



Knowsley Redevelopments Ltd

Former Contract Chemicals Ltd, Knowsley

Interpretative Desk Study

February 2021

35-37 High Street, Barrow-upon-Soar, Loughborough, LE12 8PY

Tel: 01509 410372

Email: info@gjgeoenvironmental.com





Report Title	Contract Chemicals, Knowsley - Interpretative Desk Study	Site Address	Former Contract Chemicals Ltd, Penrhyn Road, Knowsley Business Park, Knowsley, L34 9HY
Author	G&J Geoenvironmental Consultants Ltd	Contamination / Geotechnical	Contamination
Work Stage	Desk Study	Report Date	February 2021
Brief Description of the Report Contents	Review of desk top information to develop a conceptual model in order to establish the geo-environmental site setting, identify any potential Source-Pathway-Receptor pollutant linkages and associated environmental issues, and to provide recommendations for any further works (as required).		

Document Control

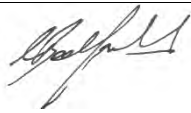
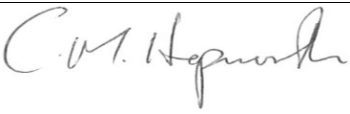
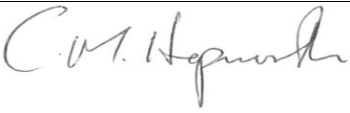
Project: Contract Chemicals, Knowsley – Interpretative Desk Study

Client: Knowsley Redevelopments Ltd

Job Number: GJ224

File Origin: N:\Projects\GJ224 Knowsley\Reports\GJ224-DTS-V1.docx

Document Checking:

Prepared by:	Andrew Bedford Senior Geoenvironmental Consultant	Signed:	
Checked and verified by:	Chris Hepworth Managing Director	Signed:	
Issued by	Chris Hepworth Managing Director	Signed:	

Issue	Date	Status
1	February 2021	V1
2		
3		

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1.0 Introduction

G&J Geoenvironmental Consultants Ltd (G&J) was commissioned by Knowsley Redevelopments Ltd to carry out an Interpretative Desk Study for the site of the Former Contract Chemicals Ltd, Knowsley.

The purpose of this report is to collate and interpret information pertaining to the site from a desk-based review of available data. The scope of the study is as follows:

- To determine the environmental setting of the site and its surroundings in terms of location, topography, ground conditions and land use;
- To discuss the geology, hydrogeology and hydrology at, and in the vicinity of, the site;
- To determine the site history and that of the surrounding area;
- To assess potential contamination issues pertaining to the site with consideration of the site's current and historic use;
- To develop an initial Conceptual Site Model (CSM) linking sources of potential contamination with pathways and receptors;
- To produce a Preliminary Risk Assessment for contamination in accordance with the *Contaminated Land Risk Management (LCRM)* Framework;
- To provide recommendations for further work and / or mitigation measures; and
- To support any planning applications for development of the site.

1.1 Terms and Conditions

This report has been prepared for Knowsley Redevelopments Ltd in consideration of the current use of the site and a future commercial development. Much of the environmental information relates to the site in its present state and should not be used in a different context without reference to G&J.

1.2 Sources of information

The following sections describe the environmental setting of the site, the site history and the anticipated ground conditions based on information taken from a variety of sources, including;

- Site Inspection undertaken on 16 February 2021;
- Current maps and plans;

- Site photographs (Appendix A);
- Geological maps and records;
- Environmental data (Groundsure) reports (Appendix B);
- Historical maps (Appendix C);
- Website of relevant authorities and organisations such as The British Geological Survey, the Environment Agency, Natural England and Historic England

Much of the information reviewed as part of this assessment is contained within the historical maps and data reports obtained from Groundsure. Only where information is considered significant and relevant in the context of the objectives of the survey has it been included in our assessment. The full Groundsure reports are referenced below:

- 10 February 2021, Groundsure Enviro+Geo insight (GS-7563653);
- 10 February 2021, Groundsure Mapinsight (GS-7563652_largescale);
- 10 February 2021, Groundsure Mapinsight (GS-7563652_smallscale).

Several previous desktop studies and intrusive investigations have been undertaken on the site, the reports of which have been made available to G&J:

- *'Preliminary Contaminated Site Investigation Contract Chemicals Ltd, Knowsley'*, Cremer & Warner Ltd, Report ref: C397/1, April 1993.
- *'Desk Study on land at Contract Chemicals Limited prepared for Contract Chemicals Limited'*, Robinson Fletcher Consultants Ltd, Report ref: 15144/1, September 1993.
- *'Contract Chemicals Limited, Knowsley Plant, Site Condition Report'*, Entec UK Limited, Report ref: 003i2, February 2003.
- *'Contract Chemicals Ltd, Trade Effluent Overspill Sampling, Final Interpretive Report'*, Entec UK Limited, Report ref: 11002il, January 2011.
- *'Bromododecane Spillage Investigation, Contract Chemicals Site, Knowsley'*, AMEC Environment & Infrastructure UK Limited, Report ref: 32144, September 2012

Although every effort has been made to ensure the accuracy of the information contained herein, no checks have been carried out to ensure the accuracy of information obtained from third parties and no liability can be accepted for any errors or misinterpretation of the third party information where it has been incorporated into this report.

1.3 Policy Context – Land Contamination

The primary legal and policy mechanisms for managing contaminated land are Part IIA of the Environmental Protection Act 1990 and the National Planning Policy Framework.

Part IIA provides a statutory definition of Contaminated Land and supporting guidance which defines how to decide whether or not land meets this definition. For land to be determined as contaminated land, the onus is on demonstrating with sufficient certainty that land is in such condition, by reasons of substances in, on or under the ground that;

- a) Significant harm is being caused or there is a significant possibility of such harm being caused; or
- b) Significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused.

Significant harm and how to determine if a significant possibility of such harm exists is defined in the statutory guidance which accompanies Part IIA. The guidance also defines four categories of land with respect to the risks to human health and the water environment and how the degree of risk relates to the statutory definition of contaminated land, as summarised in the following figure:

Figure 1.1 Part IIA Categories

Land Category	Human Health	Water	
1	Unacceptably high probability that Significant Harm would occur if no action taken	Strong case that a Significant Possibility of Significant Pollution exists	Part IIA Contaminated Land
2	The risks are sufficient that a Significant Possibility of Significant Harm exists	Of sufficient concern to present a Significant Possibility of Significant Pollution	
3	Not low risk but does not pose a Significant Possibility of Significant Harm	The risks are not sufficient to constitute Significant Possibility of Significant Pollution	Not Part IIA Contaminated Land
4	Low risk to human health and no possibility of meeting the statutory definition	No/low risk to controlled waters and would not meet the statutory definition	

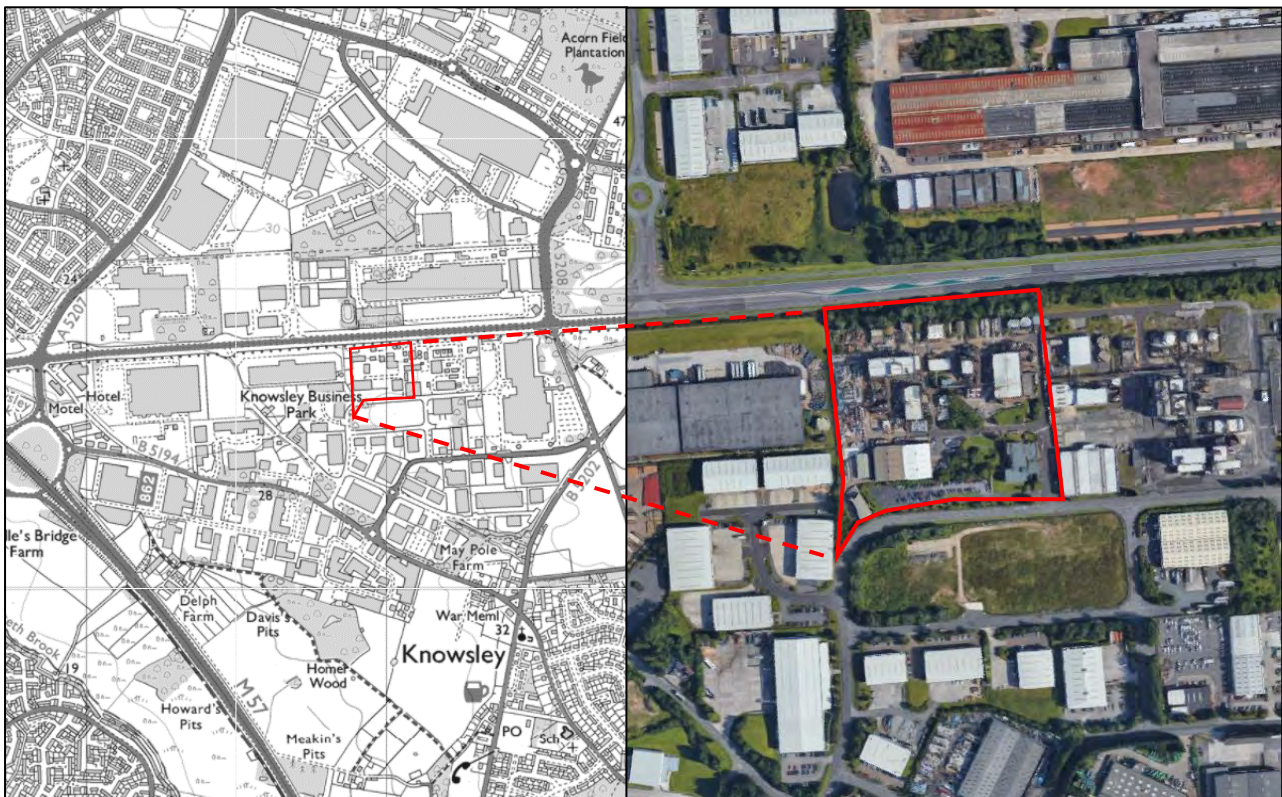
In terms of planning policy, a precautionary approach is adopted whereby it is necessary to demonstrate with sufficient confidence that the site cannot meet the statutory definition of contaminated land. Although the above categorisation is not explicitly applicable to planning decisions, a site classed as Category 4 should be considered suitable for development in accordance with planning policy. While a Category 3 site could be considered suitable, the reduced level of confidence associated with such a site means this is less likely.

2.0 Site Setting

2.1 Site Location

The site is located off Penrhyn Road and south of the A580, approximately 1.2km north of Knowsley, Liverpool. The site is approximately centred on National Grid Reference 43032, 96683, and the site location and layout are shown in Figure 2.1.

Figure 2.1 Site Location and Layout



Contains Ordnance Survey data, © Crown copyright 2021

2.2 Site Description

The Contract Chemicals site lies within Knowsley Business Park and covers an area of approximately 1.0ha, and is currently disused. Generally the site comprises former chemical processing plants and tank farms in the central and eastern portions of the site, warehousing and storage to the west and office space and car parking to the south. The site very gently slopes from approximately 32mAOD in the north to approximately 30mAOD in the south.

Brief descriptions of the main building structures are included in Table 2.1 below. The relevant structures / areas are shown Figure 2.2, which is based on a plan taken from the Entec 2003 Site Condition Report. Site Photographs are presented in Appendix A.

Figure 2.2 – Site Layout

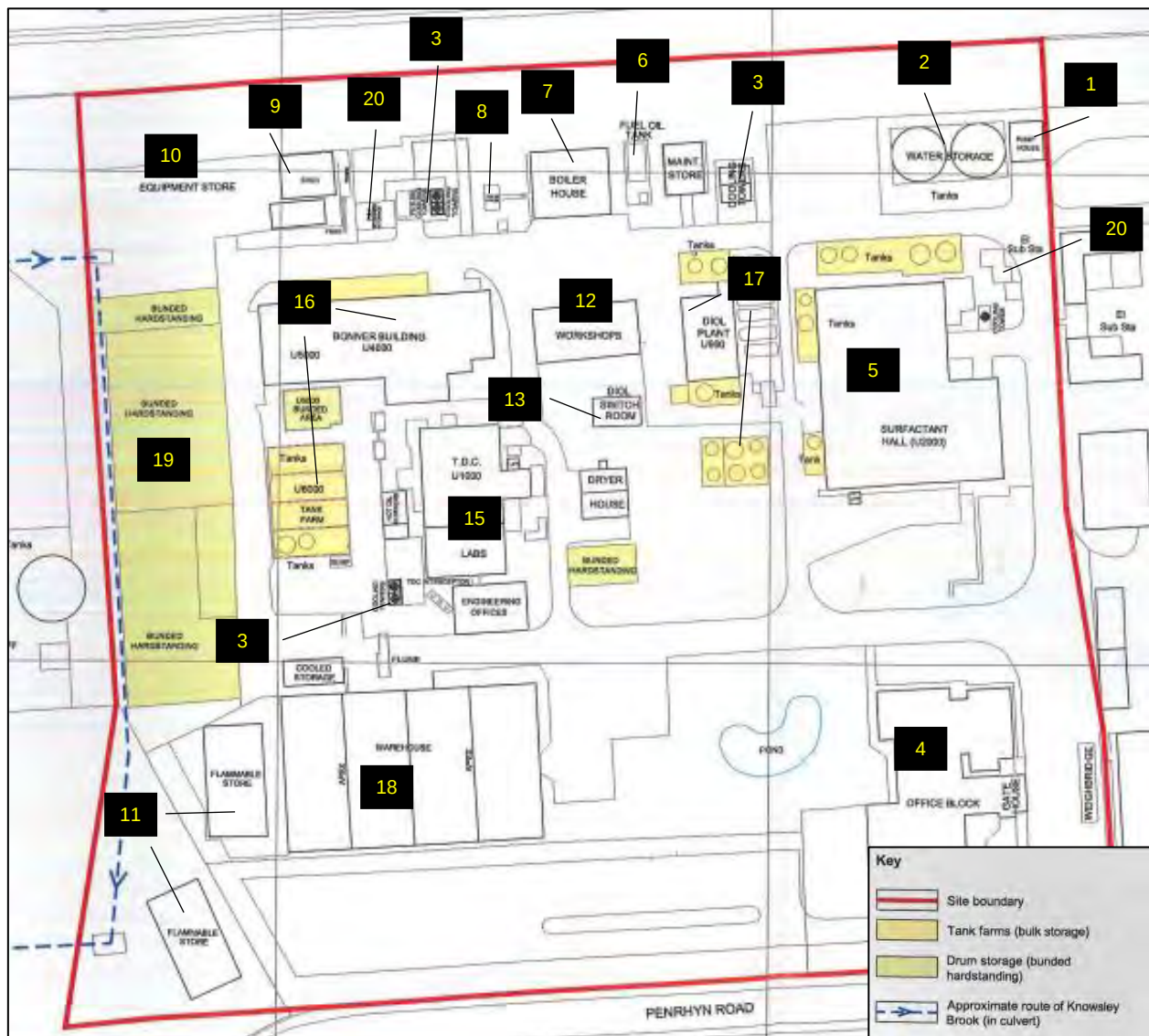


Table 2.1 Summary of Main Structures and Areas

Name	No.	Description	Photo Appendix Reference
Pump House	1	One storey brick construction. Buildings houses water pumping hardware. Some chemical containers stored within the building including Biocides and Bromgard 420	A1
Water Tanks	2	Two metal clad, cylindrical water storage tanks	A2
Cooling Towers	3	There are three cooling tower locations on site, the units generally comprise metallic clad rectangular structures with large internal fans.	A3
Office Building	4	Two storey brick construction. Site gate house is located here along with a weighbridge.	A4
Surfactant Hall and Tank Farm	5	Cladded steel framed structure with concrete floor. Houses a number of vessels and historically was involved in the production of powders such as sodium cyanate. A number of cylindrical metallic tanks are located to the north and west of the structure, containing substances such as hydrochloric and acetic acid. The tanks look in good repair and located within concrete bunded areas.	A5
Fuel Tanks	6	Three above ground metallic tanks within a high walled concrete bund. Two of the tanks are of metallic construction and are rectangular in shape, the third is a large metallic cylinder. The two square tanks contain diesel fuel and have re-fuelling apparatus, the cylindrical tank is listed as "fuel oil".	A6
Boiler House	7	Cladded steel framed structure that is mostly empty at present.	A7
Valve House	8	Single storey brick construction building which houses mains gas supply infrastructure and pipe work.	A8
Workshop Sheds	9	Cladded Steel framed structures that are mostly empty.	A9
Equipment Store	10	Area of soft ground currently utilised as storage space for old metallic vessels and other miscellaneous equipment.	A10
Flammable Sore	11	Cladded Steel framed structure, currently undergoing demolition.	A11
Workshops	12	Two storey brick and steel cladded building used as a workshop. The building was historically utilised as a fitters and is currently stocked with small spare parts.	A12
Switch Room	13	Single storey brick construction, currently empty but once housed control mechanisms for electronics.	A13
Dryer House	14	Single storey brick construction, utilised as a changing room for workers PPE. The building has several rows of lockers within and some old Hazmat suites laying around on the floor.	A14
Technical Development Centre (TDC)	15	A cladded steel structure with concrete flooring. Houses small metallic 'reaction vessels' for the testing and production of specialist chemicals. Adjoined to the TDC is a three storey building of brick construction used as laboratory and office space.	A15

Bonner Building and Tank Farm	16	Cladded steel structure with concrete flooring. Houses metallic vessels for distillation and bromination. There is an adjacent tank farm to the south comprising metallic vessels set within a concrete bunded area. The tanks, which looked in good repair, housed chemicals such as bromine, butyric and hydrobutyric acid.	A16
Diol Plant and Tank Farm	17	The Diol Plant is a cladded steel structure with concrete flooring. It is understood that the Diol Plant has been unused for approximately 15 years, however processes including reverse osmosis and distilling took place. A number of tanks are situated to the south within a concrete bund, the tanks are metallic in construction, look in good repair and contained chemicals such as hydrochloric acid and sodium hydroxide.	A17
Warehouse	18	Cladded steel structure with concrete floor. Used to house raw materials. Currently mostly full of IBC's containing waste material.	A18
Bunded Hardstanding (west)	19	The western boundary of site is occupied by bunded, concrete hardstanding historically used for the storage of IBC's. Currently the area is occupied with IBC's containing a number of waste products and unused raw materials.	A19
Substations	20	Two electricity substations are located on the site, one being to the north east of the surfactant hall, the second being on the northern boundary of the site.	A20
Chemical and Production Pipelines	-	The site is criss-crossed with numerous chemical and product pipelines which are located above ground, in general all pipelines cross over areas of hardstanding.	A21

2.3 Surrounding Land Use

To the immediate north of site is the A580 'East Lancashire Road' with the Brintonwood Trading Estate beyond. To the west of the site is a distribution warehouse where a number of businesses operate from. To the east is a chemical works operated by Algal Omega 3 Ltd and to the south is rough ground.

2.4 Potential Sources of Contamination

The Contract Chemicals site has handled a wide range of chemicals historically with the majority of these being liquid in form, the main process and storage areas of the site are considered to be the most probable sources for impact to both soils and groundwater. The majority of chemicals were held either in bulk storage vessels within bunded concrete areas or stored in IBCs on site. It is understood that currently all the vessels residing in tanks farms are now empty, however the warehouse and bunded hardstanding area in the west of the site have numerous IBCs full of waste materials and unused raw materials.

Although the site resides largely on hardstanding with widespread bunded areas and an effluent drainage system comprising sumps and interceptors, there are still several pathways via which chemical contaminants could impact soil or groundwater, the most notable being spillages to surface, leakage of the effluent drainage

system and permeation through cracks or joints in hardstanding. However, there was no evidence of spillages / staining etc, and all the tanks, bunds and hard surfaces etc appeared well maintained and in good condition.

Using information gathered from both a site walkover and from the Entec 2003 report, Table 2.2 below lists a number of primary contaminants of concern. A full inventory of chemicals used at the site, taken from the Entec 2003 report, is included in Appendix D.

Table 2.2 Contaminants of concern

Location	Contaminant of concern
Surfactant Hall and Tank Farm	• Sodium cyanate • Sodium thiocyanate • Hydrochloric Acid • Acetic Acid
Technical Development Centre (TDC)	• Various organic and inorganic contaminants
Bonner Building and Tank Farm	• Bromine • Butyric acid • Hydrochloric acid • Ethanol
Diol Plant and Tank Farm	• Dimethyl amine (1, 2) propane diol • Hydrochloric Acid • Sodium Hydroxide
Warehouse & Bunded Hardstanding (west)	• Hydrochloric acid wastes • Hydrobromine acid wastes • Sulphur Dioxide absorber waste • Alkaline wastes • Solvent wastes • Diol wastes • Ammonium Sulphate wastes
Equipment Store	• Hydrocarbons • Inorganics
Substations	• Hydrocarbons (including PCBS)
Pump House	• Biocides • Bromgard 420
Fuel Tanks	• Fuel Oils • Petroleum Hydrocarbons
Valve House	• Gas Condensates
Workshops	• Petroleum Hydrocarbons

2.5 Sensitive Land Use

The site is located within a Nitrate Vulnerable Zone.

2.6 Industrial Permits

The site is listed as an (Part A(1)) Licensed industrial site for the processing of inorganic and organic chemicals and has consents granted for the storing of hazardous substances.

The site also has an active Integrated Pollution Control (IPC) authorisation and is an Upper Tier Control of Major Accidents Hazards (COMAH) site.

2.7 Proposed Development

It is proposed to redevelop the site for commercial use. The current proposed layout is shown in Figure 2.3.

Figure 2.3 – Proposed Layout



3.0 Ground Conditions

3.1 Geology

The geological map of the area shows the site to be directly underlain by superficial deposits comprising Devensian Till in the north and the Shirdley Hill Sand Formation in the south. The underlying solid geology is shown to be the sandstone of the Chester Formation. BGS boreholes from prior to the construction of the chemical works recorded approximately 3m of Boulder Clay (Till) in the north, over sandstone with bands of marl. In the south was recorded a thin layer of sand and gravel over sandstone and marl. The limited investigation works described in the available reports referenced in Section 1.2. found clayey, sandy Made Ground with brick and ash which was present locally to depths up to 2.6m.bgl.

3.2 Mining and Extraction

There are no records of mining or extraction within 500m of the site. Historical mapping from 1867 shows water filled pits at 'Penrhyn Pits' and 'Kiling Pits' approximately 300-400m south of site.

3.3 Radon

The site is not located in a Radon Affected Area as defined by the Health Protection Agency (HPA), as less than 1% of properties are above the Action Level. As such no radon protective measures are considered necessary in new buildings.

3.4 Ground Stability

British Geological Survey (BGS) data presented in table 3.1 below identifies the following potential ground instability hazards on the site:

Table 3.1 Summary of Potential Ground Instability

Potential Instability Factor	Maximum Hazard Potential
Collapsible Ground	Very Low
Compressible Ground	Low
Ground Dissolution	Very Low
Landslide Risk	Very Low
Running Sand	Very Low
Shrinking or Swelling Clay	Negligible

The BGS data suggests there is a Low Hazard Potential from Compressible Ground. All other hazards are rated as very low to negligible.

3.5 Made Ground and Landfills

There Groundsure Report indicates the presence of Made Ground across the southern half of the site, and 'worked' ground (described as a void) across the northern half. There are no landfills recorded within 500m of the site.

3.6 Hydrogeology

The Shirdley Hill Sand Formation is classes as Secondary (A) Aquifer, meaning it has permeable layers capable of supporting water supplies at a local rather strategic scale, and in some cases forming an important source of base flow to rivers.

The superficial Devensian Till deposits are classed as a Secondary (undifferentiated) Aquifer, meaning it has potential to supply water from more permeable layers and / or fractures on a local scale, and may be important for supplying base flow to rivers.

The Chester Formation is classed as Principal Aquifer, meaning it has 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.

The site is within Zone 3 (total catchment) of a Groundwater Source Protection Zone, meaning it is within the catchment of a groundwater source from which water is abstracted for public potable supply.

3.6.1 Groundwater Abstractions

The closest groundwater abstraction is approximately 500m to the west of site where water is taken for evaporative cooling. Potable water is taken approximately 980m to the east of site from a number of boreholes.

4.0 Hydrology

4.1 Watercourses

The nearest watercourse is Knowsley Brook. Historical maps (Appendix C) show this running east to west across the site. However, it now flows in a culvert, which is shown to run beneath the western margin of the site in the plan taken from the Entec report, which is presented in Figure 2.2. Evidence suggests it flows beneath the northern and western edges of the site.

4.2 Flood Risk

The site is shown to be located in Flood Zone 1, meaning it is outside the predicted extent of extreme flooding from rivers and the sea.

The risks from other forms of flooding are considered to be low.

4.3 Water Quality

According to the Environment Agency, the ecological quality of the Knowsley Brook was rated as Moderate in 2019, while the chemical quality was rated as Fail.

4.4 Site Drainage

The site is covered by a combination of buildings, hard surfaces and soft ground. Drainage from buildings and impermeable surfaces is likely to be dominated by surface run-off to an effluent drainage system and series of sub surface interceptors before discharging into the foul sewer. Drainage in areas of soft ground is likely by infiltration.

5.0 Site History

5.1 Historical Mapping

The following is a summary of the relevant history of the site and its immediate surroundings, based on a review of historical Ordnance Survey (OS) maps and plans alongside anecdotal evidence from previous staff members. Available mapping dates from 1867. Table 5.1 presents a summary of the significant developments and activities that have taken place on, or in the vicinity of, the site, based on a selection of the available maps (presented in Appendix C).

Table 5.1 Summary of Site History

Date	On-Site Features	Surrounding Area
1867	The site is shown as part of a network of fields and hedgerows with the Knowsley Brook flowing from east to west across the centre of the site. Sapling Wood is shown on the north eastern boundary of site.	The immediate surrounding area comprises agricultural fields.
1893	No significant changes.	A group of buildings are shown to the south west of the site labelled as 'Peacock House' with the small village of Knowsley Delph beyond. Tinkle Peg Lane runs east-west to the south of site where there are also a number of pits shown as 'Penrhyn Pits' and 'HKitling Pits'.
1908	No significant changes.	No significant changes.
1927	No significant changes.	No significant changes.
1937	No significant changes.	The 'East Lancashire Road' is now shown along the northern boundary of the site.
1959	No significant changes.	Some industrial units that comprised ROF Kirby and a large pond are displayed to the north of site beyond the East Lancashire Road where a dismantled tramway is also shown. A small works, which has the appearance of a sewage works, is shown to the south-west. To the south a residential development, including a school and two churches, is now shown.
1978	No significant changes.	A large works (possibly a paper works) including some tanks is now shown to the west of site. Tinkle Peg lane and the residential development to the south, are no longer shown.

Date	On-Site Features	Surrounding Area
1981	The site is now shown as a 'works' and a number of structures are now shown on site including the Surfactant and T.D.C building. Knowsley Brook is no longer shown, suggesting it had been been culverted.	A works and a number of tanks are now shown to the east of the site. Penrhyn Road now runs along the southern boundary of site, several other new roads are shown further to the south adjacent to Penrhyn Road.
1988	No significant changes.	A number of industrial units are now shown to the south.
1994	Several more structures are now shown on the available mapping including the Warehouse, Dryer House and Fitters Workshops.	No significant changes.
2003	Several more structures are now shown on the mapping including the Bonner Building (constructed in 1997). The site is now shown in the approximate layout that it has at present.	No significant changes.

5.2 Summary of Site History

The site seems to have been largely undeveloped agricultural land / rough ground until around 1980 when development of the current site commenced, which included the culverting of Knowsley Brook. It is understood that Tate and Lyle initially occupied the site for two years with Contract Chemicals purchasing the site in 1983. Since then the site has seen some development between 1988 and 2003, the most prominent being the construction of the Bonner building in 1997.

The land around the site also comprised mainly rural and undeveloped agricultural land in the late 19th and early 20th century, with most significant change being the construction of the A580 East Lancashire Road to the immediate north of site around 1937. Although mapping is not available for the Second World War period, it is understood that Royal Ordnance Factory Kirby was located to the north of the A580, with anecdotal evidence suggesting that Nissan Huts for munitions workers were located on the Contract Chemicals site.

Subsequently the late 1950's and 1960's saw development in the wider local area of both residential and industrial units. The most prominent being post Second World War pre-fabricated residential housing to the south of site which were demolished in the 1970's. The development of the current Knowsley Business Park began in the 1980's.

5.3 Previous Investigations

A number of ground investigations have been undertaken at the site between 1993 and 2012. Details are available in the reports that have been made available to G&J referenced in Section 1.2.

The following section provide a brief overview of each intrusive investigation, including a summary of the environmental testing undertaken.

5.3.1 Cremer & Warner 1993

Cremer & Warner were commissioned by Contract Chemicals to undertake a site investigation to assess ground contamination conditions on the western boundary of the current site and the eastern boundary of the adjacent distribution warehouse.

The intrusive investigation was designed on a grid pattern resembling four rows with two trial pit locations on each row, with a total of eight trial pits excavated to a maximum depth of 0.8mbgl. Additionally two boreholes were sunk to a maximum depth of 3.5mbgl, both of which were installed with gas/groundwater monitoring equipment.

Nine sub surface soil samples were taken and then combined into four composite samples reflecting the four rows as mentioned above. Results indicated that soil contamination was greatest in the samples within the Contract Chemicals site however, lower amounts were also detected in samples from the adjacent warehouse site. Contamination comprised organic compounds, the most prevalent being benzene compounds, naphthalene, benzophenone, diamines and an unknown brominate.

The results suggested that contaminated surface run-off was migrating from the Contract Chemicals site into the distribution warehouse site.

5.3.2 Sub Soils Surveys 1997

The investigation carried out by Sub Soils in 1997 comprised 3 boreholes to a maximum depth of 12.1mbgl located in the proposed footprint of the Bonner Building. Although the investigation was primarily geotechnical in nature, chemical testing showed chemical concentrations were below the lowest 'threshold trigger values' presented by the Interdepartmental Committee on the Redevelopment of Contamination Land (ICRCL).

5.3.3 CCL Investigation 1997

CCL also undertook a series of investigations in the footprint of the Bonner building and the Flammable Store where 7 shallow soil samples were taken. In both locations the CCL investigation considered the soils to have limited amounts of contamination when compared to the ICRCL threshold values.

5.3.4 Entec 2010

Entec UK Ltd undertook a site investigation in 2010 on behalf of Contract Chemicals, in response to an overspill from a trade effluent outflow within the Contract Chemicals site to the distribution warehouse to the west. The scope of the works comprised five hand dug pits excavated to a maximum depth of 0.8mbgl. Four of the pits were dug in areas directly impacted by the spill and one outside used as a 'control' sample. Two samples were taken from each pit and tested for a chemical suite comprising of SVOCs, VOCs, Alcohols, pH, metals, TPH-CWG and water soluble sulphate. Additionally the two samples from the control pit were also tested for fraction organic carbon and one sample was also tested for leachate.

The results of the investigation found that there was slightly elevated organic contamination in samples from the spill area, however none of these exceeded commercial GACs. Assessment of the one leachate sample concluded that there was some slight impact on pore water quality but would most likely be considered to be below the threshold for effective remediation.

It was considered that the impact to soils in the affected area was not considerable and therefore residual contamination was not a hazard to human health.

5.3.5 AMEC 2012

AMEC were commissioned by Contract Chemicals in 2012 to undertake a site investigation after a spillage of 1-bromododecane from an IBC. The spill occurred on the western boundary of the Contract Chemicals site and was observed to have flowed into the adjacent distribution warehouse. The scope of the works comprised four dynamic boreholes advanced to a maximum depth of 2.3mbgl and six hand dug pits excavated to a maximum depth of 0.7mbgl. Two of the above boreholes were installed with gas/groundwater monitoring equipment.

A total of 16 samples were taken during the investigation and were subsequently tested for SVOCs. The samples obtained during the 2012 investigation were compared against adjacent samples from the 2010 investigation, particularly for bromododecane concentrations. The 2012 results identified significantly greater concentrations of bromododecane in shallow soils suggesting the contamination was directly linked to the 2012 spill rather than the 2010 trade effluent outflow spillage. Data collected from subsequent groundwater monitoring indicated that the impact to groundwater quality was limited.

6.0 Conceptual Site Model

6.1 Introduction

The information obtained from the desk-based study has been collated and evaluated to develop a Conceptual Model for the site.

The site has been assessed in line with current UK guidelines, namely the Contaminated Land (England) Regulations 2000 and Part IIA of the Environmental Protection Act 1990 and follows the procedures set out in the Environmental Agency 'Land Contamination: Risk Management' (LCRM) framework.

LCRM provides the technical framework for structured decision making about land contamination and replaces 'Model Procedures for the Management of Land Contamination – Contaminated Land Report (CLR) 11', which built on previous work carried out under the Contaminated Land Research Programme of the former Department of the Environment. LCRM has adopted and refined the methodology and terminology that has been used in contaminated land risk assessment for a number of years.

LCRM defines the three essential elements to any risk:

- A contaminant source - a substance that is in, on or under land and has the potential to cause harm or to cause pollution of controlled waters.
- A receptor – in general terms, something that could be adversely affected by a contaminant, such as people, an ecological system, property or a water body.
- A pathway - a route or means by which a receptor can be exposed to, or affected by a contaminant.

Each of these elements can exist independently, and create a risk only where they are linked together, so that a particular contaminant affects a particular receptor through a particular pathway. This kind of linked combination of source-pathway-receptor is described as a contaminant linkage or pollutant linkage.

The following describes a Preliminary Risk Assessment and presents a Stage 1 Conceptual Model for the site, based on the proposed commercial use.

6.2 Hazard Identification

6.2.1 Potential Contamination Sources

The site history as a chemical works and the wide variety of chemicals and processes used during its operation have resulted in several potential contamination sources. The most prominent of these being the main processing areas such as the Surfactant Hall, Bonner building, Diol Plant, TDC and adjacent tank farms. In addition, other sources such as fuel tanks, electricity substations, IBCs and smaller chemical containers were identified during the site walkover.

The potential for contamination originating off-site to have significantly affected the site is comparatively low, although another chemical works is present adjacent to the east.

Table 6.1 presents a summary of potential sources and the primary contaminants of concern.

Table 6.1 Summary of Potential Contaminant Sources

Source	Potential Contaminants
Surfactant Hall and Tank Farm (S1)	- Sodium cyanate - Sodium thiocyanate - Hydrochloric Acid - Acetic Acid
Technical Development Centre (TDC) (S2)	Various organic and inorganic contaminants
Bonner Building and Tank Farm (S3)	- Bromine - Butyric acid - Hydrochloric acid - Ethanol
Diol Plant and Tank Farm (S4)	- Dimethyl amine (1, 2) propane diol - Hydrochloric Acid - Sodium Hydroxide
Warehouse & Bunded Hardstanding (west) (S5)	- Hydrochloric acid wastes - Hydrobromine acid wastes - Sulphur Dioxide absorber waste - Alkaline wastes - Solvent wastes - Diol wastes - Ammonium Sulphate wastes
Equipment Store (S6)	- Hydrocarbons - Inorganics
Substations (S7)	Hydrocarbons (including PCBS)
Pump House (S8)	- Biocides - Bromgard 420 (zinc based water hardness treatment)
Fuel Tanks (S9)	- Fuel Oils - Petroleum Hydrocarbons

Source	Potential Contaminants
Valve House (S10)	Gas Condensates
Workshops (S11)	Petroleum Hydrocarbons
General Contaminants associated with the buildings and Made Ground (S12)	- Metals - PAHs - Asbestos

6.2.2 Potential Receptors

The following are considered the potential receptors assuming a future commercial use of the site.

- Future land users – Occupiers / users of the proposed development;
- Buildings (including foundations) and below ground services / infrastructure – Concrete foundations, drinking water supply pipes and other service infrastructure.
- Groundwater – Secondary (A) and Principal Aquifers located beneath the site.
- Surface Water – Knowsley Brook
- Flora – Any vegetation within current or proposed site landscaping.

6.2.3 Potential Contamination Pathways

The following are considered potential contamination pathways given the nature of the site and the potential contaminative sources identified, and assuming a future commercial use.

- Ingestion and dermal absorption through direct contact with contaminated soils and soil-derived dusts;
- Inhalation of airborne soil-derived dust/particulate matter;
- Migration and inhalation of gases and vapour;
- Contamination of drinking water pipes by contaminated material leading to the ingestion of contaminated drinking water;
- Attack on concrete foundations by aggressive soil conditions;

- Leaching of contaminants by percolating rainwater and dissolution, followed by horizontal and vertical migration through the unsaturated zone to shallow groundwater;
- Migration via the saturated zone to surface water receptors.

6.3 Preliminary Risk Assessment

Risks from land contamination in the UK are assessed on the 'suitability for use' principle, whereby pollutant linkages are considered with regard to the intended end use of the site, and the specific exposure pathways and receptors associated with that use.

The CSM forms the basis for the design of subsequent stages of investigation, which should aim to confirm (or otherwise) the presence and significance of the potential pollutant linkages highlighted by the CSM. The risk assessment has been carried out assuming a future commercial land use.

For the purpose of this report, the environmental risks associated with each potential pollutant linkage have been initially assessed based on the available information using the following scale;

Table 6.2 Risk Levels

Risk Level	Description
Very Low / Negligible	The contaminant linkage may not be complete or is otherwise very unlikely to result in significant effects*, and further investigation should not be necessary
Low	Significant effects* are unlikely and further investigation may not be necessary, but should be considered
Medium	Significant effects* are a possibility and further investigation is recommended
High	Significant effects* are likely and further investigation is required
Very High	There is evidence that significant effects* are currently occurring, or are likely to occur, and immediate action is required.

*Significant effects are considered to be any of the following:

- Exposure of site users to levels of contamination that may constitute significant harm as defined by Part IIA of the Environmental Protection Act
- An impact on controlled waters from contamination in contradiction of the aims of the Water Framework Directive, which may constitute Part IIA significant harm
- Exposure of an ecological system, or part thereof, to levels of contamination that may constitute Part IIA significant harm

- Exposure of crops, domesticated animals and animals subject to hunting / fishing rights to levels of contamination that may constitute Part IIA significant harm
- Exposure of construction and underground service materials to levels of contamination which may cause damage or exceed industry thresholds

In accordance with CLR11, professional judgement has been employed to evaluate the risk on a qualitative basis using available information.

Based on the potential sources, pathways and receptors associated with the proposed residential development, an initial Conceptual Site Model has been developed, and is summarised in Table 6.3.

Contract Chemicals, Knowsley, Interpretative Desk Study

Table 6.3 Conceptual Site Model

Area / Structure	Contaminants (Chemicals of Concern)	Pathway		Risk	Comment / Recommended Actions
Sources 1-12 Soil contaminated with substances associated with the specific process areas, storage areas, tanks and buildings described in Table 6.1.	Various organic and inorganic compounds, including; Acids Alkalis VOCs SVOCs PCBs Hydrocarbons PAHs Metals Asbestos cyanide sulphates ammonia	Ingestion and dermal adsorption through direct contact	Humans (Future site users)	Low / Medium	The presence of a large number of potential contamination sources requires ground investigations works and risk assessment to delineate, quantify and evaluate any soil and groundwater contamination.
		Inhalation of dust / particulates		Low / Medium	The proposed use will reduce risks to future site users given the presence of buildings and hardcover over most of the site area.
		Inhalation of gases / vapours		Medium	The absence of recent detailed investigations means there is limited information regarding the current chemical quality of the ground.
		Direct contact	Buildings / Foundations / Services	Medium	Ground conditions may have implications for building materials, such as concrete and water pipes. Investigation is recommended to determine any necessary protection measures.
		Leaching and migration through unsaturated zone	Groundwater	Medium	The underlying shallow groundwater is likely to be in hydraulic continuity with the Principal Aquifer, and there is potential for impact from site derived contamination. In the absence of recent groundwater monitoring data, investigation is required to evaluate any risk.
		Migration through saturated zone	Knowsley Brook	Medium	The Knowsley Brook runs culverted beneath the site, and it is possible that any shallow groundwater is in hydraulic continuity. Investigation is required to evaluate any risk.
		Plant uptake	Flora	Low	Investigation will determine the suitability of the site soils as a growing medium.

7.0 Conclusions and Recommendations

7.1 Preliminary Risk Assessment

Based on the information reviewed during this survey, the risks from land contamination (except those to construction workers) are considered to be low to medium. The risks reflect the generally moderate potential for significant contamination to be present, given the past site uses and observations made during the site walkover, the significance of the relevant pollutant linkages and the sensitivity of the receptors.

The risks to human health are considered to be low to medium for a commercial land use, given the potential for direct exposure to contaminated soil is low if the site is largely covered by buildings or hardcover. The risks to the water environment are considered to be medium, based on the high sensitivity of the Principal Aquifer and the proximity of Knowsley Brook.

The risks would have to be reassessed should the intended site use be changed.

7.1.1 Construction Workers

Given the unique exposure scenario for any construction, investigation or maintenance worker involved in groundworks or excavations, the risks are considered separately from those to other receptors which are described above.

There is always a risk of exposure to contamination for those involved in ground disturbance, particularly in Made Ground and near surface soils where materials such as asbestos can be present. Measures should be taken to minimise exposure of such workers to these risks, in accordance with common good practice.

7.2 Future Work Requirements

There is potential for significant contamination to be present, that would represent a significant risk in the context of the proposed development. Site investigation works are recommended to determine the chemical characteristics of the soil and groundwater and identify any potentially significant risks, and are likely to be a requirement of the Local Planning Authority.

Given the above, it is considered that an intrusive investigation will be necessary to evaluate the identified potential contamination sources and assess the general contamination profile of the soil and groundwater.



Investigation works should comprise a combination of boreholes and trial holes, as appropriate, and should both target the specific potential sources and provide non-targeted, general coverage across the site.



Appendices

Appendix A – Site Photographs



View to from the Bonner building towards the Diol Plant



View from the Bonner Building towards the south east, office block visible in the distance



View towards the TDC building (left) and the tank farm to the south of the Bonner Building (right)



View of the workshops and the Bonner building from the north east



View of the drain above the culverted Knowsley Brook, picture taken from the north western corner of site



View within the culvert



View from the site entrance from Penrhyn Road



View from the site entrance from Penrhyn Road



A1.1. View of Pump House building



A1.2. Pipe work within the pump house



A1.3. Chemicals within the pump house



A1.4. Chemicals within the pump house



A2.1. View of water tanks from the south west



A2.2. View of water tanks from the south east



A3.1. View of the cooling tower along the northern boundary of the site



A3.2. View of the second cooling tower along the northern boundary of the site



A4.1 View of the office building from the west



A4.2. View of the office building from the site entrance



A5.1. View of the Surfactant building from the south



A5.2. View of the tank farm to the north of the Surfactant building



A5.3. View of tank in Surfactant tank farm



A5.4. View of tank in Surfactant tank farm



A5.5. View of tank in Surfactant tank farm



A6.1. View of the fuel tanks along the northern boundary of the site



A6.2. View of the fuel tanks along the northern boundary of the site



A7.1 View of the Boiler House



A8.1. View of the Valve house



A9.1 View of the workshop sheds



A9.2. View of the workshop sheds



A10.1 View of the equipment store



A10.2. View of the equipment store



A11.1 View of the flammable store from the north



A12.1. View of fitters shop from the south



A13.1 View of the switch room from the north west



A14.1. View of the dryer house from the north west



A15.1 View of the TDC building from the south



A15.2. View of the bunded tanks along the eastern side of the TDC building



A15.3 View of the bunded tanks along the eastern side of the TDC building



A15.4. View of inside the TDC building



A16.1 View of the Bonner Building from the north east



A16.2. View inside of the Bonner building



A16.3 View of the bunded tanks to the south of the Bonner building



A16.4. View of the bunded tank farm area to the south of the Bonner building



A17.1 View of the Diol Plant from the North west



A17.2. View of the bunded tank farm to the south of the Diol Plant



A17.3 View of the bundled tanks to the east of the Diol Plant



A17.4. View of the bundled tanks to the east of the Diol Plant



A18.1 View of the warehouse entrance from the north east



A18.2. storage area to the east of the warehouse entrance



A18.3 View of waste products inside the warehouse



A18.4. View of waste products inside the warehouse



A19.1 View of the bunded storage area along the western side of the site



A19.2. View of IBC's full of raw/waste produce



A19.3 View from the south of the storage area



A19.4. Example of the produce stored



A20.1. View of the Electricity substation structure from the North east



A20.2. View of the Electricity substation structure from the South east



Appendix B – Groundsure Report

CONTRACT CHEMICALS LTD, PENRHYN ROAD, KNOWSLEY BUSINESS PARK, KNOWSLEY, L34 9HY

Order Details

Date: 10/02/2021
Your ref: GJ224
Our Ref: GS-7563653
Client: G&J Geoenvironmental Consultants Ltd

Site Details

Location: 342974 396756
Area: 3.8 ha
Authority: [Knowsley Metropolitan Borough Council](#)



Summary of findings

p. 2 **Aerial image**

p. 8

OS MasterMap site plan

p.12 groundsure.com/insightuserguide

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
13	1.1	<u>Historical industrial land uses</u>	0	8	23	18	-
15	1.2	<u>Historical tanks</u>	7	3	11	26	-
17	1.3	<u>Historical energy features</u>	0	1	3	16	-
18	1.4	Historical petrol stations	0	0	0	0	-
19	1.5	<u>Historical garages</u>	0	0	0	1	-
19	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
20	2.1	<u>Historical industrial land uses</u>	0	9	26	23	-
23	2.2	<u>Historical tanks</u>	7	8	13	45	-
25	2.3	<u>Historical energy features</u>	0	1	6	27	-
27	2.4	Historical petrol stations	0	0	0	0	-
27	2.5	<u>Historical garages</u>	0	0	0	2	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
28	3.1	Active or recent landfill	0	0	0	0	-
28	3.2	Historical landfill (BGS records)	0	0	0	0	-
29	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
29	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
29	3.5	Historical waste sites	0	0	0	0	-
29	3.6	<u>Licensed waste sites</u>	0	0	0	3	-
30	3.7	<u>Waste exemptions</u>	0	0	6	16	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
33	4.1	<u>Recent industrial land uses</u>	27	5	45	-	-
38	4.2	Current or recent petrol stations	0	0	0	0	-
38	4.3	<u>Electricity cables</u>	0	0	1	1	-
39	4.4	Gas pipelines	0	0	0	0	-
39	4.5	Sites determined as Contaminated Land	0	0	0	0	-



39	4.6	<u>Control of Major Accident Hazards (COMAH)</u>	1	0	1	1	-
39	4.7	Regulated explosive sites	0	0	0	0	-
40	4.8	<u>Hazardous substance storage/usage</u>	2	0	0	1	-
40	4.9	<u>Historical licensed industrial activities (IPC)</u>	22	15	0	0	-
45	4.10	<u>Licensed industrial activities (Part A(1))</u>	40	2	2	2	-
54	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	0	1	1	-
55	4.12	Radioactive Substance Authorisations	0	0	0	0	-
55	4.13	<u>Licensed Discharges to controlled waters</u>	0	0	2	0	-
55	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
56	4.15	Pollutant release to public sewer	0	0	0	0	-
56	4.16	List 1 Dangerous Substances	0	0	0	0	-
56	4.17	List 2 Dangerous Substances	0	0	0	0	-
56	4.18	<u>Pollution Incidents (EA/NRW)</u>	1	0	1	4	-
57	4.19	<u>Pollution inventory substances</u>	7	0	0	0	-
60	4.20	<u>Pollution inventory waste transfers</u>	1	0	0	0	-
63	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
64	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
66	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
67	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
68	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
68	5.5	Groundwater vulnerability- local information	None (within 0m)				
69	5.6	<u>Groundwater abstractions</u>	0	0	0	0	31
77	5.7	Surface water abstractions	0	0	0	0	0
77	5.8	<u>Potable abstractions</u>	0	0	0	0	8
79	5.9	<u>Source Protection Zones</u>	1	0	0	1	-
79	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
80	6.1	<u>Water Network (OS MasterMap)</u>	1	1	4	-	-



81	6.2	<u>Surface water features</u>	0	1	2	-	-
81	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
82	6.4	<u>WFD Surface water bodies</u>	1	0	0	-	-
82	6.5	<u>WFD Groundwater bodies</u>	2	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
84	7.1	Risk of Flooding from Rivers and Sea (RoFRaS)	None (within 50m)				
84	7.2	Historical Flood Events	0	0	0	-	-
84	7.3	Flood Defences	0	0	0	-	-
84	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
85	7.5	Flood Storage Areas	0	0	0	-	-
86	7.6	Flood Zone 2	None (within 50m)				
86	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
87	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding					
89	9.1	<u>Groundwater flooding</u>	High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
90	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
91	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
91	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
91	10.4	Special Protection Areas (SPA)	0	0	0	0	0
91	10.5	National Nature Reserves (NNR)	0	0	0	0	0
92	10.6	<u>Local Nature Reserves (LNR)</u>	0	0	0	0	3
92	10.7	Designated Ancient Woodland	0	0	0	0	0
92	10.8	Biosphere Reserves	0	0	0	0	0
93	10.9	Forest Parks	0	0	0	0	0
93	10.10	Marine Conservation Zones	0	0	0	0	0
93	10.11	<u>Green Belt</u>	0	0	0	0	3
93	10.12	Proposed Ramsar sites	0	0	0	0	0



94	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
94	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
94	10.15	Nitrate Sensitive Areas	0	0	0	0	0
94	10.16	<u>Nitrate Vulnerable Zones</u>	1	0	0	0	3
96	10.17	SSSI Impact Risk Zones	0	-	-	-	-
96	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
97	11.1	World Heritage Sites	0	0	0	-	-
97	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
97	11.3	National Parks	0	0	0	-	-
97	11.4	Listed Buildings	0	0	0	-	-
98	11.5	Conservation Areas	0	0	0	-	-
98	11.6	Scheduled Ancient Monuments	0	0	0	-	-
98	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
99	12.1	<u>Agricultural Land Classification</u>	Urban (within 250m)				
100	12.2	Open Access Land	0	0	0	-	-
100	12.3	Tree Felling Licences	0	0	0	-	-
100	12.4	Environmental Stewardship Schemes	0	0	0	-	-
100	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
101	13.1	<u>Priority Habitat Inventory</u>	1	1	4	-	-
102	13.2	Habitat Networks	0	0	0	-	-
102	13.3	Open Mosaic Habitat	0	0	0	-	-
102	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
103	14.1	<u>10k Availability</u>	Identified (within 500m)				
104	14.2	Artificial and made ground (10k)	0	0	0	0	-
105	14.3	Superficial geology (10k)	0	0	0	0	-

105	14.4	Landslip (10k)	0	0	0	0	-
106	14.5	Bedrock geology (10k)	0	0	0	0	-
106	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
<u>107</u>	<u>15.1</u>	<u>50k Availability</u>	Identified (within 500m)				
<u>108</u>	<u>15.2</u>	<u>Artificial and made ground (50k)</u>	2	1	1	3	-
109	15.3	Artificial ground permeability (50k)	0	0	-	-	-
<u>110</u>	<u>15.4</u>	<u>Superficial geology (50k)</u>	2	0	1	0	-
<u>111</u>	<u>15.5</u>	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
111	15.6	Landslip (50k)	0	0	0	0	-
111	15.7	Landslip permeability (50k)	None (within 50m)				
<u>112</u>	<u>15.8</u>	<u>Bedrock geology (50k)</u>	1	0	0	0	-
<u>113</u>	<u>15.9</u>	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
113	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
<u>114</u>	<u>16.1</u>	<u>BGS Boreholes</u>	4	1	43	-	-
Page	Section	Natural ground subsidence					
<u>118</u>	<u>17.1</u>	<u>Shrink swell clays</u>	Very low (within 50m)				
<u>119</u>	<u>17.2</u>	<u>Running sands</u>	Low (within 50m)				
<u>121</u>	<u>17.3</u>	<u>Compressible deposits</u>	Very low (within 50m)				
<u>123</u>	<u>17.4</u>	<u>Collapsible deposits</u>	Very low (within 50m)				
<u>124</u>	<u>17.5</u>	<u>Landslides</u>	Very low (within 50m)				
<u>125</u>	<u>17.6</u>	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
127	18.1	Natural cavities	0	0	0	0	-
128	18.2	BritPits	0	0	0	0	-
<u>128</u>	<u>18.3</u>	<u>Surface ground workings</u>	0	3	18	-	-
129	18.4	Underground workings	0	0	0	0	0
129	18.5	Historical Mineral Planning Areas	0	0	0	0	-



129	18.6	Non-coal mining	0	0	0	0	0
130	18.7	Mining cavities	0	0	0	0	0
130	18.8	JPB mining areas	None (within 0m)				
130	18.9	Coal mining	None (within 0m)				
130	18.10	Brine areas	None (within 0m)				
130	18.11	Gypsum areas	None (within 0m)				
131	18.12	Tin mining	None (within 0m)				
131	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
132	19.1	Radon	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
133	20.1	BGS Estimated Background Soil Chemistry	4	0	-	-	-
133	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
134	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
135	21.1	Underground railways (London)	0	0	0	-	-
135	21.2	Underground railways (Non-London)	0	0	0	-	-
136	21.3	Railway tunnels	0	0	0	-	-
136	21.4	Historical railway and tunnel features	0	1	6	-	-
136	21.5	Royal Mail tunnels	0	0	0	-	-
137	21.6	Historical railways	0	0	0	-	-
137	21.7	Railways	0	0	0	-	-
137	21.8	Crossrail 1	0	0	0	0	-
137	21.9	Crossrail 2	0	0	0	0	-
137	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2021. All Rights Reserved.

Capture Date: 22/04/2019

Site Area: 3.8ha



Recent site history - 2015 aerial photograph

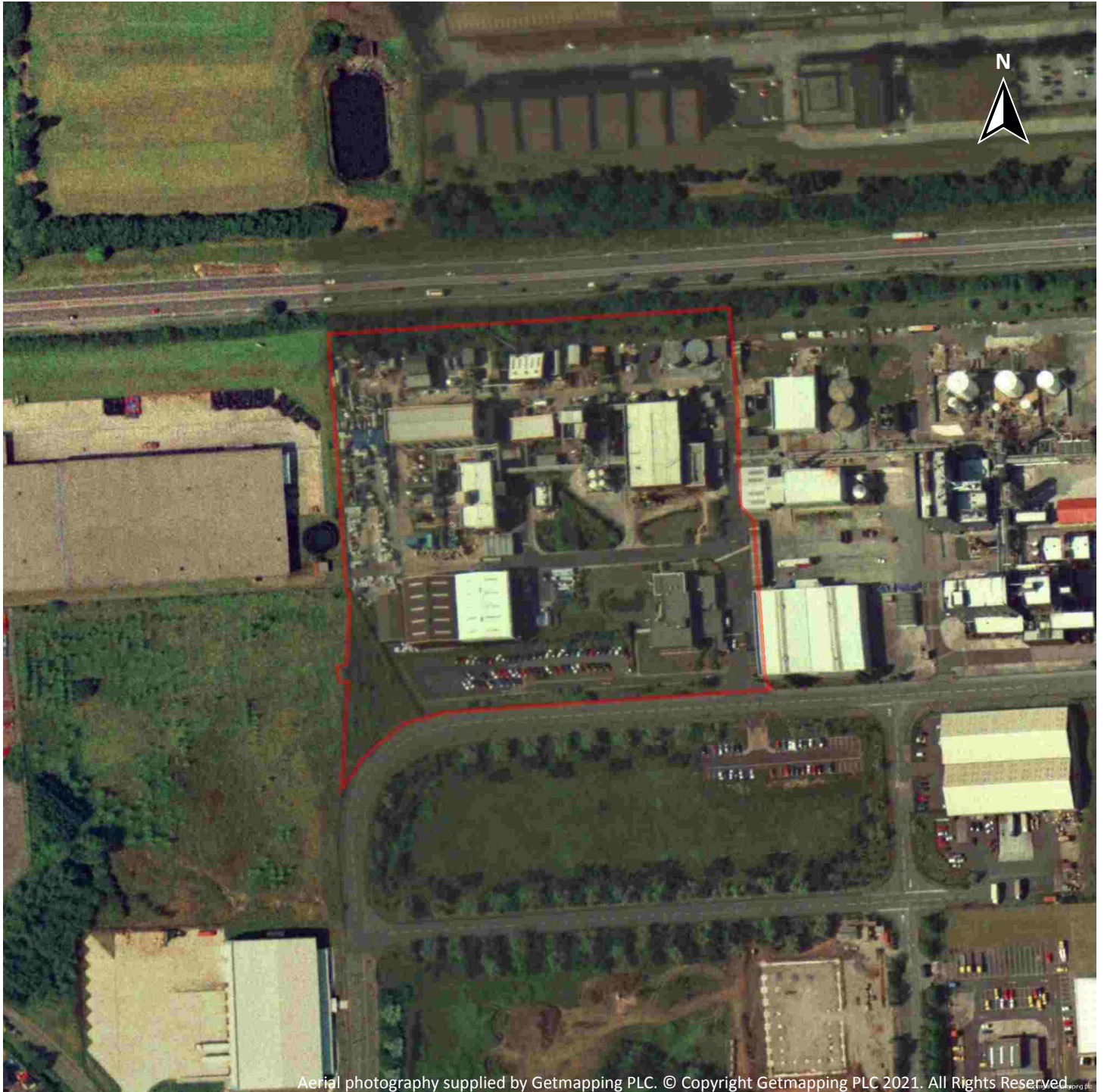


Capture Date: 11/06/2015

Site Area: 3.8ha



Recent site history - 2001 aerial photograph

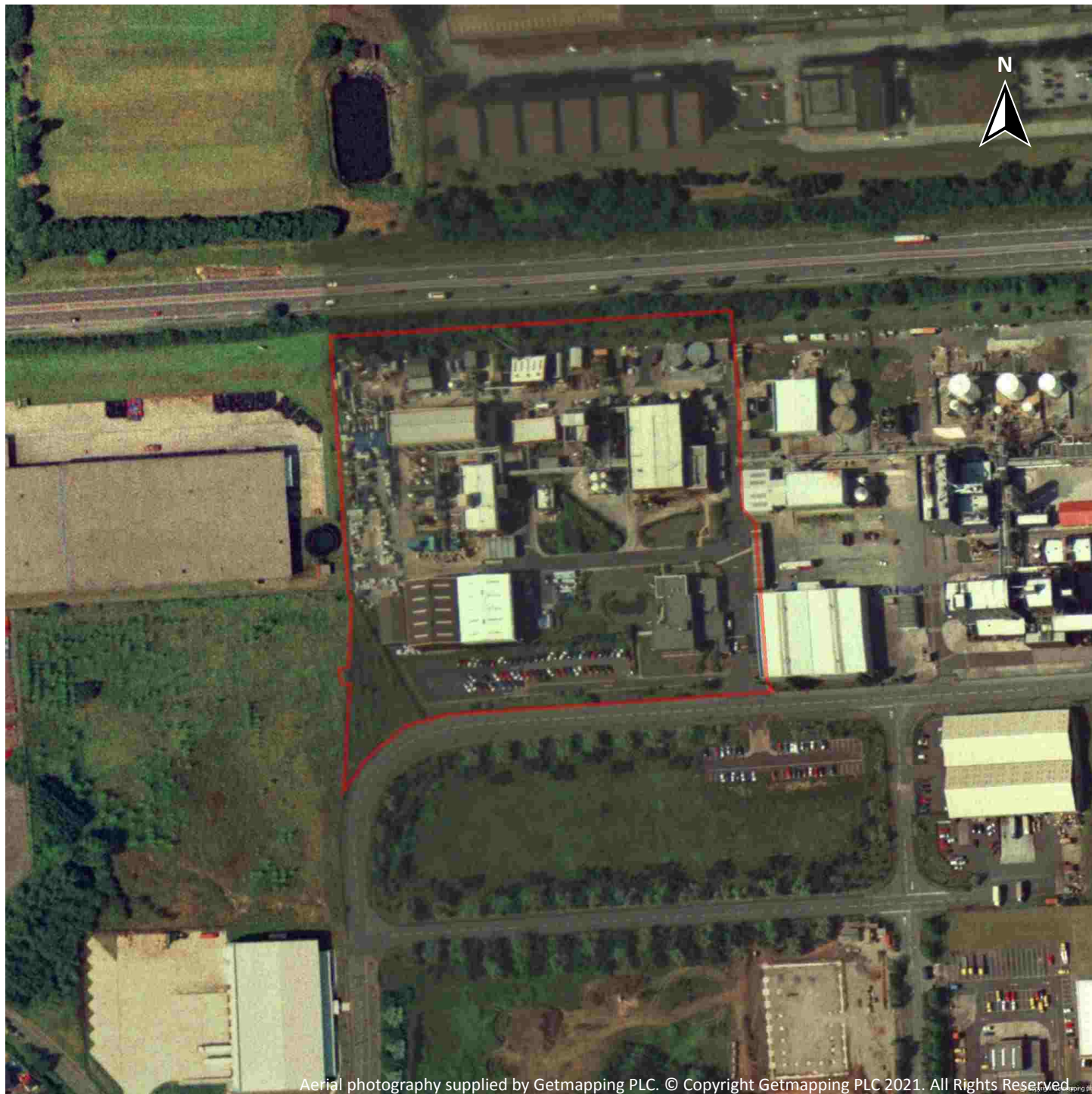


Capture Date: 01/05/2001

Site Area: 3.8ha



Recent site history - 2000 aerial photograph



Capture Date: 21/07/2000

Site Area: 3.8ha



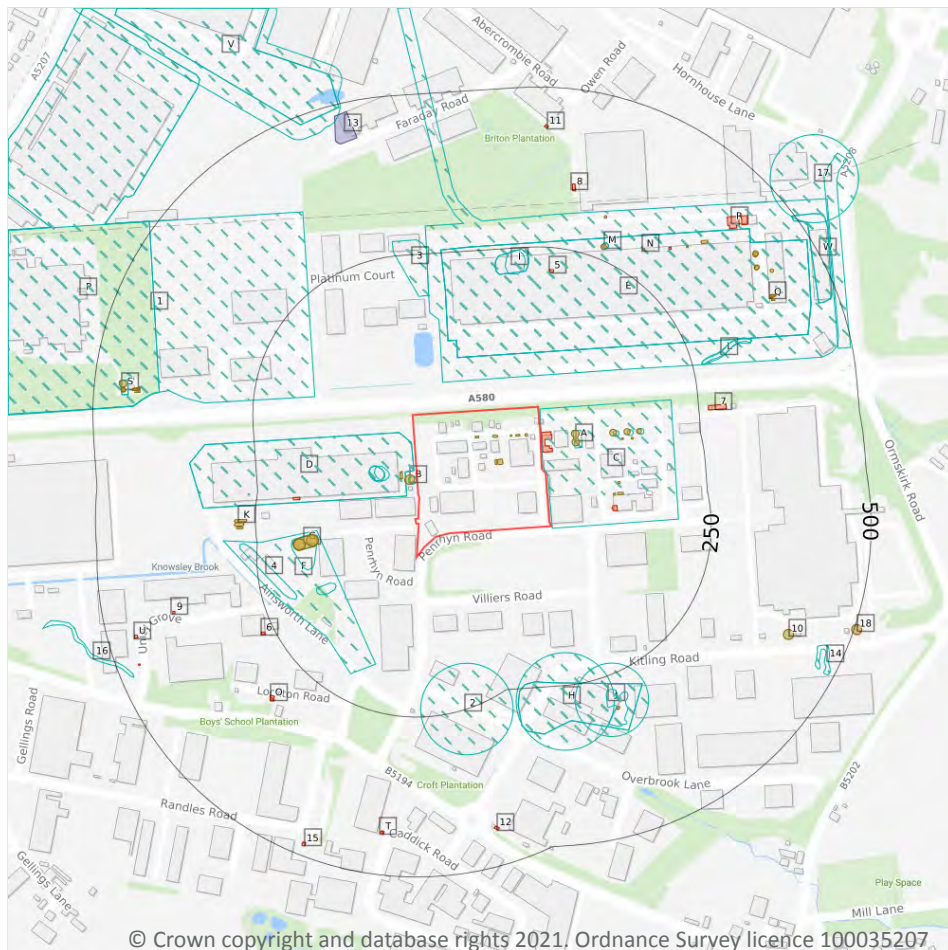
OS MasterMap site plan



Site Area: 3.8ha



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

49

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 13**

ID	Location	Land use	Dates present	Group ID
B	1m W	Unspecified Tank	1988	886196



ID	Location	Land use	Dates present	Group ID
B	1m W	Unspecified Tank	1976	927139
C	1m E	Unspecified Commercial/Industrial	1988	796636
D	4m W	Unspecified Commercial/Industrial	1976	871597
D	4m W	Unspecified Commercial/Industrial	1988	977766
B	43m W	Unspecified Pit	1955	865811
E	48m N	Railway Sidings	1955 - 1976	2367747
B	50m W	Unspecified Pit	1925	968394
B	51m W	Unspecified Pit	1907 - 1938	913070
A	51m E	Unspecified Tanks	1988	815155
E	85m N	Unspecified Works	1966	830264
E	85m N	Unspecified Commercial/Industrial	1988	894106
E	85m N	Unspecified Commercial/Industrial	1976	946675
C	114m E	Unspecified Tank	1988	824625
F	126m SW	Unspecified Works	1966	830272
F	134m W	Unspecified Heap	1966	803302
C	136m E	Unspecified Tank	1988	824626
C	153m E	Unspecified Tank	1988	824627
G	155m W	Unspecified Tanks	1966	886732
1	156m W	Unspecified Factory	1966	972653
G	157m W	Unspecified Tanks	1955	925990
2	179m S	Unspecified Disused Pits	1892	822547
3	184m N	Unspecified Heap	1966	803308
4	197m W	Unspecified Heap	1966	803307
H	199m S	Unspecified Pits	1938	885796
I	209m N	Unspecified Heap	1966	877140
I	211m N	Unspecified Heap	1988	872565
I	211m N	Unspecified Heap	1976	909027
J	230m S	Unspecified Pits	1966	924081

ID	Location	Land use	Dates present	Group ID
H	241m S	Unspecified Pits	1925	878471
H	241m S	Unspecified Pits	1925	968505
L	264m E	Unspecified Ground Workings	1925	852993
L	266m E	Unspecified Ground Workings	1938	971516
M	268m NE	Unspecified Tank	1976	896520
M	268m NE	Unspecified Tank	1988	928411
J	271m S	Unspecified Pits	1907 - 1938	862020
P	398m W	Unspecified Commercial/Industrial	1976	857010
P	398m W	Unspecified Commercial/Industrial	1988	929760
S	446m W	Unspecified Tanks	1976	853071
S	446m W	Unspecified Tanks	1988	927296
14	457m SE	Unspecified Ground Workings	1892	799879
V	464m N	Unspecified Factory	1966	920677
W	468m E	Unspecified Pits	1966 - 1976	875850
W	468m E	Unspecified Pits	1988	989114
W	478m E	Tramway Sidings	1955	821557
16	480m W	Delph	1925	967307
V	486m N	Unspecified Commercial/Industrial	1988	882698
V	486m N	Unspecified Commercial/Industrial	1976	962662
17	491m NE	Unspecified Pits	1925 - 1938	882991

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

47

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 13**



ID	Location	Land use	Dates present	Group ID
A	On site	Tanks	1991	105770
A	On site	Tanks	1994	105773
A	On site	Tanks	1991	105774
A	On site	Tanks	1991	105775
A	On site	Tanks	1994	105776
A	On site	Tanks	1994	105777
A	On site	Unspecified Tank	1994	113153
B	4m W	Tanks	1974 - 1994	149251
B	22m W	Tanks	1974 - 1994	129539
A	49m E	Tanks	1991	105778
C	103m E	Tanks	1991	105780
C	109m E	Unspecified Tank	1991	113154
C	109m E	Tanks	1991	105779
C	112m E	Unspecified Tank	1991	113159
C	127m E	Tanks	1991	105781
C	131m E	Unspecified Tank	1991	113155
C	142m E	Tanks	1991	105782
C	151m E	Unspecified Tank	1991	113156
G	155m W	Tanks	1959 - 1974	142814
G	155m W	Unspecified Tank	1959	113151
G	175m W	Unspecified Tank	1959	113150
K	263m W	Unspecified Tank	1985 - 1994	127384
M	266m N	Unspecified Tank	1975 - 1997	147915
K	268m W	Unspecified Tank	1985 - 1994	137022
K	269m W	Unspecified Tank	1994	113152
N	295m NE	Unspecified Tank	1968	113140
J	300m S	Unspecified Tank	1978 - 1997	136708
M	313m N	Unspecified Tank	1959 - 1997	148189



ID	Location	Land use	Dates present	Group ID
N	341m NE	Unspecified Tank	1968	113139
N	361m NE	Unspecified Tank	1975 - 1997	128400
10	400m SE	Unspecified Tank	1978 - 1997	128580
Q	400m NE	Tanks	1991	105783
Q	401m NE	Tanks	1991	105789
Q	401m NE	Tanks	1975	134317
Q	401m NE	Unspecified Tank	1997	126855
Q	401m NE	Tanks	1997	133699
Q	402m NE	Unspecified Tank	1968 - 1975	133934
Q	411m NE	Unspecified Tank	1997	138287
Q	412m NE	Unspecified Tank	1968 - 1975	143854
Q	420m NE	Unspecified Tank	1968	113157
S	428m W	Tanks	1984	139738
S	428m W	Tanks	1974	146982
S	429m W	Tanks	1993	135478
S	450m W	Unspecified Tank	1974 - 1993	137954
S	450m W	Unspecified Tank	1993	125409
S	451m W	Unspecified Tank	1974 - 1984	138990
18	496m E	Unspecified Tank	1991	113158

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

20

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 13**



ID	Location	Land use	Dates present	Group ID
A	2m E	Electricity Substations	1991	59868
C	99m E	Electricity Substation	1991	61367
D	183m W	Electricity Substation	1974 - 1994	70245
5	211m N	Electricity Substation	1997	61365
6	265m SW	Electricity Substation	1988 - 1996	84781
7	265m E	Electricity Substation	1991	61366
O	311m SW	Electricity Substation	1988 - 1996	66141
O	315m SW	Electricity Substation	1981	74453
N	320m NE	Electricity Substation	1997	61364
8	342m N	Electricity Substation	1997	61356
9	387m W	Electricity Substation	1993	61369
R	409m NE	Electricity Substation	1997	61355
R	427m NE	Electricity Substation	1997	84765
T	431m S	Electricity Substation	1988 - 1996	82222
T	432m S	Electricity Substation	1981	80803
11	436m N	Electricity Substation	1975 - 1997	85424
12	438m S	Electricity Substation	1996	61370
U	453m W	Electricity Substation	1993	61368
U	464m W	Gas Meter House	1993	63665
15	479m S	Electricity Substation	1981 - 1996	81726

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

1

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 13**

ID	Location	Land use	Dates present	Group ID
13	438m N	Vehicle Repair Depot	1976	25257

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

58

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 20**

ID	Location	Land Use	Date	Group ID
B	1m W	Unspecified Tank	1976	927139
B	1m W	Unspecified Tank	1988	886196
C	1m E	Unspecified Commercial/Industrial	1988	796636



ID	Location	Land Use	Date	Group ID
D	4m W	Unspecified Commercial/Industrial	1976	871597
D	4m W	Unspecified Commercial/Industrial	1988	977766
B	43m W	Unspecified Pit	1955	865811
E	48m N	Railway Sidings	1966	2367747
B	50m W	Unspecified Pit	1925	968394
B	50m W	Unspecified Pit	1925	968394
B	51m W	Unspecified Pit	1938	913070
B	51m W	Unspecified Pit	1925	913070
B	51m W	Unspecified Pit	1907	913070
B	51m W	Unspecified Pit	1938	913070
A	51m E	Unspecified Tanks	1988	815155
E	85m N	Unspecified Works	1966	830264
E	85m N	Unspecified Commercial/Industrial	1976	946675
E	85m N	Unspecified Commercial/Industrial	1988	894106
C	114m E	Unspecified Tank	1988	824625
F	126m SW	Unspecified Works	1966	830272
F	134m W	Unspecified Heap	1966	803302
C	136m E	Unspecified Tank	1988	824626
C	153m E	Unspecified Tank	1988	824627
G	155m W	Unspecified Tanks	1966	886732
1	156m W	Unspecified Factory	1966	972653
G	157m W	Unspecified Tanks	1955	925990
2	179m S	Unspecified Disused Pits	1892	822547
3	184m N	Unspecified Heap	1966	803308
4	197m W	Unspecified Heap	1966	803307
H	199m S	Unspecified Pits	1938	885796
I	209m N	Unspecified Heap	1966	877140
I	211m N	Unspecified Heap	1976	909027

ID	Location	Land Use	Date	Group ID
I	211m N	Unspecified Heap	1988	872565
J	230m S	Unspecified Pits	1966	924081
H	241m S	Unspecified Pits	1925	878471
H	241m S	Unspecified Pits	1925	968505
L	264m E	Unspecified Ground Workings	1925	852993
L	266m E	Unspecified Ground Workings	1938	971516
L	266m E	Unspecified Ground Workings	1938	971516
N	268m NE	Unspecified Tank	1976	896520
N	268m NE	Unspecified Tank	1988	928411
J	271m S	Unspecified Pits	1938	862020
J	271m S	Unspecified Pits	1925	862020
J	271m S	Unspecified Pits	1907	862020
Q	398m W	Unspecified Commercial/Industrial	1976	857010
Q	398m W	Unspecified Commercial/Industrial	1988	929760
U	446m W	Unspecified Tanks	1976	853071
U	446m W	Unspecified Tanks	1988	927296
10	457m SE	Unspecified Ground Workings	1892	799879
Z	464m N	Unspecified Factory	1966	920677
AA	468m E	Unspecified Pits	1966	875850
AA	468m E	Unspecified Pits	1976	875850
AA	468m E	Unspecified Pits	1988	989114
AA	478m E	Tramway Sidings	1955	821557
AC	480m W	Delph	1925	967307
AC	480m W	Delph	1925	967307
Z	486m N	Unspecified Commercial/Industrial	1976	962662
Z	486m N	Unspecified Commercial/Industrial	1988	882698
11	491m NE	Unspecified Pits	1938	882991

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 20**

ID	Location	Land Use	Date	Group ID
A	On site	Tanks	1994	105777
A	On site	Tanks	1994	105776
A	On site	Tanks	1994	105773
A	On site	Unspecified Tank	1994	113153
A	On site	Tanks	1991	105775
A	On site	Tanks	1991	105774
A	On site	Tanks	1991	105770
B	4m W	Tanks	1994	149251
B	4m W	Tanks	1974	149251
B	4m W	Tanks	1974	149251
B	6m W	Tanks	1985	149251
B	22m W	Tanks	1974	129539
B	23m W	Tanks	1994	129539
B	24m W	Tanks	1985	129539
A	49m E	Tanks	1991	105778
C	103m E	Tanks	1991	105780
C	109m E	Unspecified Tank	1991	113154
C	109m E	Tanks	1991	105779
C	112m E	Unspecified Tank	1991	113159
C	127m E	Tanks	1991	105781
C	131m E	Unspecified Tank	1991	113155
C	142m E	Tanks	1991	105782
C	151m E	Unspecified Tank	1991	113156



ID	Location	Land Use	Date	Group ID
G	155m W	Tanks	1959	142814
G	155m W	Tanks	1974	142814
G	155m W	Tanks	1974	142814
G	155m W	Unspecified Tank	1959	113151
G	175m W	Unspecified Tank	1959	113150
K	263m W	Unspecified Tank	1994	127384
K	264m W	Unspecified Tank	1985	127384
N	266m N	Unspecified Tank	1997	147915
N	267m N	Unspecified Tank	1975	147915
K	268m W	Unspecified Tank	1994	137022
K	268m W	Unspecified Tank	1985	137022
K	269m W	Unspecified Tank	1994	113152
O	295m NE	Unspecified Tank	1968	113140
J	300m S	Unspecified Tank	1997	136708
J	300m S	Unspecified Tank	1997	136708
J	300m S	Unspecified Tank	1995	136708
J	301m S	Unspecified Tank	1978	136708
N	313m N	Unspecified Tank	1959	148189
N	313m N	Unspecified Tank	1975	148189
N	313m N	Unspecified Tank	1997	148189
N	313m N	Unspecified Tank	1959	148189
N	313m N	Unspecified Tank	1968	148189
O	341m NE	Unspecified Tank	1968	113139
O	361m NE	Unspecified Tank	1997	128400
O	362m NE	Unspecified Tank	1975	128400
R	400m SE	Unspecified Tank	1997	128580
R	400m SE	Unspecified Tank	1997	128580
R	400m SE	Unspecified Tank	1995	128580

ID	Location	Land Use	Date	Group ID
R	400m SE	Unspecified Tank	1978	128580
S	400m NE	Tanks	1991	105783
S	401m NE	Tanks	1991	105789
S	401m NE	Tanks	1975	134317
S	401m NE	Tanks	1997	133699
S	401m NE	Unspecified Tank	1997	126855
S	402m NE	Unspecified Tank	1968	133934
S	403m NE	Unspecified Tank	1975	133934
S	411m NE	Unspecified Tank	1997	138287
S	412m NE	Unspecified Tank	1975	143854
S	412m NE	Unspecified Tank	1968	143854
S	420m NE	Unspecified Tank	1968	113157
U	428m W	Tanks	1984	139738
U	428m W	Tanks	1974	146982
U	429m W	Tanks	1993	135478
U	450m W	Unspecified Tank	1993	137954
U	450m W	Unspecified Tank	1993	125409
U	451m W	Unspecified Tank	1974	137954
U	451m W	Unspecified Tank	1984	137954
U	451m W	Unspecified Tank	1974	138990
U	451m W	Unspecified Tank	1984	138990
12	496m E	Unspecified Tank	1991	113158

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

34

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 20**

ID	Location	Land Use	Date	Group ID
A	2m E	Electricity Substations	1991	59868
C	99m E	Electricity Substation	1991	61367
D	183m W	Electricity Substation	1994	70245
D	183m W	Electricity Substation	1974	70245
D	183m W	Electricity Substation	1974	70245
D	184m W	Electricity Substation	1985	70245
5	211m N	Electricity Substation	1997	61365
M	265m SW	Electricity Substation	1996	84781
M	265m SW	Electricity Substation	1994	84781
6	265m E	Electricity Substation	1991	61366
M	265m SW	Electricity Substation	1988	84781
P	311m SW	Electricity Substation	1988	66141
P	312m SW	Electricity Substation	1996	66141
P	312m SW	Electricity Substation	1994	66141
P	315m SW	Electricity Substation	1981	74453
O	320m NE	Electricity Substation	1997	61364
7	342m N	Electricity Substation	1997	61356
8	387m W	Electricity Substation	1993	61369
T	409m NE	Electricity Substation	1997	61355
T	427m NE	Electricity Substation	1997	84765
V	431m S	Electricity Substation	1988	82222
T	431m NE	Electricity Substation	1997	84765
V	432m S	Electricity Substation	1996	82222
V	432m S	Electricity Substation	1994	82222
V	432m S	Electricity Substation	1981	80803
W	436m N	Electricity Substation	1997	85424
W	436m N	Electricity Substation	1975	85424

ID	Location	Land Use	Date	Group ID
9	438m S	Electricity Substation	1996	61370
Y	453m W	Electricity Substation	1993	61368
Y	464m W	Gas Meter House	1993	63665
AB	479m S	Electricity Substation	1996	81726
AB	479m S	Electricity Substation	1994	81726
AB	479m S	Electricity Substation	1988	81726
AB	481m S	Electricity Substation	1981	81726

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

2

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'.

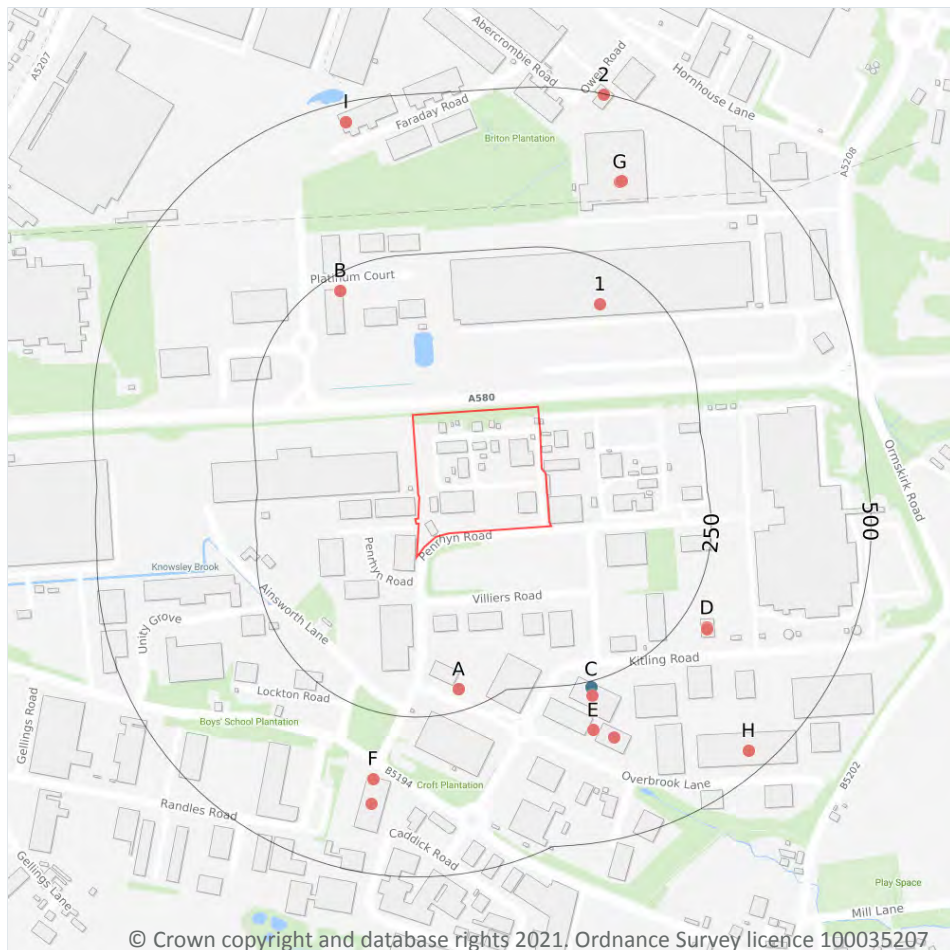
Features are displayed on the Past land use - un-grouped map on **page 20**

ID	Location	Land Use	Date	Group ID
X	438m N	Vehicle Repair Depot	1976	25257
X	438m N	Vehicle Repair Depot	1976	25257

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Licensed waste sites
- 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

3

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

Features are displayed on the Waste and landfill map on **page 28**

ID	Location	Details		
C	263m S	Site Name: Laurel House M R F Site Address: Laurel House, Kitling Road, Knowsley Business Park, Prescot, Merseyside, L34 9JA Correspondence Address: -	Type of Site: 75kte Materials Recycling Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EWC028 EPR reference: EA/EPR/CP3793SX/A001 Operator: Environmental Waste Controls Ltd Waste Management licence No: 100684 Annual Tonnage: 24999	Issue Date: 30/10/2008 Effective Date: - Modified:: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
C	263m S	Site Name: Laurel House M R F Site Address: Laurel House, Kitling Road, Knowsley Business Park, Prescot, Merseyside, L34 9JA Correspondence Address: -	Type of Site: 75kte Materials Recycling Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EWC028 EPR reference: EA/EPR/CP3793SX/V002 Operator: Environmental Waste Controls Plc Waste Management licence No: 100684 Annual Tonnage: 24999	Issue Date: 30/10/2008 Effective Date: - Modified:: 20/07/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
C	263m S	Site Name: Laurel House M R F Site Address: Laurel House, Kitling Road, Knowsley Business Park, Prescot, Merseyside, L34 9JA Correspondence Address: -	Type of Site: 75kte Materials Recycling Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EWC028 EPR reference: EA/EPR/CP3793SX/V003 Operator: Environmental Waste Controls Limited Waste Management licence No: 100684 Annual Tonnage: 24999	Issue Date: 30/10/2008 Effective Date: - Modified:: 05/04/2018 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified

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

3.7 Waste exemptions

Records within 500m	22
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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 28**

ID	Location	Site	Reference	Category	Sub-Category	Description
1	187m NE	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
A	217m S	Avanti Recycling Centre Kitling Road Merseyside L34 9HL	EPR/FH0171BL /A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in a secure place



ID	Location	Site	Reference	Category	Sub-Category	Description
A	217m S	Avanti Recycling Centre Kitling Road Merseyside L34 9HL	EPR/FH0171BL /A001	Treating waste exemption	Non- Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
A	217m S	Avanti Recycling Centre Kitling Road Merseyside L34 9HL	EPR/FH0171BL /A001	Treating waste exemption	Non- Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
B	224m NW	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	224m NW	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
C	273m S	LAUREL HOUSE, KITLING ROAD, KNOWSLEY BUSINESS PARK, PRESCOT, L34 9JA	WEX107347	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	291m SE	KITLING ROAD, KNOWSLEY BUSINESS PARK, PRESCOT, L34 9JA	WEX193859	Storing waste exemption	Not on a farm	Storage of waste in secure containers
D	291m SE	KITLING ROAD, KNOWSLEY BUSINESS PARK, PRESCOT, L34 9JA	WEX040999	Storing waste exemption	Not on a farm	Storage of waste in secure containers
D	292m SE	G Collier & Sons Ltd Kitling Road PRESCOT Merseyside L34 9JA	EPR/TF0136SC /A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in secure containers
E	326m S	Overbrook Court, Overbrook Lane, Prescot, Knowsley, L34 9FB	EA/EPR/VP388 0LZ/A001	Treating waste exemption	Not on a farm	Repair or refurbishment of WEEE
E	346m S	Overbrook Court Overbrook Lane Prescot Knowsley L34 9FB	EA/EPR/VP375 5FC/A001	Treating waste exemption	Non- Agricultural Waste Only	Repair or refurbishment of WEEE
F	354m S	Liverpool Depot Caddick Road PRESCOT Merseyside L34 9HP	EPR/GF0539CY /A001	Treating waste exemption	Non- Agricultural Waste Only	Treatment of waste food
G	373m N	HORNHOUSE LANE, KNOWSLEY INDUSTRIAL PARK, LIVERPOOL, L33 7YQ	WEX119395	Storing waste exemption	Not on a farm	Storage of waste in a secure place

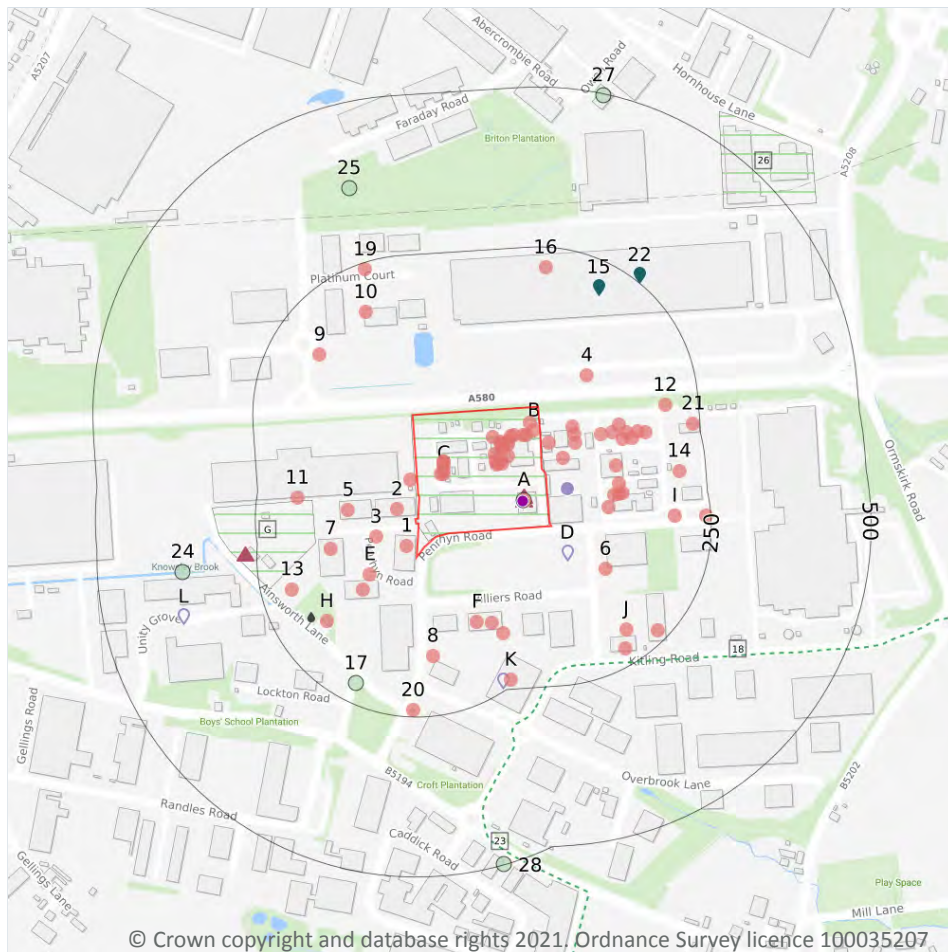


ID	Location	Site	Reference	Category	Sub-Category	Description
G	375m N	Makro Limited Hornhouse Lane LIVERPOOL L33 7YQ	EPR/GE5587Y Q/A001	Treating waste exemption	Non-Agricultural Waste Only	Crushing waste fluorescent tubes
F	393m S	Nagel Langdons Ltd, CADDICK ROAD, KNOWSLEY BUSINESS PARK, PRESCOT, L34 9HP	WEX061668	Treating waste exemption	Not on a farm	Treatment of waste food
H	467m SE	The Total Complex Overbrook Lane Prescott Merseyside L34 9FB	EPR/QH0978U E/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in secure containers
H	467m SE	The Total Complex Overbrook Lane Prescott Merseyside L34 9FB	EPR/QH0978U E/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
I	469m N	25, FARADAY ROAD, KNOWSLEY INDUSTRIAL PARK, LIVERPOOL, L33 7UT	WEX148902	Storing waste exemption	Not on a farm	Storage of waste in a secure place
I	469m N	25, FARADAY ROAD, KNOWSLEY INDUSTRIAL PARK, LIVERPOOL, L33 7UT	WEX148902	Treating waste exemption	Not on a farm	Treatment of waste food
I	469m N	25, FARADAY ROAD, KNOWSLEY INDUSTRIAL PARK, LIVERPOOL, L33 7UT	WEX148902	Storing waste exemption	Not on a farm	Storage of waste in secure containers
2	497m N	Nagel Langdons Ltd, 2 Owen Road, Knowsley Industrial Park, Kirkby, L33 7YP	WEX159189	Treating waste exemption	Not on a Farm	Treatment of waste food

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
- Electricity cables
- 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

77

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 33**

ID	Location	Company	Address	Activity	Category
A	On site	Contract Chemicals	Penrhyn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY	Colours, Chemicals and Water Softeners and Supplies	Industrial Products
B	On site	Electricity Sub Station	Merseyside, L34	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features



ID	Location	Company	Address	Activity	Category
B	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
C	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
C	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
C	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
C	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
C	On site	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
C	On site	Tanks	Merseyside, L34	Tanks (Generic)	Industrial Features
C	12m W	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	13m E	Electricity Sub Station	Merseyside, L34	Electrical Features	Infrastructure and Facilities
1	17m W	Engineering Solutions & Automation Ltd	Unit A/1 Penrhyn Court, Penrhyn Road, Knowsley Business Park, Prescot, Merseyside, L34 9AB	Industrial Engineers	Engineering Services
2	32m NW	Direct Vehicle Glass	Unit E2 Penrhyn Court, Penrhyn Road, Knowsley Business Park, Prescot, Merseyside, L34 9AB	Vehicle Repair, Testing and Servicing	Repair and Servicing
B	34m E	Chimney	Merseyside, L34	Chimneys	Industrial Features
B	51m E	Gas Valve Compound	Merseyside, L34	Gas Features	Infrastructure and Facilities
B	53m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	54m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
3	66m W	Electricity Sub Station	Merseyside, L34	Electrical Features	Infrastructure and Facilities
E	78m W	Electricity Sub Station	Merseyside, L34	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
4	91m NE	Electricity Sub Station	Merseyside, L33	Electrical Features	Infrastructure and Facilities
B	94m E	Electricity Sub Station	Merseyside, L34	Electrical Features	Infrastructure and Facilities
B	94m E	Pylon	Merseyside, L34	Electrical Features	Infrastructure and Facilities
E	98m SW	Beverston Engineering Ltd	Unit B Penrhyn Court, Penrhyn Road, Knowsley Business Park, Prescot, Merseyside, L34 9AB	Precision Engineers	Engineering Services
B	104m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
5	106m W	M I Healthcare	Unit D/1 Penrhyn Court, Penrhyn Road, Knowsley Business Park, Prescot, Merseyside, L34 9AB	X-Ray Services	Health Support Services
6	108m SE	Electricity Sub Station	Merseyside, L34	Electrical Features	Infrastructure and Facilities
B	110m E	Algal Omega 3	Penrhyn Road, Knowsley Business Park, Prescot, Merseyside, L34 9HY	Milling, Refining and Food Additives	Foodstuffs
B	111m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	113m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	113m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	117m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
B	124m E	Pylon	Merseyside, L34	Electrical Features	Infrastructure and Facilities
B	128m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
7	135m W	Paper 4 Print	Unit C2 Penrhyn Court, Penrhyn Road, Knowsley Business Park, Prescot, Merseyside, L34 9AB	Wood Products Including Charcoal, Paper, Card and Board	Industrial Products
B	135m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
F	138m SE	Precision Pneumatics Ltd	Villiers Court, Villiers Road, Knowsley Business Park, Prescot, Merseyside, L34 9ET	Pneumatic Engineers	Engineering Services



ID	Location	Company	Address	Activity	Category
B	143m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
F	145m S	W E C Group	Villiers Road, Knowsley Business Park, Prescot, Merseyside, L34 9ET	General Construction Supplies	Industrial Products
B	153m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
8	156m S	Electricity Sub Station	Merseyside, L34	Electrical Features	Infrastructure and Facilities
F	161m S	Electricity Sub Station	Merseyside, L34	Electrical Features	Infrastructure and Facilities
B	164m E	Pylon	Merseyside, L34	Electrical Features	Infrastructure and Facilities
H	173m SW	Electricity Sub Station	Merseyside, L34	Electrical Features	Infrastructure and Facilities
9	173m NW	Gas Governor	Merseyside, L33	Gas Features	Infrastructure and Facilities
10	177m NW	Lombard Shipping Plc	7-8 Platinum Court, Alchemy Way, Knowsley Industrial Park, Liverpool, Merseyside, L33 7XN	Distribution and Haulage	Transport, Storage and Delivery
11	187m W	Electricity Sub Station	Merseyside, L34	Electrical Features	Infrastructure and Facilities
I	194m E	Pylon	Merseyside, L34	Electrical Features	Infrastructure and Facilities
12	198m E	Pylon	Merseyside, L34	Electrical Features	Infrastructure and Facilities
J	199m SE	Northgate Vehicle Hire	Kitling Road, Knowsley Business Park, Prescot, Merseyside, L34 9JA	Vehicle Hire and Rental	Hire Services
13	201m W	Depot	Merseyside, L34	Container and Storage	Transport, Storage and Delivery
14	208m E	Pylon	Merseyside, L34	Electrical Features	Infrastructure and Facilities
16	218m N	Electricity Sub Station	Merseyside, L33	Electrical Features	Infrastructure and Facilities
J	224m SE	Northgate Vehicle Hire	Kitling Road, Knowsley Business Park, Prescot, Merseyside, L34 9JA	Vehicle Hire and Rental	Hire Services



ID	Location	Company	Address	Activity	Category
J	233m SE	News Printers	Kitling Road, Knowsley Business Park, Prescott, Merseyside, L34 9HN	Published Goods	Industrial Products
K	235m S	Recycling Business	Merseyside, L34	Recycling Centres	Infrastructure and Facilities
19	239m N	Electricity Sub Station	Merseyside, L33	Electrical Features	Infrastructure and Facilities
20	239m S	Electricity Sub Station	Merseyside, L34	Electrical Features	Infrastructure and Facilities
21	240m E	Tank	Merseyside, L34	Tanks (Generic)	Industrial Features
I	242m E	Pylon	Merseyside, L34	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0
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Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	2
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High voltage underground electricity transmission cables.

Features are displayed on the Current industrial land use map on **page 33**

ID	Location	Cable Set	Cable Route	Details	
18	220m S	CABLE SECT 02	KIRKBY - LISTER DRIVE 1	Cable Make: SUDKABEL XLPE Cable Type: A/C Operating Voltage (kV): 275	Year of installation: 2009 Cable in tunnel? No
23	280m S	CABLE SECT 03	KIRKBY - LISTER DRIVE 1	Cable Make: SUDKABEL XLPE Cable Type: A/C Operating Voltage (kV): 275	Year of installation: 2009 Cable in tunnel? No

This data is sourced from National Grid.



4.4 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 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.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

3

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 33**

ID	Location	Company	Address	Operational status	Tier
B	On site	Contract Chemicals Limited	Contract Chemicals Limited, Prescott, Knowsley Industrial Estate, Penrhyn Road, Liverpool, Merseyside, L34 9HY	Current COMAH Site	COMAH Upper Tier Operator
G	158m W	Flogas Britain Limited	Flogas Britain Limited, Liverpool, Knowsley Business Park, Ainsworth Lane, Prescott, Merseyside, L34 9EU	Current COMAH Site	COMAH Lower Tier Operator
26	424m NE	Euroliters Ltd	Euroliters Ltd, Horn House Lane, Knowsley Ind Park, Liverpool, L33 7YQ	Historical NIHHS Site	-

This data is sourced from the Health and Safety Executive.

4.7 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.



4.8 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 33**

ID	Location	Details	
A	On site	Application reference number: No Details Application status: Approved Application date: No Details Address: Contract Chemicals 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
A	On site	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
G	267m W	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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

37

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 33**

ID	Location	Details	
A	On site	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



ID	Location	Details	
A	On site	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
A	On site	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: AQ8123	Original Permit Number: IPCMINVAR Date Approved: 6-4-1995 Effective Date: 13-4-1995 Status: Superseded By Variation
A	On site	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, 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
A	On site	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, 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
A	On site	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, 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
A	On site	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, 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
A	On site	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, 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
A	On site	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, 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



ID	Location	Details	
A	On site	Operator: Contract Chemicals (knowsley) Ltd Address: Penryhn Road, Knowsley Business Park, Prescot, 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
A	On site	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
A	On site	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
A	On site	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
A	On site	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
A	On site	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
A	On site	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
A	On site	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



ID	Location	Details	
A	On site	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
A	On site	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
A	On site	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
A	On site	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
A	On site	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
B	31m E	Operator: Contract Chemicals (knowsley) Ltd Address: Knowsley Industrial Park, Penrhyn Road, Knowsley Industrial Park South, Prescot, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: AF7096	Original Permit Number: IPCAPP Date Approved: 17-10-1992 Effective Date: 17-10-1992 Status: Superseded By Variation
B	31m E	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: AL9220	Original Permit Number: IPCAPP Date Approved: 14-7-1994 Effective Date: 21-7-1994 Status: Superseded By Variation
B	31m E	Operator: Contract Chemicals (knowsley) Ltd Address: Knowsley Industrial Park, Penrhyn Road, Knowsley Industrial Park South, Prescot, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: AM7940	Original Permit Number: IPCMINVAR Date Approved: 5-4-1994 Effective Date: 5-4-1994 Status: Superseded By Variation



ID	Location	Details	
B	31m E	Operator: Contract Chemicals (knowsley) Ltd Address: Knowsley Industrial Park, Penrhyn Road, Knowsley Industrial Park South, Prescott, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: AQ4772	Original Permit Number: IPCMINVAR Date Approved: 28-2-1995 Effective Date: 6-3-1995 Status: Superseded By Variation
B	31m E	Operator: Contract Chemicals (knowsley) Ltd Address: Knowsley Industrial Park, Penrhyn Road, Knowsley Industrial Park South, Prescott, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: AR0748	Original Permit Number: IPCMINVAR Date Approved: 24-4-1995 Effective Date: 28-4-1995 Status: Superseded By Variation
B	31m E	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: AV0568	Original Permit Number: IPCMINVAR Date Approved: 8-3-1996 Effective Date: 14-3-1996 Status: Superseded By Variation
B	31m E	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: AW0458	Original Permit Number: IPCMINVAR Date Approved: 2-7-1996 Effective Date: 8-7-1996 Status: Superseded By Variation
B	31m E	Operator: Contract Chemicals (knowsley) Ltd Address: Knowsley Industrial Park, Penrhyn Road, Knowsley Industrial Park South, Prescott, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: BD1326	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
B	31m E	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: BD6379	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
B	31m E	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: BH6800	Original Permit Number: IPCMAJVAR Date Approved: 23-2-2000 Effective Date: 25-2-2000 Status: Superseded By Variation



ID	Location	Details	
B	31m E	Operator: Contract Chemicals (knowsley) Ltd Address: Knowsley Industrial Park, Penrhyn Road, Knowsley Industrial Park South, Prescott, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: BH6818	Original Permit Number: IPCMAJVAR Date Approved: 25-5-2000 Effective Date: 25-5-2000 Status: Superseded By Variation
B	31m E	Operator: Contract Chemicals (knowsley) Ltd Address: Knowsley Industrial Park, Penrhyn Road, Knowsley Industrial Park South, Prescott, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: BH9302	Original Permit Number: IPCMINVAR Date Approved: 22-2-2000 Effective Date: 23-2-2000 Status: Superseded By Variation
B	31m E	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: BI9537	Original Permit Number: IPCMINVAR Date Approved: 29-6-2001 Effective Date: 4-7-2001 Status: Superseded By Variation
B	31m E	Operator: Contract Chemicals (knowsley) Ltd Address: Knowsley Industrial Park, Penrhyn Road, Knowsley Industrial Park South, Prescott, Merseyside, L34 9HY Process: Processes Involving Halogens Permit Number: BJ8715	Original Permit Number: IPCMAJVAR Date Approved: 10-4-2001 Effective Date: 16-4-2001 Status: Revoked - Now Ippc
B	31m E	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: BM2152	Original Permit Number: IPCMINVAR Date Approved: 5-12-2001 Effective Date: 5-12-2001 Status: Revoked - Now Ippc

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

46

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 33**



ID	Location	Details	
A	On site	Operator: CONTRACT CHEMICALS (KNOWSLEY) LIMITED Installation Name: KNOWSLEY CONTRACT CHEMICALS EPR/BL8619IA Process: INORGANIC CHEMICALS; ACIDS EG CHROMIC ACID Permit Number: BL8619IA Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 13/08/2004 Effective Date: 13/08/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	On site	Operator: CONTRACT CHEMICALS (KNOWSLEY) LIMITED Installation Name: KNOWSLEY CONTRACT CHEMICALS EPR/BL8619IA Process: INORGANIC CHEMICALS; SALTS EG AMMONIUM CHLORIDE Permit Number: BL8619IA Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 13/08/2004 Effective Date: 13/08/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	On site	Operator: CONTRACT CHEMICALS (KNOWSLEY) 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: - Issue Date: 13/08/2004 Effective Date: 13/08/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	On site	Operator: CONTRACT CHEMICALS (KNOWSLEY) 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: - Issue Date: 13/08/2004 Effective Date: 13/08/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED



ID	Location	Details	
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: - Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 26/10/2020 Status: TRANSFER EFFECTIVE
A	On site	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: - Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 26/10/2020 Status: TRANSFER EFFECTIVE
A	On site	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: - Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 26/10/2020 Status: TRANSFER EFFECTIVE



ID	Location	Details	
A	On site	Operator: CONTRACT CHEMICALS (KNOWSLEY) LIMITED Installation Name: KNOWSLEY CONTRACT CHEMICALS EPR/BL8619IA Process: ASSOCIATED PROCESS Permit Number: BL8619IA Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 13/08/2004 Effective Date: 13/08/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	On site	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: BL8619IA Original Permit Number: BL8619IA	EPR Reference: - Issue Date: 13/08/2004 Effective Date: 13/08/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	On site	Operator: CONTRACT CHEMICALS (KNOWSLEY) 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: - Issue Date: 13/08/2004 Effective Date: 13/08/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	On site	Operator: CONTRACT CHEMICALS (KNOWSLEY) 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: - Issue Date: 13/08/2004 Effective Date: 13/08/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED

ID	Location	Details	
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED



ID	Location	Details	
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	Operator: CONTRACT CHEMICALS LIMITED Installation Name: CONTRACT CHEMICALS EPR/SP3007PM Process: ASSOCIATED PROCESS Permit Number: SP3007PM Original Permit Number: SP3007PM	EPR Reference: - Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 26/10/2020 Status: TRANSFER EFFECTIVE
A	On site	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: - Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 26/10/2020 Status: TRANSFER EFFECTIVE
A	On site	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: - Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 26/10/2020 Status: TRANSFER EFFECTIVE



ID	Location	Details	
A	On site	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: - Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 26/10/2020 Status: TRANSFER EFFECTIVE
A	On site	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: - Issue Date: 23/08/2019 Effective Date: 23/08/2019 Last date noted as effective: 26/10/2020 Status: TRANSFER EFFECTIVE
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED



ID	Location	Details	
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED



ID	Location	Details	
A	On site	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: 26/10/2020 Status: SUPERCEDED
A	On site	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: 26/10/2020 Status: SUPERCEDED
D	48m SE	Operator: KNOWSLEY ENERGY RECOVERY LIMITED Installation Name: KNOWSLEY EFW FACILITY EPR/ZP3339FN Process: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR. Permit Number: ZP3339FN Original Permit Number: ZP3339FN	EPR Reference: - Issue Date: 12/11/2012 Effective Date: 12/11/2012 Last date noted as effective: 26/10/2020 Status: EFFECTIVE
D	48m SE	Operator: KNOWSLEY ENERGY RECOVERY LIMITED Installation Name: KNOWSLEY EFW FACILITY EPR/ZP3339FN Process: INCINERATION OF NON HAZARDOUS WASTE >1T/HR Permit Number: ZP3339FN Original Permit Number: ZP3339FN	EPR Reference: - Issue Date: 12/11/2012 Effective Date: 12/11/2012 Last date noted as effective: 26/10/2020 Status: EFFECTIVE
K	235m SE	Operator: AVANTI ENVIRONMENTAL GROUP LIMITED Installation Name: AVANTI RECYCLING CENTRE EPR/DP3437AT Process: RECOVERY OR A MIX OF RECOVERY AND DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PRE-TREATMENT OF WASTE FOR INCINERATION OR CO-INCINERATION Permit Number: DP3437AT Original Permit Number: DP3437AT	EPR Reference: - Issue Date: 12/02/2016 Effective Date: 12/02/2016 Last date noted as effective: 26/10/2020 Status: SUPERCEDED



ID	Location	Details	
K	235m SE	Operator: SRCL LIMITED Installation Name: KITLING ROAD RECYCLING CENTRE EPR/TP3335JM Process: RECOVERY OR A MIX OF RECOVERY AND DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PRE-TREATMENT OF WASTE FOR INCINERATION OR CO-INCINERATION Permit Number: TP3335JM Original Permit Number: TP3335JM	EPR Reference: - Issue Date: 11/12/2017 Effective Date: 31/12/2017 Last date noted as effective: 26/10/2020 Status: TRANSFER EFFECTIVE
L	376m W	Operator: DEMETAL LTD 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: - Issue Date: 07/07/2006 Effective Date: 07/07/2006 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
L	376m W	Operator: DEMETAL LTD Installation Name: KNOWSLEY METAL RECOVERY Process: INORGANIC CHEMICALS; USING ETC OF ANTIMONY ETC (UNLESS OTHERWISE PRESCRINED) (UNLESS GLAZING ETC) Permit Number: WP3339KV Original Permit Number: SP3738LR	EPR Reference: - Issue Date: - Effective Date: 20/01/2010 Last date noted as effective: 26/10/2020 Status: SURRENDER EFFECTIVE

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

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

Records within 500m	2
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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 33**

ID	Location	Address	Details	
15	209m NE	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
22	259m NE	Metal Architektur, Kirkby Works, East Lancs Road, L33 7TU	Process: Coating Processes 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.



4.12 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.

4.13 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 33**

ID	Location	Address	Details	
H	189m SW	MERSEYSIDE POLYMER PROCESSING LTD, CADDICK ROAD, KNOWSLEY BUSINESS PARK	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
H	189m SW	MERSEYSIDE POLYMER PROCESSING LTD, CADDICK ROAD, KNOWSLEY BUSINESS PARK	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.

4.14 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.



4.15 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.

4.16 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.

4.17 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.

4.18 Pollution Incidents (EA/NRW)

Records within 500m

6

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 33**

ID	Location	Details	
A	On site	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)
17	218m SW	Incident Date: 11/02/2003 Incident Identification: 136144 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

ID	Location	Details	
24	366m W	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)
25	368m N	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)
27	497m N	Incident Date: 06/09/2003 Incident Identification: 187956 Pollutant: Inorganic Chemicals/Products Pollutant Description: Acids	Water Impact: Category 3 (Minor) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)
28	499m S	Incident Date: 02/10/2001 Incident Identification: 34270 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m

7

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 33**

ID: A, Location: On site, Permit: BL8619IA
 Operator: Contract Chemicals (Knowsley) Limited
 Activity: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS
 Address: Knowsley Contract Chemicals Penrhyn Road Knowsley Business Park Merseyside L34 9HY
 Sector: Chemicals, Sub-sector: Chemicals
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Xylene - all isomers	10kg	772.766kg



ID: A, Location: On site, Permit: BL8619IA
Operator: Contract Chemicals (Knowsley) Limited
Activity: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS
Address: Knowsley Contract Chemicals Penrhyn Road Knowsley Business Park Merseyside L34 9HY
Sector: Chemicals, Sub-sector: Chemicals
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Phenols - total as C	20kg	56.994kg

ID: A, Location: On site, Permit: BL8619IA
Operator: Contract Chemicals (Knowsley) Limited
Activity: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS
Address: Knowsley Contract Chemicals Penrhyn Road Knowsley Business Park Merseyside L34 9HY
Sector: Chemicals, Sub-sector: Chemicals
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Ethyl benzene	10kg	133.402kg

ID: A, Location: On site, Permit: BL8619IA
Operator: Contract Chemicals (Knowsley) Limited
Activity: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS
Address: Knowsley Contract Chemicals Penrhyn Road Knowsley Business Park Merseyside L34 9HY
Sector: Chemicals, Sub-sector: Chemicals
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Chloroform (Trichloromethane)	5kg	7.608kg

ID: A, Location: On site, Permit: BL8619IA
Operator: Contract Chemicals (Knowsley) Limited
Activity: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS
Address: Knowsley Contract Chemicals Penrhyn Road Knowsley Business Park Merseyside L34 9HY
Sector: Chemicals, Sub-sector: Chemicals
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Dichloromethane (DCM) (Methylene chloride)	10kg	16.701kg



ID: A, Location: On site, Permit: BL8619IA
 Operator: Contract Chemicals (Knowsley) Limited
 Activity: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS
 Address: Knowsley Contract Chemicals Penrhyn Road Knowsley Business Park Merseyside L34 9HY
 Sector: Chemicals, Sub-sector: Chemicals
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Ammonia	1000kg	Below Reporting Threshold
Wastewater	Arsenic	5kg	Below Reporting Threshold
Wastewater	Cadmium	1kg	Below Reporting Threshold
Wastewater	Chromium	20kg	Below Reporting Threshold
Wastewater	Copper	20kg	Below Reporting Threshold
Wastewater	Lead	20kg	Below Reporting Threshold
Air	Chlorine and inorganic chlorine compounds - as HCl	10000kg	Below Reporting Threshold
Air	Non-methane volatile organic compounds (NMVOCs)	10000kg	Below Reporting Threshold
Wastewater	Pentachlorophenol (PCP)	0.05kg	Below Reporting Threshold
Wastewater	Benzene	10kg	Below Reporting Threshold
Wastewater	Carbon tetrachloride (Tetrachloromethane)	1kg	Below Reporting Threshold
Wastewater	Ethylene dichloride (1,2-Dichloroethane)	10kg	Below Reporting Threshold
Wastewater	Toluene	10kg	Below Reporting Threshold
Wastewater	Mercury	0.1kg	Below Reporting Threshold
Wastewater	Nickel	20kg	Below Reporting Threshold
Wastewater	Zinc	100kg	Below Reporting Threshold
Air	Sulphur oxides (SO2 and SO3) as SO2	100000kg	Below Reporting Threshold
Wastewater	Nitrogen - as total N	50000kg	Below Reporting Threshold
Wastewater	Phosphorus - as total P	5000kg	Below Reporting Threshold

ID: A, Location: On site, Permit: BL8619IA
 Operator: Contract Chemicals (Knowsley) Limited
 Activity: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS
 Address: Knowsley Contract Chemicals Penrhyn Road Knowsley Business Park Merseyside L34 9HY
 Sector: Chemicals, Sub-sector: Chemicals



Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Trichlorobenzene - all isomers	0.01kg	0.215kg

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

4.20 Pollution inventory waste transfers

Records within 500m	1
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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 33**

ID: A, Location: On site, Permit: BL86191A
 Operator: Contract Chemicals (Knowsley) Limited
 Activity: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS
 Address: Knowsley Contract Chemicals Penrhyn Road Knowsley Business Park Merseyside L34 9HY
 Sector: Chemicals, Sub-sector: Chemicals
 Releases:

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D1	Deposit into or onto land (eg landfill, etc.)	0	Absolute Value	06 01 01	sulphuric acid and sulphurous acid	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.)	19	Absolute Value	06 01 01	sulphuric acid and sulphurous acid	Yes
D10	Incineration on Land	0	Absolute Value	06 01 01	sulphuric acid and sulphurous acid	Yes
R1	Use principally as a fuel or other means to generate energy	0	Absolute Value	06 01 01	sulphuric acid and sulphurous acid	Yes
R4	Recycling/reclamation of metals and metal compounds	0	Absolute Value	06 01 01	sulphuric acid and sulphurous acid	Yes



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)	0	Absolute Value	06 01 01	sulphuric acid and sulphurous acid	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.)	93.5	Absolute Value	06 01 02	hydrochloric acid	Yes
R1	Use principally as a fuel or other means to generate energy	0.48	Absolute Value	06 01 04	phosphoric and phosphorous acid	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.)	66	Absolute Value	06 02 03	ammonium hydroxide	Yes
R1	Use principally as a fuel or other means to generate energy	1	Absolute Value	06 02 05	other bases	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.)	738.66	Absolute Value	07 01 01	aqueous washing liquids and mother liquors	Yes
R1	Use principally as a fuel or other means to generate energy	25.7	Absolute Value	07 01 01	aqueous washing liquids and mother liquors	Yes
D10	Incineration on Land	19	Absolute Value	07 01 03	organic halogenated solvents, washing liquids and mother liquors	Yes
R1	Use principally as a fuel or other means to generate energy	126.78	Absolute Value	07 01 03	organic halogenated solvents, washing liquids and mother liquors	Yes



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
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 numbers D1 to D12 (eg evaporation, drying, calcination, etc.)	242.66	Absolute Value	07 01 04	other organic solvents, washing liquids and mother liquors	Yes
R1	Use principally as a fuel or other means to generate energy	58.9	Absolute Value	07 01 04	other organic solvents, washing liquids and mother liquors	Yes
R4	Recycling/reclamation of metals and metal compounds	17.6	Absolute Value	07 01 04	other organic solvents, washing liquids and mother liquors	Yes
R1	Use principally as a fuel or other means to generate energy	20.5	Absolute Value	07 01 07	halogenated still bottoms and reaction residues	Yes
R1	Use principally as a fuel or other means to generate energy	46	Absolute Value	07 01 08	other still bottoms and reaction residues	Yes
R1	Use principally as a fuel or other means to generate energy	41	Absolute Value	07 01 10	other filter cakes and spent absorbents	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 numbers D1 to D12 (eg evaporation, drying, calcination, etc.)	1671.78	Absolute Value	07 07 01	aqueous washing liquids and mother liquors	Yes
R1	Use principally as a fuel or other means to generate energy	156.1	Absolute Value	07 07 01	aqueous washing liquids and mother liquors	Yes
R1	Use principally as a fuel or other means to generate energy	146	Absolute Value	07 07 04	other organic solvents, washing liquids and mother liquors	Yes
R1	Use principally as a fuel or other means to generate energy	30	Absolute Value	07 07 07	halogenated still bottoms and reaction residues	Yes
R1	Use principally as a fuel or other means to generate energy	57	Absolute Value	07 07 08	other still bottoms and reaction residues	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)	10.12	Absolute Value	15 01 04	metallic packaging	No



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D1	Deposit into or onto land (eg landfill, etc.)	1.95	Absolute Value	15 01 10	packaging containing residues of or contaminated by dangerous substances	Yes
R1	Use principally as a fuel or other means to generate energy	3	Absolute Value	15 01 10	packaging containing residues of or contaminated by dangerous substances	Yes
R1	Use principally as a fuel or other means to generate energy	5	Absolute Value	16 03 05	organic wastes containing dangerous substances	Yes
R1	Use principally as a fuel or other means to generate energy	2	Absolute Value	16 05 06	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	Yes
R1	Use principally as a fuel or other means to generate energy	29.5	Absolute Value	16 10 01	aqueous liquid wastes containing dangerous substances	Yes
D1	Deposit into or onto land (eg landfill, etc.)	36	Absolute Value	19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	No
R1	Use principally as a fuel or other means to generate energy	0.18	Absolute Value	20 01 21	fluorescent tubes and other mercury-containing waste	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)	13.25	Absolute Value	20 03 01	mixed municipal waste	No

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

4.21 Pollution inventory radioactive waste

Records within 500m

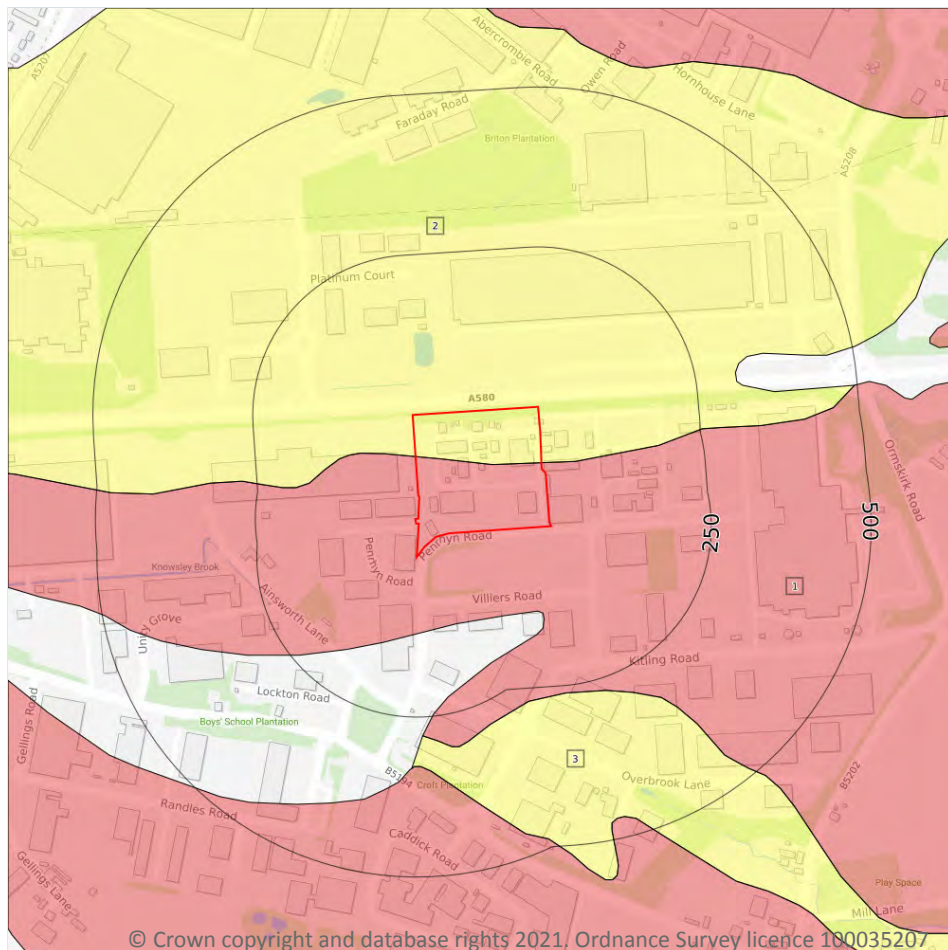
0

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



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

5.1 Superficial aquifer

Records within 500m

3

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 64**

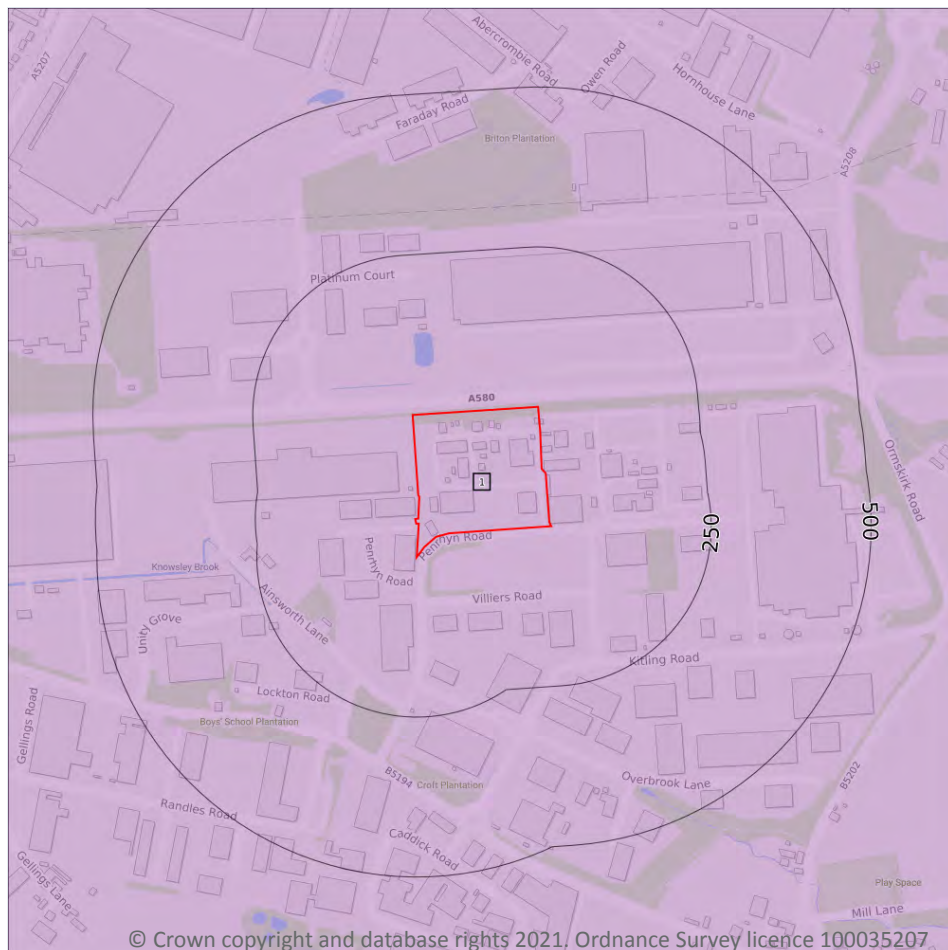
ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary 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

ID	Location	Designation	Description
3	262m S	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

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.

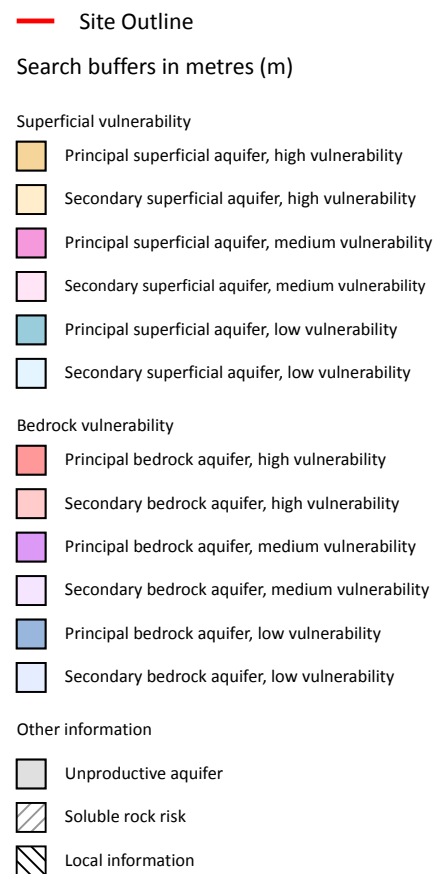
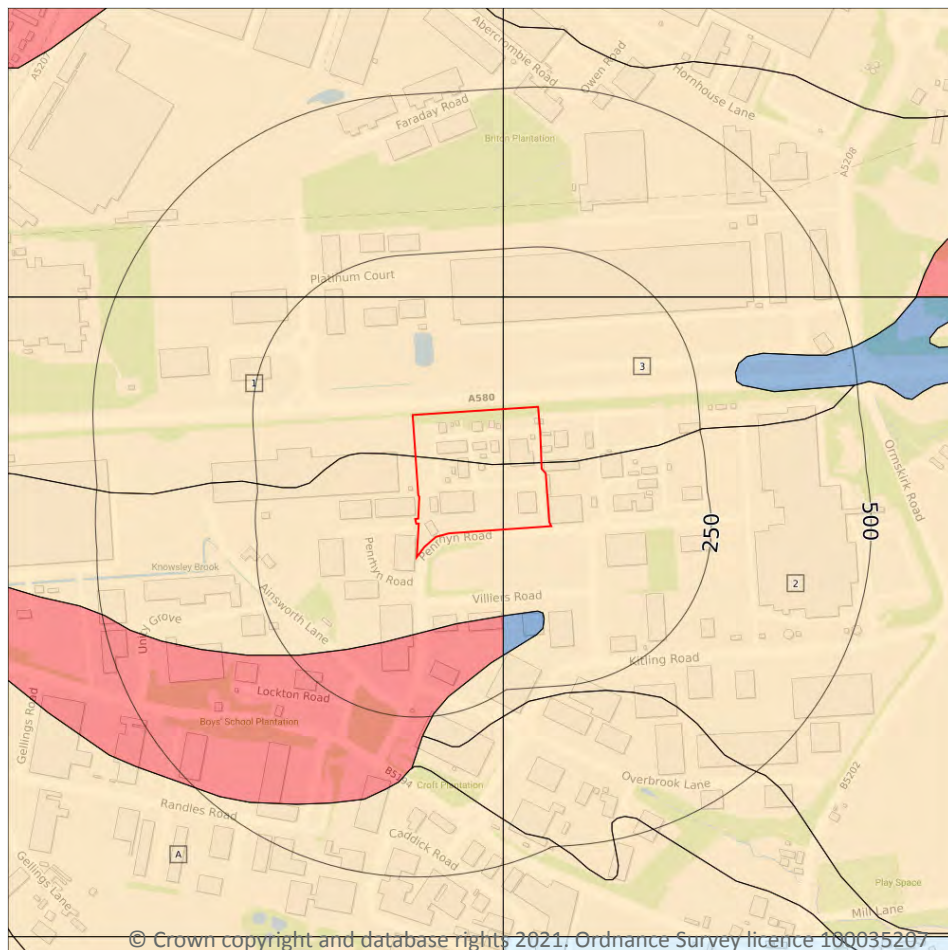
Features are displayed on the Bedrock aquifer map on **page 66**

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



5.3 Groundwater vulnerability

Records within 50m

4

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 67**

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: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
3	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: Low Aquifer type: Principal Flow mechanism: Mixed
A	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

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

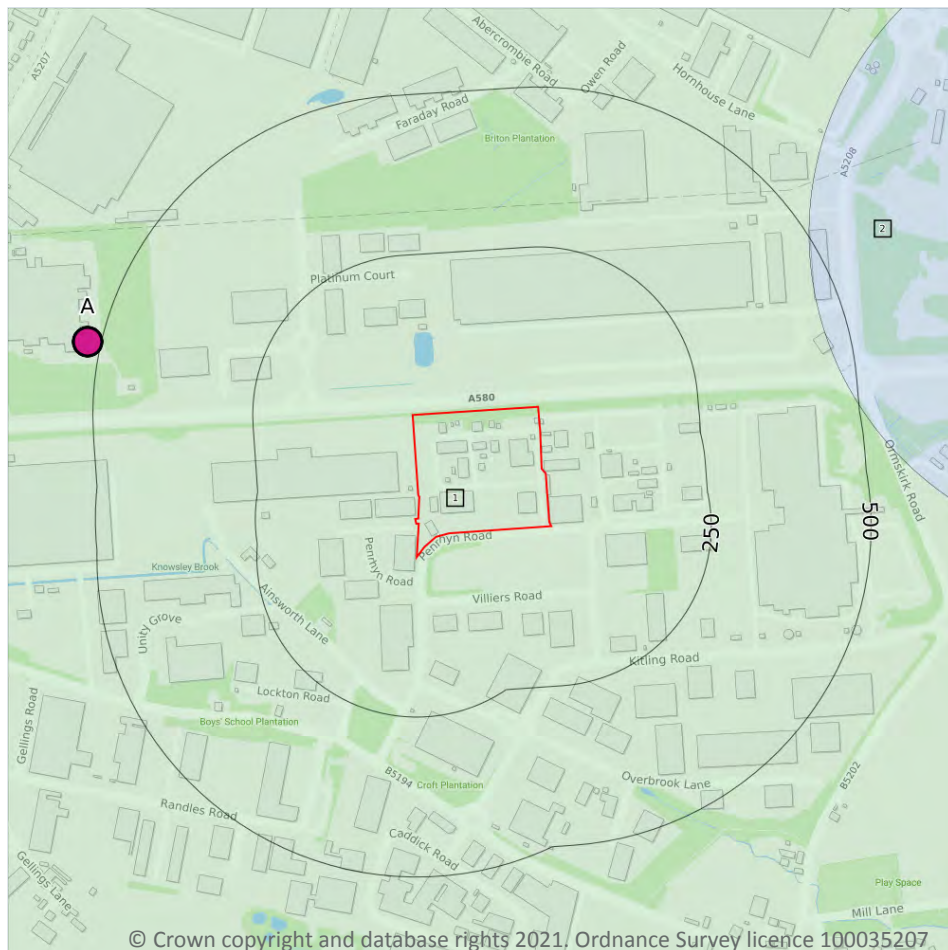
0

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
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

31

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 69**

ID	Location	Details	
A	521m 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	521m 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	521m 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	521m 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: -
-	983m 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: -

ID	Location	Details	
-	983m 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: -
-	983m 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): 2,074,000 Max Daily Volume (m ³): 7,500 Original Application No: - Original Start Date: 16/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 26/11/2018 Version End Date: -
-	1799m 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: -
-	1799m 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	
-	1799m 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: -
-	1799m 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: -
-	1799m 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: -
-	1799m 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: -
-	1811m 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: -



ID	Location	Details	
-	1811m 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: -
-	1811m 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: -
-	1811m 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: -
-	1811m 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: -
-	1811m 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	
-	1841m 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: -
-	1841m 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): 150,000 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: -
-	1841m 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): 150,000 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: -
-	1841m 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): 150,000 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	
-	1841m 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): 150,000 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: -
-	1903m N	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): 250,030 Max Daily Volume (m ³): 818.28 Original Application No: - Original Start Date: 20/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -
-	1903m N	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): 250,030 Max Daily Volume (m ³): 818.28 Original Application No: - Original Start Date: 20/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -
-	1903m N	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): 250,030 Max Daily Volume (m ³): 818.28 Original Application No: - Original Start Date: 20/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -

ID	Location	Details	
-	1963m 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 (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/02/1995 Version End Date: -
-	1963m 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 (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/02/1995 Version End Date: -
-	1963m 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 (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/02/1995 Version End Date: -
-	1963m 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 (m³): 2,905,000 Max Daily Volume (m³): 9,092.18 Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 26/11/2018 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

8

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 69**

ID	Location	Details	
-	983m 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: -
-	983m 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: -

ID	Location	Details	
-	983m 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): 2,074,000 Max Daily Volume (m ³): 7,500 Original Application No: - Original Start Date: 16/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 26/11/2018 Version End Date: -
-	1903m N	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): 250,030 Max Daily Volume (m ³): 818.28 Original Application No: - Original Start Date: 20/01/1989 Expiry Date: - Issue No: 101 Version Start Date: 18/03/2011 Version End Date: -
-	1963m 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: -
-	1963m 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	
-	1963m 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: -
-	1963m 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): 2,905,000 Max Daily Volume (m ³): 9,092.18 Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 26/11/2018 Version End Date: -

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

5.9 Source Protection Zones

Records within 500m	2
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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 69**

ID	Location	Type	Description
1	On site	3	Total catchment
2	463m E	2	Outer 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 MasterMap)
- 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 MasterMap)

Records within 250m

6

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 80**

ID	Location	Type of water feature	Ground level	Permanence	Name
A	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Knowsley Brook



ID	Location	Type of water feature	Ground level	Permanence	Name
B	48m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	202m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	209m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	209m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	212m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

3

Covering rivers, streams and lakes (some overlap with OS MasterMap 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 80**

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 80**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River WB catchment	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 80**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
1	On site	River	Croxteth/Knowsley Brook	GB112069060610	Moderate	Good	Moderate	2016

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

6.5 WFD Groundwater bodies

Records on site	2
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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 80**

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	2015



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	<u>GB41201G101700</u>	Poor	Poor	Poor	2016

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 Sea (RoFRaS)

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; 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).

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

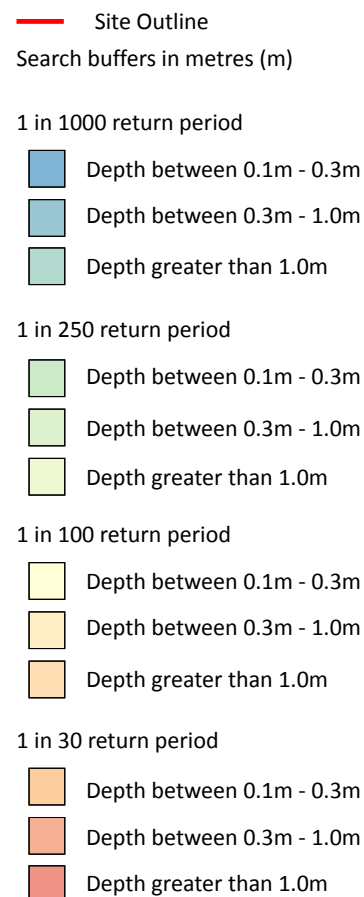
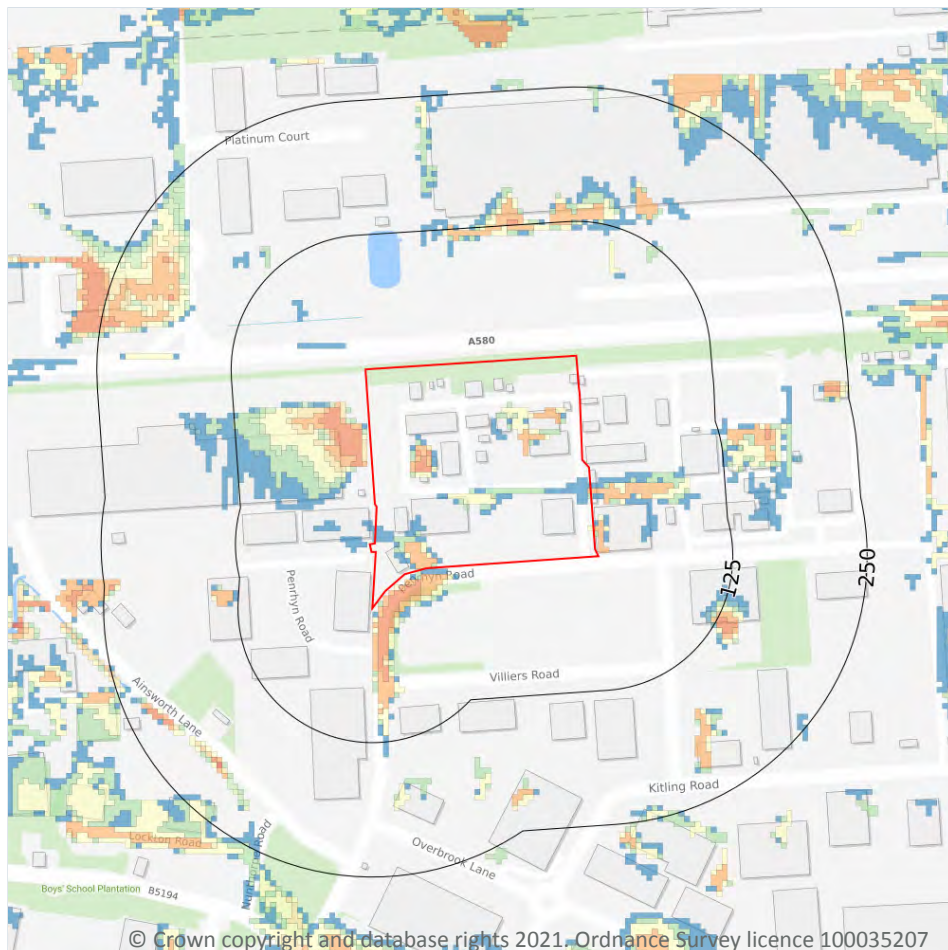
0

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



8.1 Surface water flooding

Highest risk on site

1 in 30 year, 0.3m - 1.0m

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 87**

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.

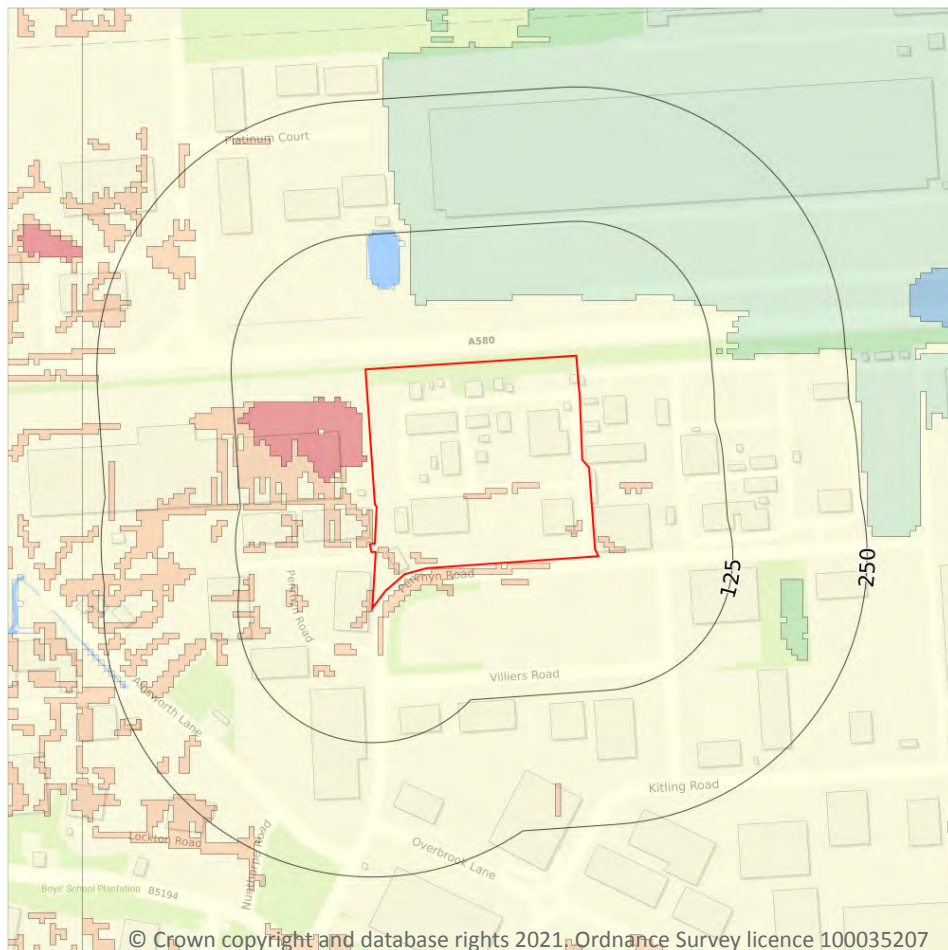
The table below shows the maximum flood depths for a range of return periods for the site.

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 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site

Moderate-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 89**

This data is sourced from Ambiantal Risk Analytics.

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

3

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 90**

ID	Location	Name	Data source
2	966m NE	Acornfield Plantation	Natural England
4	1410m SW	Croxteth	Natural England
-	1932m 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

0

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.

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 90**

ID	Location	Name	Local Authority name
1	553m SE	Liverpool and Manchester	Knowsley
3	1408m SW	Liverpool and Manchester	Liverpool
-	1641m S	Liverpool and Manchester	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	S642	Existing



Location	Name	Type	NVZ ID	Status
610m SW	ALT NVZ	Surface Water	S642	Existing
1017m NE	ALT NVZ	Surface Water	S642	Existing
1212m SE	ALT NVZ	Surface Water	S642	Existing

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



SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site

0

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.

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 English Heritage, 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 English Heritage, 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 English Heritage, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m

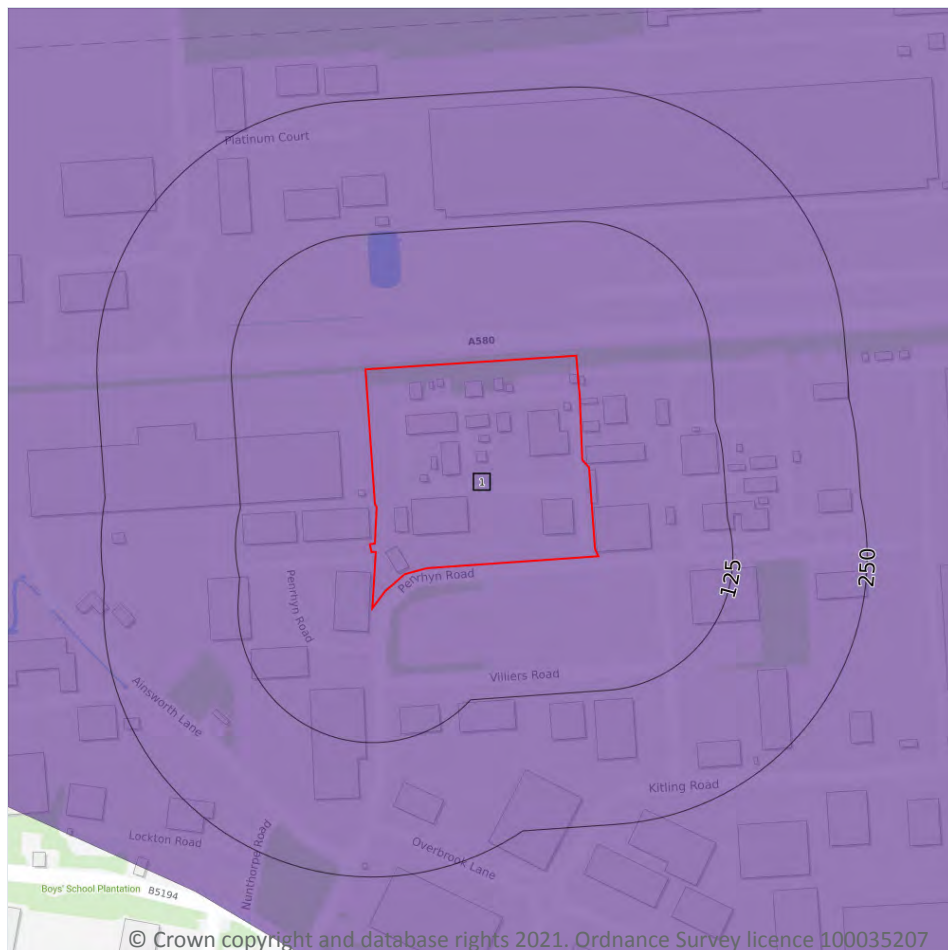
0

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 English Heritage, 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 99**

ID	Location	Classification	Description
1	On site	Urban	-

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.

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

6

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 101**

ID	Location	Main Habitat	Other habitats
1	On site	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)
2	32m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	81m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	147m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
5	187m W	Good quality semi-improved grassland	Main habitat: GQSIG (INV > 50%)
6	219m 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

0

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.

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 103**

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

This data is sourced from the British Geological Survey.



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

14.2 Artificial and made ground (10k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m

0

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.

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

14.5 Bedrock geology (10k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

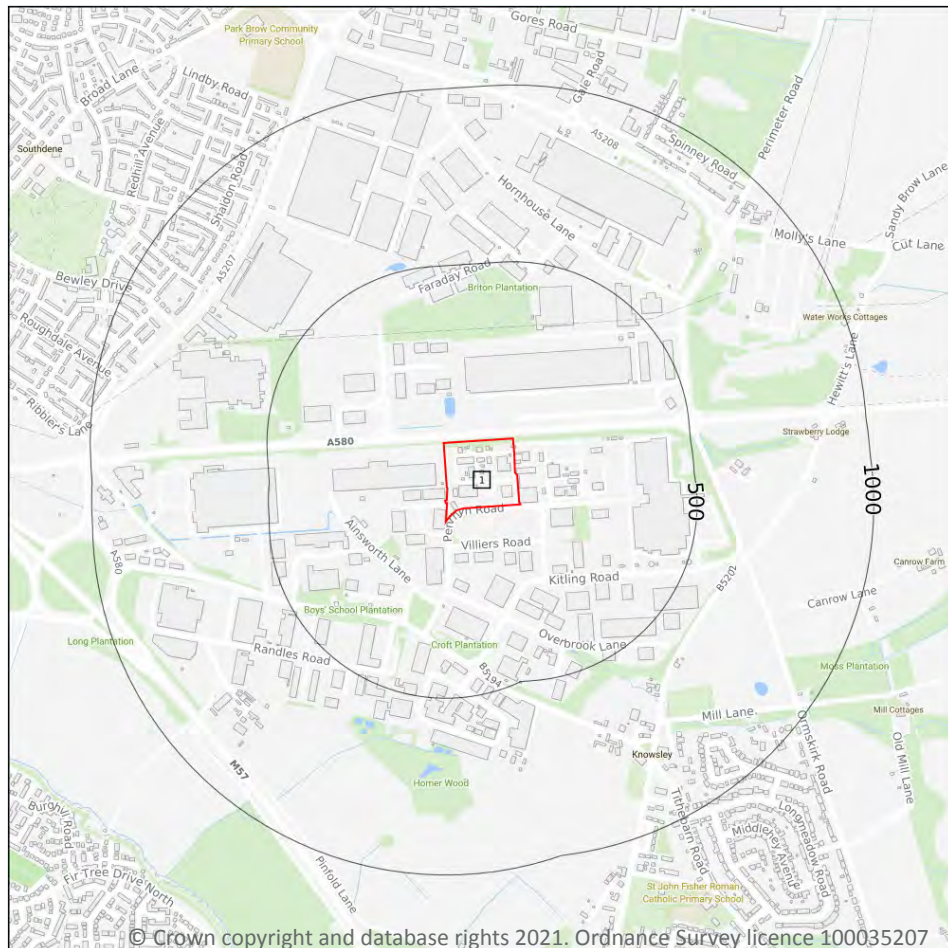
0

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.

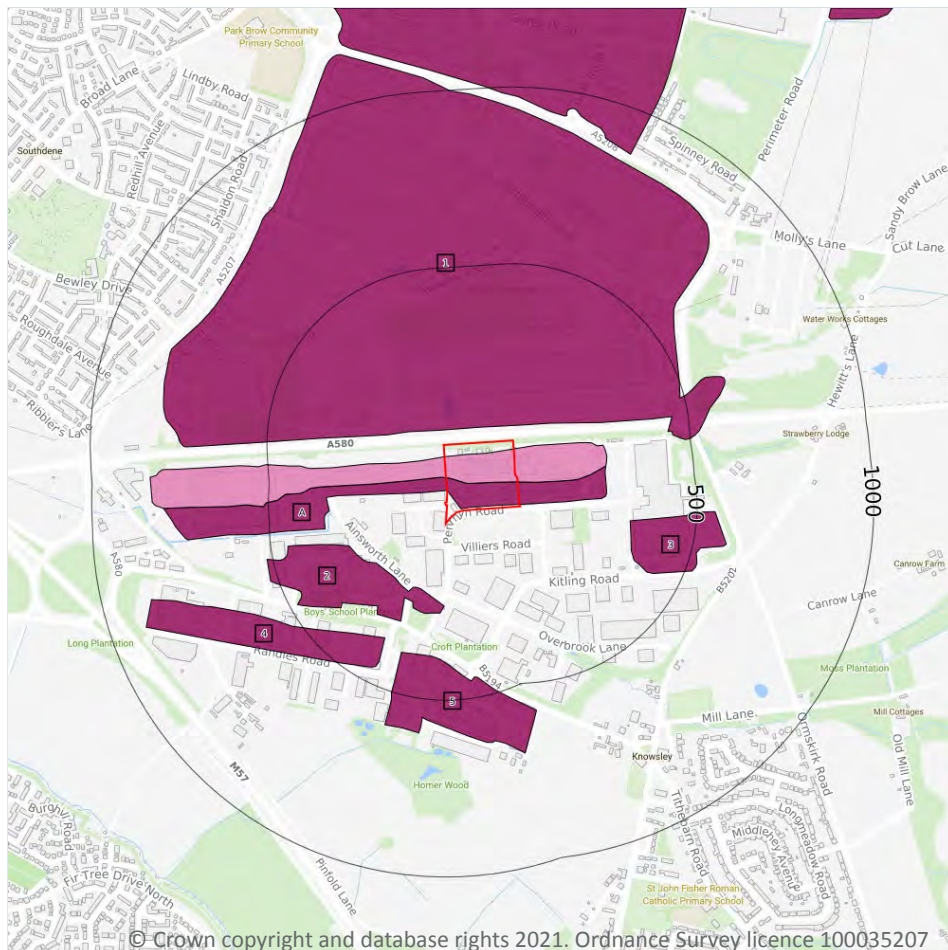
Features are displayed on the Geology 1:50,000 scale - Availability map on **page 107**

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

7

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 108**

ID	Location	LEX Code	Description	Rock description
A	On site	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
A	On site	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
1	42m N	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	198m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT



ID	Location	LEX Code	Description	Rock description
3	314m E	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
4	367m SW	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
5	377m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

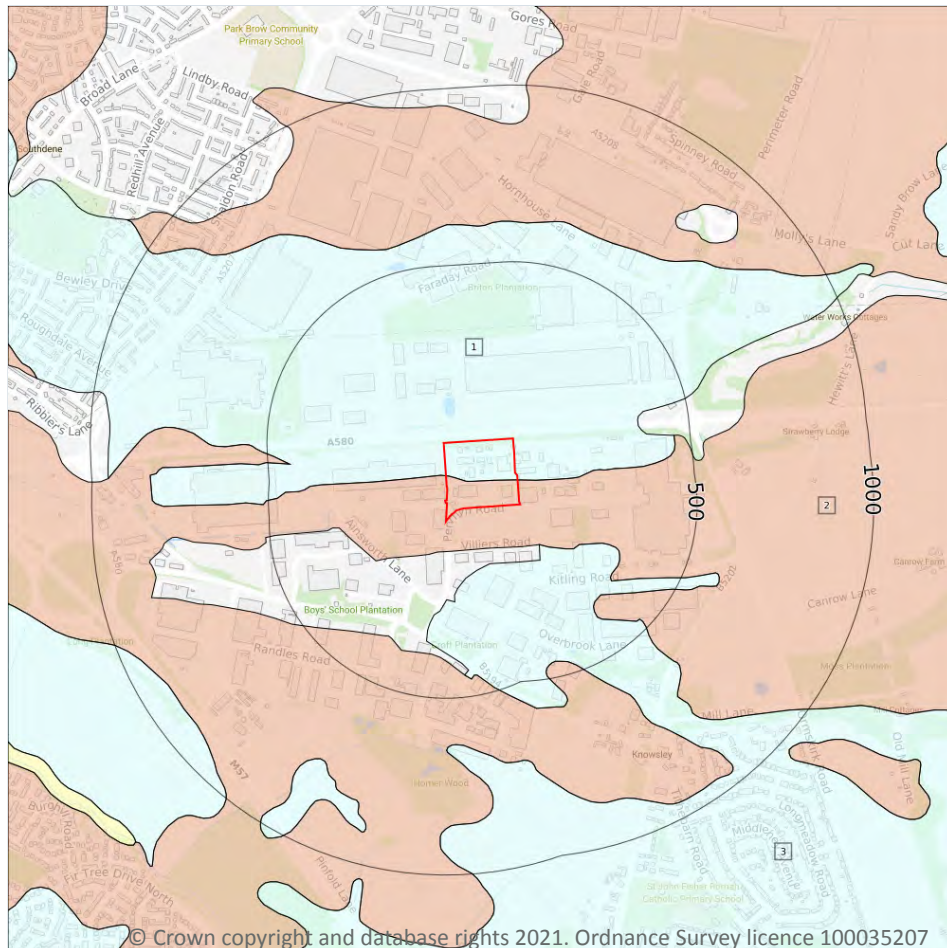
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial 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 - 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

3

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 110**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
2	On site	SSA-S	SHIRDLEY HILL SAND FORMATION	SAND
3	126m SE	TILLD-CSVL	TILL, DEVENSIAN	CLAY, SANDY, GRAVELLY, COBBLY



This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

2

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	Intergranular	High	High
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

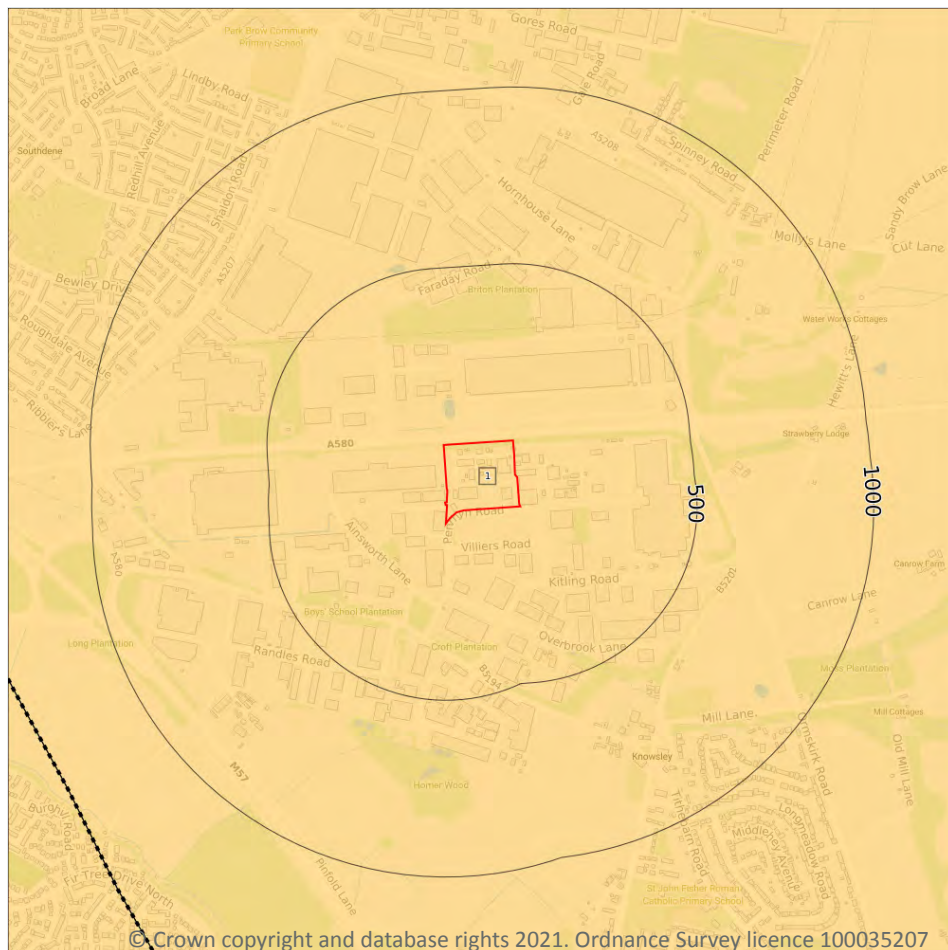
0

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 112**

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	High

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

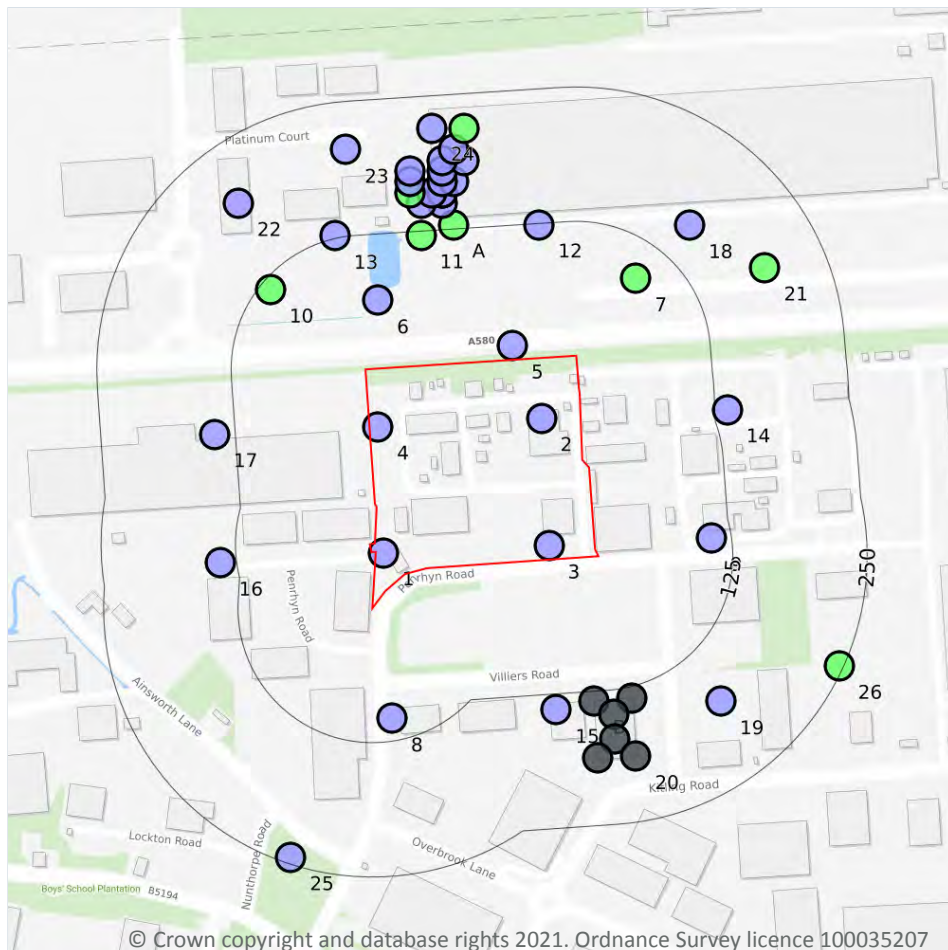
0

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

48

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 114**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	342875 396645	KNOWSLEY IND ESTATE 11	5.49	N	165107
2	On site	343022 396770	KNOWSLEY IND ESTATE 4	6.1	N	165099
3	On site	343029 396652	KNOWSLEY IND ESTATE 12	6.1	N	165108



ID	Location	Grid reference	Name	Length	Confidential	Web link
4	On site	342870 396762	KNOWSLEY IND ESTATE 3	6.1	N	165098
5	14m N	342995 396838	LIVERPOOL CORP. SHALLOW BORES	4.47	N	164969
6	64m N	342870 396880	YORKSHIRE COPPER TUBE LTD PHASE II INVESTIGATION 101	6.2	N	17561950
7	91m NE	343110 396900	KNOWSLEY YORKSHIRE COPPER TUBE RC1	10.9	N	17529455
8	104m S	342883 396491	KNOWSLEY IND ESTATE 16	3.66	N	165112
9	106m E	343180 396659	KNOWSLEY IND ESTATE 13	6.1	N	165109
10	116m NW	342770 396890	LANGTREE DEVELOPMENT KNOWSLEY 5	10.5	N	17561917
11	121m N	342910 396940	YORKSHIRE COPPER TUBE LTD PHASE IIB CONTAMINATION ASSESSMENT 204	14.5	N	17561968
12	124m N	343020 396950	YORKSHIRE COPPER TUBE LTD PHASE II INVESTIGATION 103	6.0	N	17561952
13	128m N	342830 396940	LANGTREE DEVELOPMENT KNOWSLEY 4	5.0	N	17561916
A	129m N	342940 396950	YORKSHIRE COPPER TUBE LTD PHASE IIB CONTAMINATION ASSESSMENT 203	16.0	N	17561967
B	134m S	343071 396507	KNOWSLEY IND. EST LIVERPOOL 4	-	Y	N/A
B	135m S	343106 396510	KNOWSLEY IND. EST LIVERPOOL 1	-	Y	N/A
14	137m E	343195 396778	KNOWSLEY IND ESTATE 5	5.18	N	165100
15	140m S	343036 396499	KNOWSLEY IND ESTATE 17	6.1	N	165113
16	140m W	342723 396636	KNOWSLEY IND ESTATE 10	4.57	N	165106
17	144m W	342718 396755	KNOWSLEY IND ESTATE 2	4.57	N	165097
B	147m S	343089 396495	KNOWSLEY IND. EST LIVERPOOL 5	-	Y	N/A
A	150m N	342930 396970	YORKSHIRE COPPER TUBE LTD PHASE IIC SITE INVESTIGATION 308	7.2	N	17561980
A	151m N	342910 396970	YORKSHIRE COPPER TUBE LTD PHASE II INVESTIGATION 102	6.0	N	17561951
A	160m N	342930 396980	YORKSHIRE COPPER TUBE LTD REMEDIAL TRIALS MW313	5.1	N	17561990
A	160m N	342930 396980	YORKSHIRE COPPER TUBE LTD REMEDIAL TRIALS MW315	5.1	N	17561992
A	160m N	342930 396980	YORKSHIRE COPPER TUBE LTD PHASE IIB CONTAMINATION ASSESSMENT 207	6.0	N	17561971



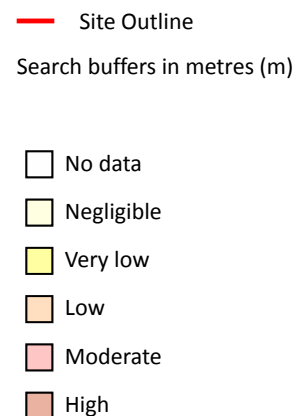
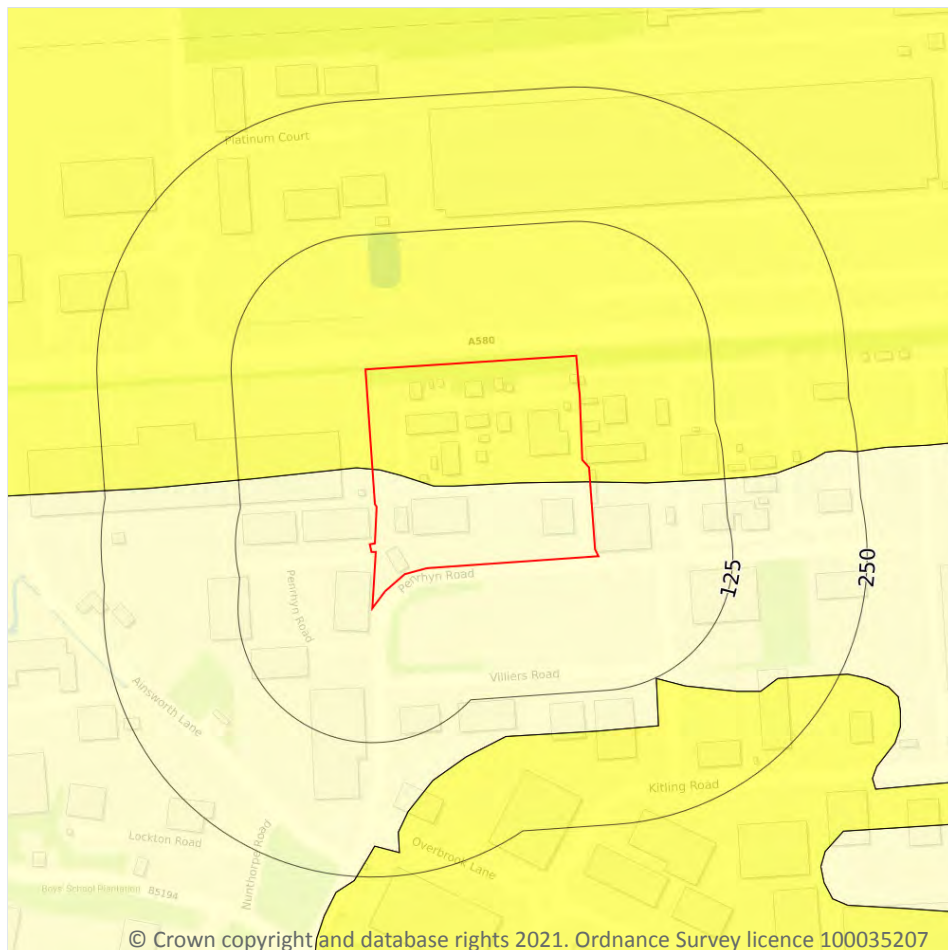
ID	Location	Grid reference	Name	Length	Confidential	Web link
A	160m N	342920 396980	YORKSHIRE COPPER TUBE LTD PHASE IIB CONTAMINATION ASSESSMENT 201	5.0	N	17561963
18	161m NE	343160 396950	KNOWSLEY YORKSHIRE COPPER TUBE RC10	4.0	N	17529498
A	161m N	342900 396980	YORKSHIRE COPPER TUBE LTD PHASE IIB CONTAMINATION ASSESSMENT 206	18.0	N	17561970
A	169m N	342940 396990	YORKSHIRE COPPER TUBE LTD PHASE IIC SITE INVESTIGATION 307	6.6	N	17561979
A	169m N	342930 396990	YORKSHIRE COPPER TUBE LTD PHASE IIC SITE INVESTIGATION 306	6.6	N	17561978
B	170m S	343090 396472	KNOWSLEY IND. EST LIVERPOOL 6	-	Y	N/A
A	171m N	342900 396990	YORKSHIRE COPPER TUBE LTD PHASE IIC SITE INVESTIGATION 310	8.1	N	17561987
19	176m SE	343189 396507	KNOWSLEY IND ESTATE 18	5.49	N	165114
A	179m N	342930 397000	YORKSHIRE COPPER TUBE LTD REMEDIAL TRIALS MW314	5.0	N	17561991
A	181m N	342900 397000	YORKSHIRE COPPER TUBE LTD PHASE IIC SITE INVESTIGATION 309	7.6	N	17561981
B	187m S	343074 396454	KNOWSLEY IND. EST LIVERPOOL 3	-	Y	N/A
A	188m N	342950 397010	YORKSHIRE COPPER TUBE LTD REMEDIAL TRIALS MW312	4.2	N	17561989
20	189m S	343110 396456	KNOWSLEY IND. EST LIVERPOOL 2	-	Y	N/A
A	189m N	342930 397010	YORKSHIRE COPPER TUBE LTD REMEDIAL TRIALS MW311	5.1	N	17561988
21	194m NE	343230 396910	KNOWSLEY YORKSHIRE COPPER TUBE RC2	21.0	N	17529456
22	195m NW	342740 396970	LANGTREE DEVELOPMENT KNOWSLEY 3	6.5	N	17561915
A	199m N	342940 397020	YORKSHIRE COPPER TUBE LTD PHASE IIC SITE INVESTIGATION 305	7.0	N	17561977
23	205m N	342840 397020	LANGTREE DEVELOPMENT KNOWSLEY 2	5.8	N	17561914
A	218m N	342950 397040	YORKSHIRE COPPER TUBE LTD PHASE IIB CONTAMINATION ASSESSMENT 205	21.5	N	17561969
24	220m N	342920 397040	YORKSHIRE COPPER TUBE LTD PHASE IIC SITE INVESTIGATION 304	7.6	N	17561976
25	243m S	342789 396362	KNOWSLEY IND ESTATE 22	6.1	N	165118
26	246m SE	343299 396540	KITLING ROAD KNOWSLEY E13	12.75	N	17560480



This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m

2

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).

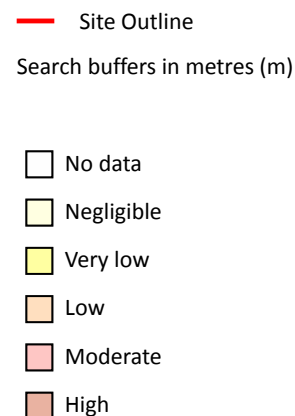
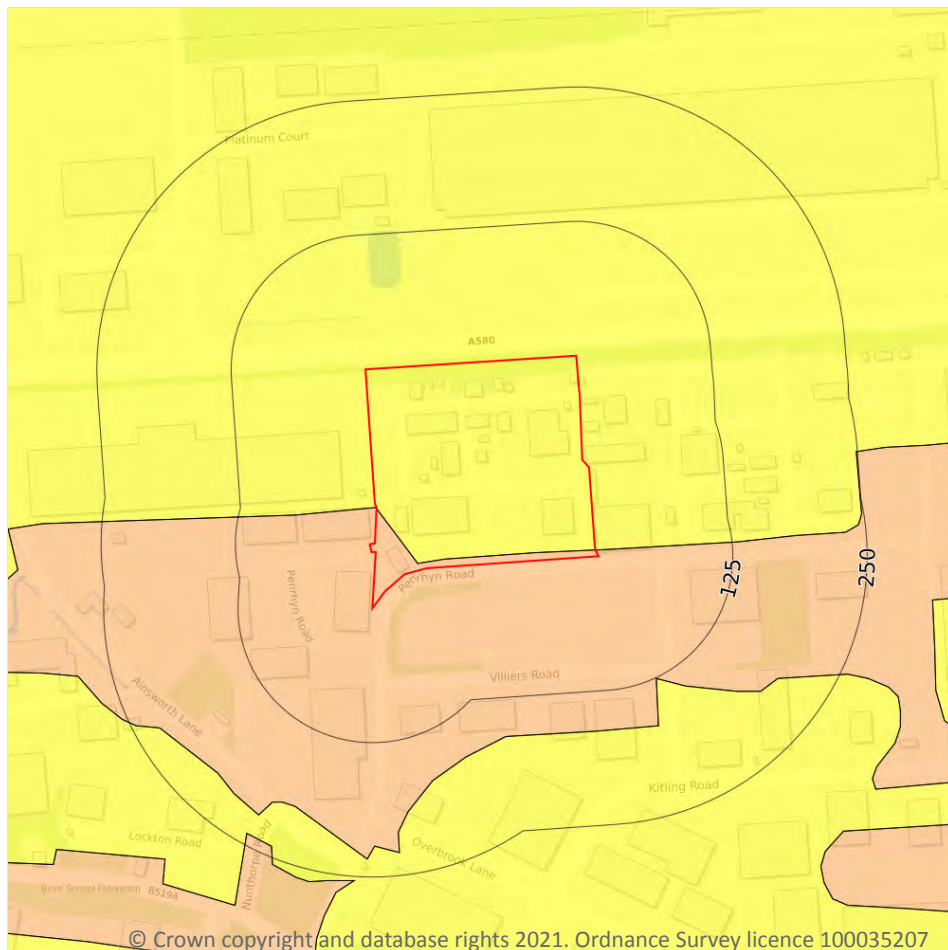
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 118**

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
On site	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

2

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**

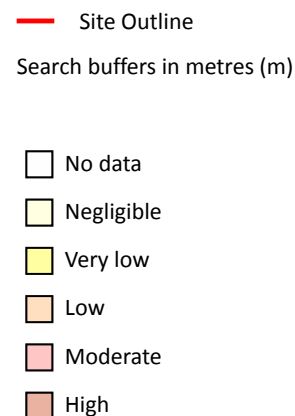
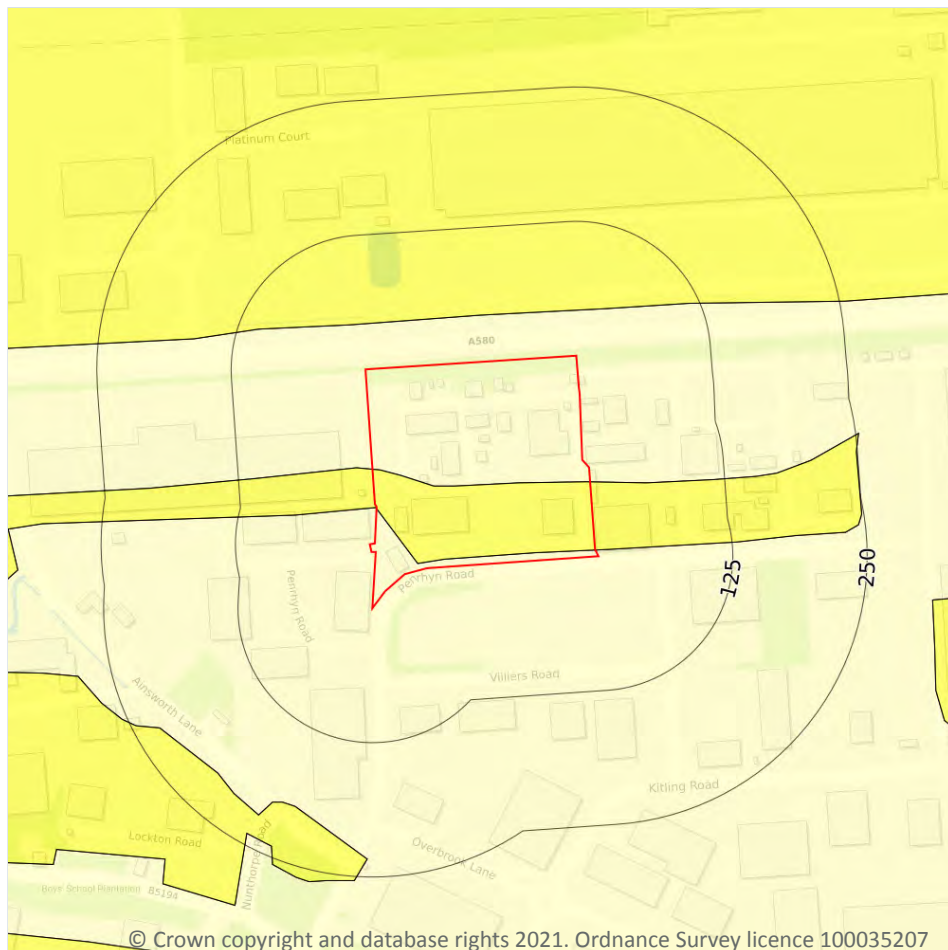
Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

Location	Hazard rating	Details
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

3

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 121**

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

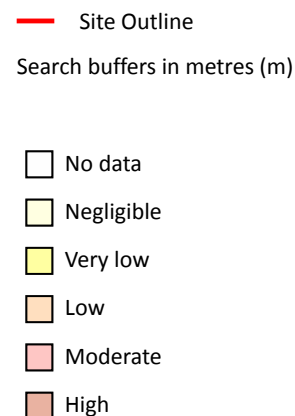
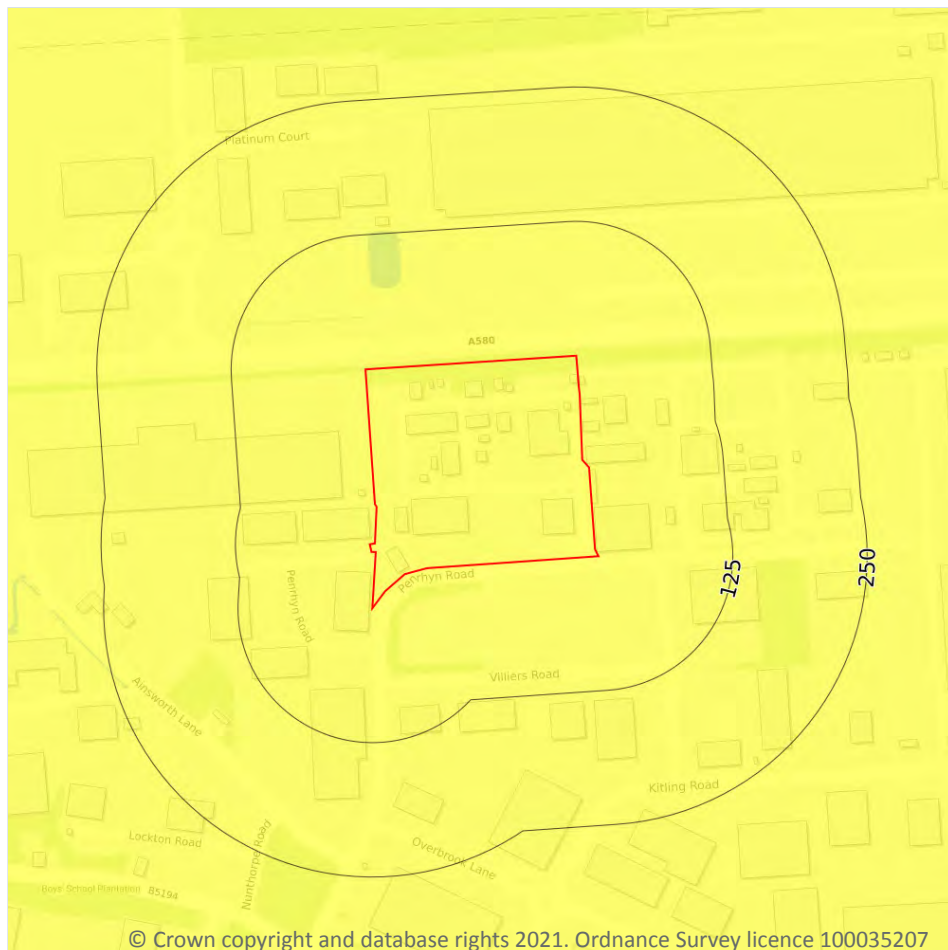


Location	Hazard rating	Details
42m N	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



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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.

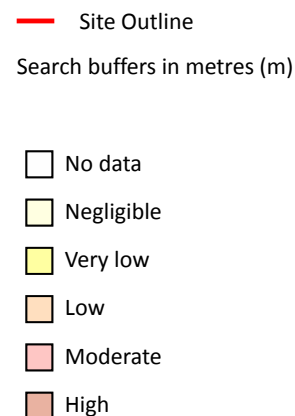
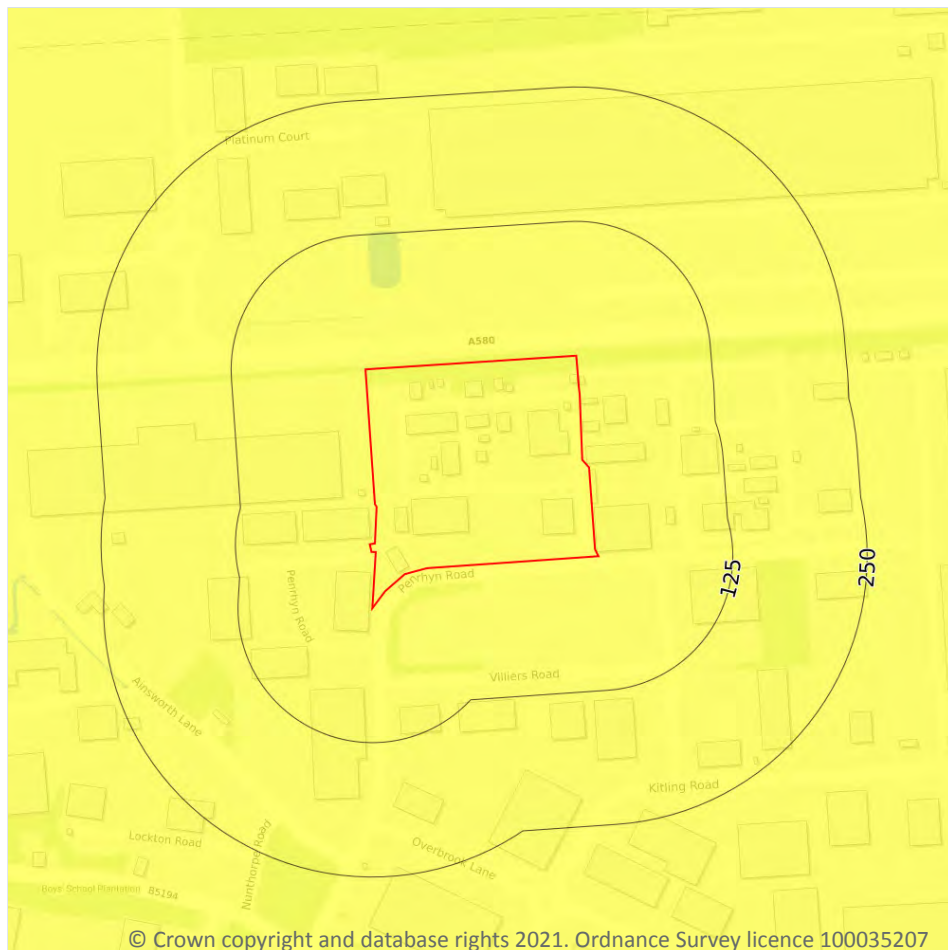
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 123**

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



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.

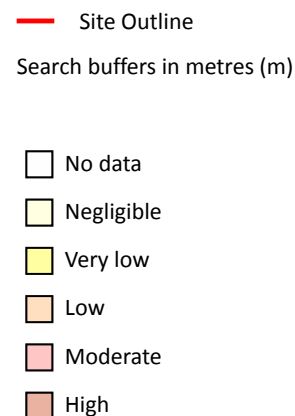
Features are displayed on the Natural ground subsidence - Landslides map on **page 124**

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



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.

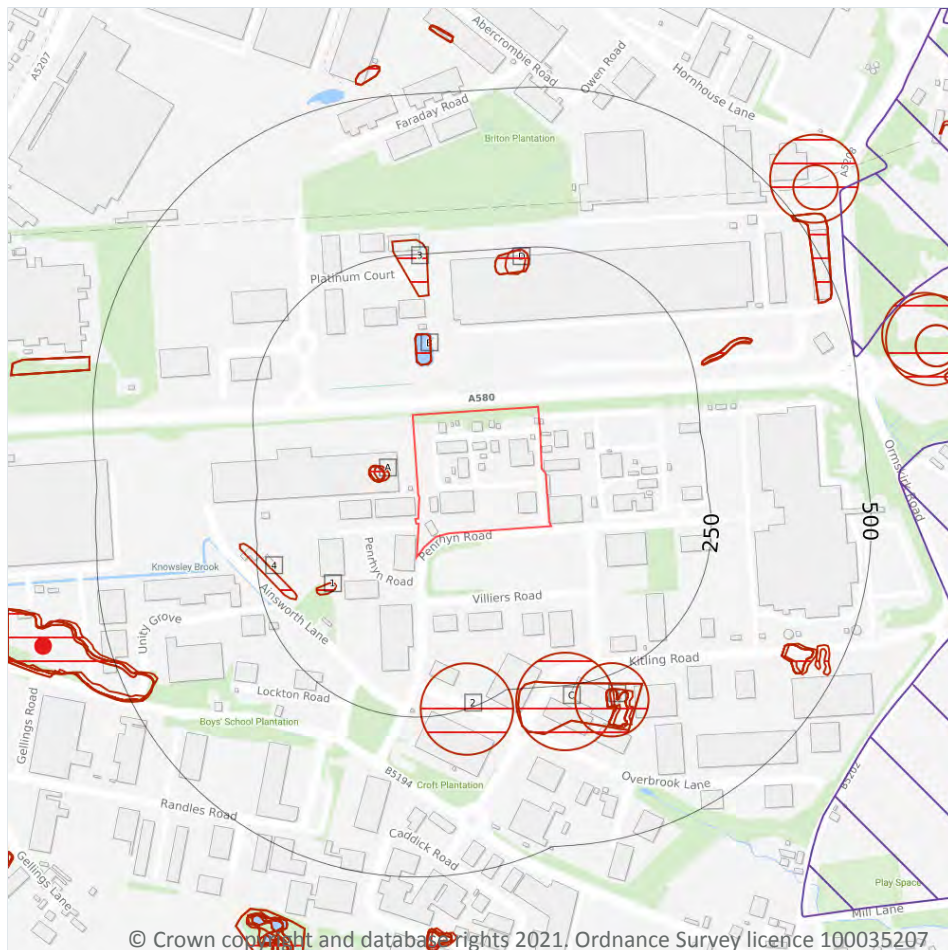
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 125**

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, ground workings and natural cavities



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- 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 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 Peter Brett Associates (PBA).

18.2 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.

18.3 Surface ground workings

Records within 250m

21

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, ground workings and natural cavities map on **page 127**

ID	Location	Land Use	Year of mapping	Mapping scale
A	43m W	Unspecified Pit	1955	1:10560
A	50m W	Unspecified Pit	1925	1:10560
A	50m W	Unspecified Pit	1925	1:10560
A	51m W	Unspecified Pit	1938	1:10560
A	51m W	Unspecified Pit	1925	1:10560
A	51m W	Unspecified Pit	1907	1:10560
A	51m W	Unspecified Pit	1938	1:10560
B	77m N	Pond	1966	1:10560
B	77m N	Pond	1976	1:10000
B	77m N	Pond	1988	1:10000
1	134m W	Unspecified Heap	1966	1:10560
2	179m S	Unspecified Disused Pits	1892	1:10560
3	184m N	Unspecified Heap	1966	1:10560
4	197m W	Unspecified Heap	1966	1:10560
C	199m S	Unspecified Pits	1938	1:10560
D	209m N	Unspecified Heap	1966	1:10560
D	211m N	Unspecified Heap	1976	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
D	211m N	Unspecified Heap	1988	1:10000
E	230m S	Unspecified Pits	1966	1:10560
C	241m S	Unspecified Pits	1925	1:10560
C	241m S	Unspecified Pits	1925	1:10560

This data is sourced from Ordnance Survey/Groundsure.

18.4 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.

18.5 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 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 Peter Brett Associates (PBA).

18.8 JPB mining areas

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

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

This data is sourced from Johnson Poole and Bloomer.

18.9 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.

18.10 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.

18.11 Gypsum areas

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

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

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

Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

18.13 Clay mining

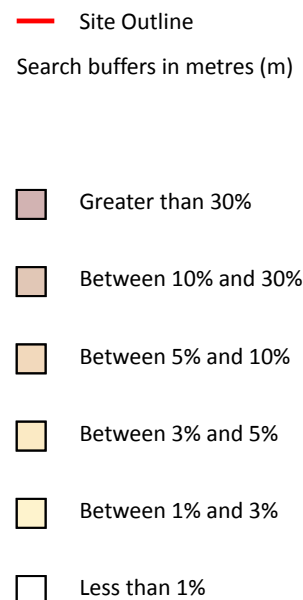
Records on site	0
-----------------	---

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 Radon



19.1 Radon

Records on site

1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

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 Public Health England.



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

4

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	60 - 90 mg/kg	15 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	60 - 90 mg/kg	15 mg/kg

This data is sourced from the British Geological Survey.

20.2 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.



20.3 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.



21 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 1 Worksites
- 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

21.1 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.

21.2 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.

21.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 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 135**

Location	Land Use	Year of mapping	Mapping scale
48m N	Railway Sidings	1966	10560
114m N	Railway Sidings	1985	-
114m N	Railway Sidings	1959	1250
114m N	Railway Sidings	1974	1250
173m N	Railway Sidings	1974	1250
185m N	Railway Sidings	1960	1250
186m N	Railway Sidings	1959	2500

This data is sourced from Ordnance Survey/Groundsure.

21.5 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.



21.6 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.

21.7 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.

21.8 Crossrail 1

Records within 500m

0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 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.

21.10 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>.

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Appendix C – Historical Maps

Site Details:

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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1867

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1867
Revised 1867
Edition N/A
Copyright N/A
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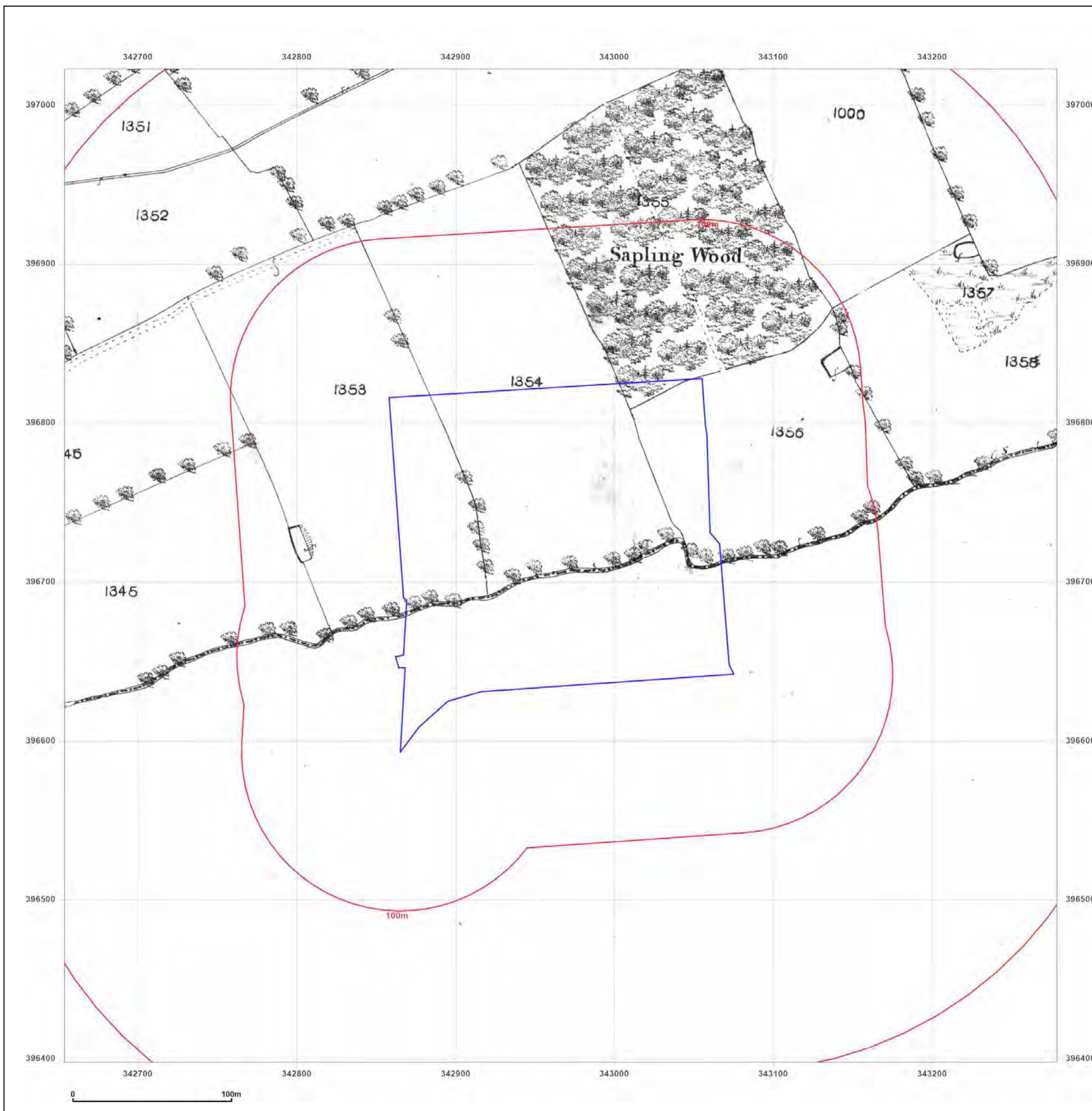


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Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1893

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1893
Revised 1893
Edition N/A
Copyright N/A
Levelled N/A

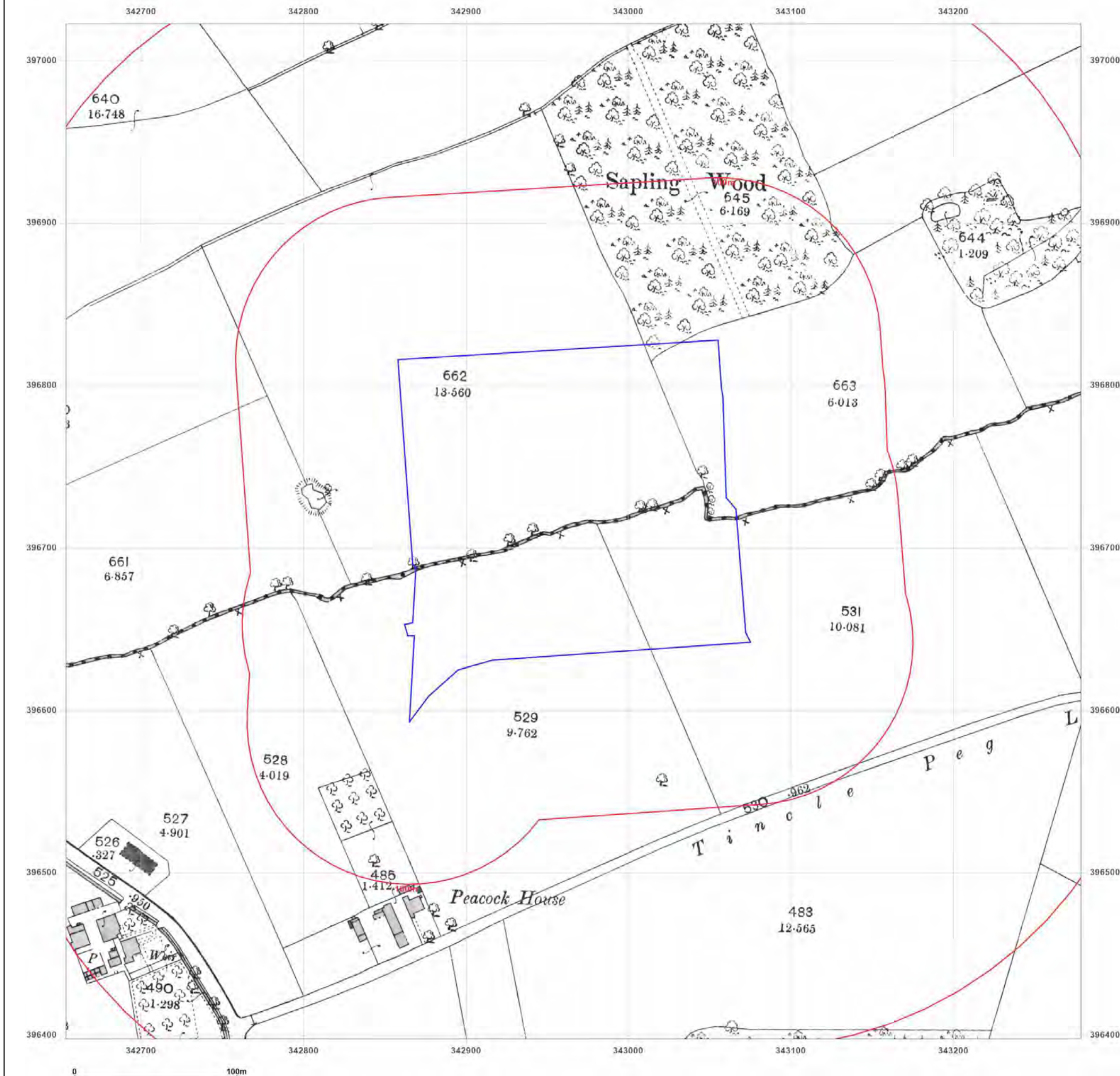


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Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1908

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1908
Revised 1908
Edition N/A
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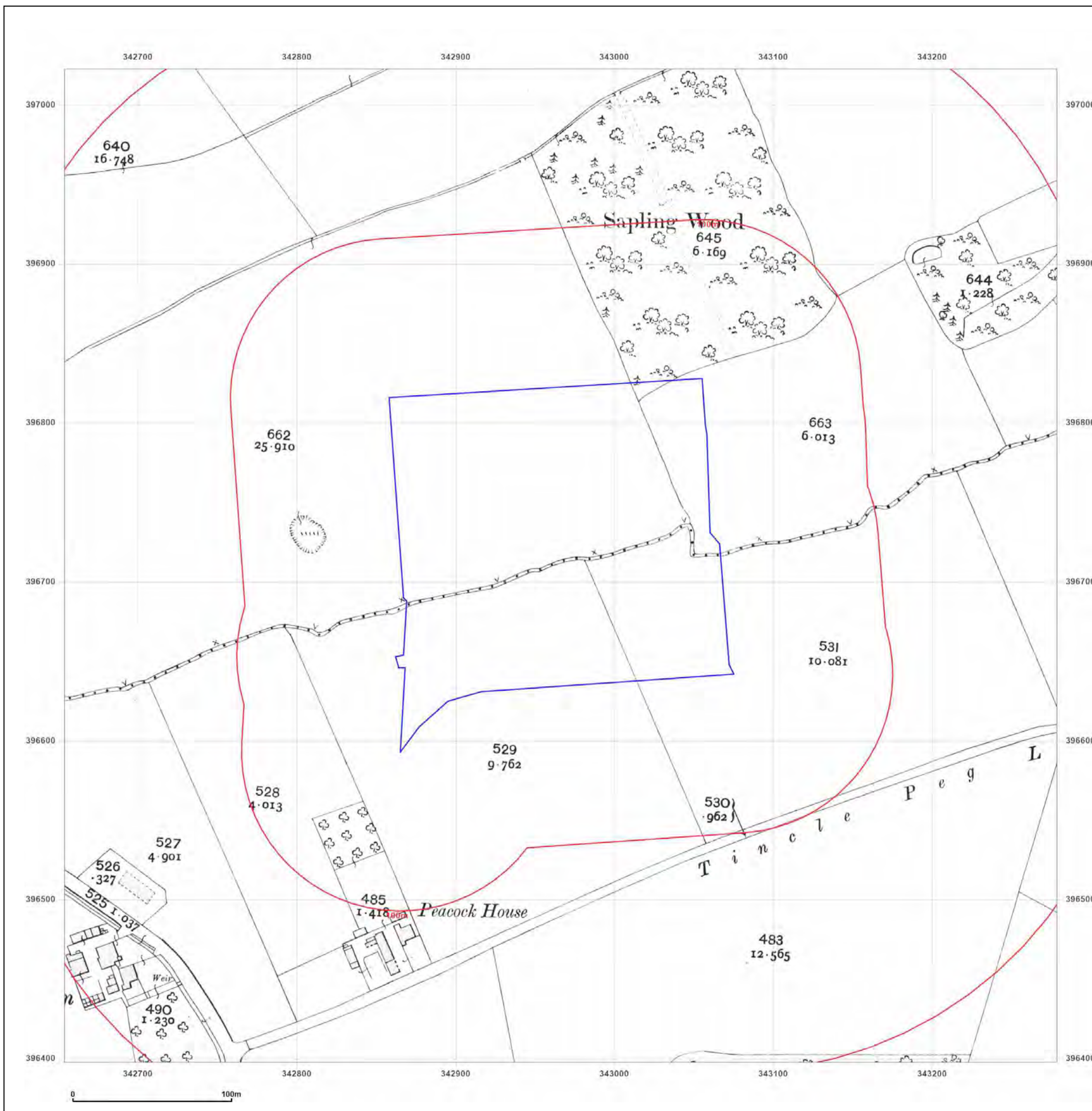


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Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1927

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1927
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Edition N/A
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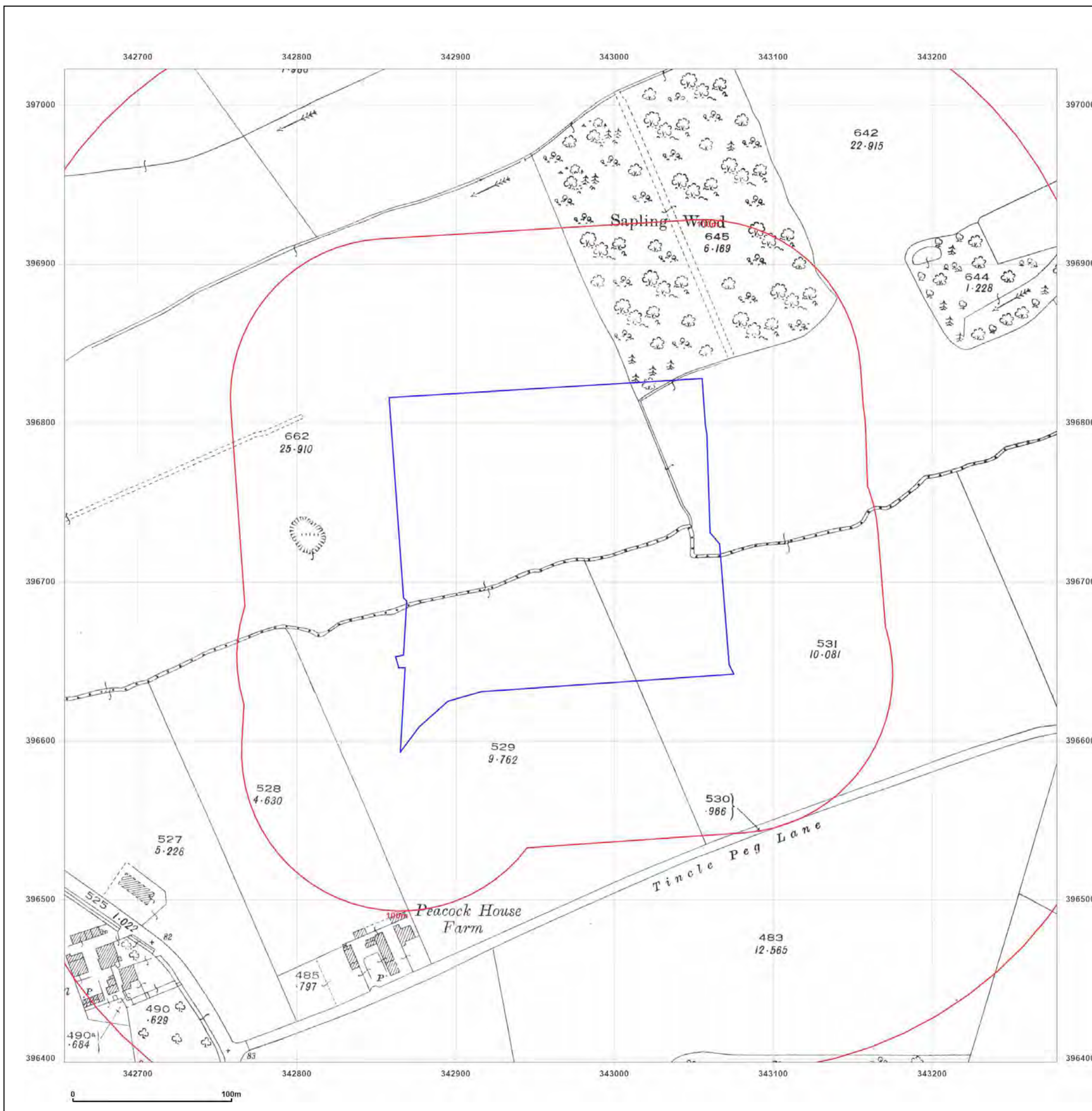


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Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1937

Scale: 1:2,500

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Surveyed 1937
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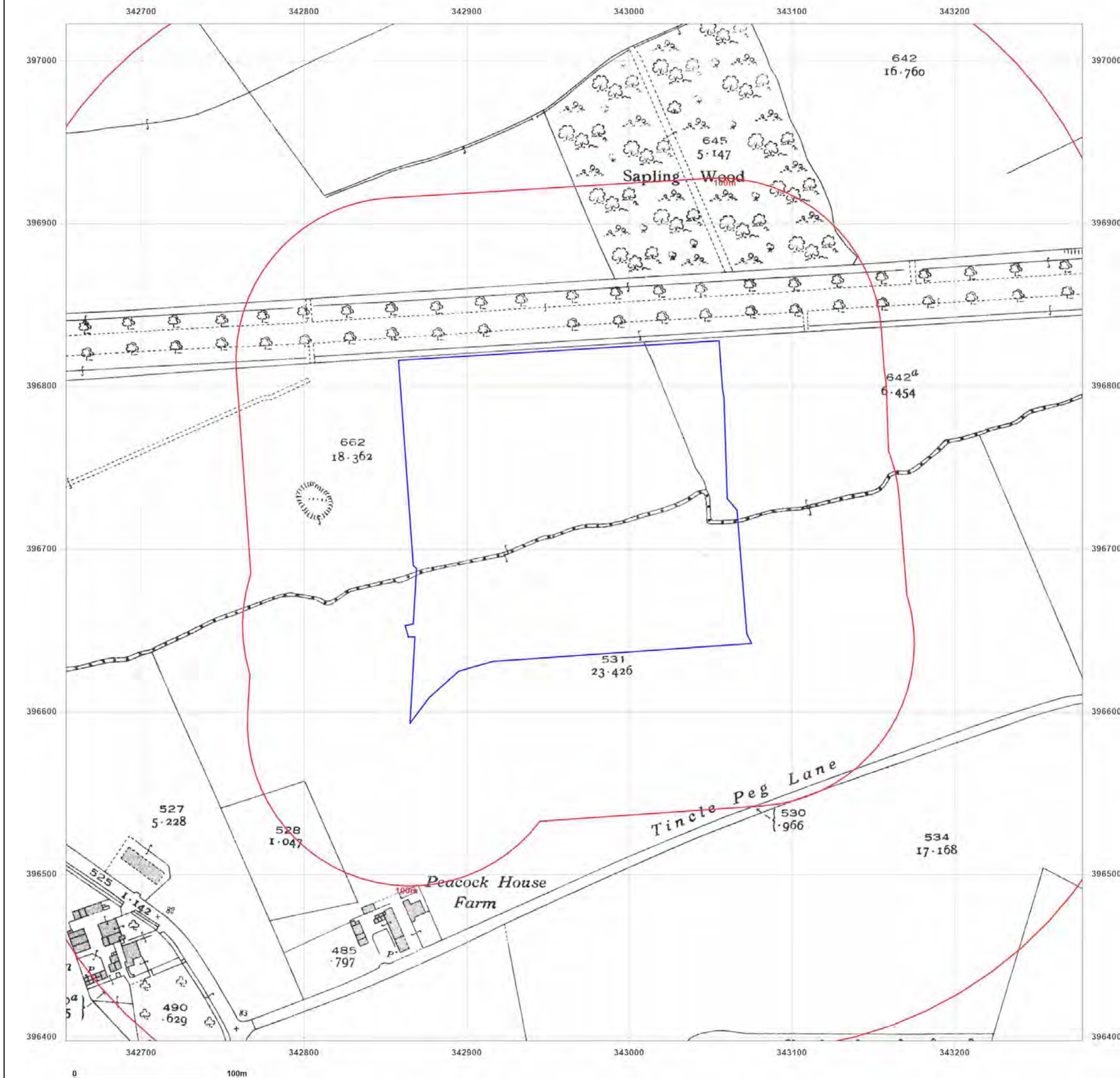


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Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 1959

Scale: 1:1,250

Printed at: 1:2,000



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Revised 1959
Edition N/A
Copyright 1959
Levelled 1946

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Revised 1959
Edition N/A
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Revised 1959
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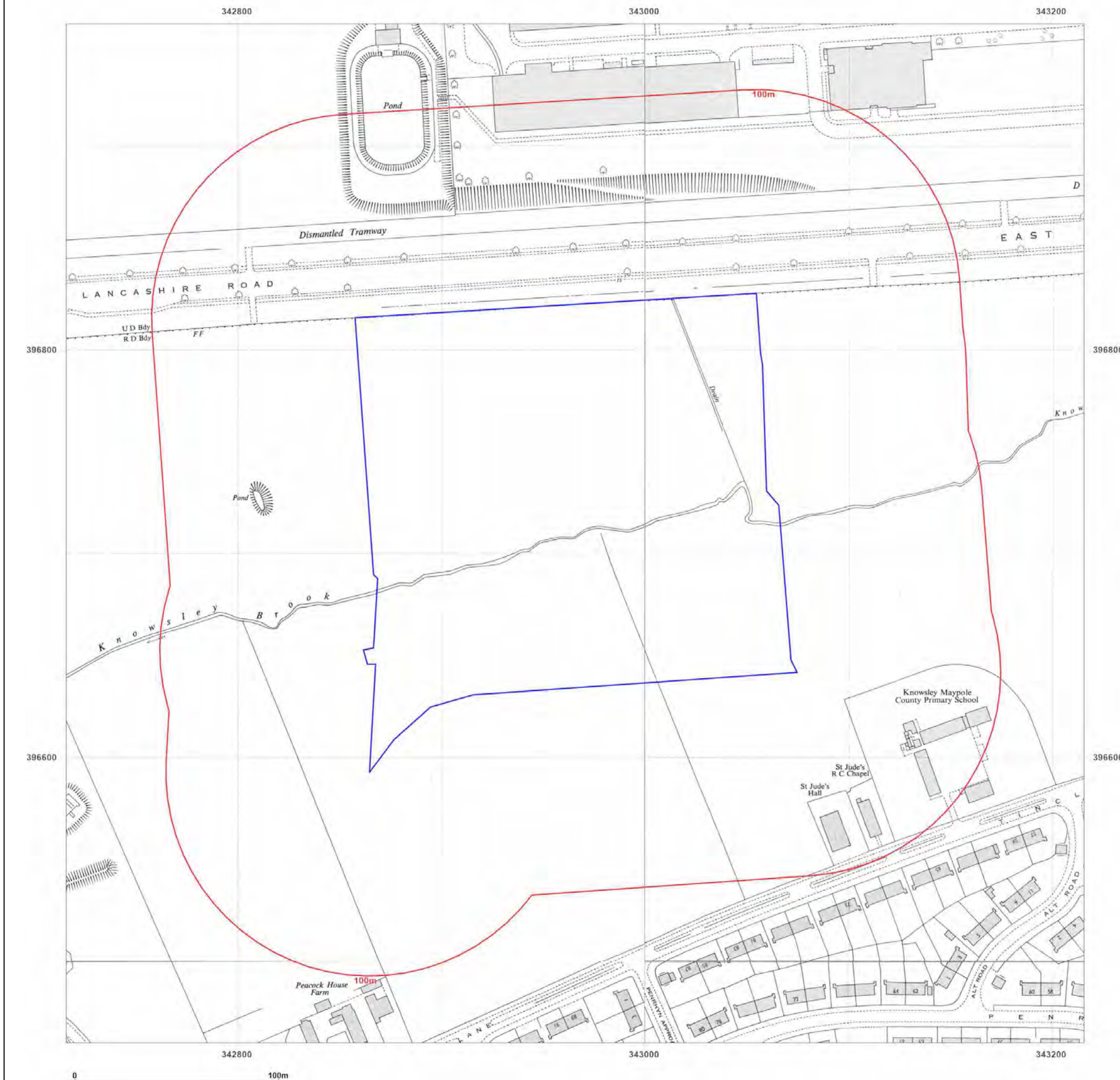


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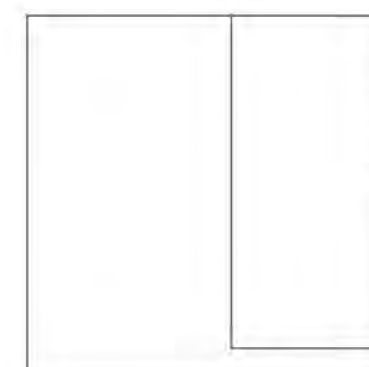
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Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 1959

Scale: 1:1,250

Printed at: 1:2,000



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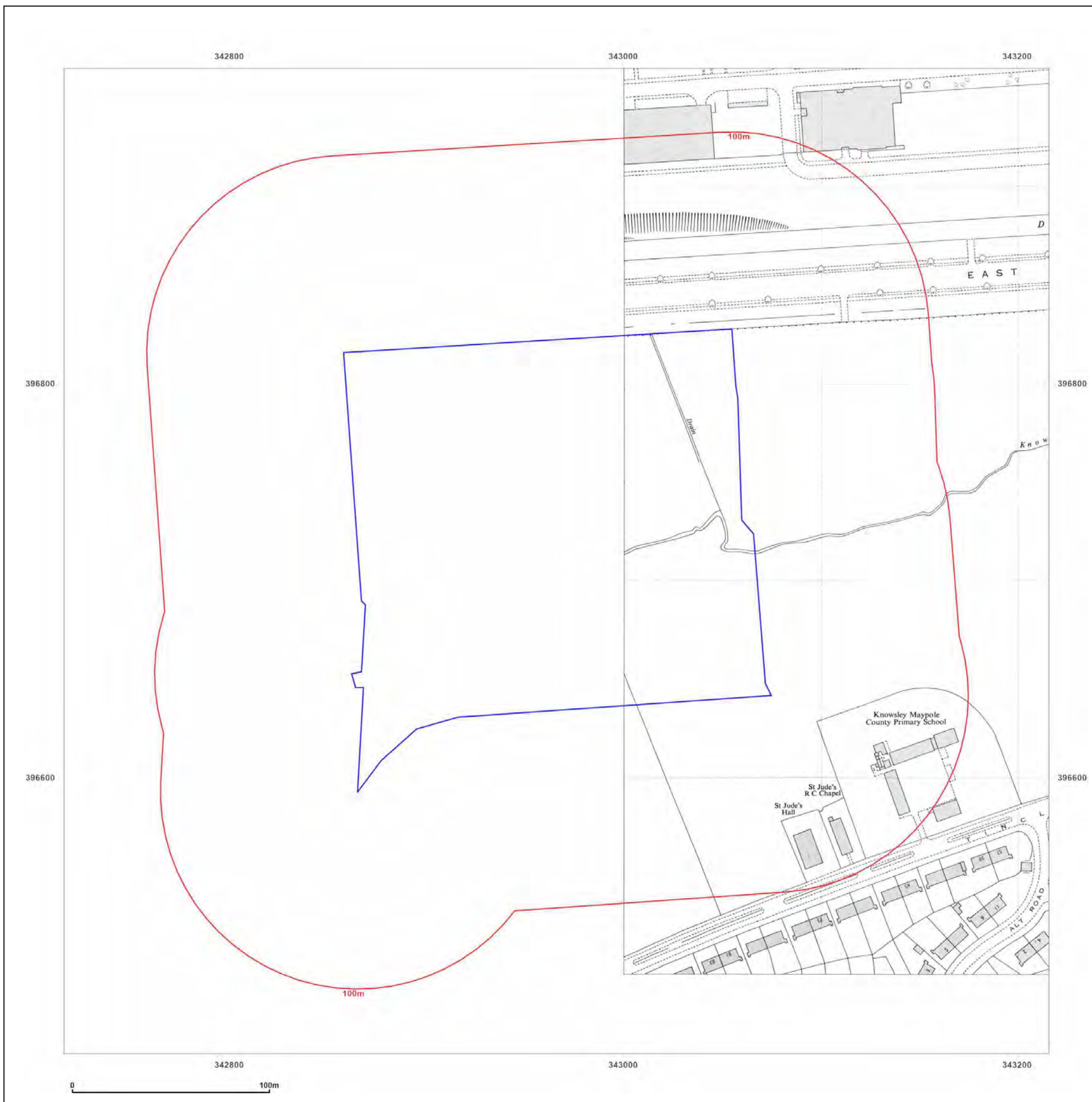


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Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 1959-1960

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1959
Revised 1959
Edition 1960
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Levelled 1957

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Revised 1959
Edition 1960
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Levelled 1946

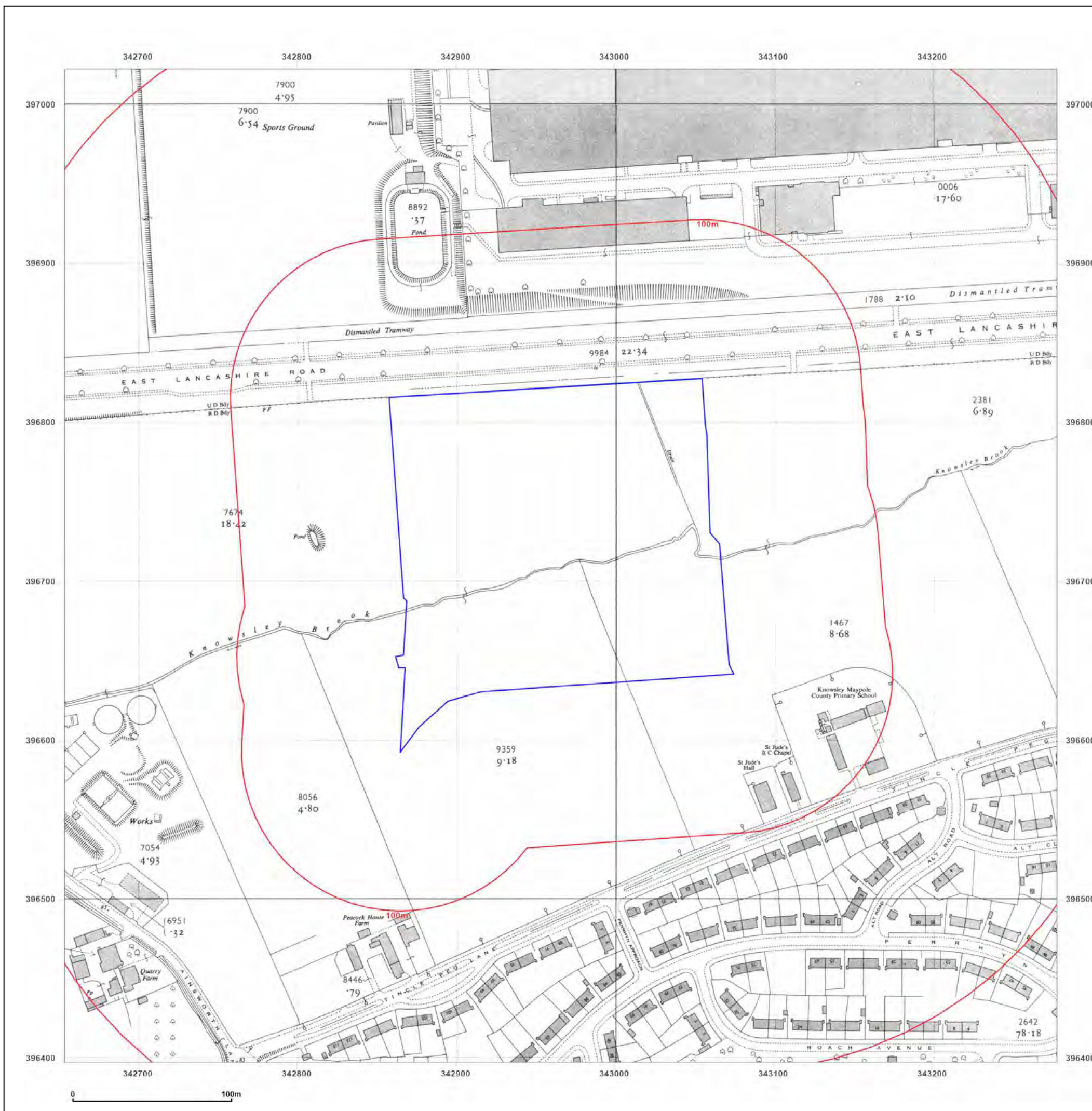


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Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 1974

Scale: 1:1,250

Printed at: 1:2,000



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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 1974-1978

Scale: 1:1,250

Printed at: 1:2,000



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Revised 1975
Edition 1975
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Levelled 1946

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Revised N/A
Edition N/A
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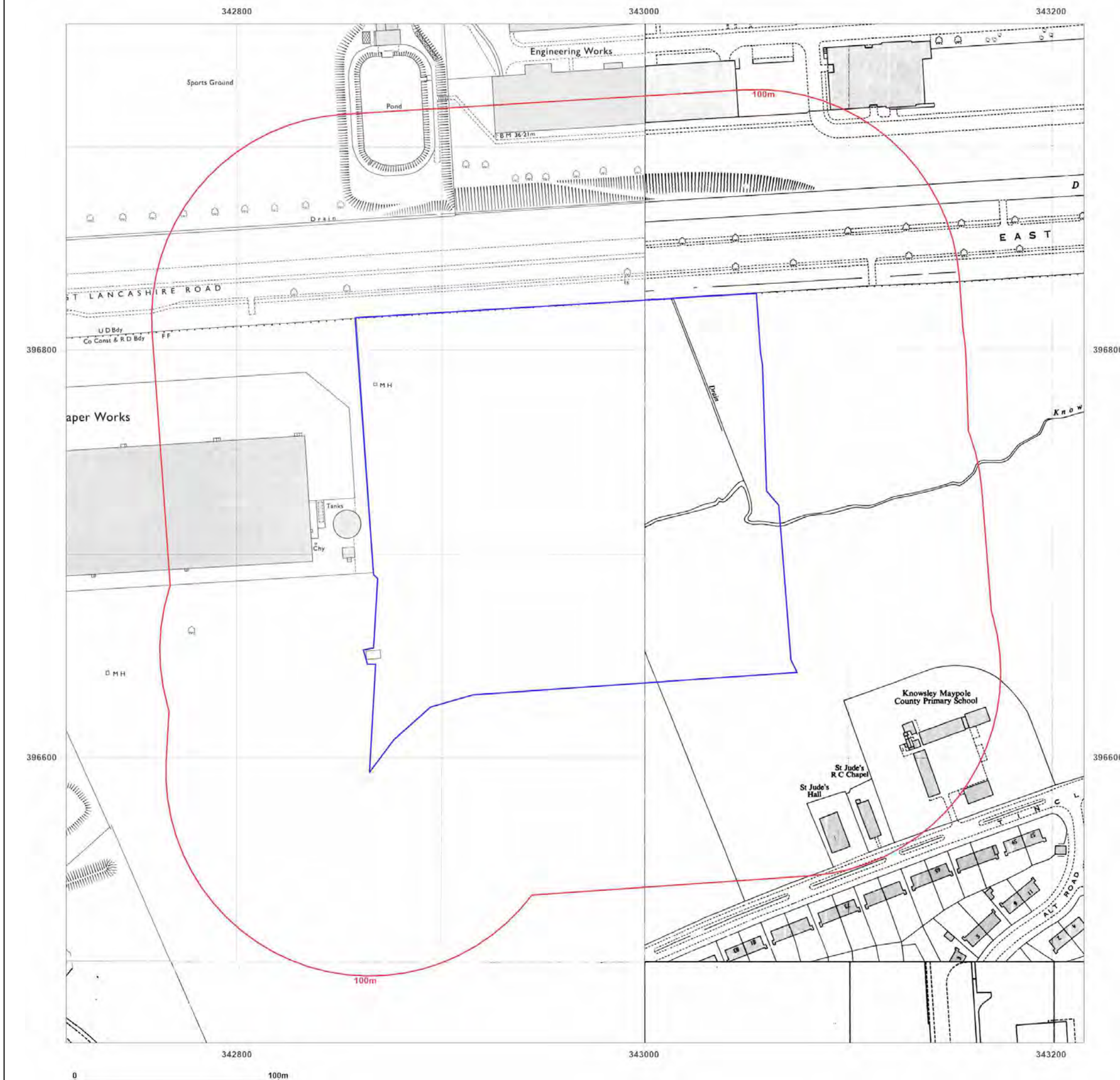


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 1981-1985

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1960
Revised 1985
Edition N/A
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Revised N/A
Edition N/A
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Revised N/A
Edition N/A
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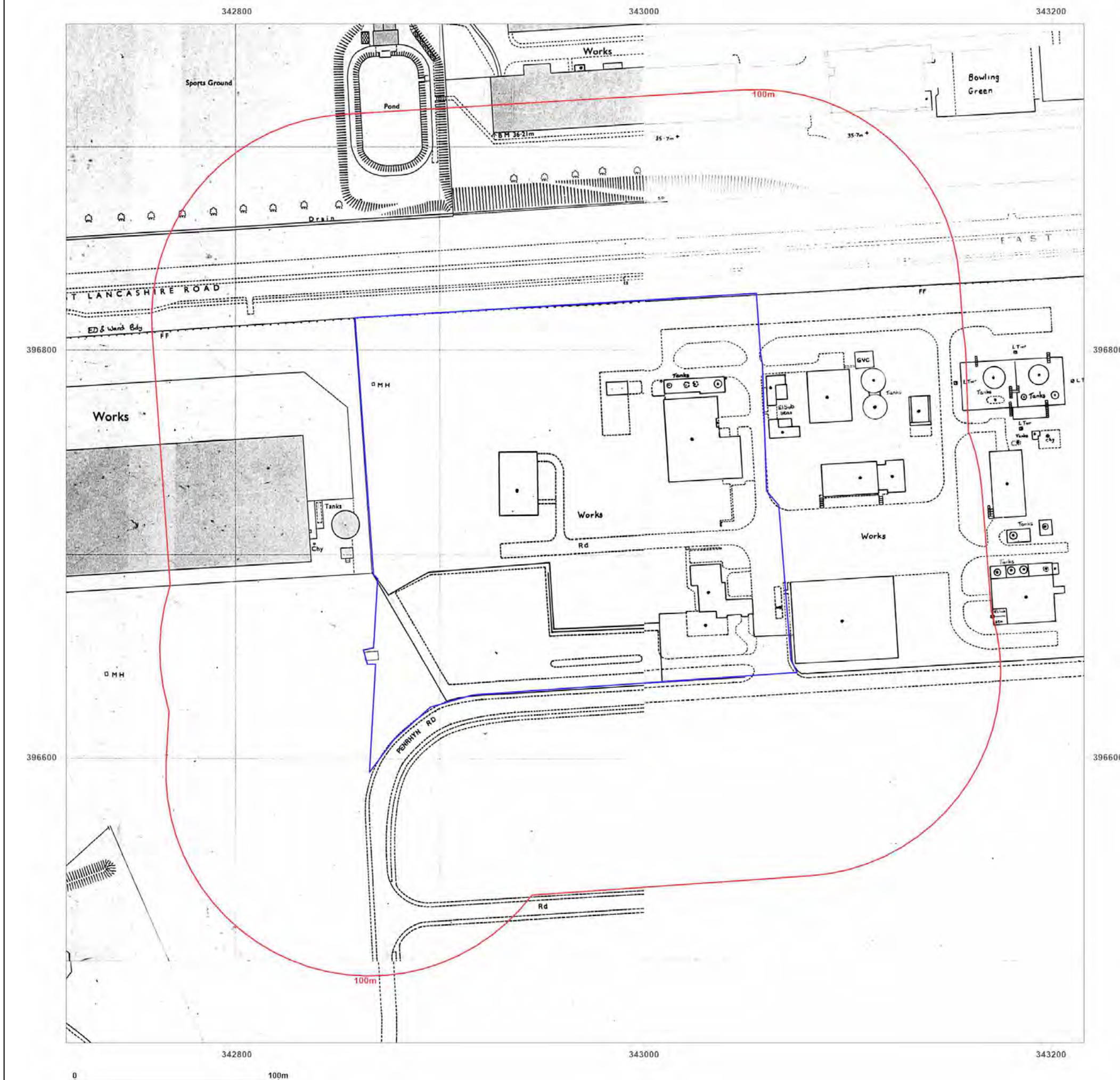


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 1988-1993

Scale: 1:1,250

Printed at: 1:2,000



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Revised N/A
Edition N/A
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Revised N/A
Edition N/A
Copyright 1991
Levelled 1960

Surveyed 1958
Revised 1987
Edition N/A
Copyright 1988
Levelled 1960

Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

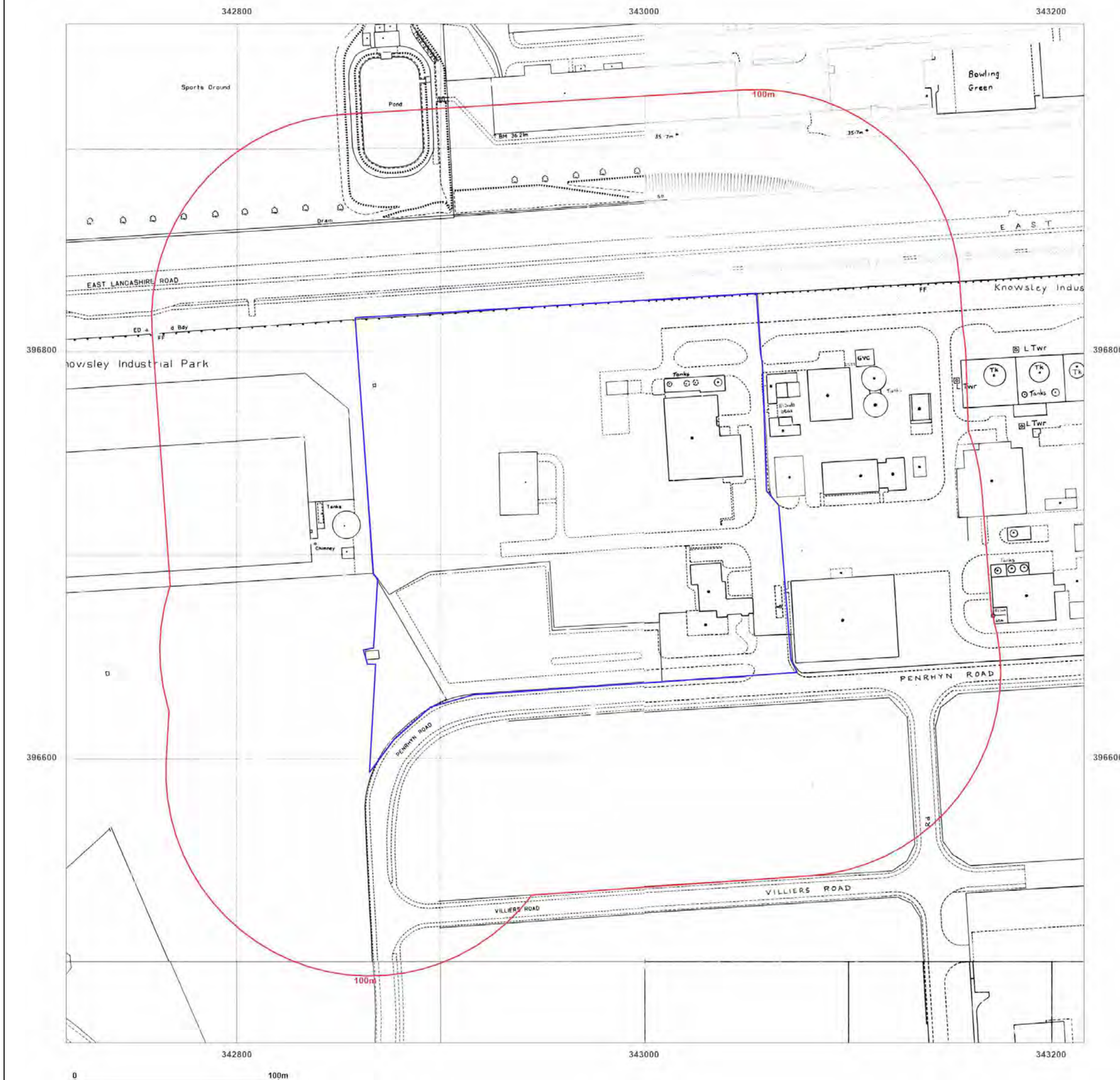


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BUSINESS PARK, KNOWSLEY,
L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 1994

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1994
Revised 1994
Edition N/A
Copyright 1994
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1994
Levelled N/A

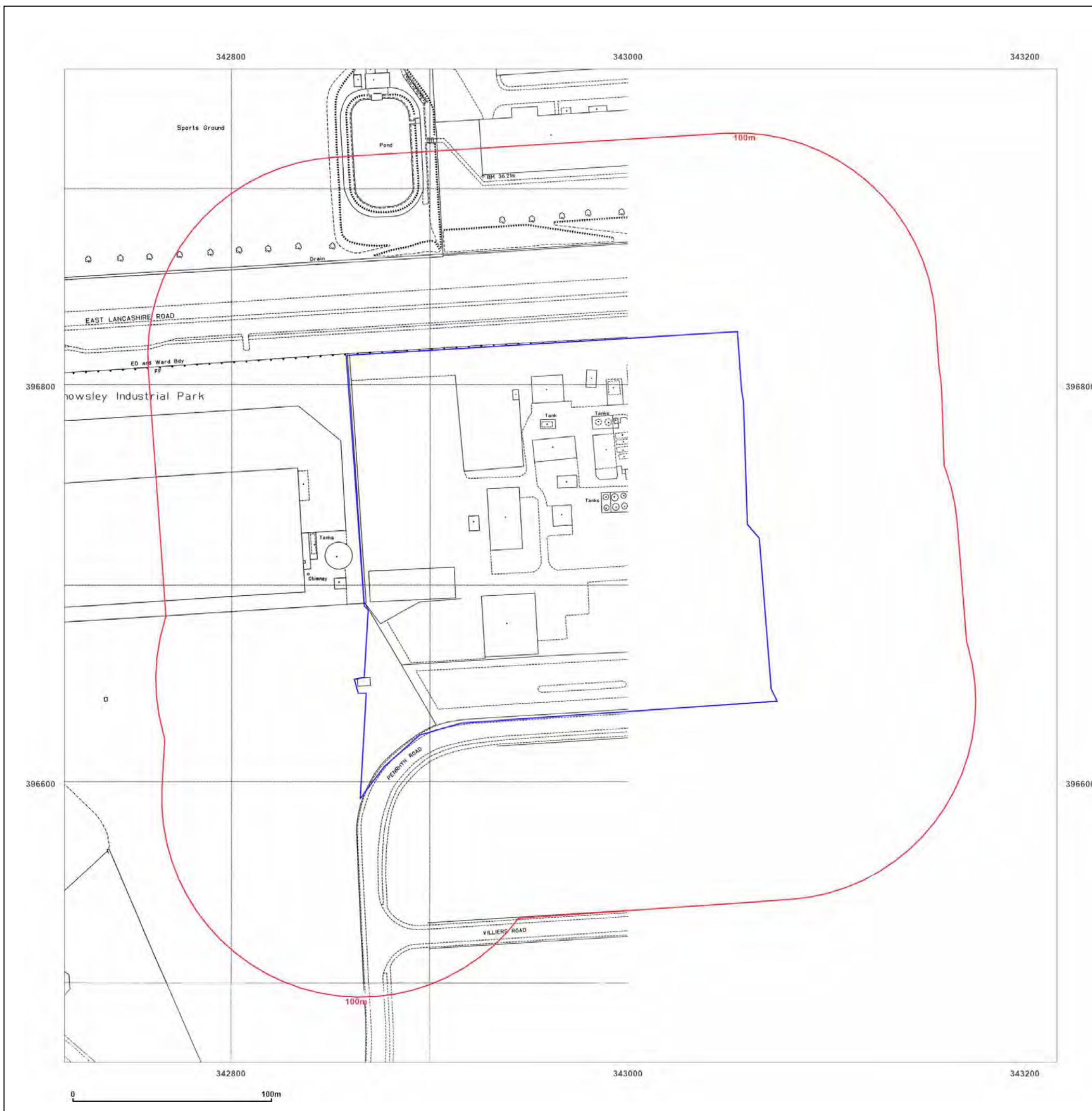


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 1993-1995

Scale: 1:1,250

Printed at: 1:2,000



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1994
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed 1995
Revised 1995
Edition N/A
Copyright 1992
Levelled N/A

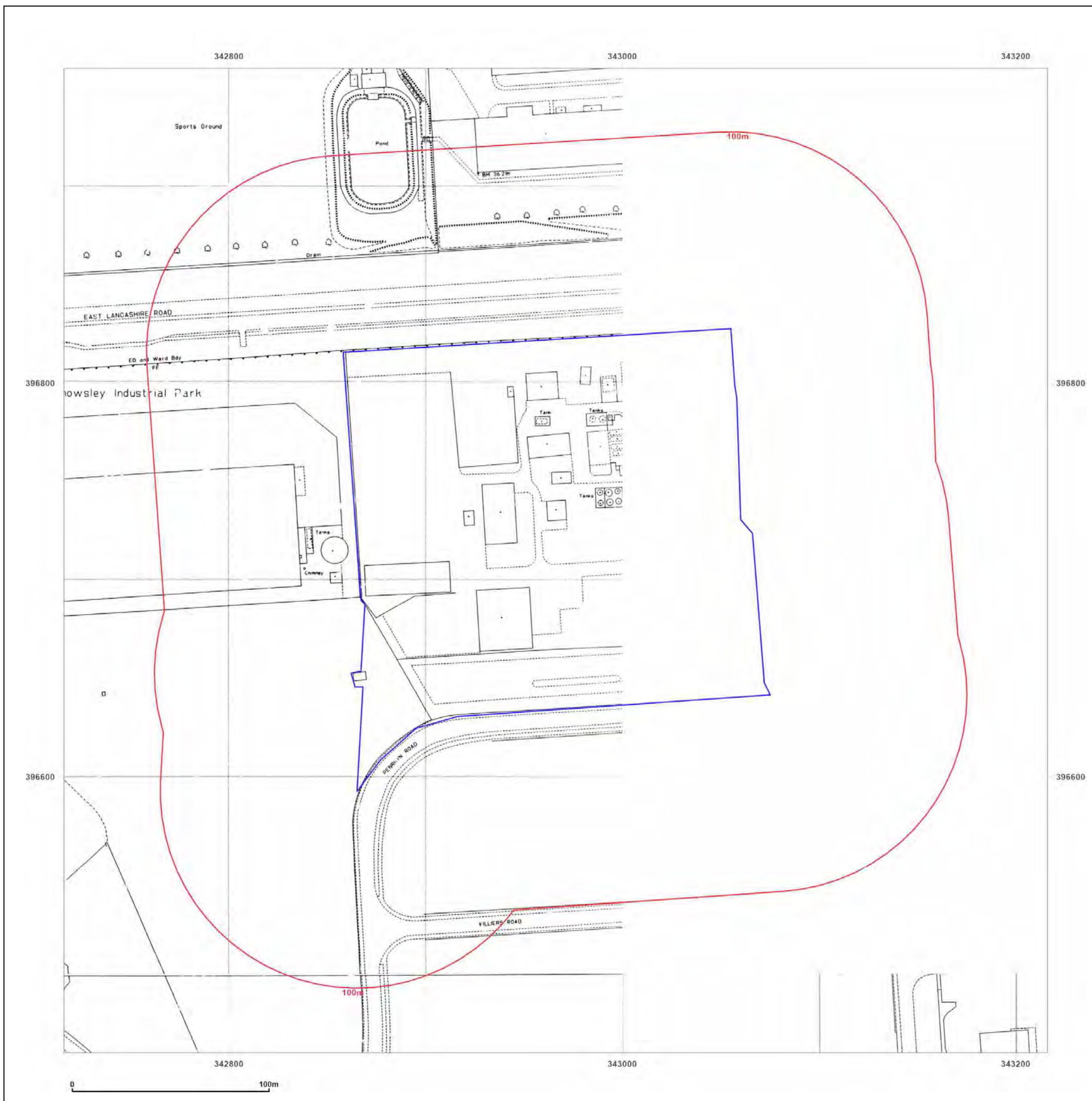


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



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Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1891-1892

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1892
Revised 1892
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1891
Revised 1891
Edition N/A
Copyright N/A
Levelled N/A

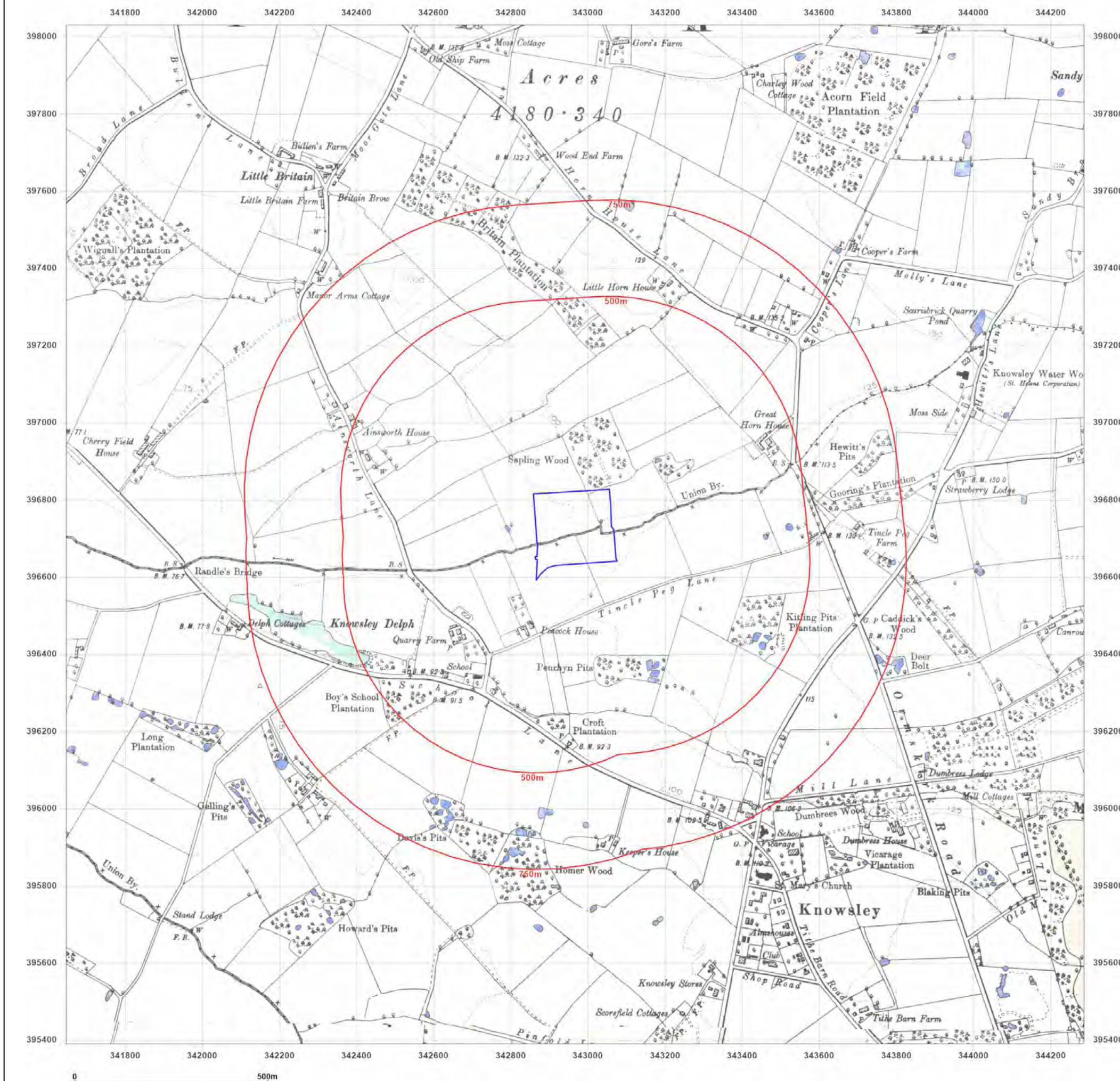


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1906-1907

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1892
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1891
Revised 1906
Edition N/A
Copyright N/A
Levelled N/A

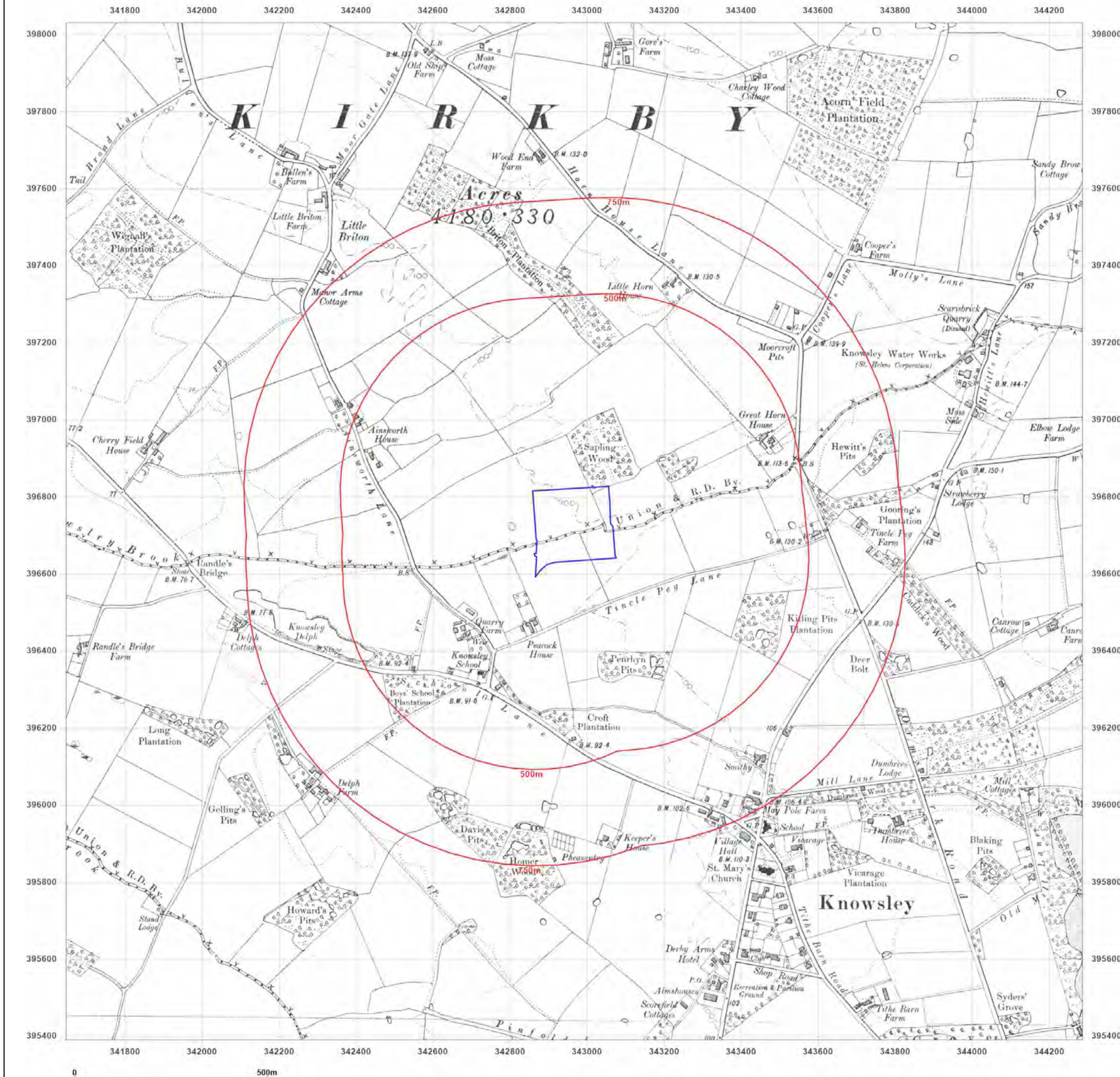


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1925

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1847
Revised 1925
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1849
Revised 1925
Edition N/A
Copyright N/A
Levelled N/A

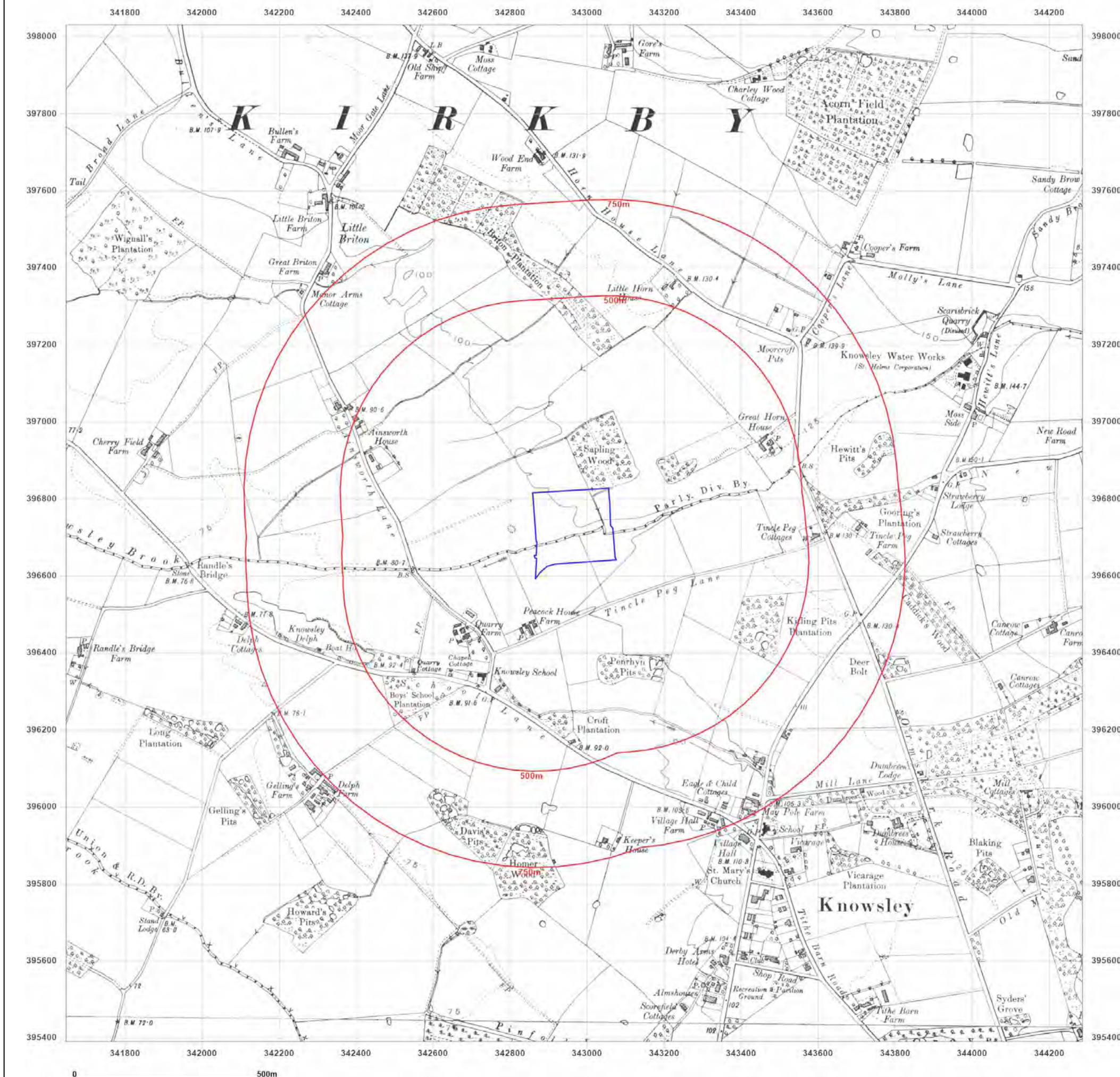


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1925

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1847
Revised 1925
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1849
Revised 1925
Edition N/A
Copyright N/A
Levelled N/A

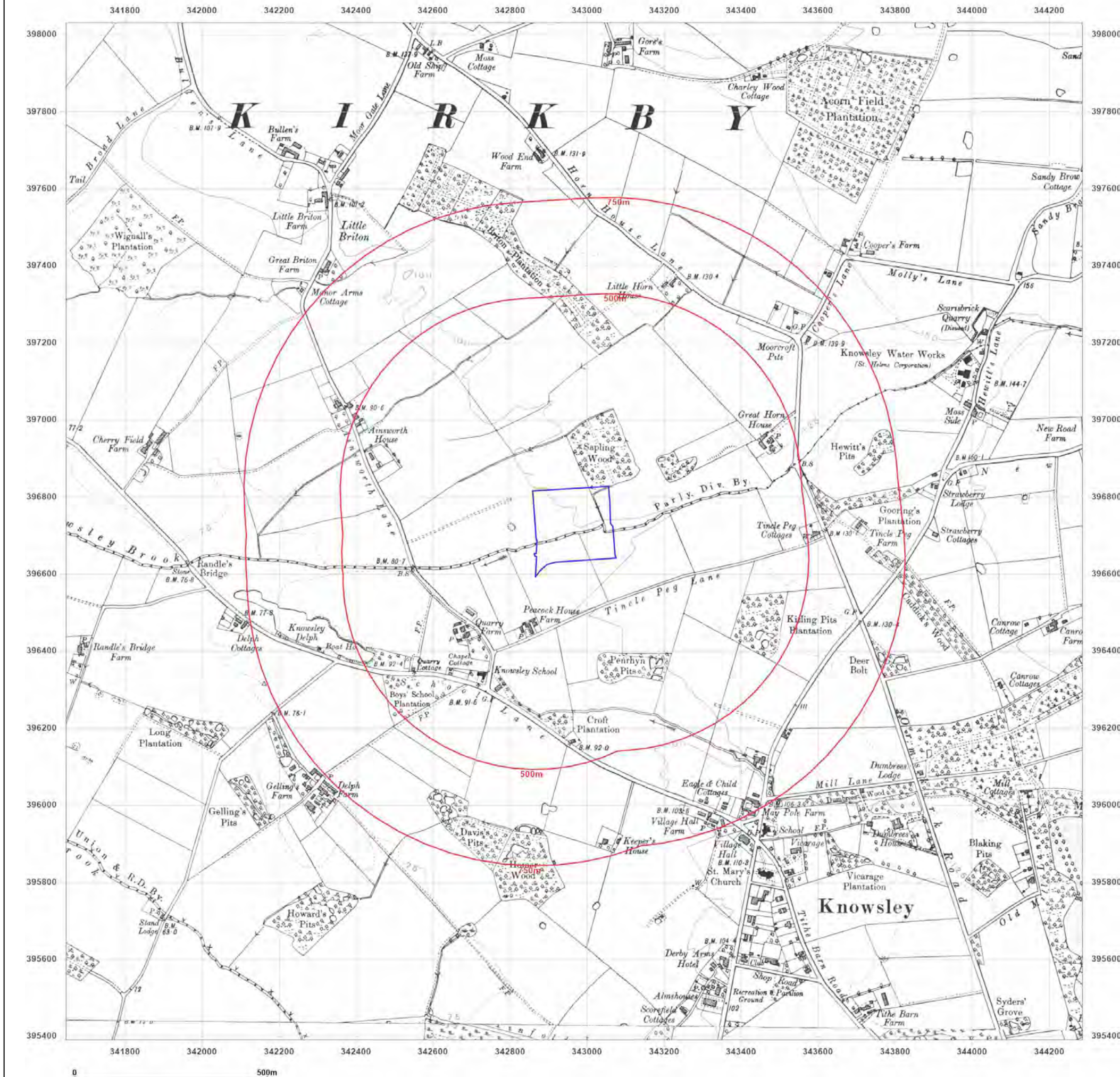


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1925

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1847
Revised 1925
Edition N/A
Copyright N/A
Levelled N/A

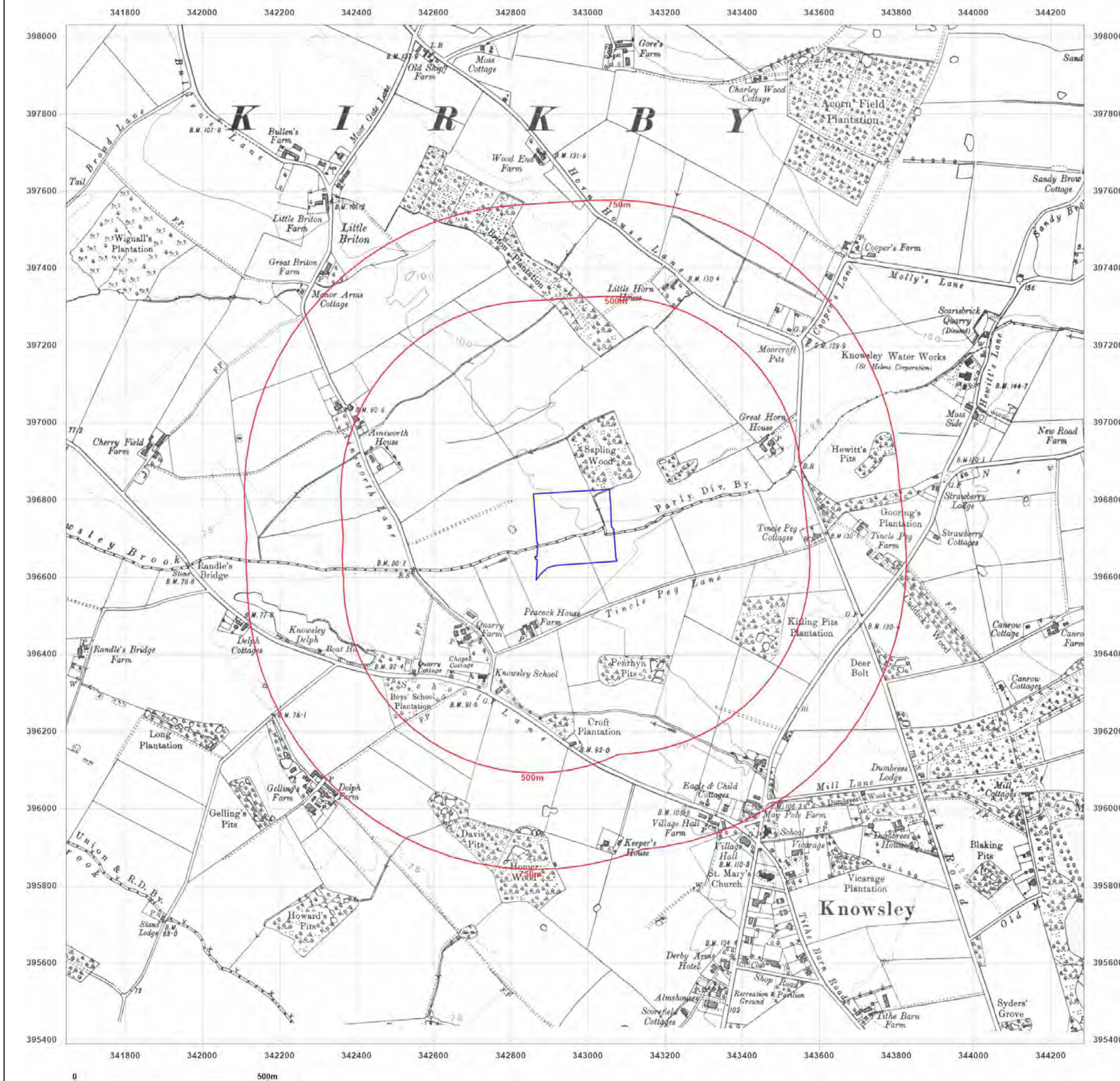


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1847
Revised 1938
Edition N/A
Copyright N/A
Levelled 1926

Surveyed 1849
Revised 1938
Edition 1938
Copyright N/A
Levelled N/A

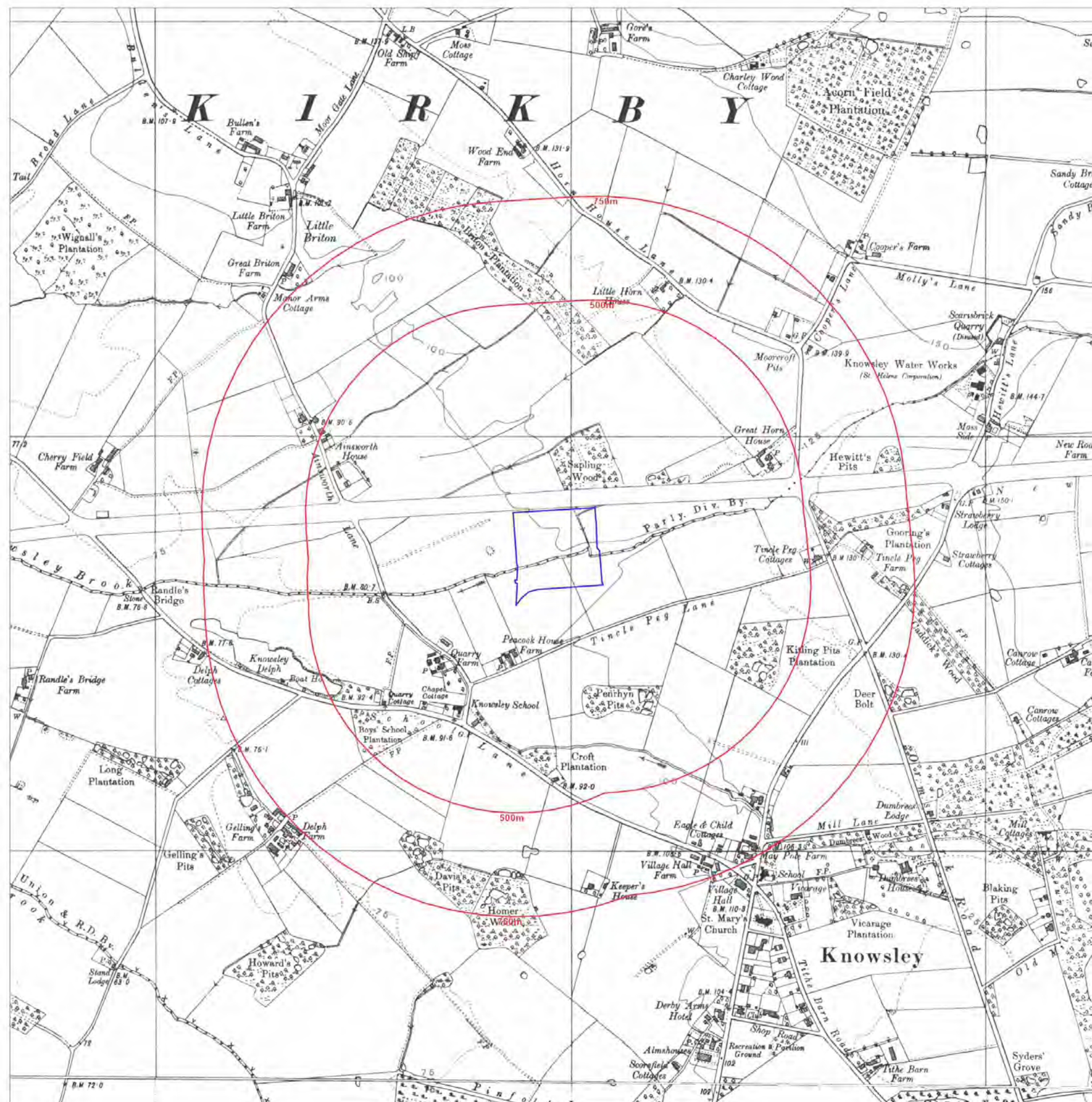


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Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1847
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

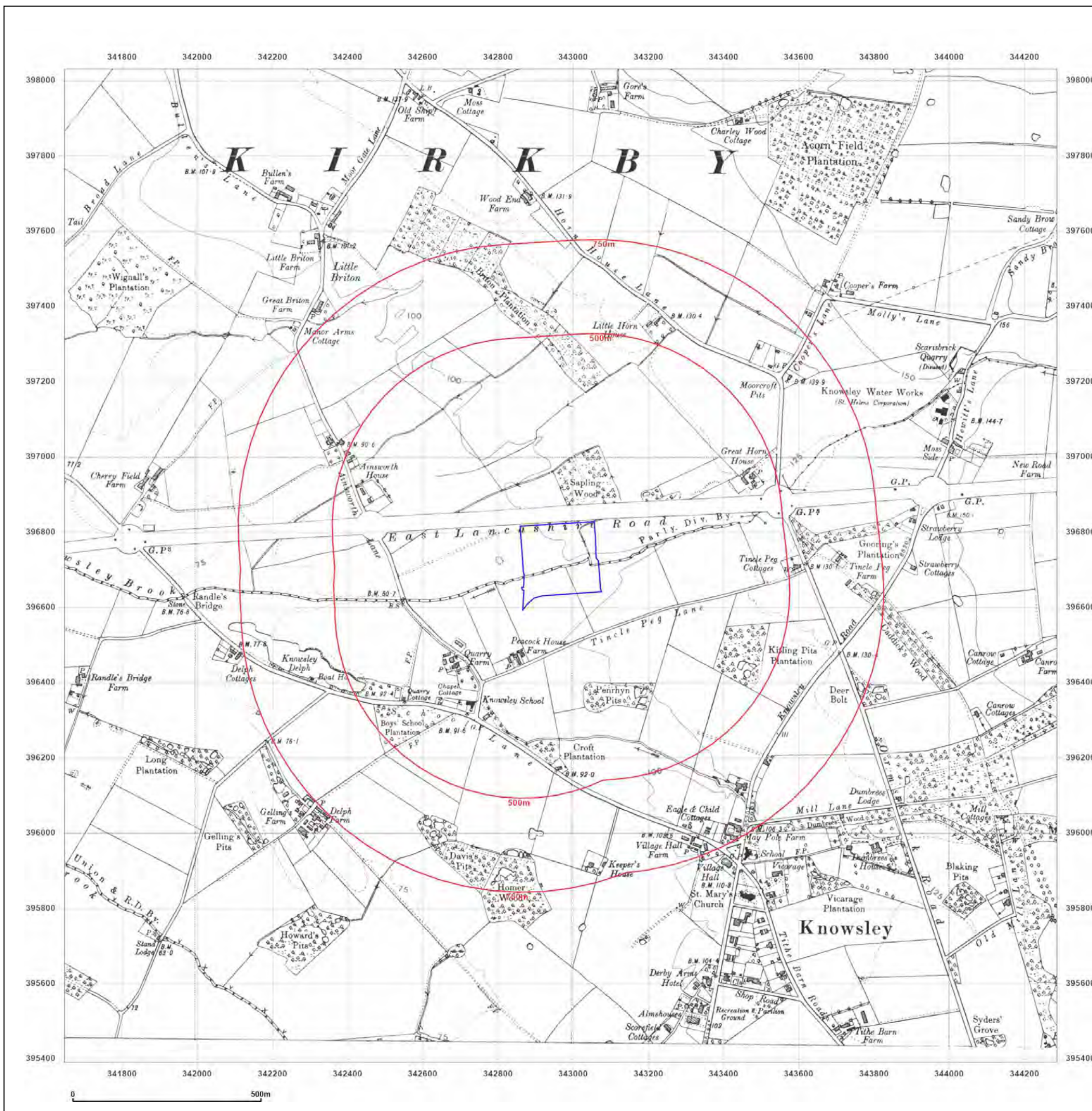


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: Provisional

Map date: 1956

Scale: 1:10,560

Printed at: 1:10,560



Surveyed N/A
Revised 1955
Edition N/A
Copyright 1956
Levelled N/A

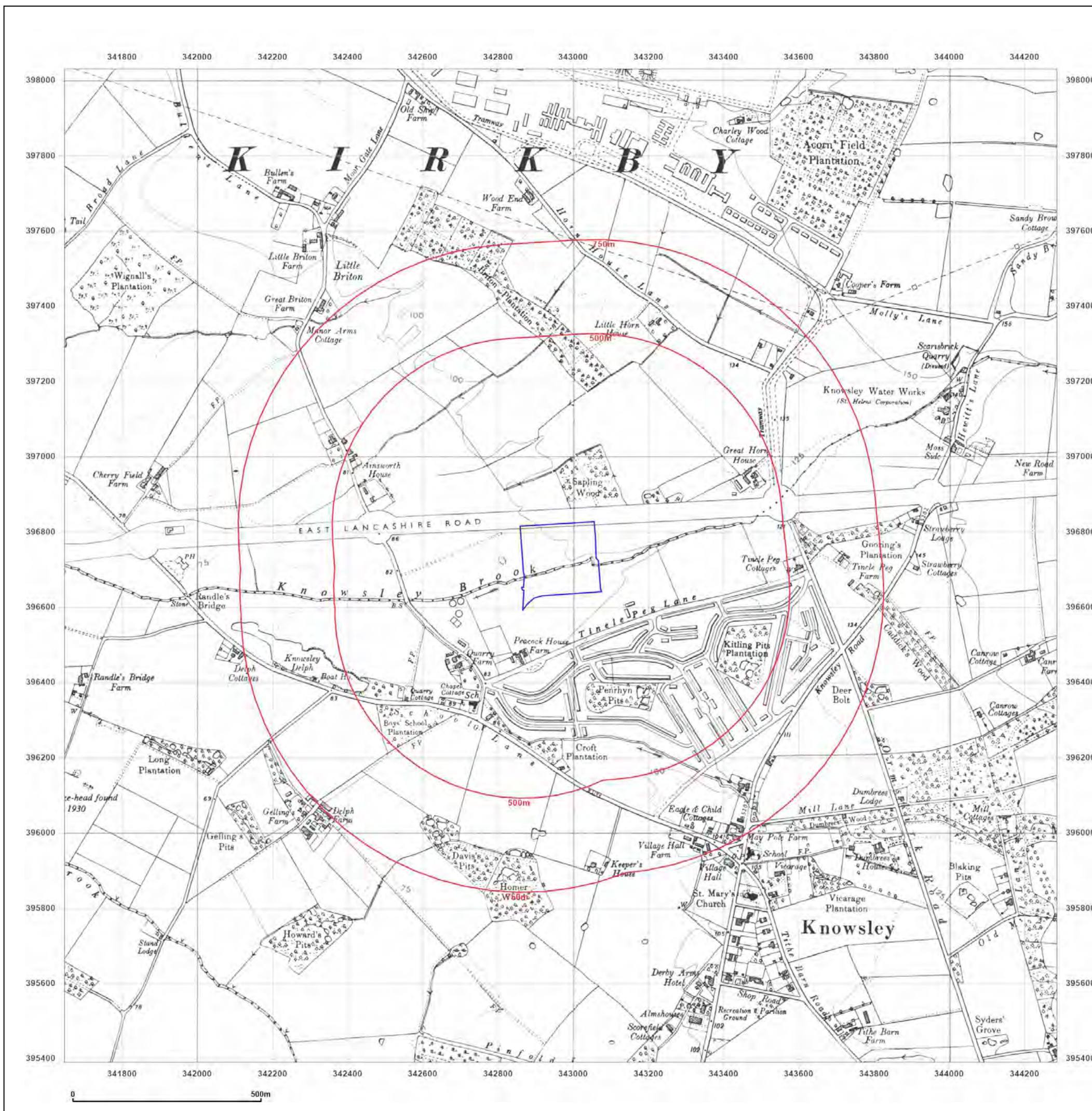


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: Provisional

Map date: 1966

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1965
Revised 1966
Edition N/A
Copyright N/A
Levelled N/A

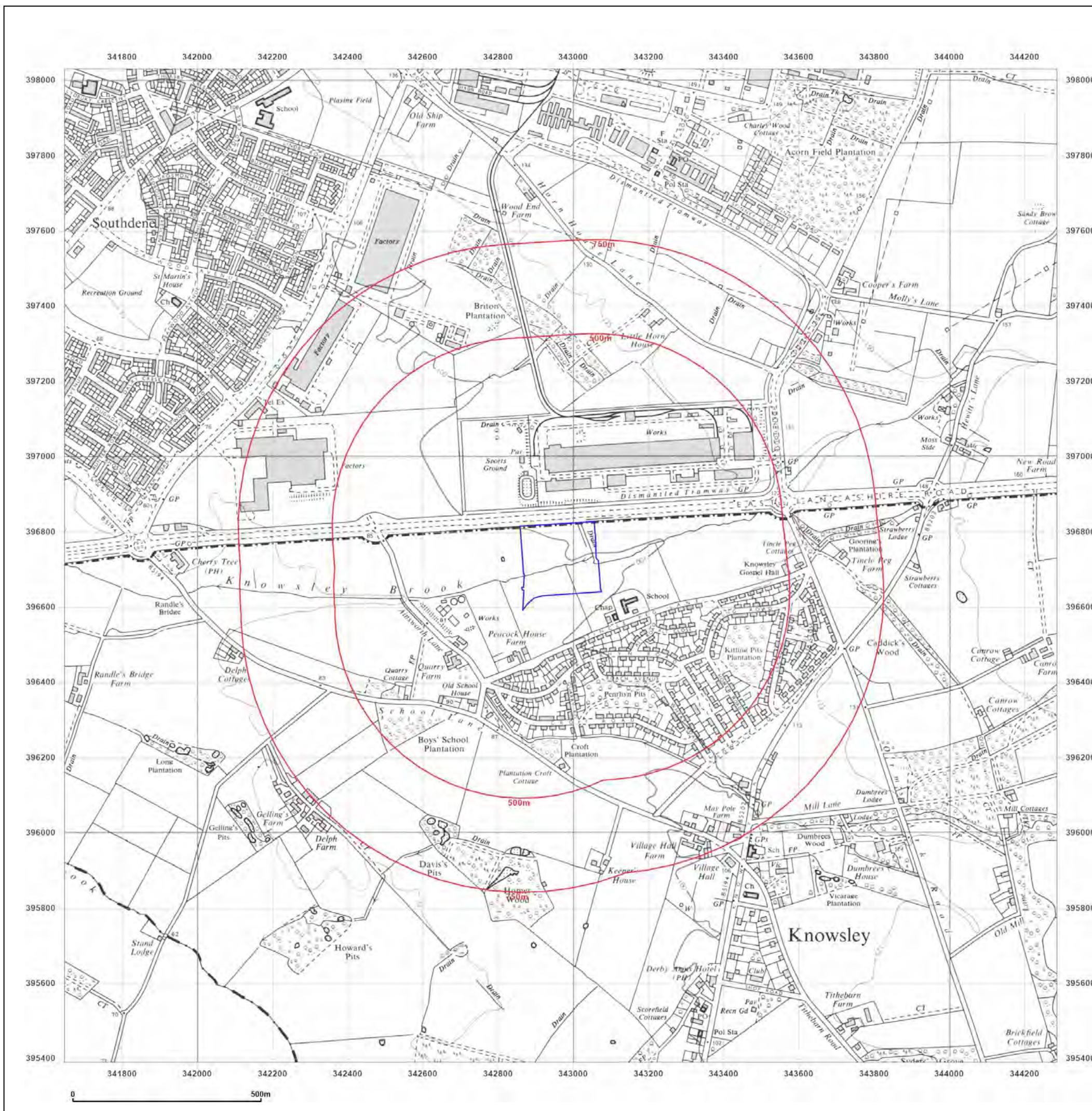


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 1988

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1987
Revised 1988
Edition N/A
Copyright N/A
Levelled N/A

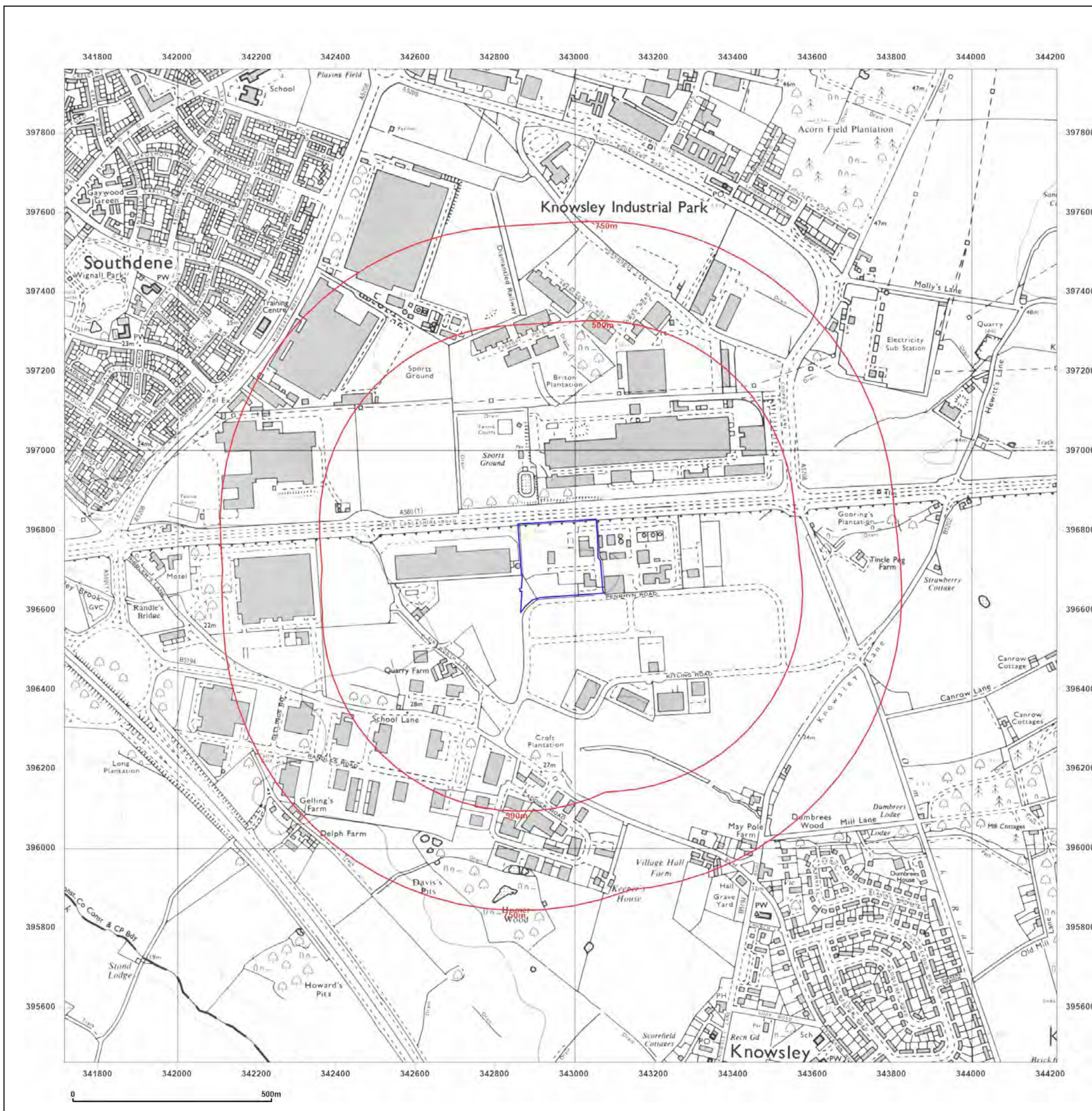


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000

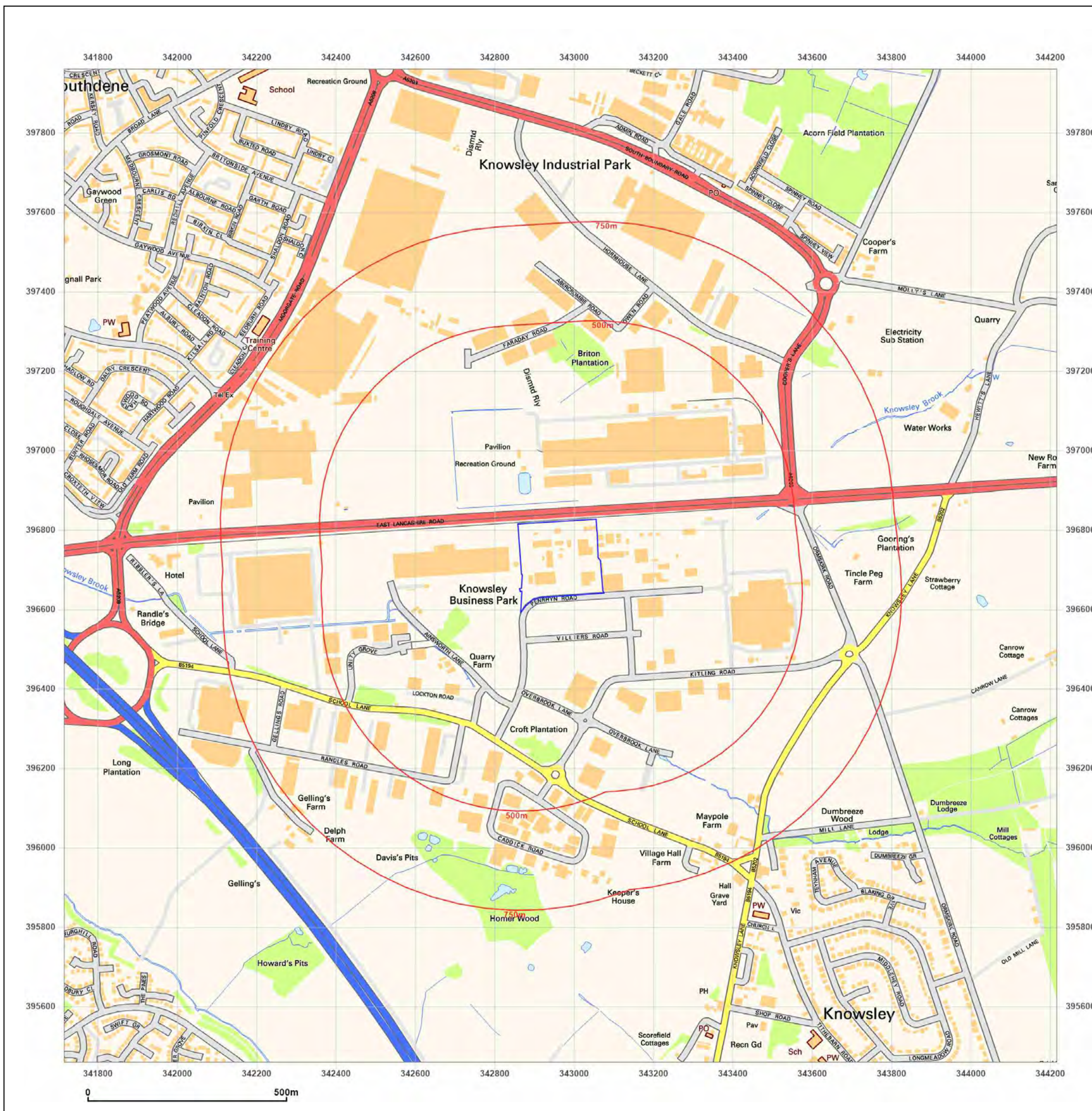


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L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

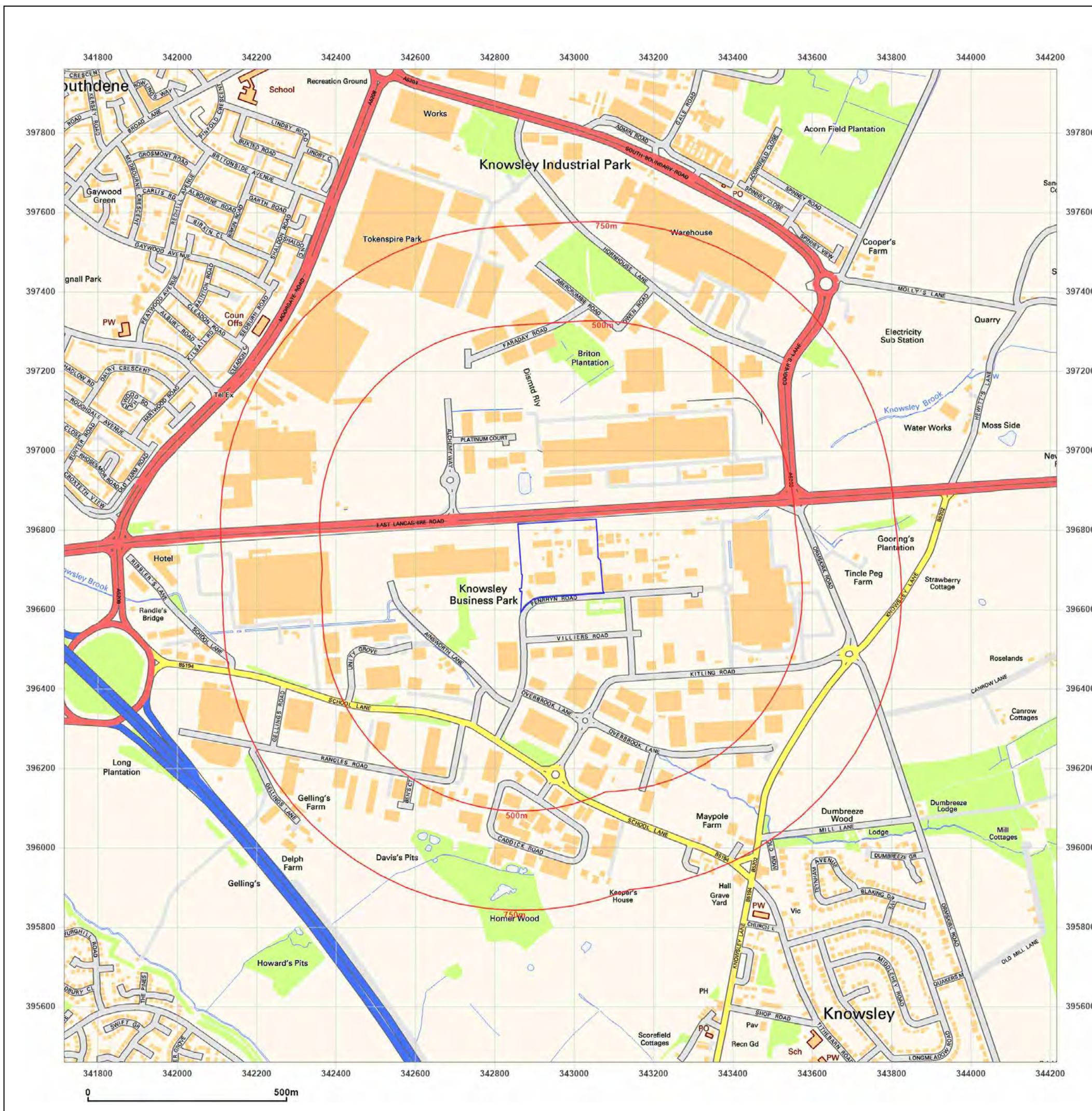


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BUSINESS PARK, KNOWSLEY,
L34 9HY

Client Ref: GJ224
Report Ref: GS-7563652
Grid Ref: 342966, 396710

Map Name: National Grid

Map date: 2021

Scale: 1:10,000

Printed at: 1:10,000

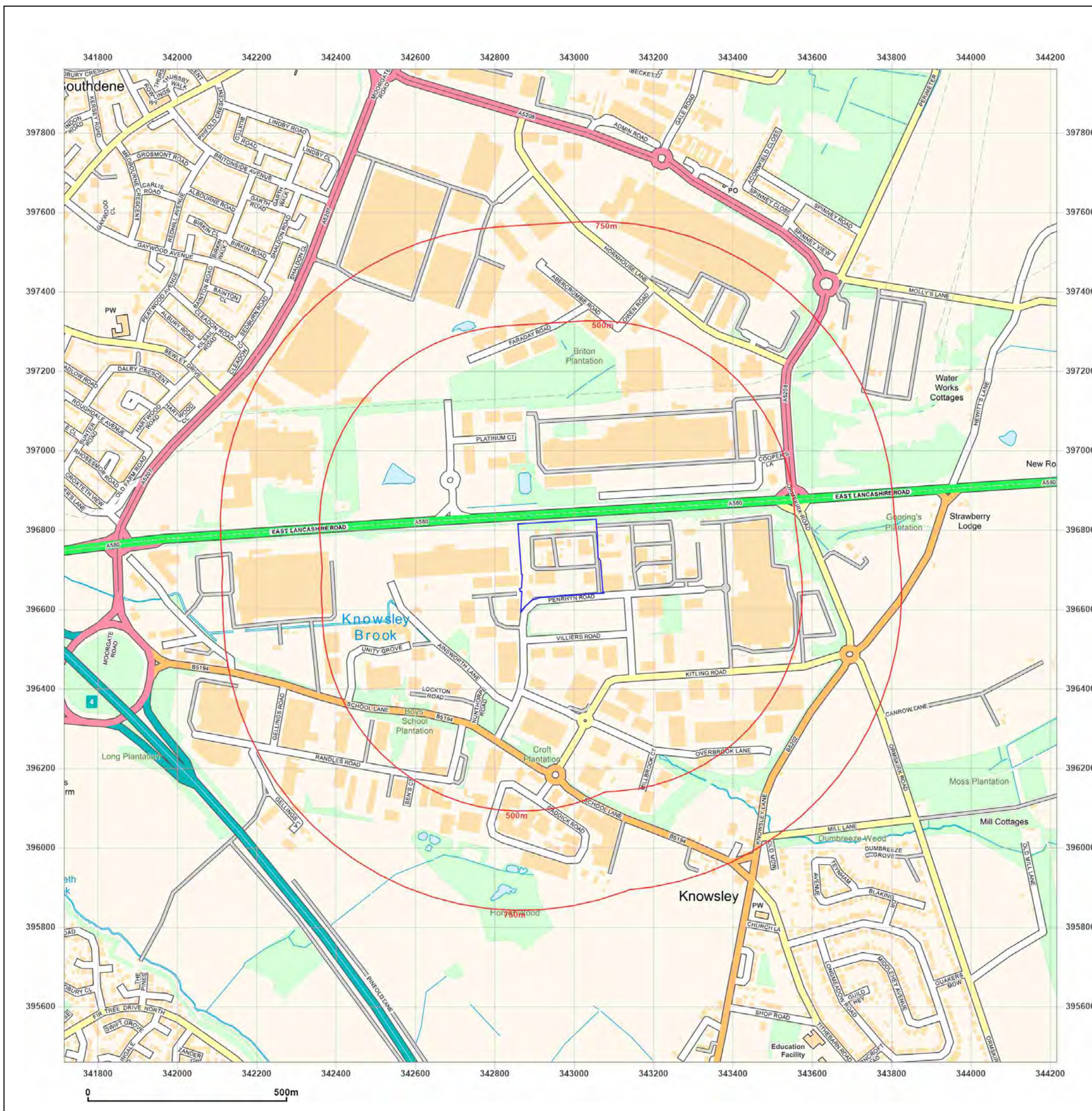


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Appendix D – Chemical Inventory from Entec Report (2003)

MAP 80 Label Code	Process from Which Waste Originated
KW151F	2-ACETYL FURAN
KW016I	2-ACETYL FURAN
KW017I	2-ACETYL FURAN
KW031T	2-ACETYL FURAN
KW071C	2-ACETYL FURAN
KW060T	2-ACETYL FURAN
KW070T	1,4-DIBROMOBUTANE
KW143C	1,4-DIBROMOBUTANE
KW144C	1,4-DIBROMOBUTANE
KW071T	1,4-DIBROMOBUTANE
KW072T	1,4-DIBROMOBUTANE
KW030H	1,4-DIBROMOBUTANE
KW284F	1,4-DIBROMOBUTANE
KW009L	AEA PROPPANT 530
KW010L	AEA PROPPANT 530
KW172F	AGFA PZK 3070
KW173F	AGFA PZK 3070
KW174F	AGFA PZK 3070
KW183F	AGFA PZK 3070
KW 213F	AGFA PZK 3070
KW214F	AGFA PZK 3070
KW40F	AGFA PZK 3070
KW248F	AGFA PZK 3070
KW142F	AGFA RNG 954
KW143F	AGFA RNG 954
KW144F	AGFA RNG 954
KW145F	AGFA RNG 954
KW146F	AGFA RNG 8647
KW147F	AGFA RNG 8647
KW149F	AGFA RNG 8647
KW150F	AGFA RNG 8647
KW175F	AGFA RNG 8647
KW025I	AGFA RNG 8647
KW215F	AGFA RNG 8647
KW216F	AGFA RNG 8647
KW012L	AY65
KW210F	BENZYL BLOCKED ACID
KW211F	BENZYL BLOCKED ACID
KW212F	BENZYL BLOCKED ACID
KW081C	BENZYL BLOCKED ACID
KW065T	BENZYL 2-BROMOACETATE
KW025H	BENZYL 2-BROMOACETATE
KW027H	BENZYL 2-BROMOACETATE
KW026H	BENZYL 2-BROMOACETATE
KW265F	BENZYL 2-BROMOACETATE
KW019L	BENZYL 2-BROMOACETATE
KW066T	BENZYL 2-BROMOACETATE
KW266F	BENZYL 2-BROMOACETATE
KW136C	BENZYL 2-BROMOACETATE
KW082C	BENZYL BROMIDE
KW025I	BENZYL BROMIDE
KW222F	BENZYL BROMIDE
KW054T	BENZYL BROMIDE
KW286F	BENZYL BROMIDE
KW006C	BIS CEA HCl
KW004F	BIS CEA HCl
KW007C	BIS CEA HCl
KW016C	BIS CEA HCl

KW062F	BIS CEA HCl
KW029F	BIS CEA HCl
KW003T	BIS CEA HCl
KW004T	BIS CEA HCl
KW031F	BIS CEA HCl
KW024C*	BIS CEA HCl
KW034F	BIS CEA HCl
KW005T	BIS CEA HCl
KW045F	BIS CEA HCl
KW060F	BIS CEA HCl
KW059F	BIS CEA HCl
KW061F	BIS CEA HCL REWORK
KW070F	BIS CEA HCl
KW073F	BIS CEA Hcl
KW097C	BiBB
KW098C	BiBB
KW235F	BiBB
KW251F	BROMOACETIC ACID
KW113C	BROMOACETIC ACID
KW136C	BROMOACETIC ACID
KW097F	4-BROMOBENZYL BROMIDE
KW098F	4-BROMOBENZYL BROMIDE
KW052C	4-BROMOBENZYL BROMIDE
KW053C	4-BROMOBENZYL BROMIDE
KW054C	4-BROMOBENZYL BROMIDE
KW100F	4-BROMOBENZYL BROMIDE
KW077C	4-BROMOBENZYL BROMIDE
KW078C	4-BROMOBENZYL BROMIDE
KW203F	4-BROMOBENZYL BROMIDE
KW021H	4- BROMOBENZYL BROMIDE
KW050T	4-BROMOBENZYL BROMIDE
KW051T	4-BROMOBENZYL BROMIDE
KW023H	4-BROMOBENZYL BROMIDE
KW056T	4-BROMOBENZYL BROMIDE
KW033H	4-BROMOBENZYL BROMIDE
KW134C	2-BROMOHEXANOIC ACID
KW135C	2-BROMOHEXANOIC ACID
KW020L	2-BROMOHEXANOIC ACID
KW273F	2-BROMOHEXANOIC ACID
KW041I	2-BROMOHEXANOIC ACID
KW052T	2-BROMOBUTYRIC ACID (ABBA)
KW053T	2-BROMOBUTYRIC ACID (ABBA)
KW236F	2-BROMOBUTYRIC ACID (ABBA)
KW138C	2-BROMOBUTYRIC ACID (ABBA)
KW068T	2-BROMOBUTYRIC ACID (ABBA)
KW142C	2-BROMOBUTYRIC ACID (ABBA)
KW010I	BUTYLBROMO ACETATE (tert-)(t-BBA)
KW039C	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW065F	BUTYLBROMO ACETATE (tert-)(t-BBA)
KW014T	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW069F	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW066F	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW071F	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW016T	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW080F	BUTYLBROMO ACETATE (tert-) (t-BBA)

KW081F	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW042C	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW086F	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW021T	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW022T	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW140C	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW282F	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW069T	BUTYLBROMO ACETATE (tert-) (t-BBA)
KW257F	BUTYL BROMIDE
KW259F	BUTYL BROMIDE
KW260F	BUTYL BROMIDE
KW034I	BUTYL BROMIDE
KW255F	BUTYL BROMIDE
KW117C	BUTYL BROMIDE
KW258F	BUTYL BROMIDE
KW256F	BUTYL BROMIDE
KW006E	IBBiB
KW022H	IBBiB
KW005E	IBBiB
KW099C	IBBiB
KW029I	IBBiB
KW043F	CAA
KW048F	CAA
KW006H	CAA
KW007H	CAA
KW040C	CANNINGS
KW022F	CEA HCl
KW103C	CETYL BROMIDE
KW104C	CETYL BROMIDE
KW103C	CETYL BROMIDE
KW243C	CETYL BROMIDE
KW176F	CETYL SULPHONYL CHLORIDE
KW177F	CETYL SULPHONYL CHLORIDE
KW178F	CETYL SULPHONYL CHLORIDE
KW035F	CETYL SULPHONYL CHLORIDE
KW068C	CETYL SULPHONYL CHLORIDE
KW181F	CETYL SULPHONYL CHLORIDE
KW029C	CHEMICAL 22
KW008I	CHEMICAL 47
KW014L	CHEMICAL 51
KW036C	CHEMICAL 80
KW037C	CHEMICAL 80
KW021C	CHEMICAL 80
KW038C	CHEMICAL 80 / 83
KW154F	CHEMICAL 40 / 81
KW013L	CHEMICAL M1208
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KW075C	CHEM 907 STAGE 1
KW016L	CHEM 907 STAGE 2
KW039T	CHEM 907 STAGE 2
KW028I	CHEM 922
KW252F	CHEM XW922
KW012C	4- CHLOROBENZOPHENONE
KW009F	1-CHLOROPROPANE
KW010F	1-CHLOROPROPANE
KW019F	1-CHLOROPROPANE
KW003F	CHLOROPROPANOL
KW006F	CHLOROPROPANOL
KW007F	CHLOROPROPANOL
KW020F	CHLOROPROPANOL

KW072F	CHLOROPROPANOL
KW072F	CHLOROPROPANOL
KW038I	CHOLINE CHLORIDE
KW039I	CHOLINE CHLORIDE
KW040I	CHOLINE CHLORIDE
KW002I*	CONCRETE
KW018C	COPPER THIOCYANATE
KW008H	COPPER (1) THIOCYANATE
KW101F	CHLOROPROPANOL
KW102F	CHLOROPROPANOL
KW119F	CYCLOHEXYL CHLORIDE
KW120F	CYCLOHEXYL CHLORIDE
KW121F	CYCLOHEXYL CHLORIDE
KW122F	CYCLOHEXYL CHLORIDE
KW194F	DAPHA
KW195F	DAPHA
KW197F	DAPHA
KW198F	DAPHCI
KW199F	DAPHCI
KW200F	DAPHCI
KW126C	DBSA
KW127C	DBSA
KW054F	DEAEC HCL
KW055F	DEAEC HCL
KW056F	DEAEC HCL
KW057F	DEAEC HCL
KW018T	DEAEC HCI
KW059T	DEAEC HCL
KW062T	DEAEC.HCI
KW141C	DEA DIOL (DEAPD)
KW281F	DEA DIOL (DEAPD)
KW229H	DEA DIOL (DEAPD)
KW283F	DEA DIOL (DEAPD)
KW018L	DEKOTE EN CONCENTRATE
KW021I	DCHAN
KW063C	DCHAN
KW021I	DCHAN
KW055T	DCHAN
KW105C	DECYL BROMIDE
KW058T	DECYL BROMIDE
KW106C	DECYL BROMIDE
KW107C	DECYL BROMIDE
KW244F	DECYL BROMIDE
KW043C	Meso-2,3-DIBROMOSUCCINIC ACID (DBSA)
KW044C	Meso-2,3-DIBROMOSUCCINIC ACID (DBSA)
KW047C	Meso-2,3-DIBROMOSUCCINIC ACID (DBSA)
KW045C	Meso-2,3-DIBROMOSUCCINIC ACID (DBSA)
KW019T	Meso-2,3-DIBROMOSUCCINIC ACID (DBSA)
KW017T	Meso-2,3-DIBROMOSUCCINIC ACID (DBSA)
KW048C	DIMETHYLSUBERI-MIDATE DIHYDROCHLORIDE DRYING (DMSI)
KW184F	DI-N-BUTYLAMINE CAPRYLATE
KW087D	DMSI
KW018F	DMAEC HCI
KW030F	DMAEC HCI
KW031C	DMAEC HCI
KW064C	DMAEC.HCI
KW239F	DMAEC.HCI

KW063T	DMAEC.HCI
KW169F	DMAPC.HCI
KW170F	DMAPC.HCI
KW027I	DMAPC.HCI
KW019C	DMAPD
KW020C	DMAPD
KW168F	DMAPMA-EPI
KW088C	DMSI
KW009T	DPAN
KW006T	DPAN
KW052F	DPAN
KW007T	DPAN
KW033C	DPAN
KW008T	DPAN
KW017F	DPAN
KW035C	DPAN
KW010T	DPAN
KW1000	EMPTY DRUM
KW118F	EPZG
KW127F	EPZG
KW128F	EPZG
KW129F	EPZG
KW269F	ETHYL 2-BROMOBUTYRATE
KW035I	ETHYL 2-BROMOBUTYRATE
KW036I	ETHYL 2-BROMOBUTYRATE
KW270F	ETHYL 2-BROMOBUTYRATE
KW014I	ENVIROSCRUBBER WASTE
KW002H	FIBERITE
KW074C	GUAIACOL GLYCIDYL ETHER
KW024I	GUAIACOL GLYCIDYL ETHER
KW190F	GUAIACOL GLYCIDYL ETHER
KW040T	GUAIACOL GLYCIDYL ETHER
KW191F	GUAIACOL GLYCIDYL ETHER
KW080C	GUAIACOL GLYCIDYL ETHER
KW083C	GUAIACOL GLYCIDYL ETHER
KW083C	GUAIACOL GLYCIDYL ETHER
KW015C	GUAR GUM
KW062C	GUANAZOLE
KW018I	GUANAZOLE
KW019I	GUANAZOLE
KW020I	GUANAZOLE
KW015L	GUANAZOLE
KW161F	GUANAZOLE
KW061C	GUANAZOLE
KW111C	HEPTYL BROMIDE
KW112C	HEPTYL BROMIDE
KW249F	HEPTYL BROMIDE
KW261F	HEXYL BROMIDE
KW118C	HEXYL BROMIDE
KW119C	HEXYL BROMIDE
KW120C	HEXYL BROMIDE
KW262F	HEXYL BROMIDE
KW023F	HUNIGS BASE
KW024F	HUNIGS BASE
KW155F	HUNIGS BASE
KW156F	HUNIGS BASE
KW157F	HUNIGS BASE
KW158F	HUNIGS BASE
KW159F	HUNIGS BASE
KW160F	HUNIGS BASE
KW032T	HUNIGS BASE

KW161F	HUNIGS BASE
KW049F	IR 1282
KW280F	iPBIB
KW275F	iPBIB
KW276F	iPBIB
KW277F	iPBIB
KW278F	iPBIB
KW139C	iPBIB
KW028H	iPBIB
KW279F	iPBIB
KW026C	LAB WASTE
KW035F	LAB WASTE
KW036F	LAB WASTE
KW011T	LAB WASTE
KW092F	LAB WASTE
KW093F	LAB WASTE
KW207F	LAB WASTE
KW208F	LAB WASTE
KW209F	LAB WASTE
KW049T	LAB WASTE
KW047T	LAB WASTE (QSE)
KW086C	LAB WASTE (QSE)
KW163F	
KW089C	LAURYL BROMIDE
KW003E	LAURYL BROMIDE
KW090C	LAURYL BROMIDE
KW229F	LAURYL BROMIDE
KW091C	LAURYL BROMIDE
KW034T	LSC
KW048T	LSC
KW164F	
KW167F	
KW182F	LSC
KW189F	LSC
KW067C	LSC
KW223F	LSC
KW020H	LSC
KW245F	LSC
KW008F	MACFARLAN SMITH
KW011C	MACFARLAN SMITH
KW010C	MACFARLAN SMITH
KW033F	MACFARLAN SMITH
KW063F	MACFARLAN SMITH
KW032F	MACFARLAN SMITH
KW058F	MACFARLAN SMITH
KW074F	MACFARLAN SMITH
KW075F	MACFARLAN SMITH
KW076F	MACFARLAN SMITH
KW078F	MACFARLAN SMITH
KW082F	MACFARLAN SMITH
KW001L	MAINTENANCE DEPT
KW11L	MAINTENANCE DEPT
KW108C	MBB (3-METHYLBUTYL BROMIDE)
KW122C	M 2-BB
KW123C	M 2-BB
KW263F	M 2-BB
KW124C	M 2-BB
KW125C	M 2-BB
KW264F	M 2-BB
KW285F	M 2-BB

KW246F	MBB
KW109C	MBB
KW110C	MBB
KW247F	MBB
KW064F	MBMB
KW113F	MBM
KW114F	MBM
KW115F	MBM
KW057C	MBM
KW131F	MBM
KW130T	MBM
KW065C	MBM
KW066C	MBM
KW072C	MBM
KW073C	MBM
KW003C	MISC
KW004C	MISC
KW034C	MISC
KW162F	MISC
KRM133C	MISC
KW084C	MISC
KW131C	MISC
[KW131Ca	MISC - NOT IN USE
KW0331	MISC
KW153F	MISC
KW137C	MISC
KW057T	MISC
KW031I	MMA HCl
KW031I	MMA HCl
KW001F	MOP
KW005F	MOP
KW008C	MOP
KW009C	MOP
KW013C	MOP
KW025F	MOP
KW026F	MOP
KW193F	MOD FLEX
KW196F	MOD FLEX
KW076C	MOD FLEX
KW290F	MPP
KW145C	MPP
KW146C	MPP
KW291F	MPP
KW100C	MYRISTYL BROMIDE
KW101C	MYRISTYL BROMIDE
KW030I	MYRISTYL BROMIDE
KW242F	MYRISTYL BROMIDE
KW01I	2-NDPA
KW011F	2-NDPA
KW012F	2-NDPA
KW013F	2-NDPA
KW025C	2-NDPA
KW016F	2-NDPA
KW044F	2-NDPA
KW051F	2-NDPA

KW014C	2-NDPA
KW063F	4-NDPA
KW077F	4-NDPA
KW001O	4-NDPA
KW219F	4-NDPA
KW218F	4-NDPA
KW085C	4-NDPA
KW046T	4-NDPA
KW221F	4-NDPA
KW002O	4-NDPA
KW224F	4-NDPA
KW067T	4-NDPA
KW104F	4-NITROBENZOYL CHLORIDE
KW105F	4-NITROBENZOYL CHLORIDE
KW106F	4-NITROBENZOYL CHLORIDE
KW1000	NOMINALLY EMPTY DRUM
KW031H	N-(4-BROMOBUTYL)PHTHALIMIDE
KW032H	N-(4-BROMOBUTYL)PHTHALIMIDE
KW288F	N-(4-BROMOBUTYL)PHTHALIMIDE
KW289F	N-(4-BROMOBUTYL)PHTHALIMIDE
KW230F	N-PROPYL BROMIDE
KW231F	N-PROPYL BROMIDE
KW092C	N-PROPYL BROMIDE
KW019H	N-PROPYL BROMIDE
KW232F	N-PROPYL BROMIDE
KW093C	N-PROPYL BROMIDE
KW233F	N-PROPYL BROMIDE
KW238F	N-PROPYL BROMIDE
KW013I	OCTYL SULPHONYL CHLORIDE
KW017H	OCTYL SULPHONYL CHLORIDE
KW029T	OCTYL SULPHONYL CHLORIDE
KW015I	OCTYL SULPHONYL CHLORIDE
KW139F	OCTYL SULPHONYL CHLORIDE
KW140F	OCTYL SULPHONYL CHLORIDE
KW202F	OSC
KW166F	OCTAPHEN
KW180F	OAP
KW188F	OAP
KW023I	OAP
KW192F	OAP
KW041T	OAP
KW094C	OCTYL BROMIDE
KW004E	OCTYL BROMIDE
KW095C	OCTYL BROMIDE
KW234F	OCTYL BROMIDE
KW096C	OCTYL BROMIDE
KW237F	OCTYL BROMIDE
KW254F	PENTYL BROMIDE
KW114C	PENTYL BROMIDE
KW115C	PENTYL BROMIDE
KW253F	PENTYL BROMIDE
KW116C	PENTYL BROMIDE
KW085F	POTASSIUM ACETATE
KW024H	POTASSIUM CYANATE
KW018L	POTASSIUM CYANATE
KW087F	POTASSIUM 2-ETHYL HEXANOATE SOLUTION
KW079F	POTASSIUM OCTANOATE
KW017C	PYRIDINE HYDROBROMIDE

KW015F	PYRIDINE HYDROBROMIDE
KW013T	SALICYLANILIDE
KW094F	SALICYLANILIDE
KW009I	SALICYLANILIDE
KW179F	SALICYLANILIDE
KW021F	SOD THIO / CHLOROPROPANE
KW041C	SODIUM CYANATE
KW009H	SODIUM CYANATE
KW046C	SODIUM CYANATE
KW020T	SODIUM CYANATE
KW089F	SAFENER 107892 roh
KW090F	SAFENER 107892 roh
KW091F	SAFENER 107892 roh
KW050C	SAFENER 107892 roh
KW051C	SAFENER 107892 roh
KW010H	SAFENER 107892 roh
KW099F	SAFENER 107892 roh
KW055C	SAFENER 107892 roh
KW132F	SAFENER 107892 roh
KW135F	SAFENER 107892 roh
KW001E	SAFENER 107892 roh
KW138F	SAFENER 107892 roh
KW204F	SAFENER 107892 roh
KW011H	SODIUM BROMIDE / SODIUM THIOCYANATE
KW056C	SODIUM BROMIDE SOLUTION
KW060C	SILICO TUNGSTIC ACID (STA)
KW134F	SILICO TUNGSTIC ACID (STA)
KW165F	SILICO TUNGSTIC ACID (STA)
KW017L	SILIPORITE
KW005I	TRIBROMOANILINE (TBAN)
KW008L	TRIBROMOANILINE (TBAN)
KW037F	TRIBROMOBENZENE
KW038F	TRIBROMOBENZENE
KW039F	TRIBROMOBENZENE
KW040F	TRIBROMOBENZENE
KW041F	TRIBROMOBENZENE
KW002L*	TRIBROMOBENZENE
KW030C	TRIBROMOBENZENE
KW027C	TRIBROMOBENZENE
KW050F	TRIBROMOBENZENE
KW042F	TRIBROMOBENZENE
KW084F	TRIBROMOBENZENE
KW088F	TRIBROMOBENZENE
KW171F	TRIBROMOBENZENE
KW053F	TRICHLOROACETAMIDE
KW012H	TRICHLOROACETAMIDE
KW007L	TRICHLOROACETAMIDE
KW136F	TRICHLOROACETAMIDE
KW137F	TRICHLOROACETAMIDE
KW141F	TRICHLOROACETAMIDE
KW001C	TUK
KW002C	TUK

KW014F	TUK
KW274F	TUK
KW014H	TAHT
KW015H	TAHT
KW108F	TAHT
KW110F	TAHT
KW117F	TAHT
KW123F	TAHT
KW124F	TAHT
KW125F	TAHT
KW126F	TAHT
KW079C	TAHT
KW130F	TAHT
KW016H	TAHT
KW058C	TAHT
KW044C	TAHT
KW217F	TAHT
KW220F	TAHT
KW007E	TAHT
KW241F	TAHT
KW037I	TAHT
KW271F	TAHT
KW272F	TAHT
KW011I	TEA HCI
KW012I	TEA HCI
KW003L	VULNAX
KW003I*	ZENECA
KW004I*	ZENECA
KW003H*	ZENECA
KW004H*	ZENECA
KW003I*	ZENECA
KW004I*	ZENECA
KW003H*	ZENECA
KW004H*	ZENECA
KW006I	ZINC ISOCYANATE
KW007I	ZINC ISOCYANATE
KW032C	ZINC ISOCYANATE
KW005C	ZINC ISOCYANATE
KW023T	ZENECA ICIA5504
KW024T	ZENECA ICIA5504
KW025T	ZENECA ICIA5504
KW026T	ZENECA ICIA5504
KW027T	ZENECA ICIA5504
KW028T	ZENECA ICIA5504
KW111F	ZENECA ICIA5504
KW112F	ZENECA ICIA5504

Description of Waste	Label Issue No	Issue Date
WASTE ACETONE EX CLEANDOWN	1	31/01/00
DISTILLATION RESIDUE	1	31/01/00
AQUEOUS RESIDUE	1	31/01/00
WASTE METHYLENE CHLORIDE	1	31/01/00
VAC TANK LIQUORS	1	02/06/00
AQUEOUS SODIUM ACETATE	1	14/09/01
SULPHUROUS ACID WASTE	1	21/05/02
SULPHURIC ACID WASTE	1	21/05/02
AQUEOUS ALKALINE WASH	1	21/05/02
DISTILLATION FORES	1	21/05/02
DISTILLATION RESIDUES	1	21/05/02
WATER BOIL OUT	1	21/05/02
ACETONE VCP	1	21/05/02
AEA PROPPANT 530 SOLUTION	1	09/12/97
CERAMIC BEADS CONTAINING UP TO 50%. RANGE 10-50% PROPPANT SOLUTION	1	23/12/97
AQUEOUS DISTILLATE	1	13/04/00
TOLUENE DISTILLATE	1	13/04/00
LIQUORS AND METHANOL WASH	1	13/04/00
METHANOL VCP	1	12/05/00
METHANOL DAMP FAILED MATERIAL FOR DISPOSAL	1	21/11/00
THIONYL CHLORIDE STRIP WASTE	1	21/11/00
ISOPROPANOL WASTE	1	20/07/01
WASTE FILTER CAKE	1	14/09/01
ORGANIC DISTILLATE CONTAINING TOLUENE/ METHANOL/ ETHANOL	1	05/11/99
AQUEOUS WASTE CONTAINING ETHANOL/METHANOL/HCL/SODIUM BROMIDE	1	05/11/99
MOTHER LIQUORS CONTAINING AGFA 8647 / HEXANE	1	05/11/99
METHANOL/ WATER	1	05/11/99
METHANOL/TOLUENE DISTILLATE	2	13/04/00
AQUEOUS WASTE EX HCL QUENCH	2	13/04/00
AQUEOUS WASTE EX BRINE QUENCH	2	13/04/00
MOTHER LIQUORS CONTAINING AGFA 8647 / HEXANE	2	13/04/00
METHANOL VCP WASTE	1	25/04/00
AQUEOUS BRINE QUENCH	1	21/11/00
TOLUENE / PETROLEUM ETHER DISTILLATE	1	22/11/00
MOTHER AND WASH LIQUORS	1	22/11/00
VESSEL WASHINGS	1	31/01/00
ORGANIC DISTILLATE (20% TOLUENE AND 80% MEK)	1	03/11/00
MOTHER LIQUORS (55% TOLUENE, 40% HEPTANE)	1	03/11/00
ACETONE VCP	1	11/00
AQUEOUS WASTE ACIDIC	1	03/11/00
DISTILLATION RESIDUE	1	21/12/01
WATER WASH	1	21/12/01
CARBONATE WASH	1	21/12/01
WATER DISTILLATE	1	21/12/01
ACETONE VCP	1	21/01/01
WATER VCP	1	21/01/01
EX 5747 DUMP TANK	1	11/01/02
TOLUENE / PRODUCT RESIDUES EX VESSEL	1	11/01/02
BROMMOACETIC ACID WASTE SOLUTION EX BBA PLANT CLEANDOWN	1	01/01/02
HBr STRIPPINGS	1	10/00
ALKALINE WASHINGS	1	10/00
METHANOL VCP LIQUORS	1	06/03/01
SAND CONTAMINATED WITH BENZYL BROMIDE (<50%)	1	13/07/01
ACETONE VCP	1	03/02/01
ACIDIC AQUEOUS DISTILLATE	1	20/02/97
TOLUENE / THIONYL CHLORIDE DISTILLATE	1	20/02/97
ACIDIC AQUEOUS DISTILLATE	1	20/02/97
VAC PUMP SEAL TANK LIQUORS ex BIS CEA HCl	1	05/03/97

AQUEOUS WASH ex BIS CEA HCl	1	18/03/97
WASTE TOLUENE CONTAINING BIS CEA HCl UP TO 15%	1	10/04/97
AQUEOUS QUENCH LIQUORS	1	10/04/97
AQUEOUS WASHES ex CLEANDOWN	1	10/04/97
WASTE TOLUENE	1	02/05/97
SAND CONTAMINATED WITH BIS CEA FILTRATES	1	14/05/97
RECOVERED TOLUENE/IPA ex BIS CEA HCl FOR RECYCLING	1	27/05/97
AQUEOUS TOLUENE/IPA ex BIS CEA HCl	1	27/05/97
MIXED SOLVENT ex VESSEL BOIL OUT ex BIS CEA HCl	1	09/07/97
ACIDIC AQUEOUS DISTILLATE EX DOUBLE CONE DRYER DMAEC HCL	1	09/09/97
VAC TANK LIQUORS EX DOUBLE CONE DRYER CLEAN DOWN	1	09/09/97
WATER/TOLUENE EX BIS CEA HCL REWORK	1	15/10/97
Ex. BIS CEA HCL FILTRATES: 45% TOLUENE 45% ISOPROPYL ALCOHOL (IPA 5% BIS CEA HCL TRACE HCL / TRACE SULPHUROUS ACID	1	16/11/97
TOLUENE / IPA DAMP BIS CEA HCl CONTAMINATED WITH 4NDPA ON A FILTER CLOTH	1	01/12/97
PHOSPHOROUS ACID LAYER	1	21/06/01
RESIDUES	1	21/06/01
TOLUENE VCP	1	21/06/01
ACETONE VCP	1	22/10/01
WATER VCP	1	05/10/01
VAC TANK LIQUORS	1	04/01/02
METHANOL CLEANDOWN	1	17/09/98
HEXANE DISTILLATE	1	17/09/98
FLOOR SWEEPS	1	17/09/98
POLYTHENE LINERS	1	17/09/98
VACUUM TANK LIQUORS		
ACETONE CLEANDOWN	1	29/09/98
CONTAMINATED CONSUMABLES	1	08/00
ABSORB GRANUALS WITH 4-BBB	1	08/00
KNOCKOUT POT CONDENSATES	1	09/00
SODIUM CARBONATE WASTE WASH LIQUOR	1	02/07/01
METHYLENE CHLORIDE WASTE EX ABSORBER	1	02/07/01
WATER EX BENZOYL PEROXIDE	1	02/07/01
WATER VCP LIQUORS	1	20/07/01
CARBON CAKE EX 4-BBB REWORK	1	20/07/01
SODIUM SULPHITE WASH EX 4-BBB	1	03/09/02
AQUEOUS PHOSPHORIC ACID LAYER	1	25/01/02
DISTILLATION RESIDUE	1	25/01/02
AQUEOUS VCP	1	25/01/02
ACETONE VCP	1	15/03/02
AQUEOUS WASTE DISTILLATE	1	03/07/02
WET FORS	1	09/07/01
RESIDUES	1	09/07/01
VCP LIQUORS	1	09/07/01
KEROSINE RECOVERED EX Abba (UPTO 5% 2-BBA)	1	05/04/02
KEROSINE RECOVERED EX Abba (UPTO 50% 2-BBA)	1	05/04/02
WATER EX DISTILLATE	1	23/04/02
Ex. t-BBA AQUEOUS WASTE STREAM: SODIUM CARBONATE 15% SODIUM BROMIDE 1% SODIUM BROMOACETATE 1%	1	07/11/97
Ex. t-BBA DISTILLATION RESIDUES: t-BUTYLBROMOACETATE est. 50% TARS est. 50%	1	06/11/97
Ex. tBBA VESSEL CLEANOUT RESIDUES:ACETONE CONTAINING < 3% tBBA	1	06/11/97
Ex. tBBA AQUEOUS WASTE STREAM FOR RECOVERY: N,N-DIMETHYLANILINE HYDROBROMIDE 60% WATER 40% - FOR RECOVERY	2	12/01/98
Ex. Tbba DISTILATEEx.FORERUNS.max. 5% tBBA. 95% (+) TOLUENE	1	16/11/97
Ex. tBBA AQUEOUS WASTE - AZEOTROPE DRYING:WATER 5% TOLUENE < 0.5% Tbba	1	13/11/97
Ex. tBBA VESSEL CLEANOUT RESIDUES:max. 5% tBBA. 95% (+) TOLUENE	1	20/11/97
Ex. t-BBA REWORK. ACIDIC AQUEOUS WASTE: 10% BROMOACETIC ACID 2% t-BBA	1	12/02/98
Ex. VESSEL CLEAN DOWN: UP TO 3% t-BBA 97% (+) METHANOL / TOLUENE	1	18/02/98

VACUUM PUMP TANK RESIDUES:5% SODIUM HYDROXIDE UP TO 5% TOLUENE 90 % (+) WATER	1	19/02/98
CLEAN DOWN:2% SODIUM HYDROXIDE TRACE TOLUENE 98% WATER	1	19/02/98
EX. VACUUM PUMP CATCH POT: 90% TOLUENE 5% t-BBA 5% PUMP OIL	1	17/04/98
DISTILLATION RESIDUES Ex. DIMETHYLANILINE RECOVERY	1	12/06/98
AQUEOUS WASTE Ex. DIMETHYLANILINE RECOVERY: UP TO 10% SODIUM HYDROXIDE UP TO 1% DIMETHYLANILINE	1	12/06/98
HBr WASH	1	17/04/02
TOLUENE CONTAINING UPTO 70% tBBA FOR DISPOSAL	1	01/05/02
DIBROMOANILINE 60% AQUEOUS SOLUTION FOR DISPOSAL	1	01/05/02
DISTILLATION RESIDUE	1	20/11/01
AQUEOUS SULPHUROUS ACID	1	20/11/01
SULPHURIC ACID WASTE	1	20/11/01
AQUEOUS VCP LIQUOR	1	20/11/01
ACETONE WASTE	1	20/11/01
AQUEOUS ALKALINE WASTE	1	20/11/01
WATER SPLIT EX DISTILLATION	1	20/11/01
METHANOL VCP	1	20/11/01
WET FORES	1	18/07/01
AQUEOUS WASH LAYER	1	18/07/01
RESIDUES	1	18/07/01
AQUEOUS PYRIDINE HYDROBROMIDE LAYER	1	18/07/01
NEUTRALISED AQUEOUS LAYER	1	18/07/01
WATER/ACETYL ACETONE DISTILLATE ex CAA	1	03/07/97
AQUEOUS DISTILLATE ex CALCIUM ACETYLACETONE	1	09/07/97
RECOVERED CALCIUM ACETYLACETONATE	1	08/10/97
AQUEOUS DRYER WASHINGS	1	17/10/97
No.1 SCRUBBER LIQUORS CONTAINING: Hcl & H2SO4	1	07/11/97
AQUEOUS WASH ex CEA HCl	1	18/03/97
PHOSPHOROUS ACID LAYER	1	08/08/01
SULPHURIC ACID	1	08/08/01
WATER WASH	1	08/08/01
ACETONE VCP	1	08/08/01
AQUEOUS WASTE STAGE 1	1	27/04/00
ORGANIC MOTHER LIQUORS HEPTANE / CSC	1	27/04/00
METHANOL VCP	1	27/04/00
AQUEOUS LIQUORS EX STAGE 2	1	27/04/00
VAC TANK LIQUORS NaOH	1	27/04/00
AQUEOUS WASTE EX STAGE 2 (DIMETHYLFORMAMIDE ROUTE)	1	12/05/00
SULPHURIC ACID LIQUORS ex CHEMICAL 22	2	24/05/01
< 5% SULPHURIC ACID LIQUORS ex CHEMICAL 47	2	24/05/01
VESSEL WASHINGS	1	31/01/00
DISTILLATE EX CHEMICAL 80	1	07/10/97
V1402 VAC SEAL TANK LIQUORS	1	07/10/97
SULPHURIC ACID LIQUORS	1	16/10/97
ACID SCRUBBER LIQUORS Ex. No.1 SCRUBBER. 10% SULPHURIC ACID	1	30/10/97
ACROLEIN / CAUSTIC	2	15/03/01
VESSEL WASHINGS	1	31/01/00
AMMONIA SOLN EX STAGE 1	1	26/05/00
AMMONIUM SULPHATE SOLN EX ACID ABSORBER	1	26/06/00
AQUEOUS DISTILLATE	1	05/06/00
VCP FOR CONSENT TO DISCHARGE	1	22/02/00
AQUEOUS WASTE EX VCP	1	09/03/01
WASTE BATCH	1	25/10/01
AQUEOUS CATALYST SLURRY	1	20/02/97
WATER WASH	1	20/02/97
BICARBONATE WASH	1	20/02/97
1-CHLOROPROPANE RESIDUES	1	20/03/97
WASTE METHANOL / METHYL ACETATE / CHLOROPROPANOL / CHLOROPROPYL ACETATE	1	20/02/97
METHANOL / METHYL ACETATE	1	20/02/97
AQUEOUS POTASSIUM BROMIDE	1	20/02/97
3-CHLOROPROPANOL RESIDUES	1	21/03/97

STAGES 1&2. CONTAINS: 25% BROMOCHLOROPROPANE 27% PROPANE DIOL 9% ACETONITRILE 15% METHANOL	1	01/12/97
POTASSIUM BROMIDE SOLID WASTE	1	04/04/01
SPILLAGES AND FLOOR SWEEPS	1	04/04/02
AQUEOUS VCP LIQUOR	1	04/04/02
AQUEOUS DISTILLATE (EX DRYER)	1	08/04/02
CONCRETE CONTAMINATED WITH SULPHURIC ACID	1	22/04/97
CLEANDOWN LIQUORS USING AMMONIA LIQUORS ex ZINC ISOCYANATE	1	12/03/97
CONTAMINATED (GENERAL) & APPROX. 20% WATER WET. Ex. P/FILTER CLEANDOWN	1	20/11/97
ACETONITRILE / POTASSIUM ACETATE SOLN	1	04/11/98
SATURATED SOLIDS BROMO CHLOROPROPANE / ACETONITRILE/ POTASSIUM ACETATE/ POTASSIUM BROMIDE	1	30/11/98
ACID LAYER: APPROX. 25% HYDROCHLORIC ACID TRACE CYCLOHEXYL CHLORIDE	1	03/06/99
AQUEOUS SODIUM CARBONATE WASH: <5% SODIUM CARBONATE 5-15% SODIUM CHLORIDE TRACE CYCLOHEXYL CHLORIDE	1	03/06/99
CYCLOHEXYL CHLORIDE RESIDUES	1	03/06/99
METHANOL EX. VCP <5% CYCLOHEXYL CHLORIDE RESIDUES	1	03/06/99
METHANOL / HEPTANE DISTILLATE	1	26/06/00
AQUEOUS WASTE	1	26/06/00
METHANOL VCP LIQUORS	1	05/07/00
AQUEOUS WASH Ex DAPHCL	1	07/07/00
HEPTANE DISTILLATE Ex DAPHCI	1	07/07/00
METHANOL VCP	1	16/08/00
MOTHER LIQUORS	1	05/12/01
WATER WASH	1	05/12/01
TOLUENE DISTILLATE EX DEAEC HCL	1	15/08/97
TOLUENE / PROPANOL	1	05/09/97
THIONYL / TOLUENE DISTILLATE	1	05/09/97
PROPANOL DISTILLATE ex DEAEC HCL	1	09/09/97
VAC SEAL TANK LIQUORS: 94% WATER 6% DEAEC HCl TRACE PROPANOL	1	13/03/98
AQUEOUS LAYER EX DEAEC FREE BASE	1	07/09/01
AQUEOUS WASH EX DEAEC. HCL TOLUENE RECOVERY	1	19/11/01
SODIUM CHLORIDE SOLUTION	1	22/04/02
WATER / DIETHYLAMINE RECOVERY	1	22/04/02
RESIDUES	1	22/04/02
ACETONE VCP	1	15/05/02
AQUEOUS VCP	1	27/11/01
AQUEOUS SOLUTION CONTAINS DCHAS	1	01/02/00
AQUEOUS SOLUTION CONTAINS SODIUM HYDROGEN SULPHATE	1	01/02/00
AQUEOUS VESSEL WASHINGS	1	01/02/00
DCHAN PROCESS CONTAMINATED WITH 2-AF	1	13/07/01
PHOSPHOROUS ACID LAYER	1	22/08/01
RESIDUES	1	22/08/01
SULPHURIC ACID	1	22/08/01
CAUSTIC WASH	1	22/08/01
ACETONE VCP	1	22/08/01
CONTAMINATED POLYTHENE BAGS	1	03/03/98
ACIDIC WASH LIQUORS Ex. DBSA: 90% WATER 10% DBSA	1	03/03/98
BASIC WASH LIQUORS Ex. DBSA: 90% WATER 10% DBSA	1	06/03/98
FLOOR SWEEPS Ex. DBSA	1	03/03/98
AQUEOUS VAC TANK LIQUORS	1	08/04/98
WATER DISTILLATE Ex. DBSA: DBSA >1% BROMOFORM	2	19/03/98
LIQUOR Ex. CONE DRIER SEAL FLUSH TANK: 80% MIN. AQUEOUS CAUSTIC SODA (10% MAX. STRENGTH) 20% MAX. METHYLENE CHLORIDE	1	06/04/98
METHANOL VCP LIQUORS	1	26/05/00
MOTHER LIQUORS	1	09/03/01
PROPANOL FILTRATES ex DMAEC HCl	1	20/03/97
PROPANOL/WATER ex DMAEC HCl	1	30/04/97
SCRUBBER LIQUORS ex DMAEC HCl	1	09/07/97
AQUEOUS SALT SOLN CONTAINING NaOH	1	25/02/00
TOLUENE LAYER / FILTRATES	1	16/07/01

AQUEOUS WASH EX DMAEC.HCL TOLUENE RECOVERY	1	19/11/01
AQUEOUS WASTE	1	17/0300
FILTER PAD AND CAKE	1	17/03/00
AQUEOUS SCRUBBER LIQUORS (CONTAINS UPTO 3% SULPHURIC ACID)	1	02/01/01
DIOL SCRUBBER LIQUORS	1	12/03/97
DIOL RESIDUES	1	12/03/97
ETHYL ACETATE WASHES	1	17/03/00
VCP WATER WASH EX. DMSI	1	08/04/01
VAC PUMP SEAL FLUSH TANK LIQUORS	1	10/08/97
CAUSTIC SCRUBBER LIQUORS CONTAMINATED WITH BENZENE AND CYANIDE	1	10/08/97
AQUEOUS ALUMINIUM WASTE	1	10/08/97
WATER EX BENZENE CHARGE	1	10/08/97
HYDROCHLORIC ACID EX DPAN	1	10/08/97
DPAN CARBONATE LIQUORS	1	10/08/97
QUENCH LIQUORS ex DPAN	1	10/08/97
WATER WASHINGS EX VESSEL CLEANDOWN	1	29/09/97
SAND CONTAMINATED WITH BENZENE	1	15/10/97
CONTAINS RESIDUES OF REFER TO MANUFACTURERS LABEL	1	13/03/97
>98% METHANOL <2% HYDROCHLORIC ACID	1	01/06/99
VAC SEAL TANK LIQUOR: 90% WATER / 5% SODIUM HYDROXIDE/ 5% METHANOL	1	04/06/99
DISTILLATE:>99.5% METHANOL / <0.5% HCl	1	04/06/99
FILTRATES:>95% METHANOL / <5% FERRIC CHLORIDE	1	04/06/99
ACIDIC WASTE	1	04/02/02
ALKALINE WASTE	1	04/02/02
AQUEOUS VCP	1	04/02/02
ACETONE VCP	1	04/02/02
<10% SODIUM CHLORIDE / <10 SODIUM CARBONATE/ >80% WATER	1	19/08/99
FIBERITE POLYMER KM 119 / SULPHOLANE	1	27/05/97
AQUEOUS WASTE	1	08/06/00
BRINE WASHES	1	08/06/00
DISTILLATION FORERUNS	1	08/06/00
DISTILLATION RESIDUES	1	08/06/00
METHANOL VCP,	1	08/06/00
VAC TANK LIQUORS	1	04/10/00
AQUEOUS SOLUTION EX. GGE REWORK	1	20/11/00
AQUEOUS SOLUTION (CONT. SODIUM METABISULPHITE (10%) AND GGE (<1%) EX. GGE REWORK	1	10/00
AQUEOUS WASTE	2	13/03/97
AQUEOUS AMMONIA SULPHATE / SULPHURIC ACID ex ABSORBERS	1	01/02/00
SODIUM CHLORIDE DAMP	1	01/02/00
PRESSURE FILTER WASHINGS	1	01/02/00
AQUEOUS MOTHER LIQUORS	1	01/02/00
VESSEL WASHINGS	1	16/02/99
VAC TANK LIQUORS	1	10/02/00
AMMONIA SOLN AQUEOUS DISTILLATE	1	01/02/00
HBr STRIPPINGS	1	25/09/01
ALKALINE STRIPPINGS	1	25/09/01
METHANOL VCP	1	25/09/01
DISTILLATION RESIDUES	1	27/11/01
PHOSPHOROUS ACID LAYER	1	27/11/01
SULPHURIC ACID WASTE	1	27/11/01
CAUSTIC WASH	1	27/11/01
ACETONE VCP	1	27/11/01
SODIUM HYDROXIDE SOLN 40-47%	1	20/03/97
ABSORBENT SWABS ex SPILLAGE KIT	1	20/03/97
DISTILLATION LIGHTS	1	31/01/00
FORERUNS	1	31/01/00
DISTILLATION RESIDUES	1	31/01/00
METHANOL VCP	1	31/01/00
AQUEOUS VCP	1	31/01/00
SCRUBBER LIQUORS	1	31/01/00
AQUEOUS QUENCH (SODIUM ETHYL SULPHATE)	1	31/01/00

VAC TANK LIQUORS	1	23/11/00
DISTILLED N-PROPANOL / IR1282	1	17/07/97
INITIAL FORES EX FINAL BATCH FOR DISPOSAL	1	12/04/02
FORES EX FINAL BATCH FOR DISPOSAL	1	12/04/02
ACIDIC WASTE	1	12/04/02
ALKALINE WASTE	1	12/04/02
RESIDUES	1	12/04/02
SCRUBBER LIQUORS	1	12/04/02
AQUEOUS VCP	1	12/04/02
ACETONE VCP	1	12/04/02
GLACIAL ACETIC ACID, PERCHLORIC ACID, MERCURIC ACID	1	27/05/97
METHANOL, KARL FISCHER REAGENT	1	27/05/97
TOLUENE, METHANOL, ACETONITRILE	1	27/05/97
CHLORINATED SOLVENT WASTE	1	05/09/97
HALOGENATED MIXED ORGANIC WASTE	1	26/06/98
NON-CHLORINATED MIXED ORAGNIC WASTE	1	10/07/98
EX. 4-BBB (CONTAINS ACETONITRILE	1	23/10/00
EX. MBM (CONTAINS METHANOL AND HBr	1	23/10/00
EX. HUNIG'S BASE	1	23/10/00
MIXED AQUEOUS LABORATORY WASTE	1	04/04/01
USED COD DIGESTION SOLUTION	1	15/02/01
USED DRAEGAR TUBES	1	26/02/01
DELETED		
PHOSPHOROUS ACID LAYER	1	18/05/01
RESIDUES	1	18/05/01
SULPHURIC ACID	1	18/05/01
ACETONE VCP	1	18/05/01
CARBONATE WASH (Xi - replaces previous label using same code	1	28/05/02
AQUEOUS SOLUTION EX STAGE 2 (PYRIDINE HYDROCHLORIDE)	1	16/02/00
AQUEOUS SOLUTION EX STAGE 2 (DIMETHYL FORMAMIDE)	1	01/03/01
DELETED		
DELETED		
AQUEOUS WASTE (2-ETHOXYETHANOL ROUTE) EX. STAGE 1	1	12/05/00
HEPTANE VCP EX STAGE 2	1	02/06/00
VACUUM TANK LIQUORS	1	16/03/00
VACUUM TANK LIQUORS (EX. LSC (AND 4-NDPA))	1	14/03/01
AQUEOUS LIQUORS EX SLS 2EE RECOVERY	1	08/06/01
RESIDUES EX HEPTANE RECOVERY, STAGE 2	1	22/08/01
AQUEOUS WASTE STAGE 1	1	20/02/97
AQUEOUS WASTE STAGE 2	1	20/02/97
AQUEOUS WASTE STAGE 3	1	20/02/97
METHANOL MOTHER LIQUOR WASHES	2	21/05/97
DUMP TANK CONTENTS	1	17/06/97
RESIDUES EX FILTRATE RECOVERY	1	15/05/97
METHANOL / TOLUENE / MACSMITH	1	09/09/97
STAGE 3. CONTAINS : TOLUENE 79% WATER 0.12% N, BENZYL BIS (2-CHLORO) ETHYLAMINE	1	16/01/98
WATER WASH CONTAINS :WATER 90% TOLENE 5% METHANOL 5%	1	20/01/98
PHENYL ACETONITRILE RECOVERY CONTAINS:WATER 0.3% PHENYL ACETONITRILE 63%TOLUENE 37%	1	22/01/98
VACUUM TANK LIQUORS. Ex DOUBLE CONE DRYER CONTAINS:WATER 79%METHANOL 10%CAUSTIC SODA 0-8%	1	22/01/98
70% TOLUENE TRACE PHENYL ACETONITRILE 30% WATER	1	23/02/98
WASTE OIL	1	19/05/97
WASTE OIL and Sand	1	08/09/98
PHOSPHOROUS ACID LAYER	1	03/09/01
WET FORES	1	05/12/01
RESIDUES	1	05/12/01
ACETONE VCP	1	05/12/01
AQUEOUS VCP	1	05/12/01
CAUSTIC WASTE	1	05/12/01
ACIDIC WASTE	1	05/12/01
INITIAL FORES	1	03/07/02

RESIDUES	1	03/09/01
SULPHURIC ACID	1	03/09/01
CAUSTIC WASH	1	03/09/01
WATER SPLIT	1	03/09/01
(METHYL 4-BROMOMETHYL BENZOATE) METHANOL Ex. VESSEL CLEANOUT CONTAINS MAX. 5% MBMB	1	30/10/97
(METHYL 2-BROMOTETRA-DECANOATE) ACIDIC METHANOL SPLIT: 5-10% BROMINE / 10-50% HBr / 0-10 PHOSPHORUS ACID / 30-85% METHANOL (BALANCE)	1	24/03/99
ACIDIC METHANOL DISTILLATE - FOR CLEANDOWN: 0-5% BROMINE / 0-5% HBr / 0- 5% WATER 83-100% METHANOL BALANCE	1	24/03/99
ACIDIC METHANOL DISTILLATE - EX. CLEANDOWN: 0-5% BROMINE / 0-5% HBr / 0- 5% WATER 0-2% METHYL 2-BROMOMYRISTATE 83-100% METHANOL BALANCE	1	24/03/99
PHOSPHOROUS ACID LAYER: 75-90% PHOSPHOROUS ACID 0-5% RED PHOSPHOROUS / 10-20% HBr / 0-1% BROMINE / 0-5% BROMO MYRISTOYL BROMIDE	1	24/03/99
VACUUM RECIRCULATION TANK LIQUORS: 10% SODIUM HYDROXIDE / TRACE METHANOL / WATER	1	21/06/99
WASTE, SAND EX REACTION SPILLAGE (BROMOMYRISTIC/HBR/BROMINE)	1	26/11/99
WASTE SCRUBBERS LIQUORS EX MBM	1	07/03/00
MBM REWORK (OSC CONTAMINATED)	1	17/03/00
MBM REWORK (OSC CONTAMINATED) HBr TREATED	1	02/06/00
MBM REWORK (OSC CONTAMINATED) LIME TREATED	1	02/06/00
ABSORBER - TDC WASTE SODIUM SULPHITE ABSORBER LIQUORS	1	20/02/97
ABSORBER - TDC WASTE SODIUM SULPHITE ABSORBER LIQUORS	1	20/02/97
ALUMINIUM CHLORIDE - ANHYDROUS	1	11/09/97
ACETONE BOILOUT EX V1202	1	16/02/00
BENZOYL CHLORIDE	1	28/01/02
BUND WASTE - UPTO 20% HBr <1% BROMINE	1	17/01/01
HBr ABSORBER WASTE	2	29/01/02
HBr ABSORBER WASTE	1	20/12/01
SODIUM CARBONATE EX HBr SPILLAGE	1	19/11/01
KEROSENE / THERMIA B	1	31/01/00
NOMINALLY EMPTY PACKAGING (EX PHOSPHOROUS ACID) RTN TO SUPPLIER	1	25/03/02
SAND EX HYDRAZINE HYDRATE SPILLAGE	1	21/08/01
SCRUBBER WASTE	1	06/09/01
AQUEOUS DISTILLATE	1	06/09/01
METHANOL / WASTE DISTILLATE	1	20/02/97
POTASSIUM CHLORIDE SOLN CONTAINING METHANOL	1	20/02/97
RECOVERED SOLIDS FROM DISTILLATION	1	20/02/97
AQUEOUS ALUMINIUM WASTE	1	20/02/97
SPENT CARBONATE SOLUTION	1	20/02/97
METHANOLIC POTASSIUM HYDROXIDE approx 18% w/w KOH	1	01/04/97
MOP STAGE 1 (1,1 DICHLORO 3-OXO PENT-1-ENE)	1	01/04/97
WATER WASHES	1	26/06/00
METHANOL VCP LIQUORS	1	26/06/00
VAC TANK LIQUORS	1	26/06/00
TOLUENE DISTILLATE	1	12/08/02
AQUEOUS SPLIT	1	12/08/02
DISTILLATION RESIDUE	1	12/08/02
METHANOL VCP	1	12/08/02
PHOSPHOROUS ACID LAYER	1	07/08/01
SULPHURIC ACID	1	07/08/01
WATER WASH	1	07/08/01
ACETONE VCP	1	07/08/01
AQUEOUS SPLIT MOTHER LIQUORS - STAGE 2	2	13/03/97
AQUEOUS FILTER WASH LIQUORS ex 2-NDPA 3rd STAGE	3	13/03/97
METHANOL LIQUORS ex 2-NDPA 3rd STAGE	3	13/03/97
METHANOL MOTHER LIQUORS	3	13/03/97
AQUEOUS ACIDIC WASTE ex 2-NDPA 1st STAGE	3	13/03/97
VESSEL / EQUIPMENT WASHINGS	1	12/03/97
TOLUENE (ex vessel boil out ex 2 - NDPA	1	09/07/97
TOLUENE CONTAMINATED WITH 2-NDPA, ACETONE, TUK, IPA	1	22/07/97

ACIDIC DISTILLATE EX 2-NDPA	1	15/08/97
TOLUENE / METHANOL EX 4-NDPA CLEANDOWN	1	15/08/97
WATER CONTAMINATED SOLVENT CONTAINS: WATER 11% METHANOL 88% TOLUENE 1%	1	22/01/98
AQUEOUS WASTE EX 4-NDPA STAGE ONE	1	16/01/01
ORGANIC WASTE	1	16/01/01
AQUEOUS WASTE EX 4-NDPA STAGE THREE	1	16/01/01
CAUSTIC LIQUOR EX. 4-NDPA CLEANDOWN	1	01/02/01
WATER EX. CLEANDOWN	1	01/02/01
ACETONE EX. CLEANDOWN	1	01/02/01
AQUEOUS WASTE EX. STAGE ONE (NEUTRALISED)	1	01/02/01
IPA EX CLEANDOWN	1	02/04/01
LOW PURITY 4-NDPA PRODUCT	1	26/03/02
ACETONE EX. VESSEL CLEANDOWN 99% 4-NBC APPROX. 1%	1	30/11/98
HEPTANE FILTRATE / HEPTANE 97% 4-NBC 2-3%	1	30/11/98
Ex. VAC SEAL FLUSH RESERVOIR: MAX. 4% SODIUM HYDROXIDE 1% TOLUENE CONTAINS RESIDUES: REFER TO SUPPLIER LABEL	1	15/12/98
AQUEOUS WASTE	1	22/07/99
FILTER CAKE WASTE	1	05/08/02
ACETONE VCP	1	05/08/02
VACUUM TANK LIQUORS	1	05/08/02
DISTILLATION RESIDUE	1	25/05/01
AQUEOUS SULPHUROUS ACID	1	25/05/01
SULPHURIC ACID	1	25/05/01
AQUEOUS VCP LIQUOR	1	25/05/01
ACETONE	1	25/05/01
AQUEOUS ALKALINE WASTE	1	25/05/01
WATER SPLIT	1	12/06/01
METHANOL VCP	1	16/07/01
ORGANIC DISTILLATE EX STAGE 1: OCTANOL / <2% OCTYL BROMIDE / OCTYL ETHER	1	22/07/99
AQUEOUS WASTE EX. STAGE 1: SODIUM OCTYL SULPHONATE / SODIUM SULPHITE / TBAB / SODIUM BROMIDE	1	22/07/99
AQUEOUS WASTE EX STAGE 2: SODIUM CHLORIDE / PYRIDINE HYDROCHLORIDE / TRACE OSC / TRACE HEPTANE / HYDROGEN CHLORIDE / SULPHUR DIOXIDE	1	22/07/99
OSC (STAGE 1 PRODUCT) WATER WET (APPROX 2.5%) FLOORSWEEPS	1	01/09/99
VAC TANK LIQUORS	1	22/09/99
CARBON CAKE	1	22/09/99
CONTAMINATED WITH MBM, HEPTANE	1	08/00
MEK DISTILLATE	1	25/02/00
AQUEOUS WASTE EX STAGE 1	1	12/05/00
METHANOL VCP EX STAGE 2	1	02/06/00
DISTILLATION RESIDUES EX STAGE 3	1	02/06/00
METHANOL VCP EX STAGE 1	1	08/06/00
ABSORBER LIQUORS	1	08/06/00
PHOSPHOROUS ACID LAYER	1	11/06/01
RESIDUES	1	11/06/01
SULPHURIC ACID	1	11/06/01
ACETONE VCP	1	11/06/01
CAUSTIC WASH	1	11/06/01
METHANOL VCP	1	16/07/01
DISTILLATION RESIDUES	1	20/11/01
PHOSPHOROUS ACID LAYER	1	20/11/01
SULPHURIC ACID WASTE	1	20/11/01
ACETONE VCP	1	20/11/01
CAUSTIC WASH	1	20/11/01
DISTILLATE (METHYLACETATE ROUTE): 47% METHANOL 3% METHYL ACETATE 50% WATER	1	17/03/98
FLOOR SWEEPINGS	1	17/10/01
WASTE SOLIDS	1	27/11/01
ISOPROPANOL / WATER DISTILLATE	1	22/04/98
REWORK: ISOPROPANOL / WATER DISTILLATE	1	30/01/98
PYRIDINE HYDROBROMIDE SOLN. REWORK MOTHER LIQUORS	1	05/03/97

PYRIDINE HYDROBROMIDE - AQUEOUS DISTILLATE	1	05/03/97
AQUEOUS WASTE EX SALICYLANILIDE	1	22/09/97
AQUEOUS WASTE EX RECOVERED CHLOROBENZENE	2	20/07/98
FLOOR SWEEPS	1	15/10/97
METHANOL VCP	1	04/05/00
AQUEOUS SODIUM THIOCYANATE CONTAMINATED	1	21/03/97
SCRUBBER LIQUORS: 21% AMMONIUM SULPHATE 1% SULPHURIC ACID 70% WATER	1	18/02/98
FLOOR SWEEPS:80% SODIUM CYANATE 20% SODIUM CARBONATE TRACE UREA	1	02/03/98
VAC PUMP SEAL LIQUORS:95% WATER 2% AMMONIA 3% SODIUM CYANATE	1	03/03/98
45% SODIUM CYANATE 45% SODIUM CARBONATE 5% AMMONIA 5% WATER	1	24/04/98
ALKALINE AQUEOUS INTERFACE FROM STAGE 2 1.5% POTASSIUM BICARBONATE 6% POTASSIUM CHLORIDE 50% TOLUENE	2	23/07/98
60% ETHYL METHYLACRYLATE 40% TOLUENE <5% TRIETHYLAMINE	1	18/05/98
SOLVENTS, MIXED, DISTILLED 40% ETHANOL 40% WATER 20% ETHYL ACETATE 1% HCl	1	18/05/98
ACIDIC AQUEOUS WASTE FROM STAGE 1: 12% HYDROCHLORIC ACID 7% SODIUM CHLORIDE <0.5% ETHANOL <0.1% TOLUENE	3	27/07/98
ABSORBER AND SCRUBBER WASTE:<7% SODIUM HYDROXIDE <7% SODIUM BICARBONATE	3	27/08/98
ALKALINE AQUEOUS WASTE:3% POTASSIUM BICARBONATE 13% POTASSIUM CHLORIDE <0.1% TOLUENE	1	23/07/98
CONTAMINATED SPILLAGE SWABS	1	21/09/98
SCRUBBER LIQUORS: 21% AMMONIUM SULPHATE 1% SULPHURIC ACID 70% WATER 6.2% TOLUENE 2.8% SAFENER HOE 107892 1% POTASSIUM CHLORIDE <1% POTASSIUM BICARBONATE	1	09/12/98
RECOVERED WATER:0.5% ETHYLMETHACRYLATE 2.5% TRIETHYLAMINE	1	21/06/99
80% TOLUENE 20% ETHYL METHACRYLATE	1	17/08/99
AQUEOUS POTASSIUM BICARBONATE SOLN (TRACE SAFENER/TOLUENE)	1	11/09/99
VCP - TOLUENE / METHANOL/ STAGE 1 SAFENER	1	17/09/99
VCP(TOLUENE, SAFENER, POTASSIUM BICARBONATE)	1	10/10/00
<30% SODIUM BROMIDE <30% SODIUM THIOCYANATE	1	30/11/98
<2% BUTYRIC ACID <2% HYDROBROMIC ACID <1% ORGANICS	1	23/12/98
SILICA / TUNGSTIC ACID:HYDROCHLORIC ACID	1	16/08/99
AQUEOUS ACIDIC WASTE:13% HYDROCHLORIC ACID 10% SODIUM CHLORIDE 5% t-BUTYL METHYL ETHER	1	16/08/99
RECOVERED t-BUTYL METHYL ETHER	1	22/02/00
SILIPORITE MOLECULAR SIEVE (SPENT)	1	22/06/01
(TBAN) FLOOR SWEEPS	1	17/07/97
WATER WASH CONTAINS TBAN SOLIDS ~ 10%	1	10/11/97
FILTRATE ex TRIBROMOBENZENE	1	20/06/97
METHANOL/TOLUENE DISTILLATE ex TRIBROMOBENZENE	1	20/06/97
METHANOL/TOLUENE/WATER DISTILLATE ex TRIBROMOBENZENE	1	20/06/97
WATER WASH ex TRIBROMOBENZENE	1	20/06/97
METHANOL WASH LIQUORS ex TRIBROMOBENZENE	1	20/06/97
LINERS AND FLOOR SWEEPS FROM DAMP AND DRY STAGES ex TRIBROMOBENZENE	1	23/06/97
SCRUBBER LIQUORS	1	15/07/97
SCRUBBER LIQUORS ex TRIBROMOBENZENE	1	23/06/97
TOLUENE CONTAMINATED WITH TRACE AMOUNTS OF TBB	1	17/07/97
FILTRATES EX TRIBROMOBENZENE	1	20/06/97
METHANOL WET	1	12/03/98
60% METHANOL 20% WATER 5% TRIBROMOBENZENE	1	22/04/98
TBB METHANOL WET	1	31/03/00
VESSEL CLEANDOWN LIQUORS EX VESSEL CLEANDOWN	1	08/10/97
CONTAMINATED - EX. ABSOLUTE FILTER	1	11/12/98
DISTILLATE EX TCA	1	07/10/97
AQUEOUS WASTE (CONTAINS METHANOL)	1	13/09/99
DISTILLATION RESIDUE EX TCA	1	13/09/99
ABSORBER WASTE	1	11/10/99
AQUEOUS WASH	1	20/02/97
ACIDIC ALUMINIUM WASTE	1	20/02/97

CLEAN DOWN MATERIAL ex TUK FOR RECYCLING	2	13/03/97
ACETONE VCP	1	15/03/02
FLOOR SWEEPS	1	11/01/99
NOMINALLY EMPTY BAGS	1	11/01/99
AQUEOUS WASTE STREAM:0.5% TAHT / 1.5% ACETIC ACID 0.5% ACRYLONITRILE 1% AMMONIUM SULPHATE 95% WATER	1	12/01/99
PARAFORMALDEHYDE / TAHT / SULPHURIC ACID / ACETIC ACID / POSSIBLE <1% CHLOROPROPIONITRILE / TRACE HCl / SO2	1	27/01/99
REACTION MIXTURE AFTER NEUTRALISATION	1	01/06/99
METHANOL (VESSEL CLEANING) 1% MAX. THAT	1	03/06/99
95-99% METHANOL 1-5% METHYLCYCLOHEXANE	1	03/06/99
ACRYLONITRILE CONTAMINATED WITH HYDROGEN CHLORIDE (1% MAX)	1	03/06/99
METHYLCYCLOHEXANE CONTAMINATED WITH 1% MAX. ACETONE 1% MAX. WATER	1	03/06/99
EX. PLANT CLEANDOWN (CONT. UPTO 5% NITRIC ACID AND UPTO 5% TAHT)	1	03/06/99
ACETONE/WATER CLEANDOWN	1	07/06/99
WATER BOIL OUT: □ 5% TAHT	1	22/06/99
HCL <20% CONTAINS TAHT POLYMERS	1	29/07/99
AQUEOUS WASTE (nPB trial)	1	02/11/00
SOLVENT STREAM	1	07/12/00
VACUUM TANK LIQUORS	1	01/02/01
INTERMEDIATE WASTE	1	01/08/01
METHYLCYCLOHEXANE/ACRYLONITRILE WASTE	1	01/08/01
SODIUM CARBONATE WASH EX N-PROPYL BROMIDE RECOVERY	1	11/02/02
WATER DISTILLATE EX N-PROPYL BROMIDE RECOVERY	1	11/02/02
DISTILLATION RESIDUES EX N-PROPYL BROMIDE RECOVERY	1	11/02/02
AQUEOUS DISTILLATE CONTAINS □ 1% HCl	1	15/04/99
SCRUBBER WASTE CONTAINS □ 1% HCl	1	15/04/99
SAND / WATER EX VULNAX PLANT CLEANDOWN	1	17/07/97
FC4011 FLOOR SWEEPS FOR RETURN	1	18/06/97
FC4011 CONTAMINATED COMSUMABLES FOR RETURN	1	18/06/97
FC4001 FLOOR SWEEPS FOR RETURN	1	18/06/97
FC4001 CONTAMINATED COMSUMABLES	1	18/06/97
FC4011 FLOOR SWEEPS FOR RETURN	1	18/06/97
FC4011 CONTAMINATED COMSUMABLES FOR RETURN	1	18/06/97
FC4001 FLOOR SWEEPS FOR RETURN	1	18/06/97
FC4001 CONTAMINATED COMSUMABLES	1	18/06/97
ZINC OXIDE / UREA DISSOLVED IN 8-9% AMMONIA SOLUTION ex GENIPLEX	1	28/07/97
SOLID ZINC OXIDE / UREA MIXTURE ex GENIPLEX		
SULPHURIC ACID SCRUBBER LIQUORS ex GENIPLEX		
WASTE AMMONIA LIQUORS	1	20/02/97
NOMINALLY EMPTY	1	05/02/99
FLOOR SWEEPS	1	05/02/99
CONTAMINATED FILTER SOCKS	1	05/02/99
CONTAMINATED CLEANING MATERIALS	1	05/02/99
PROCESS DISTILLATE	1	05/02/99
VACUUM SEAL FLUSH LIQUORS	1	05/02/99
□ 60% ACETONE / □ 40 % ICIA5504	1	18/02/99
□ 85% TOLUENE / □ 15% ICIA5504	1	18/02/99

CONTRACT CHEMICALS KNOWSLEY INTERNAL MATERIAL SAFETY DATA SHEET INDEX

RAW MATERIALS

RAW MATERIALS CODE NUMBER	CHEMICAL COMPOUND	ISSUE NO	DATE
CCK/RM/HS/001A	ACETONE	004	27/05/02
CCK/RM/HS/002A	ALUMINIUM TRI ISOPROPOXIDE	001	18/12/89
CCK/RM/HS/003A	AMMONIA SOLN 32-34%	003	22/09/97
CCK/RM/HS/004A	ACETIC ANHYDRIDE	003	01/11/01
CCK/RM/HS/005A	ACRYLAMIDE 50 %	003	06/02/95
CCK/RM/HS/006A	AMINOPHENOL	001	25/03/97
CCK/RM/HS/007A	ARMEEN 12 D	001	18/12/89
CCK/RM/HS/008A	ACETONITRILE	003	28/04/02
CCK/RM/HS/009A	ACETYL CHLORIDE	001	18/12/89
CCK/RM/HS/010A	ACETIC ACID	007	26/03/01
CCK/RM/HS/011A	ALUMINA TRIHYDRATE	001	18/12/89
CCK/RM/HS/012A	ALLYLAMINE	001	18/12/89
CCK/RM/HS/013A	AEROSOL OS	001	18/12/89
CCK/RM/HS/014A	A C AMINE	001	18/12/89
CCK/RM/HS/015A	ARKONPON T	001	18/12/89
CCK/RM/HS/016A	ANTIFOAM RD EMULSION	002	15/02/02
CCK/RM/HS/017A	ALUMINIUM CHLORIDE ANHYDROUS	002	05/11/96
CCK/RM/HS/018A	ALUMINIUM OXIDE	001	18/12/90
CCK/RM/HS/019A	ALUMINIUM TRIHYDRATE	001	18/12/90
CCK/RM/HS/020A	ANTHRACENE	001	01/03/90
CCK/RM/HS/021A	AMMONIUM THIOCYANATE	001	21/02/94
CCK/RM/HS/022A	AMMONIA ANHYDROUS 99 %	001	17/03/94
CCK/RM/HS/023A	ANILINE	002	05/09/01
CCK/RM/HS/024A	AMMONIUM PERSULPHATE	001	19/03/90
CCK/RM/HS/025A	ALPHA METHYL STYRENE	001	19/03/90
CCK/RM/HS/026A	ALUMINIUM TRIHYDROXIDE	001	08/05/90
CCK/RM/HS/027A	ACETYLENE	002	05/09/01
CCK/RM/HS/028A	ARGOSHIELD	001	17/09/90
CCK/RM/HS/029A	AMMONIUM CHLORIDE	002	25/02/91
CCK/RM/HS/030A	ACRYLONITRILE	002	08/01/99
CCK/RM/HS/031A	ANILINE HYDROCHLORIDE	001	25/02/91
CCK/RM/HS/032A	AMMONIA GAS	001	23/08/99
CCK/RM/HS/033A	AMYL ALCOHOL	001	10/03/92
CCK/RM/HS/034A	ALLYL CHLORIDE	002	03/04/02
CCK/RM/HS/035A	ACETYL ACETONE	001	10/06/96
CCK/RM/HS/036A	AMP 95	001	10/10/96
CCK/RM/HS/037A	ACTIVATED ALUMINA	001	15/11/96
CCK/RM/HS/038A	AMINOETHYLETHANOLAMINE	004	18/10/02
CCK/RM/HS/039A	ACROLEIN	001*	30/09/97
CCK/RM/HS/040A	AEROSOL AY65 PREMIX	002	12/01/00
CCK/RM/HS/041A	ALLYL PHENYL ETHER	001	10/05/00
CCK/RM/HS/042A	ALLYL GLYCIDYL ETHER	001	16/03/01
CCK/RM/HS/043A	ACTIVATED CALCIUM MONTMORILLONITE (FULCAT 22b)	001	13/11/01
CCK/RM/HS/044A	ACETYL BROMIDE	001	26/11/01
CCK/RM/HS/045A	ALCOHOL ETHOXYLATE	001	23/09/02
CCK/RM/HS/046A	ACETALDEHYDE	001	18/10/02

Grey text = 'Dead RM' not ordered for production use 2000-2001.

CCK/RM/HS/001B	BENAZOLIN ETHYL ESTER	001	18/12/89
CCK/RM/HS/002B	P- BENZOQUINONE	001	18/12/89
CCK/RM/HS/003B	BENDIOCARB	001	18/12/89
CCK/RM/HS/004B	BENZYL CHLORIDE	003	25/01/00
CCK/RM/HS/005B	BENZENE	003	06/02/95
CCK/RM/HS/006B	BARIUM HYDROXIDE OCTAHYDRATE	001	18/12/89
CCK/RM/HS/007B	BIPHENYL	001	15/03/90
CCK/RM/HS/008B	BENZOPHENONE HYDRAZONE 96 %	001	28/03/90
CCK/RM/HS/009B	BENZOYL CHLORIDE	001	05/07/90
CCK/RM/HS/010B	BAYLUBE G1001	001	18/01/91
CCK/RM/HS/011B	BELITE M 8	002	17/06/91
CCK/RM/HS/012B	BENTONITE	001	30/04/91
CCK/RM/HS/013B	BROMOCHLOROPROPANE	001	04/12/91
CCK/RM/HS/014B	BENZOIC ACID 99 %	002	20/08/92
CCK/RM/HS/015B	BENZYL THIOCYANATE	002	20/08/92
CCK/RM/HS/016B	BIBENZYL 99 % (1,2- DIPHENYLETHANE)	001	13/04/92
CCK/RM/HS/017B	BATTERY ACID (use 36S 10-70 H2SO4)	002	03/04/02
CCK/RM/HS/018B	BROMOETHANE	001	16/11/92
CCK/RM/HS/019B	BENTOLITE	001	04/03/93
CCK/RM/HS/020B	n- BUTANOL	004	19/08/02
CCK/RM/HS/021B	BENZENE SULPHONIC ACID	001	17/03/94
CCK/RM/HS/022B	Iso BUTANOL	002	17/01/02
CCK/RM/HS/023B	BHT	001	12/07/94
CCK/RM/HS/024B	BUTYL BROMIDE	001	25/10/94
CCK/RM/HS/025B	BIOGALACTOSIDASE	001	07/04/95
CCK/RM/HS/026B	BENZYL CYANIDE	001	17/05/95
CCK/RM/HS/027B	BIOCELLULASE	001	13/02/97
CCK/RM/HS/028B	t BUTANOL	002	24/07/01
CCK/RM/HS/029B	BROMOACETYL BROMIDE	001	13/11/97
CCK/RM/HS/030B	BELLASOL 530	001	04/12/97
CCK/RM/HS/031B	BARIUM CARBONATE	001	22/04/98
CCK/RM/HS/032B	t BUTYL HYDROQUINONE	001	08/01/99
CCK/RM/HS/033B	BROMINE	002	10/06/02
CCK/RM/HS/034B	BIS (CHLOROETHYL) ETHER	001	08/02/00
CCK/RM/HS/035B	1-BROMO-3-CHLOROPROPANE	001	21/02/00
CCK/RM/HS/036B	4- BROMOBENZYL BROMIDE (DCM) DAMP	001	14/06/00
CCK/RM/HS/037B	4-BROMOTOLUENE	002	19/08/02
CCK/RM/HS/037Ba	4-BROMOTOLUENE (50%) IN DICHLOROMETHANE	001	03/07/01
CCK/RM/HS/038B	BENZYL BLOCKED ACID INTERMEDIATE	001	06/11/00
CCK/RM/HS/039B	BROMOPROPANE (N-PROPYL BROMIDE)	002	15/10/02
CCK/RM/HS/040B	BENZYL ALCOHOL	001	10/11/00
CCK/RM/HS/041B	BEZOYL PEROXIDE	001	02/07/01
CCK/RM/HS/041Ba	BEZOYL PEROXIDE (up to 12%) in DICHLOROMETHANE	001	03/07/01
CCK/RM/HS/042B	N BUTYRIC ACID	001	02/07/01
CCK/RM/HS/043B	N BUTANOIC ANHYDRIDE	002	08/03/02
CCK/RM/HS/044B	2 BROMOBUTYRIC (ABBA)	001	02/07/01
CCK/RM/HS/045B	2 BROMO-2-METHYLPROPIONYL BROMIDE	001	12/07/01
CCK/RM/HS/046B	BUTYL ALCOHOL- BUTANOL (se 20B)	001	13/11/01
CCK/RM/HS/047B	BORIC ACID	001	22/01/02
CCK/RM/HS/048B	2-BROMOPROPIONIC ACID	001	28/10/02
CCK/RM/HS/049B	BORON TRIFLUORIDE ACETIC ACID	001	04/11/02
CCK/RM/HS/001C	CHEMICAL 'X'	001	18/12/89

Grey text = 'Dead RM' not ordered for production use 2000-2001.

CCK/RM/HS/002C	CELITE (use filter aid- 003F)	003	09/08/01
CCK/RM/HS/003C	CAUSTIC SODA (FLAKE)	005	17/07/97
CCK/RM/HS/004C	CARBON (ACTIVATED)	004	03/04/02
CCK/RM/HS/005C	CHLOROETHYL DIETHYL AMMONIUM CHLORIDE	001	18/12/89
CCK/RM/HS/006C	CHLOROBENZENE	002	25/11/97
CCK/RM/HS/007C	CHLOROFORM	001	18/12/89
CCK/RM/HS/008C	CHLORINE	001	18/12/89
CCK/RM/HS/009C	COPPER (1) CHLORIDE	001	18/12/89
CCK/RM/HS/010C	2- CHLORO BENZALDEHYDE	001	18/12/89
CCK/RM/HS/011C	CHLOROACETYL CHLORIDE	001	19/03/90
CCK/RM/HS/012C	CAUSTIC SODA (LIQUOR)- use sodium hydroxide in future!	005	25/05/01
CCK/RM/HS/013C	CYCLOHEXANE	001	25/02/91
CCK/RM/HS/014C	2- CHLOROBENZOIC ACID	001	08/04/91
CCK/RM/HS/015C	CARLTON HEAVY FUEL OIL	001	19/05/92
CCK/RM/HS/016C	CHLOROBENZOYL CHLORIDE	002	25/10/93
CCK/RM/HS/017C	CALCIUM HYPOCHLORITE	001	28/06/93
CCK/RM/HS/018C	CHLOROBENZO TRIAZOLE	001	04/03/94
CCK/RM/HS/019C	COPPER THIOCYANATE (DAMP CAKE)	001	24/03/94
CCK/RM/HS/020C	CITRIC ACID	001	12/07/94
CCK/RM/HS/021C	CALCIUM HYDROXIDE	002	10/06/02
CCK/RM/HS/022C	CAUSTIC POTASH LIQUORS 48-50%	001	05/11/98
CCK/RM/HS/023C	CAUSTIC POTASH LIQUOR 5 - 50 %	001	07/11/96
CCK/RM/HS/024C	COPPER SULPHATE	002	14/01/00
CCK/RM/HS/025C	COPPER SULPHATE PENTAHYDRATE	001	18/03/98
CCK/RM/HS/026C	CYCLOHEXANOL	001	12/05/99
CCK/RM/HS/027C	CARBOXYLIC 954 DRY	001	28/09/99
CCK/RM/HS/028C	CAPRYLIC ACID (USE 21H IN FUTURE!)	001	06/02/00
CCK/RM/HS/029C	CHEMICAL 907 (INTERMEDIATE)	001	07/02/00
CCK/RM/HS/030C	CETYL BROMIDE	001	02/05/00
CCK/RM/HS/031C	CETYL ALCOHOL	001	09/08/01
CCK/RM/HS/032C	CYAUNURIC CHLORIDE	002	16/10/02
CCK/RM/HS/033C	CHOLINE CHLORIDE 70% SOLUTION	001	12/04/02
CCK/RM/HS/001D	DOBANOL	001	18/12/89
CCK/RM/HS/002D	DIETHYL HYDROXYLAMINE	001	18/12/89
CCK/RM/HS/003D	DIPHENYL SULPHONE	001	18/12/89
CCK/RM/HS/004D	DIETHYLSULPHITE PTCL	001	18/12/89
CCK/RM/HS/005D	2,4-DICHLOROANILINE	002	02/03/01
CCK/RM/HS/006D	DIMETHYL CARBONATE	001	18/12/89
CCK/RM/HS/007D	DODECANETHIOL	002	11/01/95
CCK/RM/HS/008D	DIBROMETHANE	001	18/12/89
CCK/RM/HS/009D	4- DIETHYLAMINO BENZALDEHYDE	002	30/03/92
CCK/RM/HS/010D	DISSOLVAN	001	09/07/98
CCK/RM/HS/011D	DIPHENYL	002	28/03/01
CCK/RM/HS/012D	DIMETHYL FORMAMIDE	002	06/11/00
CCK/RM/HS/013D	DICHLOROMETHANE	003	04/01/02
CCK/RM/HS/014D	DIMETHYL PHOSPHONATE	001	19/04/90
CCK/RM/HS/015D	DICHLOROBIS (DIETHYL SULPHIDE)	001	09/10/90
CCK/RM/HS/016D	DOBANOL 25- 7	001	20/10/90
CCK/RM/HS/017D	DOBANOL 23- 6.5	001	20/10/90
CCK/RM/HS/018D	DIPHENYL OXIDE	001	15/01/91
CCK/RM/HS/019D	DISOBUTYLENE	001	15/01/91
CCK/RM/HS/020D	4,4'- DIAMINO DIPHENYL METHANE	001	18/01/91
CCK/RM/HS/021D	DIPHENYL MITHANE	001	25/02/91
CCK/RM/HS/022D	DIMETHYL SULPHATE	001	25/03/91

CCK/RM/HS/023D	DYNASIL P	001	29/04/91
CCK/RM/HS/024D	DOBANIC ACID	001	05/07/91
CCK/RM/HS/025D	1,3- DICHLOROBENZENE 98 %	001	04/10/91
CCK/RM/HS/026D	1,3- DIAMINOPROPANE	003	18/10/02
CCK/RM/HS/027D	N,N DI-ISOPROPYLETHYLAMINE		
CCK/RM/HS/028D	DISOPROPYL FLUOROPHOSPHATE	001	15/07/92
CCK/RM/HS/029D	DIMETHYL AMINE 60 %	004	15/10/02
CCK/RM/HS/030D	4,4'- DIAMINO DIPHENYLMETHANE	003	20/05/93
CCK/RM/HS/031D	2,4- DICHLOROACETOPHENONE (CRUDE)	001	07/09/93
CCK/RM/HS/032D	DIETHYL ACECTIC ACID	001	30/09/93
CCK/RM/HS/033D	DIETHYLAMINE	002	01/11/01
CCK/RM/HS/034D	DIETHYL ETHANOLAMINE	003	14/02/02
CCK/RM/HS/035D	DICYANOHEXANE	001	28/01/94
CCK/RM/HS/036D	DIMER 1017	001	06/08/93
CCK/RM/HS/037D	DOWTHERM	002	25/03/94
CCK/RM/HS/038D	DIMETHYLETHANOLAMINE	003	14/02/02
CCK/RM/HS/039D	DIETHYLENETRIAMINE	003	22/10/99
CCK/RM/HS/040D	DIETHANOLAMINE	004	14/02/02
CCK/RM/HS/041D	DIMER 1022	001	
CCK/RM/HS/042D	DICHAN	002	12/11/96
CCK/RM/HS/043D	N,N-DIMETHYLGLYCINE Hcl SOLN.	001	25/09/95
CCK/RM/HS/044D	DIETHANOLAMINE HYDROCHLORIDE	001*	
CCK/RM/HS/045D	DIBROMONEOPENTYL GLYCOL	001	02/04/96
CCK/RM/HS/046D	DIISOPROPYLAMINE	002	20/01/00
CCK/RM/HS/047D	DIETHYL SULPHATE	002	20/01/00
CCK/RM/HS/048D	DICHLORODIPHENYL SULPHONE	001	25/03/97
CCK/RM/HS/049D	4-4-DIHYDROXYDIPHENYL SULPHONE	001	25/03/97
CCK/RM/HS/050D	1,4-DIHYDROXYBENZENE	001	25/03/97
CCK/RM/HS/051D	DIMETHYLAMINOPROPYLAMINE	003	03/09/02
CCK/RM/HS/052D	N,N DIMETHYLANILINE	001	13/11/97
CCK/RM/HS/053D	DICHLOROHEXYLAMINE	001	15/01/00
CCK/RM/HS/054D	DI-N-BUTYLAMINE	003	16/10/02
CCK/RM/HS/055D	DICYANDIAMIDE	002	10/06/02
CCK/RM/HS/056D	DMAPMA	001	
CCK/RM/HS/057D	2,4-DI-TERT-ALLYLPHENOL	00	31/05/00
CCK/RM/HS/058D	2-(2,4-DI-T-AMYLPHENOXY)HEXANOIC ACID (DAPHA)	001	23/06/00
CCK/RM/HS/059D	DIPHENYLAMINE	001	13/01/01
CCK/RM/HS/060D	nn-DIMETHYLPROPANE-1-3-DIAMINE (Jeffcat zr)	002	18/12/01
CCK/RM/HS/061D	1-4-DICHLOROBUTANE	001	16/03/01
CCK/RM/HS/062D	DECYL ALCOHOL	001	10/08/01
CCK/RM/HS/063D	WET BROMOSUCCINIC ACID	001	27/11/01
CCK/RM/HS/064D	14 DIBROMOBUTANE	001	20/08/02
CCK/RM/HS/065D	DIETHYLENE GLYCOL	001	29/10/02
CCK/RM/HS/066D	DIPROPYLENE GLYCOL SOLUTION (AQUEOUS)(20%), 1,2-BENZISOTHIAZOLIN-3-ONE, SODIUM SALT. (DPG SOLUTION OF BIT)	001	29/10/02
CCK/RM/HS/001E	ETHOFUMESATE	001	18/12/89
CCK/RM/HS/002E	ETHYLENE GLYCOL	005	31/07/02
CCK/RM/HS/003E	ETHANESULPHONYL CHLORIDE	001	18/12/89
CCK/RM/HS/004E	2- ETHYLHEXANOIC ACID	010	19/08/02
CCK/RM/HS 005E	ETHYLENE DICHLORIDE	001	18/12/89
CCK/RM/HS/006E	EPICHLOROHYDRIN	006	03/04/02

CCK/RM/HS/007E	ETHYL ACETATE	003	01/11/01
CCK/RM/HS/008E	ENAMINE	001	18/12/89
CCK/RM/HS/009E	ETHANOL/ETHYL ALCOHOL	004	26/03/01
CCK/RM/HS/010E	ETIDRONIC ACID	001	30/04/90
CCK/RM/HS/011E	ELVAX RESIN	001	27/05/90
CCK/RM/HS/012E	ETHYLENE(ETHENE)	001	17/09/90
CCK/RM/HS/013E	ETHYL MAGNESIUM BROMIDE	001	16/11/92
CCK/RM/HS/014E	EPZG	002	19/05/94
CCK/RM/HS/015E	ELTESOL PTSA	001	18/08/93
CCK/RM/HS/016E	ETHANOLAMINE	001	17/03/94
CCK/RM/HS/017E	ESTOL 1501	001	25/04/94
CCK/RM/HS/018E	ETHYL BROMIDE	001*	24/06/94
CCK/RM/HS/019E	EPIC	001	18/01/95
CCK/RM/HS/020E	ETHYL 2-CHLOROACETOACETATE	002	10/06/02
CCK/RM/HS/021E	ETHYL METHACRYLATE	002	26/02/01
CCK/RM/HS/022E	EPZG (METHANOL DAMP)	001	18/05/99
CCK/RM/HS/023E	ETHYL-2-BROMOTETRADECANOATE	001	02/11/99
CCK/RM/HS/024E	EHTYLENE DIAMINE	001	18/01/00
CCK/RM/HS/025E	2-EHOXYETHANOL	001	02/05/00
CCK/RM/HS/026E			
CCK/RM/HS/027E			
CCK/RM/HS/001F	FORMALIN	001	18/12/89
CCK/RM/HS/002F	FCIMC CHLORIDE	001	18/12/89
CCK/RM/HS/003F	FILTER AID	002	09/08/01
CCK/RM/HS/004F	FURURAL	001	18/12/89
CCK/RM/HS/005F	FORMIC ACID	003	10/05/02
CCK/RM/HS/006F	FC 4001 PASTE	001	24/08/94
CCK/RM/HS/007F	FULMONT 237	001	26/07/93
CCK/RM/HS/008F	FORMANILIDE	001	05/10/94
CCK/RM/HS/009F	FORMALDEHYDE 28-40 % SOLN	001	22/07/96
CCK/RM/HS/010F	FERRIC CHLORIDE	002	10/06/02
CCK/RM/HS/011F	FURAN	002	04/03/02
CCK/RM/HS/012F	FULCAT 22b	001	13/11/01
CCK/RM/HS/013F	FUMARIC ACID	002	31/10/02
CCK/RM/HS/014F			
CCK/RM/HS/001G	GLYCERINE	001	18/12/89
CCK/RM/HS/002G	GLACIAL ACETIC ACID	002	14/05/02
CCK/RM/HS/003G	GLYOXYLIC ACID	001	04/03/91
CCK/RM/HS/004G	GMCH	002	06/12/96
CCK/RM/HS/005G	GUAR GUM	002	26/03/01
CCK/RM/HS/006G	GUANOZOLE (DAMP)	001	22/06/95
CCK/RM/HS/007G	GOLPANOL BOZ	003	19/08/02
CCK/RM/HS/008G	GOLPANOL PA	005	02/09/03
CCK/RM/HS/009G	GUAIACOL	001	12/06/00
CCK/RM/HS/010G	GLYCEROL	001	29/10/02
CCK/RM/HS/001H	HEXANE	003	08/01/02

CCK/RM/HS/002H	HYDRAZINE HYDRATE	003	10/06/02
CCK/RM/HS/003H	HYDROGEN PEROXIDE	003	27/11/01
CCK/RM/HS/004H	HEAVY BOILER OIL	001	18/12/89
CCK/RM/HS/005H	HIMIC ANHYDRIDE	001	19/03/90
CCK/RM/HS/006H	HYDROCHLORIC ACID	009	26/02/01
CCK/RM/HS/007H	HEXAMINE	002	05/11/95
CCK/RM/HS/008H	HEXYL ALCOHOL (hexanol)	002	13/11/01
CCK/RM/HS/009H	HEAT TRANSFER FLUID	001	28/07/93
CCK/RM/HS/010H	HYPOPHOSPHOROUS ACID	001	18/08/93
CCK/RM/HS/011H	HYDROQUINONE(4METHOXYPHENOL)	002	26/02/01
CCK/RM/HS/012H	HUNIGS BASE	001	13/07/92
CCK/RM/HS/013H	HEPTANE	002	09/12/98
CCK/RM/HS/014H	HYDROS	001	21/08/96
CCK/RM/HS/015H	HYDROBROMIC ACID	003	19/08/02
CCK/RM/HS/016H	HOE 16400(SAFENER INTERMEDIATE)	002	08/09/98
CCK/RM/HS/017H	HEXAMETHYLLIMINEDIAMINE	001	02/02/00
CCK/RM/HS/018H	HOMBE	001	23/10/00
CCK/RM/HS/019H	HYDROBROMIC ACID (CONTAINING UPTO 5% BROMINE)	001	10/11/00
CCK/RM/HS/020H	HYDROGEN CHLORIDE (ANHYDROUS)	001	13/01/01
CCK/RM/HS/021H	HEXANOIC ACID (CAPROIC ACID)	001	01/08/01
CCK/RM/HS/022H	HEPTANOL (HEPTYL ALCOHOL)	001	19/09/01
CCK/RM/HS/023H	HEXYANOL (see 008H)	001	13/11/01
CCK/RM/HS/024H	2 HYDROXYETHANESULPHONIC ACID SODIUM SALT (NA ISETHIONATE SOLID)	001	27/07/02
CCK/RM/HS/001I	ISOBUTANOL (USE 22b)	Na	na
CCK/RM/HS/002I	ISOPROPANOL	003	16/01/02
CCK/RM/HS/003I	IMS (methylated spirits)	003	15/01/02
CCK/RM/HS/004I	ISOPROPOLYMYRISTATE	002	21/01/92
CCK/RM/HS/005I	ISOPROPYL ALCOHOL (use 002I in future!)	003	16/01/02
CCK/RM/HS/006I	ISOOCETANOL	001	12/08/94
CCK/RM/HS/007I	ITC 509	001	28/07/93
CCK/RM/HS/008I	IMIDAZOLE (LUGALVAN IM7)	003	03/09/02
CCK/RM/HS/009I	ICIA5504 – ZENECA	001*	05/02/99
CCK/RM/HS/010I	ISOBUTYRIC ACID	002	26/09/02
CCK/RM/HS/011I	ISOBUTYRIC ANHYDRIDE	001	14/04/02
CCK/RM/HS/001K	KELZAN	001	19/12/89
CCK/RM/HS/002K	K 10 CATALYST	002	04/11/96
CCK/RM/HS/003K	KLENSORB	001	19/12/89
CCK/RM/HS/004K	KERESENE	001	21/05/02
CCK/RM/HS/005K			
CCK/RM/HS/001L	LONTREAL 35A	001	19/12/90
CCK/RM/HS/002L	LIGHT SODIUM CARBONATE	001	19/12/89
CCK/RM/HS/003L	LIMBUX LIME	002	22/07/89
CCK/RM/HS/004L	LITHIUM HYDROXIDE	001	28/06/93
CCK/RM/HS/005L	LACTIC ACID	001	19/12/89
CCK/RM/HS/006L	LITHIUM CARBONATE	001	28/06/93
CCK/RM/HS/007L	LAUROYL CHLORIDE	002	07/01/97
CCK/RM/HS/008L	LANOLIN ANHYDROUS	001	13/03/95

CCK/RM/HS/009L	LAURYL BROMIDE	001	06/02/00
CCK/RM/HS/010L	LAURYL ALCOHOL	001	25/05/01
CCK/RM/HS/011L			
CCK/RM/HS/001M	MONOLAN 8000/E80	001	19/12/89
CCK/RM/HS/002M	METHANE SULPHONYL CHLORIDE	001	19/12/89
CCK/RM/HS/003M	MONOPROPYLENE GLYCOL	002	01/11/01
CCK/RM/HS/004M	METHANOL	008	10/06/02
CCK/RM/HS/005M	MOMOCHLOROACETIC ACID	001	19/12/89
CCK/RM/HS/006M	MORPHOLINE	001	19/12/89
CCK/RM/HS/007M	METHYLENE CHLORIDE <i>use /013D</i>	004	04/01/02
CCK/RM/HS/008M	METHYL ETHYL KETONE	002	25/02/00
CCK/RM/HS/009M	METHYL CHLORIDE	002	10/12/99
CCK/RM/HS/010M	METHYLHYDROGEN POLYSILOXANE	001	06/03/90
CCK/RM/HS/011M	MONOCHLOROACETYL CHLORIDE	001	22/03/90
CCK/RM/HS/012M	2 -MERCAPTO BENZOTHIOZOLE	001	30/04/90
CCK/RM/HS/013M	4 - 4'METHYLENE DIANILINE	001	30/04/90
CCK/RM/HS/014M	MAGNESIUM SULPHATE	001	16/01/91
CCK/RM/HS/015M	METHYL ACETATE	003	08/03/02
CCK/RM/HS/016M	METHANE SULPHONIC ACID	004	03/04/02
CCK/RM/HS/017M	4 - METHYLMIZADOLE	001	16/11/92
CCK/RM/HS/018M	MAGNESIUM	001	19/12/89
CCK/RM/HS/019M	MON 18500 TECHNICAL (FLUPOXAM)	001	25/05/94
CCK/RM/HS/020M	MAGNESIUM PERCHLORATE HEXAHYDRATE	001	10/12/99
CCK/RM/HS/021M	MONOMER 7992	001*	24/10/94
CCK/RM/HS/022M	MANDELONITRILE	002	06/04/95
CCK/RM/HS/023M	MALEIC ANHYDRIDE	001	02/04/96
CCK/RM/HS/024M	MONO-TERTBUTYLHYDRQUINONE	001	02/04/96
CCK/RM/HS/025M	METHANOLIC/POTASSIUM HYDROXIDE 28 % SOLN	001	05/11/96
CCK/RM/HS/026M	METHYL ACETATE - METHANOL MIXTURE	001*	13/03/98
CCK/RM/HS/027M	METHYL PYRROLIDONE	001	29/06/98
CCK/RM/HS/028M	METHYLCYCLOHEXANE	001	08/01/99
CCK/RM/HS/029M	MYRISTIC ACID	002	10/06/02
CCK/RM/HS/030M	METHYL TERTIARY BUTYL ETHER	001	20/07/99
CCK/RM/HS/031M	4-METHOXYPHENOL	001	07/02/00
CCK/RM/HS/032M	METHYL-2-BROMOHEXANOATE	001	01/06/00
CCK/RM/HS/033M	METHYLTRICHLOROACETATE	001	04/09/00
CCK/RM/HS/034M	METHYL-2-BROMOLAURATE	001	06/11/00
CCK/RM/HS/035M	MYRISTYL ALCOHOL	001	27/07/01
CCK/RM/HS/036M	3- METHYLBUTANOL	002	19/08/02
CCK/RM/HS/037M	MONOMETHYLAMINE 40% SOLN.	001	10/09/01
CCK/RM/HS/038M	MATEXIL	001	
CCK/RM/HS/039M	3- METHOXYPROPYLAMINE	002	15/10/02
CCK/RM/HS/001N	NEOSYL POWDER LD	001	19/12/89
CCK/RM/HS/002N	NITRIC ACID	001	19/12/89
CCK/RM/HS/003N	NERVANAID DP	002	14/01/00
CCK/RM/HS/004N	NIA PAGIN M	001	19/12/89
CCK/RM/HS/005N	NIDASOL M	001	19/12/89
CCK/RM/HS/006N	NEOPENTYL GLYCOL	001	12/08/93
CCK/RM/HS/007N	NICOTINIC ACID	003	10/06/02
CCK/RM/HS/008N	NITROGEN	002	03/04/02
CCK/RM/HS/009N	4 - NDPA AQUEOUS ALKALI SOLn	002	25/03/97
CCK/RM/HS/010N	NERVANAID	001	18/03/98

CCK/RM/HS/011N	NAPHTHALENE CRYSTALS	001	22/07/96
CCK/RM/HS/012N	NTA (POWDER)	001	21/08/96
CCK/RM/HS/012N	4-NDPA IN TOLUENE	001	13/01/01
CCK/RM/HS/013N	4-NDPA SODIUM SALT SOLUTION	001	13/01/01
CCK/RM/HS/014N			
CCK/RM/HS/001O	OLEUM (FUMING)	002	02/08/93
CCK/RM/HS/002O	OXALYL CHLORIDE	001	19/12/89
CCK/RM/HS/003O	OXYGEN	001	17/09/90
CCK/RM/HS/004O	OCTADECYLAMINE	001	18/01/91
CCK/RM/HS/005O	ORTHOPHOSPHOROUS ACID	001	04/03/91
CCK/RM/HS/006O	OCTAPHEN	001	07/09/93
CCK/RM/HS/007O	ORTHONITROCHLORONITROBENZENE	002	10/05/02
CCK/RM/HS/008O	OCTANOL	001	07/07/99
CCK/RM/HS/009O	OCTYL BROMIDE	001	07/07/99
CCK/RM/HS/010O	OCTAPHEN (MEK WET)	001	25/02/00
CCK/RM/HS/011O	OLEYL ALCOHOL	001	31/10/02
CCK/RM/HS/001P	POLYFON H	001	19/12/89
CCK/RM/HS/002P	PLURONIC P75	001	19/12/89
CCK/RM/HS/003P	PP450 FILTRATES	001	19/12/89
CCK/RM/HS/004P	PLURONIC P103	001	19/12/89
CCK/RM/HS/005P	POTASSIUM HYDROXIDE 47% SOLN	002	18/03/98
CCK/RM/HS/006P	POTASSIUM CYANIDE	003	19/08/02
CCK/RM/HS/007P	PYRIDINE	002	30/07/01
CCK/RM/HS/008P	PROPYLENE OXIDE	002	07/10/99
CCK/RM/HS/009P	PHOSPHORIC ACID	003	10/06/02
CCK/RM/HS/010P	PHENOTHIAZINE	001	07/05/98
CCK/RM/HS/011P			
CCK/RM/HS/012P	POTASSIUM PERMANGENATE	001	19/12/89
CCK/RM/HS/013P	POLYGLYCOL E - 400	001	19/12/89
CCK/RM/HS/014P	PENTARYTHITOL	001	19/12/89
CCK/RM/HS/015P	PARA TOLUENE SULPHONIC ACID	004	08/01/02
CCK/RM/HS/016P	PALMITIC ACID	001	19/12/89
CCK/RM/HS/017P	PROPYLENE GLYCOL	002	23/07/93
CCK/RM/HS/018P	PHOSPHOROUS OXYCHLORIDE	001	06/03/90
CCK/RM/HS/019P	POTASIUUM HYDROQUININE MONOSULPHATE	001	06/03/90
CCK/RM/HS/020P	RED AMORPHOUS PHOSPHOROUS	003	13/08/02
CCK/RM/HS/021P	P - TERTIARY OCTYL PHENOL	001	16/03/90
CCK/RM/HS/022P	PHOSPHOROUS TRICHLORIDE	003	26/03/01
CCK/RM/HS/023P	PROPANE	001	17/09/90
CCK/RM/HS/024P	POLYCHECK 5079	001	10/10/90
CCK/RM/HS/025P	POTASSIUM CARBONATE	003	13/06/02
CCK/RM/HS/026P	P A FLUID	001	19/12/89
CCK/RM/HS/027P	PRISTERENE	001	12/07/91
CCK/RM/HS/028P	POTASSIUM ACETATE	002	15/01/02
CCK/RM/HS/029P	1,3 - PROPANEDIOL	001*	30/03/92
CCK/RM/HS/030P	1 - PROPANOL	003	19/08/02
CCK/RM/HS/031P	POLYETHYLENEGLYCOL (PEG/ Pluriol)	002	10/05/02
CCK/RM/HS/032P	POTASSIUM MONO HYDRO ORTHOPHOSPHATE	001	16/10/92
CCK/RM/HS/033P	POTASSIUM PHOSPHATE	001	18/11/92
CCK/RM/HS/034P	PERLITE FILTER AID	001	26/07/93

Last Updated : 26/09/02
Updated By :JCS

CCK/RM/HS/035P	PRIFAC 7920	001	28/07/93
CCK/RM/HS/036P	PRIFAC 7999	001	28/07/93
CCK/RM/HS/037P	PRIPOL 1017	001	06/08/93
CCK/RM/HS/038P	PRIOLENE 6900	001	30/03/94
CCK/RM/HS/039P	PRIOLENE	001	13/08/93
CCK/RM/HS/040P	PRISTERENE 4900	001	18/08/93
CCK/RM/HS/041P	POTASSIUM THIOCYANATE	002	27/07/02
CCK/RM/HS/042P	PLURONIC PE6200	001	01/11/93
CCK/RM/HS/043P	n – PROPANOL	002	19/09/01
CCK/RM/HS/044P	PROPIONITRILE	001	24/03/94
CCK/RM/HS/045P	PRIOLENE 6921	001	29/03/94
CCK/RM/HS/046P	PRIOLENE 6901	001	30/03/94
CCK/RM/HS/047P	PHTHALIC ANHYDRIDE	001	02/04/96
CCK/RM/HS/048P	PHENOL	001	21/08/96
CCK/RM/HS/049P	PARAFORMALDEHYDE	001	21/08/96
CCK/RM/HS/050P	PYRIDINE HYDROBROMIDE SOLN	001	10/10/96
CCK/RM/HS/051P	PROPIONYL CHLORIDE	001	05/11/96
CCK/RM/HS/052P	POTASSIUM HYDROXIDE SOLID / FLAKE	003	28/10/02
CCK/RM/HS/053P	PROPPANT SOLUTION(AEA)	001	04/12/97
CCK/RM/HS/054P	POTASSIUM ACETATE SOLN	001	13/03/98
CCK/RM/HS/055P	POTASSIUM HYDROGEN CARBONATE	002	02/03/01
CCK/RM/HS/056P	POTASSIUM IODATE SOLID	001	11/05/99
CCK/RM/HS/057P	POTASSIUM IODATE SOLUTION	001	17/05/99
CCK/RM/HS/058P	PZK 3070	001	06/10/99
CCK/RM/HS/059P	PZK 3070 DRY	001	06/10/99
CCK/RM/HS/060P	PLURONIC PE6800	001	19/01/00
CCK/RM/HS/061P	PREMIX THAT	001	30/05/00
CCK/RM/HS/062P	PENTANOL (PENTYL ALCOHOL)	001	19/11/01
CCK/RM/HS/063P	PROPIONIC ACID	001	11/02/02
CCK/RM/HS/064P	PERGAFAST 201 (METHANOL DAMP INTERMEDIATE)	001	12/07/02
CCK/RM/HS/065P	PENTYL BROMIDE	001	27/07/02
CCK/RM/HS/066P	PERGAFAST 201(CRUDE PRODUCT)	001	12/07/02
CCK/RM/HS/067P	RED PHOSPHOROUS /PHOSPHORIC ACID MIX	001	31/07/02
CCK/RM/HS/068P	PHTHALIMIDE	001	20/08/02
CCK/RM/HS/069P	PERMETHRIC ACID CHLORIDE	001	10/10/02
CCK/RM/HS/070P	POTASSIUM BROMIDE	001	17/10/02
CCK/RM/HS/001Q	Q.E.D. PLUS 1B	001	31/05/91
CCK/RM/HS/002Q			
CCK/RM/HS/003Q			
CCK/RM/HS/001R	REOFLAM DMMP	001	19/12/89
CCK/RM/HS/002R	RAISACAT	001	10/10/90
CCK/RM/HS/003R	RADIACID STEARIC	001	24/06/91
CCK/RM/HS/004R	REXPONOL ACID – DAMP	001	20/10/95
CCK/RM/HS/005R	RNG 954	001	06/10/99
CCK/RM/HS/006R			
CCK/RM/HS/007R			
CCK/RM/HS/008R			
CCK/RM/HS/009R			
CCK/RM/HS/010R			

Grey text = 'Dead RM' not ordered for production use 2000-2001.

CCK/RM/HS/001S	S - 01 SIMAZINE	001	19/12/89
CCK/RM/HS/002S	SORPROPHOR SD 33	001	19/12/89
CCK/RM/HS/003S	SALICYLIC ACID	003	27/07/02
CCK/RM/HS/004S	SODIUM ACETATE	002	25/05/94
CCK/RM/HS/005S	SPB 6	002	18/06/92
CCK/RM/HS/006S	STEARIC ACID	003	08/04/02
CCK/RM/HS/007S	SULPHUR	002	22/10/99
CCK/RM/HS/008S	SODIUM CYANIDE	002	01/11/01
CCK/RM/HS/009S	SODIUM CHLORIDE	002	22/12/92
CCK/RM/HS/010S	SULPHURIC ACID 70-100%	006	27/07/02
CCK/RM/HS/011S	SODIUM MONOCHLOROACETATE	001	19/12/89
CCK/RM/HS/012S	SODIUM BICARBONATE	003	18/01/02
CCK/RM/HS/013S	SODIUM NITRATE	003	13/11/01
CCK/RM/HS/014S	SODIUM SULPHATE	002	01/11/01
CCK/RM/HS/015S	SODIUM METABISULPHATE	005	24/01/00
CCK/RM/HS/016S	SODIUM TUNGSTATE	001	18/07/99
CCK/RM/HS/017S	SODIUM LACTATE 70%	001	19/12/89
CCK/RM/HS/018S	SODIUM SULPHIDE	001	19/12/89
CCK/RM/HS/019S	SODIUM DITHIONATE	001	19/12/89
CCK/RM/HS/020S	SODIUM CARBONATE	003	08/01/02
CCK/RM/HS/020Sa	SODIUM CARBONATE 15% AQUEOUS SOLUTION	001	07/03/01
CCK/RM/HS/021S	SODIUM NITRITE	002	20/06/97
CCK/RM/HS/022S	SODIUM CYANATE	001	17/05/90
CCK/RM/HS/023S	STARCH (POTATO)	001	15/10/90
CCK/RM/HS/024S	SODIUM SULPHITE	003	11/04/02
CCK/RM/HS/025S	SODIUM METHOXIDE (SOLN)	003	24/04/02
CCK/RM/HS/026S	SALT (use /009S in future!)	001	10/06/91
CCK/RM/HS/027S	SODIUM HYDROXIDE SOLN 47%	004	27/02/01
CCK/RM/HS/028S	SULPHOLANE	001	25/03/97
CCK/RM/HS/029S	SODIUM HYDROXIDE (PEARL)	002	17/02/01
CCK/RM/HS/030S	SODIUM BROMATE	002	17/02/01
CCK/RM/HS/031S	SULPHUR DIOXIDE	001	18/02/94
CCK/RM/HS/032S	STANNOUS OXALATE	001	26/07/93
CCK/RM/HS/033S	SODIUM HYPOCHLORITE SOLUTION	002	29/04/02
CCK/RM/HS/034S	SODIUM BROMIDE SOLN	001	17/11/95
CCK/RM/HS/035S	STYRENE	001	02/04/96
CCK/RM/HS/036S	SULPHURIC ACID 15-70% (also called Battery acid)	002	03/04/02
CCK/RM/HS/037S	SODIUM OCTYLSULPHONATE	001	07/07/99
CCK/RM/HS/038S	SODIUM SILICATE SOLUTION	001	18/07/99
CCK/RM/HS/039S	SILICO TUNGSTIC ACID	001	12/08/99
CCK/RM/HS/040S	SODIUM DIETHYL DITHIOCARBANATE	001	18/01/00
CCK/RM/HS/041S	SURFACTANT HA504	001	25/10/99
CCK/RM/HS/042S	SODIUM LAURYL SULPHONATE	001	06/02/00
CCK/RM/HS/043S	SODIUM CETYL SULPHONATE	001	03/05/00
CCK/RM/HS/044S	SODIUM LAURYL SULPHATE	002	21/05/02
CCK/RM/HS/045S	SODIUM HYPOPHOSPHITE	001	11/11/02
CCK/RM/HS/046S	SODIUM METHOXIDE (SOLID)	001	15/11/02
CCK/RM/HS/001T	T - 01 TRIETAZINE	001	19/12/89
CCK/RM/HS/002T	TRIETHYLAMINE	002	18/05/98

CCK/RM/HS/003T	TITANIUM TETRACHLORIDE	001	19/12/89
CCK/RM/HS/004T	TOLUENE	008	27/02/01
CCK/RM/HS/005T	THIONYL CHLORIDE	006	21/09/01
CCK/RM/HS/006T	TRICHLOROACETYL CHLORIDE	001	
CCK/RM/HS/007T	TAMOL 731	001	06/03/90
CCK/RM/HS/008T	THIOPHENE	001	23/03/90
CCK/RM/HS/009T	TCAC	001	01/11/93
CCK/RM/HS/010T	TRANS-DICHLORO - BIS	001	23/03/90
CCK/RM/HS/011T	1,1,1 - TRICHLORO ETHANE	001	08/04/90
CCK/RM/HS/012T	TRICHLOROACETAMIDE	001	23/11/92
CCK/RM/HS/013T	TETRA HYDRO FURAN	005	19/08/02
CCK/RM/HS/014T	TRICHLOROACETIC ACID	003	26/03/01
CCK/RM/HS/015T	TRIMETHYLOLPROPANE	001	23/07/93
CCK/RM/HS/016T	TRIMETHYLSILYL CHLORIDE	001	03/08/93
CCK/RM/HS/017T	TANNIN	001	30/09/93
CCK/RM/HS/018T	TRI - N - BUTYLAMINE	001	25/10/94
CCK/RM/HS/019T	TBAB	002	04/04/02
CCK/RM/HS/020T	TRIPHENYL PHOSPHITE	001	02/04/96
CCK/RM/HS/021T	TRICHLOROETHYL PHOSPHATE	001	02/04/96
CCK/RM/HS/022T	TEAB	002	04/04/02
CCK/RM/HS/023T	TRILON B	001	10/10/96
CCK/RM/HS/024T	TRIBROMOANILINE	001	19/05/97
CCK/RM/HS/025T	TRIBROMOBENZENE (METHANOL WET)	001	14/07/97
CCK/RM/HS/026T	TEMPEST	001	18/02/98
CCK/RM/HS/027T	1,3,5 TRIOXANE	001	08/01/99
CCK/RM/HS/028T	TRICHLOROACETIC ACID (90% solution)	002	16/09/02
CCK/RM/HS/029T	TAHT mother liquors (50% N-PROPYL BROMIDE)	001	29/11/01
CCK/RM/HS/001U	UREA	004	10/06/02
CCK/RM/HS/002U			
CCK/RM/HS/003U			
CCK/RM/HS/001V	VULNAX IPPD	001	11/04/90
CCK/RM/HS/002V	VULNAX 6PPD	001	11/04/90
CCK/RM/HS/003V	VANILLIN	001	26/03/91
CCK/RM/HS/004V	VERATO - NO MSDS ISSUED	001	DEV
CCK/RM/HS/005V			
CCK/RM/HS/006V	VINYLDENE CHLORIDE	001	05/11/96
CCK/RM/HS/007V			
CCK/RM/HS/001W	W - 01 (SIMILAR TO WETTOL W2)	001	19/12/89
CCK/RM/HS/002W			
CCK/RM/HS/003W			
CCK/RM/HS/001X	XYLENE	001	05/07/91
CCK/RM/HS/002X			
CCK/RM/HS/003X			

Last Updated : 26/09/02
Updated By :JCS

CCK/RM/HS/001Z	ZINC OXIDE	003	27/07/02
CCK/RM/HS/002Z	ZINC CHLORIDE	001	08/11/02
CCK/RM/HS/003Z			

IMPORTANT

1. Please use chemical rather than biological/common name ie sodium chloride rather than salt etc!
2. Grey text = 'Dead RM' not ordered for production use 2000-2001. If re-ordered new internal MSDS must be generated.
3. *- MSDS number recorded but no paper copy in system

PRODUCT CODE	PartDesc
FP-A001-000-D-T-W	Alpha Bromo Butyric Acid
FP-A002-000-D-T-C	2-Acetyl Furan
FP-A002-000-K-T-C	2 Acetyl Furan
FP-A005-000-I-C-F	AY 65 Premix
FP-B002-000-D-C-W	Bromo Iso Butyryl Bromide
FP-B003-DCM-D-O-W	Benzoyl Peroxide 11% in DCM
FP-B009-000-D-C-C	4-Bromobenzylbromide
FP-B009-001-D-C-C	4-BBB Second Crop
FP-B009-002-D-C-C	4-BBB Recovery
FP-B009-003-D-C-W	4-Bromobenzyl Bromide
FP-B009-004-D-C-C	4-Bromobenzylbromide
FP-B010-000-B-T-B	Benzyl Bromide
FP-B011-000-B-F-B	Butyl Bromide
FP-B011-000-D-F-F	Butyl Bromide
FP-B012-000-D-C-W	Bromo Acetic Acid
FP-B013-000-D-C-W	Bromo Acetyl Bromide
FP-B015-000-D-T-W	Benzyl Bromoacetate
FP-B016-000-D-C-W	Bromohexanoic Acid
FP-C003-000-D-L-W	Cetyl Bromide
FP-C005-000-C-L-W	Choline Chloride
FP-C007-050-D-C-W	2-CEA.HCl (50%)
FP-C007-070-D-C-W	2-CEA.Hcl (70%)
FP-C009-000-K-C-W	Cetyl Sulphonyl Chloride
FP-C009-001-S-L-W	Sodium Cetyl Sulphonate
FP-C010-000-D-L-W	Chemical 22
FP-C012-000-D-L-W	Chemical 44
FP-C013-000-D-L-W	Chemical 47
FP-C014-000-D-L-W	Chemical 50
FP-C020-000-D-C-W	Chemical 80
FP-C021-000-D-L-W	Chemical 81
FP-C022-000-D-L-W	Chemical 83
FP-C023-000-D-L-W	Chemical 907
FP-C023-001-D-C-W	Chemical 907 - Stage 1
FP-C024-000-D-L-W	Chemical M1208
FP-C025-000-D-T-W	3 Chloro Propan-1-ol
FP-C026-000-I-L-W	Chemical 922
FP-C043-000-D-F-F	Cyclohexyl Chloride
FP-D002-000-K-T-W	DEAEC.Hcl
FP-D002-065-D-T-W	DEAEC.HCl 65% Solution
FP-D004-000-D-C-W	Dekote En Concentrate
FP-D005-000-D-L-W	Di Butylamine Caprylate
FP-D006-000-D-T-W	Decyl Bromide
FP-D007-000-D-T-W	1,4-Dibromobutane
FP-D010-000-K-C-W	2,3Dibromo Succinic Acid
FP-D013-000-D-L-W	Diethylamino PropaneDiol
FP-D015-000-C-L-W	DMA Hydrochloride
FP-D015-999-C-L-W	Dimethylamine Hydrochloride Rework
FP-D016-000-K-T-W	DMAEC.Hcl
FP-D016-065-D-T-W	DMAEC.HCL 65% Solution

FP-D017-065-D-C-W	65% DMAPC.HCl Solution
FP-D019-000-K-L-W	Dimethylsuberimide
FP-D028-000-B-L-W	DiMethylamino Prop Diol
FP-E001-000-K-C-W	Eboni 2000B
FP-E002-000-D-C-W	Ethyl 2 Bromo Butyrate
FP-E007-000-K-L-W	EPZG
FP-G001-000-C-M-W	Geniplex
FP-G001-001-C-C-W	Geniplex Wet
FP-G001-002-C-M-W	Geniplex
FP-G001-003-C-C-W	Geniplex Wet
FP-G001-999-C-M-W	Geniplex Rework
FP-G002-001-B-T-B	GMCH for DMAPD CCK
FP-G003-000-D-L-W	Guaiacol Glycidyl Ether
FP-G004-000-K-T-W	Guanazole
FP-H001-000-S-L-W	HOMBE
FP-H002-000-D-F-F	Hexyl Bromide
FP-H003-000-D-F-F	Heptyl Bromide
FP-H004-000-D-F-F	Hunig's Base
FP-H005-000-B-C-B	Hydrobromic Acid
FP-H005-000-D-C-R	Hydrobromic Acid
FP-I001-000-D-F-W	IR1282
FP-I002-000-D-M-W	Isopropyl Bromo Isobutyrate
FP-K002-000-K-L-W	Kodak Benzyl Blocked
FP-L001-000-D-L-W	Lauryl Bromide
FP-L002-000-K-C-W	Lauryl Sulphonyl Chlor.
FP-L002-001-S-F-W	Lauryl Sulph Chl Stage 1
FP-M001-001-D-M-W	Methyl Bromo Myristate
FP-M002-000-I-T-W	Methyl Trichloroacetate
FP-M002-001-I-T-W	M.Trichloroacetate(Clar)
FP-M002-002-I-T-W	Methyl Trichloroacetate Indian Acid
FP-M003-000-D-M-W	Myristyl Bromide
FP-M004-000-D-C-W	Methyl 2 Bromo Butyrate
FP-M006-000-K-L-W	MonoMethylamine HCl
FP-M007-000-D-F-F	3-Methyl Butyl Bromide
FP-M009-000-D-T-W	MOD Flexibiliser
FP-M011-000-D-C-W	N (3-Methoxypropyl) pentylamine
FP-N001-000-K-L-W	N Benzyl Piperidine
FP-N002-000-K-L-W	N-Benzyl Niacin
FP-N003-000-I-L-W	Sodium Hydroxy Dichloro Triazine
FP-N004-000-D-C-W	Nipstrip B
FP-N005-000-K-T-W	4 Nitriso Diphenylamine
FP-N006-000-D-L-W	2 NDPA
FP-N007-000-K-L-W	N 4 Bromo Butyl Phthalamide
FP-O001-000-D-C-W	o-Allylphenol
FP-O003-000-D-M-W	Octyl Bromide
FP-O004-000-D-F-F	Octyl Sulphonyl Chloride
FP-O004-001-S-F-W	Octyl Sulph Chl Stage 1
FP-P001-000-D-F-F	n-Propyl Bromide
FP-P001-001-D-F-F	n-Propyl Bromide Crude
FP-P002-000-D-C-W	Pyridine Hydrobromide

FP-P003-000-D-F-F	Pentyl Bromide
FP-P004-000-S-L-W	Potassium Cyanate
FP-P006-000-D-F-F	Pot 2EH in Acetone
FP-P007-000-S-L-W	Pot/Sod Thio Mix
FP-P008-000-D-M-W	Pergafast 201
FP-P011-000-B-F-B	Pot 2 E.H. in Propanol
FP-P011-000-D-F-F	Pot 2 E.H. in Propanol
FP-P011-999-D-F-F	Pot 2 E.H. in Propanol
FP-P012-000-S-L-W	Potassium Thiocyanate
FP-P012-001-B-L-B	Pot Thio Soln(100%)Inter
FP-P013-000-B-L-W	Potassium Acetate Soln
FP-P013-001-S-L-W	Potassium Acetate Dry
FP-P015-000-K-L-W	PZK 3070
FP-R001-000-K-L-W	RNG 8647
FP-R002-000-K-L-W	RNG 954
FP-S001-000-S-L-W	Sodium Diacetate
FP-S001-999-S-L-W	Sodium Diacetate Rework
FP-S002-000-C-L-W	Sodium 2 Ethyl Hexanoate
FP-S002-000-K-L-W	Sodium 2 Ethyl Hexanoate
FP-S002-001-B-F-B	Sod Oct Soln(100%)Inter
FP-S003-000-B-M-B	Safener 107892
FP-S004-000-K-L-W	Salicylanilide
FP-S004-999-K-L-W	Salicylanilide Rework
FP-S005-000-I-C-W	Silico Tungstic Acid
FP-S007-000-S-L-W	Sodium Thiocyanate
FP-S007-001-B-L-B	Sod Thio Soln(100%)Inter
FP-S007-002-D-L-W	Sodium Thiocyanate Solution 50%
FP-S007-002-I-L-W	Sodium Thiocyanate Solution 50%
FP-S007-045-B-L-B	Sod Thiocyanate soln 45%
FP-S007-050-I-L-W	Sodium Thiocyanate 50% Oxidation
FP-S008-000-B-F-B	Sodium 2 EH in Methanol
FP-S010-000-D-L-W	Sodium Bromate Soln 20%
FP-S010-000-D-L-W	Sodium Bromate Soln 25%
FP-S011-000-S-L-W	Sodium Bromide
FP-S011-001-S-L-W	Sodium Bromide
FP-S011-038-I-L-B	Sodium Bromide Sol'n
FP-S011-999-S-L-W	Sodium Bromide Solution Rework
FP-S012-000-S-L-W	Sodium Cyanate
FP-S013-000-B-F-B	Sodium 2-Ethyl Hexanoate in MeAc/Me
FP-T002-000-S-M-W	TAHT in n-propylbromide
FP-T003-000-I-M-W	Axis Slurry (TAHT)
FP-T004-000-D-M-W	tBBIB
FP-T005-000-D-F-F	TBBA
FP-T008-000-K-L-W	Toly Undecyl Ketone
FP-T009-000-S-L-W	Tri Bromo Benzene
FP-T009-001-S-L-W	Tri Bromo Benzene
FP-T010-000-K-T-W	Trichloroacetamide
FP-T010-001-D-T-W	Trichloroacetamide(Clar)
FP-T010-002-K-T-W	Trichloroacetamide (Indian Acid)
FP-T010-003-K-T-W	Trichloroacetamide

FP-T011-000-K-L-W	Triethylamine Hcl
FP-V001-000-K-F-W	VPI 260 Powder
RR-H004-R02-D-F-F	Heptane Recovered ex LSC