heap	1978	1:10000
C	226m NE	Unspecified Heap	1988	1:10000

This data is sourced from Ordnance Survey®/Groundsure.

18.3 Underground workings

Records within 1000m

0

Historical land uses identified from Ordnance Survey® mapping that indicate the presence of underground workings e.g. mine shafts.

This data is sourced from Ordnance Survey®/Groundsure.

18.4 Underground mining extents

Records within 500m

0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.



18.5 Historical Mineral Planning Areas

Records within 500m

0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m

0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site

0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m

0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.



18.9 Researched mining

Records within 500m

0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m

0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m

0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site

0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site

0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.



18.14 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m

0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m

0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey® maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

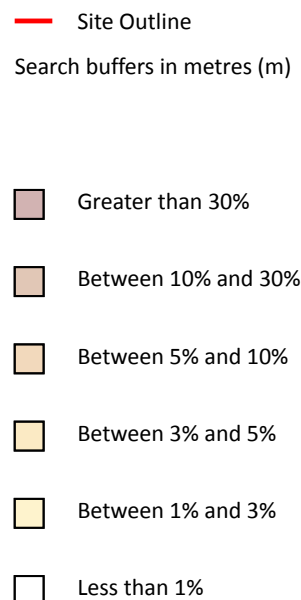
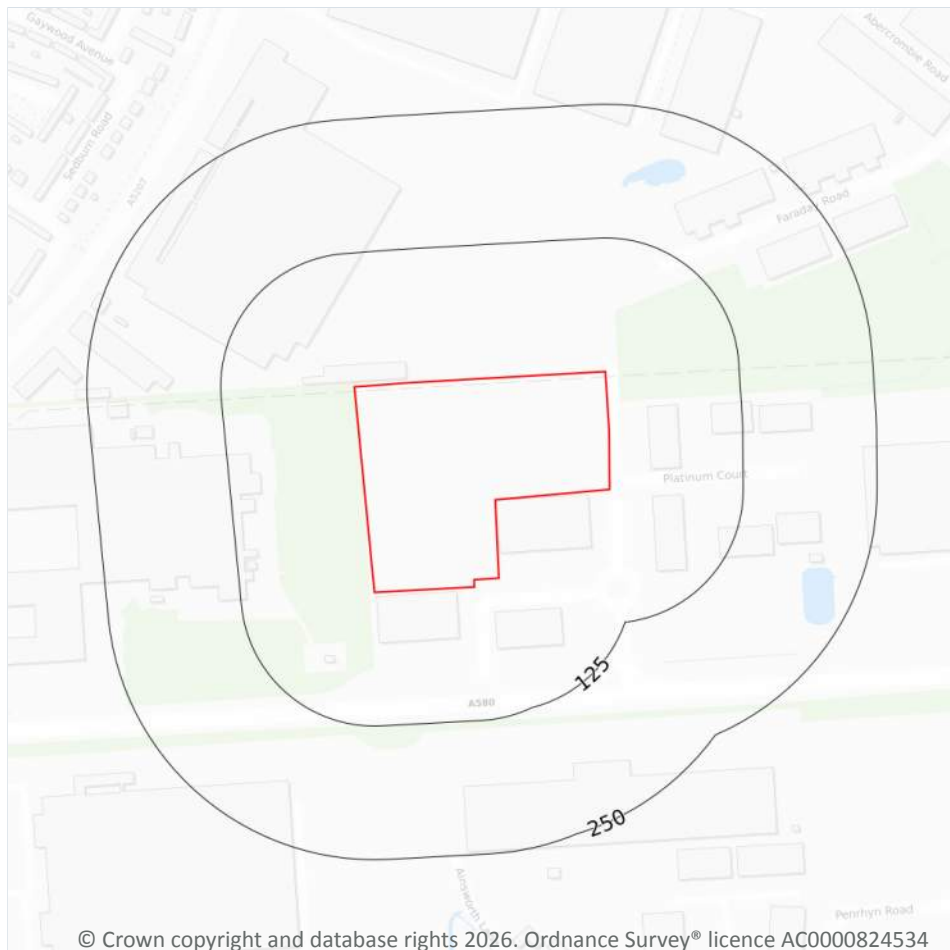
Not all 'holes' noted on Ordnance Survey® mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.



20 Radon



20.1 Radon

Records on site

1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on [page 132](#) >

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None



This data is sourced from the British Geological Survey and UK Health Security Agency.



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

6

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	120 - 180 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	120 - 180 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	120 - 180 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	120 - 180 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	120 - 180 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	120 - 180 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.



21.3 BGS Measured Urban Soil Chemistry

Records within 50m

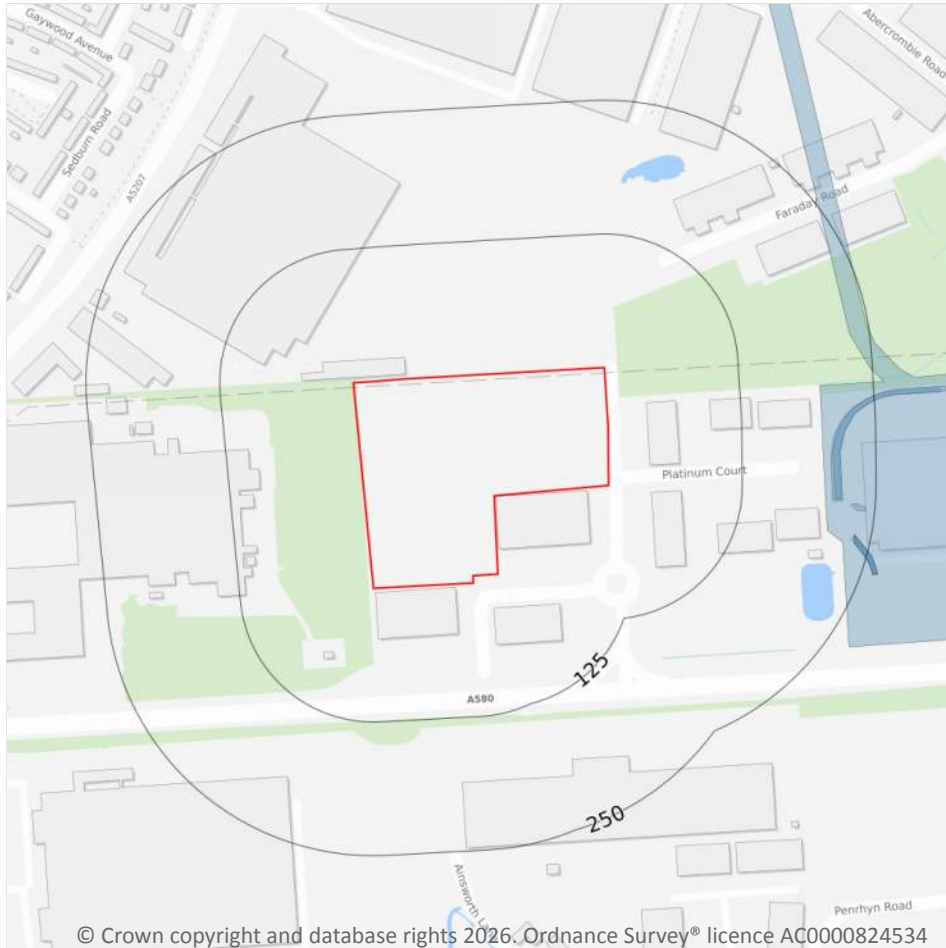
0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- ... Active railways
- ... Active tunnels
- ... Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

22.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.



This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey® mapping.

This data is sourced from the Ordnance Survey®.

22.4 Historical railway and tunnel features

Records within 250m

7

Railways and tunnels digitised from historical Ordnance Survey® mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on [page 136 >](#)

Location	Land Use	Year of mapping	Mapping scale
200m E	Railway Sidings	1966	10560
208m E	Railway Sidings	1960	1250
210m E	Railway Sidings	1960	2500
227m E	Railway Sidings	1974	1250
233m E	Railway Sidings	1985	-
234m E	Railway Sidings	1959	1250
234m E	Railway Sidings	1974	1250

This data is sourced from Ordnance Survey®/Groundsure.

22.5 Royal Mail tunnels

Records within 250m

0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.



22.6 Historical railways

Records within 250m

0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m

0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey® and OpenStreetMap.

22.8 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.9 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 Ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference> ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-conditions-april-2026/ ↗.



Appendix C

HISTORICAL MAPS

Site details:

Alchemy Way, Knowsley

Client ref:

PO-0584

Report ref:

GS-DEM-Q4P-5UU-VHW

Grid ref:

342550.29, 397038.72

Production date:

5 May 2026

Map name:

County Series

Map date:

1867

Scale:

1:2,500

Printed at:

1:2,500

Date: 1867
Surveyed: 1867
Revised: 1867

Date: 1867
Surveyed: 1867
Revised: 1867

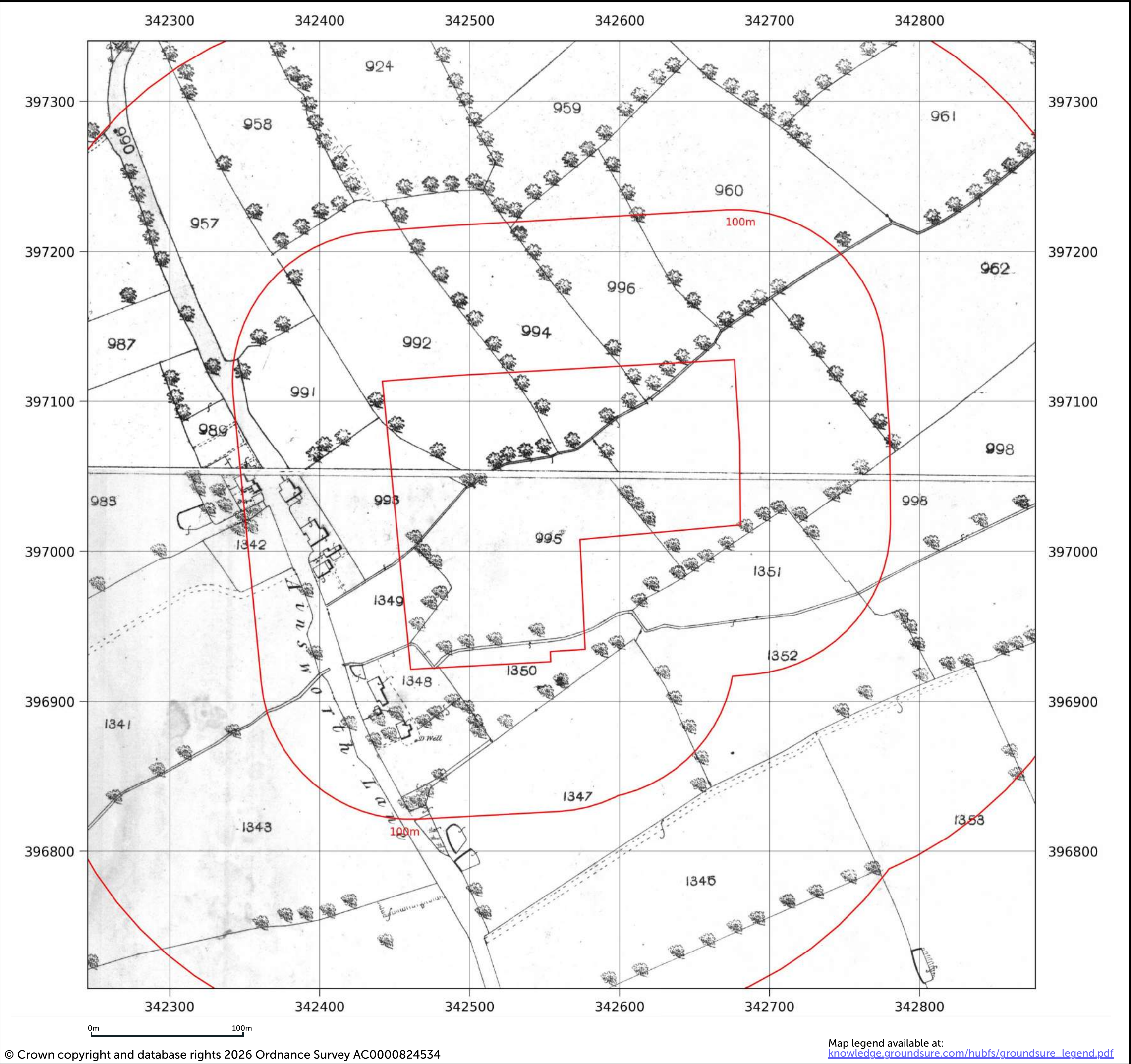
W

N

E

S

Contact us with any questions at:
info@groundsure.com
01273 257 755



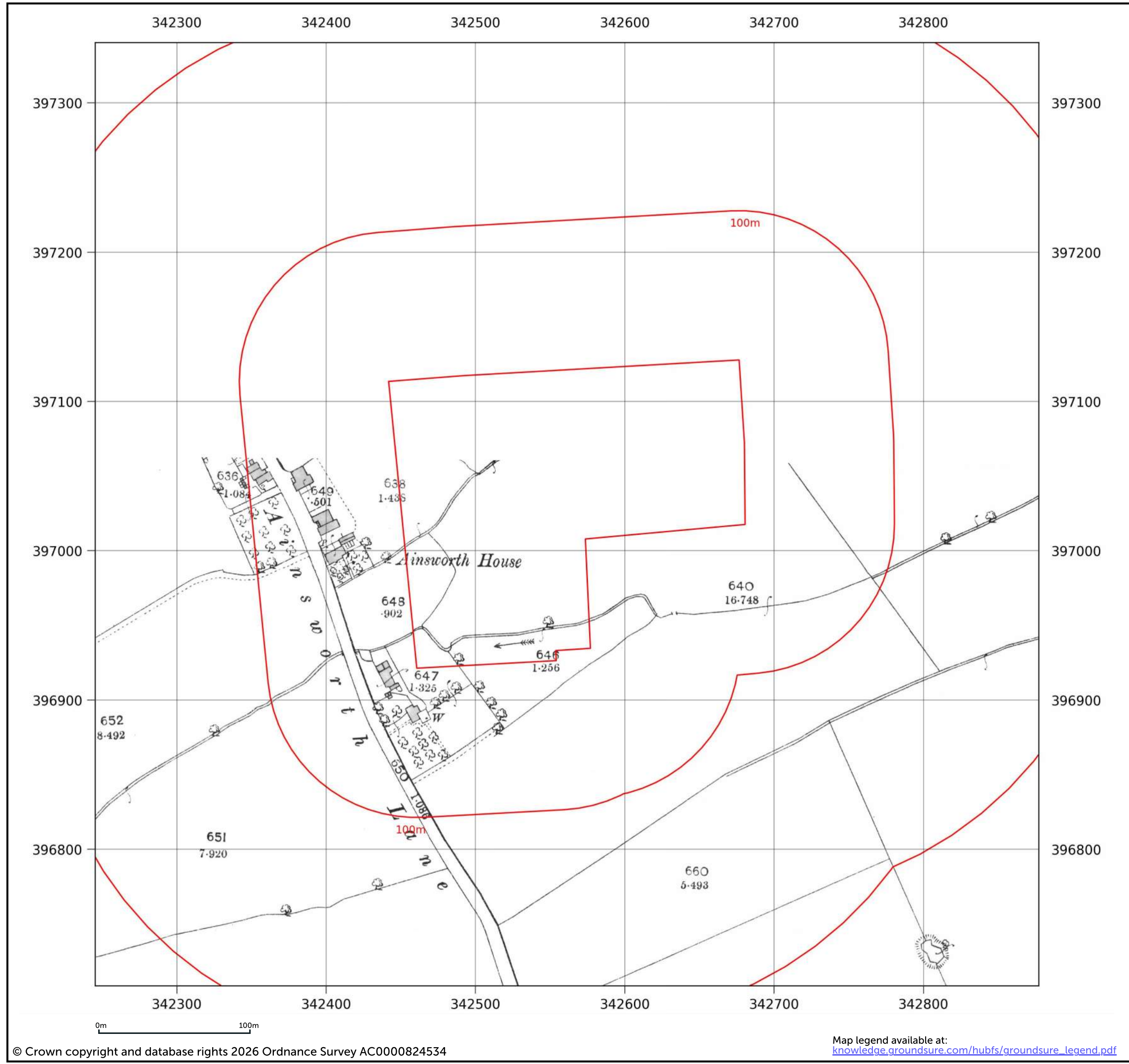
Site details: Alchemy Way, Knowsley
Client ref: PO-0584
Report ref: GS-DEM-Q4P-5UU-VHW
Grid ref: 342550.29, 397038.72
Production date: 5 May 2026

Map name: County Series
Map date: 1893
Scale: 1:2,500
Printed at: 1:2,500



Date: 1893
Surveyed: 1893
Revised: 1893

Contact us with any questions at:
info@groundsure.com
01273 257 755



Site details:

Alchemy Way, Knowsley

Client ref:

PO-0584

Report ref:

GS-DEM-Q4P-5UU-VHW

Grid ref:

342550.29, 397038.72

Production date:

5 May 2026

Map name:

County Series

Map date:

1893

Scale:

1:2,500

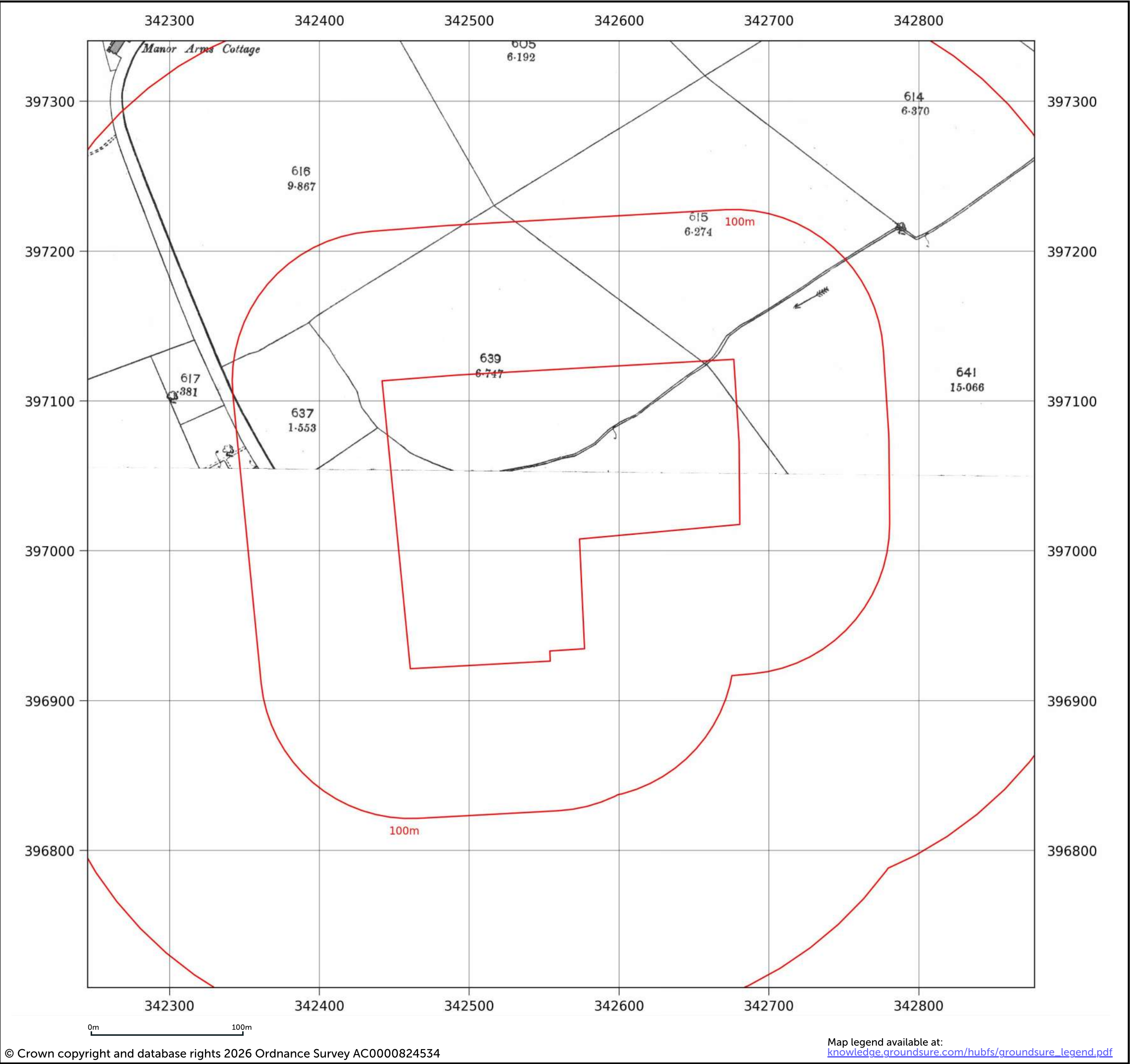
Printed at:

1:2,500

Date: 1893
Surveyed: 1893
Revised: 1893



Contact us with any questions at:
info@groundsure.com
01273 257 755



Site details:

Alchemy Way, Knowsley

Client ref:

PO-0584

Report ref:

GS-DEM-Q4P-5UU-VHW

Grid ref:

342550.29, 397038.72

Production date:

5 May 2026

Map name:

County Series

Map date:

1908

Scale:

1:2,500

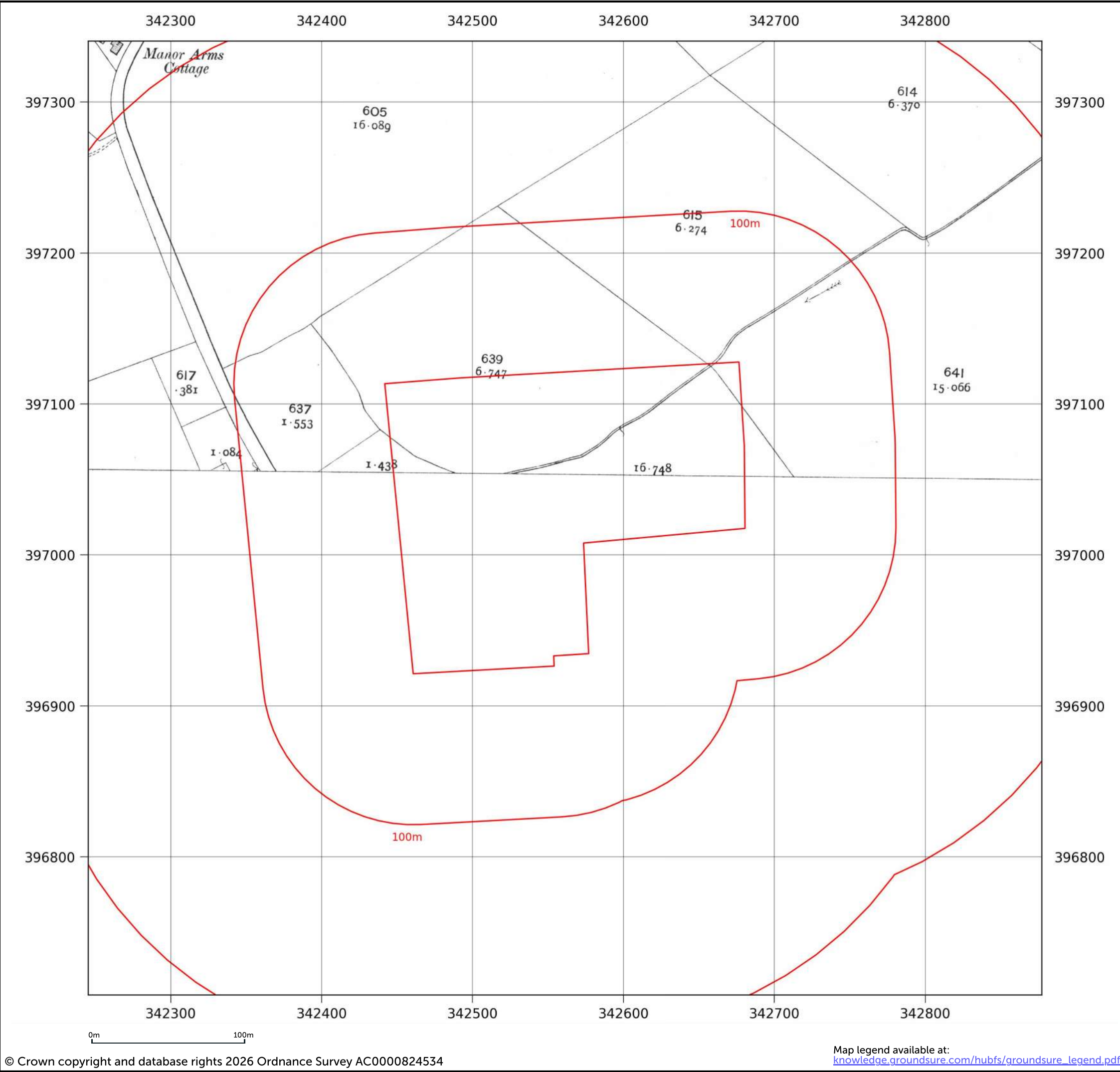
Printed at:

1:2,500

Date: 1908
Surveyed: 1908
Revised: 1908



Contact us with any questions at:
info@groundsure.com
01273 257 755



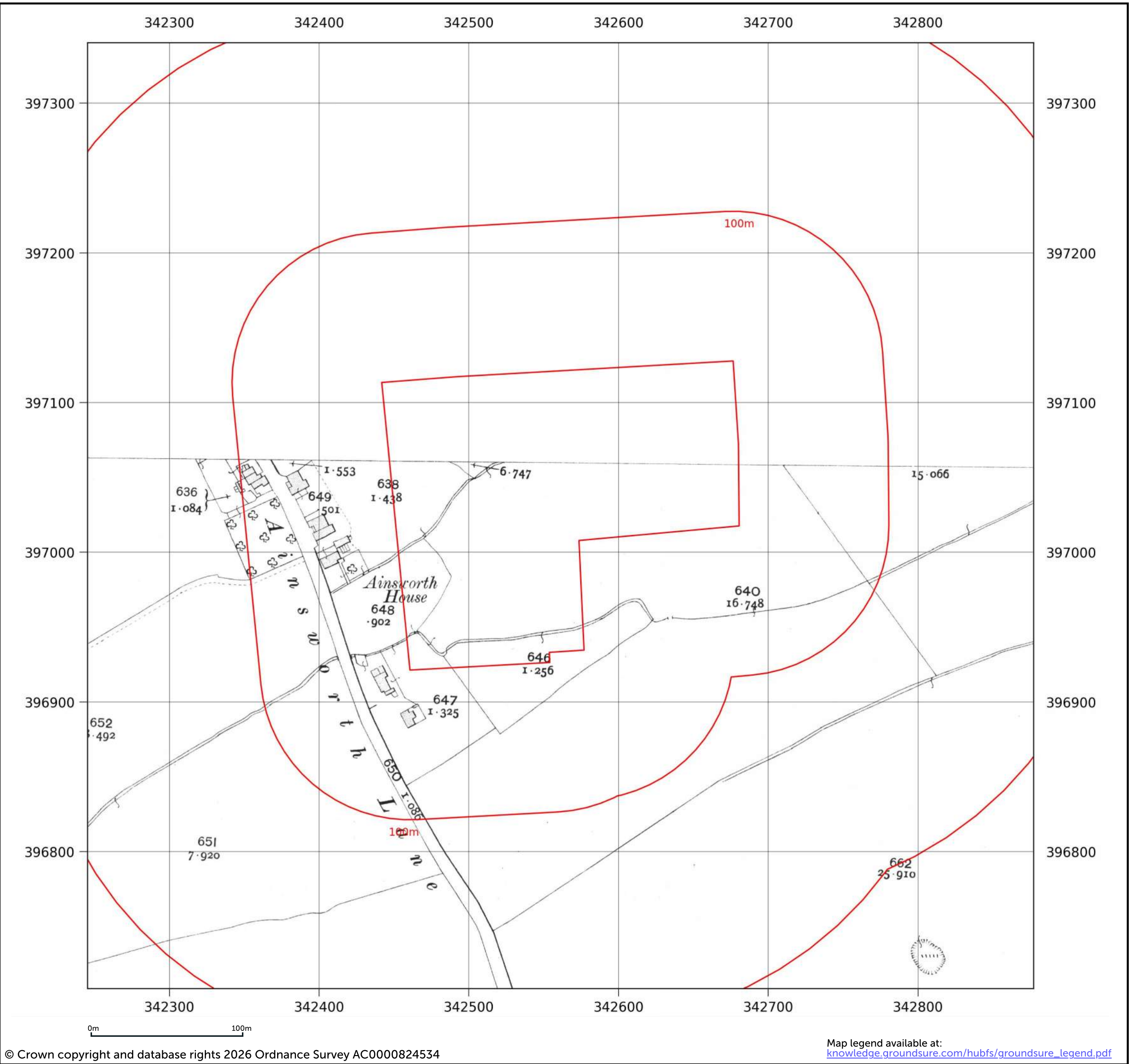
Site details:	Alchemy Way, Knowsley
Client ref:	PO-0584
Report ref:	GS-DEM-Q4P-5UU-VHW
Grid ref:	342550.29, 397038.72
Production date:	5 May 2026

Map name:	County Series
Map date:	1908
Scale:	1:2,500
Printed at:	1:2,500



Date: 1908
Surveyed: 1908
Revised: 1908

Contact us with any questions at:
info@groundsure.com
01273 257 755



Site details:

Alchemy Way, Knowsley

Client ref:

PO-0584

Report ref:

GS-DEM-Q4P-5UU-VHW

Grid ref:

342550.29, 397038.72

Production date:

5 May 2026

Map name:

County Series

Map date:

1927

Scale:

1:2,500

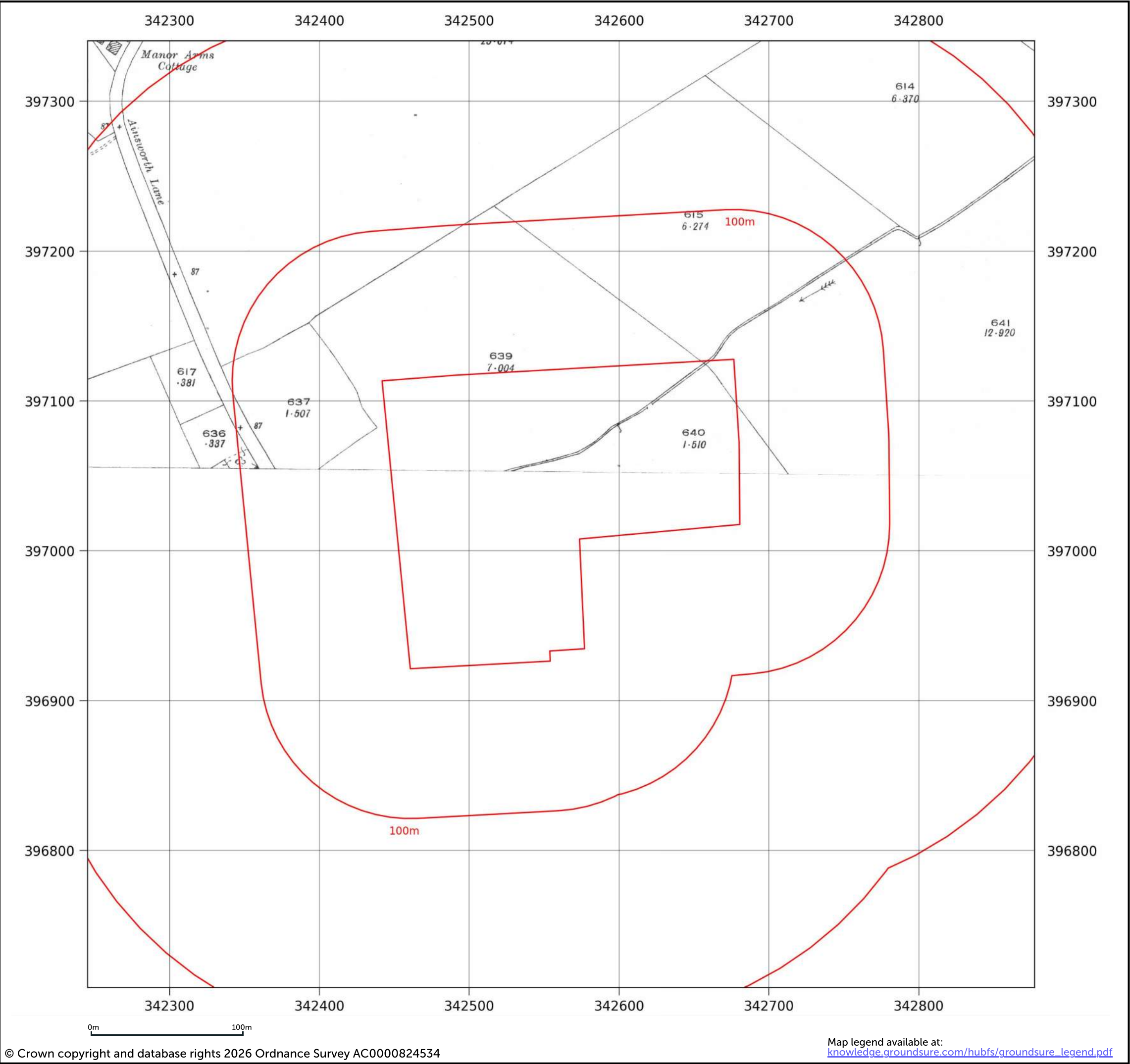
Printed at:

1:2,500

Date: 1927
Surveyed: 1927
Revised: 1927



Contact us with any questions at:
info@groundsure.com
01273 257 755



Site details:

Alchemy Way, Knowsley

Client ref:

PO-0584

Report ref:

GS-DEM-Q4P-5UU-VHW

Grid ref:

342550.29, 397038.72

Production date:

5 May 2026

Map name:

County Series

Map date:

1927

Scale:

1:2,500

Printed at:

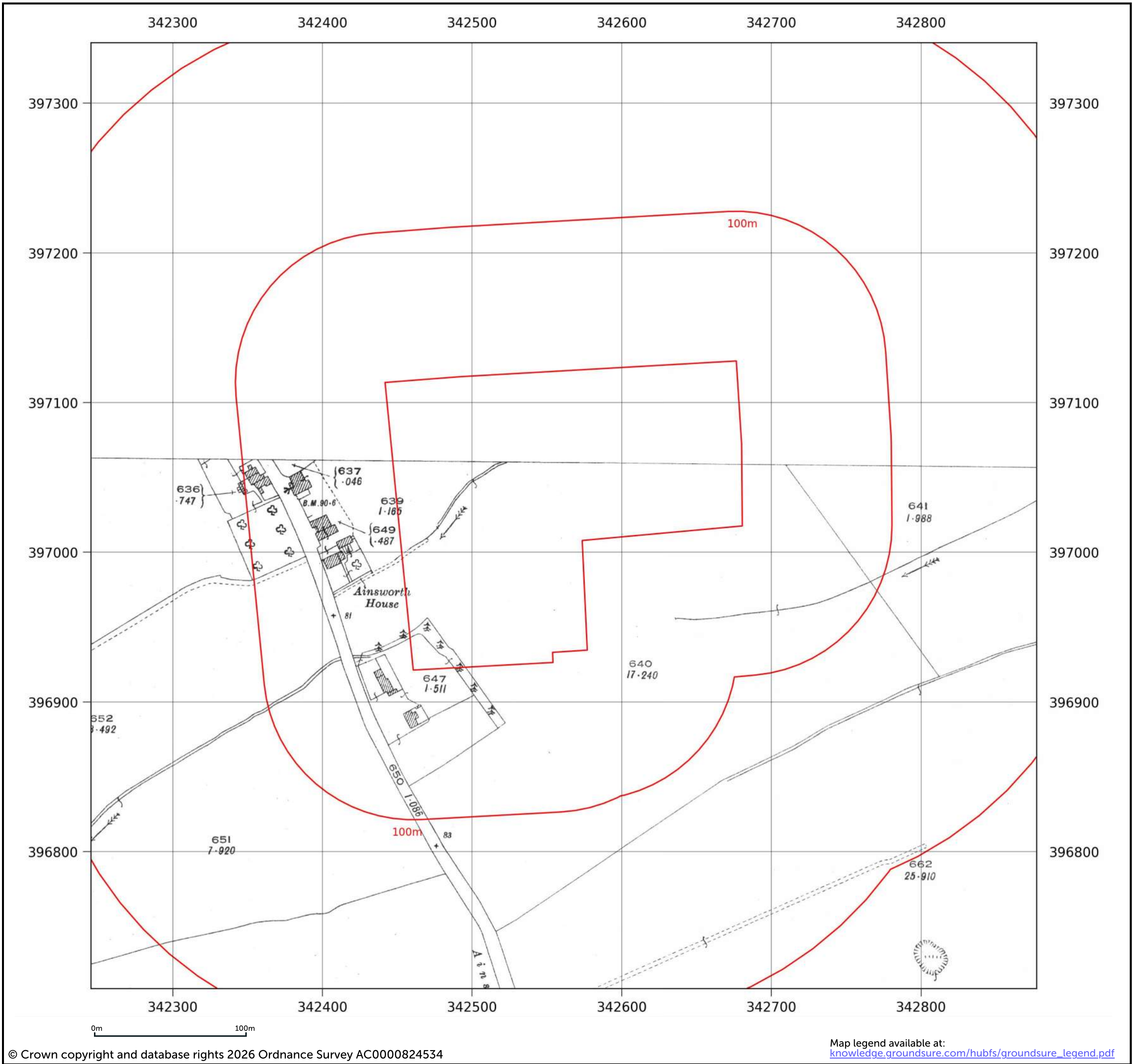
1:2,500

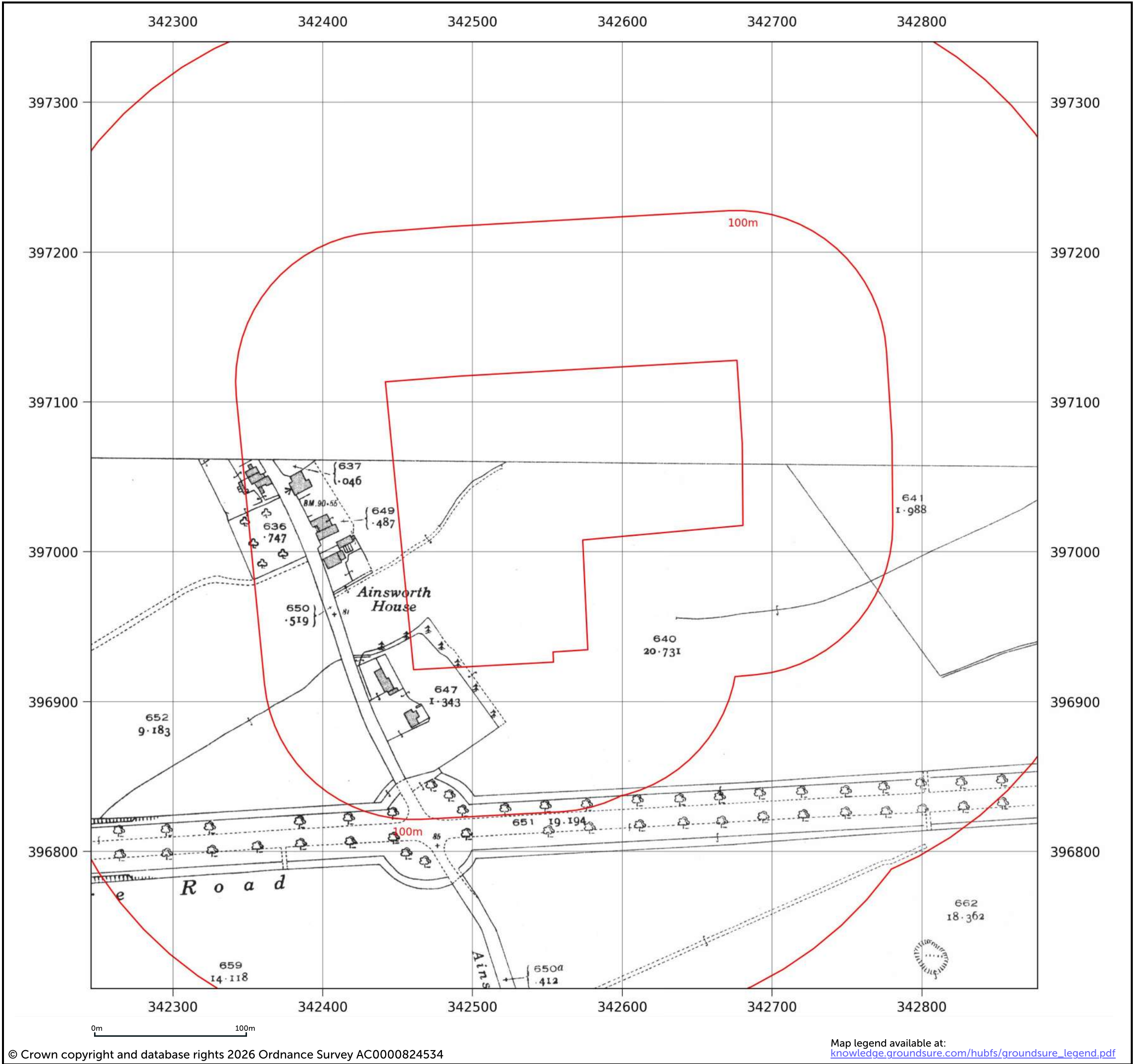
Date: 1927

Surveyed: 1927

Revised: 1927

Contact us with any questions at:
info@groundsure.com
01273 257 755





Site details:	Alchemy Way, Knowsley
Client ref:	PO-0584
Report ref:	GS-DEM-Q4P-5UU-VHW
Grid ref:	342550.29, 397038.72
Production date:	5 May 2026

Map name:	County Series
Map date:	1937
Scale:	1:2,500
Printed at:	1:2,500



Date: 1937
Surveyed: 1937
Revised: 1937

Contact us with any questions at:
info@groundsure.com
01273 257 755

Site details:	Alchemy Way, Knowsley
Client ref:	PO-0584
Report ref:	GS-DEM-Q4P-5UU-VHW
Grid ref:	342550.29, 397038.72
Production date:	5 May 2026

Map name:	National Grid
Map date:	1959-1960
Scale:	1:1,250
Printed at:	1:2,000



Date: 1960 Surveyed: 1959 Revised: 1959 Copyright: 1960 Levelled: 1946	Date: 1960 Surveyed: 1959 Revised: 1959 Copyright: 1960 Levelled: 1946
Date: 1959 Surveyed: 1959 Revised: 1959 Copyright: 1959 Levelled: 1946	Date: 1959 Surveyed: 1959 Revised: 1959 Copyright: 1959 Levelled: 1946

Contact us with any questions at:
info@groundsure.com
01273 257 755



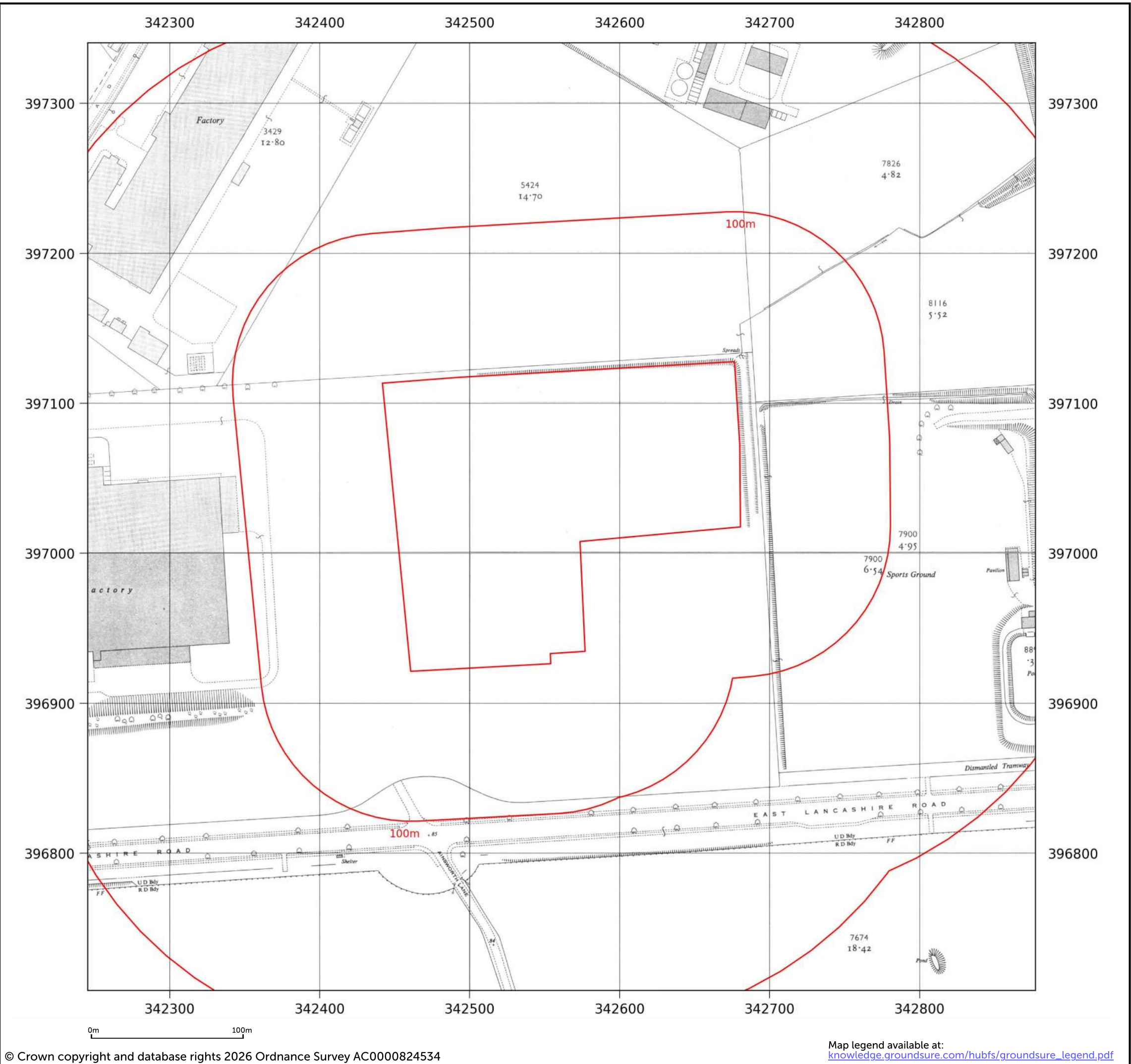
Site details:	Alchemy Way, Knowsley
Client ref:	PO-0584
Report ref:	GS-DEM-Q4P-5UU-VHW
Grid ref:	342550.29, 397038.72
Production date:	5 May 2026

Map name:	National Grid
Map date:	1960
Scale:	1:2,500
Printed at:	1:2,500



Date: 1960 Surveyed: 1959 Revised: 1959 Edition: 1960 Copyright: 1960 Levelled: 1957
Date: 1960 Surveyed: 1959 Revised: 1959 Edition: 1960 Copyright: 1960 Levelled: 1946

Contact us with any questions at:
info@groundsure.com
01273 257 755



Site details:

Alchemy Way, Knowsley

Client ref:

PO-0584

Report ref:

GS-DEM-Q4P-5UU-VHW

Grid ref:

342550.29, 397038.72

Production date:

5 May 2026

Map name:

National Grid

Map date:

1967

Scale:

1:1,250

Printed at:

1:2,000

Date: 1967

Surveyed: 1959

Revised: 1966

Copyright: 1967

Levelled: 1960

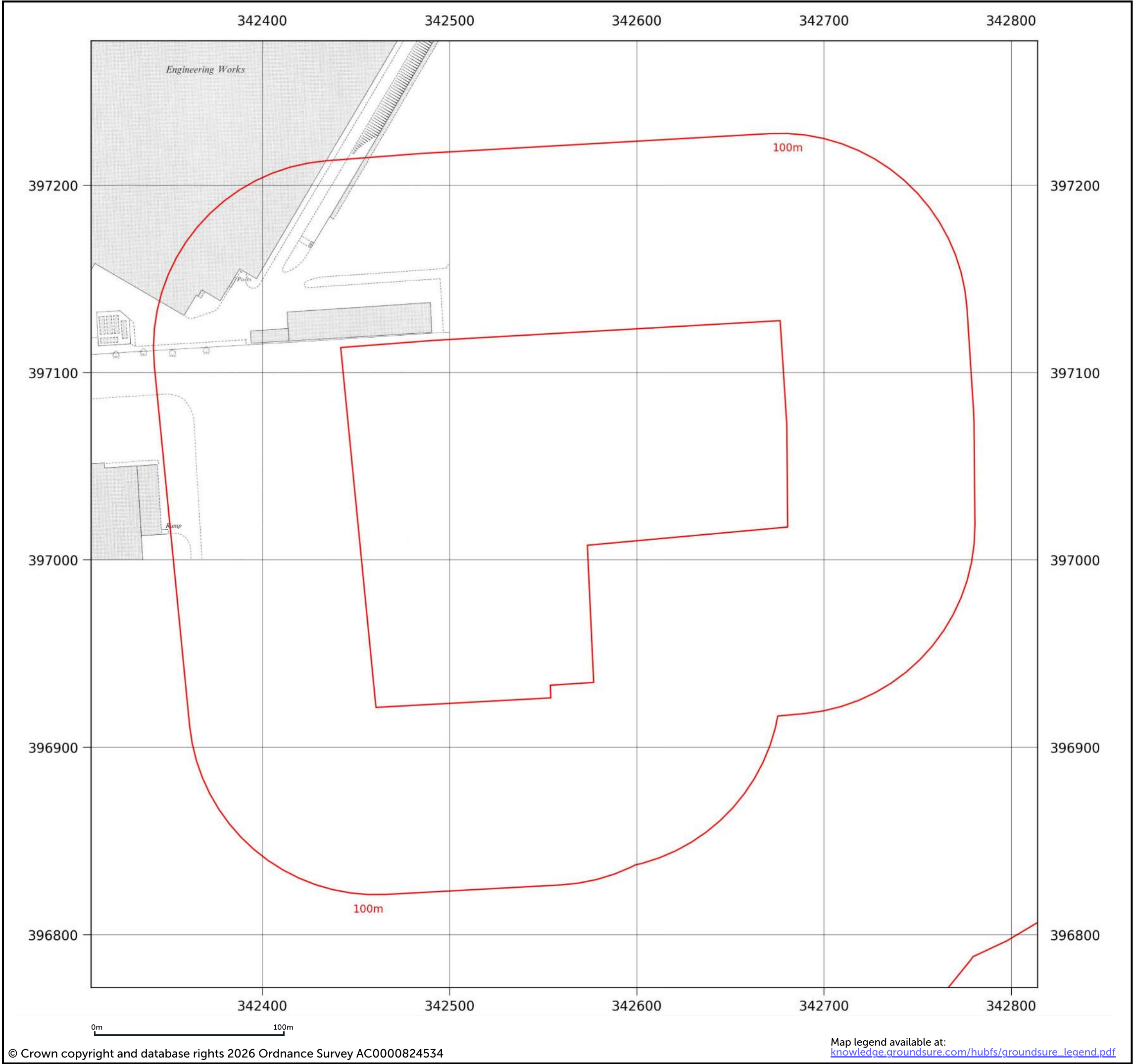
N

W

E

S

Contact us with any questions at:
info@groundsure.com
01273 257 755



Site details:

Alchemy Way, Knowsley

Client ref:

PO-0584

Report ref:

GS-DEM-Q4P-5UU-VHW

Grid ref:

342550.29, 397038.72

Production date:

5 May 2026

Map name:

National Grid

Map date:

1970

Scale:

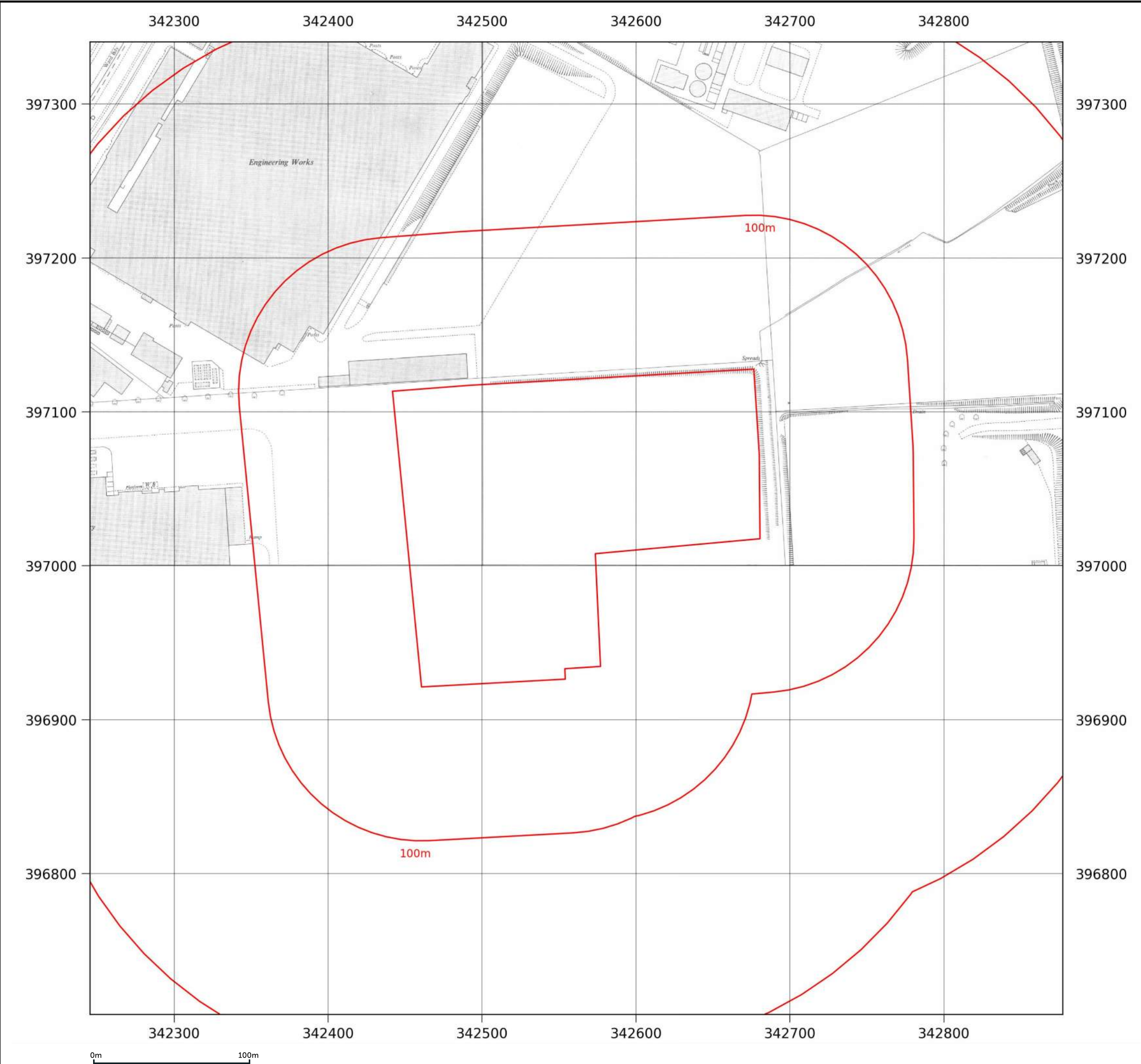
1:2,500

Printed at:

1:2,500

Date: 1970
Surveyed: 1968
Revised: 1968
Copyright: 1970
Levelled: 1960

Contact us with any questions at:
info@groundsure.com
01273 257 755



Site details:	Alchemy Way, Knowsley
Client ref:	PO-0584
Report ref:	GS-DEM-Q4P-5UU-VHW
Grid ref:	342550.29, 397038.72
Production date:	5 May 2026

Map name:	National Grid
Map date:	1974-1976
Scale:	1:1,250
Printed at:	1:2,000



	Date: 1976 Surveyed: 1959 Revised: 1975 Copyright: 1976 Levelled: 1960
Date: 1974 Surveyed: 1959 Revised: 1973 Copyright: 1974 Levelled: 1960	Date: 1974 Surveyed: 1959 Revised: 1973 Copyright: 1974 Levelled: 1960

Contact us with any questions at:
info@groundsure.com
01273 257 755



Site details:Alchemy Way, Knowsley

Client ref:PO-0584

Report ref:GS-DEM-Q4P-5UU-VHW

Grid ref:342550.29, 397038.72

Production date:5 May 2026

Map name:National Grid

Map date:1974-1976

Scale:1:1,250

Printed at:1:2,000



Date: 1976

Surveyed: 1959

Revised: 1975

Copyright: 1976

Levelled: 1960

Date: 1974

Surveyed: 1959

Revised: 1974

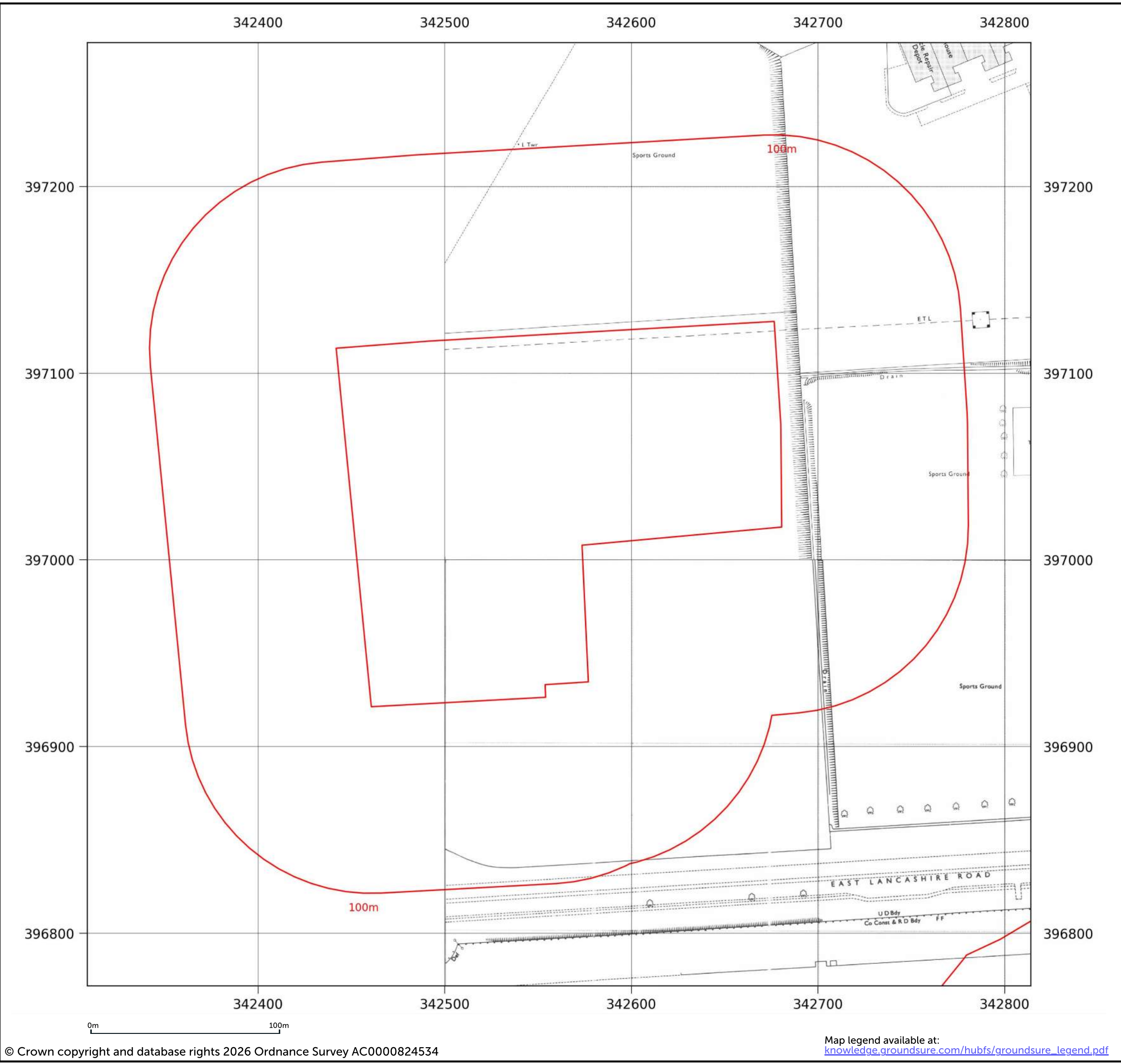
Copyright: 1974

Levelled: 1960

Contact us with any questions at:

info@groundsure.com

01273 257 755





Site details:	Alchemy Way, Knowsley
Client ref:	PO-0584
Report ref:	GS-DEM-Q4P-5UU-VHW
Grid ref:	342550.29, 397038.72
Production date:	5 May 2026

Map name:	National Grid
Map date:	1984-1985
Scale:	1:1,250
Printed at:	1:2,000



Date: 1984 Copyright: 1984 Levelled: 1960	Date: 1985 Surveyed: 1960 Revised: 1985 Copyright: 1985 Levelled: 1960
---	--

Contact us with any questions at:
info@groundsure.com
01273 257 755

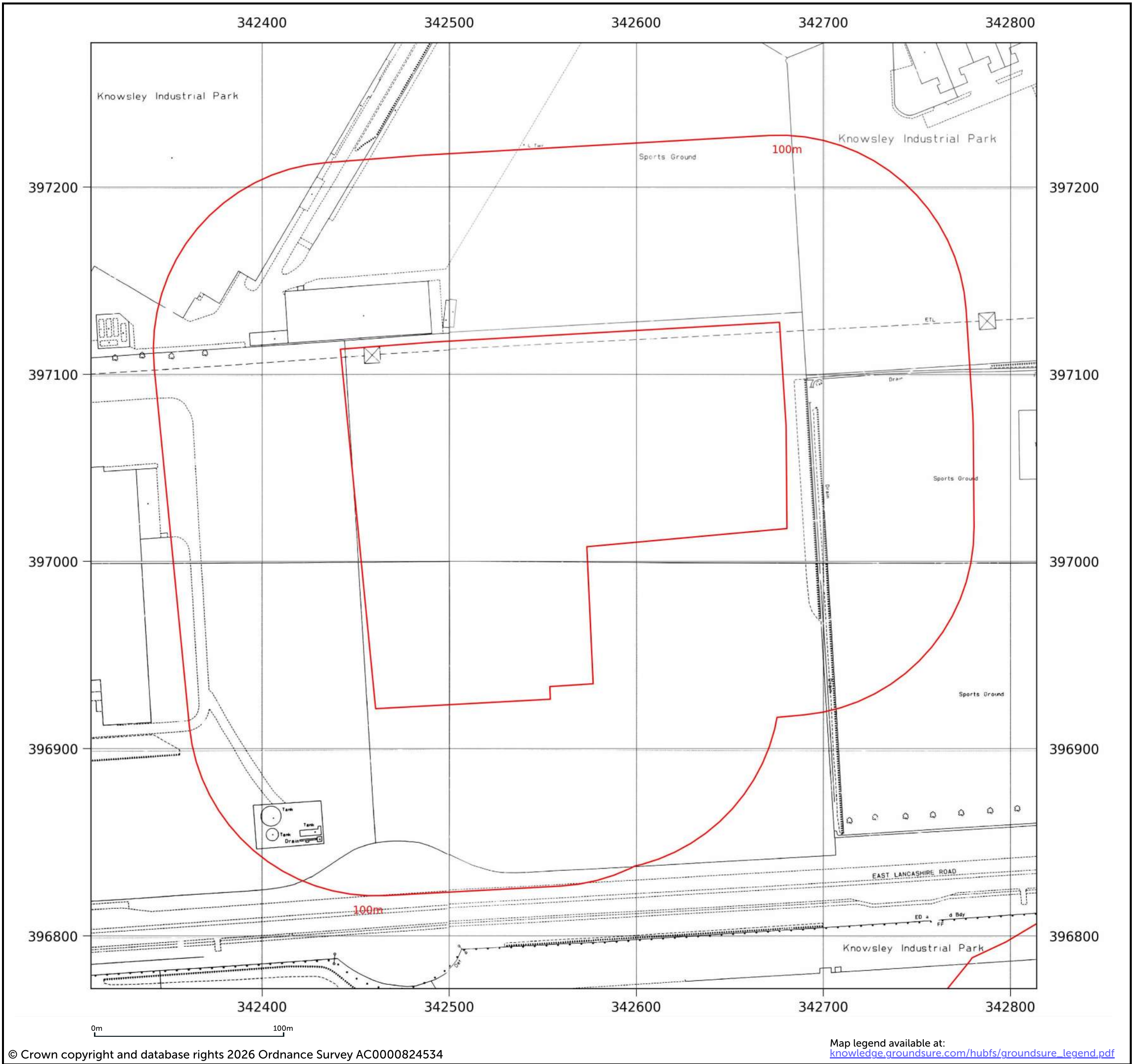
Site details:	Alchemy Way, Knowsley
Client ref:	PO-0584
Report ref:	GS-DEM-Q4P-5UU-VHW
Grid ref:	342550.29, 397038.72
Production date:	5 May 2026

Map name:	National Grid
Map date:	1993
Scale:	1:1,250
Printed at:	1:2,000



Date: 1993 Copyright: 1993	Date: 1993 Surveyed: 1993 Revised: 1993
Date: 1993 Copyright: 1993	Date: 1993 Copyright: 1993

Contact us with any questions at:
info@groundsure.com
01273 257 755



Site details:

Alchemy Way, Knowsley

Client ref:

PO-0584

Report ref:

GS-DEM-Q4P-5UU-VHW

Grid ref:

342550.29, 397038.72

Production date:

5 May 2026

Map name:

National Grid

Map date:

1994

Scale:

1:1,250

Printed at:

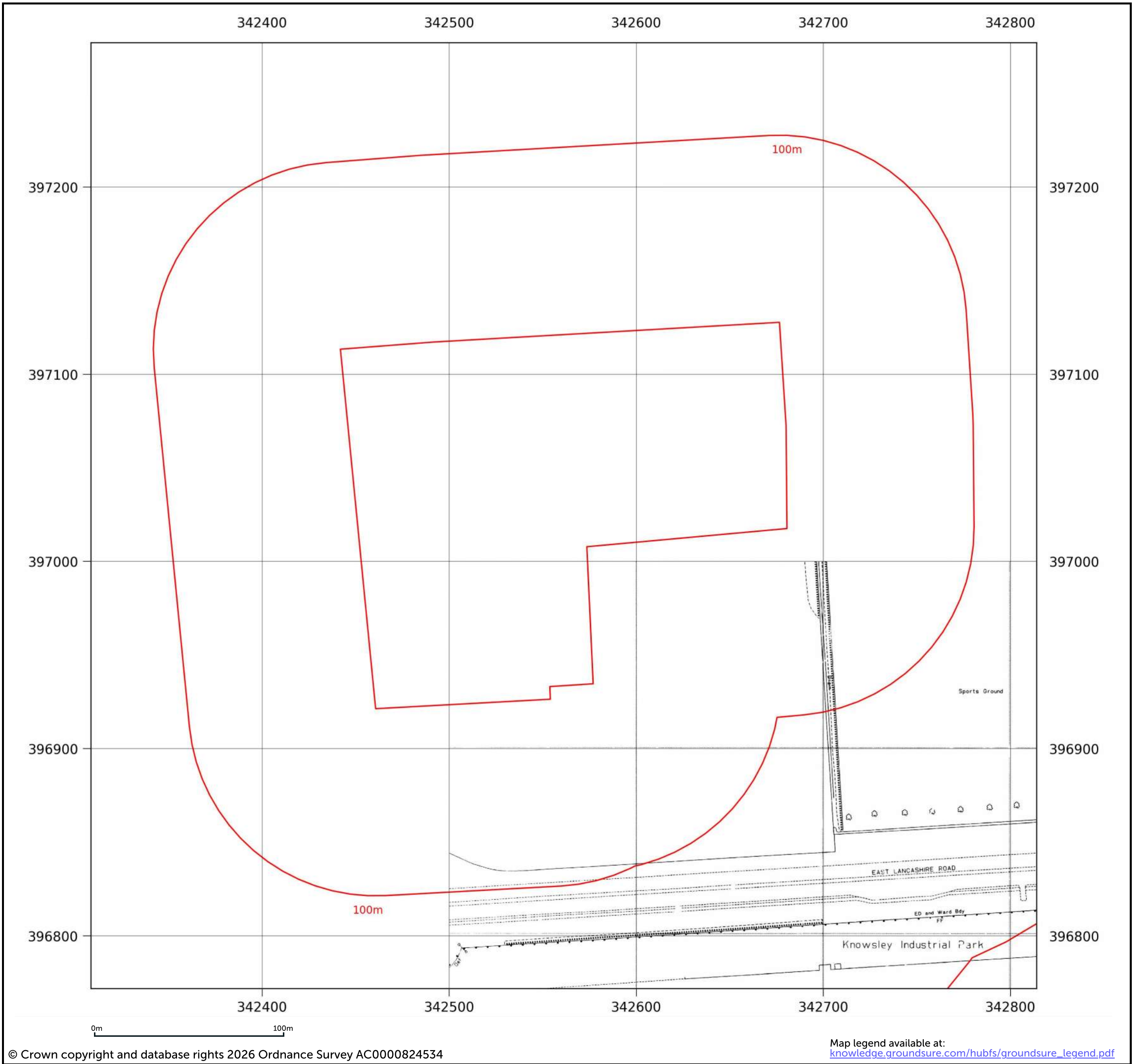
1:2,000

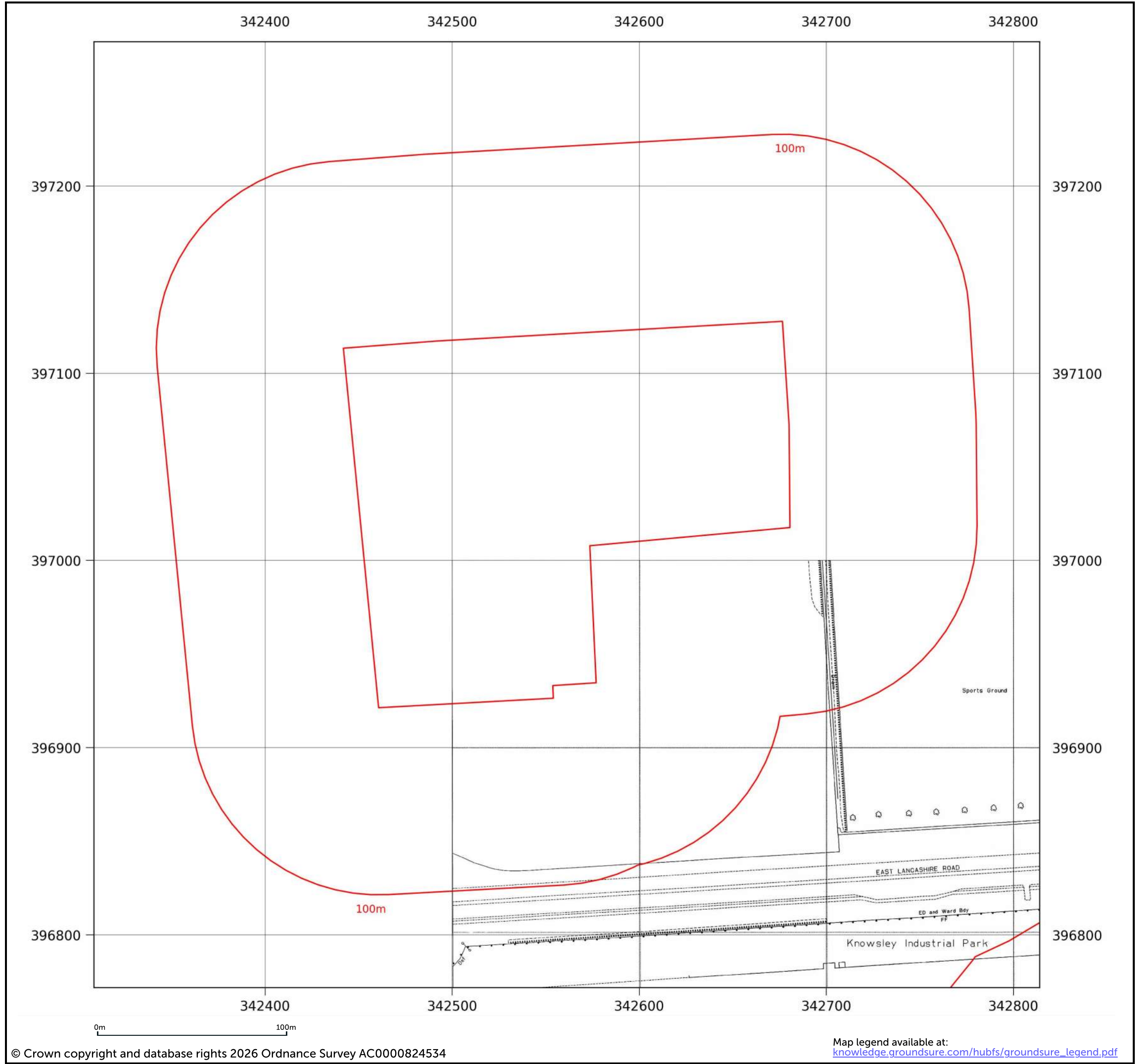
Date: 1994

Copyright: 1994



Contact us with any questions at:
info@groundsure.com
01273 257 755





Site details:	Alchemy Way, Knowsley
Client ref:	PO-0584
Report ref:	GS-DEM-Q4P-5UU-VHW
Grid ref:	342550.29, 397038.72
Production date:	5 May 2026

Map name:	National Grid
Map date:	1994
Scale:	1:1,250
Printed at:	1:2,000



Date: 1994
Surveyed: 1994
Revised: 1994
Copyright: 1994

Contact us with any questions at:
info@groundsure.com
01273 257 755

Appendix D

BGS BOREHOLE LOGS



© 2022 RPS Group

Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
2. If received electronically it is the recipient's responsibility to print to correct scale. Only written dimensions should be used.

Legend:

- Site Boundary
- WS
 Window Sample Borehole
- CP
 Cable Percussive Borehole
- TP
 Trial Pit
- TP
 Soakaway
- DCP
 Dynamic Cone Penetrometer



5 New York Street, Manchester, M1 4JB
T: +44(0) 161 228 1800 W: rpsgroup.com

Client Network Space

Project Alchemy Parcel 1 Site

Title Exploratory Borehole Location Plan

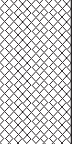
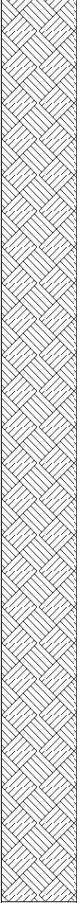
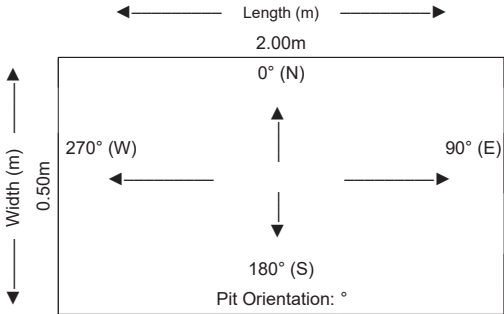
Status	Drawn By	PM/Checked by
Draft	SD	SC
Job Ref	Scale @ A3	Date Created
JER9563	NTS	SEPT 2022

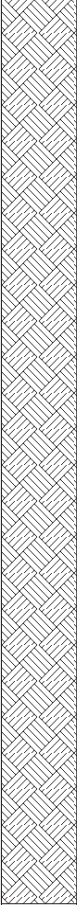
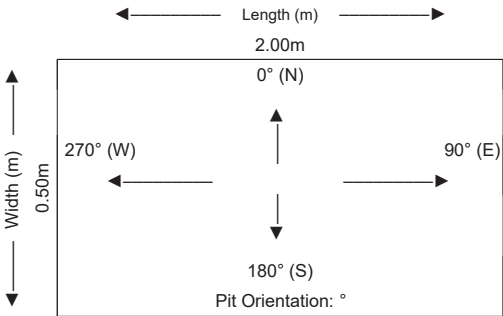
Figure Number	Rev
4	00

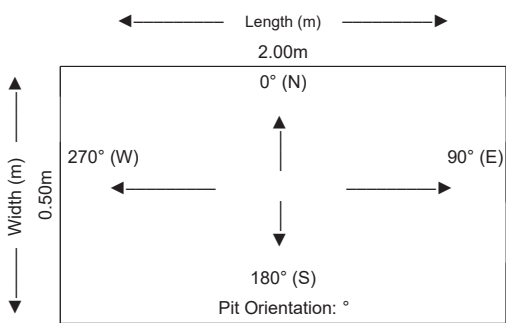
rpsgroup.com

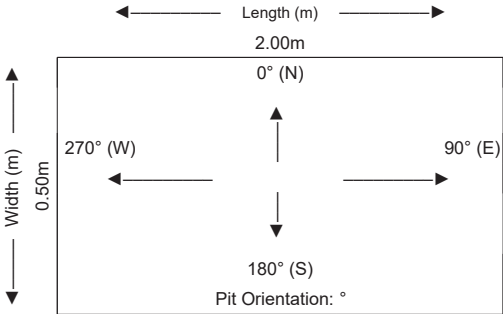
	Contract Name: Alchemy, Knowsley			Client: Network Space		Borehole ID: CP03			
	Contract Number: JER9563	Start Date: 03/08/2022	End Date: 03/08/2022	Checked By: KD	Status: PRELIMINARY				
Cable Percussion Borehole Log	Easting: 342615.6	Northing: 397054.1	Ground Level: 28.06mOD	Plant Used: Dando 2000	Logged By: SD	Sheet 1 of 1			
						Scale: 1:50			
Weather: Sun			Termination: Refusal.		SPT Hammer: AR812 Energy Ratio: 64%				
Samples & In Situ Testing				Strata Details				Groundwater	
Depths	Type/ Ref	SPT	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
0.00 - 1.20	B1						Brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subrounded fine to coarse of sandstone and mudstone. MADE GROUND		
0.50	ES1		PID 0.50m, 0.2ppm		(2.00)			1	
1.20 - 1.65	B2	SPT(S)							
1.20 - 1.65	D1	1.20m, N=4 (1,1/1,1,2)							
1.80	D2								
2.00 - 2.45	B3	SPT(S)		26.06	2.00		Black organic rich gravelly CLAY. Gravel is angular to subangular fine to coarse of brick. MADE GROUND	2	
2.00 - 2.45	D3	2.00m, N=7 (1,1/2,2,1,2)			(0.70)				
2.70 - 3.00	B4			25.36	2.70		Red brown slightly clayey gravelly SAND. Gravel is subangular to subrounded fine to coarse of sandstone. CHESTER FORMATION	3	
2.80	ES2								
3.00 - 3.45	B5	SPT(S)							
3.00 - 3.45	D4	3.00m, N=21 (8,6/5,4,5,7)			(0.90)				
3.60 - 4.00	B6	SPT(C)		24.46	3.60		Red SANDSTONE. CHESTER FORMATION	4	
3.60 - 4.00	D5	3.60m, N=0 (75 for 65mm/,,,) SPT(C)			(0.70)				
4.00 - 4.45	B7			23.76	4.30		Red and brown SANDSTONE and MUDSTONE. CHESTER FORMATION	5	
4.00 - 4.45	D6	4.00m, 20 (55 for 135mm/20 for 280mm)			(1.30)				
5.00 - 5.45	B8	SPT(S)		22.46	5.60		End of Borehole at 5.60m	6	
5.00 - 5.45	D7	5.00m, N=50 (25 for 125mm/50,,,) SPT(C)							
								7	
								8	
								9	
								10	
Start & End of Shift Observations				Installation				Remarks:	
Date	Time	Depth (m)	Casing (m)	Water (m)	Ref	Top (m)	Base (m)	Type	Dia (mm)
					1	0.00	3.60	PLAIN	
					1	3.60	5.60	SLOTTED	
1) Cable percussive borehole terminated at 5.60m bgl due to refusal. 2) Gas and groundwater monitoring standpipe installed with a response zone between 3.60m bgl and 5.60m bgl. 3) Groundwater seepage encountered at 3.60m bgl.									
Water Strikes									
Chiselling		Borehole Diameter		Casing Diameter		Strike (m)		Remarks	
From (m)	To (m)	Duration	Remarks	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)	3.60	Groundwater seepage encountered at 3.60m bgl.
3.60	3.70	00:30							
3.70	4.00	00:30							
4.00	4.70	00:30							
RPS CP Template Issue Number: 1 Issue Date: 13/09/2017									

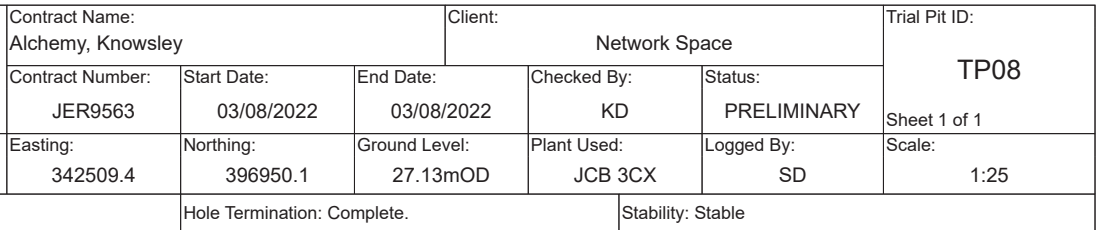
	Contract Name: Alchemy, Knowsley			Client: Network Space			Borehole ID: CP04		
	Contract Number: JER9563	Start Date: 03/08/2022	End Date: 04/08/2022	Checked By: KD	Status: PRELIMINARY				
Cable Percussion Borehole Log	Easting: 342493.0	Northing: 397016.4	Ground Level: 27.26mOD	Plant Used: Dando 2000	Logged By: SD	Sheet 1 of 1			
	Weather: Sun			Termination: Refusal.		SPT Hammer: AR812 Energy Ratio: 64%			
Samples & In Situ Testing				Strata Details				Groundwater	
Depths	Type/ Ref	SPT	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
0.00 - 1.20	B1						Brown very sandy gravelly SILT. Sand is fine to coarse Gravel is angular to subangular fine to coarse of brick, mudstone, sandstone and clinker. MADE GROUND		
1.20 - 1.65 1.20 - 1.65 1.35	B2 D1 ES1	SPT(S) 1.20m, N=2 (1./,1.,,1)		26.06	1.20		Dark brown gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of brick, coal, clinker, metal and sandstone. MADE GROUND	1	
2.00 - 2.45 2.00 - 2.45	B3 D2	SPT(S) 2.00m, N=2 (1./,1.,,1)			(1.30)		From 2.00m bgl clayey pockets present.	2	
2.70 - 3.00	B4			24.76	2.50		Stiff red brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse of sandstone and mudstone. CHESTER FORMATION	3	
3.00 - 3.45 3.00 - 3.45	B5 D3	SPT(S) 3.00m, N=50 (7./,8./,10./,12./,20)			(2.00)				
4.00 - 4.45 4.00 - 4.45	B6 D4	SPT(S) 4.00m, 50 (7./,8./,50 for 275mm)						4	
4.50 - 4.60	B7	SPT(C) 4.50m, N=0 (75 for 75mm/,...) SPT(C) 4.60m, N=0 (85 for 65mm/,...)		22.76 22.66	4.50 4.60		Weathered red and brown SANDSTONE and MUDSTONE. CHESTER FORMATION End of Borehole at 4.60m	5	
								6	
								7	
								8	
								9	
								10	
Start & End of Shift Observations				Installation				Remarks:	
Date	Time	Depth (m)	Casing (m)	Water (m)	Ref	Top (m)	Base (m)	Type	Dia (mm)
					1 1	0.00 3.00	3.00 4.60	PLAIN SLOTTED	
								1) Cable percussive borehole terminated at 4.60m bgl due to refusal. 2) Gas and groundwater monitoring standpipe installed with a response zone between 3.00m bgl and 4.60m bgl. 3) No groundwater encountered.	
								Water Strikes	
								Strike (m)	Casing (m)
								Sealed (m)	Time (mins)
								Rose to (m)	Remarks
								0	No groundwater encountered.
Chiselling				Borehole Diameter		Casing Diameter			
From (m)	To (m)	Duration	Remarks	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)		
4.50	4.60	00:30							
RPS CP Template Issue Number: 1 Issue Date: 13/09/2017									

	Contract Name: Alchemy, Knowsley			Client: Network Space		Trial Pit ID: TP04			
	Contract Number: JER9563	Start Date: 04/08/2022	End Date: 04/08/2022	Checked By: KD	Status: PRELIMINARY	Sheet 1 of 1			
Trial Pit Log	Easting: 342621.6	Northing: 397090.4	Ground Level: 28.35mOD	Plant Used: JCB 3CX	Logged By: SD	Scale: 1:25			
	Weather: Sun		Hole Termination: Sandstone encountered.		Stability: Stable				
Samples & In Situ Testing				Strata Details				Water	Backfill
Depths	Type/Ref	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description			
0.60	ES1	PID 0.60m, 0.0ppm	27.85	0.50		Brown sandy gravelly SILT with boulders of concrete. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of brick and concrete. MADE GROUND		1	
1.70 - 1.90	B1			(2.00)		Firm brown and dark grey slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of sandstone and mudstone. MADE GROUND			
2.60	ES2	PID 2.60m, 0.0ppm	25.85	2.50		Dark grey organic rich CLAY with medium cobble content of whole brick. MADE GROUND		3	
			25.65	2.70		SANDSTONE.			
				(0.30)		CHESTER FORMATION			
			25.35	3.00		End of Trial Pit at 3.00m			
Dimensions:				General Remarks:					
Final Depth: 3.00m				1) Trial pit terminated at 3.00m bgl due to encountering sandstone. 2) Backfilled with arisings upon completion. 3) No groundwater encountered.					
									
				Water Strikes					
				Strike (m)		Remarks			
						No groundwater encountered.			
				RPS TP Template Issue Number: 1 Issue Date: 13/09/2017					

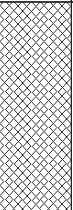
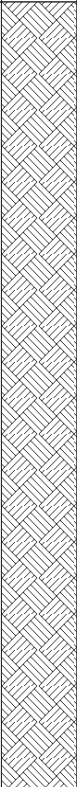
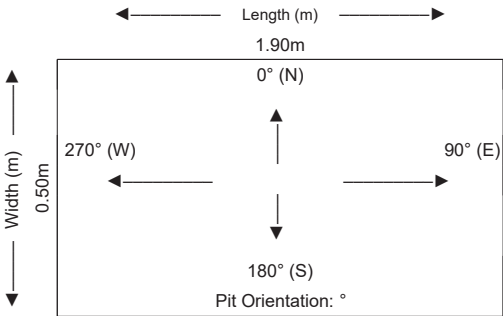
	Contract Name: Alchemy, Knowsley			Client: Network Space		Trial Pit ID: TP05					
	Contract Number: JER9563	Start Date: 04/08/2022	End Date: 04/08/2022	Checked By: KD	Status: PRELIMINARY	Sheet 1 of 1					
Trial Pit Log	Easting: 342559.3	Northing: 397035.2	Ground Level: 27.87mOD	Plant Used: JCB 3CX	Logged By: SD	Scale: 1:25					
	Weather: Sun			Hole Termination: Sandstone encountered.		Stability: Stable					
Samples & In Situ Testing				Strata Details				Water	Backfill		
Depths	Type/Ref	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description					
0.30	ES1	PID 0.30m, 3.0ppm	27.47	(0.40)		Brown sandy gravelly SILT. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of brick, sandstone and mudstone. MADE GROUND		1			
				0.40		Brown sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of sandstone and mudstone. MADE GROUND					
				(0.80)							
				26.67	1.20		Dark brown and grey organic rich CLAY with medium cobble content of whole brick. MADE GROUND				
	ES2	PID 2.20m, 3.7ppm	26.47	1.40		Brown sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of sandstone and mudstone. MADE GROUND		2			
				(1.10)							
2.10				25.37	2.50		Dark brown and grey organic rich CLAY with medium cobble content of whole brick. MADE GROUND				
				25.17	2.70		Red brown very sandy gravelly CLAY. Sand is fine to coarse. Gravel is subrounded fine to coarse of sandstone and mudstone.				
				24.97	2.90		CHESTER FORMATION SANDSTONE.				
				24.87	3.00		CHESTER FORMATION				
							End of Trial Pit at 3.00m			3	
Dimensions:										General Remarks:	
Final Depth: 3.00m										1) Trial pit terminated at 3.00m bgl due to encountering sandstone. 2) Backfilled with arisings upon completion. 3) No groundwater encountered.	
											
										Water Strikes	
										Strike (m)	Remarks
											No groundwater encountered.
RPS TP Template Issue Number: 1 Issue Date: 13/09/2017											

	Contract Name: Alchemy, Knowsley			Client: Network Space		Trial Pit ID: TP06		
	Contract Number: JER9563	Start Date: 03/08/2022	End Date: 03/08/2022	Checked By: KD	Status: PRELIMINARY	Sheet 1 of 1		
Trial Pit Log	Easting: 342547.7	Northing: 397085.7	Ground Level: 28.03mOD	Plant Used: JCB 3CX	Logged By: SD	Scale: 1:25		
	Weather: Sun			Hole Termination: Complete.		Stability: Stable		
Samples & In Situ Testing			Strata Details				Water	Backfill
Depths	Type/Ref	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description		
0.80	ES1	PID 0.80m, 0.5ppm		(2.50)		Brown sandy gravelly SILT. Sand is fine to coarse. Gravel is angular to subrounded fine to coarse of metal, timber, pottery, concrete, sandstone and mudstone. MADE GROUND <i>At 0.30m bgl a piece of brick wall was present.</i> <i>At 0.80m bgl pocket of black organic rich clay is present.</i>	1	
2.40 2.50 - 2.70	ES2 B1	PID 2.40m, 0.1ppm	25.53	2.50 (1.00)		Red fine to coarse slightly gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of mudstone and sandstone. CHESTER FORMATION	3	
						End of Trial Pit at 3.50m		
Dimensions:						General Remarks:		
Final Depth: 3.50m						1) Trial pit completed at 3.50m bgl. 2) Soakaway test performed in pit and was terminated after 4.00 hours due to limited infiltration. 3) Backfilled with arisings upon completion. 4) Groundwater seepage encountered at 1.90m bgl.		
								
						Water Strikes		
						Strike (m)	Remarks	
						1.90	Groundwater seepage encountered at 1.90m bgl.	
RPS TP Template Issue Number: 1 Issue Date: 13/09/2017								

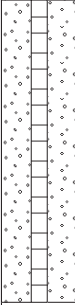
	Contract Name: Alchemy, Knowsley			Client: Network Space		Trial Pit ID: TP07		
	Contract Number: JER9563	Start Date: 03/08/2022	End Date: 03/08/2022	Checked By: KD	Status: PRELIMINARY	Sheet 1 of 1		
Trial Pit Log	Easting: 342507.2	Northing: 397077.9	Ground Level: 28.11mOD	Plant Used: JCB 3CX	Logged By: SD	Scale: 1:25		
	Weather: Sun		Hole Termination: Instability.		Stability: Unstable.			
Samples & In Situ Testing			Strata Details				Water	Backfill
Depths	Type/Ref	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description		
1.50	ES1	PID 1.50m, 0.0ppm		(0.60)		Brown sandy gravelly SILT with medium cobble content of whole brick. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of clinker and sandstone. MADE GROUND	1	
			27.51	0.60		Red brown slightly gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of sandstone. MADE GROUND		
			27.01	1.10		Dark grey silty sandy angular to subangular fine to coarse GRAVEL of concrete, brick, timber and sandstone with hydrocarbon odour. MADE GROUND		
			(0.70)					
			26.31	1.80		End of Trial Pit at 1.80m	2	
							3	
Dimensions:						General Remarks:		
Final Depth: 1.80m						1) Trial pit terminated at 1.80m bgl due to instability caused by groundwater ingress. 2) Backfilled with arisings upon completion. 3) Groundwater encountered at 1.60m bgl.		
								
						Water Strikes		
						Strike (m)	Remarks	
						1.60	Groundwater encountered at 1.60m bgl.	
RPS TP Template Issue Number: 1 Issue Date: 13/09/2017								

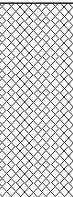
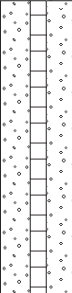


Dimensions:		General Remarks:	
Final Depth: 3.50m		1) Trial pit completed at 3.50m bgl. 2) Backfilled with arisings upon completion. 3) No groundwater encountered.	
Length (m) 2.00m 0° (N) 270° (W) 90° (E) 180° (S) Pit Orientation: ° Width (m) 0.50m			
		Water Strikes	
Strike (m)		Remarks	
		No groundwater encountered.	
RPS TP Template		Issue Number: 1 Issue Date: 13/09/2017	

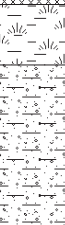
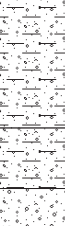
	Contract Name: Alchemy, Knowsley			Client: Network Space		Trial Pit ID: TP09			
	Contract Number: JER9563	Start Date: 03/08/2022	End Date: 03/08/2022	Checked By: KD	Status: PRELIMINARY	Sheet 1 of 1			
Trial Pit Log	Easting:	Northing:	Ground Level:	Plant Used: JCB 3CX	Logged By: SD	Scale: 1:25			
	Weather: Fair		Hole Termination: Complete.		Stability: Stable				
Samples & In Situ Testing				Strata Details			Water	Backfill	
Depths	Type/Ref	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description			
2.45	ES1			(0.70)		Brown sandy gravelly SILT. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of brick, clinker, sandstone, metal and concrete. MADE GROUND	1		
				0.70		Brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of brick, sandstone, mudstone and coal. MADE GROUND			
				(1.70)		2			
				2.40		Dark grey and black organic rich CLAY. SEDIMENT			3
				2.50		Brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of sandstone and mudstone. CHESTER FORMATION			
				2.60		End of Trial Pit at 2.60m			
Dimensions:						General Remarks:			
Final Depth: 2.60m						1) Soakaway testing pit complete at 2.60m bgl. 2) Test was ran for 3.00 hours before termination due to limited infiltration. 3) No groundwater encountered. 4) Backfilled upon completion.			
									
						Water Strikes			
						Strike (m)	Remarks		
							No groundwater encountered.		
						RPS TP Template Issue Number: 1 Issue Date: 13/09/2017			

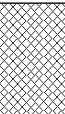
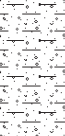
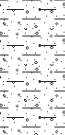
	Contract Name: Alchemy, Knowsley			Client: Network Space			Borehole ID: WS04		
	Contract Number: JER9563	Start Date: 02/08/2022	End Date: 02/08/2022	Checked By: KD	Status: PRELIMINARY				
Windowless Borehole Log	Easting: 342644.5	Northing: 397062.7	Ground Level: 28.28mOD	Plant Used: Terrier rig	Logged By: SD	Sheet 1 of 1 Scale: 1:25			
	Weather: Sun			Termination: Refusal.		SPT Hammer: WS01 Energy Ratio: 61%			
Samples & In Situ Testing				Strata Details				Groundwater	
Depths	Type/ Ref	SPT	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
0.90	ES1		PID 0.90m, 0.0ppm		(1.10)		Brown sandy slightly gravelly SILT. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of brick, coal, sandstone and mudstone. MADE GROUND	1	
1.20 - 1.65	D1	SPT(S) 1.20m, N=9 (1,1/1,2,3,3)	PID 1.20m, 0.0ppm	27.18	1.10		Firm brown sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of mudstone and sandstone. MADE GROUND		
2.00 - 2.45	D2	SPT(S) 2.00m, N=30 (3,3/4,7,8,11)			(1.20)			2	
2.40	ES2			25.98	2.30		Black organic rich CLAY. SEDIMENT		
				25.78	2.50		Red brown very sandy SILT with white fine sand intrusions. Sand is fine to coarse. CHESTER FORMATION		
		SPT(S) 3.00m, 100 (7,15/100 for 227mm)		25.28	3.00		End of Borehole at 3.00m	3	
									4
								5	
Start & End of Shift Observations				Installation				Remarks:	
Date	Time	Depth (m)	Casing (m)	Water (m)	Ref	Top (m)	Base (m)	Type	Diameter (mm)
					1	0.00	2.00	PLAIN	
					1	2.00	3.00	SLOTTED	
Windowless Sample Run Details				Casing				Water Strikes	
Test Number	Diameter (mm)	Depth Top (m)	Depth Base (m)	Recovery (%)	Depth (m)	Diameter (mm)	Strike (m)	Casing (m)	Sealed (m)
								Time (mins)	Rose to (m)
								0	
								Remarks	
								No groundwater encountered.	
RPS WLS Template Issue Number: 2 Issue Date: 02/01/2018									

	Contract Name: Alchemy, Knowsley			Client: Network Space			Borehole ID: WS05					
	Contract Number: JER9563	Start Date: 02/08/2022	End Date: 02/08/2022	Checked By: KD	Status: PRELIMINARY							
Windowless Borehole Log	Easting: 342579.6	Northing: 397025.3	Ground Level: 27.75mOD	Plant Used: Terrier rig	Logged By: SD	Sheet 1 of 1 Scale: 1:25						
	Weather: Sun		Termination: Refusal.		SPT Hammer: WS01 Energy Ratio: 61%							
Samples & In Situ Testing				Strata Details				Groundwater				
Depths	Type/ Ref	SPT	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation			
0.40	ES1		PID 0.40m, 3.0ppm	27.05	0.70		Brown sandy gravelly SILT. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of brick, coal, sandstone and mudstone. MADE GROUND	1				
1.20 - 1.65	D1	SPT(S) 1.20m, N=11 (2,2/2,2,4,3)			(1.10)		Brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of brick, coal, sandstone and mudstone. MADE GROUND					
2.00 - 2.45	D2	SPT(S) 2.00m, 100 (9,13/100 for 255mm)		25.95	1.80		Black organic rich CLAY. SEDIMENT	2				
2.60	ES2		PID 2.60m, 2.8ppm	25.65	2.10		Red brown very sandy SILT. Sand is fine to coarse. CHESTER FORMATION					
				25.05	2.70		End of Borehole at 2.70m	3				
								4				
								5				
Start & End of Shift Observations				Installation				Remarks: 1) Window sample borehole terminated at 2.70m bgl due to refusal. 2) Gas and groundwater monitoring standpipe installed with response zone between 1.70m bgl and 2.70m bgl. 3) No groundwater encountered.				
Date	Time	Depth (m)	Casing (m)	Water (m)	Ref	Top (m)	Base (m)			Type	Diameter (mm)	
					1	0.00	1.70	PLAIN				
					1	1.70	2.70	SLOTTED				
Windowless Sample Run Details				Casing				Water Strikes				
Test Number	Diameter (mm)	Depth Top (m)	Depth Base (m)	Recovery (%)	Depth (m)	Diameter (mm)	Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
										0		No groundwater encountered.
RPS WLS Template Issue Number: 2 Issue Date: 02/01/2018												

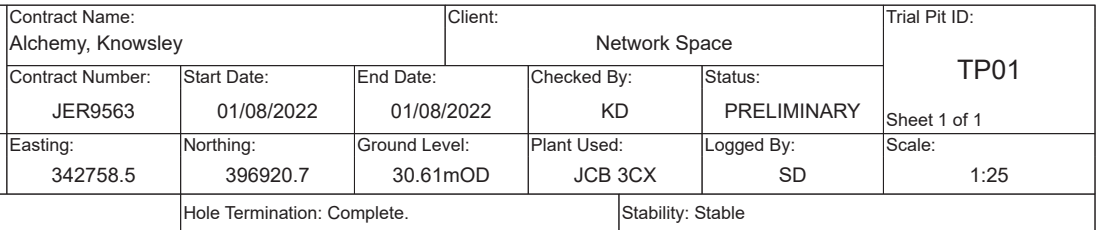
	Contract Name: Alchemy, Knowsley			Client: Network Space			Borehole ID: WS06			
	Contract Number: JER9563	Start Date: 02/08/2022	End Date: 02/08/2022	Checked By: KD	Status: PRELIMINARY					
Windowless Borehole Log	Easting: 342559.9	Northing: 396963.0	Ground Level: 27.83mOD	Plant Used: Terrier rig	Logged By: SD	Sheet 1 of 1				
	Weather: Sun			Termination: Refusal.		SPT Hammer: WS01 Energy Ratio: 61%				
Samples & In Situ Testing				Strata Details				Groundwater		
Depths	Type/ Ref	SPT	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation	
0.60	ES1		PID 0.60m, 0.4ppm	27.18	0.65		Brown sandy gravelly SILT. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of brick, sandstone, mudstone and coal. MADE GROUND	1		
1.20 - 1.65	D1	SPT(S) 1.20m, N=11 (1,1/2,3,3,3)		26.98	0.85		Brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of brick, sandstone, mudstone and coal. MADE GROUND Brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of sandstone, mudstone and coal. MADE GROUND <i>After 0.85m bgl no brick was present.</i>			
2.00 - 2.45	D2	SPT(S) 2.00m, N=22 (4,5/6,4,6,6)			(2.25)			2		
3.20	ES2	SPT(S) 3.00m, 50 (7,9/50 for 275mm)	PID 3.20m, 4.7ppm	24.73	3.10					3
				24.63	3.20		Soft dark brown organic rich CLAY.			
				24.53	3.30		SEDIMENT Red sandy SILT. Sand is fine to coarse. CHESTER FORMATION End of Borehole at 3.20m			
								4		
									5	

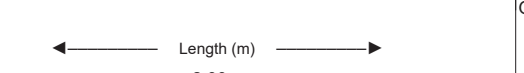
Start & End of Shift Observations					Installation					Remarks: 1) Window sample borehole terminated at 3.20m bgl due to refusal. 2) Gas and groundwater monitoring standpipe installed with response zone between 2.00m bgl and 3.00m bgl. 3) No groundwater encountered.				
Date	Time	Depth (m)	Casing (m)	Water (m)	Ref	Top (m)	Base (m)	Type	Diameter (mm)					
					1	0.00	2.00	PLAIN						
					1	2.00	3.00	SLOTTED						
Windowless Sample Run Details					Casing					Water Strikes				
Test Number	Diameter (mm)	Depth Top (m)	Depth Base (m)	Recovery (%)	Depth (m)	Diameter (mm)	Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks		
										0		No groundwater encountered.		
RPS WLS Template Issue Number: 2 Issue Date: 02/01/2018														

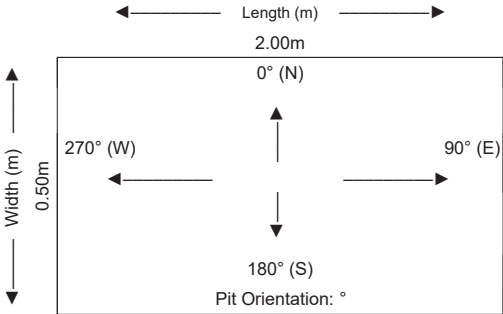
	Contract Name: Alchemy, Knowsley			Client: Network Space			Borehole ID: WS07		
	Contract Number: JER9563	Start Date: 02/08/2022	End Date: 02/08/2022	Checked By: KD	Status: PRELIMINARY				
Windowless Borehole Log	Easting: 342494.7	Northing: 396975.4	Ground Level: 27.35mOD	Plant Used: Terrier rig	Logged By: SD	Sheet 1 of 1 Scale: 1:25			
	Weather: Sun		Termination: Refusal.		SPT Hammer: WS01 Energy Ratio: 61%				
Samples & In Situ Testing				Strata Details				Groundwater	
Depths	Type/ Ref	SPT	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
1.20 - 1.65	D1	SPT(S) 1.20m, N=16 (3,3/3,4,4,5)	PID 1.50m, 0.2ppm	26.65	0.70		Brown sandy slightly gravelly SILT. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of plastic, sandstone and mudstone. MADE GROUND	1	
1.50	ES1			26.40	0.95		Dark brown slightly gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to medium of sandstone and mudstone. MADE GROUND		
2.00 - 2.45	D2	SPT(S) 2.00m, N=32 (6,6/4,9,10,9)		25.90	1.45		Dark brown very sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to medium of sandstone and mudstone. MADE GROUND		
2.85	ES2			25.70	1.65		Black organic rich sandy CLAY. Sand is fine to coarse. SEDIMENT		
3.00 - 3.45	D3	SPT(S) 3.00m, N=45 (9,9/10,11,11,13)	PID 2.85m, 0.0ppm	24.75	2.60		Brown very sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to medium of sandstone and mudstone. CHESTER FORMATION	2	
				24.55	2.80		Dark brown sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to medium of sandstone, slate and mudstone. CHESTER FORMATION		
				24.25	3.10		Brown very sandy subangular to subrounded fine to coarse GRAVEL of sandstone and mudstone. CHESTER FORMATION		
				23.85	3.50		Red sandy SILT. Sand is fine to coarse. CHESTER FORMATION		
							End of Borehole at 3.50m	3	
								4	
								5	
Start & End of Shift Observations				Installation				Remarks:	
Date	Time	Depth (m)	Casing (m)	Water (m)	Ref	Top (m)	Base (m)	Type	Diameter (mm)
					1	0.00	1.50	PLAIN	
					1	1.50	3.00	SLOTTED	
1) Window sample borehole terminated at 3.50m bgl due to refusal. 2) Gas and groundwater monitoring standpipe installed with response zone between 1.50m bgl and 3.00m bgl. 3) No groundwater encountered.									
Windowless Sample Run Details				Casing				Water Strikes	
Test Number	Diameter (mm)	Depth Top (m)	Depth Base (m)	Recovery (%)	Depth (m)	Diameter (mm)	Strike (m)	Casing (m)	Sealed (m)
							Time (mins)	Rose to (m)	Remarks
							0		No groundwater encountered.
RPS WLS Template Issue Number: 2 Issue Date: 02/01/2018									

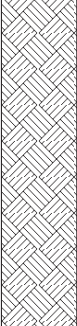
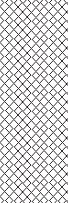
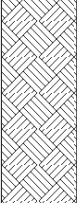
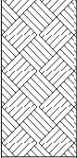
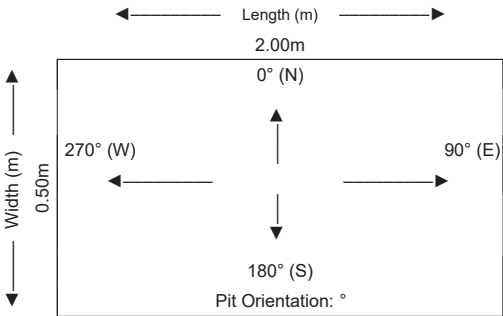
	Contract Name: Alchemy, Knowsley			Client: Network Space			Borehole ID: CP01		
	Contract Number: JER9563	Start Date: 02/08/2022	End Date: 02/08/2022	Checked By: KD	Status: PRELIMINARY	Sheet 1 of 1			
Cable Percussion Borehole Log	Easting: 342737.5	Northing: 396891.0	Ground Level: 30.05mOD	Plant Used: Dando 2000	Logged By: SD	Scale: 1:50			
Weather: Fair.		Termination: Refusal.			SPT Hammer: AR812 Energy Ratio: 64%				
Samples & In Situ Testing				Strata Details				Groundwater	
Depths	Type/ Ref	SPT	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
0.00 - 0.80	B1				(0.80)		Brown sandy gravelly SILT. Sand is fine to coarse. Gravel is very angular to subangular fine to coarse of brick, mudstone and sandstone. MADE GROUND		
0.80 - 1.20 0.90	B2 ES1		PID 0.90m, 0.0ppm	29.25	0.80 (0.40)		Brown and light grey sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of brick and coal. MADE GROUND	1	
1.20 - 1.65 1.20 - 1.65	B3 D1	SPT(S) 1.20m, N=12 (2,2/2,4,3,3)		28.85	1.20		Soft to firm brown mottled light grey sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of sandstone and mudstone. GLACIAL TILL	2	
2.00 - 2.45 2.00 - 2.50	U- NR1 B4				(1.80)		Red brown gravelly fine to coarse SAND. Gravel is sub angular to subrounded fine to coarse of sandstone. CHESTER FORMATION	3	
3.00 - 3.45 3.00 - 3.45	B5 D2	SPT(S) 3.00m, N=36 (3,4/4,11,10,11)		27.05	3.00 (0.50)		Stiff red brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded of sandstone and mudstone. CHESTER FORMATION	4	
4.00 - 4.45 4.00 - 4.45	B6 D3	SPT(S) 4.00m, N=34 (2,5/5,10,9,10)						5	
5.00 - 5.45 5.00 - 5.45	B7 D4	SPT(S) 5.00m, N=33 (6,6/7,7,8,11)						6	
6.00 - 6.45 6.00 - 6.45	B8 D5	SPT(S) 6.00m, N=34 (6,7/7,8,9,10)			(5.50)			7	
7.50 - 7.95 7.50 - 7.95	B9 D6	SPT(S) 7.50m, 50 (25 for 140mm/50 for 280mm)						8	
9.00 - 9.45 9.00 - 9.45	B10 D7	SPT(S) 9.00m, 50 (11,14/50 for 265mm)		21.05	9.00		End of Borehole at 9.00m	9	
Start & End of Shift Observations				Installation				Remarks:	
Date	Time	Depth (m)	Casing (m)	Water (m)	Ref	Top (m)	Base (m)	Type	Dia (mm)
					1	0.00	5.00	PLAIN	
					1	5.00	9.00	SLOTTED	
Chiselling				Borehole Diameter				Casing Diameter	
From (m)	To (m)	Duration	Remarks	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)		
Water Strikes									
Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks				
9.00			0		Groundwater seepage at 9.00m bgl.				
RPS CP Template Issue Number: 1 Issue Date: 13/09/2017									

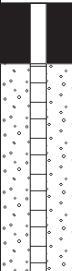
	Contract Name: Alchemy, Knowsley			Client: Network Space			Borehole ID: CP02		
	Contract Number: JER9563	Start Date: 04/08/2022	End Date: 04/08/2022	Checked By: KD	Status: PRELIMINARY				
Cable Percussion Borehole Log	Easting: 342811.3	Northing: 396909.9	Ground Level: 31.61mOD	Plant Used: Dando 2000	Logged By: SD	Sheet 1 of 1 Scale: 1:50			
	Weather: Sun		Termination: Refusal.		SPT Hammer: AR812 Energy Ratio: 64%				
Samples & In Situ Testing				Strata Details				Groundwater	
Depths	Type/ Ref	SPT	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
0.00 - 1.20	B1			31.41	0.20		Brown sandy gravelly SILT. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of brick, coal and mudstone. MADE GROUND	1	
0.70	ES1		PID 0.70m, 0.0ppm				Brown mottled light grey sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subrounded of brick, sandstone and mudstone. MADE GROUND		
1.20 - 1.65	B2	SPT(S)			(1.80)			2	
1.20 - 1.65	D1	1.20m, N=12 (2,3/3,2,3,4)							
2.00 - 2.45	B3	SPT(S)		29.61	2.00		Black organic rich gravelly CLAY. Gravel is angular fine to coarse of brick. MADE GROUND	3	
2.00 - 2.45	D2	2.00m, N=18 (2,3/4,5,5,4)	PID 2.30m, 2.4ppm		(0.50)				
2.50 - 3.00	B4			29.11	2.50		Stiff red brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subrounded fine to coarse of mudstone and sandstone. CHESTER FORMATION	4	
3.00 - 3.45	B5	SPT(S)							
3.00 - 3.45	D3	3.00m, N=45 (3,5/6,13,12,14)			(2.00)		Red SANDSTONE. Recovered as red fine to coarse SAND. CHESTER FORMATION	5	
4.00 - 4.45	B6	SPT(S)							
4.00 - 4.45	D4	4.00m, 50 (5,8/50 for 290mm)					End of Borehole at 5.10m	6	
4.50 - 4.95	B7	SPT(S)		27.11	4.50				
4.50 - 4.95	D5	4.50m, N=0 (75 for 145mm/,...)			(0.60)			7	
5.00 - 5.10	D6	SPT(S)		26.51	5.10			8	
		5.00m, N=0 (75 for 100mm/,...)						9	
								10	
Start & End of Shift Observations				Installation				Remarks:	
Date	Time	Depth (m)	Casing (m)	Water (m)	Ref	Top (m)	Base (m)	Type	Dia (mm)
					1	0.00	3.00	PLAIN	
					1	3.00	5.00	SLOTTED	
1) Cable percussive borehole terminated at 5.10m bgl due to refusal. 2) Gas and groundwater monitoring standpipe installed with a response zone between 3.00m bgl and 5.00m bgl. 3) No groundwater encountered.									
Water Strikes									
Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks				
			0		No groundwater encountered.				
Chiselling				Borehole Diameter		Casing Diameter			
From (m)	To (m)	Duration	Remarks	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)		
4.50	5.00	00:45							
RPS CP Template Issue Number: 1 Issue Date: 13/09/2017									



Dimensions: Final Depth: 3.50m 	General Remarks: 1) Trial pit completed at 3.50m bgl. 2) Backfilled with arisings upon completion. 3) Groundwater encountered at 1.10m bgl from land drain.
---	---

	Contract Name: Alchemy, Knowsley			Client: Network Space		Trial Pit ID: TP02			
	Contract Number: JER9563	Start Date: 04/08/2022	End Date: 04/08/2022	Checked By: KD	Status: PRELIMINARY	Sheet 1 of 1			
Trial Pit Log	Easting: 342784.4	Northing: 396877.1	Ground Level: 30.71mOD	Plant Used: JCB 3CX	Logged By: SD	Scale: 1:25			
	Weather: Sun		Hole Termination: Complete.		Stability: Stable				
Samples & In Situ Testing				Strata Details				Water	Backfill
Depths	Type/Ref	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description			
0.35	ES1			(0.50)		Brown sandy gravelly SILT. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of sandstone, mudstone and brick. MADE GROUND		1	
			30.21	0.50		Red very sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of tarmac and sandstone. MADE GROUND			
			29.96	0.75		Weak CONCRETE. CONCRETE			
1.30	ES2			29.71	1.00		Dark grey sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to medium of sandstone and mudstone. MADE GROUND	2	
				(0.40)					
			29.31	1.40		Brown sandy gravelly SILT. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of coal, sandstone, mudstone and clinker. MADE GROUND			
				(2.10)				3	
3.00 - 3.20	B1								
			27.21	3.50		End of Trial Pit at 3.50m			
Dimensions:						General Remarks:			
Final Depth: 3.50m						1) Trial pit completed at 3.50m bgl. 2) Backfilled with arisings upon completion. 3) No groundwater encountered.			
									
						Water Strikes			
						Strike (m) Remarks			
						No groundwater encountered.			
						RPS TP Template Issue Number: 1 Issue Date: 13/09/2017			

	Contract Name: Alchemy, Knowsley			Client: Network Space		Trial Pit ID: TP03		
	Contract Number: JER9563	Start Date: 01/08/2022	End Date: 01/08/2022	Checked By: KD	Status: PRELIMINARY	Sheet 1 of 1		
Trial Pit Log	Easting: 342830.9	Northing: 396934.9	Ground Level: 31.75mOD	Plant Used: JCB 3CX	Logged By: SD	Scale: 1:25		
	Weather: Sun			Hole Termination: Complete.		Stability: Stable		
Samples & In Situ Testing				Strata Details			Water	Backfill
Depths	Type/Ref	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description		
1.60	ES1	PID 1.60m, 0.7ppm	30.65	(1.10)		Brown sandy gravelly CLAY with cobbles of whole brick. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of coal and sandstone. MADE GROUND	1	
				1.10		Dark brown sandy gravelly CLAY with high organic content and cobbles of whole brick. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of coal and sandstone. MADE GROUND		
				1.55		Black sandy subangular fine to medium GRAVEL of clinker and coal with a strong hydrocarbon odour. MADE GROUND		
				1.70		Grey slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is very angular to subangular of brick, clinker and ceramics. MADE GROUND		
2.00	ES2	PID 2.00m, 0.4ppm	29.35	(0.70)			2	
				2.40		Red brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse of sandstone and mudstone. CHESTER FORMATION		
				(1.10)				
			28.25	3.50		End of Trial Pit at 3.50m	3	
Dimensions:				General Remarks:				
Final Depth: 3.50m				1) Trial pit completed at 3.50m bgl. 2) Soakaway test performed in pit and was terminated after 4.00 hours due to limited infiltration. 2) Backfilled with arisings upon completion. 3) No groundwater encountered.				
								
				Water Strikes				
				Strike (m) Remarks				
				No groundwater encountered.				
				RPS TP Template Issue Number: 1 Issue Date: 13/09/2017				

	Contract Name: Alchemy, Knowsley			Client: Network Space			Borehole ID: WS01		
	Contract Number: JER9563	Start Date: 01/08/2022	End Date: 01/08/2022	Checked By: KD	Status: PRELIMINARY				
Windowless Borehole Log	Easting: 342754.9	Northing: 396874.8	Ground Level: 30.09mOD	Plant Used: Terrier rig	Logged By: SD	Sheet 1 of 1			
	Weather: Sun			Termination: Refusal.		SPT Hammer: WS01 Energy Ratio: 61%			
Samples & In Situ Testing				Strata Details				Groundwater	
Depths	Type/ Ref	SPT	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
1.00	ES1		PID 1.00m, 13.8ppm		(0.60)		Brown sandy gravelly SILT. Sand is fine to coarse. Gravel is very angular to subangular fine to coarse of brick, concrete and glass. MADE GROUND	1	
				29.49	0.60		Brown and light yellow silty sandy subangular fine to coarse GRAVEL of sandstone. MADE GROUND		
				29.29	0.80		Dark grey silty sandy angular to subangular fine to coarse GRAVEL of sandstone, clinker and coal. MADE GROUND		
1.30	ES2	SPT(S) 1.20m, N=7 (1,2/1,1,2,3)	PID 1.30m, 3.8ppm		(0.40)		Light brown light grey sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of brick and coal. MADE GROUND	2	
				28.89	1.20		Soft to firm red brown mottled light grey sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of sandstone and mudstone. MADE GROUND		
				28.74	1.35				
		SPT(S) 2.00m, N=7 (2,2/2,3,1,1)			(2.10)		Red brown gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of sandstone, mudstone and quartz. MADE GROUND	3	
				26.64	3.45		Dark brown sandy very gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of clinker, coal and sandstone. MADE GROUND		
				26.54	3.55				
3.65	ES3	SPT(S) 3.00m, N=37 (25,17/9,9,11,8)					Dark brown sandy very gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of clinker, coal and sandstone. MADE GROUND	4	
				26.29	3.80		End of Borehole at 3.80m		
								5	
Start & End of Shift Observations				Installation				Remarks:	
Date	Time	Depth (m)	Casing (m)	Water (m)	Ref	Top (m)	Base (m)	Type	Diameter (mm)
					1	0.00	0.20	PLAIN	
					1	0.20	0.90	SLOTTED	
Windowless Sample Run Details				Casing				Water Strikes	
Test Number	Diameter (mm)	Depth Top (m)	Depth Base (m)	Recovery (%)	Depth (m)	Diameter (mm)	Strike (m)	Casing (m)	Sealed (m)
								Time (mins)	Rose to (m)
								0	
								Remarks	
								No groundwater encountered.	
RPS WLS Template Issue Number: 2 Issue Date: 02/01/2018									

	Contract Name: Alchemy, Knowsley			Client: Network Space			Borehole ID: WS02		
	Contract Number: JER9563	Start Date: 01/08/2022	End Date: 01/08/2000	Checked By: KD	Status: PRELIMINARY				
Windowless Borehole Log	Easting: 342778.7	Northing: 396908.9	Ground Level: 31.01mOD	Plant Used: Terrier rig	Logged By: SD	Sheet 1 of 1 Scale: 1:25			
	Weather: Sun		Termination: Refusal.		SPT Hammer: WS01 Energy Ratio: 61%				
Samples & In Situ Testing				Strata Details				Groundwater	
Depths	Type/ Ref	SPT	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
0.80	ES1		PID 0.80m, 0.9ppm	30.11	(0.90)		Brown slightly sandy gravelly CLAY with dark grey organic intrusions. Sand is fine to coarse. Gravel is angular to subangular fine to medium of brick and mudstone. MADE GROUND		
1.20 - 1.65	D1	SPT(S) 1.20m, N=12 (2,2/2,3,3,4)			0.90		Dark brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to medium of brick, timber and mudstone. MADE GROUND	1	
					(1.25)				
2.00 - 2.45	D2	SPT(S) 2.00m, N=26 (4,4/4,6,9,7)		28.86	2.15		Brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to medium of sandstone and mudstone. GLACIAL TILL	2	
					(1.15)				
3.00 - 3.30	D3	SPT(S) 3.00m, 50 (9,11/50 for 275mm)		27.71	3.30		End of Borehole at 3.30m	3	
								4	
								5	
Start & End of Shift Observations				Installation				Remarks:	
Date	Time	Depth (m)	Casing (m)	Water (m)	Ref	Top (m)	Base (m)	Type	Diameter (mm)
					1	0.00	1.00	PLAIN	
					1	1.00	2.00	SLOTTED	
1) Window sample borehole terminated at 3.30m bgl due to refusal. 2) Gas and groundwater monitoring standpipe installed with response zone between 1.00m bgl and 2.00m bgl. 3) No groundwater encountered.									
Windowless Sample Run Details						Casing		Water Strikes	
Test Number	Diameter (mm)	Depth Top (m)	Depth Base (m)	Recovery (%)	Depth (m)	Diameter (mm)	Strike (m)	Casing (m)	Sealed (m)
RPS WLS Template Issue Number: 2 Issue Date: 02/01/2018									

	Contract Name: Alchemy, Knowsley			Client: Network Space			Borehole ID: WS03					
	Contract Number: JER9563	Start Date: 01/08/2022	End Date: 01/08/2022	Checked By: KD	Status: PRELIMINARY							
Windowless Borehole Log	Easting: 342839.9	Northing: 396906.9	Ground Level: 31.51mOD	Plant Used: Terrier rig	Logged By: SD	Sheet 1 of 1 Scale: 1:25						
	Weather: Sun			Termination: Refusal.		SPT Hammer: WS01 Energy Ratio: 61%						
Samples & In Situ Testing				Strata Details				Groundwater				
Depths	Type/ Ref	SPT	Testing	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation			
0.80	ES1	PID 0.80m, 0.0ppm		30.91	0.60		Brown sandy gravelly SILT. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of brick and mudstone. MADE GROUND	1				
					(0.30)		Brown sandy gravelly CLAY including organic material. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of clinker, brick and mudstone. MADE GROUND					
					0.90		Brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of sandstone and mudstone. MADE GROUND					
1.20	D1	SPT(S) 1.20m, N=7 (1,1/1,1,2,3)	PID 1.40m, 0.3ppm	30.61	(1.10)		Brown very sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of sandstone and mudstone. GLACIAL TILL	2				
1.40	ES2											
2.50	ES3	SPT(S) 2.00m, N=33 (3,3/3,7,11,12)					28.91			2.60	Light grey and light brown fine to medium SAND. CHESTER FORMATION	
2.70	D2	SPT(S) 3.00m, N=0 (25 for 75mm/,...)		28.71	2.80		End of Borehole at 2.80m	3				
2.80	D3											
Start & End of Shift Observations				Installation				Remarks: 1) Window sample borehole terminated at 2.80m bgl due to refusal. 2) Gas and groundwater monitoring standpipe installed with response zone between 0.80m bgl and 2.80m bgl. 3) No groundwater encountered.				
Date	Time	Depth (m)	Casing (m)	Water (m)	Ref	Top (m)	Base (m)			Type	Diameter (mm)	
					1	0.00	0.80	PLAIN				
					1	0.80	2.80	SLOTTED				
Windowless Sample Run Details				Casing				Water Strikes				
Test Number	Diameter (mm)	Depth Top (m)	Depth Base (m)	Recovery (%)	Depth (m)	Diameter (mm)	Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
RPS WLS Template Issue Number: 2 Issue Date: 02/01/2018												

Appendix E

SITE WALKOVER PHOTOS



Site Walkover Photo locations

107 Mere Grange Business Park
Leaside
St Helens
WA9 5GG

Tel: Phone: +44 (0) 151 541 4000
E-mail info@adsstructural.co.uk



Environmental Consultancy

Project: Alchemy Way, Knowsley

Client: Network Space

Site Photographs

Project No.: 11110

ADS Site Visit 1



Photo 1 : Facing SW at Mercedes Benz dealership



Photo 2 : View from bund facing SE

**107 Mere Grange Business Park
Leaside
St Helens
WA9 5GG**

**Tel: Phone: +44 (0) 151 541 4000
E-mail info@adsstructural.co.uk**



Project: Alchemy Way, Knowsley

Client: Network Space

Site Photographs

Project No.: 11110

ADS Site Visit 1

Environmental Consultancy



Photo 3 : View from WS06 facing North



Photo 4 : Bailer recovered from CP03 – black coating of historical water bailer (possible biodegradable plastic bag).

**107 Mere Grange Business Park
Leaside
St Helens
WA9 5GG**

**Tel: Phone: +44 (0) 151 541 4000
E-mail info@adsstructural.co.uk**



Environmental Consultancy

Project: Alchemy Way, Knowsley

Client: Network Space

Site Photographs

Project No.: 11110

ADS Site Visit 1



Photo 5 : Facing SE at industrial units



Photo 6 : WS07 functional install

**107 Mere Grange Business Park
Leaside
St Helens
WA9 5GG**

**Tel: Phone: +44 (0) 151 541 4000
E-mail info@adsstructural.co.uk**



Environmental Consultancy

Project: Alchemy Way, Knowsley

Client: Network Space

Site Photographs

Project No.: 11110

ADS Site Visit 1



Photo 7 : Panoramic view from Alchemy Way looking south west



Photo 8 : Panoramic view from Alchemy Way looking north west

**107 Mere Grange Business Park
Leaside
St Helens
WA9 5GG**

**Tel: Phone: +44 (0) 151 541 4000
E-mail info@adsstructural.co.uk**



Project: Alchemy Way, Knowsley

Client: Network Space

Site Photographs

Project No.: 11110

ADS Site Visit 1

Environmental Consultancy



ADS Consult
107 Mere Grange Business Park,
Leaside,
St Helens,
WA9 5GG
Phone: +44 (0) 151 541 4000

adsstructural.com