

Anthony Moore

From: Nick White <nickwhite@gloverspsl.com>
Sent: 15 February 2022 12:32
To: Carl Glennon
Cc: Sue Wills; Kerr, Kim; Rob Kennedy
Subject: CDN/20/0638 - Discharge of conditions - Evonik Clayton Lane

Carl,

I hope all is well with you, it has been quite some time since our last correspondence and the applicant is keen to draw a line under the conditions which we seek to discharge.

We made an application to discharge three conditions in connection with 126420/FO/2020 these were:

Condition 8 - Contamination
Condition 10 - Foundation Details
Condition 12 - Surface Water Drainage Layout

Condition 8

Following an email from you 13.07.21 where you requested a new link to be sent (with the link provided 15.06.21 having expired). I sent a revised link on 14.07.21 to download a Preliminary Risk Assessment report from Groundtech Consulting - no further remedial works were deemed necessary within the report conclusion. We presume that this report was passed onto the EA for approval and that they were satisfied with its contents and recommendations although we have never received confirmation from you as far as we can determine.

Condition 10

In an email from you 20.04.21 comments relayed from the EA stated that there was no objection to the discharge of this condition as no piling or deep foundations were necessary for the scheme.

Condition 12

On 09.02.21 I sent you an email whereby I outlined Evonik's position with respect to the surface water drainage. To summarise Evonik have had a CCTV survey undertaken of the drains but are not prepared to carry out remedial works without confirmation that with this having been done, at considerable expense, that there would still be a requirement to install attenuation tanks to deal with a 1in 100-year storm event as the remedial work would become rendered obsolete.

Prior to consent being granted for the main application ref 126420/FO/2020 the issue of surface water drainage was discussed at length between Sue Wills and Evonik and the condition that had originally been mooted was revised accordingly within the decision notice. However due to change in personnel at the flood risk team at this time the previous discussions and agreements were not passed on about and we ended up in a situation whereby we have gone full circle with the original stipulations to accommodate a 1 in 100-year storm event which would require attenuation tanks being requested once again. When we queried why this had happened at the time Sue Wills informed me that it was most probably due to a change in staff in that department.

Since we requested confirmation and clarification on this issue there has been no further correspondence between us pertaining to the matter and things have not progressed.

We would be grateful if you could please review the application to discharge conditions 8, 10 & 12 and provide an update as to the issues outlined above to provide a way forward at your earliest convenience. Please come back to me if you have any questions or need any additional information from the applicant or consulting engineer, as we are keen to resolve this without further delays. We appreciate your help with this and look forward to hearing from you soon.

Kind Regards,

Nick

Glovers Project Services Ltd

The Old Tannery, Eastgate, Accrington,
Lancashire, BB5 6PW
Tel: 01254 398426

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GROUNDTECH
CONSULTING

Job title: Evonik Chemical Works,
Clayton

Report type: Preliminary Risk Assessment

Prepared for: Evonik Chemicals Limited

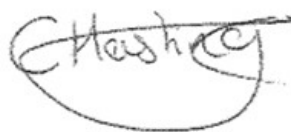
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CLIENT CONTACT	KIM KERR	

For and Behalf of Groundtech Consulting

SIGNATURE



AUTHOR

Connor Hastings BSc (Hons)

SIGNATURE



CHECKED

Richard Wyatt MEng (Hons) FGS

SIGNATURE



REVIEWED

James Doyle BSc (Hons) CGeol FGS

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Plans		
Plan Reference	Revision	Title
GRO-20221-P01	-	Project Location Plan
GRO-20221-P02	-	Preliminary Development Constraints Plan
GRO-20221-P03	-	Illustrative Preliminary CSM

1.0 INTRODUCTION

1.1 Project Objectives

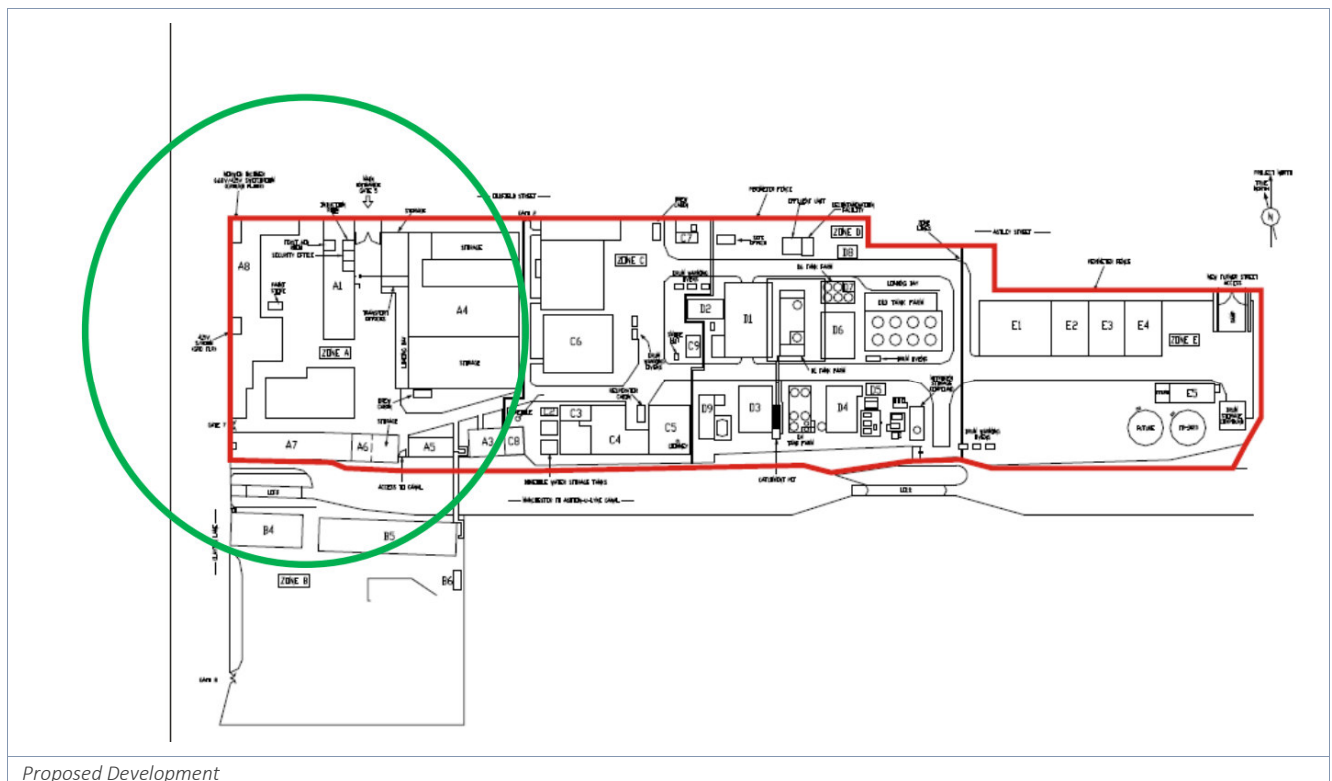
Groundtech Consulting Limited have been instructed by Kennedy Redford on behalf of Evonik Chemicals Ltd to undertake a Preliminary Risk Assessment for a site at Evonik Chemical Works in Clayton.

The objectives of the Preliminary Risk Assessment were to establish the sites environmental and geotechnical background in order to generate a Conceptual Site Model to identify any potential constraints and linkages which may affect the redevelopment of the site.

The report has been undertaken to fulfil the requirements of a preliminary risk assessment in accordance with the “Land Contamination Risk Management” guidance.

1.2 Proposed Development

The proposal is to partially demolish and refurbish some Victorian brick buildings in the western part of the larger site (Zone A). The final development area will be entirely covered over with concrete hardsurfacing with a temporary structure placed on the surface.



1.3 Limitations

This Preliminary Risk Assessment is based on information obtained from a number of sources, and the information is assumed to be correct.



Other conditions may exist on the site that have not been taken into account in this assessment as they are outside the scope of works. Groundtech Consulting are not responsible for these circumstances that are not outlined in the report.

The assessment has been prepared for the exclusive use of the client. No third parties may rely on or reproduce the contents of the report without the written permission of Groundtech Consulting Limited. If any unauthorised third party comes into possession of the report, they rely on it at their own risk and Groundtech Consulting Limited will not be obliged to provide a duty of care.

2.0 SITE SETTING

2.1 Location

The site is located circa 2.5 miles east of Manchester City Centre, as shown on the Project Location Plan GRO-20221-P01 and is approximately centred on National Grid Reference 387976, 398343.



Project Location

Access to the site is gained off Oldfield Street to the north of the site.

2.2 Site Description

The site is roughly rectangular in shape and is approximately 0.41 hectares in area. The topography of the site is generally level.

Onsite Features

The proposed development area forms the western part of the Evonik Chemical Works and comprises a number of old brick structures.

This area of the site has more recently been used as offices and storage buildings, no chemical processing works have taken place in this area for a long period of time. A boiler house and an electricity substation are indicated in the north western part of the development area.

At the time of the site reconnaissance, a number of the buildings were in the process of being demolished. Surrounding the buildings are areas of concrete hardsurfacing.

No vegetation is present on the proposed development area.

Site Boundaries and Surrounding Land Uses

The development area is bound around the entire perimeter by security fencing or the external walls of existing buildings on site.

The development area is surrounded by following features/land uses:

- North - *Public open space followed by residential land use.*
- East - *Evonik Chemical Works which includes a number of decommissioned tanks.*
- South - *Ashton Canal.*
- West - *Commercial land use.*

Photographs are presented in *Appendix 2* and relevant features are recorded on the Preliminary Development Constraints Plan *GRO-20221-P02*.

3.0 PREVIOUS INVESTIGATION

A Site Conditions Report was produced by Entec UK Limited in June 2003 and a summary of the key points relating to the proposed development area is provided below.

The report was prepared in relation to the owners of the site applying for a Part A1 permit for the production of amines, Mannich bases, toluene formaldehyde condensation products, toluene sulphonic acid salt and boron trifluoride amine compounds.

The installation area is serviced by an effluent and surface water drainage system which discharges to an effluent chamber. The effluent undergoes rudimentary treatment and pH stabilisation prior to discharge to a public sewer.

The Entec report states that the site is indicated to be underlain by Glacial Sand and Gravel and Glacial Till. The Glacial Till will have limited the downward migration of potential contaminants. In addition, the production areas are concrete hardsurfacing with pollution measures such as bunds and adequate capture drains in evidence. The impermeable surfaces will reduce shallow groundwater movement by limiting rainfall infiltration.

Zone A (which is the proposed development area referred to in this report) was used for the manufacture of rubber additive compounds since the 1890s, the rubber additive plant was demolished in the mid-1990s. Building A8 was used for pilot plant production. A petroleum rapid blend facility and laboratory were present in building A1 and 'I' resin production was carried out in building A3 up to the early 1990s. Pepton mixing was undertaken in the northern part of building A4 prior to conversion of this area to storage.

In 2003, the current activities in Zone A were as follows:

- *Administrative buildings and storage areas.*
- *Site access including bulk transportation from buildings A1.*
- *Area covered in hardsurfacing.*
- *Final product stored in large storehouse (building A4).*
- *No processes undertaken in this area and confined to Zone D.*

A CCTV survey carried out in the effluent drain between A1 and A4 indicates it to be in relatively good condition.

In Zone A, the following Contaminants of Concern were highlighted as being a potential risk to site end users and controlled waters:

- *Phenols, formaldehyde, amines, organic acids, residual epoxy resins, inorganic acids, petroleum hydrocarbons, rubber chemicals, white vulcanised vegetable oil.*

In 2003, no USTs were in use onsite.

Ground Investigation works were carried out by Entec in 2003 and three boreholes were drilled in Zone A. Made Ground was encountered to depths of between 0.5m and 1.8m bgl and was underlain by peaty Clay in the two window sample boreholes to 1.6m and 3.0m bgl and firm Clay in BH1D to 7.0m bgl. Natural Sand was present in WS1 from 1.6m to 3.0m bgl and in BH1D from 7.0m to 9.2m bgl. Stiff Clay was observed in BH1D from 9.2m to 10.0m bgl where the borehole was terminated. No groundwater was encountered in any of these boreholes.

Geo-environmental testing was carried out on samples of soil and groundwater taken from the boreholes within Zone A and the Contaminants of Concern were generally recorded at concentrations below the laboratory limits of detection, including VOCs, SVOCs, phenols, alkyl amines, formaldehyde and epoxide resins.

4.0 ENVIRONMENTAL SETTING

4.1 Site History

Available historical maps have been obtained, a list of dates and scale are listed in the table below:

Scale	Date
1:1,250	1949/50, 1951/56, 1970/72, 1978/80, 1983, 1983/87, 1991/92, 1992, 1994/95, 2003.
1:2,500	1893, 1908, 1922, 1932/33, 1949, 1950/51.
1:10,000/10,560	1848, 1890/92, 1905/06, 1923, 1933, 1933/38, 1934/38, 1956, 1968, 1981, 1985, 1991, 2001, 2010, 2021.

The plans were examined and potential issues have been identified and summarised in the table below:

Date	Site	Surrounding Area
1893	Site is occupied by Clayton Chemical Works . Numerous buildings were present around the perimeter of the site.	Buildings associated with the onsite Chemical Works to the immediate east and south. Canal is present c.20m south. Clayton Beetle Works c.15m west. Sheldrake Cotton Mill c.50m west. Iron Foundry c.75m south west. Clayton Aniline Works c.110m west. Clayton Oil Works c.125m west of the site. Graveyard c.175m north of the site.
1908	Site depicted as a Finishing Works .	Generally surrounded by fields to the south and terraced housing to the north. Beetle Works and Sheldrake Mill replaced by Clayton Finishing Works . Hope Malt Vinegar Brewery c.75m east of the site. Empire Wadding Works c.225m east.
1922	No change.	Industrial building constructed c.50m south on the opposite side of the canal. Sand pit c.120m east. Tar Still and tanks c.200m to the south.
1932-33	Chimney shown on south eastern area.	Rose Bank Casing Works to the immediate east. The Aniline Works is now shown as Clayton Chemical Works which had increased in size significantly to the south west and south and included a rail network and tanks .
1949	No change.	Rubber Works c.60m south west. Electric substation c.90m and 120m south west.
1949/50	No change.	Refuse heap c.95m south east of the site. Gas Works c.240m east. Casing Works to the east no longer shown.
1951	No change.	Clayton Finishing Works replaced by Victoria Works (Fatty Acid & Glycerine) .
1970/72	No change.	Chemical Works immediately to the east of the site. Many of the buildings associated with the Victoria Works to the west demolished.
1978/80	No change	No evidence of the refuse heap or rubber works being present.

		New buildings associated with Victoria Works built to the immediate west.
1992	Electricity substation on north western corner.	Much of the chemical works c.100m to 250m away to the south and south east demolished and replaced with housing.
2010	No change.	Chemical works to the south and south west demolished.
2021	No change.	No significant change.

The historical plans are presented in *Appendix 3*.

4.2 Geology

The following British Geological Survey (BGS) records and other available information were inspected to accurately determine the geology underlying the site:

- 1:50,000 Scale Geological Sheet 85, Manchester – Solid and Drift Edition.
- BGS Records.

Made Ground

Made Ground is not indicated to be present beneath the site on the available geological plans. However, Made Ground is anticipated associated with the development of the site with the chemical works.

Superficial Deposits

The site is indicated to be underlain by Glacial Till which characteristically comprises a mixture of clay, silt, sand and gravel.



Geological Map – Superficial Deposits

Solid Geology

The solid geology beneath the site is the Manchester Marls Formation comprising red brown moderately cemented Mudstone. The Chester Pebble Beds Formation comprising red brown medium grained poorly cemented Sandstone are present to the immediate south of the site.



There are geological faults shown on or within an influencing distance of the site.

BGS records to the east and west of the site encountered superficial deposits to between 24m and 35m where bedrock was encountered.

The BGS records are presented in *Appendix 4*.

The superficial Glacial Till deposits are classified by the Environment Agency as a Secondary Undifferentiated Aquifer. This is assigned where it is not possible to attribute either category A or B to a soil 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.

The Groundsure report indicates that the superficial deposits beneath the site are a Secondary A Aquifer, possibly associated with Glacial Sand and Gravel deposits. However, the geological map indicates that the site is underlain by Glacial Till. Secondary A Aquifers are 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.

The solid geology comprising the Manchester Marls beneath the site is classified as a Secondary B Aquifer. This is defined as a predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.

The Chester Pebble Beds situated 15m to the south of the site are classified as a Principal Aquifer. This is geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally, principal aquifers were previously major aquifers.

The groundwater within the superficial and bedrock beneath the site is described within the Groundsure report as being of Low vulnerability. These are 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.

There are no Source Protection Zones within 500m of the site. The nearest active groundwater abstraction licence is 57m to the east at Evonik Chemical, this is from a borehole for non-evaporative cooling processes. There are no potable water abstraction licences within 2km of the site.

The Manchester and East Cheshire Permo-Triassic Sandstone Aquifer in the area are indicated to have had a poor chemical rating and poor overall rating in 2015.

4.4 Hydrology

The nearest watercourse is the Ashton Canal 10m south of the site. There are no other surface water features located within 250m of the site.

Environment Agency information indicates that the Risk of Flooding from Rivers and Sea (RoFRaS) at the site is low.

The nearest active surface water abstraction licence is 123m east of the site at Ashton Canal and relates to general cooling.

4.5 Environmental Consultations

A request has been submitted to the Contaminated Land Officer at Manchester City Council for information pertaining to the site, this information will be forwarded on receipt.

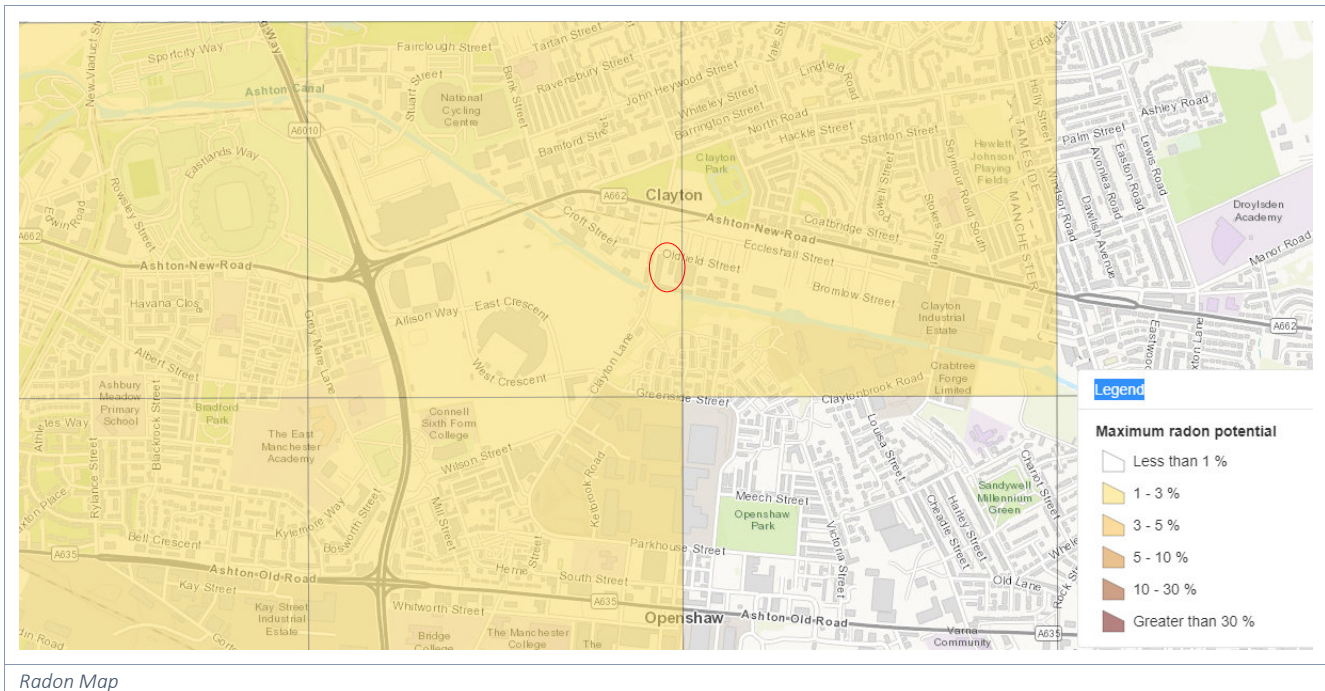
An environmental search has been conducted through Groundsure, which accesses British Geological Survey and Environment Agency databases. The complete Groundsure Report can be found in *Appendix 5* and a summary of the more relevant points is presented in the table below.

Record	<250m	250 – 500m	Description
Authorised Processes	44	7	Five processes are on site associated with organic chemicals, nitrogen containing compounds, e.g. amines.
Pollution Incidents	8	4	The nearest was 41m north west relating to contamination of organic chemicals/products. Minor impact was caused to air, no impact was caused to land and water. There were seven other incidents 56m to 91m to the west associated with chemicals.
Landfill and Waste Treatment	3	3	Historical landfill 310m east where inert waste and liquid sludge was accepted. Waste paper works 220m north west.
Discharge Consents	-	5	These are all historic licences.
Petrol Filling Stations	-	1	Former PFS 249m east.
Current industrial Uses	20	NA	Electricity substation onsite. Tanks 60m east. Vehicle repair garages 65m west.

4.6 Radon

Map 13 'Northern Welsh Marshes and Liverpool' from BRE 211 and HPA were examined which defines areas requiring radon protective measures. The probability is 1% to 3% and Clayton Lane, Manchester is not an area

requiring radon precautions in foundations in accordance with BRE Report 211 'Radon – Guidance on protective measures for new dwellings' 2015 Edition.



The radon data in the Groundsure report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland, and it indicates that the site is in area where less than 1% of homes are affected and radon precautions are not required. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supersede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square.

4.7 Coal Authority Consultation

The site lies in an area where the Law Society and Coal Authority recommends a mining search is undertaken due to past or current mining possible affecting the site.

A search was carried out with the Coal Authority, the report is presented in *Appendix 6*, the main findings are outlined below.

Past Mining

The property is in the likely zone of influence from workings in 4 seams of coal at 400m to 840m depth, last worked in 1961.

Any ground movement from these workings should have now stopped.

Present Mining

The site is not within the zone of influence of any present underground coal workings.

Future Mining

The property is not in an area where the Coal Authority are determining whether to grant a licence to remove coal by underground workings.

The property is not in an area likely to be affected at the surface by any planned underground workings. Reserves of coal exist in the local area that may be worked in the future.

No notice of the risk of land being affected by subsidence has been given under section 46 of the Coal Mining Subsidence Act 1991.

Mine Entries

There are no records of any mine entries on or within 20m of site boundary.

Coal Mining Geology

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

Opencast Coal Mining

The property is not in an area affected by past or present coal mining extracted by opencast methods. The property is also not in an area affected by a proposed opencast coal mine.

Subsidence

The Coal Authority has not received a damage notice or claim for the subject property or within 50m since 31 October 1994.

Mine Gas

There is no record of mine gas emission requiring action by the Coal Authority within the boundary of the property.

Withdrawal of Support

The property is not in an area which notice of entitlement to withdraw support has been published.

Online Interactive Coal Authority Map

Information on the Interactive Coal Authority map indicates the following:

- *There are no mine entries shown onsite.*
- *The site is not within a Development High Risk Area.*
- *The site is not affected by past or probable shallow coal mine workings.*

5.0 LAND QUALITY CONCEPTUAL SITE MODEL AND RISK ASSESSMENT

5.1 Introduction

The potential level of risk posed by contaminants in soil and/or groundwater will be influenced by the type and concentration of the contamination at source, the likelihood of exposure occurring, the potential pollution linkages and the likely chronic or acute effects on the receptors.

A contaminant is defined as a substance that has the potential to cause harm, a risk is considered to exist if such a substance is present at sufficient concentrations to cause harm and if a pathway is present a receptor could be exposed to the contaminant.

Section 4.0 compiles the information from the previous sections to assemble a Conceptual Site Model to inform the risk assessment process. The potential sources identified on the site and off the site that are within influencing distance are assessed to determine if pollution linkages exist and an unacceptable risk is posed to human health and controlled waters. The assessment has been carried out on a qualitative basis and aims to produce a complete and comprehensive Preliminary Conceptual Site Model. The potential pollution linkages are displayed on GRO-20221-P03 - Illustrative Preliminary CSM.

Three potential types of impacts exist for a site and all three need to be considered in the qualitative preliminary risk assessment:

- *Impacts from sources on the subject site.*
- *Impacts to the surrounding area from the subject site.*
- *Impacts to the subject site from the surrounding area.*

5.2 Potential Contamination Sources

Onsite Sources and Associated Contaminants of Concern (CoC)

From the information obtained during the Preliminary Risk Assessment, several potential sources of contamination have been identified onsite which may affect the redevelopment of the site for commercial end use.

The site has been a chemical works since the 1890s and has also been described as a chemical finishing works. Within the proposed development area, Zone A, the site has been used for processing of rubber additive compounds, petroleum blending, 'I' resin production and pepton mixing. However, no processes have taken place within Zone A since before 2003.

Based on the former uses of the chemical works - Contaminants of Concern may include phenols, formaldehyde, amines, organic acids, residual epoxy resins, inorganic acids, petroleum hydrocarbons, rubber chemicals, white vulcanised vegetable oil.

General Made Ground is likely to be present beneath the site and potential contaminants may include heavy metals, speciated Polycyclic Aromatic Hydrocarbons (PAHs), Total Petroleum Hydrocarbons (TPH CWG), asbestos and ground gases.

The electricity substation may be a source of PolyChlorinated Biphenyls (PCBs) used as cooling agents in transformers. However, PCBs were banned from use in the UK after 1981 and given the age of the substation they will not be present onsite.

Offsite Sources and Associated Contaminants of Concern (CoC)

Numerous potential sources of contamination have been identified surrounding the site and these include the following:

- Chemical works to the immediate east and south which includes decommissioned tanks.
- Victoria Works (Fatty Acid and Glycerine) to the immediate west.
- Cotton mill 50m west.
- Rubber works 60m south west.
- Iron foundry 75m south west.
- Aniline works 110m west.
- Oil works 125m west.
- Graveyard 175m north/sand pit 120m east/refuse heap 95m south east.
- Wadding Works 225m east.
- Tar still/tanks 200m south.
- Gas works 240m east.
- Former railway land to the south and south west.

Industry Profiles and Related Laboratory Testing

The relevant DoE Industry Profiles were consulted with regards to the historic industrial uses on the site and the surrounding area, the associated contaminants are presented below:

Industry Profile	Associated Contaminants of Concern	Required Testing
Chemical Works	PAHs, organic compounds, inorganic compounds, solvents, acids, alkalis, asbestos, PCBs and fuels.	Metals, PAHs, TPH CWG, Volatile Organic Compounds (VOCs), Semi Volatile Organic Compounds (SVOCs), pH, asbestos, PCBs and ground gases.
Textile Works and Dye Works	Metals, inorganic compounds, chlorinated organic solvents, sizing agents, water repellents, soaps/detergents, pesticides, fuel, ash, asbestos, PCBs and ground gases.	Metals, PAHs, TPH CWG, VOCs, SVOCs, asbestos, PCBs and ground gases.
Animal and Animal Products Processing Works	Metals, inorganic compounds, organic compounds, acids, alkalis.	Metals, PAHs, TPH CWG, sulphides, pH, formaldehyde, phenols,
Chemical Works – Rubber Processing	Solvents, PAHs, phenols, amines, oils, acids, alkalis, metals, plating chemicals, PCBs and asbestos.	Metals, PAHs, TPH CWG, VOCs, SVOCs, amines, pH, PCBs, asbestos.
Iron Foundry	Metals, inorganic compounds, PAHs, fuels and oils	Metals, PAHs, TPH CWG, VOCs, SVOCs.
Oil Refineries and Bulk Storage of Crude Oil	Hydrocarbons, organic compounds, inorganic compounds, metals, asbestos.	Metals, PAHs, TPH CWG, VOCs, SVOCs, asbestos.
Gas Works	Metals, tars, PAHs, hydrocarbons	Metals, sulphate, cyanide, VOCs, SVOCs, PAHs, TPH CWG.
Railway Lands	Fuel derived hydrocarbons, lubricating oils, creosote, herbicides, PAHs PCBs, asbestos and ash	Metals, PAHs, TPH CWG, VOCs, herbicides, SVOCs, phenols and creosols.

In addition to the above Industry Profiles available, the Aniline works could be a source of phenols and the tar still/tanks could be a source of hydrocarbons.

The graveyard, sand pit and refuse heap are potential sources of ground gases.

5.3 Pollution Linkages

The definition of a pollution linkage is a medium which allows a contaminant to impact a receptor. Potential pollution linkages have been recognised for the commercial development from the identified contamination sources that exist.

At this stage, the contaminants identified above are considered to potentially pose an unacceptable risk to human health and controlled waters through the following pollution linkages:

- *Direct soil and dust ingestion.*
- *Dermal contact with soil both indoors and outdoors.*
- *Indoor air inhalation from soil and vapour.*
- *Outdoor inhalation of soil and vapour.*
- *Migration and accumulation of ground gas into internal spaces.*
- *Impaction of groundwater from soil contamination (diffuse and point).*
- *Impaction of groundwater from groundwater plume.*
- *Migration of soil and groundwater contamination impacting surface waters.*

5.4 Receptors

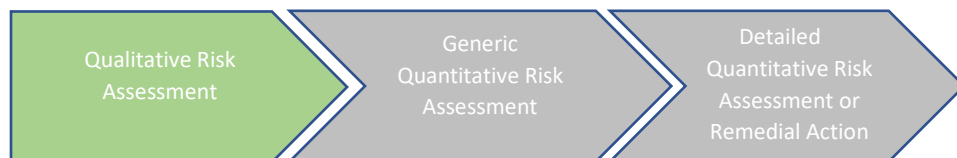
Receptors generally fall into the categories of human health or controlled waters within the river basin system. The recognized receptors are listed below:

- *Site end users.*
- *Superficial Secondary A and Secondary Undifferentiated Aquifer.*
- *Bedrock Secondary B Aquifer beneath the site and the Principal Aquifer circa 15m south.*
- *Ashton Canal to the immediate south.*
- *Clean potable water supply pipe.*

5.5 Preliminary Conceptual Site Model (CSM)

The factual information obtained from the searches and summarised in Section 2.0 and 3.0 has been used to compile a Preliminary CSM. Using Source-Pathway-Receptor assessment criteria that is applicable in the UK, a risk assessment has been completed to determine if a plausible pollution linkage exists between the identified contaminants and receptors. The risk classification has been estimated in accordance with the CIRIA C552 assessment criteria outlined in *Appendix 7*.

Human Health Pollution Linkage Assessment



- The table below represents the first stage in the land quality risk assessment process - **the Qualitative Risk Assessment**.
- In order for a development site to be deemed 'suitable for use' the level of risk needs to be reduced to an acceptable level - low to negligible risk. The purpose of each stage of risk assessment is to establish if there is a requirement for additional stages of assessment in order to have sufficient confidence to support a risk characterisation or remedial action.

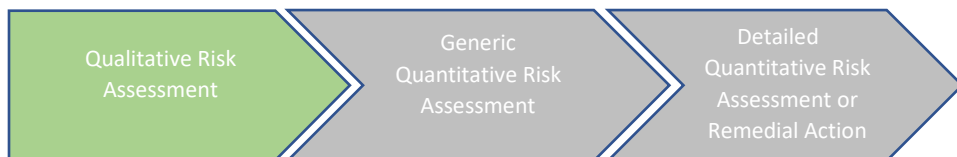
Conceptual Site Model					Qualitative Risk Assessment	
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	Rationale and Action
PL1	Contaminated Soils	Ingestion of soil and dust. Dermal contact with soil.	Low	Medium	Low	<i>Pollution Linkage 1 refers to proposed site users coming into contact with contaminated soils on the site.</i> <i>The site has been occupied by a chemical works since the 1890s and remains in operation. The proposed development area (Zone A) has historically been used for processing of rubber additive compounds, petroleum blending, 'I' resin and pepton mixing. However, no processes have taken place within Zone A since at least 2003.</i> <i>Based on the former uses of the chemical works, CoC Concern may include phenols, formaldehyde, amines, organic acids, residual epoxy resins, inorganic acids, petroleum hydrocarbons, rubber chemicals, white vulcanised vegetable oil.</i> <i>General Made Ground beneath the site may be a potential source of metals, PAHs, hydrocarbons, asbestos and ground gases.</i>

Conceptual Site Model					Qualitative Risk Assessment	
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	Rationale and Action
						The electricity substation was constructed after 1981 when the use of PolyChlorinated Biphenyls (PCBs) was banned therefore, PCBs will not be present onsite and the risk is very low. Any potential offsite sources of contamination to the south of the site are unlikely to have affected the site as the canal will have acted as a barrier breaking the pathway of possible migrating contamination reaching the site. In addition, the general area of the site is indicated to be underlain by a significant thickness of Glacial Till deposits which are predominantly impermeable, therefore this will have restricted lateral migration of potential offsite mobile contaminants affecting the site. The proposed development is for a commercial end use and the site area will be entirely covered with hardsurfacing with a temporary building placed on top. The hardsurfacing will break the pathway to potentially contaminated soils and a viable pollution linkage is not considered to exist.
PL2	Contaminated Soils	Inhalation of vapour.	Unlikely	Medium to Severe	Low	This pollution linkage refers to volatile vapours migrating into confined spaces within the proposed development. The site has been a chemical works since the 1890s however, chemical processes no longer take place within Zone A. In addition, there is the potential for hydrocarbons to be present within the underlying soils. The area adjacent to the proposed development area is still used a chemical works.

Conceptual Site Model					Qualitative Risk Assessment	
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	Rationale and Action
						Testing of soils from three boreholes across Zone A as part of the Entec Ground Investigation did not record any significant concentrations of Contaminants of Concern including VOCs and hydrocarbons, and most were below laboratory limits of detection. The proposed development area will be entirely covered in concrete hardsurfacing and the only structure will be a temporary building placed on the slab. The concrete will therefore break the pathway to site end users from possible vapours and a plausible pollution linkage is not considered to exist.
PL3	Contaminated Soils	Inhalation of soil dust by adjacent site users.	Unlikely	Medium	Low	Pollution Linkage 3 relates to contamination on the subject site affecting adjacent site users. The Glacial Till beneath the site is likely to have restricted the potential migration offsite of any possible mobile contaminants and the surrounding land uses are indicative or more onerous than the subject site. Therefore, no realistic pollution linkage is considered to exist.
PL4	Contaminated Soils	Attacking potable water supply pipe.	Unlikely to Low Likelihood	Medium	Moderate to Low	Pollution Linkage 4 refers to the possible contaminants permeating potable water pipes and consumption by the future site end users of the tainted water supply. Made Ground is likely to be present at installation depth which may be contaminated with a range of contaminants including organics such as hydrocarbons and VOCs/SVOCs however, previous testing indicates very low concentrations were present in the soils in 2003.

Conceptual Site Model					Qualitative Risk Assessment	
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	Rationale and Action
						<i>If new potable water supply pipes are to be included as part of the commercial development, a pollution linkage is considered to exist. A local water company risk assessment will be required prior to construction to advise on the level of protection required for any potable water supply pipes.</i>
PL5	Ground Gas	Migration and accumulation of ground gas in internal spaces.	Unlikely	Medium to Severe	Low	<i>Made Ground is indicated to be present beneath the site to a depth of 1.8m bgl in addition to peaty Clays to 3.0m bgl. In addition, potential offsite sources of permanent ground gases include a graveyard, sand pit and refuse heap.</i> <i>The proposed development area is to be entirely covered in concrete hardsurfacing and with a temporary building placed on the slab. The concrete surfacing will therefore break the pathway to site end users from permanent ground gases and a plausible pollution linkage is not considered to exist.</i>

Controlled Waters Pollution Linkage Assessment



- The table below represents the first stage in the land quality risk assessment process – **Qualitative Risk Assessment**.
- In order for a development site to be deemed 'suitable for use' the level of risk needs to be reduced to an acceptable level - low to negligible risk. The purpose of each stage of risk assessment is to establish if there is a requirement for additional stages of assessment in order to have sufficient confidence to support a risk characterisation or remedial action.

Conceptual Site Model					Qualitative Risk Assessment	
PL	Potential source	Pollution linkage	Likelihood	Severity	Level of risk	Rationale
PL6	Contaminated Soils	Impaction of groundwater from soil contamination (diffuse and point). Impaction of groundwater from groundwater plume.	Unlikely	Medium	Low	Potentially contaminated Made Ground is likely to be present across the site as the site has been a chemical works since the 1890s. The Site Condition Report prepared by Entec indicated that the site has predominantly been covered with hardsurfacing which will have limited the infiltration of rainwater through the soils and leaching potential contaminants. In addition, bunds and capture drains are present across the site, again limiting the spread of any chemicals that may have been spilled or leaked. Geo-environmental testing of soils and groundwater taken from Zone A in 2003 did not record any elevated Contaminants of Concern. In addition, since at least 2003, no chemical processes have taken place in Zone A therefore the conditions beneath the subject site are unlikely to have worsened. Geological maps indicate that the site is underlain by Glacial Till (Secondary Undifferentiated Aquifer) which predominantly consists of significant depths of Clay as indicated by nearby borehole data. The bedrock underlying the site is the Manchester Marls Formation (Secondary B Aquifer) comprising red brown moderately cemented Mudstone. The Chester Pebble Beds Formation (Principal Aquifer) is present c.15m to

Conceptual Site Model					Qualitative Risk Assessment	
PL	Potential source	Pollution linkage	Likelihood	Severity	Level of risk	Rationale
						the south. Records indicate that the superficial deposits in the general area are over 20m in thickness and predominantly consist of clay therefore, the Glacial Till deposits will have restricted the downward migration of any potential mobile contaminants to the underlying Secondary B Aquifer and the Principal Aquifer to the south of the site. In addition, the Groundsure report states the groundwater beneath the site is of low vulnerability to contamination. The Entec Ground Investigation recorded clay predominantly within their boreholes and no groundwater was present to 10m bgl. The site is not within 500m of a SPZ and is not considered a sensitive resource. In addition, there are no potable water abstractions within 2000m. A groundwater abstraction is c.57m to the east but is used for industrial processes. The proposed development will be entirely covered in concrete hardsurfacing which will considerably reduce infiltration and leaching of potential contaminants therefore, no pollution linkage is considered to exist.
PL7	Contaminated Soils	Migration of soil and groundwater contamination impacting surface waters.	Unlikely	Medium	Low	Pollution Linkage 7 refers to the impact of the Ashton Canal to the immediate south of the site from contaminated soils and groundwater. No other surface water features are within 250m. Mobile contamination may be present, however gross mobile contamination is not anticipated based on the results of previous testing and no groundwater has been identified within the boreholes to 10m bgl. Furthermore, the canal will be clay lined and will be a closed system, therefore any potential mobile contaminants through the

Conceptual Site Model					Qualitative Risk Assessment	
PL	Potential source	Pollution linkage	Likelihood	Severity	Level of risk	Rationale
						ground will not be able to enter the canal. Pluvial groundwater flows should be controlled. Hazardous substances should be prevented from entering groundwater. Pollution control measures have been identified across the site to prevent any chemicals entering the ground and if any minor amount did, then the significant thickness of Glacial Till will have also prevented the impaction of the groundwater by it acting as an aquitard. A viable pollution linkage is not considered to exist.

6.0 GROUND ENGINEERING RECOMENDATIONS AND POTENTIAL LIMITATIONS

6.1 Preliminary Foundation Assessment

The proposal is to partially demolish and refurbish some Victorian brick buildings and restore them back to offices. Any parts of the buildings fully demolished will be reinstated with concrete hardstanding to tie into the rest of the external works. A temporary structure will be placed on top of the concrete surfacing.

The site is indicated to be underlain by superficial Glacial Till deposits and bedrock comprising the Manchester Marls. BGS borehole records indicate that the superficial deposits are over 20m in thickness.

Previous boreholes across the development area indicate that Made Ground is present to a maximum depth of 1.8m bgl and peaty clays are to at least 3.0m bgl. In BH1D, firm and stiff Clay and medium dense Sand was encountered from beneath the Made Ground to 10.0m bgl.

No new foundations are intended as part of the proposed development.

6.2 Additional Limitations

Coal Mining

The site is not indicated to be affected by a legacy of historic coal mine workings and is not located within a Development High Risk Area.

SuDS

The site is likely to be underlain by deep Made Ground which may be contaminated and natural Glacial Till deposits. The use of a SuDS drainage solution at the site is unlikely to be a viable option.

Canal

The Ashton Canal is to the immediate south of the site. The integrity of this feature should not be compromised during the construction of the proposed development. An easement will be in place associated with the canal and this should be considered in final development proposals.

7.0 CONCLUSIONS AND GROUND INVESTIGATION SCOPE RATIONALE

7.1 Land Quality

The site has been occupied by a chemical works since the 1890s and remains in operation. The proposed development area (Zone A) has been used for processing of rubber additive compounds, petroleum blending, 'I' resin and pepton mixing. However, processes no longer take place within Zone A since at least 2003.

Based on the former uses of the chemical works, Contaminants of Concern may include phenols, formaldehyde, amines, organic acids, residual epoxy resins, inorganic acids, petroleum hydrocarbons, rubber chemicals, white vulcanised vegetable oil.

Human Health

The proposed development is for a commercial development and the proposed development area will be entirely covered with concrete hardsurfacing which will break the pollution linkage from potentially contaminated soils to site end users, the risk to human health is considered to be *Low*.

A temporary structure is to be placed on top of the concrete surfacing therefore, the risk of volatile vapours migrating into confined spaces within the proposed development is *Low*.

Made Ground is likely to be present at installation depth which may be contaminated with a range of contaminants including organics such as hydrocarbons and VOCs/SVOCs. If new potable water supply pipes are to be included as part of the commercial development, there is a *Moderate to Low* risk of possible contaminants permeating potable water pipes and consumption by the future site end users of the tainted water supply.

Potential sources of ground gases have been identified however, the temporary structure is to be situated on top of the concrete surfacing therefore the risk from permanent ground gases is *Low*.

Controlled Waters

During the Entec Ground Investigation of 2003, no groundwater was encountered within the boreholes that were drilled to 10m bgl. In addition, testing of soils and groundwater did not record any significant concentrations of contamination and most were below laboratory limits of detection within Zone A where the intended development is to take place. The groundwater is not considered to be a valuable resource and the potential downward migration of contaminants will have been restricted by the significant depth of underlying Glacial Till. The Groundsure report states the groundwater beneath the site is of low vulnerability to contamination.

Pollution control measures have been identified across the site to prevent any chemicals entering the ground and if any minor amount did, then the significant thickness of Glacial Till will have also prevented the impaction of the groundwater by it acting as an aquitard.

The Ashton Canal is adjacent to the site, this is a closed system and possible contaminants will not have impacted the watercourse through groundwater.

The risk to controlled waters is considered to be *Low*.

7.2 Ground Engineering

No new foundations are intended as part of the proposed development as the temporary structure is to be situated on top of the concrete surfacing.

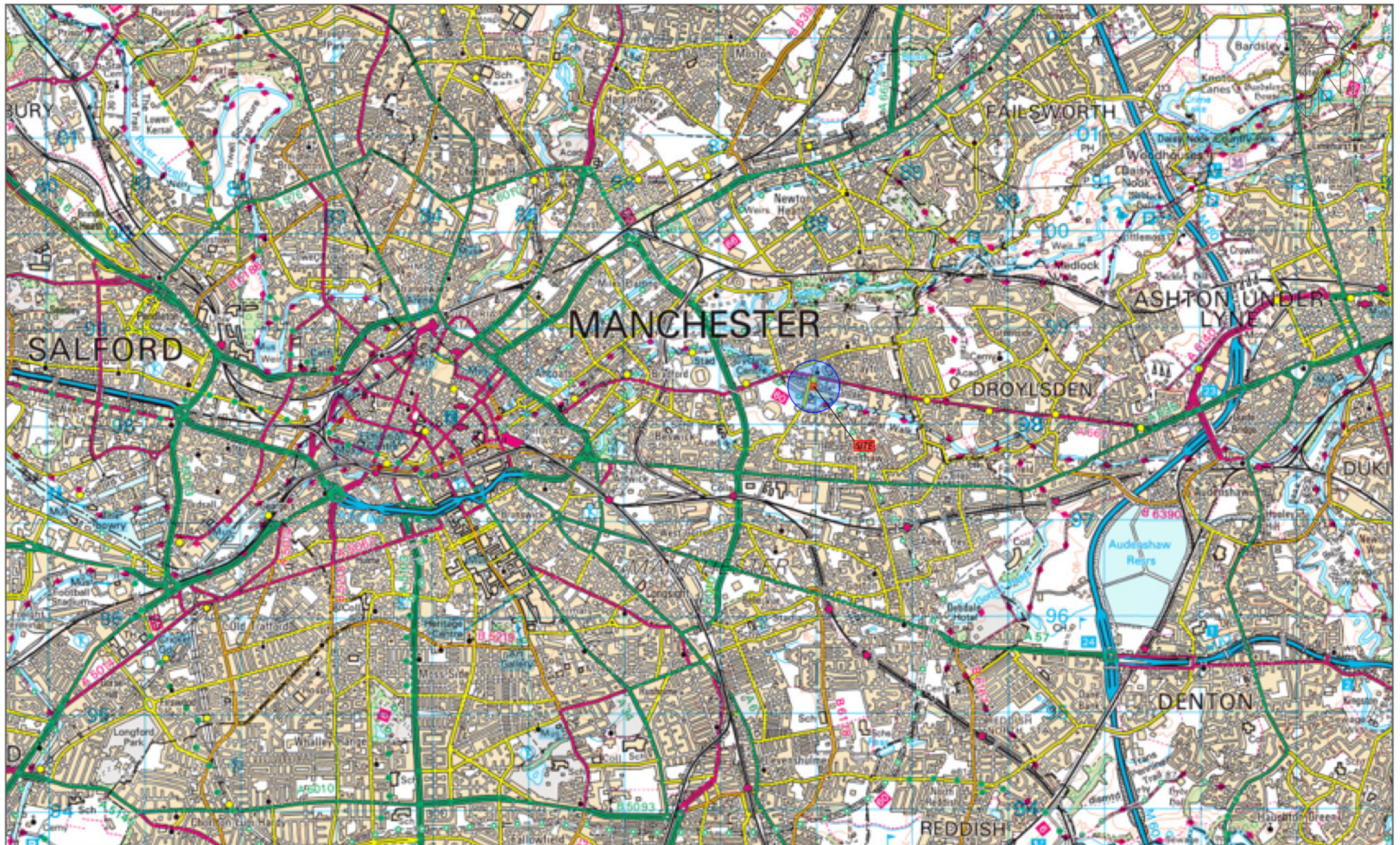
7.3 Additional Considerations

The site is likely to be underlain by Made Ground which may be contaminated and natural Glacial Till deposits. The use of a SuDS drainage solution at the site is unlikely to be viable option.

The site is not indicated to be affected by a legacy of historic coal mine workings and is not located within a Development High Risk Area.



APPENDIX 1 - Plans

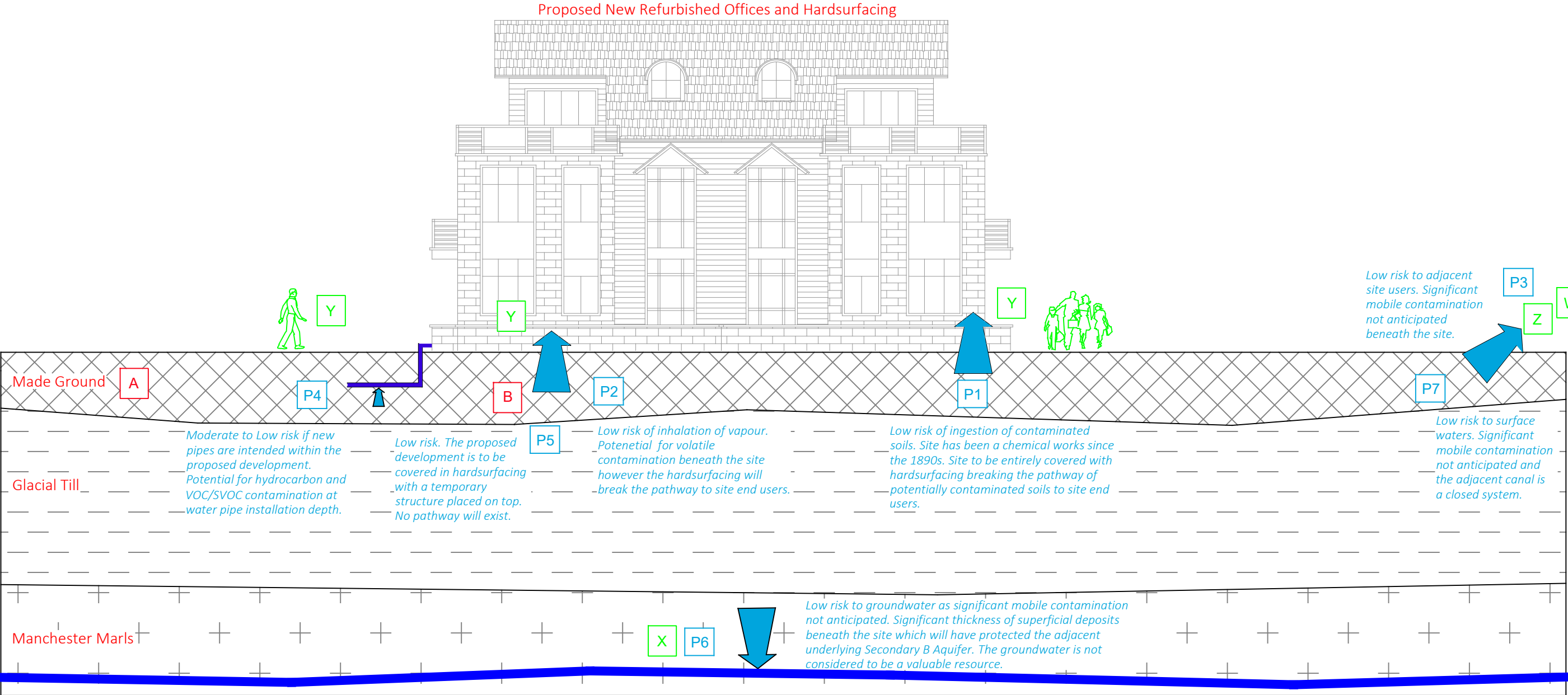


 GROUNDTECH CONSULTING	CLIENT	DATE				Status		Notes  Location of the site
	EVONIK CHEMICALS LTD	JANUARY 2021				Preliminary		
	PROJECT TITLE	SCALE				Draft		
	EVONIK CHEMICAL WORKS, CLAYTON	NTS				Issued	●	
	PLAN TITLE	PLAN NUMBER				For Comment		
PROJECT LOCATION PLAN	GRO-20221-P01	Rev.	Details		Date	Approved		



 GROUNDTECH CONSULTING	CLIENT	DATE				Status	Notes  Site boundary  Principal Aquifer  Secondary B Aquifer
	EVONIK CHEMICALS LTD	JANUARY 2021				Preliminary	
	PROJECT TITLE	SCALE				Draft	
	EVONIK CHEMICAL WORKS, CLAYTON	NTS				Issued	
	PLAN TITLE	PLAN NUMBER				For Comment	
	PRELIMINARY DEVELOPMENT CONSTRAINTS	GRO-20221-P02_1.1				Approved	
		Rev.	Details		Date		

SOURCES	POLLUTION LINKAGES	RECEPTORS
A. Contaminated soils / Made Ground. B. Ground gas.	P1. Ingestion of soil and dust. P2. Inhalation of vapour. P3. Inhalation of soil dust by adjacent site users. P4. Attacking of potable water supply pipe. P5. Migration and accumulation of ground gas in internal places. P6. Impaction of groundwater from soil contamination. P7. Migration of soil and groundwater contamination impacting surface waters.	W. Adjacent Ashton Canal. X. Groundwater within underlying Secondary Aquifers & adjacent Principal Aquifer. Y. Site end users. Z. Adjacent site users.



	CLIENT	DATE			Status		Notes
	EVONIK CHEMICALS LTD	JANUARY 2021			Preliminary		
	PROJECT TITLE	SCALE			Draft		
	EVONIK CHEMICAL WORKS, CLAYTON	NTS			Issued	●	
	PLAN TITLE	PLAN NUMBER			For Comment		
	ILLUSTRATIVE PRELIMINARY CSM	GRO-20221-P03_1.1	Rev.	Details	Date	Approved	



APPENDIX 2 - Photographs



Photograph 1 – Existing chemical works buildings



Photograph 2 – Buildings being demolished



Photograph 3 – Boiler house room in north west area



Photograph 4 – Demolition of buildings



APPENDIX 3 - Historical Maps

Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391

Report Ref: EMS-662921_874391

Grid Ref: 387953, 398334

Map Name: County Series

Map date: 1893

Scale: 1:2,500

Printed at: 1:2,500



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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: County Series

Map date: 1908

Scale: 1:2,500

Printed at: 1:2,500



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 Edition 1908
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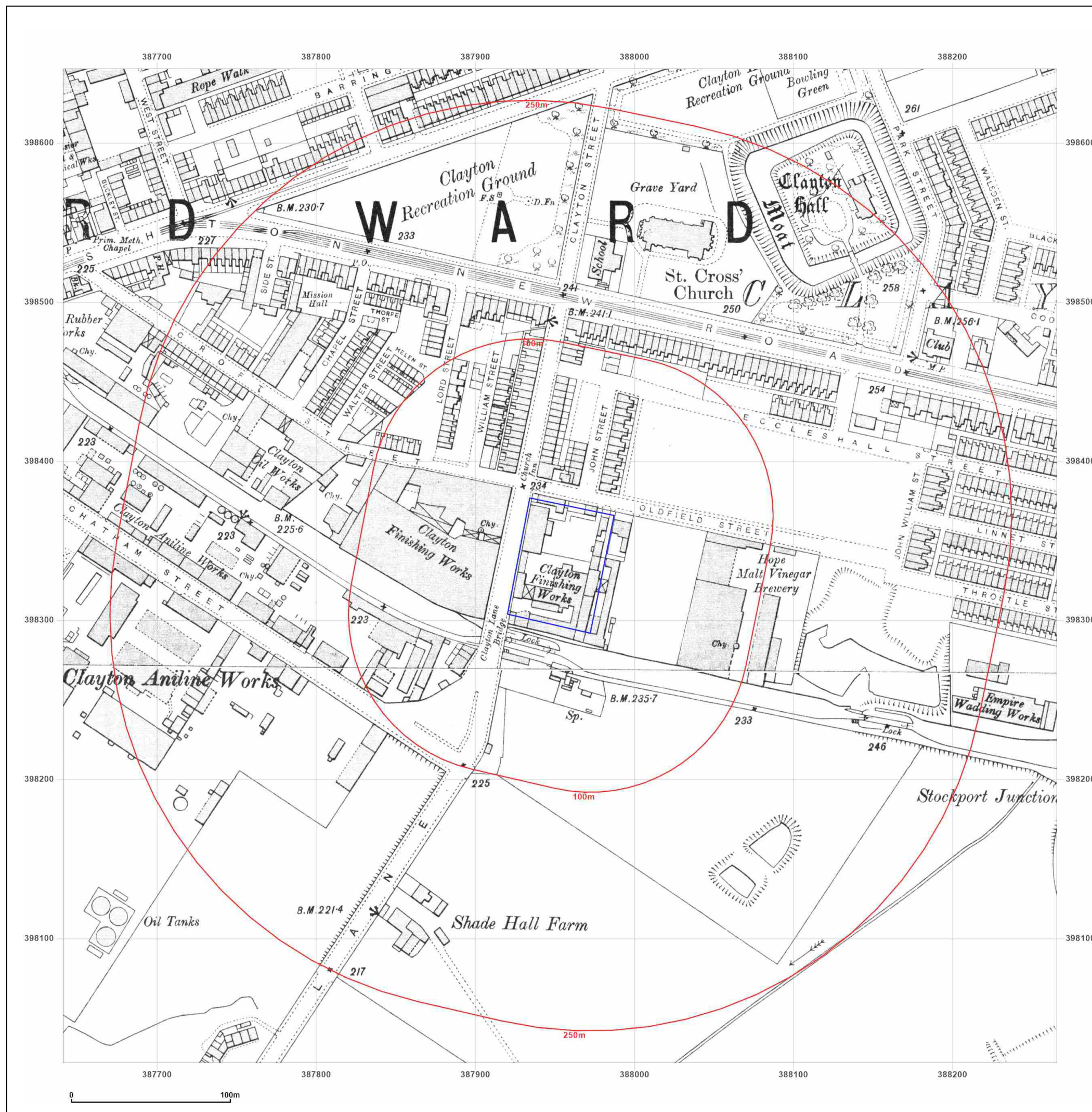


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Site Details:

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Client Ref: EMS_662921_874391

Report Ref: EMS-662921_874391

Grid Ref: 387953, 398334

Map Name: County Series

Map date: 1922

Scale: 1:2,500

Printed at: 1:2,500



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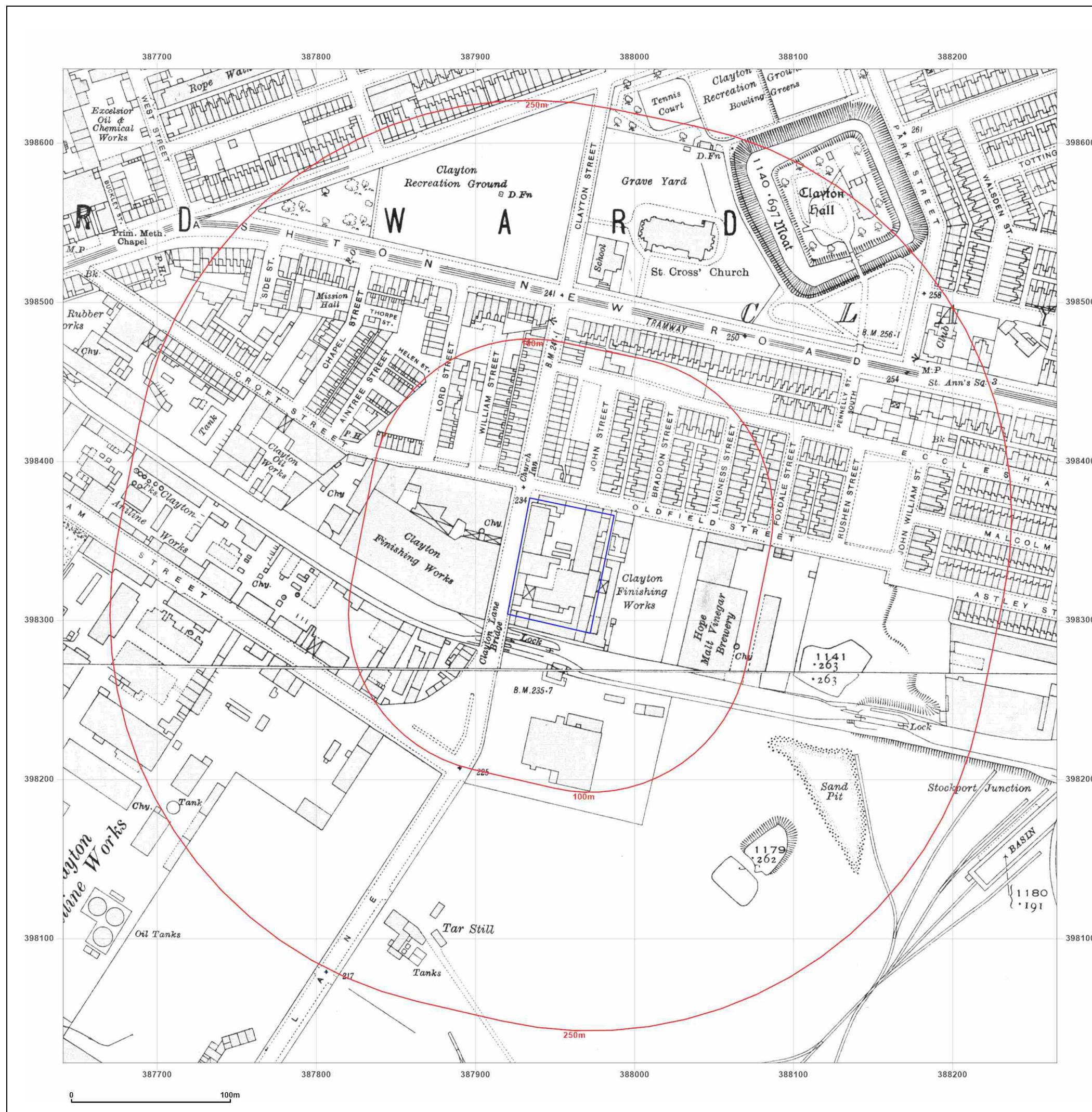


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Site Details:

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Client Ref: EMS_662921_874391

Report Ref: EMS-662921_874391

Grid Ref: 387953, 398334

Map Name: County Series

Map date: 1932-1933

Scale: 1:2,500

Printed at: 1:2,500



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Site Details:

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Report Ref: EMS-662921_874391

Grid Ref: 387953, 398334

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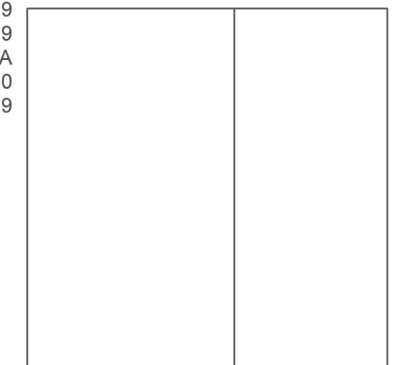
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Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 1949-1950

Scale: 1:1,250

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Site Details:

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Client Ref: EMS_662921_874391

Report Ref: EMS-662921_874391

Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 1950-1951

Scale: 1:2,500

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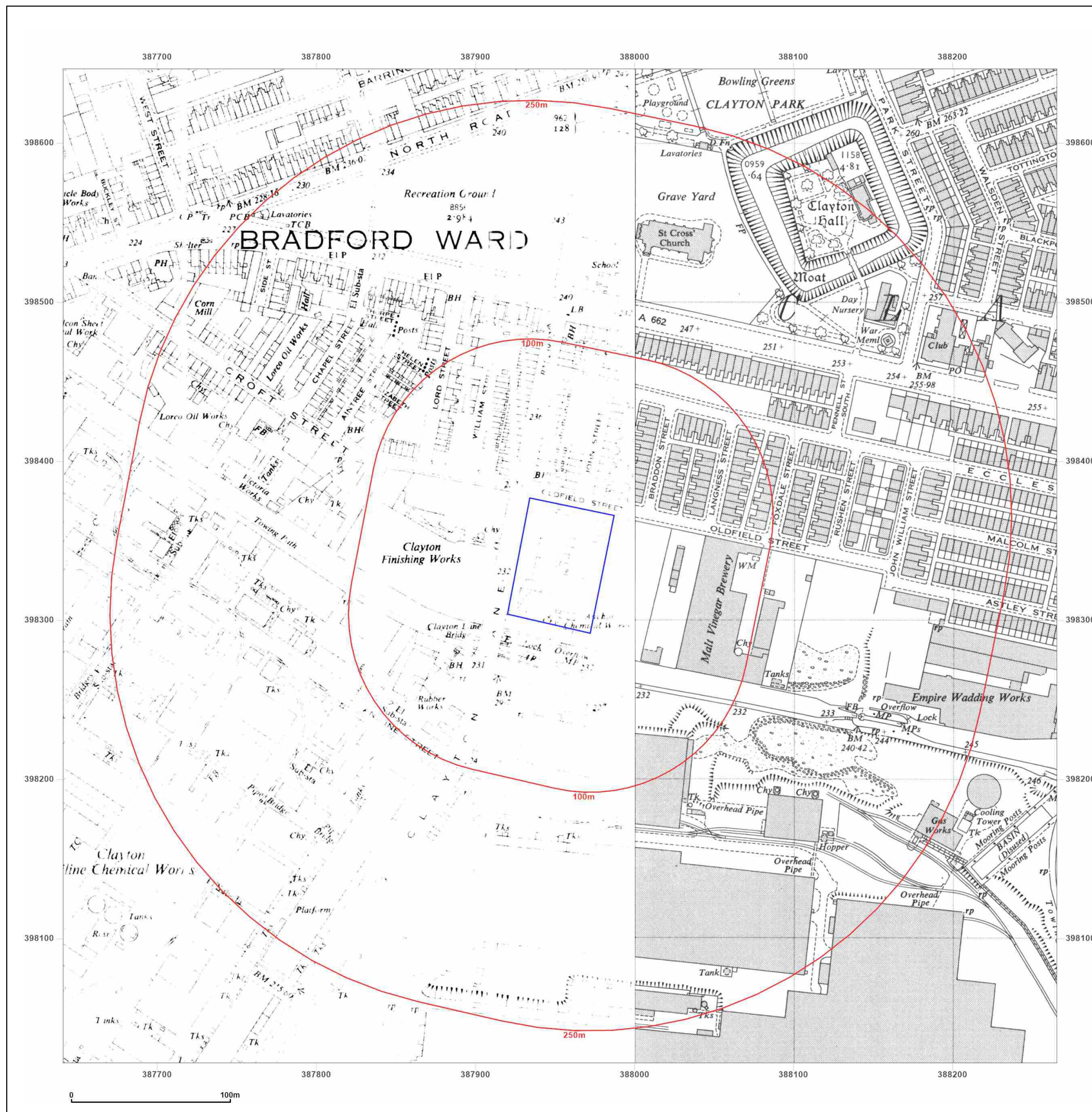


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Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 1951-1956

Scale: 1:1,250

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Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 1970-1972

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Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 1978-1980

Scale: 1:1,250

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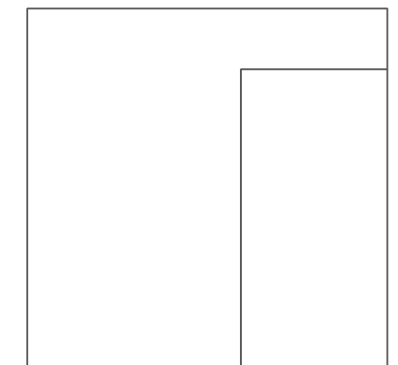
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Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 1983

Scale: 1:1,250

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Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 1991-1992

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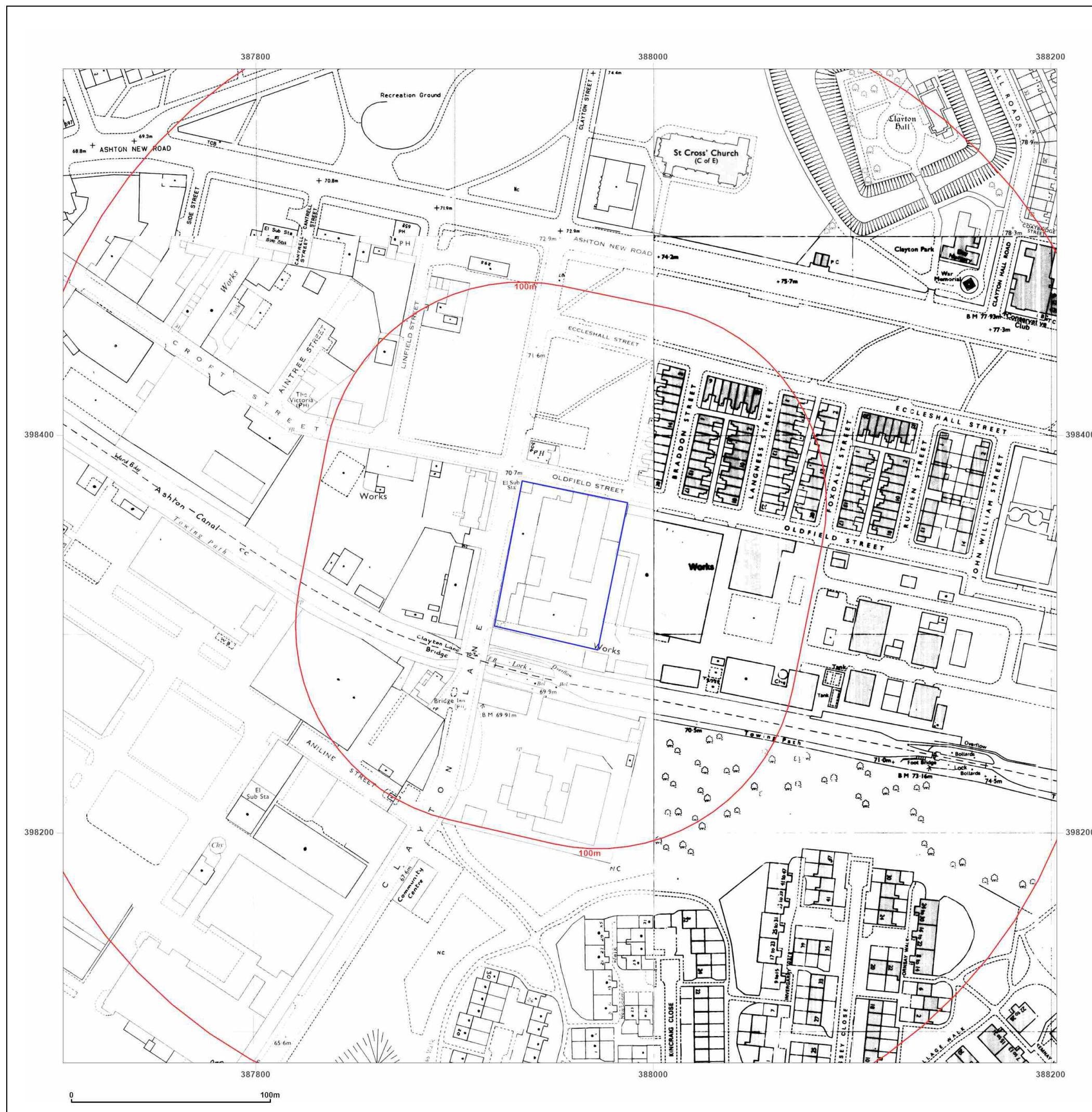


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Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 1992

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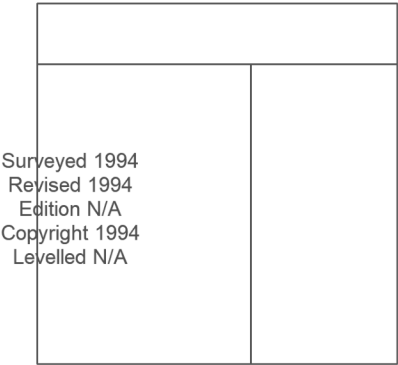
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Map Name: National Grid

Map date: 1994-1995

Scale: 1:1,250

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Production date: 20 January 2021

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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 1994-1995

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 1995
 Levelled N/A



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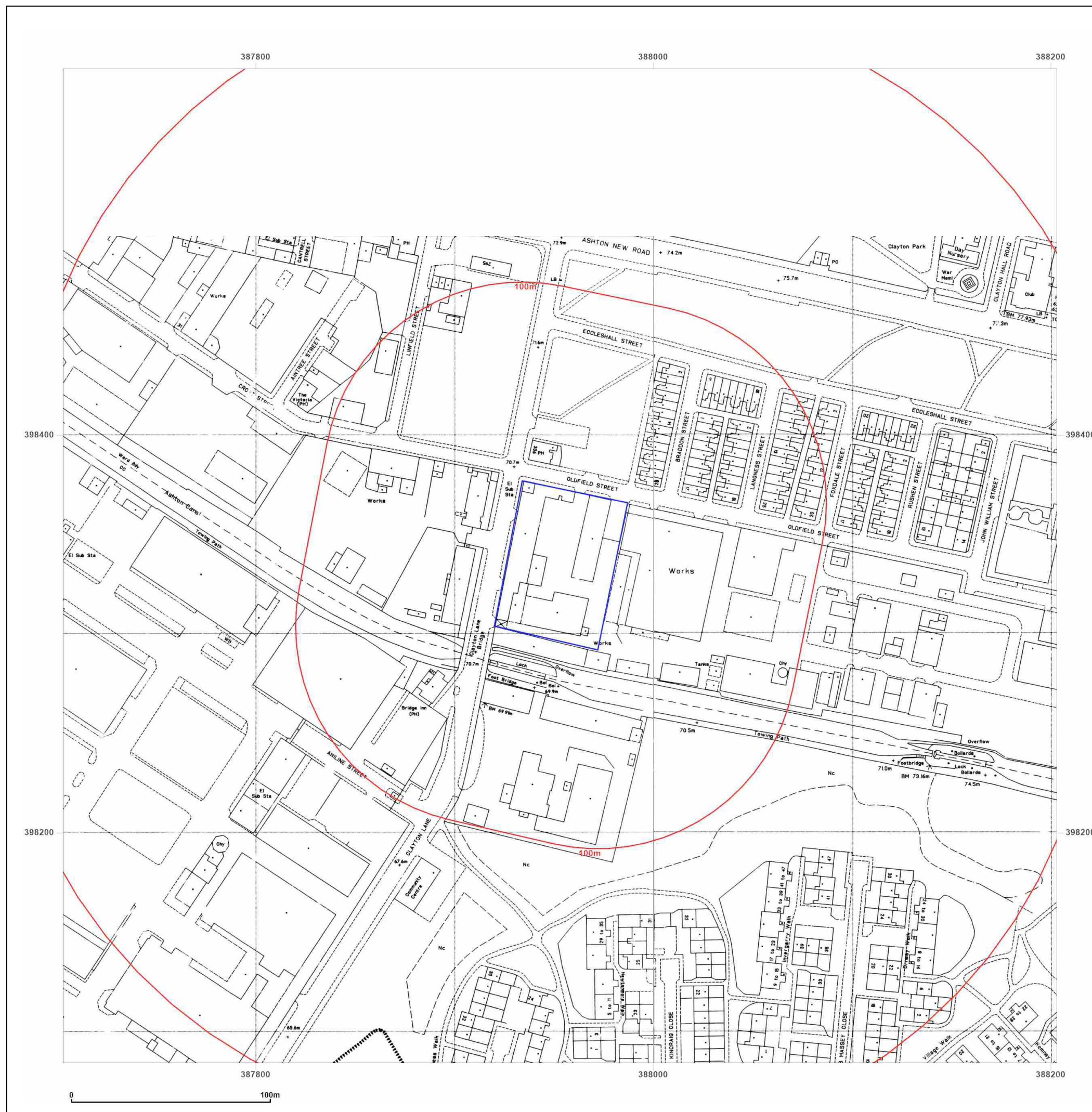


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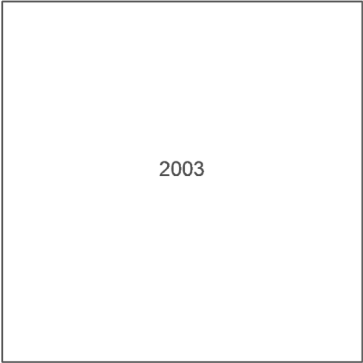


Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: LandLine
Map date: 2003
Scale: 1:1,250
Printed at: 1:1,250



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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: County Series

Map date: 1848

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1845
Revised N/A
Edition 1848
Copyright N/A
Levelled N/A

Surveyed 1845
Revised N/A
Edition 1848
Copyright N/A
Levelled N/A



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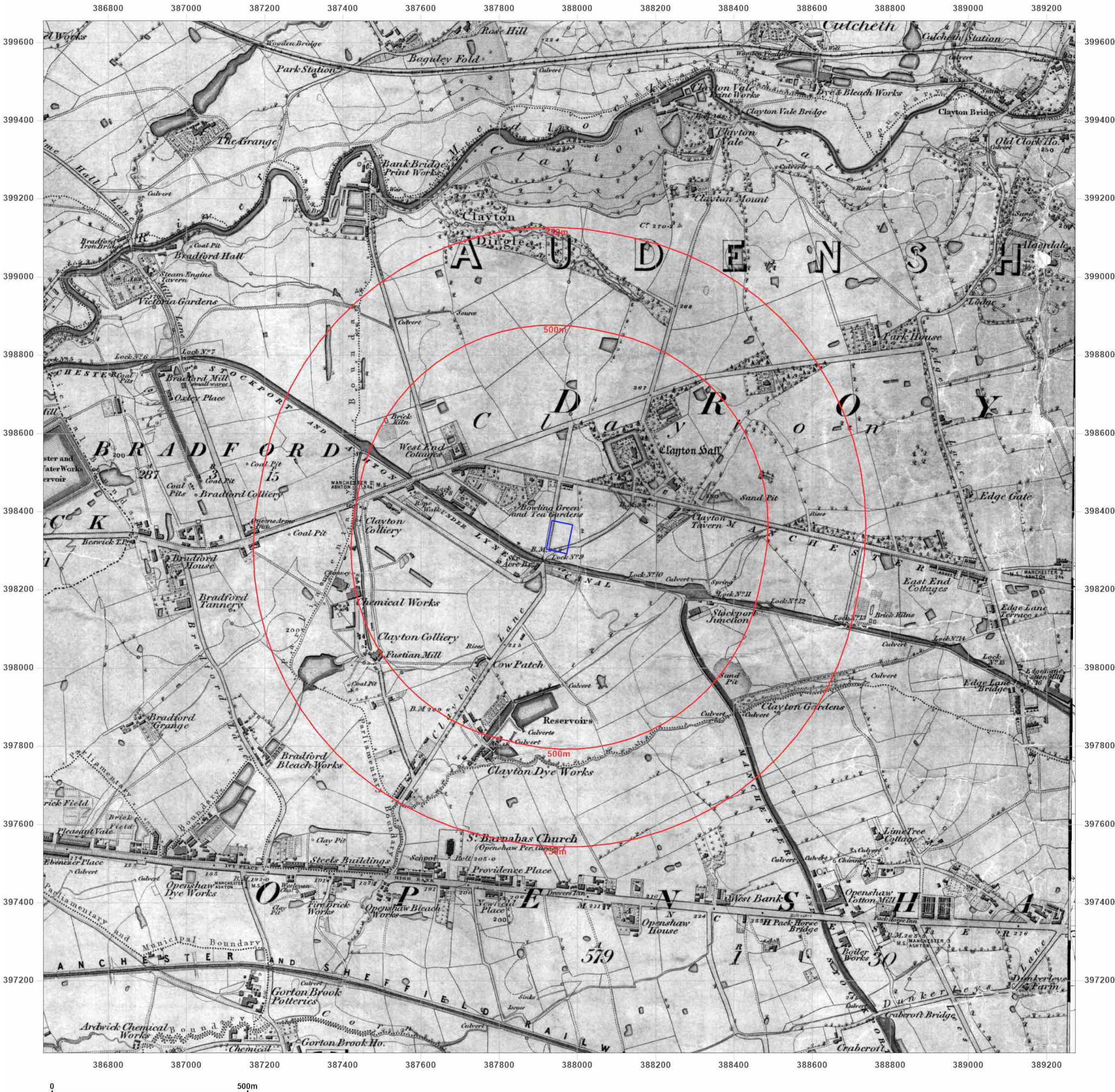


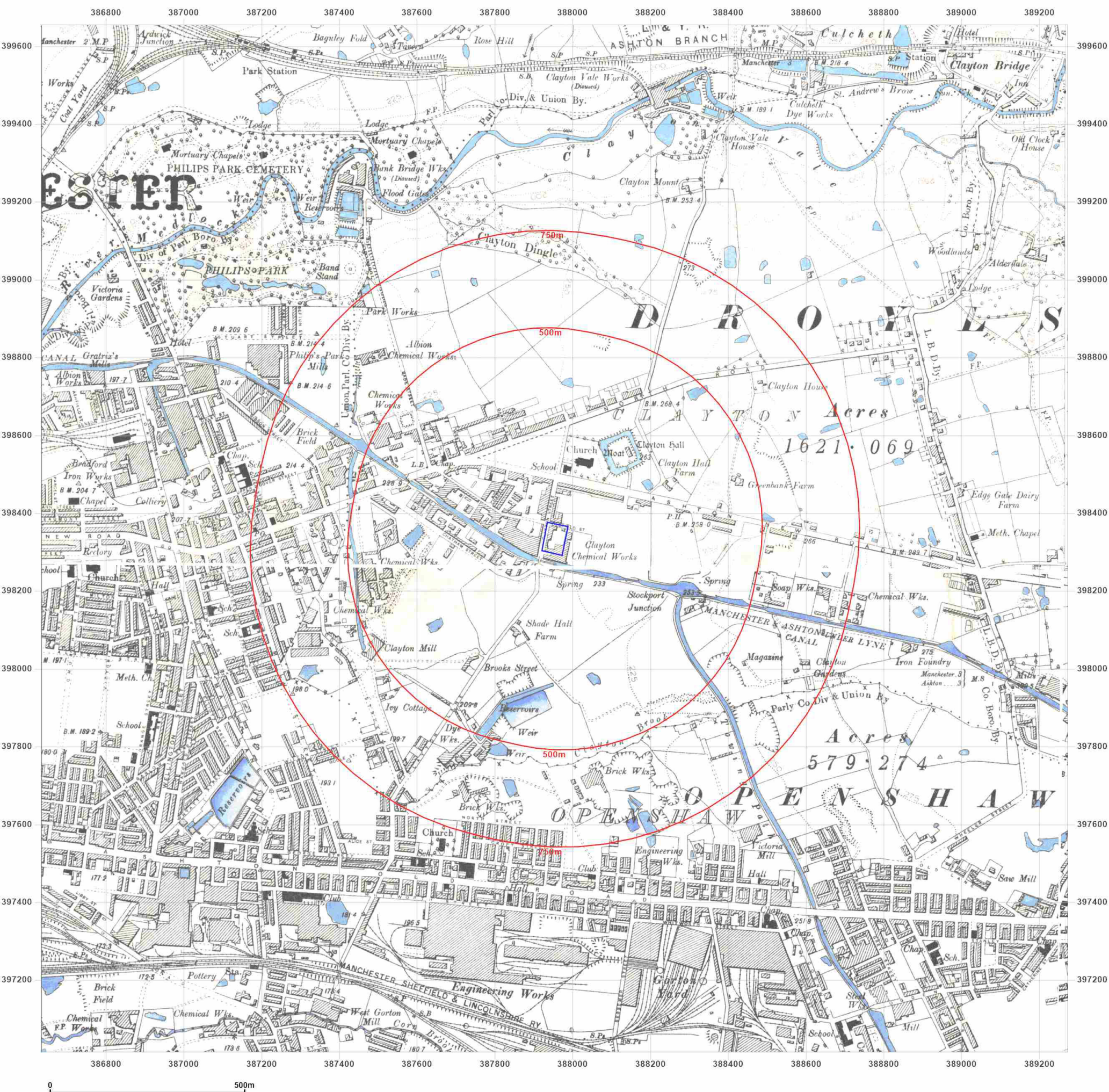
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Production date: 20 January 2021

Map legend available at:
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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: County Series

Map date: 1890-1892

Scale: 1:10,560

Printed at: 1:10,560



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

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

Surveyed 1890
Revised 1890
Edition 1890
Copyright N/A
Levelled N/A

Surveyed 1892
Revised 1892
Edition N/A
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Production date: 20 January 2021

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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: County Series

Map date: 1905-1906

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1906
Edition 1906
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1906
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1905
Edition 1905
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1906
Edition N/A
Copyright N/A
Levelled N/A



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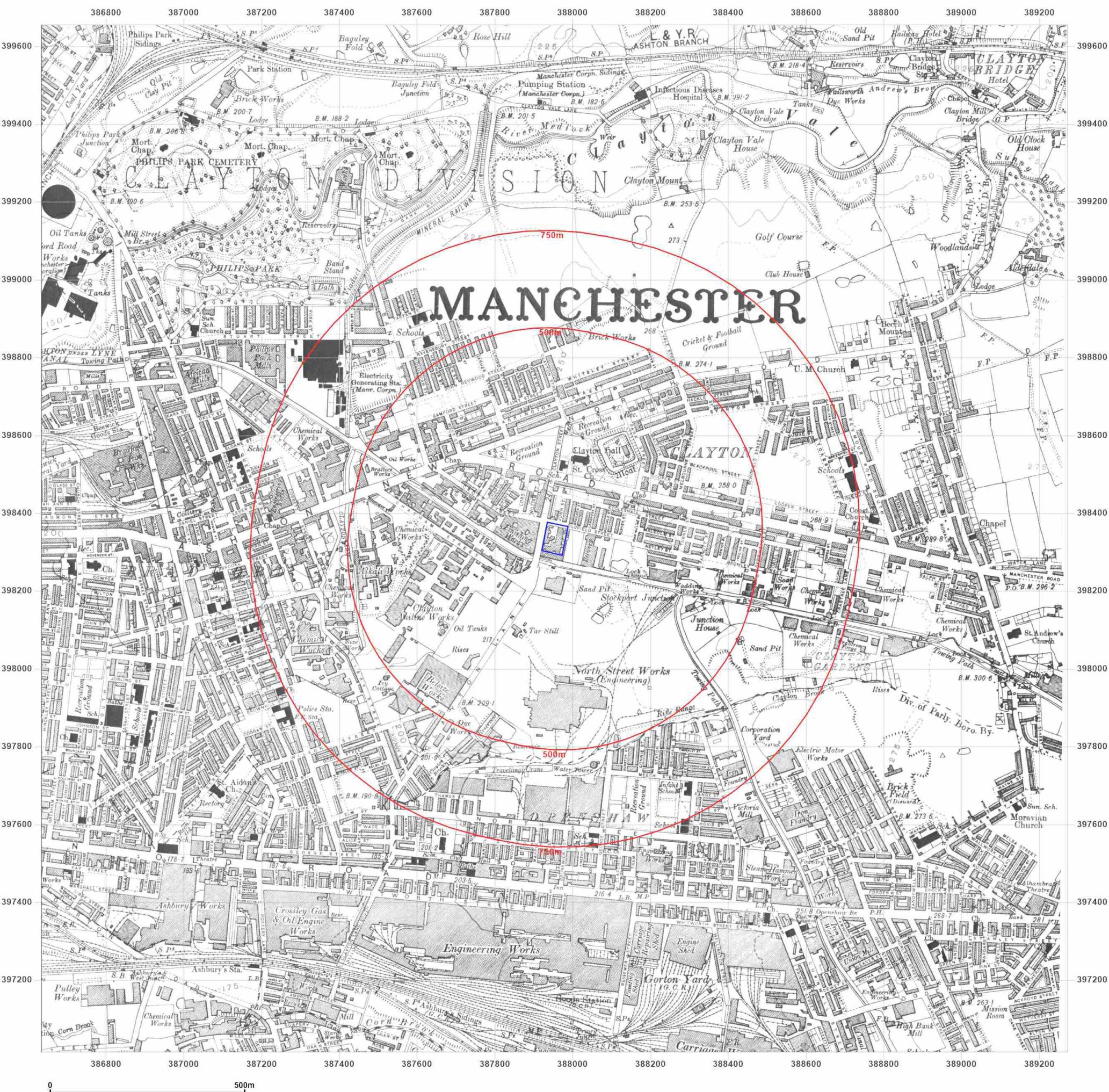


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Production date: 20 January 2021

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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: County Series

Map date: 1923

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1921
Edition 1923
Copyright N/A
Levelled 1906

Surveyed 1844
Revised 1915
Edition 1923
Copyright N/A
Levelled 1915



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Production date: 20 January 2021

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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: County Series

Map date: 1933-1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
 Revised 1933
 Edition 1933
 Copyright N/A
 Levelled 1927

Surveyed 1844
 Revised 1933
 Edition N/A
 Copyright N/A
 Levelled N/A

Surveyed 1844
 Revised 1934
 Edition 1934
 Copyright N/A
 Levelled 1927

Surveyed 1844
 Revised 1938
 Edition N/A
 Copyright N/A
 Levelled N/A



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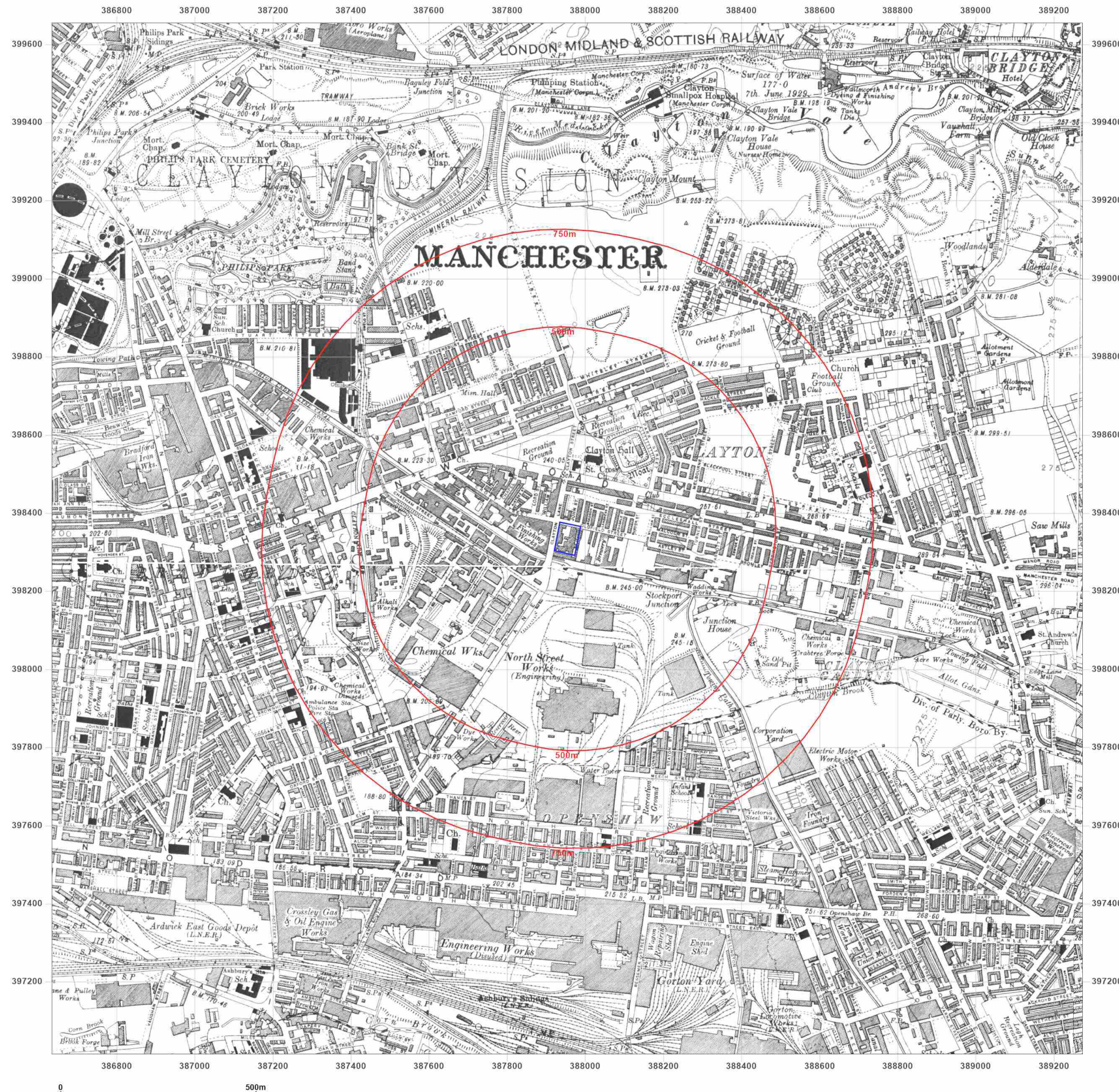


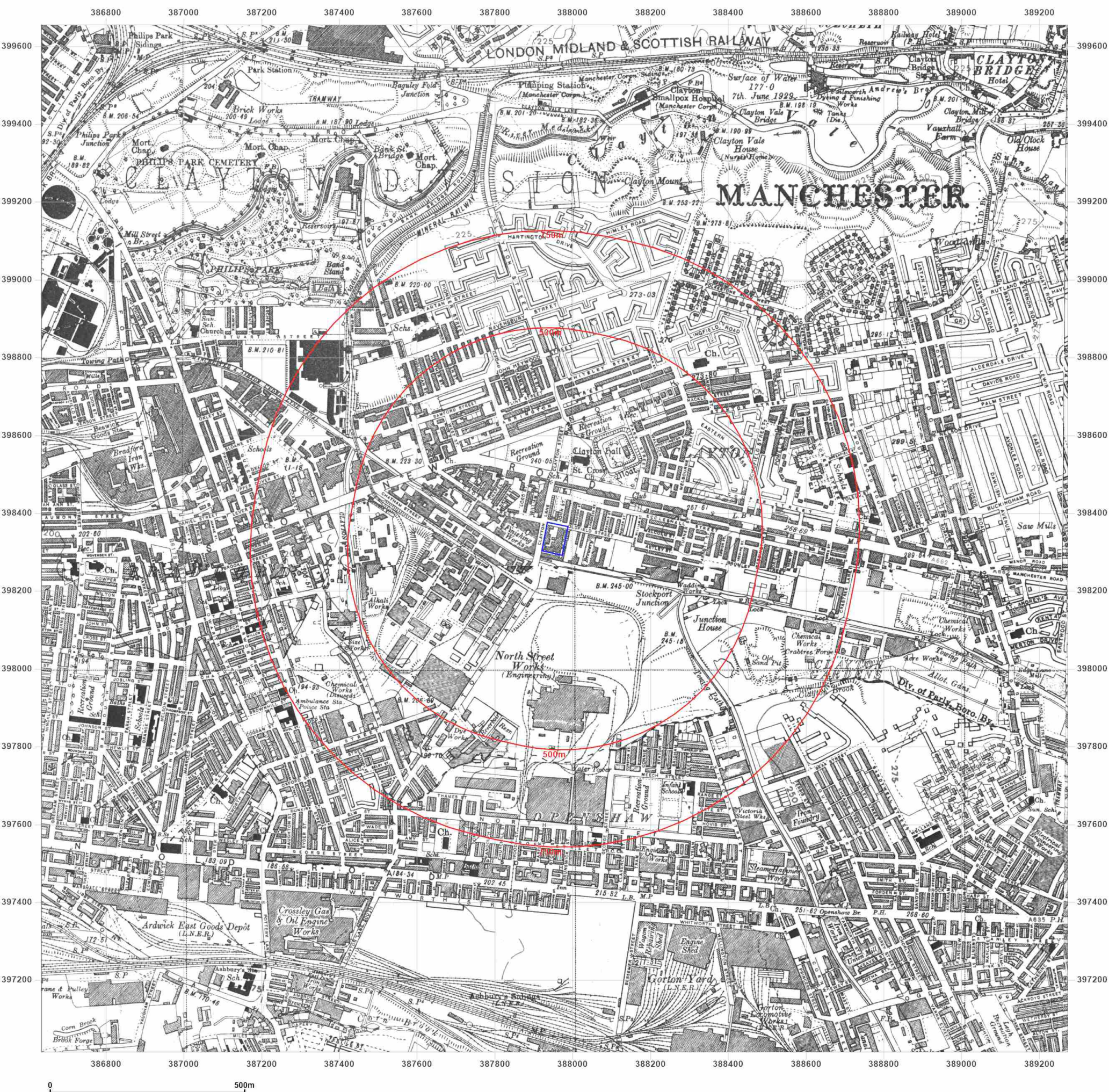
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Production date: 20 January 2021

Map legend available at:
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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: County Series

Map date: 1934-1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1938
Edition 1938
Copyright N/A
Levelled 1927

Surveyed 1844
Revised 1938
Edition N/A
Copyright N/A
Levelled 1929

Surveyed 1844
Revised 1938
Edition 1938
Copyright N/A
Levelled 1927

Surveyed 1844
Revised 1934
Edition N/A
Copyright N/A
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Production date: 20 January 2021

Map legend available at:
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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: Provisional

Map date: 1956

Scale: 1:10,560

Printed at: 1:10,560



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



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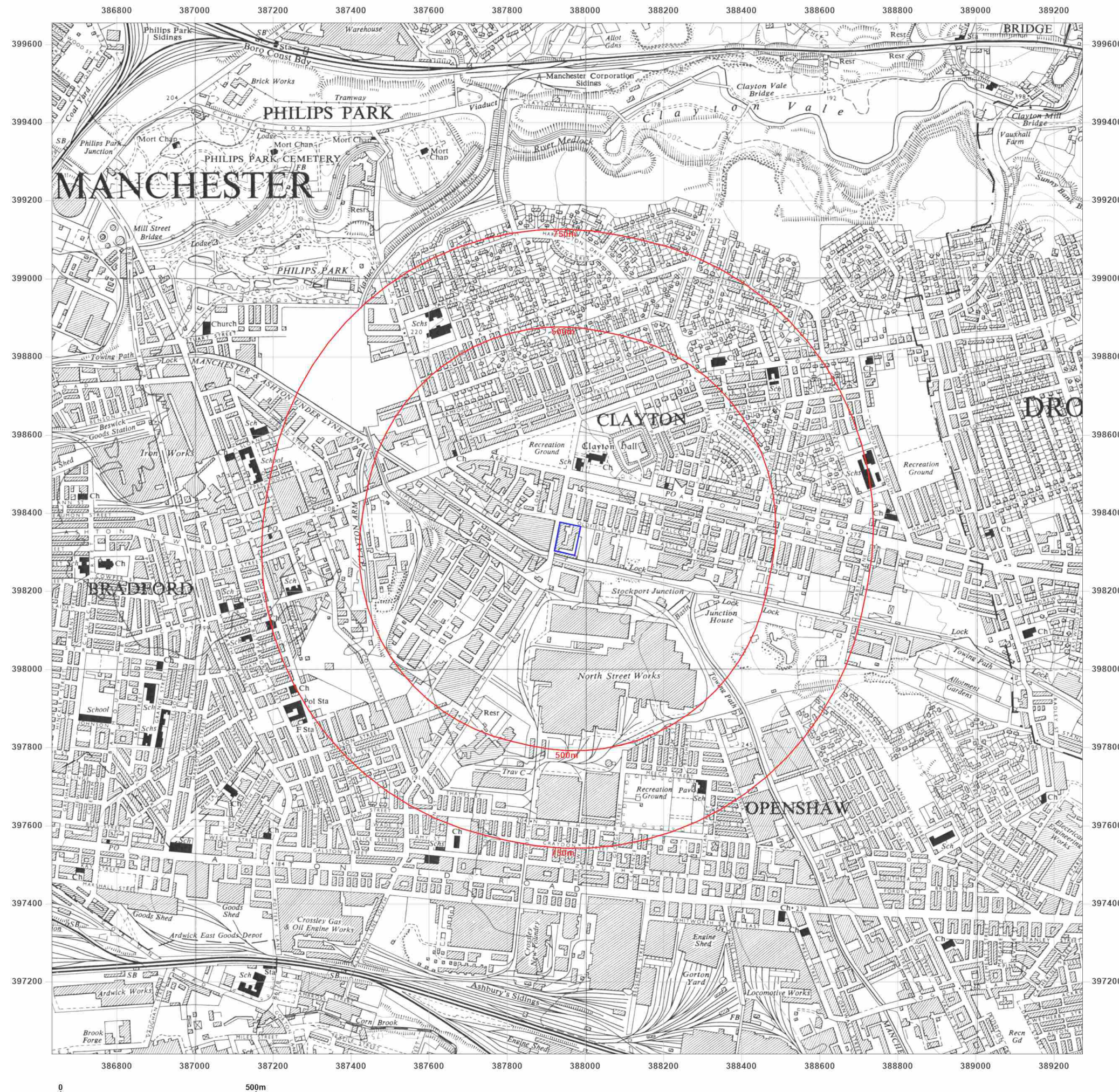


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Production date: 20 January 2021

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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: Provisional

Map date: 1968

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1968
 Revised 1968
 Edition N/A
 Copyright 1968
 Levelled N/A



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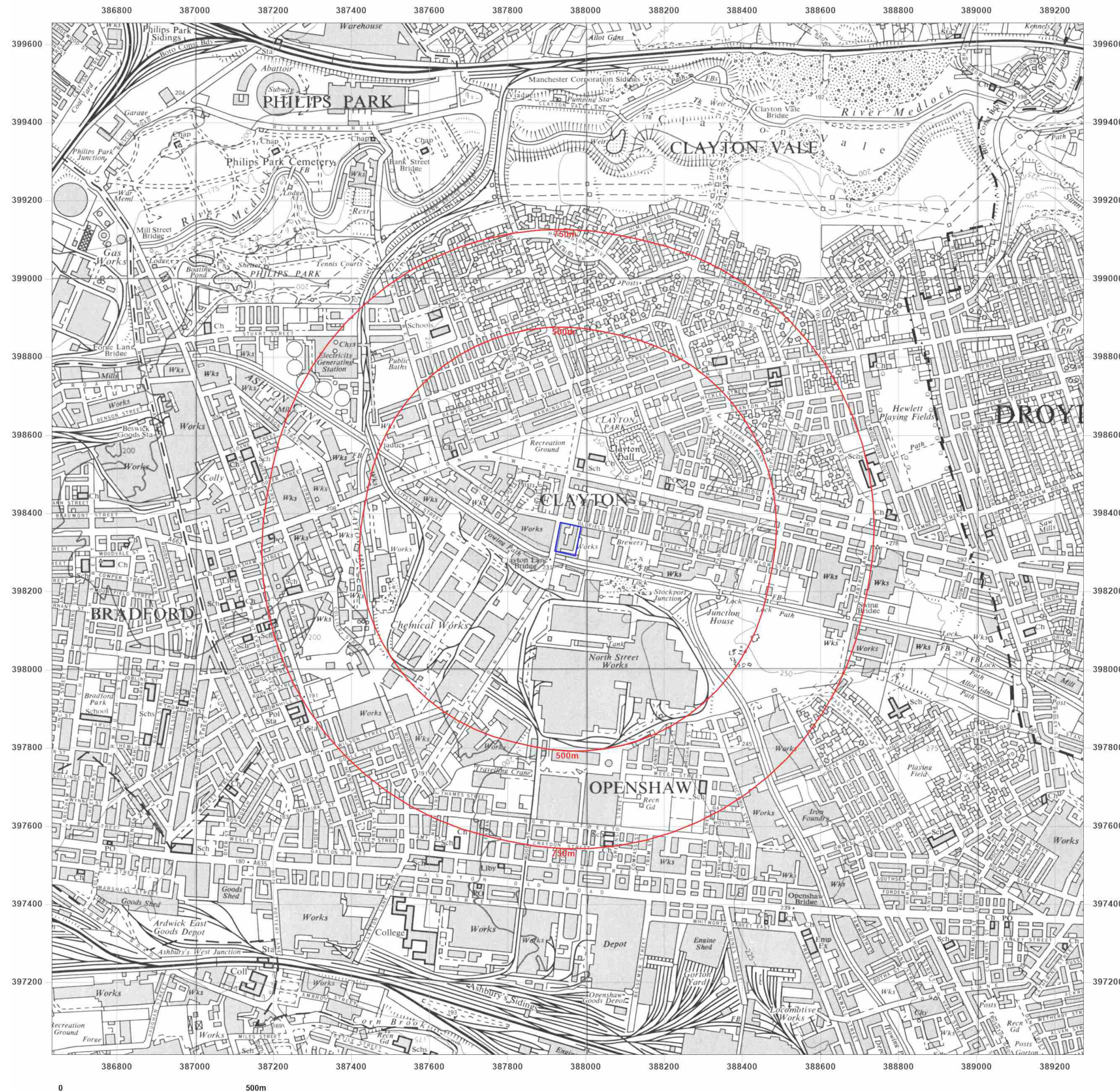


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Production date: 20 January 2021

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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391

Report Ref: EMS-662921_874391

Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 1981

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1976
Revised 1980
Edition N/A
Copyright 1981
Levelled 1976



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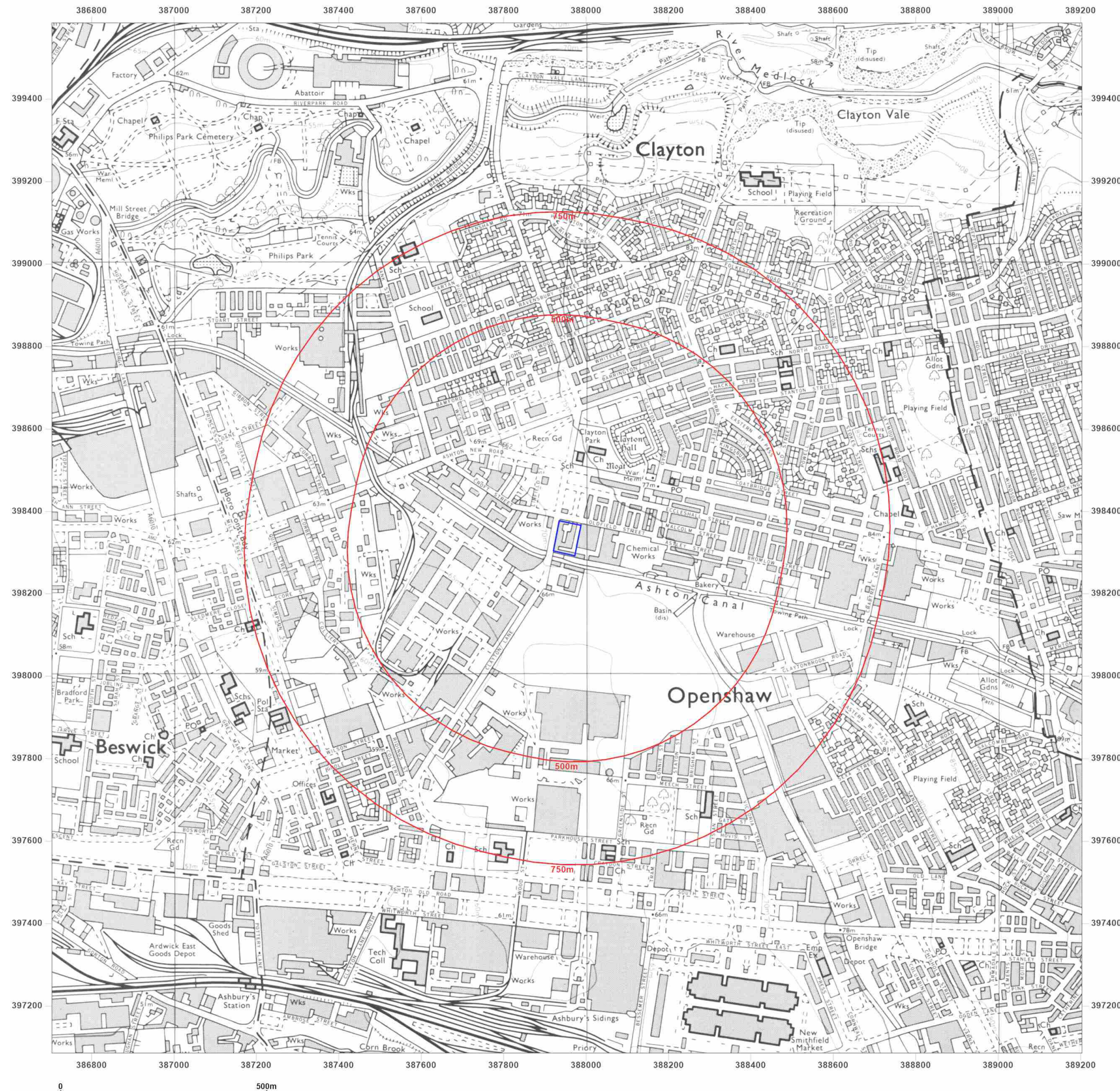


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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391
Report Ref: EMS-662921_874391
Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 1985

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1985
 Revised 1985
 Edition N/A
 Copyright 1985
 Levelled 1981



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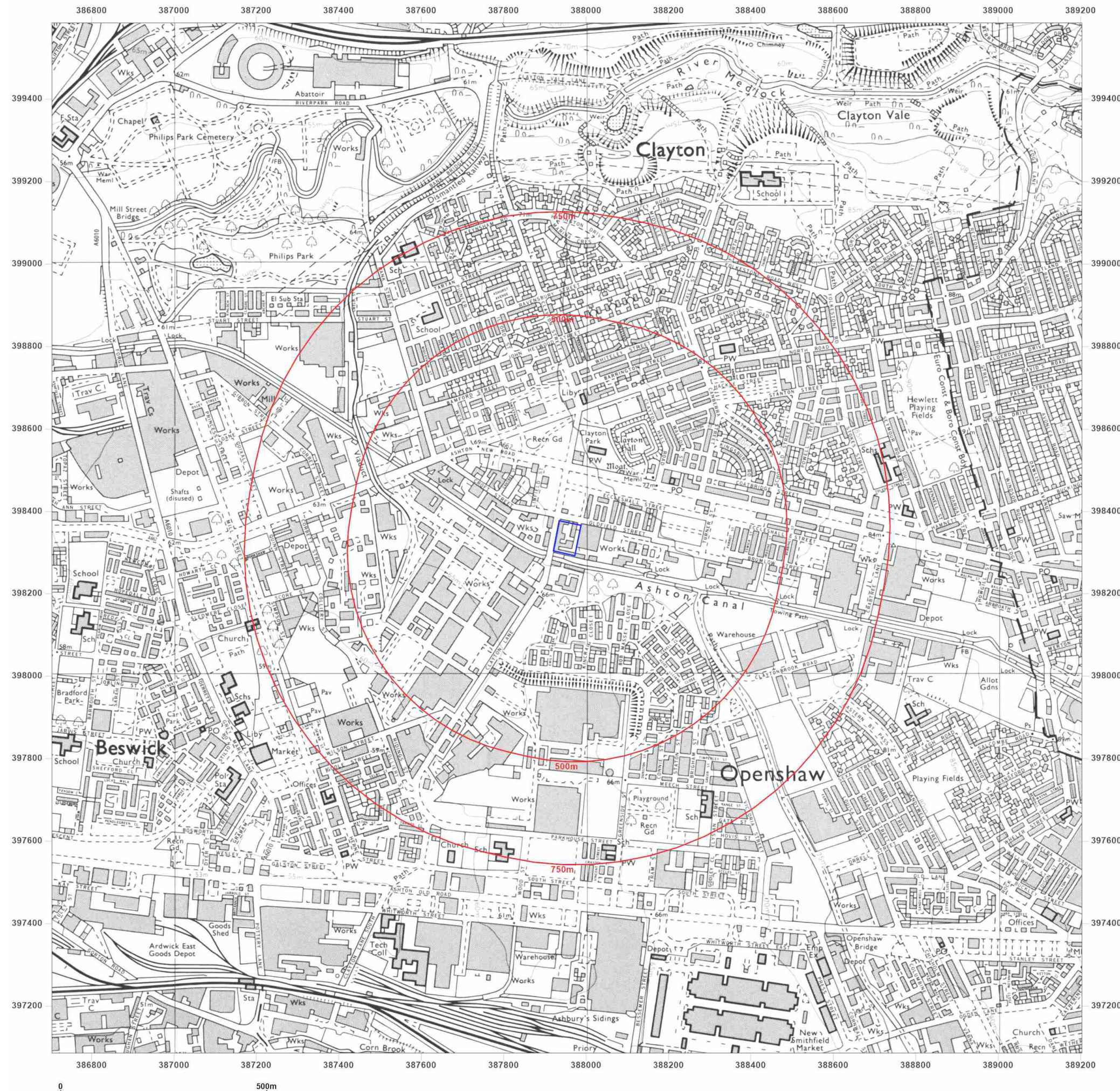


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Production date: 20 January 2021

Map legend available at:
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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391

Report Ref: EMS-662921_874391

Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000



2001



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Production date: 20 January 2021

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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391

Report Ref: EMS-662921_874391

Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010



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Site Details:

Evonik Chemical Works

Client Ref: EMS_662921_874391

Report Ref: EMS-662921_874391

Grid Ref: 387953, 398334

Map Name: National Grid

Map date: 2021

Scale: 1:10,000

Printed at: 1:10,000



2021



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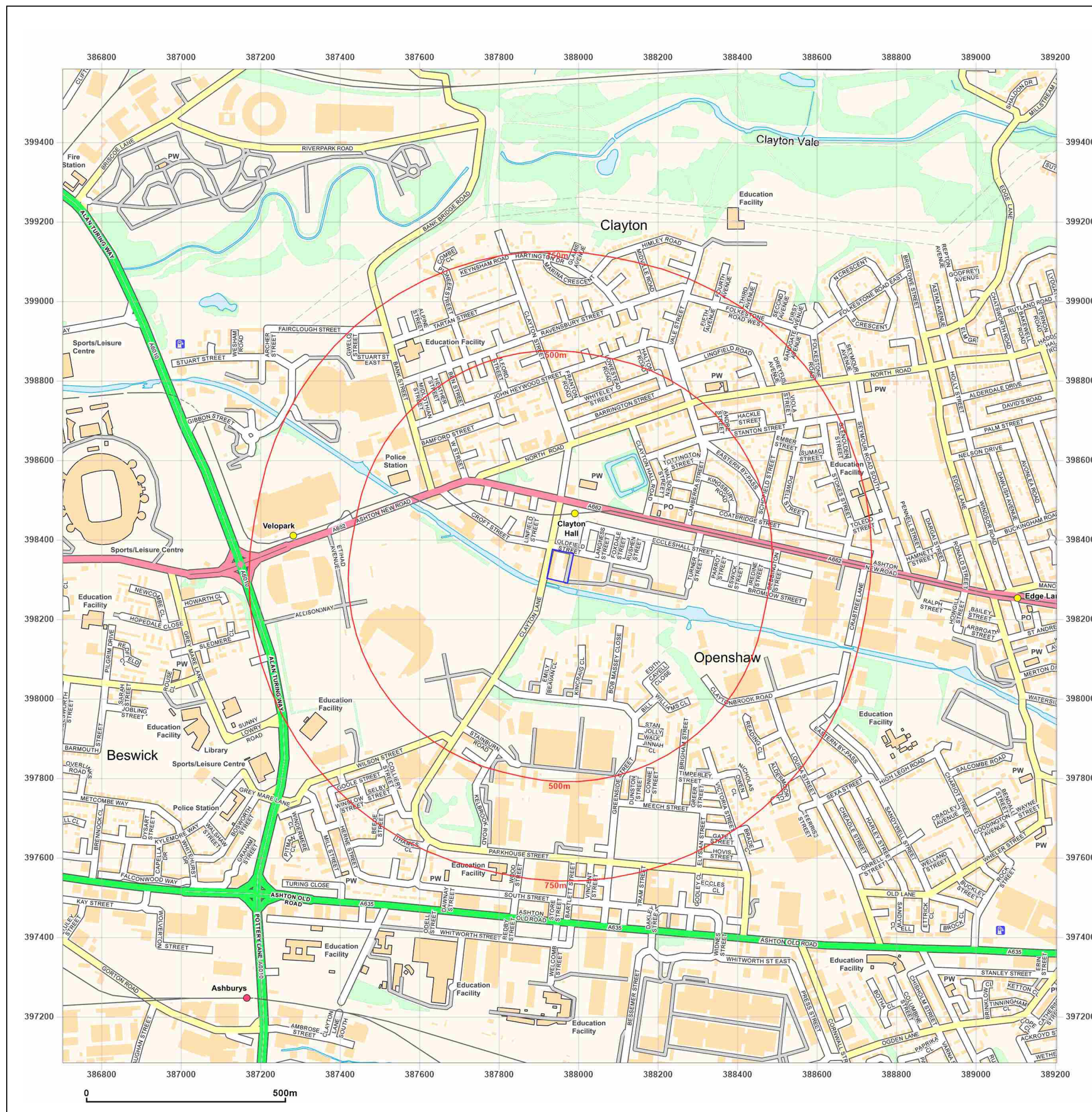


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Production date: 20 January 2021

Map legend available at:
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APPENDIX 4 - BGS Records

SECTION OF

Bouhole

at

Morden's (Clayton) Ltd.,

W. Morden, Clayton,

Dyers.

Manchester.

Maps: One-inch 85.

Six-inch 104NE

County

Height above O.D. 11850'

Latitude

Longitude

Communicated by

Messrs. Wm. Mutton Ltd.

Date of Sinking 1908.

Made by

Dip of Strata

Hickling No. 41. (cont.)
Trans. Inst. Mining. Vol. LV., 1918.

M/c 87.(a)

See also slightly different account by the
bones (F. Smith & Son), attached hereto.
'with total depth 344'.

Thickness.

Depth from Surface.

Memes

Memes.

0.61	2	-	0.61	2	-
8.53	28	-	9.14	30	-
1.83	6	-	10.97	36	-
3.05	10	-	14.02	46	-
2.44	8	-	16.46	54	-
4.27	14	-	20.73	68	-
3.66	12	-	24.38	80	-
0.15	-	6	24.54	80	6
1.22	4	-	25.76	84	6
1.07	3	6	26.82	88	-
1.83	6	-	28.65	94	-
0.91	3	-	29.57	97	-
6.10	20	-	35.66	117	-
0.46	1	6	36.12	118	6
0.61	2	-	36.73	120	6
0.61	2	-	37.34	122	6
0.91	3	-	38.25	125	6
1.22	4	-	39.47	129	6
2.44	8	-	41.91	137	6
3.05	10	-	44.96	147	6
10.67	35	-	55.63	182	6
4.57	15	-	60.20	197	6
8.23	27	-	68.43	224	6
0.31	1	-	68.73	225	6
2.13	7	-	70.87	232	6
1.83	6	-	72.70	238	6
4.72	15	6	77.42	254	-
0.91	3	-	78.33	257	-

made ground

Clay

Sand & clay

Clay

Sand & gravel

Clay & stones

Red clay

Clay & stones

Red clay

Sandy clay

Red clay

Sandy clay

Red clay

Dark stone

Sandy clay

Sand

Clay

Clay & stones

Sandy clay

Clay & stones

Red clay

Clay & stones

Red clay

Stone

Red clay

Stone

Red clay

Hard red sandstone

Institute of Geological Sciences
RECORD OF SHAFT OR BOREHOLE

6-in or 1:10 000 Map Registration No.

SJ 89/222

85

National Grid Reference

Name and Number of Shaft or Borehole:

For whom made ANCHOR CHEMICALS LTD. CLAYTON LANE, CLAYTON.

Town or Village CLAYTON County MANCHESTER

Exact site (reference to a fixed point on 1-in or 1:50 000 Map)

SJ 8803 9829 (SJ 89/222)

Purpose for which made

Ground level at ^{shaft}_{bore} relative to O.D. _____ m. If not ground level give O.D. of beginning of ^{shaft}_{bore} _____ m.

Made by J. P. WHITTER. AHERTON

Date of sinking: MARCH 1984.

Information from 87 SMALLBROOK LANE, LEIGH. 0942-893660

Examined by

Specimen Numbers and Additional Notes

[illegible]



APPENDIX 5 - Groundsure Report

Evonik Chemical Works,

Order Details

Date: 20/01/2021
Your ref: EMS_662921_874392
Our Ref: EMS-662921_874392
Client: emapsite

Site Details

Location: 387953 398334
Area: 0.41 ha
Authority: [Manchester City 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	Historical industrial land uses	5	11	38	103	-
19	1.2	Historical tanks	0	1	116	201	-
31	1.3	Historical energy features	1	0	15	22	-
33	1.4	Historical petrol stations	0	0	0	0	-
33	1.5	Historical garages	0	0	3	6	-
34	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
35	2.1	Historical industrial land uses	6	16	47	146	-
43	2.2	Historical tanks	0	2	173	307	-
61	2.3	Historical energy features	6	0	36	47	-
64	2.4	Historical petrol stations	0	0	0	0	-
64	2.5	Historical garages	0	0	4	7	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
66	3.1	Active or recent landfill	0	0	0	0	-
66	3.2	Historical landfill (BGS records)	0	0	0	0	-
67	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
67	3.4	Historical landfill (EA/NRW records)	0	0	0	1	-
67	3.5	Historical waste sites	0	0	3	1	-
68	3.6	Licensed waste sites	0	0	0	1	-
69	3.7	Waste exemptions	2	0	0	1	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
70	4.1	Recent industrial land uses	1	1	18	-	-
72	4.2	Current or recent petrol stations	0	0	1	0	-
72	4.3	Electricity cables	0	0	0	0	-
72	4.4	Gas pipelines	0	0	0	0	-
72	4.5	Sites determined as Contaminated Land	0	0	0	0	-



73	4.6	<u>Control of Major Accident Hazards (COMAH)</u>	1	1	0	0	-
73	4.7	Regulated explosive sites	0	0	0	0	-
73	4.8	<u>Hazardous substance storage/usage</u>	0	0	2	5	-
75	4.9	<u>Historical licensed industrial activities (IPC)</u>	0	4	7	0	-
76	4.10	<u>Licensed industrial activities (Part A(1))</u>	4	17	9	4	-
81	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	1	0	2	3	-
82	4.12	Radioactive Substance Authorisations	0	0	0	0	-
82	4.13	<u>Licensed Discharges to controlled waters</u>	0	0	0	5	-
83	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
84	4.15	Pollutant release to public sewer	0	0	0	0	-
84	4.16	<u>List 1 Dangerous Substances</u>	0	0	2	0	-
84	4.17	List 2 Dangerous Substances	0	0	0	0	-
84	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	1	7	4	-
86	4.19	<u>Pollution inventory substances</u>	3	0	1	0	-
88	4.20	<u>Pollution inventory waste transfers</u>	1	0	1	0	-
95	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
96	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
98	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
100	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
101	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
101	5.5	Groundwater vulnerability- local information	None (within 0m)				
102	5.6	<u>Groundwater abstractions</u>	0	3	9	9	5
109	5.7	<u>Surface water abstractions</u>	0	0	5	1	0
111	5.8	Potable abstractions	0	0	0	0	0
111	5.9	Source Protection Zones	0	0	0	0	-
111	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
112	6.1	<u>Water Network (OS MasterMap)</u>	0	5	5	-	-



113	6.2	<u>Surface water features</u>	0	3	1	-	-
114	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
114	6.4	<u>WFD Surface water bodies</u>	0	1	0	-	-
115	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
116	7.1	Risk of Flooding from Rivers and Sea (RoFRaS)	None (within 50m)				
116	7.2	Historical Flood Events	0	0	0	-	-
116	7.3	Flood Defences	0	0	0	-	-
116	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
117	7.5	Flood Storage Areas	0	0	0	-	-
118	7.6	Flood Zone 2	None (within 50m)				
118	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
119	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding					
121	9.1	<u>Groundwater flooding</u>	Moderate-High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
122	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
123	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
123	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
123	10.4	Special Protection Areas (SPA)	0	0	0	0	0
123	10.5	National Nature Reserves (NNR)	0	0	0	0	0
124	10.6	<u>Local Nature Reserves (LNR)</u>	0	0	0	0	1
124	10.7	Designated Ancient Woodland	0	0	0	0	0
124	10.8	Biosphere Reserves	0	0	0	0	0
124	10.9	Forest Parks	0	0	0	0	0
125	10.10	Marine Conservation Zones	0	0	0	0	0
125	10.11	<u>Green Belt</u>	0	0	0	0	3
125	10.12	Proposed Ramsar sites	0	0	0	0	0



125	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
126	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
126	10.15	Nitrate Sensitive Areas	0	0	0	0	0
126	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
127	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
128	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
129	11.1	World Heritage Sites	0	0	0	-	-
130	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
130	11.3	National Parks	0	0	0	-	-
130	11.4	<u>Listed Buildings</u>	0	1	3	-	-
131	11.5	Conservation Areas	0	0	0	-	-
131	11.6	<u>Scheduled Ancient Monuments</u>	0	0	1	-	-
131	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
132	12.1	<u>Agricultural Land Classification</u>	Urban (within 250m)				
133	12.2	Open Access Land	0	0	0	-	-
133	12.3	Tree Felling Licences	0	0	0	-	-
133	12.4	Environmental Stewardship Schemes	0	0	0	-	-
133	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
134	13.1	<u>Priority Habitat Inventory</u>	0	0	9	-	-
135	13.2	Habitat Networks	0	0	0	-	-
135	13.3	<u>Open Mosaic Habitat</u>	0	1	0	-	-
136	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
137	14.1	<u>10k Availability</u>	Identified (within 500m)				
138	14.2	<u>Artificial and made ground (10k)</u>	0	1	1	6	-
140	14.3	<u>Superficial geology (10k)</u>	1	0	0	2	-

141	14.4	Landslip (10k)	0	0	0	0	-
<u>142</u>	<u>14.5</u>	<u>Bedrock geology (10k)</u>	2	0	0	3	-
<u>143</u>	<u>14.6</u>	<u>Bedrock faults and other linear features (10k)</u>	0	0	0	6	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
<u>144</u>	<u>15.1</u>	<u>50k Availability</u>	Identified (within 500m)				
<u>145</u>	<u>15.2</u>	<u>Artificial and made ground (50k)</u>	0	1	0	2	-
<u>146</u>	<u>15.3</u>	<u>Artificial ground permeability (50k)</u>	0	1	-	-	-
<u>147</u>	<u>15.4</u>	<u>Superficial geology (50k)</u>	1	0	0	2	-
<u>148</u>	<u>15.5</u>	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
148	15.6	Landslip (50k)	0	0	0	0	-
148	15.7	Landslip permeability (50k)	None (within 50m)				
<u>149</u>	<u>15.8</u>	<u>Bedrock geology (50k)</u>	2	0	0	3	-
<u>150</u>	<u>15.9</u>	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
<u>150</u>	<u>15.10</u>	<u>Bedrock faults and other linear features (50k)</u>	0	0	0	5	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
<u>151</u>	<u>16.1</u>	<u>BGS Boreholes</u>	0	0	9	-	-
Page	Section	Natural ground subsidence					
<u>153</u>	<u>17.1</u>	<u>Shrink swell clays</u>	Very low (within 50m)				
<u>154</u>	<u>17.2</u>	<u>Running sands</u>	Very low (within 50m)				
<u>155</u>	<u>17.3</u>	<u>Compressible deposits</u>	Very low (within 50m)				
<u>157</u>	<u>17.4</u>	<u>Collapsible deposits</u>	Very low (within 50m)				
<u>158</u>	<u>17.5</u>	<u>Landslides</u>	Very low (within 50m)				
<u>159</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
161	18.1	Natural cavities	0	0	0	0	-
<u>162</u>	<u>18.2</u>	<u>BritPits</u>	0	0	1	1	-
<u>162</u>	<u>18.3</u>	<u>Surface ground workings</u>	1	17	15	-	-
<u>164</u>	<u>18.4</u>	<u>Underground workings</u>	0	0	0	0	7
164	18.5	Historical Mineral Planning Areas	0	0	0	0	-



<u>164</u>	<u>18.6</u>	<u>Non-coal mining</u>	0	0	0	0	1
<u>165</u>	<u>18.7</u>	<u>Mining cavities</u>	0	0	0	0	2
<u>165</u>	<u>18.8</u>	<u>JPB mining areas</u>	Identified (within 0m)				
<u>166</u>	<u>18.9</u>	<u>Coal mining</u>	Identified (within 0m)				
166	18.10	Brine areas	None (within 0m)				
166	18.11	Gypsum areas	None (within 0m)				
166	18.12	Tin mining	None (within 0m)				
166	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
<u>167</u>	<u>19.1</u>	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
<u>168</u>	<u>20.1</u>	<u>BGS Estimated Background Soil Chemistry</u>	1	3	-	-	-
<u>168</u>	<u>20.2</u>	<u>BGS Estimated Urban Soil Chemistry</u>	2	7	-	-	-
169	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
170	21.1	Underground railways (London)	0	0	0	-	-
170	21.2	Underground railways (Non-London)	0	0	0	-	-
171	21.3	Railway tunnels	0	0	0	-	-
<u>171</u>	<u>21.4</u>	<u>Historical railway and tunnel features</u>	0	2	25	-	-
172	21.5	Royal Mail tunnels	0	0	0	-	-
<u>172</u>	<u>21.6</u>	<u>Historical railways</u>	0	0	3	-	-
<u>173</u>	<u>21.7</u>	<u>Railways</u>	0	0	6	-	-
173	21.8	Crossrail 1	0	0	0	0	-
173	21.9	Crossrail 2	0	0	0	0	-
173	21.10	HS2	0	0	0	0	-

Recent aerial photograph



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Capture Date: 22/04/2019

Site Area: 0.41ha



Contact us with any questions at:

info@groundsure.com

08444 159 000

Date: 20 January 2021

Recent site history - 2015 aerial photograph



Capture Date: 11/06/2015

Site Area: 0.41ha



Contact us with any questions at:

info@groundsure.com

08444 159 000

Date: 20 January 2021

Recent site history - 2009 aerial photograph



Capture Date: 02/06/2009

Site Area: 0.41ha



Recent site history - 2000 aerial photograph

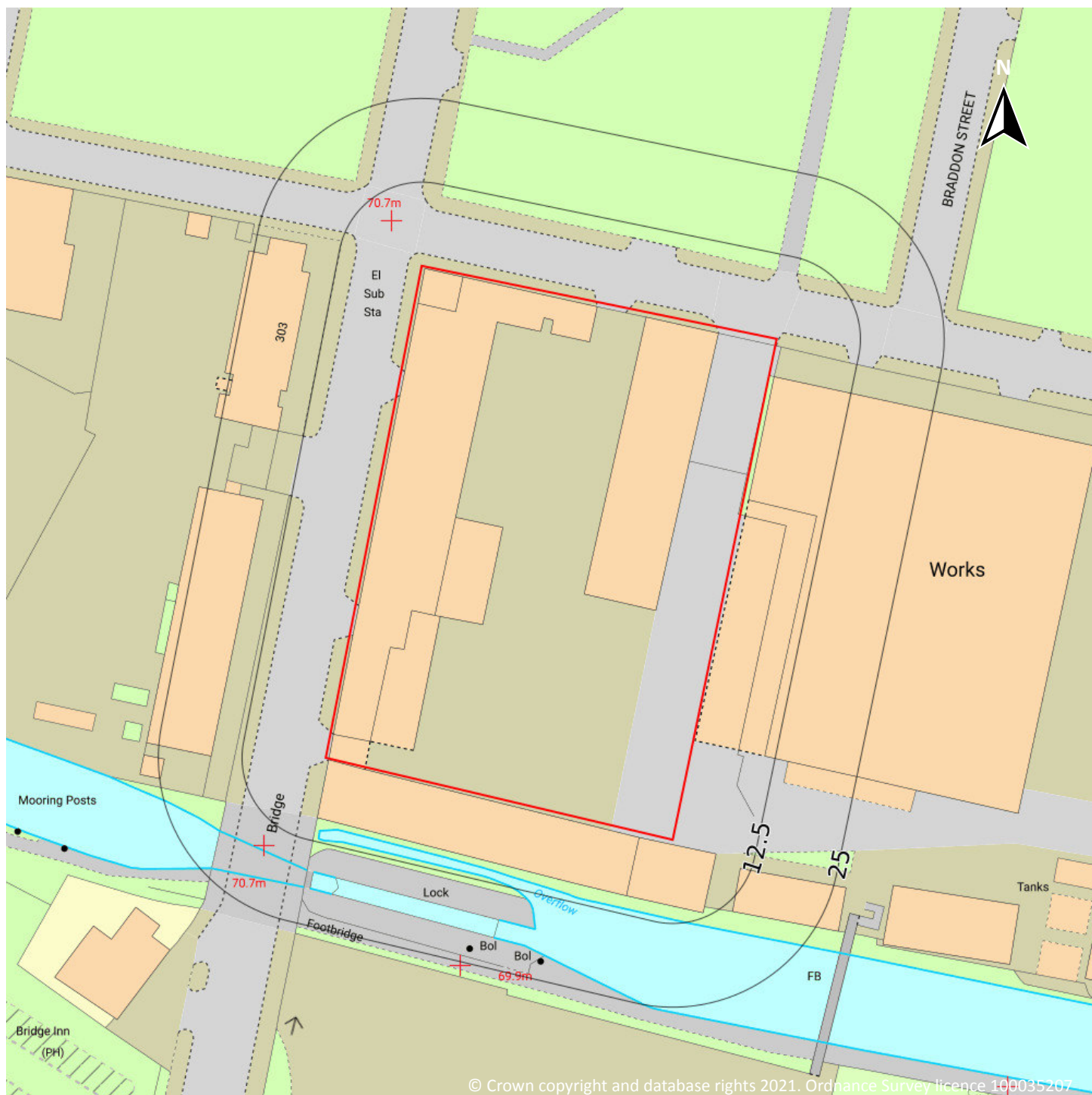


Capture Date: 19/06/2000

Site Area: 0.41ha



OS MasterMap site plan



Site Area: 0.41ha



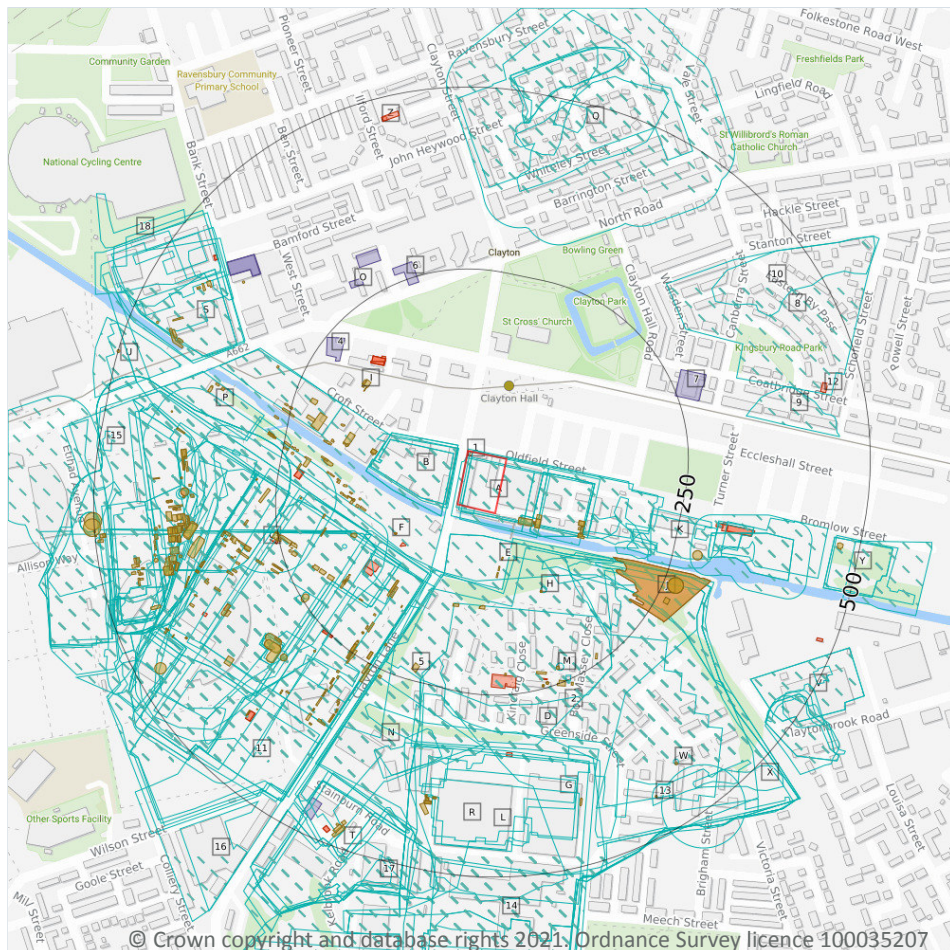
Contact us with any questions at:

info@groundsure.com

08444 159 000

Date: 20 January 2021

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

157

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
A	On site	Unspecified Commercial/Industrial	1923	796793



ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Works	1968	849751
A	On site	Chemical Works	1978	918950
A	On site	Unspecified Works	1985 - 1991	929483
A	On site	Chemical Works	1891	981333
B	13m W	Unspecified Works	1968	922944
C	14m W	Unspecified Commercial/Industrial	1956	853511
B	15m W	Unspecified Works	1985 - 1991	884614
B	15m W	Unspecified Works	1978	910195
B	18m W	Finishing Works	1906 - 1938	946441
B	18m W	Unspecified Commercial/Industrial	1891	972255
2	34m S	Railway Sidings	1934 - 1938	882010
D	34m S	Engineering Works	1934	912693
A	37m E	Brewery	1968	958488
A	41m E	Brewery	1923	913193
D	42m SE	Railway Sidings	1956	877918
A	52m E	Vinegar Brewery	1906	831121
A	52m E	Brewery	1933 - 1938	854933
A	52m E	Brewery	1921	904415
D	64m SE	Engineering Works	1923	951144
3	66m SE	Steel Works	1956	810023
D	91m S	Railway Sidings	1968	862695
A	94m SE	Refuse Heap	1956 - 1968	927998
C	100m SW	Unspecified Commercial/Industrial	1968	926845
C	101m SW	Unspecified Works	1985	940096
C	104m W	Chemical Works	1968	884000
C	112m SW	Unspecified Works	1905	851601
C	112m SW	Unspecified Works	1915	960638
C	113m SW	Unspecified Commercial/Industrial	1938	888176



ID	Location	Land use	Dates present	Group ID
G	113m SE	Railway Sidings	1915	870808
C	115m SW	Chemical Works	1934	888408
C	115m SW	Chemical Works	1921	974713
C	120m SW	Unspecified Works	1923	856782
H	120m SE	Unspecified Tank	1968	825260
A	124m SE	Sand Pit	1915 - 1923	904794
C	125m W	Railway Sidings	1933 - 1934	968150
C	126m W	Unspecified Works	1985 - 1991	870723
D	128m S	Unspecified Works	1968	923446
C	129m W	Unspecified Works	1978	962557
A	131m E	Refuse Heap	1956 - 1968	891215
A	160m E	Unspecified Ground Workings	1923	800637
C	163m W	Unspecified Tank	1923	825262
C	167m W	Chemical Works	1890 - 1891	884944
G	169m SE	Railway Sidings	1923	924696
C	183m W	Unspecified Works	1968	830470
A	187m E	Unspecified Pit	1915	840561
K	190m E	Unspecified Works	1968	935136
K	210m E	Wadding Works	1923	979618
L	211m S	Engineering Works	1938	884631
M	224m SE	Unspecified Tank	1968	825250
C	232m W	Chemical Works	1906 - 1915	950978
C	232m W	Unspecified Commercial/Industrial	1933 - 1934	990094
C	238m SW	Unspecified Tank	1915 - 1923	911915
M	243m SE	Unspecified Tank	1934	825258
N	260m SW	Motor Works	1905	833283
K	272m E	Wadding Works	1934	962999
C	272m W	Refuse Heap	1890 - 1915	858305



ID	Location	Land use	Dates present	Group ID
C	276m W	Refuse Heap	1921	957108
C	278m W	Unspecified Heap	1956	923971
C	278m SW	Railway Sidings	1978	846139
C	279m W	Unspecified Commercial/Industrial	1923	976600
C	279m W	Refuse Heap	1923	990889
P	284m W	Unspecified Works	1968	830471
K	297m E	Wadding Works	1938	851416
K	297m E	Wadding Works	1915	954282
D	298m S	Unspecified Heap	1985 - 1991	854063
Q	302m N	Brick Works	1906	964206
K	303m E	Bakery	1978	810101
8	304m NE	Brick Works	1906	818778
C	305m SW	Oil Tanks	1915	934088
C	306m W	Railway Building	1938	820498
C	308m SW	Oil Tanks	1923	852756
C	308m SW	Oil Tanks	1905	975013
N	310m S	Unspecified Pit	1890	840558
C	312m SW	Unspecified Tank	1934	825249
C	312m SW	Unspecified Tank	1934 - 1938	914329
K	314m E	Unspecified Pit	1905	840560
K	315m E	Unspecified Commercial/Industrial	1985 - 1991	852201
R	316m S	Dye Works	1851	870141
C	324m W	Unspecified Heap	1934 - 1938	913510
L	324m S	Unspecified Works	1978	878377
C	327m W	Unspecified Commercial/Industrial	1905 - 1906	934228
L	328m S	Unspecified Works	1985	985355
L	332m S	Engineering Works	1915	870994
9	335m E	Sand Pit	1851	797604



ID	Location	Land use	Dates present	Group ID
S	341m NW	Unspecified Works	1991	926651
S	342m NW	Unspecified Works	1985 - 1991	898710
C	346m W	Unspecified Works	1968	984377
C	347m W	Unspecified Works	1985 - 1991	943793
S	349m NW	Unspecified Commercial/Industrial	1933	796764
S	349m NW	Oil Works	1921 - 1923	864827
10	360m NE	Unspecified Ground Workings	1906	800760
Q	363m N	Brick Works	1921 - 1923	925321
Q	364m N	Unspecified Ground Workings	1906	800635
C	368m SW	Unspecified Works	1978	865300
C	369m W	Alkali Works	1915	908859
L	371m S	Unspecified Works	1991	844894
C	372m W	Unspecified Tank	1938	901748
C	373m W	Unspecified Tank	1906 - 1933	922414
C	377m W	Alkali Works	1934 - 1938	961180
C	378m W	Refuse	1956	802112
11	380m SW	Unspecified Works	1915 - 1923	912251
C	381m W	Chemical Works	1923	852811
S	384m NW	Brick Kiln	1851	811031
S	393m NW	Unspecified Works	1978	847531
C	397m W	Unspecified Works	1923	971621
C	406m W	Refuse Heap	1968	925604
T	407m SW	Unspecified Works	1985	862949
T	407m SW	Unspecified Works	1968	922875
S	408m NW	Chemical Works	1891	834550
U	411m W	Unspecified Works	1921 - 1923	848942
C	416m W	Unspecified Works	1985 - 1991	909589
V	419m SE	Unspecified Warehouse	1978	931301



ID	Location	Land use	Dates present	Group ID
V	419m SE	Unspecified Warehouse	1985 - 1991	969361
W	419m SE	Unspecified Tank	1934	825251
Q	420m N	Unspecified Pit	1933	919751
S	421m NW	Refuse Heap	1891	829165
T	423m SW	Dye Works	1923	920128
C	425m W	Unspecified Works	1978	896127
C	425m SW	Unspecified Heap	1938	804175
T	427m S	Unspecified Ground Working	1851	821933
C	428m SW	Unspecified Disused Mill	1905	827218
X	436m SE	Gravel Pit	1890	807915
X	437m SE	Rifle Range	1915 - 1923	937905
T	439m S	Dye Works	1915	866564
T	439m S	Dye Works	1934 - 1938	959572
C	440m W	Refuse Heap	1934 - 1938	935650
S	444m NW	Unspecified Works	1968	918867
Q	457m N	Unspecified Pit	1923	852184
Q	458m N	Unspecified Ground Workings	1921	800636
Q	459m N	Unspecified Pit	1891	941909
X	459m SE	Unspecified Ground Workings	1934 - 1938	880101
Y	463m E	Chemical Works	1923	855125
Y	463m E	Chemical Works	1905	946148
V	463m SE	Unspecified Ground Workings	1915	800749
V	463m SE	Unspecified Pit	1890 - 1905	934039
V	463m SE	Unspecified Pit	1923	975009
V	464m SE	Sand Pit	1851	797602
U	466m W	Unspecified Works	1968	912430
Y	466m E	Chemical Works	1915	967087
T	468m SW	Dye Works	1890 - 1905	987882



ID	Location	Land use	Dates present	Group ID
C	470m SW	Unspecified Mill	1851 - 1890	961717
V	470m SE	Refuse Heap	1956 - 1968	948721
C	478m W	Unspecified Commercial/Industrial	1851	976601
14	480m S	Unspecified Commercial/Industrial	1968	796802
15	481m W	Colliery	1851	798316
V	489m SE	Unspecified Heap	1923 - 1938	906104
C	491m W	Colliery	1851	798314
Y	492m E	Soap Works	1890	991004
16	492m SW	Unspecified Works	1968	830485
C	493m W	Unspecified Tank	1906 - 1938	854058
C	493m W	Unspecified Tank	1923	923831
C	493m W	Unspecified Tank	1891	984869
C	493m W	Chimney	1851	835765
17	493m S	Refuse Heap	1934 - 1938	931175
C	494m W	Chemical Works	1923	883999
18	499m NW	Unspecified Ground Workings	1923	800633

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

318

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	33m E	Tanks	1995 - 1996	148941
A	54m E	Unspecified Tank	1972 - 1983	132892



ID	Location	Land use	Dates present	Group ID
A	55m E	Unspecified Tank	1979	128235
A	57m E	Tanks	1995 - 1996	147358
A	57m E	Tanks	1983	135740
E	61m S	Unspecified Tank	1956	116216
E	73m S	Unspecified Tank	1956	116215
E	81m S	Unspecified Tank	1956	116217
F	92m SW	Unspecified Tank	1949	140290
F	93m SW	Unspecified Tank	1970	122422
F	93m SW	Unspecified Tank	1949	132584
F	93m SW	Unspecified Tank	1956	148814
A	115m E	Unspecified Tank	1983	116221
A	115m E	Tanks	1972 - 1983	133020
A	116m E	Unspecified Tank	1979	116220
A	118m E	Unspecified Tank	1972	116219
A	118m E	Tanks	1950	123616
A	120m E	Unspecified Tank	1983	141866
C	122m W	Unspecified Tank	1932 - 1949	128827
C	123m W	Tanks	1949 - 1956	125749
H	123m SE	Unspecified Tank	1950	143296
H	124m SE	Unspecified Tank	1950	122548
C	126m W	Unspecified Tank	1949	124412
E	128m S	Tanks	1949 - 1970	136758
C	133m SW	Tanks	1949 - 1956	126643
C	133m W	Unspecified Tank	1922	116235
C	133m SW	Tanks	1949	132100
E	133m S	Tanks	1949 - 1970	137054
C	135m W	Tanks	1956	106904
C	141m SW	Tanks	1933	106985



ID	Location	Land use	Dates present	Group ID
C	141m W	Tanks	1932	130638
C	141m W	Unspecified Tank	1908 - 1922	127575
C	143m W	Unspecified Tank	1949	142031
C	143m W	Tanks	1949	140552
C	144m W	Tanks	1949	135168
C	145m W	Unspecified Tank	1949 - 1956	123851
C	150m W	Unspecified Tank	1949 - 1956	143387
C	153m W	Tanks	1908	106906
C	156m W	Tanks	1949 - 1970	129402
C	157m W	Tanks	1949 - 1956	147755
C	158m SW	Unspecified Tank	1956	116197
C	162m W	Unspecified Tank	1956 - 1980	131573
I	163m NW	Unspecified Tank	1980	126030
C	164m W	Tanks	1956	106907
I	164m NW	Unspecified Tank	1956 - 1970	136270
C	167m W	Tanks	1956	106908
C	168m W	Unspecified Tank	1956	116234
I	169m NW	Unspecified Tank	1987 - 1991	123928
C	173m W	Tanks	1956 - 1980	146379
C	173m W	Tanks	1949 - 1956	128110
J	174m E	Gas Works	1950	125589
C	176m SW	Unspecified Tank	1956	116218
C	178m W	Tanks	1908	106911
C	179m SW	Tanks	1956	123849
C	181m W	Tanks	1956	106910
C	182m W	Tanks	1956	106905
C	182m SW	Tanks	1933	122356
C	183m W	Unspecified Tank	1956	116233

ID	Location	Land use	Dates present	Group ID
C	183m W	Tanks	1956	106995
C	186m SW	Unspecified Tank	1956	116199
C	186m W	Tanks	1949 - 1956	145441
C	186m W	Unspecified Tank	1932	116226
C	186m SW	Tanks	1956	145795
C	187m SW	Tanks	1933	143424
C	188m SW	Unspecified Tank	1956	116198
C	197m SW	Tanks	1949	106986
C	199m W	Unspecified Tank	1922 - 1932	130905
C	199m SW	Tanks	1933	106984
C	203m SW	Tanks	1949 - 1956	140103
C	207m SW	Tanks	1949 - 1956	136973
C	209m SW	Tanks	1949 - 1956	134555
C	209m W	Tanks	1949 - 1956	127388
C	214m W	Tanks	1956	106912
C	214m W	Unspecified Tank	1956	116225
C	215m SW	Unspecified Tank	1933	116196
C	217m W	Unspecified Tank	1932	116232
C	218m SW	Unspecified Tank	1956	127041
C	218m SW	Unspecified Tank	1949	133058
C	219m SW	Unspecified Tank	1949	144528
M	220m S	Unspecified Tank	1949 - 1970	135938
C	221m W	Unspecified Tank	1932	116227
M	225m S	Tanks	1972	107024
5	225m S	Tanks	1922	107026
M	227m S	Unspecified Tank	1950	127158
C	227m W	Tanks	1933	128745
C	228m W	Unspecified Tank	1908 - 1922	144291

ID	Location	Land use	Dates present	Group ID
C	229m W	Tanks	1956	137053
C	230m W	Tanks	1933	106993
C	231m SW	Unspecified Tank	1956	116200
C	233m W	Unspecified Tank	1908 - 1922	129690
C	233m W	Tanks	1956	141111
C	234m SW	Tanks	1956	142343
C	234m W	Unspecified Tank	1908	116228
C	234m W	Tanks	1956	106994
C	235m SW	Tanks	1949 - 1956	132932
C	235m SW	Tanks	1949	143331
C	237m W	Tanks	1933	106992
C	237m W	Unspecified Tank	1922	116231
C	237m SW	Tanks	1949	134551
M	237m SE	Unspecified Tank	1972	116195
C	238m SW	Tanks	1949	143724
C	240m SW	Unspecified Tank	1908 - 1922	124394
C	241m W	Tanks	1908 - 1922	149311
M	242m S	Unspecified Tank	1950	116187
M	242m S	Tanks	1950 - 1972	127950
C	242m W	Unspecified Tank	1908 - 1922	147975
C	243m W	Tanks	1893	106913
C	244m SW	Tanks	1933	107027
M	244m S	Tanks	1950	125808
M	245m S	Tanks	1972	139471
M	246m S	Tanks	1972	107023
M	246m S	Unspecified Tank	1950	116186
C	246m W	Unspecified Tank	1908 - 1922	130097
C	247m W	Tanks	1933	148293



ID	Location	Land use	Dates present	Group ID
C	248m W	Tanks	1908	106914
C	248m W	Tanks	1949 - 1956	130314
C	248m W	Tanks	1956	106996
C	250m SW	Unspecified Tank	1949 - 1956	133623
C	251m SW	Unspecified Tank	1949 - 1956	145897
C	255m W	Tanks	1908	106916
M	255m SE	Unspecified Tank	1933	116188
C	256m W	Tanks	1949	137800
C	256m W	Tanks	1956	148736
J	256m E	Unspecified Tank	1950	116214
J	256m E	Gasometer	1950	108542
C	257m SW	Tanks	1933	107025
C	258m W	Unspecified Tank	1932	116224
C	258m SW	Unspecified Tank	1949	126295
C	261m W	Tanks	1956	135776
J	261m SE	Unspecified Tank	1950	127265
C	262m W	Tanks	1949	147429
C	263m W	Tanks	1949	130026
C	263m W	Tanks	1933	106987
C	264m W	Tanks	1893	106915
C	264m W	Tanks	1932	137765
C	277m W	Unspecified Tank	1956	116223
K	277m E	Unspecified Tank	1995 - 1996	130599
C	278m W	Tanks	1956	106989
C	280m SW	Unspecified Tank	1933	116207
C	281m SW	Unspecified Tank	1949 - 1956	137750
C	284m NW	Unspecified Tank	1932	116230
C	287m SW	Unspecified Tank	1933	116203

ID	Location	Land use	Dates present	Group ID
C	288m W	Unspecified Tank	1949 - 1956	148566
C	290m W	Tanks	1949	129933
C	290m W	Tanks	1956	136070
C	293m SW	Unspecified Tank	1949	124403
C	293m SW	Unspecified Tank	1949 - 1956	149350
C	296m W	Tanks	1933	106990
C	301m SW	Unspecified Tank	1933	116206
C	304m W	Tanks	1956	106997
C	304m W	Unspecified Tank	1949 - 1956	129419
C	306m W	Unspecified Tank	1956	116213
C	306m SW	Tanks	1933 - 1956	144281
C	306m W	Tanks	1949	106998
C	306m SW	Unspecified Tank	1933	116209
C	309m W	Unspecified Tank	1949 - 1956	143950
C	310m W	Tanks	1949	106988
C	311m SW	Tanks	1956	107035
C	312m W	Unspecified Tank	1956	116222
C	312m SW	Oil Tanks	1908 - 1922	147443
C	313m W	Tanks	1949 - 1956	136076
C	314m SW	Unspecified Tank	1933	116208
C	314m SW	Unspecified Tank	1956	116201
C	314m W	Tanks	1949	107000
C	316m SW	Tanks	1956	107036
C	317m SW	Unspecified Tank	1949	128521
C	317m W	Unspecified Tank	1933	116212
C	317m W	Tanks	1949 - 1956	127712
C	319m SW	Unspecified Tank	1949	116205
C	319m SW	Tanks	1949 - 1956	131440



ID	Location	Land use	Dates present	Group ID
C	319m SW	Unspecified Tank	1956	116202
C	319m W	Unspecified Tank	1908	116211
C	321m W	Tanks	1949	106999
C	321m W	Unspecified Tank	1949	125464
C	322m W	Unspecified Tank	1949	149190
C	322m W	Tanks	1949 - 1956	140666
C	323m W	Unspecified Tank	1949 - 1956	130627
C	323m W	Tanks	1933	106991
C	325m SW	Tanks	1949 - 1956	147326
C	326m SW	Tanks	1949	107043
C	328m SW	Tanks	1949 - 1956	123351
C	335m SW	Tanks	1949 - 1956	122910
C	335m W	Unspecified Tank	1956	115888
C	335m SW	Tanks	1949	128453
C	341m SW	Unspecified Tank	1949 - 1956	146208
C	343m SW	Unspecified Tank	1949 - 1956	145907
C	343m SW	Unspecified Tank	1949	144706
P	344m W	Unspecified Tank	1949 - 1956	132250
C	345m SW	Unspecified Tank	1933	116210
C	346m W	Unspecified Tank	1956	115886
C	347m SW	Unspecified Tank	1949 - 1956	145954
C	351m SW	Tanks	1933	107040
C	351m SW	Tanks	1949 - 1956	140052
C	351m W	Tanks	1987 - 1994	138407
C	351m SW	Tanks	1949 - 1956	148595
P	353m W	Tanks	1949	141083
C	356m W	Tanks	1949	107018
C	356m W	Unspecified Tank	1956	115889

ID	Location	Land use	Dates present	Group ID
C	357m W	Tanks	1933	107019
C	358m W	Tanks	1994	130302
C	359m W	Tanks	1987 - 1991	128908
P	361m W	Tanks	1932 - 1956	147569
C	362m W	Unspecified Tank	1949 - 1956	129535
C	362m SW	Unspecified Tank	1949 - 1956	138019
C	366m W	Unspecified Tank	1956	126992
C	367m W	Unspecified Tank	1949 - 1956	138481
C	367m W	Tanks	1949	107020
C	367m W	Unspecified Tank	1949	148424
C	368m W	Tanks	1949 - 1980	132520
C	369m W	Tanks	1970	149120
C	370m W	Gasometer	1908 - 1932	135678
C	373m W	Tanks	1956	106917
C	374m W	Tanks	1970	125368
C	374m SW	Tanks	1956	107032
C	375m W	Unspecified Tank	1949 - 1956	133157
C	375m W	Tanks	1949	106909
C	375m W	Tanks	1949 - 1956	125997
C	377m W	Unspecified Tank	1956	116154
C	378m W	Tanks	1949	144568
C	378m W	Tanks	1949	129322
C	378m W	Tanks	1956	143578
C	378m W	Tanks	1956	106903
C	378m W	Tanks	1949	147383
C	378m W	Tanks	1949 - 1956	129500
C	379m W	Tanks	1956	107021
C	379m W	Unspecified Tank	1949 - 1956	125137



ID	Location	Land use	Dates present	Group ID
C	380m W	Tanks	1970	134893
C	380m W	Tanks	1956	135686
C	381m W	Tanks	1949 - 1956	146047
C	381m W	Tanks	1949 - 1956	126284
C	383m W	Tanks	1980	128189
C	384m W	Tanks	1949 - 1970	134955
S	384m NW	Unspecified Tank	1922	116229
C	385m W	Tanks	1949	139548
C	385m W	Unspecified Tank	1922	115890
C	386m W	Tanks	1956	106902
C	386m W	Tanks	1970 - 1980	145616
C	387m W	Tanks	1970	134022
C	387m W	Unspecified Tank	1949 - 1956	126226
C	387m W	Tanks	1949 - 1970	145885
C	388m W	Tanks	1956 - 1980	134369
C	389m W	Unspecified Tank	1956	116158
C	390m W	Tanks	1949	139310
C	391m W	Tanks	1956 - 1970	126070
C	391m W	Tanks	1922	141942
C	391m W	Tanks	1933	126460
C	392m W	Tanks	1949	127871
C	392m W	Unspecified Tank	1956	116155
C	393m W	Tanks	1970 - 1980	134738
C	393m W	Tanks	1956 - 1970	147267
C	393m SW	Unspecified Tank	1949	116204
C	393m W	Tanks	1956	140497
C	396m W	Tanks	1933	145111
C	397m W	Unspecified Tank	1956	116157



ID	Location	Land use	Dates present	Group ID
C	398m W	Tanks	1994	142641
R	398m S	Unspecified Tank	1963	127421
R	398m S	Unspecified Tank	1948 - 1956	130676
R	398m S	Unspecified Tank	1956 - 1963	144172
R	398m S	Unspecified Tank	1948	146314
C	401m W	Tanks	1987 - 1991	132827
C	401m W	Unspecified Tank	1922 - 1933	148480
R	401m S	Tanks	1981	133884
R	401m S	Tanks	1989 - 1993	144612
C	402m SW	Unspecified Tank	1949 - 1956	139879
R	402m S	Tanks	1994 - 1995	138488
C	402m W	Unspecified Tank	1956	115887
R	406m S	Tanks	1994 - 1995	123845
C	409m W	Unspecified Tank	1908	116153
G	409m S	Tanks	1968 - 1979	128813
C	410m W	Unspecified Tank	1956	116156
C	411m W	Tanks	1949 - 1956	122935
C	414m SW	Unspecified Tank	1949	130128
C	414m SW	Unspecified Tank	1956	131935
C	414m W	Tanks	1956	107001
C	414m W	Unspecified Tank	1949	129303
C	414m SW	Unspecified Tank	1949	146493
S	417m W	Tanks	1893	145942
S	418m NW	Tanks	1949	143710
C	418m W	Tanks	1956	107004
C	418m W	Unspecified Tank	1956	115891
C	418m W	Unspecified Tank	1922 - 1933	140860
S	419m W	Tanks	1908	106941



ID	Location	Land use	Dates present	Group ID
C	420m W	Unspecified Tank	1893	115892
S	423m NW	Tanks	1949	106938
W	423m SE	Unspecified Tank	1933	116165
C	428m SW	Tanks	1949	107028
S	430m W	Tanks	1908	141266
S	430m NW	Unspecified Tank	1949	116105
C	431m W	Tanks	1908 - 1922	127800
S	431m NW	Tanks	1893	106942
C	432m SW	Unspecified Tank	1956	115885
C	433m SW	Tanks	1949	107029
C	439m W	Tanks	1949	107017
C	443m W	Tanks	1949 - 1953	125647
C	443m W	Tanks	1953	107016
C	444m W	Unspecified Tank	1949 - 1953	131278
C	444m W	Unspecified Tank	1893	115894
C	445m W	Unspecified Tank	1949	115895
C	445m W	Tanks	1953	107006
13	446m SE	Unspecified Tank	1968	116164
C	448m W	Unspecified Tank	1949	115893
C	449m W	Tanks	1893	107015
C	452m W	Unspecified Tank	1949 - 1953	123188
C	458m SW	Unspecified Tank	1994	115884
S	460m W	Unspecified Tank	1908	116152
T	461m S	Unspecified Tank	1956 - 1963	131292
T	468m S	Tanks	1933	107042
T	468m S	Unspecified Tank	1956 - 1963	136547
T	468m S	Unspecified Tank	1948 - 1963	138850
Y	469m E	Tanks	1908 - 1922	133719



ID	Location	Land use	Dates present	Group ID
C	485m W	Tanks	1949 - 1953	146447
C	486m W	Tanks	1949	123155
C	489m W	Tanks	1933	107005
C	490m W	Unspecified Tank	1908 - 1932	135606
C	491m W	Unspecified Tank	1893	131619
U	497m W	Unspecified Tank	1908	116150
C	498m W	Unspecified Tank	1908	137919
C	499m W	Unspecified Tank	1893	144915

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

38

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
1	On site	Electricity Substation	1956 - 1994	75041
F	90m SW	Electricity Substation	1949 - 1970	84080
C	137m SW	Electricity Substation	1970 - 1994	70493
C	147m SW	Electricity Substation	1949 - 1956	67188
I	165m NW	Electricity Substation	1949	68710
I	165m NW	Electricity Substation	1949 - 1994	74141
I	165m NW	Electricity Substation	1986 - 1987	79871
I	168m NW	Electricity Substation	1997	67404
I	170m NW	Electricity Substation	1949	81157
J	174m E	Gas Works	1950	76941



ID	Location	Land use	Dates present	Group ID
C	215m W	Electricity Substation	1949 - 1991	71318
C	217m W	Electricity Substation	1994	69928
M	221m S	Electricity Substation	1956 - 1970	70055
M	235m S	Electricity Substation	1972	62206
C	249m SW	Electricity Substation	1949 - 1956	65590
C	249m SW	Electricity Substation	1949	69688
C	252m W	Electricity Substation	1949	73971
C	254m W	Electricity Substation	1949 - 1956	67292
J	256m E	Gasometer	1950	59735
K	301m E	Electricity Substation	1950 - 1983	84035
K	310m E	Electricity Substation	1972	71209
K	310m E	Electricity Substation	1983	62204
K	317m E	Electricity Substation	1995 - 1996	80925
K	317m E	Electricity Substation	1950	83515
D	329m S	Electricity Substation	1981 - 1995	82276
C	342m SW	Electricity Substation	1949	62207
C	370m W	Gasometer	1908 - 1932	73248
C	375m SW	Electricity Substation	1949 - 1956	68410
C	400m SW	Electricity Substation	1949 - 1980	79405
C	400m SW	Electricity Substation	1949	74084
S	433m NW	Electricity Substation	1972 - 1997	79248
S	433m NW	Electricity Substation	1978	73456
12	441m E	Electricity Substation	1972 - 1996	69027
Z	467m N	Electricity Substation	1972 - 1986	84923
Z	468m N	Electricity Substation	1997	66931
V	474m E	Electricity Substation	1996	62205
T	477m S	Electricity Substation	1956	72280
T	477m S	Electricity Substation	1963 - 1981	85382

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

9

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
4	215m NW	Garage	1978	20327
6	241m N	Garage	1972	20328
7	248m E	Garage	1972 - 1979	26013
O	270m NW	Garage	1972	20329
O	288m NW	Garage	1972	20330
S	374m NW	Garage	1997	22667
S	375m NW	Garage	1972 - 1986	24761
S	375m NW	Garage	1978	21189
T	449m SW	Garage	1948	20331

This data is sourced from Ordnance Survey / Groundsure.



1.6 Historical military land

Records within 500m

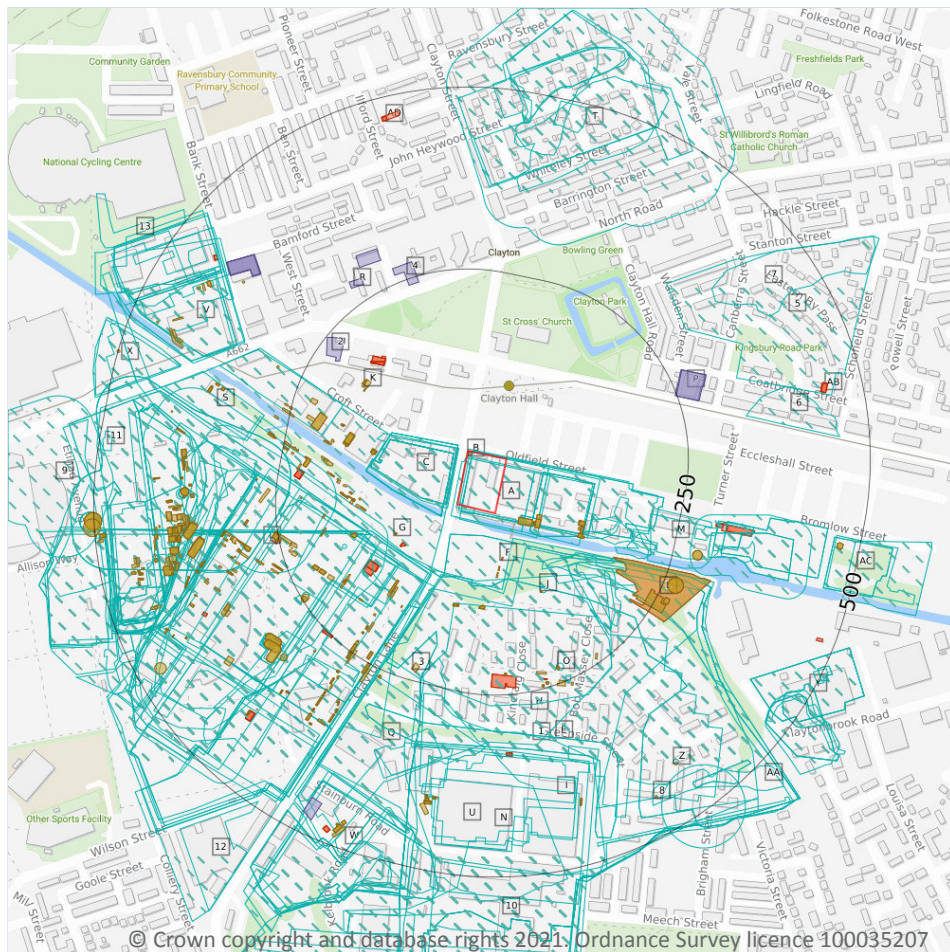
0

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

215

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 35**

ID	Location	Land Use	Date	Group ID
A	On site	Chemical Works	1891	981333
A	On site	Unspecified Works	1985	929483
A	On site	Chemical Works	1978	918950



ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Works	1991	929483
A	On site	Unspecified Works	1968	849751
A	On site	Unspecified Commercial/Industrial	1923	796793
C	13m W	Unspecified Works	1968	922944
D	14m W	Unspecified Commercial/Industrial	1956	853511
C	15m W	Unspecified Works	1985	884614
C	15m W	Unspecified Works	1978	910195
C	15m W	Unspecified Works	1991	884614
C	18m W	Finishing Works	1921	946441
C	18m W	Finishing Works	1906	946441
C	18m W	Unspecified Commercial/Industrial	1891	972255
C	18m W	Finishing Works	1938	946441
C	18m W	Finishing Works	1933	946441
C	18m W	Finishing Works	1923	946441
E	34m S	Railway Sidings	1934	882010
E	34m S	Engineering Works	1934	912693
A	37m E	Brewery	1968	958488
A	41m E	Brewery	1923	913193
E	42m SE	Railway Sidings	1956	877918
A	52m E	Brewery	1921	904415
A	52m E	Vinegar Brewery	1906	831121
A	52m E	Brewery	1938	854933
A	52m E	Brewery	1933	854933
E	64m SE	Engineering Works	1923	951144
1	66m SE	Steel Works	1956	810023
E	91m S	Railway Sidings	1968	862695
H	92m S	Railway Sidings	1938	882010
H	92m S	Railway Sidings	1938	882010



ID	Location	Land Use	Date	Group ID
A	94m SE	Refuse Heap	1968	927998
D	100m SW	Unspecified Commercial/Industrial	1968	926845
A	101m SE	Refuse Heap	1956	927998
D	101m SW	Unspecified Works	1985	940096
D	104m W	Chemical Works	1968	884000
D	112m SW	Unspecified Works	1915	960638
D	113m SW	Unspecified Commercial/Industrial	1938	888176
I	113m SE	Railway Sidings	1915	870808
D	115m SW	Unspecified Works	1905	851601
D	115m SW	Chemical Works	1934	888408
D	120m SW	Unspecified Works	1923	856782
J	120m SE	Unspecified Tank	1968	825260
A	124m SE	Sand Pit	1923	904794
D	125m W	Railway Sidings	1938	882010
D	125m W	Railway Sidings	1933	968150
D	126m W	Unspecified Works	1991	870723
D	127m SW	Railway Sidings	1934	968150
E	128m S	Unspecified Works	1968	923446
D	129m W	Unspecified Works	1978	962557
A	131m E	Refuse Heap	1956	891215
A	131m E	Refuse Heap	1968	891215
A	132m SE	Sand Pit	1915	904794
A	160m E	Unspecified Ground Workings	1923	800637
D	163m W	Unspecified Tank	1923	825262
D	167m W	Chemical Works	1891	884944
I	169m SE	Railway Sidings	1923	924696
D	183m W	Unspecified Works	1968	830470
A	187m E	Unspecified Pit	1915	840561



ID	Location	Land Use	Date	Group ID
M	190m E	Unspecified Works	1968	935136
M	210m E	Wadding Works	1923	979618
N	211m S	Engineering Works	1938	884631
O	224m SE	Unspecified Tank	1968	825250
D	232m W	Unspecified Commercial/Industrial	1933	990094
D	232m W	Chemical Works	1921	974713
D	232m W	Chemical Works	1906	950978
D	238m SW	Unspecified Tank	1915	911915
O	243m SE	Unspecified Tank	1934	825258
D	247m SW	Unspecified Tank	1923	911915
Q	260m SW	Motor Works	1905	833283
M	272m E	Wadding Works	1934	962999
D	272m W	Refuse Heap	1891	858305
D	276m W	Refuse Heap	1921	957108
D	278m W	Unspecified Heap	1956	923971
D	278m SW	Railway Sidings	1978	846139
D	279m W	Unspecified Commercial/Industrial	1923	976600
D	279m W	Refuse Heap	1923	990889
D	282m W	Refuse Heap	1906	858305
S	284m W	Unspecified Works	1968	830471
M	297m E	Wadding Works	1938	851416
M	297m E	Wadding Works	1915	954282
E	298m S	Unspecified Heap	1985	854063
E	298m S	Unspecified Heap	1991	854063
T	302m N	Brick Works	1906	964206
M	303m E	Bakery	1978	810101
S	304m NE	Brick Works	1906	818778
D	305m SW	Oil Tanks	1915	934088



ID	Location	Land Use	Date	Group ID
D	306m W	Railway Building	1938	820498
D	308m SW	Oil Tanks	1905	975013
D	308m SW	Oil Tanks	1923	852756
Q	310m S	Unspecified Pit	1890	840558
D	312m SW	Unspecified Tank	1934	914329
D	312m SW	Unspecified Tank	1934	825249
D	312m SW	Unspecified Tank	1938	914329
M	314m E	Unspecified Pit	1905	840560
M	315m E	Unspecified Commercial/Industrial	1985	852201
M	315m E	Unspecified Commercial/Industrial	1991	852201
U	316m S	Dye Works	1851	870141
D	317m SW	Unspecified Tank	1938	914329
D	317m SW	Unspecified Tank	1934	914329
D	321m W	Refuse Heap	1890	858305
D	321m W	Chemical Works	1890	884944
D	323m W	Refuse Heap	1915	858305
D	324m W	Unspecified Heap	1934	913510
N	324m S	Unspecified Works	1978	878377
D	327m W	Refuse Heap	1905	858305
D	327m W	Unspecified Commercial/Industrial	1905	934228
N	328m S	Unspecified Works	1985	985355
D	331m W	Unspecified Heap	1938	913510
N	332m S	Engineering Works	1915	870994
6	335m E	Sand Pit	1851	797604
V	341m NW	Unspecified Works	1991	926651
V	342m NW	Unspecified Works	1985	898710
D	346m W	Unspecified Works	1968	984377
D	347m W	Unspecified Works	1985	943793

ID	Location	Land Use	Date	Group ID
D	347m W	Unspecified Works	1991	943793
V	349m NW	Oil Works	1921	864827
V	349m NW	Unspecified Commercial/Industrial	1933	796764
V	351m NW	Oil Works	1923	864827
D	353m SW	Unspecified Works	1985	870723
D	353m SW	Unspecified Works	1991	870723
7	360m NE	Unspecified Ground Workings	1906	800760
T	363m N	Brick Works	1923	925321
T	364m N	Unspecified Ground Workings	1906	800635
T	367m N	Brick Works	1921	925321
D	368m SW	Unspecified Works	1978	865300
D	369m W	Alkali Works	1915	908859
N	371m S	Unspecified Works	1991	844894
D	372m W	Unspecified Tank	1938	901748
D	373m W	Unspecified Tank	1921	922414
D	373m W	Unspecified Tank	1906	922414
D	373m W	Unspecified Tank	1933	922414
D	373m W	Unspecified Tank	1923	922414
D	377m W	Alkali Works	1938	961180
D	377m W	Alkali Works	1934	961180
D	378m W	Refuse	1956	802112
D	380m SW	Unspecified Works	1915	912251
D	381m W	Chemical Works	1923	852811
V	384m NW	Brick Kiln	1851	811031
D	388m SW	Unspecified Works	1923	912251
V	393m NW	Unspecified Works	1978	847531
D	397m W	Unspecified Works	1923	971621
D	406m W	Refuse Heap	1968	925604

ID	Location	Land Use	Date	Group ID
W	407m SW	Unspecified Works	1985	862949
W	407m SW	Unspecified Works	1968	922875
V	408m NW	Chemical Works	1891	834550
X	411m W	Unspecified Works	1921	848942
X	412m W	Unspecified Works	1923	848942
V	416m NW	Unspecified Works	1991	898710
D	416m W	Unspecified Works	1991	909589
D	417m W	Unspecified Works	1985	909589
V	418m NW	Unspecified Works	1985	898710
Y	419m SE	Unspecified Warehouse	1985	969361
Y	419m SE	Unspecified Warehouse	1978	931301
Y	419m SE	Unspecified Warehouse	1991	969361
Z	419m SE	Unspecified Tank	1934	825251
T	420m N	Unspecified Pit	1933	919751
V	421m NW	Refuse Heap	1891	829165
W	423m SW	Dye Works	1923	920128
D	425m W	Unspecified Works	1978	896127
V	425m NW	Unspecified Works	1978	847531
D	425m SW	Unspecified Heap	1938	804175
W	427m S	Unspecified Ground Working	1851	821933
D	428m SW	Unspecified Disused Mill	1905	827218
AA	436m SE	Gravel Pit	1890	807915
AA	437m SE	Rifle Range	1915	937905
W	439m S	Dye Works	1938	959572
W	439m S	Dye Works	1934	959572
W	439m S	Dye Works	1915	866564
D	440m W	Refuse Heap	1934	935650
D	442m W	Refuse Heap	1938	935650



ID	Location	Land Use	Date	Group ID
V	444m NW	Unspecified Works	1968	918867
T	457m N	Unspecified Pit	1923	852184
T	458m N	Unspecified Ground Workings	1921	800636
T	459m N	Unspecified Pit	1891	941909
AA	459m SE	Unspecified Ground Workings	1938	880101
AA	459m SE	Unspecified Ground Workings	1934	880101
AC	463m E	Chemical Works	1905	946148
AC	463m E	Chemical Works	1923	855125
Y	463m SE	Unspecified Ground Workings	1915	800749
Y	463m SE	Unspecified Pit	1905	934039
Y	463m SE	Unspecified Pit	1890	934039
Y	463m SE	Unspecified Pit	1923	975009
Y	464m SE	Sand Pit	1851	797602
X	466m W	Unspecified Works	1968	912430
AC	466m E	Chemical Works	1915	967087
W	468m SW	Dye Works	1890	987882
D	470m SW	Unspecified Mill	1890	961717
Y	470m SE	Refuse Heap	1956	948721
Y	470m SE	Refuse Heap	1968	948721
9	474m W	Unspecified Commercial/Industrial	1906	934228
AA	474m S	Rifle Range	1923	937905
D	478m W	Unspecified Commercial/Industrial	1851	976601
W	480m S	Dye Works	1905	987882
10	480m S	Unspecified Commercial/Industrial	1968	796802
11	481m W	Colliery	1851	798316
D	486m W	Chemical Works	1915	950978
D	486m W	Unspecified Commercial/Industrial	1934	990094
D	487m SW	Unspecified Mill	1851	961717



ID	Location	Land Use	Date	Group ID
Y	489m SE	Unspecified Heap	1923	906104
D	491m W	Colliery	1851	798314
AC	492m E	Soap Works	1890	991004
12	492m SW	Unspecified Works	1968	830485
Y	492m SE	Unspecified Heap	1938	906104
Y	492m SE	Unspecified Heap	1934	906104
D	493m W	Unspecified Tank	1906	854058
D	493m W	Unspecified Tank	1891	984869
D	493m W	Unspecified Tank	1938	854058
D	493m W	Unspecified Tank	1933	854058
D	493m W	Unspecified Tank	1923	923831
D	493m W	Chimney	1851	835765
W	493m S	Refuse Heap	1938	931175
D	494m W	Chemical Works	1923	883999
W	497m S	Refuse Heap	1934	931175
13	499m NW	Unspecified Ground Workings	1923	800633

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

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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 35**

ID	Location	Land Use	Date	Group ID
A	33m E	Tanks	1996	148941
A	33m E	Tanks	1995	148941
A	54m E	Unspecified Tank	1972	132892
A	54m E	Unspecified Tank	1983	132892



ID	Location	Land Use	Date	Group ID
A	55m E	Unspecified Tank	1979	128235
A	57m E	Tanks	1996	147358
A	57m E	Tanks	1995	147358
A	57m E	Tanks	1983	135740
F	61m S	Unspecified Tank	1956	116216
F	73m S	Unspecified Tank	1956	116215
F	81m S	Unspecified Tank	1956	116217
G	92m SW	Unspecified Tank	1949	140290
G	93m SW	Unspecified Tank	1970	122422
G	93m SW	Unspecified Tank	1949	132584
G	93m SW	Unspecified Tank	1956	148814
A	115m E	Tanks	1972	133020
A	115m E	Unspecified Tank	1983	116221
A	116m E	Tanks	1979	133020
A	116m E	Tanks	1983	133020
A	116m E	Unspecified Tank	1979	116220
A	118m E	Unspecified Tank	1972	116219
A	118m E	Tanks	1950	123616
A	118m E	Tanks	1950	123616
A	120m E	Unspecified Tank	1983	141866
A	120m E	Unspecified Tank	1983	141866
D	122m W	Unspecified Tank	1949	128827
D	123m W	Tanks	1949	125749
D	123m W	Tanks	1956	125749
J	123m SE	Unspecified Tank	1950	143296
J	124m SE	Unspecified Tank	1950	122548
D	124m W	Unspecified Tank	1932	128827
D	126m W	Unspecified Tank	1949	124412

ID	Location	Land Use	Date	Group ID
D	126m W	Unspecified Tank	1949	124412
F	128m S	Tanks	1970	136758
F	128m S	Tanks	1949	136758
F	128m S	Tanks	1956	136758
F	128m S	Tanks	1949	136758
D	133m SW	Tanks	1949	126643
D	133m SW	Tanks	1956	126643
D	133m W	Unspecified Tank	1922	116235
D	133m SW	Tanks	1949	132100
F	133m S	Tanks	1970	137054
F	133m S	Tanks	1949	137054
F	133m S	Tanks	1956	137054
F	134m S	Tanks	1949	137054
D	135m W	Tanks	1956	106904
D	141m SW	Tanks	1933	106985
D	141m W	Tanks	1932	130638
D	141m W	Unspecified Tank	1908	127575
D	141m W	Unspecified Tank	1922	127575
D	143m W	Unspecified Tank	1949	142031
D	143m W	Tanks	1949	140552
D	144m W	Tanks	1949	135168
D	145m W	Tanks	1949	135168
D	145m W	Unspecified Tank	1949	123851
D	145m W	Unspecified Tank	1956	123851
D	150m W	Unspecified Tank	1949	143387
D	150m W	Unspecified Tank	1956	143387
D	153m W	Tanks	1908	106906
D	156m W	Tanks	1949	129402

ID	Location	Land Use	Date	Group ID
D	157m W	Tanks	1970	129402
D	157m W	Tanks	1956	129402
D	157m W	Tanks	1949	129402
D	157m W	Tanks	1949	147755
D	157m W	Tanks	1956	147755
D	157m W	Tanks	1949	147755
D	158m SW	Unspecified Tank	1956	116197
D	162m W	Unspecified Tank	1980	131573
K	163m NW	Unspecified Tank	1980	126030
D	163m W	Unspecified Tank	1970	131573
D	163m W	Unspecified Tank	1956	131573
D	164m W	Tanks	1956	106907
K	164m NW	Unspecified Tank	1970	136270
K	164m NW	Unspecified Tank	1956	136270
D	167m W	Tanks	1956	106908
D	168m W	Unspecified Tank	1956	116234
K	169m NW	Unspecified Tank	1987	123928
K	169m NW	Unspecified Tank	1991	123928
D	173m W	Tanks	1980	146379
D	173m W	Tanks	1949	128110
D	174m W	Tanks	1949	128110
D	174m W	Tanks	1956	128110
D	174m W	Tanks	1970	146379
D	174m W	Tanks	1956	146379
L	174m E	Gas Works	1950	125589
D	176m SW	Unspecified Tank	1956	116218
D	178m W	Tanks	1908	106911
D	179m SW	Tanks	1956	123849

ID	Location	Land Use	Date	Group ID
D	181m W	Tanks	1956	106910
D	182m W	Tanks	1956	106905
D	182m SW	Tanks	1933	122356
D	183m W	Unspecified Tank	1956	116233
D	183m W	Tanks	1956	106995
D	186m W	Tanks	1949	145441
D	186m SW	Unspecified Tank	1956	116199
D	186m W	Unspecified Tank	1932	116226
D	186m SW	Tanks	1956	145795
D	187m SW	Tanks	1933	143424
D	188m SW	Unspecified Tank	1956	116198
D	189m W	Tanks	1956	145441
D	197m SW	Tanks	1949	106986
D	199m W	Unspecified Tank	1922	130905
D	199m W	Unspecified Tank	1932	130905
D	199m SW	Tanks	1933	106984
D	203m SW	Tanks	1949	140103
D	203m SW	Tanks	1949	140103
D	203m SW	Tanks	1956	140103
D	207m SW	Tanks	1949	136973
D	207m SW	Tanks	1956	136973
D	207m SW	Tanks	1949	136973
D	209m SW	Tanks	1949	134555
D	209m SW	Tanks	1949	134555
D	209m SW	Tanks	1956	134555
D	209m W	Tanks	1949	127388
D	209m W	Tanks	1949	127388
D	209m W	Tanks	1956	127388

ID	Location	Land Use	Date	Group ID
D	214m W	Tanks	1956	106912
D	214m W	Unspecified Tank	1956	116225
D	215m SW	Unspecified Tank	1933	116196
D	217m W	Unspecified Tank	1932	116232
D	218m SW	Unspecified Tank	1949	133058
D	218m SW	Unspecified Tank	1956	127041
D	219m SW	Unspecified Tank	1949	144528
O	220m S	Unspecified Tank	1970	135938
O	220m S	Unspecified Tank	1949	135938
O	220m S	Unspecified Tank	1956	135938
D	221m W	Unspecified Tank	1932	116227
O	225m S	Tanks	1972	107024
3	225m S	Tanks	1922	107026
O	227m S	Unspecified Tank	1950	127158
D	227m W	Tanks	1933	128745
O	228m S	Unspecified Tank	1950	127158
D	228m W	Unspecified Tank	1908	144291
D	228m W	Unspecified Tank	1922	144291
D	229m W	Tanks	1956	137053
D	230m W	Tanks	1933	106993
D	231m SW	Unspecified Tank	1956	116200
D	233m W	Unspecified Tank	1908	129690
D	233m W	Unspecified Tank	1922	129690
D	233m W	Tanks	1956	141111
D	234m SW	Tanks	1956	142343
D	234m W	Unspecified Tank	1908	116228
D	234m W	Tanks	1956	106994
D	235m SW	Tanks	1949	132932

ID	Location	Land Use	Date	Group ID
D	235m SW	Tanks	1956	132932
D	235m SW	Tanks	1949	143331
D	237m W	Unspecified Tank	1922	116231
D	237m W	Tanks	1933	106992
D	237m SW	Tanks	1949	134551
O	237m SE	Unspecified Tank	1972	116195
D	238m SW	Tanks	1949	143724
L	239m SE	Gas Works	1950	125589
D	240m SW	Unspecified Tank	1908	124394
D	241m W	Tanks	1908	149311
D	241m W	Tanks	1922	149311
O	242m S	Tanks	1950	127950
O	242m S	Unspecified Tank	1950	116187
D	242m W	Unspecified Tank	1908	147975
D	242m W	Unspecified Tank	1922	147975
O	243m S	Tanks	1972	127950
D	243m W	Tanks	1893	106913
D	244m SW	Unspecified Tank	1922	124394
D	244m SW	Tanks	1933	107027
O	244m S	Tanks	1950	125808
O	245m S	Tanks	1972	139471
O	246m S	Tanks	1972	107023
O	246m S	Unspecified Tank	1950	116186
D	246m W	Unspecified Tank	1908	130097
D	246m W	Unspecified Tank	1922	130097
D	247m W	Tanks	1933	148293
D	248m W	Tanks	1908	106914
D	248m W	Tanks	1949	130314

ID	Location	Land Use	Date	Group ID
D	248m W	Tanks	1956	130314
D	248m W	Tanks	1949	130314
D	248m W	Tanks	1956	106996
D	250m SW	Unspecified Tank	1949	133623
D	250m SW	Unspecified Tank	1949	133623
D	250m SW	Unspecified Tank	1956	133623
D	251m SW	Unspecified Tank	1949	145897
D	251m SW	Unspecified Tank	1956	145897
D	255m W	Tanks	1908	106916
O	255m SE	Unspecified Tank	1933	116188
D	256m W	Tanks	1949	137800
D	256m W	Tanks	1956	148736
D	256m W	Tanks	1949	137800
L	256m E	Unspecified Tank	1950	116214
L	256m E	Gasometer	1950	108542
D	257m SW	Tanks	1933	107025
D	258m W	Unspecified Tank	1932	116224
D	258m SW	Unspecified Tank	1949	126295
D	258m SW	Unspecified Tank	1949	126295
D	261m W	Tanks	1956	135776
L	261m SE	Unspecified Tank	1950	127265
L	261m SE	Unspecified Tank	1950	127265
D	262m W	Tanks	1949	147429
D	263m W	Tanks	1949	130026
D	263m W	Tanks	1933	106987
D	264m W	Tanks	1893	106915
D	264m W	Tanks	1932	137765
D	277m W	Unspecified Tank	1956	116223



ID	Location	Land Use	Date	Group ID
M	277m E	Unspecified Tank	1996	130599
M	277m E	Unspecified Tank	1995	130599
D	278m W	Tanks	1956	106989
D	280m SW	Unspecified Tank	1933	116207
D	281m SW	Unspecified Tank	1949	137750
D	281m SW	Unspecified Tank	1956	137750
D	281m SW	Unspecified Tank	1949	137750
D	284m NW	Unspecified Tank	1932	116230
D	287m SW	Unspecified Tank	1933	116203
D	288m W	Unspecified Tank	1949	148566
D	288m W	Unspecified Tank	1956	148566
D	290m W	Tanks	1949	129933
D	290m W	Tanks	1956	136070
D	291m W	Tanks	1949	129933
D	293m SW	Unspecified Tank	1949	149350
D	293m SW	Unspecified Tank	1956	149350
D	293m SW	Unspecified Tank	1949	124403
D	296m W	Tanks	1933	106990
D	301m SW	Unspecified Tank	1933	116206
D	304m W	Tanks	1956	106997
D	304m W	Unspecified Tank	1949	129419
D	305m W	Unspecified Tank	1949	129419
D	305m W	Unspecified Tank	1956	129419
D	306m W	Unspecified Tank	1956	116213
D	306m SW	Tanks	1949	144281
D	306m SW	Tanks	1956	144281
D	306m W	Tanks	1949	106998
D	306m SW	Unspecified Tank	1933	116209

ID	Location	Land Use	Date	Group ID
D	306m SW	Tanks	1949	144281
D	309m W	Unspecified Tank	1949	143950
D	309m W	Unspecified Tank	1956	143950
D	310m W	Tanks	1949	106988
D	311m SW	Tanks	1956	107035
D	312m SW	Tanks	1933	144281
D	312m W	Unspecified Tank	1956	116222
D	312m SW	Oil Tanks	1908	147443
D	312m SW	Oil Tanks	1922	147443
D	313m W	Tanks	1949	136076
D	313m W	Tanks	1956	136076
D	314m SW	Unspecified Tank	1933	116208
D	314m SW	Unspecified Tank	1956	116201
D	314m W	Tanks	1949	107000
D	316m SW	Tanks	1956	107036
D	317m W	Unspecified Tank	1933	116212
D	317m SW	Unspecified Tank	1949	128521
D	317m W	Tanks	1949	127712
D	317m W	Tanks	1956	127712
D	317m SW	Unspecified Tank	1949	128521
D	319m SW	Unspecified Tank	1949	116205
D	319m SW	Tanks	1949	131440
D	319m SW	Tanks	1956	131440
D	319m SW	Unspecified Tank	1956	116202
D	319m W	Unspecified Tank	1908	116211
D	321m W	Tanks	1949	106999
D	321m W	Unspecified Tank	1949	125464
D	322m W	Unspecified Tank	1949	149190

ID	Location	Land Use	Date	Group ID
D	322m W	Tanks	1949	140666
D	322m W	Tanks	1956	140666
D	323m W	Unspecified Tank	1949	130627
D	323m W	Unspecified Tank	1956	130627
D	323m W	Tanks	1949	140666
D	323m W	Unspecified Tank	1949	130627
D	323m W	Tanks	1933	106991
D	325m SW	Tanks	1949	147326
D	325m SW	Tanks	1956	147326
D	326m SW	Tanks	1949	147326
D	326m SW	Tanks	1949	107043
D	328m SW	Tanks	1949	123351
D	328m SW	Tanks	1956	123351
D	335m SW	Tanks	1949	122910
D	335m SW	Tanks	1956	122910
D	335m W	Unspecified Tank	1956	115888
D	335m SW	Tanks	1949	128453
D	341m SW	Unspecified Tank	1949	146208
D	341m SW	Unspecified Tank	1956	146208
D	343m SW	Unspecified Tank	1949	145907
D	343m SW	Unspecified Tank	1956	145907
D	343m SW	Unspecified Tank	1949	144706
S	344m W	Unspecified Tank	1949	132250
S	344m W	Unspecified Tank	1956	132250
D	345m SW	Unspecified Tank	1933	116210
D	346m W	Unspecified Tank	1956	115886
D	347m SW	Unspecified Tank	1949	145954
D	347m SW	Unspecified Tank	1956	145954

ID	Location	Land Use	Date	Group ID
D	347m SW	Unspecified Tank	1949	145954
D	351m SW	Tanks	1933	107040
D	351m SW	Tanks	1949	140052
D	351m SW	Tanks	1956	140052
D	351m SW	Tanks	1949	140052
D	351m W	Tanks	1994	138407
D	351m SW	Tanks	1949	148595
D	351m SW	Tanks	1956	148595
D	351m SW	Tanks	1949	148595
D	352m W	Tanks	1987	138407
D	352m W	Tanks	1991	138407
S	353m W	Tanks	1949	141083
S	353m W	Tanks	1949	141083
D	356m W	Tanks	1949	107018
D	356m W	Unspecified Tank	1956	115889
D	357m W	Tanks	1933	107019
D	358m W	Tanks	1994	130302
D	359m W	Tanks	1987	128908
D	359m W	Tanks	1991	128908
S	361m W	Tanks	1949	147569
S	361m W	Tanks	1932	147569
S	361m W	Tanks	1949	147569
S	361m W	Tanks	1956	147569
D	362m W	Unspecified Tank	1949	129535
D	362m W	Unspecified Tank	1956	129535
D	362m SW	Unspecified Tank	1949	138019
D	362m SW	Unspecified Tank	1956	138019
D	362m SW	Unspecified Tank	1949	138019

ID	Location	Land Use	Date	Group ID
D	366m W	Unspecified Tank	1956	126992
D	367m W	Unspecified Tank	1949	138481
D	367m W	Unspecified Tank	1956	138481
D	367m W	Tanks	1949	107020
D	367m W	Unspecified Tank	1949	148424
D	367m W	Unspecified Tank	1949	138481
D	368m W	Tanks	1980	132520
D	369m W	Tanks	1970	149120
D	370m W	Gasometer	1908	135678
D	370m W	Gasometer	1922	135678
D	370m W	Gasometer	1932	135678
D	373m W	Tanks	1956	106917
D	374m W	Tanks	1970	125368
D	374m SW	Tanks	1956	107032
D	375m W	Unspecified Tank	1949	133157
D	375m W	Unspecified Tank	1956	133157
D	375m W	Tanks	1949	106909
D	375m W	Tanks	1949	125997
D	375m W	Tanks	1956	125997
D	376m W	Tanks	1949	132520
D	377m W	Unspecified Tank	1956	116154
D	378m W	Tanks	1949	144568
D	378m W	Tanks	1949	129322
D	378m W	Tanks	1956	143578
D	378m W	Tanks	1956	106903
D	378m W	Tanks	1949	147383
D	378m W	Tanks	1949	129500
D	378m W	Tanks	1956	129500



ID	Location	Land Use	Date	Group ID
D	379m W	Tanks	1956	107021
D	379m W	Unspecified Tank	1949	125137
D	380m W	Unspecified Tank	1949	125137
D	380m W	Unspecified Tank	1956	125137
D	380m W	Tanks	1970	134893
D	380m W	Tanks	1956	135686
D	381m W	Tanks	1949	146047
D	381m W	Tanks	1956	146047
D	381m W	Tanks	1949	126284
D	382m W	Tanks	1949	126284
D	382m W	Tanks	1956	126284
D	383m W	Tanks	1980	128189
D	384m W	Tanks	1970	134955
D	384m W	Tanks	1949	134955
D	384m W	Tanks	1956	134955
V	384m NW	Unspecified Tank	1922	116229
D	385m W	Tanks	1949	139548
D	385m W	Tanks	1949	139548
D	385m W	Unspecified Tank	1922	115890
D	386m W	Tanks	1956	106902
D	386m W	Tanks	1980	145616
D	387m W	Tanks	1970	145616
D	387m W	Tanks	1970	134022
D	387m W	Tanks	1970	145885
D	387m W	Unspecified Tank	1949	126226
D	387m W	Tanks	1949	145885
D	387m W	Unspecified Tank	1956	126226
D	387m W	Tanks	1956	145885

ID	Location	Land Use	Date	Group ID
D	388m W	Tanks	1980	134369
D	389m W	Tanks	1970	134369
D	389m W	Tanks	1956	134369
D	389m W	Unspecified Tank	1956	116158
D	390m W	Tanks	1949	139310
D	391m W	Tanks	1922	141942
D	391m W	Tanks	1970	126070
D	391m W	Tanks	1956	126070
D	391m W	Tanks	1933	126460
D	392m W	Tanks	1949	127871
D	392m W	Unspecified Tank	1956	116155
D	393m W	Tanks	1949	127871
D	393m W	Tanks	1980	134738
D	393m W	Tanks	1970	147267
D	393m W	Tanks	1956	147267
D	393m SW	Unspecified Tank	1949	116204
D	393m W	Tanks	1970	134738
D	393m W	Tanks	1956	140497
D	396m W	Tanks	1933	145111
D	397m W	Unspecified Tank	1956	116157
D	398m W	Tanks	1994	142641
U	398m S	Unspecified Tank	1963	127421
U	398m S	Unspecified Tank	1948	130676
U	398m S	Unspecified Tank	1956	130676
U	398m S	Unspecified Tank	1963	144172
U	398m S	Unspecified Tank	1948	146314
U	398m S	Unspecified Tank	1956	144172
D	401m W	Tanks	1987	132827



ID	Location	Land Use	Date	Group ID
D	401m W	Tanks	1991	132827
D	401m W	Unspecified Tank	1922	148480
U	401m S	Tanks	1981	133884
U	401m S	Tanks	1989	144612
U	401m S	Tanks	1990	144612
D	402m W	Unspecified Tank	1933	148480
D	402m SW	Unspecified Tank	1949	139879
D	402m SW	Unspecified Tank	1956	139879
U	402m S	Tanks	1995	138488
U	402m S	Tanks	1994	138488
U	402m S	Tanks	1993	144612
D	402m W	Unspecified Tank	1956	115887
D	402m SW	Unspecified Tank	1949	139879
U	406m S	Tanks	1995	123845
U	406m S	Tanks	1994	123845
D	409m W	Unspecified Tank	1908	116153
I	409m S	Tanks	1979	128813
I	409m S	Tanks	1968	128813
D	410m W	Unspecified Tank	1956	116156
D	411m W	Tanks	1949	122935
D	411m W	Tanks	1956	122935
D	411m W	Tanks	1949	122935
D	414m SW	Unspecified Tank	1949	130128
D	414m SW	Unspecified Tank	1956	131935
D	414m W	Unspecified Tank	1949	129303
D	414m W	Tanks	1956	107001
D	414m SW	Unspecified Tank	1949	146493
D	414m W	Unspecified Tank	1949	129303



ID	Location	Land Use	Date	Group ID
V	417m W	Tanks	1893	145942
V	418m NW	Tanks	1949	143710
V	418m NW	Tanks	1949	143710
D	418m W	Unspecified Tank	1956	115891
D	418m W	Tanks	1956	107004
D	418m W	Unspecified Tank	1922	140860
V	419m W	Tanks	1908	106941
D	420m W	Unspecified Tank	1933	140860
D	420m W	Unspecified Tank	1893	115892
V	423m NW	Tanks	1949	106938
Z	423m SE	Unspecified Tank	1933	116165
D	428m SW	Tanks	1949	107028
V	430m W	Tanks	1908	141266
V	430m NW	Unspecified Tank	1949	116105
D	431m W	Tanks	1908	127800
V	431m NW	Tanks	1893	106942
D	432m SW	Unspecified Tank	1956	115885
D	433m SW	Tanks	1949	107029
D	436m W	Tanks	1922	127800
D	439m W	Tanks	1949	107017
D	443m W	Tanks	1953	125647
D	443m W	Tanks	1949	125647
D	443m W	Tanks	1949	125647
D	443m W	Tanks	1953	107016
D	444m W	Unspecified Tank	1953	131278
D	444m W	Unspecified Tank	1949	131278
D	444m W	Unspecified Tank	1893	115894
D	444m W	Unspecified Tank	1949	131278



ID	Location	Land Use	Date	Group ID
D	445m W	Unspecified Tank	1949	115895
D	445m W	Tanks	1953	107006
8	446m SE	Unspecified Tank	1968	116164
D	448m W	Unspecified Tank	1949	115893
D	449m W	Tanks	1893	107015
D	452m W	Unspecified Tank	1953	123188
D	452m W	Unspecified Tank	1949	123188
D	458m SW	Unspecified Tank	1994	115884
V	460m W	Unspecified Tank	1908	116152
W	461m S	Unspecified Tank	1956	131292
W	461m S	Unspecified Tank	1963	131292
W	468m S	Tanks	1933	107042
W	468m S	Unspecified Tank	1948	138850
W	468m S	Unspecified Tank	1956	136547
W	468m S	Unspecified Tank	1956	138850
W	468m S	Unspecified Tank	1963	138850
W	468m S	Unspecified Tank	1963	136547
AC	469m E	Tanks	1908	133719
AC	469m E	Tanks	1922	133719
D	485m W	Tanks	1953	146447
D	485m W	Tanks	1949	146447
D	486m W	Tanks	1949	123155
D	489m W	Tanks	1933	107005
D	490m W	Unspecified Tank	1908	135606
D	490m W	Unspecified Tank	1922	135606
D	490m W	Unspecified Tank	1932	135606
D	491m W	Unspecified Tank	1893	131619
X	497m W	Unspecified Tank	1908	116150



ID	Location	Land Use	Date	Group ID
D	498m W	Unspecified Tank	1908	137919
D	499m W	Unspecified Tank	1893	144915

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

89

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 35**

ID	Location	Land Use	Date	Group ID
B	On site	Electricity Substation	1994	75041
B	On site	Electricity Substation	1970	75041
B	On site	Electricity Substation	1956	75041
B	On site	Electricity Substation	1980	75041
B	On site	Electricity Substation	1987	75041
B	On site	Electricity Substation	1991	75041
G	90m SW	Electricity Substation	1970	84080
G	90m SW	Electricity Substation	1949	84080
G	90m SW	Electricity Substation	1956	84080
G	90m SW	Electricity Substation	1949	84080
D	137m SW	Electricity Substation	1980	70493
D	137m SW	Electricity Substation	1987	70493
D	137m SW	Electricity Substation	1991	70493
D	137m SW	Electricity Substation	1994	70493
D	138m SW	Electricity Substation	1970	70493
D	147m SW	Electricity Substation	1949	67188
D	147m SW	Electricity Substation	1956	67188
D	147m SW	Electricity Substation	1949	67188



ID	Location	Land Use	Date	Group ID
K	165m NW	Electricity Substation	1949	68710
K	165m NW	Electricity Substation	1949	74141
K	165m NW	Electricity Substation	1987	79871
K	165m NW	Electricity Substation	1991	74141
K	165m NW	Electricity Substation	1994	74141
K	167m NW	Electricity Substation	1986	79871
K	168m NW	Electricity Substation	1997	67404
K	170m NW	Electricity Substation	1949	81157
L	174m E	Gas Works	1950	76941
D	215m W	Electricity Substation	1980	71318
D	215m W	Electricity Substation	1987	71318
D	215m W	Electricity Substation	1991	71318
D	215m W	Electricity Substation	1949	71318
D	216m W	Electricity Substation	1970	71318
D	216m W	Electricity Substation	1949	71318
D	216m W	Electricity Substation	1956	71318
D	217m W	Electricity Substation	1994	69928
O	221m S	Electricity Substation	1970	70055
O	221m S	Electricity Substation	1956	70055
O	235m S	Electricity Substation	1972	62206
L	239m SE	Gas Works	1950	76941
D	249m SW	Electricity Substation	1949	65590
D	249m SW	Electricity Substation	1956	65590
D	249m SW	Electricity Substation	1949	69688
D	252m W	Electricity Substation	1949	73971
D	254m W	Electricity Substation	1949	67292
D	254m W	Electricity Substation	1956	67292
L	256m E	Gasometer	1950	59735

ID	Location	Land Use	Date	Group ID
M	301m E	Electricity Substation	1983	84035
M	301m E	Electricity Substation	1950	84035
M	302m E	Electricity Substation	1979	84035
M	310m E	Electricity Substation	1972	71209
M	310m E	Electricity Substation	1983	62204
M	317m E	Electricity Substation	1996	80925
M	317m E	Electricity Substation	1995	80925
M	317m E	Electricity Substation	1950	83515
E	329m S	Electricity Substation	1995	82276
E	329m S	Electricity Substation	1994	82276
E	329m S	Electricity Substation	1993	82276
E	329m S	Electricity Substation	1981	82276
E	330m S	Electricity Substation	1989	82276
E	330m S	Electricity Substation	1990	82276
D	342m SW	Electricity Substation	1949	62207
D	370m W	Gasometer	1908	73248
D	370m W	Gasometer	1922	73248
D	370m W	Gasometer	1932	73248
D	375m SW	Electricity Substation	1949	68410
D	375m SW	Electricity Substation	1956	68410
D	400m SW	Electricity Substation	1980	79405
D	400m SW	Electricity Substation	1970	79405
D	400m SW	Electricity Substation	1949	79405
D	400m SW	Electricity Substation	1956	79405
D	400m SW	Electricity Substation	1949	74084
V	433m NW	Electricity Substation	1997	79248
V	433m NW	Electricity Substation	1978	73456
V	433m NW	Electricity Substation	1972	79248

ID	Location	Land Use	Date	Group ID
V	433m NW	Electricity Substation	1986	79248
AB	441m E	Electricity Substation	1972	69027
AB	441m E	Electricity Substation	1983	69027
AB	442m E	Electricity Substation	1996	69027
AB	442m E	Electricity Substation	1995	69027
AB	442m E	Electricity Substation	1979	69027
AB	442m E	Electricity Substation	1983	69027
AD	467m N	Electricity Substation	1972	84923
AD	467m N	Electricity Substation	1986	84923
AD	468m N	Electricity Substation	1997	66931
AD	468m N	Electricity Substation	1978	84923
Y	474m E	Electricity Substation	1996	62205
W	477m S	Electricity Substation	1956	72280
W	477m S	Electricity Substation	1981	85382
W	477m S	Electricity Substation	1963	85382

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

11

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 35**

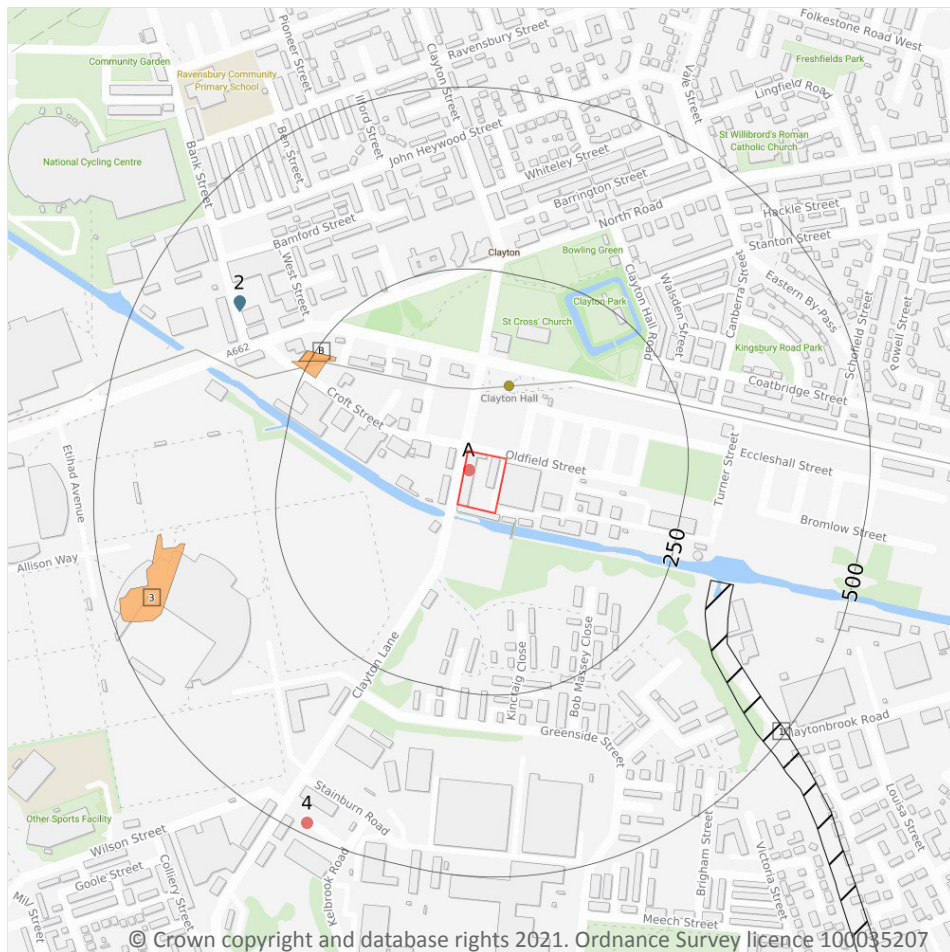


ID	Location	Land Use	Date	Group ID
2	215m NW	Garage	1978	20327
4	241m N	Garage	1972	20328
P	248m E	Garage	1972	26013
P	249m E	Garage	1979	26013
R	270m NW	Garage	1972	20329
R	288m NW	Garage	1972	20330
V	374m NW	Garage	1997	22667
V	375m NW	Garage	1972	24761
V	375m NW	Garage	1986	24761
V	375m NW	Garage	1978	21189
W	449m SW	Garage	1948	20331

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (EA/NRW)
- Historical waste sites
- 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

1

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.

Features are displayed on the Waste and landfill map on **page 66**

ID	Location	Details		
1	310m E	Site Address: Stockport Branch Canal, Greater Manchester Licence Holder Address: -	Waste Licence: - Site Reference: F056 Waste Type: Inert, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded: - Last Recorded: -

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

3.5 Historical waste sites

Records within 500m

4

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

Features are displayed on the Waste and landfill map on **page 66**

ID	Location	Address	Further Details	Date
B	220m NW	Site Address: N/A	Type of Site: Waste Paper Works Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1978

ID	Location	Address	Further Details	Date
B	229m NW	Site Address: N/A	Type of Site: Waste Paper Works Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1971
B	229m NW	Site Address: N/A	Type of Site: Waste Paper Works Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1970
3	378m W	Site Address: N/A	Type of Site: Refuse Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1956

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

3.6 Licensed waste sites

Records within 500m	1
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Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 66**

ID	Location	Details		
2	373m NW	Site Name: Recon Packaging Ltd Site Address: Bank Street, Clayton, Manchester, M11 4BT Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: RPL004 EPR reference: EA/EPR/GP3192CM/V002 Operator: Recon Packaging Ltd Waste Management licence No: 53467 Annual Tonnage: 416.667	Issue Date: 04/12/1998 Effective Date: - Modified: 24/08/2016 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

3

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.

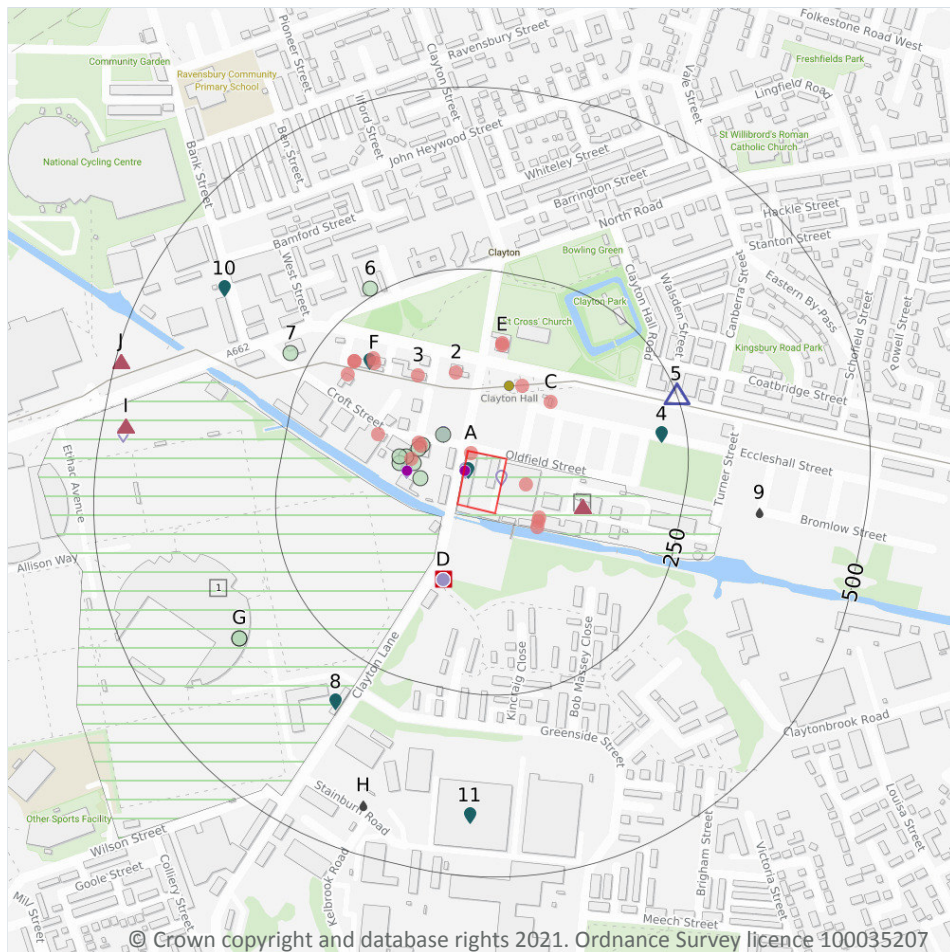
Features are displayed on the Waste and landfill map on **page 66**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	On site	Evonik Chemicals Limited, Clayton Lane, Clayton, M11 4SR	WEX234634	Treating waste exemption	Not on a farm	Crushing waste fluorescent tubes
A	On site	Evonik Chemicals Limited, Clayton Lane, Clayton, M11 4SR	WEX088752	Treating waste exemption	Not on a farm	Crushing waste fluorescent tubes
4	485m SW	-	WEX216020	Treating waste exemption	Not on a farm	Anaerobic digestion at premises not used for agriculture and burning of resultant biogas

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
- △ Current or recent petrol stations
- 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
- List 1 Dangerous Substances
- Pollution Incidents (EA/NRW)
- Pollution inventory substances
- Pollution inventory waste transfers

4.1 Recent industrial land uses

Records within 250m

20

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 70**

ID	Location	Company	Address	Activity	Category
A	On site	Electricity Sub Station	Greater Manchester, M11	Electrical Features	Infrastructure and Facilities
A	33m E	Works	Greater Manchester, M11	Unspecified Works Or Factories	Industrial Features
A	60m E	Tank	Greater Manchester, M11	Tanks (Generic)	Industrial Features



ID	Location	Company	Address	Activity	Category
A	60m E	Tank	Greater Manchester, M11	Tanks (Generic)	Industrial Features
A	60m E	Tank	Greater Manchester, M11	Tanks (Generic)	Industrial Features
A	64m W	Auto Fit	Victoria Works, Croft Street, Manchester, Greater Manchester, M11 4RQ	Vehicle Repair, Testing and Servicing	Repair and Servicing
A	68m W	K & R Motors Ltd	Croft Street, Manchester, Greater Manchester, M11 4RQ	Vehicle Repair, Testing and Servicing	Repair and Servicing
A	75m W	Works	Greater Manchester, M11	Unspecified Works Or Factories	Industrial Features
C	99m NE	Electricity Sub Station	Greater Manchester, M11	Electrical Features	Infrastructure and Facilities
C	103m N	Clayton Hall (Manchester Metrolink)	Greater Manchester, M11	Tram, Metro and Light Railway Stations and Stops	Public Transport, Stations and Infrastructure
2	109m N	Automani Cars	295, Ashton New Road, Manchester, Greater Manchester, M11 4SQ	Secondhand Vehicles	Motoring
3	124m NW	Shiraz Plastic Ltd	2, Linfield Street, Manchester, Greater Manchester, M11 4RG	Rubber, Silicones and Plastics	Industrial Products
A	126m W	Gratt Motor Co	34, Croft Street, Manchester, Greater Manchester, M11 4RQ	Vehicle Repair, Testing and Servicing	Repair and Servicing
E	152m N	Digitally Printed Glass	The Old School House, Clayton Street, Manchester, Greater Manchester, M11 4HA	Glass	Industrial Products
E	154m N	Silver Spoon Kitchens & Bedrooms	The Old School House, Clayton Street, Manchester, Greater Manchester, M11 4HA	General Construction Supplies	Industrial Products
F	177m NW	Electricity Sub Station	Greater Manchester, M11	Electrical Features	Infrastructure and Facilities
F	182m NW	Electricity Sub Station	Greater Manchester, M11	Electrical Features	Infrastructure and Facilities
F	196m NW	Clayton Motors Manchester Ltd	32, Croft Street, Manchester, Greater Manchester, M11 4RQ	Vehicle Repair, Testing and Servicing	Repair and Servicing
F	199m NW	Manchester M O T Ltd	612, Ashton New Road, Manchester, Greater Manchester, M11 4SG	Vehicle Repair, Testing and Servicing	Repair and Servicing



ID	Location	Company	Address	Activity	Category
F	199m NW	South Manchester Commercial Vehicle Sales Ltd	612, Ashton New Road, Manchester, Greater Manchester, M11 4SG	New Vehicles	Motoring

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	1
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Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 70**

ID	Location	Company	Address	LPG	Status
5	249m E	UNBRANDED	635, Ashton New Road, Clayton, Manchester, Greater Manchester, M11 4RX	Not Applicable	Obsolete

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0
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High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0
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High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0
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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

2

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

Features are displayed on the Current industrial land use map on **page 70**

ID	Location	Company	Address	Operational status	Tier
B	On site	Evonik Chemicals Limited	Evonik Chemicals Limited, Clayton, Manchester, Clayton Lane, Manchester, Greater Manchester, M11 4SR	Current COMAH Site	COMAH Lower Tier Operator
1	28m SW	Ciba Speciality Chemicals	Ciba Speciality Chemicals, Ashton New Road, Clayton, M11 4AP	Historical COMAH 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

7

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 70**

ID	Location	Details	
B	114m E	Application reference number: No Details Application status: Approved Application date: 05/04/2002 Address: Evonik Chemicals Ltd, Clayton Lane, Clayton, Manchester, Greater Manchester, England, M11 4SR	Details: Above Ground Storage Of Various Substances Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified



ID	Location	Details	
B	114m E	Application reference number: 062763/HSC/NORTH2/01 Application status: Historical Consent Application date: 05/04/2002 Address: Air Products (Chemicals) Plc, Clayton Lane, Clayton, Manchester, Greater Manchester, England, M11 4SR	Details: Above Ground Storage Of Various Substances Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
I	468m W	Application reference number: 092423/HSC/2010/N2 Application status: Historical Consent Application date: 12/04/2010 Address: OMG UK Limited, Ashton New Road, Clayton, Manchester, M11 4AT	Details: Deemed Consent - Manufacture and sales of performance chemicals for use in the Rubber, Surface Coatings and Chemical Industry Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
I	468m W	Application reference number: 093567/HSC/2010/N2 Application status: Historical Consent Application date: 08/09/2010 Address: OMG UK Limited, Ashton New Road, Clayton, Manchester, M11 4AT	Details: Revocation of hazardous substances consent granted under ref 092423/HSC/2010/N2 Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
J	492m W	Application reference number: 094262/HSC/2010/N2 Application status: Historical Consent Application date: 15/09/2010 Address: Ashton New Road, Clayton, Manchester, M11 4AP	Details: Revocation of hazardous substances consents granted under refs: 000002/HSC/NORTH2/92 and 057477/HSC/NORTH2/99 Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
J	492m W	Application reference number: 057477/HSC/NORTH2/99 Application status: Historical Consent Application date: 02/09/1999 Address: CIBA Speciality Chemicals PLC, Ashton New Road, Clayton, Manchester, M11 4AP	Details: Hazardous Substances Deemed Consent - Manufacture of dyestuffs and related chemicals Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
J	492m W	Application reference number: 000002/HSC/NORTH2/92 Application status: Historical Consent Application date: 12/11/1992 Address: Clayton Aniline Co. Ltd., Ashton New Road, Clayton, Manchester, M11 4AP	Details: Storage of sulphur trioxide (as Oleum) and chlorine. 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

11

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 70**

ID	Location	Details	
A	41m NW	Operator: Synprotec Ltd Address: 303 Clayton Road, Clayton, Manchester, M11 4SX Process: Manufacture And Use Of Organic Chemicals Permit Number: AJ1279	Original Permit Number: IPCAPP Date Approved: 16-11-1993 Effective Date: 16-11-1993 Status: Superseded By Variation
A	41m NW	Operator: Synprotec Ltd Address: 303 Clayton Road, Clayton, Manchester, M11 4SX Process: Manufacture And Use Of Organic Chemicals Permit Number: BA8596	Original Permit Number: IPCMAJVAR Date Approved: 7-7-1998 Effective Date: 20-7-1998 Status: Superseded By Variation
A	41m NW	Operator: Synprotec Ltd Address: 303 Clayton Road, Clayton, Manchester, M11 4SX Process: Manufacture And Use Of Organic Chemicals Permit Number: BE3766	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
A	41m NW	Operator: Synprotec Ltd Address: 303 Clayton Road, Clayton, Manchester, M11 4SX Process: Manufacture And Use Of Organic Chemicals Permit Number: BG3147	Original Permit Number: IPCMINVAR Date Approved: 24-6-1999 Effective Date: 24-6-1999 Status: Revoked - Now Ippc
D	105m S	Operator: Air Products (chemicals) Plc Address: Clayton Lane, Clayton, Manchester, M11 4SR Process: Manufacture And Use Of Organic Chemicals Permit Number: AK7078	Original Permit Number: IPCAIRAPP Date Approved: 18-2-1994 Effective Date: 1-3-1994 Status: Superseded By Variation
D	105m S	Operator: Air Products (chemicals) Plc Address: Clayton Lane, Manchester, Greater Manchester, M11 4SR Process: Manufacture And Use Of Organic Chemicals Permit Number: AK7086	Original Permit Number: IPCAIRAPP Date Approved: 18-2-1994 Effective Date: 1-3-1994 Status: Revoked
D	105m S	Operator: Air Products (chemicals) Plc Address: Clayton Lane, Clayton, Manchester, M11 4SR Process: Manufacture And Use Of Organic Chemicals Permit Number: AL2675	Original Permit Number: IPCAPP Date Approved: 18-2-1994 Effective Date: 1-3-1994 Status: Revoked



ID	Location	Details	
D	105m S	Operator: Air Products (chemicals) Plc Address: Clayton Lane, Clayton, Manchester, M11 4SR Process: Manufacture And Use Of Organic Chemicals Permit Number: AP6958	Original Permit Number: IPCMINVAR Date Approved: 18-1-1995 Effective Date: 18-1-1995 Status: Superseded By Variation
D	105m S	Operator: Air Products (chemicals) Plc Address: Clayton Lane, Clayton, Manchester, M11 4SR Process: Manufacture And Use Of Organic Chemicals Permit Number: AR9427	Original Permit Number: IPCMINVAR Date Approved: 25-8-1995 Effective Date: 11-9-1995 Status: Superseded By Variation
D	105m S	Operator: Air Products (chemicals) Plc Address: Clayton Lane, Clayton, Manchester, M11 4SR Process: Manufacture And Use Of Organic Chemicals Permit Number: AZ8609	Original Permit Number: IPCMINVAR Date Approved: 3-11-1997 Effective Date: 10-11-1997 Status: Superseded By Variation
D	105m S	Operator: Air Products (chemicals) Plc Address: Clayton Lane, Clayton, Manchester, M11 4SR Process: Manufacture And Use Of Organic Chemicals Permit Number: BE1488	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 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

34

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 70**

ID	Location	Details	
A	On site	Operator: AIR PRODUCTS (CHEMICALS) LIMITED Installation Name: CLAYTON WORKS Process: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES Permit Number: YP3031PB Original Permit Number: BL9623IK	EPR Reference: - Issue Date: 16/12/2004 Effective Date: 01/01/2005 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	On site	Operator: EVONIK CHEMICALS LIMITED Installation Name: AIR PRODUCTS (CHEMICALS) CLAYTON EPR/BL9623IK Process: ASSOCIATED PROCESS Permit Number: QP3739YK Original Permit Number: BL9623IK	EPR Reference: - Issue Date: 11/09/2017 Effective Date: 11/09/2017 Last date noted as effective: 26/10/2020 Status: EFFECTIVE



ID	Location	Details	
A	On site	Operator: AIR PRODUCTS (CHEMICALS) LIMITED Installation Name: CLAYTON WORKS Process: ASSOCIATED PROCESS Permit Number: YP3031PB Original Permit Number: BL9623IK	EPR Reference: - Issue Date: 16/12/2004 Effective Date: 01/01/2005 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	On site	Operator: EVONIK CHEMICALS LIMITED Installation Name: AIR PRODUCTS (CHEMICALS) CLAYTON EPR/BL9623IK Process: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES Permit Number: QP3739YK Original Permit Number: BL9623IK	EPR Reference: - Issue Date: 11/09/2017 Effective Date: 11/09/2017 Last date noted as effective: 26/10/2020 Status: EFFECTIVE
A	41m NW	Operator: SYNPROTEC LTD Installation Name: - Process: ORGANIC CHEMICALS; HALOGEN CONTAINING COMPOUNDS EG HALOCARBONS Permit Number: BM0303 Original Permit Number: BM0303	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
A	41m NW	Operator: SYNPROTEC LTD Installation Name: - Process: ORGANIC CHEMICALS; ORGANOMETALLIC COMPOUNDS EG LEAD ALKYL Permit Number: BM0303 Original Permit Number: BM0303	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
A	41m NW	Operator: SYNPROTEC LTD Installation Name: - Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: BM0303 Original Permit Number: BM0303	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
A	41m NW	Operator: SYNPROTEC LTD Installation Name: - Process: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS Permit Number: BM0303 Original Permit Number: BM0303	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
A	41m NW	Operator: SYNPROTEC LTD Installation Name: - Process: ORGANIC CHEMICALS; PHOSPHORUS CONTAINING COMPOUNDS EG SUBSTITUTED PHOSPHINES Permit Number: BM0303 Original Permit Number: BM0303	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS



ID	Location	Details	
A	41m NW	Operator: SYNPROTEC LTD Installation Name: - Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: BM0303 Original Permit Number: BM0303	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
A	41m NW	Operator: SYNPROTEC LTD Installation Name: - Process: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES Permit Number: BM0303 Original Permit Number: BM0303	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
A	41m NW	Operator: SYNPROTEC LTD Installation Name: - Process: ORGANIC CHEMICALS; SYNTHETIC RUBBERS Permit Number: BM0303 Original Permit Number: BM0303	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
A	41m NW	Operator: SYNPROTEC LTD Installation Name: 303 CLAYTON LANE EPR/BM0303IW Process: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS Permit Number: BM0303IW Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 22/03/2004 Effective Date: 22/03/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	41m NW	Operator: SYNPROTEC LTD Installation Name: 303 CLAYTON LANE EPR/BM0303IW Process: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES Permit Number: BM0303IW Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 22/03/2004 Effective Date: 22/03/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	41m NW	Operator: SYNPROTEC LTD Installation Name: 303 CLAYTON LANE EPR/BM0303IW Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS Permit Number: BM0303IW Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 22/03/2004 Effective Date: 22/03/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	41m NW	Operator: SYNPROTEC LTD Installation Name: 303 CLAYTON LANE EPR/BM0303IW Process: ASSOCIATED PROCESS Permit Number: BM0303IW Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 22/03/2004 Effective Date: 22/03/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED



ID	Location	Details	
A	41m NW	Operator: SYNPROTEC LTD Installation Name: 303 CLAYTON LANE EPR/BM0303IW Process: ORGANIC CHEMICALS; HALOGEN CONTAINING COMPOUNDS EG HALOCARBONS Permit Number: BM0303IW Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 22/03/2004 Effective Date: 22/03/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	41m NW	Operator: SYNPROTEC LTD Installation Name: 303 CLAYTON LANE EPR/BM0303IW Process: ORGANIC CHEMICALS; ORGANOMETALLIC COMPOUNDS EG LEAD ALKYLs Permit Number: BM0303IW Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 22/03/2004 Effective Date: 22/03/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	41m NW	Operator: SYNPROTEC LTD Installation Name: 303 CLAYTON LANE EPR/BM0303IW Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: BM0303IW Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 22/03/2004 Effective Date: 22/03/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	41m NW	Operator: SYNPROTEC LTD Installation Name: 303 CLAYTON LANE EPR/BM0303IW Process: ORGANIC CHEMICALS; PHOSPHORUS CONTAINING COMPOUNDS EG SUBSTITUTED PHOSPHINES Permit Number: BM0303IW Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 22/03/2004 Effective Date: 22/03/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	41m NW	Operator: SYNPROTEC LTD Installation Name: 303 CLAYTON LANE EPR/BM0303IW Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: BM0303IW Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 22/03/2004 Effective Date: 22/03/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
A	77m W	Operator: CARBOGEN AMCIS LIMITED Installation Name: 303 CLAYTON ROAD EPR/PP3236ST Process: ORGANIC CHEMICALS; HALOGEN CONTAINING COMPOUNDS EG HALOCARBONS Permit Number: EP3738EJ Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 19/12/2013 Effective Date: 19/12/2013 Last date noted as effective: 26/10/2020 Status: EFFECTIVE



ID	Location	Details	
A	77m W	Operator: CARBOGEN AMCIS LIMITED Installation Name: 303 CLAYTON ROAD EPR/PP3236ST Process: ORGANIC CHEMICALS; PHOSPHORUS CONTAINING COMPOUNDS EG SUBSTITUTED PHOSPHINES Permit Number: EP3738EJ Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 19/12/2013 Effective Date: 19/12/2013 Last date noted as effective: 26/10/2020 Status: EFFECTIVE
A	77m W	Operator: CARBOGEN AMCIS LIMITED Installation Name: 303 CLAYTON ROAD EPR/PP3236ST Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS Permit Number: EP3738EJ Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 19/12/2013 Effective Date: 19/12/2013 Last date noted as effective: 26/10/2020 Status: EFFECTIVE
A	77m W	Operator: CARBOGEN AMCIS LIMITED Installation Name: 303 CLAYTON ROAD EPR/PP3236ST Process: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS Permit Number: EP3738EJ Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 19/12/2013 Effective Date: 19/12/2013 Last date noted as effective: 26/10/2020 Status: EFFECTIVE
A	77m W	Operator: CARBOGEN AMCIS LIMITED Installation Name: 303 CLAYTON ROAD EPR/PP3236ST Process: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES Permit Number: EP3738EJ Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 19/12/2013 Effective Date: 19/12/2013 Last date noted as effective: 26/10/2020 Status: EFFECTIVE
A	77m W	Operator: CARBOGEN AMCIS LIMITED Installation Name: 303 CLAYTON ROAD EPR/PP3236ST Process: ORGANIC CHEMICALS; ORGANOMETALLIC COMPOUNDS EG LEAD ALKYL Permit Number: EP3738EJ Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 19/12/2013 Effective Date: 19/12/2013 Last date noted as effective: 26/10/2020 Status: EFFECTIVE
A	77m W	Operator: CARBOGEN AMCIS LIMITED Installation Name: 303 CLAYTON ROAD EPR/PP3236ST Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: EP3738EJ Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 19/12/2013 Effective Date: 19/12/2013 Last date noted as effective: 26/10/2020 Status: EFFECTIVE
A	77m W	Operator: CARBOGEN AMCIS LIMITED Installation Name: 303 CLAYTON ROAD EPR/PP3236ST Process: ORGANIC CHEMICALS; SULPHUR CONTAINING COMPOUNDS EG SULPHIDES Permit Number: EP3738EJ Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 19/12/2013 Effective Date: 19/12/2013 Last date noted as effective: 26/10/2020 Status: EFFECTIVE



ID	Location	Details	
A	77m W	Operator: CARBONGEN AMCIS LTD Installation Name: 303 CLAYTON ROAD EPR/PP3236ST Process: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS Permit Number: PP3236ST Original Permit Number: BM0303IW	EPR Reference: - Issue Date: 16/05/2005 Effective Date: 16/05/2005 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
I	469m W	Operator: HEXION SPECIALTY CHEMICALS CLAYTON LTD Installation Name: RHODIA UK LTD Process: ASSOCIATED PROCESS Permit Number: SP3538GH Original Permit Number: UP3136LU	EPR Reference: EA/EPR/UP3136LU/S002 Issue Date: - Effective Date: 16/02/2009 Last date noted as effective: 26/10/2020 Status: SURRENDER EFFECTIVE
I	469m W	Operator: HEXION SPECIALTY CHEMICALS CLAYTON LTD Installation Name: RHODIA UK LTD Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS Permit Number: SP3538GH Original Permit Number: UP3136LU	EPR Reference: EA/EPR/UP3136LU/S002 Issue Date: - Effective Date: 16/02/2009 Last date noted as effective: 26/10/2020 Status: SURRENDER EFFECTIVE
I	469m W	Operator: OMG (UK) LTD Installation Name: OMG UK LTD Process: ORGANIC CHEMICALS; ANY OTHER ORGANIC COMPOUNDS (NOT DESCRIBED 4.1 A(1)(A)) Permit Number: BS3492IW Original Permit Number: BS3492IW	EPR Reference: - Issue Date: 09/03/2004 Effective Date: 09/03/2004 Last date noted as effective: 26/10/2020 Status: SUPERCEDED
I	469m W	Operator: HEXION SPECIALTY CHEMICALS CLAYTON LTD Installation Name: RHODIA UK LTD Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS Permit Number: SP3538GH Original Permit Number: UP3136LU	EPR Reference: EA/EPR/UP3136LU/S002 Issue Date: - Effective Date: 16/02/2009 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

6

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 70**



ID	Location	Address	Details	
A	On site	Air Products (Chemicals) Plc, Clayton Lane, Clayton, M11 4SR	Process: Use of Organic Chemicals Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
F	182m NW	Djs Auto Centre, Ashton New Rd, M11 4SG	Process: Waste Oil Burner 0.4 MW Status: New Legislation Applies Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
4	215m E	Save Ashton, New Rd, M11 4RX	Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
8	319m SW	Rotunda Plc, Clayton Lane, Clayton, M11 2AT	Process: Rubber Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
10	402m NW	Vitacom Ltd, Bank St, M11 4AS	Process: Rubber Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
11	417m S	Thomas Storey Fabrications Ltd, Stainburn Road, Openshaw, Manchester, M11 2ER	Process: Coating Processes Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0
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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	5
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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 70**



ID	Location	Address	Details	
9	354m E	PARROTT STREET/BROMLOW STREET CSO, PARROTT ST/BROMLOW ST JUNCTION, OPENSHAW, MANCHESTER, GREATER MANCHESTER, M11 4QW	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0107 Permit Version: 3 Receiving Water: UNNAMED WATERCOURSE	Status: VARIED UNDER EPR 2010 Issue date: 05/02/2016 Effective Date: 05/02/2016 Revocation Date: 05/11/2019
H	433m S	ASHTON NEW RD/BEBBINGTON, MANCHESTER	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982734 Permit Version: 1 Receiving Water: BALCK BROOK	Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: - Effective Date: 30/09/1994 Revocation Date: 01/08/2005
H	433m S	ASHTON NEW RD/BEBBINGTON, MANCHESTER	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0323 Permit Version: 1 Receiving Water: BLACK BROOK	Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: - Effective Date: 01/01/1995 Revocation Date: 01/01/1995
H	433m S	PARROTT STREET/BROMLOW STREET CSO, PARROTT ST/BROMLOW ST JUNCTION, OPENSHAW, MANCHESTER, GREATER MANCHESTER, M11 4QW	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0107 Permit Version: 1 Receiving Water: UNNAMED WATERCOURSE	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01/01/1995 Revocation Date: 02/09/2010
H	433m S	PARROTT STREET/BROMLOW STREET CSO, PARROTT ST/BROMLOW ST JUNCTION, OPENSHAW, MANCHESTER, GREATER MANCHESTER, M11 4QW	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0107 Permit Version: 2 Receiving Water: UNNAMED WATERCOURSE	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 04/02/2016

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

2

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.

Features are displayed on the Current industrial land use map on **page 70**

ID	Location	Name	Status	Receiving Water	Authorised Substances
D	106m S	Anchor Chemical Outfalls 1/2/5	Not Active	Manchester Ship Canal	Mercury (other)
D	106m S	Air Products (chemicals) Clayton	Active	Manchester Ship Canal	Mercury (other)

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

12

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 70**

ID	Location	Details	
A	41m NW	Incident Date: 17/06/2002 Incident Identification: 85898 Pollutant: Organic Chemicals/Products Pollutant Description: Solvents	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
A	56m W	Incident Date: 27/03/2002 Incident Identification: 67108 Pollutant: Organic Chemicals/Products Pollutant Description: Hydrocarbons	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
A	63m W	Incident Date: 21/08/2001 Incident Identification: 25901 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Chemical Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
A	67m W	Incident Date: 26/07/2002 Incident Identification: 94717 Pollutant: Organic Chemicals/Products Pollutant Description: Solvents	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
A	69m W	Incident Date: 05/09/2002 Incident Identification: 105974 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 4 (No Impact)
A	81m W	Incident Date: 05/09/2002 Incident Identification: 105987 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 4 (No Impact)
A	89m W	Incident Date: 23/07/2003 Incident Identification: 176591 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 4 (No Impact)
A	91m W	Incident Date: 29/04/2002 Incident Identification: 75428 Pollutant: Inorganic Chemicals/Products Pollutant Description: Acids	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
6	260m NW	Incident Date: 18/07/2001 Incident Identification: 17244 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)
7	277m NW	Incident Date: 28/01/2003 Incident Identification: 133803 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)



ID	Location	Details	
G	351m SW	Incident Date: 31/05/2001 Incident Identification: 10156 Pollutant: Organic Chemicals/Products Pollutant Description: Dyes and Inks	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
G	351m SW	Incident Date: 31/05/2001 Incident Identification: 10156 Pollutant: Organic Chemicals/Products Pollutant Description: Dyes and Inks	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

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

4.19 Pollution inventory substances

Records within 500m	4
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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 70**

ID: A, Location: On site, Permit: BL9623IK
 Operator: Evonik Chemicals Limited
 Activity: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES
 Address: Air Products (Chemicals) Clayton CLAYTON WORKS Clayton Lane Clayton M11 4SR
 Sector: Chemicals, Sub-sector: Chemicals
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Total organic carbon (TOC)	50000kg	99000kg

ID: A, Location: On site, Permit: BL9623IK
 Operator: Evonik Chemicals Limited
 Activity: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES
 Address: Air Products (Chemicals) Clayton CLAYTON WORKS Clayton Lane Clayton M11 4SR
 Sector: Chemicals, Sub-sector: Chemicals
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Carbon monoxide	100000kg	Below Reporting Threshold



Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Methane	10000kg	Below Reporting Threshold
Air	Nitrogen oxides (NO and NO2) as NO2	100000kg	Below Reporting Threshold
Air	Non-methane volatile organic compounds (NMVOCs)	10000kg	Below Reporting Threshold
Wastewater	Mercury	0.1kg	Below Reporting Threshold
Air	Sulphur oxides (SO2 and SO3) as SO2	100000kg	Below Reporting Threshold
Wastewater	Nitrogen - as total N	50000kg	Below Reporting Threshold
Air	Carbon dioxide	10000000kg	Below Reporting Threshold

ID: A, Location: On site, Permit: BL9623IK
 Operator: Evonik Chemicals Limited
 Activity: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES
 Address: Air Products (Chemicals) Clayton CLAYTON WORKS Clayton Lane Clayton M11 4SR
 Sector: Chemicals, Sub-sector: Chemicals
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Xylene - all isomers	10kg	21.8kg

ID: A, Location: 77m W, Permit: BM0303IW
 Operator: Carbongen Amcis Limited
 Activity: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS
 Address: 303 Clayton Lane Manchester Greater Manchester M11 4SX
 Sector: Chemicals, Sub-sector: Chemicals
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Ammonia	1000kg	Below Reporting Threshold
Air	Carbon monoxide	100000kg	Below Reporting Threshold
Air	Nitrous oxide	10000kg	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
Air	Dichloromethane (DCM) (Methylene chloride)	1000kg	Below Reporting Threshold
Air	Chloroform (Trichloromethane)	100kg	Below Reporting Threshold



Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Sulphur oxides (SO ₂ and SO ₃) as SO ₂	100000kg	Below Reporting Threshold
Air	Carbon dioxide	10000000kg	Below Reporting Threshold

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

4.20 Pollution inventory waste transfers

Records within 500m

2

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

Features are displayed on the Current industrial land use map on **page 70**

ID: A, Location: On site, Permit: BL9623IK
 Operator: Evonik Chemicals Limited
 Activity: ORGANIC CHEMICALS; NITROGEN CONTAINING COMPOUNDS EG AMINES
 Address: Air Products (Chemicals) Clayton CLAYTON WORKS Clayton Lane Clayton M11 4SR
 Sector: Chemicals, Sub-sector: Chemicals
 Releases:

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)	7	Absolute Value	07 01 01	aqueous washing liquids and mother liquors	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)	91	Absolute Value	07 01 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)	33	Absolute Value	08 04 09	waste adhesives and sealants containing organic solvents or other dangerous substances	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)	0.2	Absolute Value	13 02 06	synthetic engine, gear and lubricating oils	Yes
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.2	Absolute Value	13 03 10	other insulating and heat transmission oils	Yes
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	17	Absolute Value	15 02 02	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	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)	Below Reporting Threshold	Below Reporting Threshold	15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02	No
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.1	Absolute Value	16 05 06	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	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)	0.1	Absolute Value	20 01 21	fluorescent tubes and other mercury-containing waste	Yes
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	64	Absolute Value	20 03 01	mixed municipal waste	No
R4	Recycling/reclamation of metals and metal compounds	294	Absolute Value	20 01 40	metals	No
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	172	Absolute Value	20 01 30	detergents other than those mentioned in 20 01 29	No



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	33	Absolute Value	15 01 01	paper and cardboard packaging	No

ID: A, Location: 77m W, Permit: BM0303IW
 Operator: Carbongen Amcis Limited
 Activity: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS
 Address: 303 Clayton Lane Manchester Greater Manchester M11 4SX
 Sector: Chemicals, Sub-sector: Chemicals
 Releases:

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 numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	4.51	Absolute Value	06 01 02	hydrochloric 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 numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	1.07	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 numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	0.28	Absolute Value	07 07 01	aqueous 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.)	34.41	Absolute Value	07 07 03	organic halogenated solvents, washing liquids and mother liquors	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.)	280.02	Absolute Value	07 07 04	other organic solvents, washing liquids and mother liquors	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)	13.15	Absolute Value	07 07 04	other organic solvents, washing liquids and mother liquors	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.)	3.18	Absolute Value	07 07 07	halogenated still bottoms and reaction residues	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.)	2.64	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)	0.29	Absolute Value	07 07 08	other still bottoms and reaction residues	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.)	0.03	Absolute Value	07 07 09	halogenated 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.)	6.63	Absolute Value	07 07 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.)	0.2	Absolute Value	09 01 05	bleach solutions and bleach fixer solutions	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.)	0.44	Absolute Value	10 01 09	sulphuric 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 numbers D1 to D12 (eg evaporation, drying, calcination, etc.)	1	Absolute Value	13 01 10	mineral based non-chlorinated hydraulic oils	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.)	1	Absolute Value	13 02 05	mineral-based non-chlorinated engine, gear and lubricating oils	Yes
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	1.05	Absolute Value	13 02 08	other engine, gear and lubricating oils	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.)	0.05	Absolute Value	14 06 02	other halogenated solvents and solvent mixtures	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.)	0.02	Absolute Value	14 06 03	other solvents and solvent mixtures	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.)	21.24	Absolute Value	15 01 10	packaging containing residues of or contaminated by dangerous substances	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)	10.47	Absolute Value	15 01 10	packaging containing residues of or contaminated by dangerous substances	Yes



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
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.)	0.18	Absolute Value	15 01 11	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	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.)	2.69	Absolute Value	16 03 03	inorganic wastes containing dangerous substances	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.)	0.17	Absolute Value	16 03 05	organic wastes containing dangerous substances	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.)	0.55	Absolute Value	16 05 06	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	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.)	0.76	Absolute Value	16 05 07	discarded inorganic chemicals consisting of or containing dangerous substances	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.)	1.2	Absolute Value	16 10 01	aqueous liquid wastes containing dangerous substances	Yes
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	1.2	Absolute Value	20 01 01	paper and cardboard	No
R5	Recycling/reclamation of other inorganic materials	1.2	Absolute Value	20 01 02	glass	No
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	1.4	Absolute Value	20 01 38	wood other than that mentioned in 20 01 37	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.



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- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

Records within 500m	2
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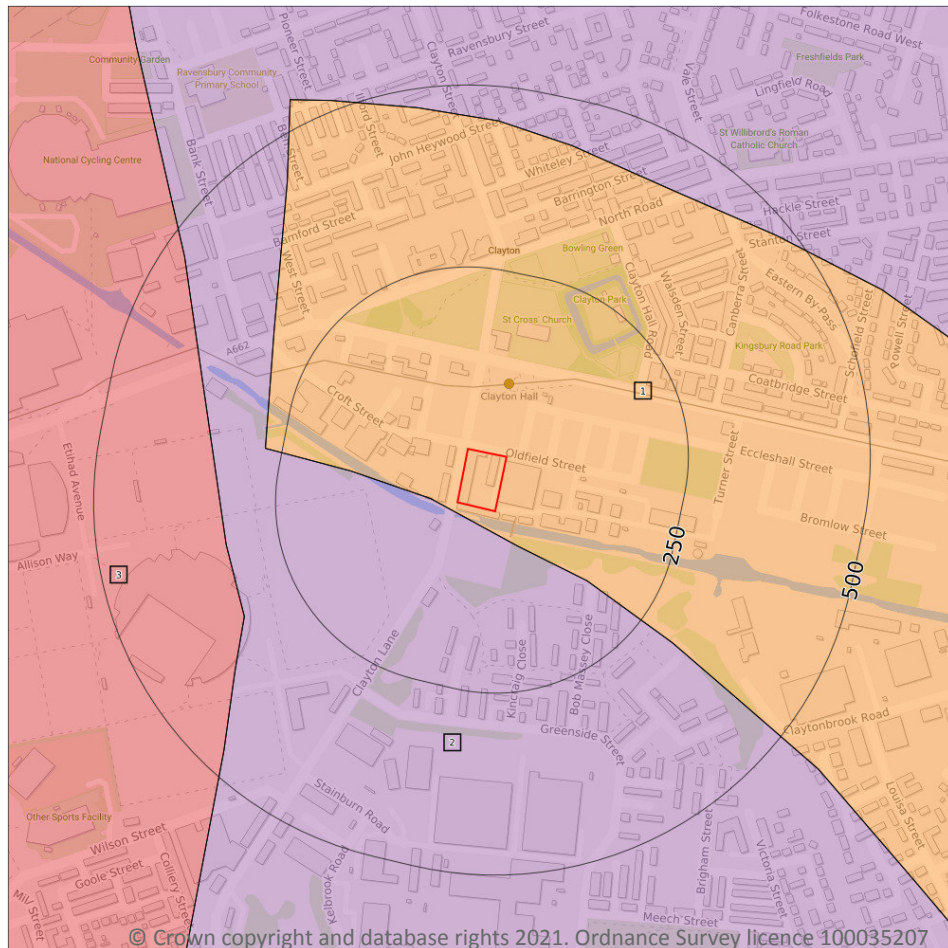
Features are displayed on the Hydrogeology map on **page 96**

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	109m W	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

3

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 98**

ID	Location	Designation	Description
1	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers
2	13m SW	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

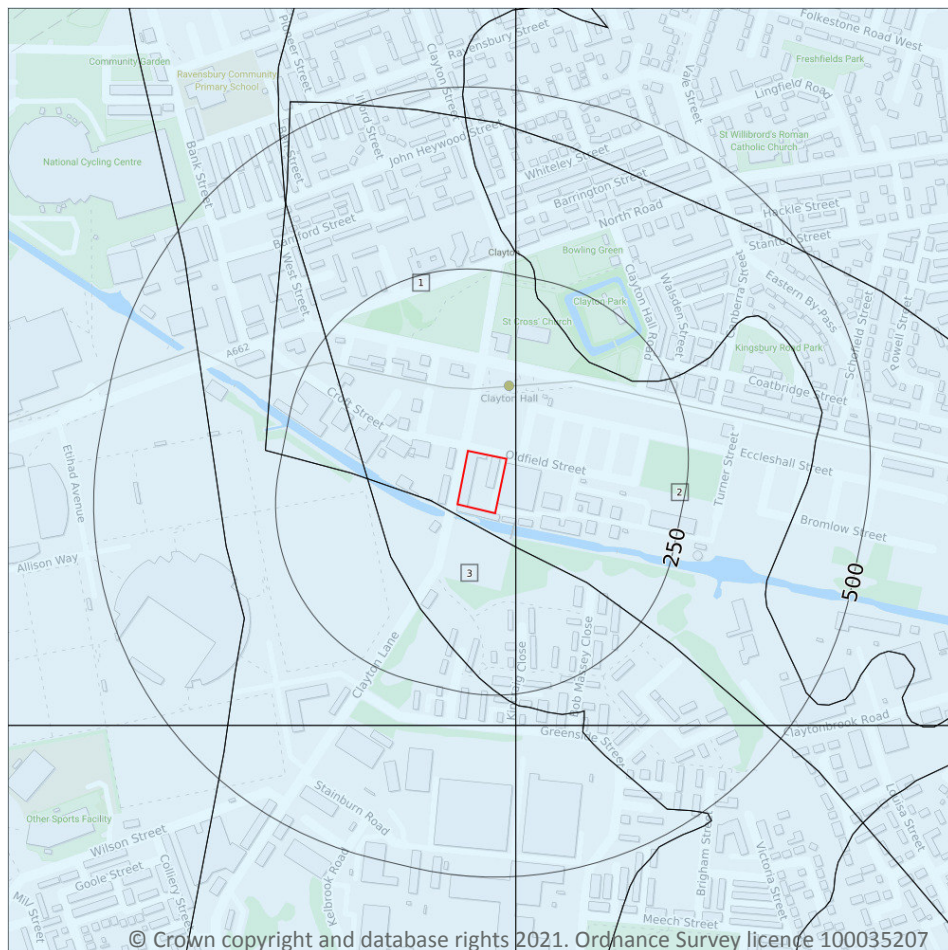


ID	Location	Designation	Description
3	322m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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



Groundwater vulnerability



— Site Outline

Search buffers in metres (m)

Superficial vulnerability

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

Bedrock vulnerability

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

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m

3

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 100**



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Medium	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
2	12m E	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
3	13m SW	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Medium	Vulnerability: Low Aquifer type: Principal Flow mechanism: Well connected fractures

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

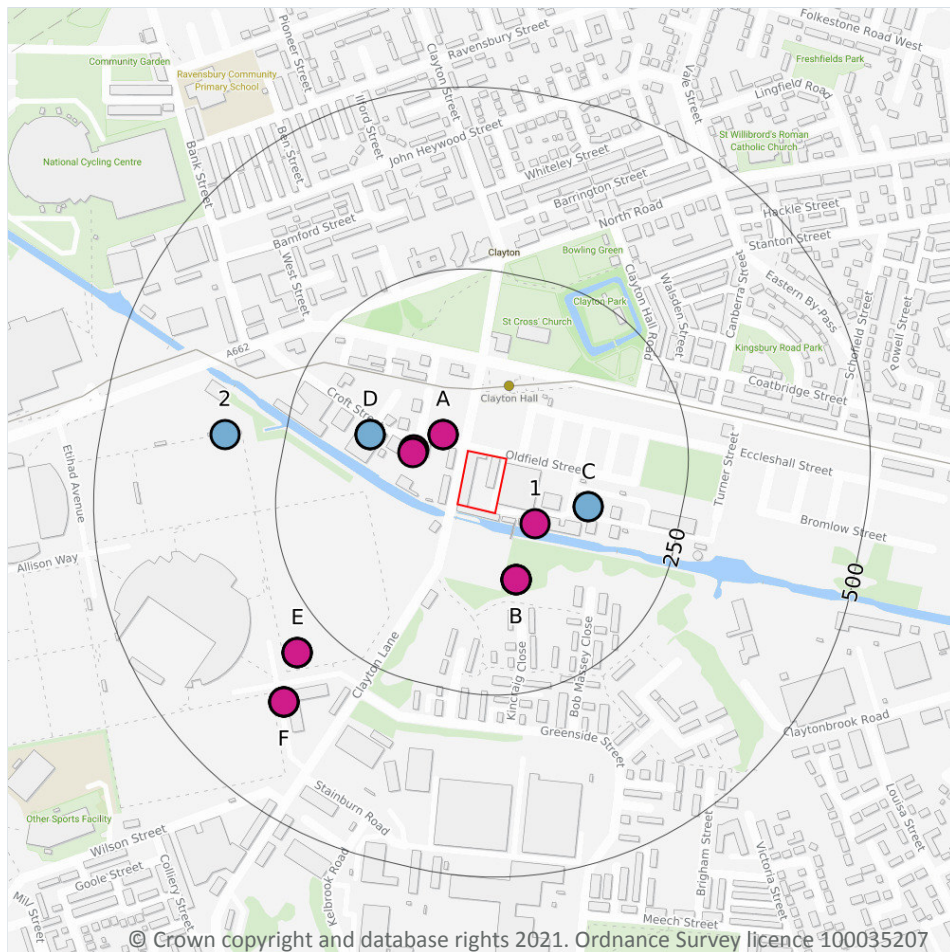
0

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

26

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 102**



ID	Location	Details	
A	41m NW	Status: Historical Licence No: 2569006037 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLES (2) ON PREMISES AT CROFT ST, CLAYTON, MANCHESTER" Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 387900 Northing: 398400	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
A	41m NW	Status: Historical Licence No: 2569006037 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLES (2) ON PREMISES AT CROFT ST, CLAYTON, MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 387900 Northing: 398400	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
A	41m NW	Status: Historical Licence No: 2569006037 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLES X 2 ON PREMISES AT CROFT STREET CLAYTON MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 387900 Northing: 398400	Annual Volume (m ³): 111832 Max Daily Volume (m ³): 654.624 Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
1	57m E	Status: Active Licence No: 2569006036 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLE ON PREMISES AT CLAYTON, MANCHESTER Data Type: Point Name: Evonik Chemicals Limited Easting: 388027 Northing: 398277	Annual Volume (m ³): 372,772 Max Daily Volume (m ³): 3,600.50 Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 103 Version Start Date: 09/03/2017 Version End Date: -



ID	Location	Details	
A	73m W	Status: Active Licence No: 2569006037 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLE 1 ON PREMISES AT CROFT STREET, CLAYTON, MANCHESTER Data Type: Point Name: Evonik Chemicals Limited Easting: 387860 Northing: 398379	Annual Volume (m ³): 111,831.60 Max Daily Volume (m ³): 654.62 Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 103 Version Start Date: 09/03/2017 Version End Date: -
A	73m W	Status: Active Licence No: 2569006037 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLE 2 ON PREMISES AT CROFT STREET, CLAYTON, MANCHESTER Data Type: Point Name: Evonik Chemicals Limited Easting: 387859 Northing: 398375	Annual Volume (m ³): 111,831.60 Max Daily Volume (m ³): 654.62 Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 103 Version Start Date: 09/03/2017 Version End Date: -
B	95m S	Status: Historical Licence No: 2569006036 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE ON PREMISES AT CLAYTON, MANCHESTER" Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
B	95m S	Status: Historical Licence No: 2569006036 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE ON PREMISES AT CLAYTON, MANCHESTER" Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -



ID	Location	Details	
B	95m S	Status: Historical Licence No: 2569006036 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE ON PREMISES AT CLAYTON, MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
B	95m S	Status: Historical Licence No: 2569006036 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE ON PREMISES AT CLAYTON, MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
B	95m S	Status: Historical Licence No: 2569006036 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE ON PREMISES AT CLAYTON MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m ³): 372772 Max Daily Volume (m ³): 3600.5 Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
B	95m S	Status: Historical Licence No: 2569006036 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE ON PREMISES AT CLAYTON MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m ³): 372772 Max Daily Volume (m ³): 3600.5 Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -

ID	Location	Details	
E	299m SW	Status: Historical Licence No: 2569006026 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, CLAYTON, MANCHESTER" Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC Easting: 387700 Northing: 398100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/07/2000 Version End Date: -
E	299m SW	Status: Historical Licence No: 2569006026 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, CLAYTON, MANCHESTER" Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC Easting: 387700 Northing: 398100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/07/2000 Version End Date: -
E	299m SW	Status: Historical Licence No: 2569006026 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, CLAYTON, MANCHESTER Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC Easting: 387700 Northing: 398100	Annual Volume (m ³): 633962 Max Daily Volume (m ³): 2837 Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/07/2000 Version End Date: -
E	299m SW	Status: Historical Licence No: 2569006026 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, CLAYTON, MANCHESTER Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC Easting: 387700 Northing: 398100	Annual Volume (m ³): 633962 Max Daily Volume (m ³): 2837 Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/07/2000 Version End Date: -

ID	Location	Details	
F	361m SW	Status: Historical Licence No: NW/069/0006/005 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT OPENSHAW, WEST ASHTON Data Type: Point Name: MANCHESTER CITY FOOTBALL CLUB LIMITED Easting: 387681 Northing: 398032	Annual Volume (m ³): 266113 Max Daily Volume (m ³): 1000 Original Application No: - Original Start Date: 14/11/2012 Expiry Date: 31/03/2018 Issue No: 1 Version Start Date: 14/11/2012 Version End Date: -
F	361m SW	Status: Historical Licence No: NW/069/0006/005 Details: Horticultural Watering Direct Source: Ground Water - North West Region Point: BOREHOLE AT OPENSHAW, WEST ASHTON Data Type: Point Name: MANCHESTER CITY FOOTBALL CLUB LIMITED Easting: 387681 Northing: 398032	Annual Volume (m ³): 266113 Max Daily Volume (m ³): 1000 Original Application No: - Original Start Date: 14/11/2012 Expiry Date: 31/03/2018 Issue No: 1 Version Start Date: 14/11/2012 Version End Date: -
F	361m SW	Status: Historical Licence No: NW/069/0006/005 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE AT OPENSHAW, WEST ASHTON Data Type: Point Name: MANCHESTER CITY FOOTBALL CLUB LIMITED Easting: 387681 Northing: 398032	Annual Volume (m ³): 266113 Max Daily Volume (m ³): 1000 Original Application No: - Original Start Date: 14/11/2012 Expiry Date: 31/03/2018 Issue No: 1 Version Start Date: 14/11/2012 Version End Date: -
F	361m SW	Status: Active Licence No: NW/069/0006/005/R01 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE AT OPENSHAW, WEST ASHTON Data Type: Point Name: MANCHESTER CITY FOOTBALL CLUB LIMITED Easting: 387681 Northing: 398032	Annual Volume (m ³): 221,650 Max Daily Volume (m ³): 1,000 Original Application No: - Original Start Date: 01/04/2018 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2018 Version End Date: -
F	361m SW	Status: Active Licence No: NW/069/0006/005/R01 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT OPENSHAW, WEST ASHTON Data Type: Point Name: MANCHESTER CITY FOOTBALL CLUB LIMITED Easting: 387681 Northing: 398032	Annual Volume (m ³): 221,650 Max Daily Volume (m ³): 1,000 Original Application No: - Original Start Date: 01/04/2018 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2018 Version End Date: -



ID	Location	Details	
-	1412m S	Status: Historical Licence No: 2569006044 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PRESTON STREET, GORTON, MANCHESTER Data Type: Point Name: CEMEX UK MATERIALS LTD Easting: 388030 Northing: 396880	Annual Volume (m ³): 15000 Max Daily Volume (m ³): 115 Original Application No: - Original Start Date: 23/10/2003 Expiry Date: 31/03/2014 Issue No: 3 Version Start Date: 15/10/2007 Version End Date: -
-	1412m S	Status: Active Licence No: NW/069/0004/012 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PRESTON STREET, MANCHESTER Data Type: Point Name: Cemex UK Materials Limited Easting: 388030 Northing: 396880	Annual Volume (m ³): 7,500 Max Daily Volume (m ³): 72 Original Application No: - Original Start Date: 19/06/2014 Expiry Date: 31/03/2027 Issue No: 2 Version Start Date: 21/12/2018 Version End Date: -
-	1588m NE	Status: Historical Licence No: 2569006021 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT CLAYTON MILL BRIDGE, MANCHESTER Data Type: Point Name: MANCHESTER ABATTOIR Easting: 389100 Northing: 399500	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 22/05/1998 Version End Date: -
-	1977m NW	Status: Historical Licence No: 2569005061 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT NORTON STREET, MILES PLATTING, MANCHESTER" Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LTD Easting: 386550 Northing: 399790	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 08/02/2000 Expiry Date: - Issue No: 2 Version Start Date: 01/07/2000 Version End Date: -



ID	Location	Details	
-	1977m NW	Status: Active Licence No: 2569005061 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT NORTON STREET, MILES PLATTING, MANCHESTER Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LIMITED Easting: 386550 Northing: 399790	Annual Volume (m ³): 33,000 Max Daily Volume (m ³): 125 Original Application No: - Original Start Date: 08/02/2000 Expiry Date: - Issue No: 3 Version Start Date: 13/08/2012 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

6

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.

Features are displayed on the Abstractions and Source Protection Zones map on **page 102**

ID	Location	Details	
C	123m E	Status: Historical Licence No: 2569006995 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "ASHTON CANAL, MANCHESTER" Data Type: Point Name: BRITISH WATERWAYS Easting: 388100 Northing: 398300	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
C	123m E	Status: Active Licence No: 2569006995 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: ASHTON CANAL, MANCHESTER Data Type: Point Name: Canal and River Trust Easting: 388100 Northing: 398300	Annual Volume (m ³): 68,190 Max Daily Volume (m ³): 68,190 Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -



ID	Location	Details	
D	136m W	Status: Historical Licence No: 2569006997 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "ASHTON CANAL, MANCHESTER [CLAYTON ANALINE]" Data Type: Point Name: BRITISH WATERWAYS Easting: 387800 Northing: 398400	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
D	136m W	Status: Historical Licence No: 2569006997 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: ASHTON CANAL, MANCHESTER [CLAYTON ANALINE] Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 387800 Northing: 398400	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
D	136m W	Status: Active Licence No: 2569006997 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: ASHTON CANAL MANCHESTER CLAYTON ANALINE Data Type: Point Name: Canal and River Trust Easting: 387800 Northing: 398400	Annual Volume (m ³): 3,500,420 Max Daily Volume (m ³): 3,500,420 Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
2	332m W	Status: Historical Licence No: 2569006996 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: ASHTON CANAL, MANCHESTER [VITACOM] Data Type: Point Name: BRITISH WATERWAYS Easting: 387600 Northing: 398400	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -

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



5.8 Potable abstractions

Records within 2000m	0
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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.

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

5.9 Source Protection Zones

Records within 500m	0
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Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

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

5.10 Source Protection Zones (confined aquifer)

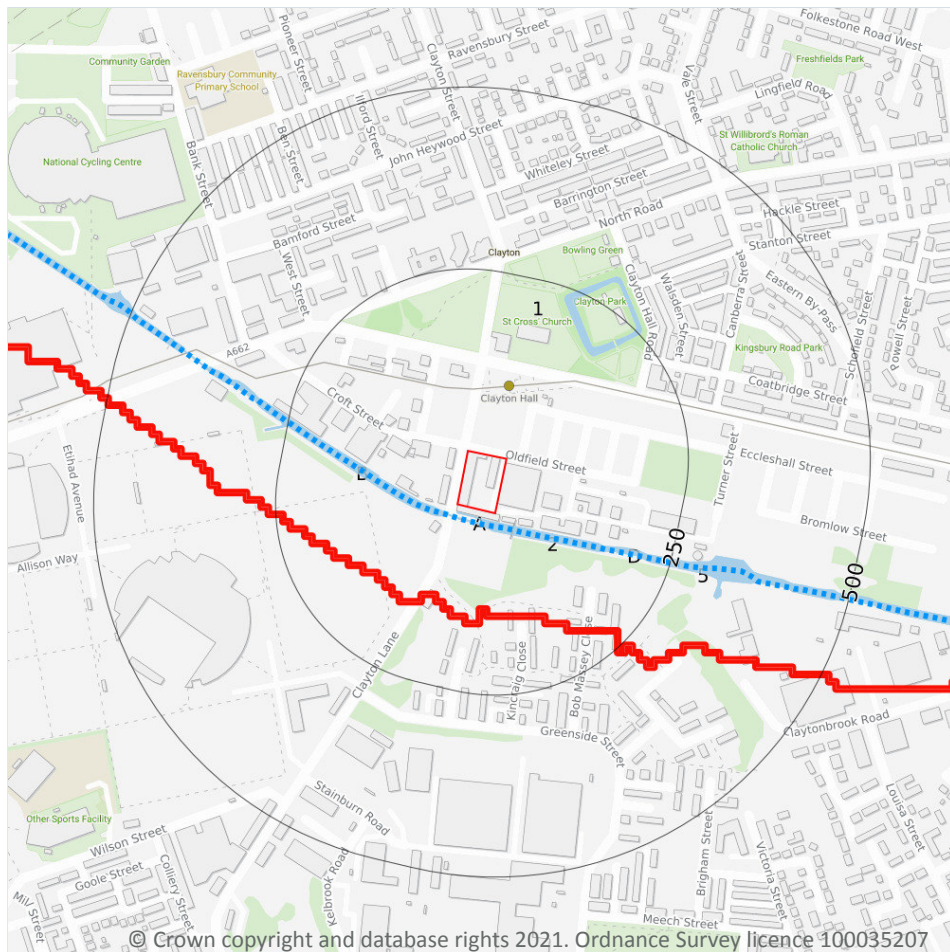
Records within 500m	0
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Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only 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

10

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 112**

ID	Location	Type of water feature	Ground level	Permanence	Name
A	10m S	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
2	17m S	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	Ashton Canal
A	17m S	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	Ashton Canal
B	17m S	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	Ashton Canal
A	18m S	Lock or flight of locks. An enclosure in a canal or navigable river with gates and sluices at either end.	On ground surface	Watercourse contains water year round (in normal circumstances)	Ashton Canal
D	160m E	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	Ashton Canal
D	161m E	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	Ashton Canal
D	178m E	Lock or flight of locks. An enclosure in a canal or navigable river with gates and sluices at either end.	On ground surface	Watercourse contains water year round (in normal circumstances)	Ashton Canal
D	203m E	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	Ashton Canal
5	211m E	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	Ashton Canal

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

4

Covering rivers, streams and lakes (some overlap with OS 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 112**

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 112**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River WB catchment	Medlock (Lumb Brook to Irwell)	GB112069061152	Roch Irk Medlock	Irwell

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

6.4 WFD Surface water bodies

Records identified

2

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 112**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
A	18m S	Canal	Ashton Canal and Peak Forest Canal, lower section	GB71210219	Moderate	Good	Moderate	2016
-	892m NW	River	Medlock (Lumb Brook to Irwell)	GB112069061152	Moderate	Good	Moderate	2016

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



6.5 WFD Groundwater bodies

Records on site

1

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

Features are displayed on the Hydrology map on **page 112**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Manchester and East Cheshire Permo-Triassic Sandstone Aquifers	<u>GB41201G101100</u>	Poor	Poor	Poor	2015

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

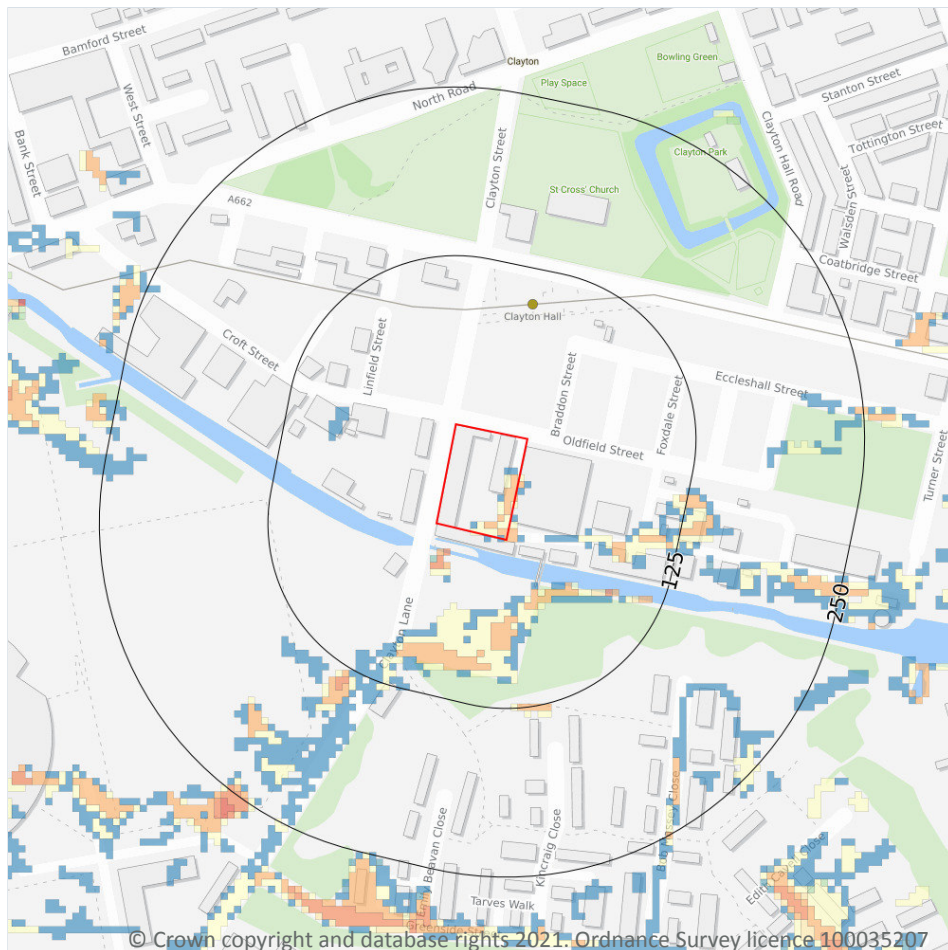
0

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



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

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

1 in 250 return period

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

1 in 100 return period

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

1 in 30 return period

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

8.1 Surface water flooding

Highest risk on site

1 in 30 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.3m - 1.0m

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

Features are displayed on the Surface water flooding map on **page 119**

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

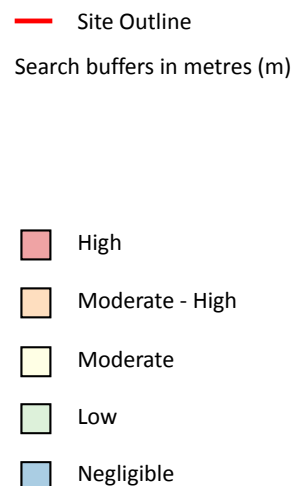
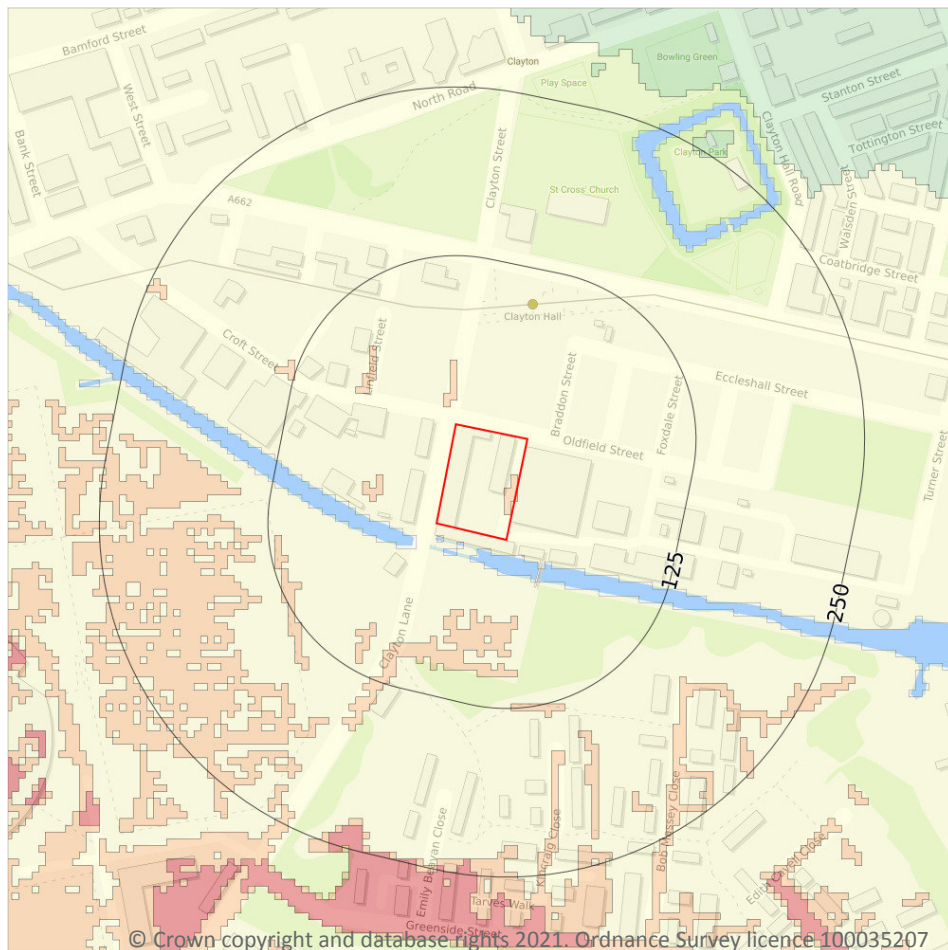
The table below shows the maximum flood depths for a range of return periods for the site.

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

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Moderate-High

Highest risk within 50m

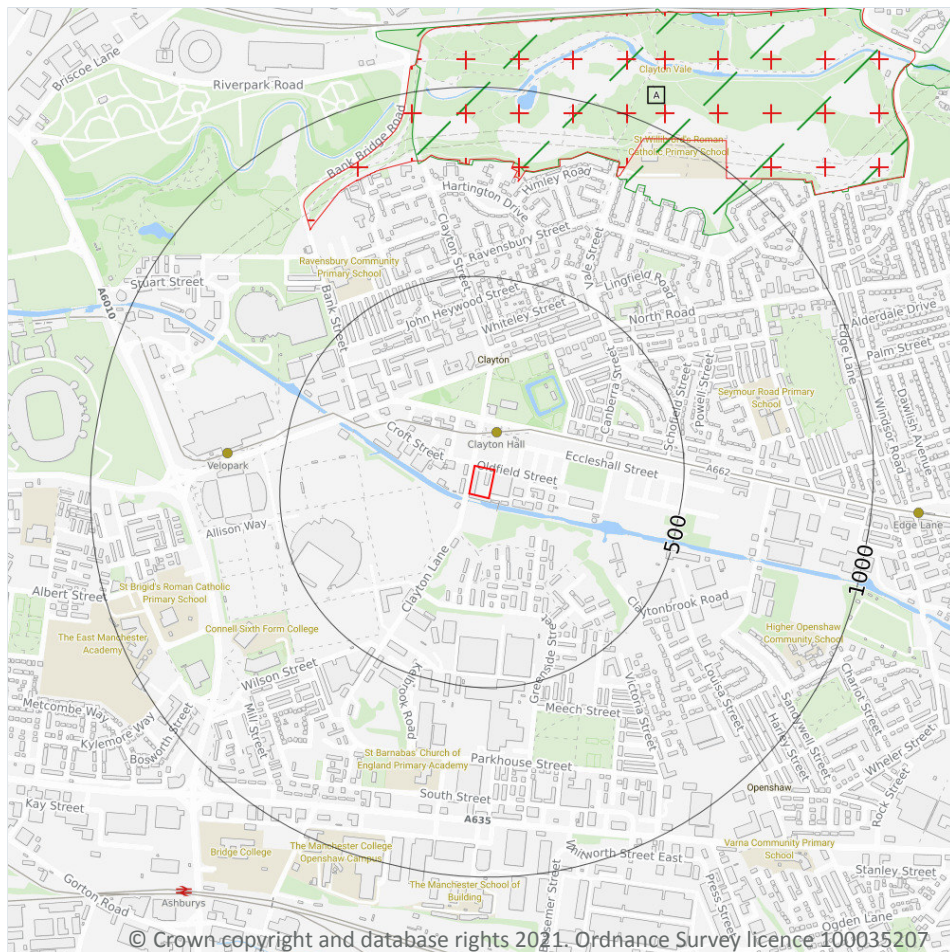
Moderate-High

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 121**

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



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

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m**0**

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m**0**

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m**0**

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m**0**

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m**1**

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 122**

ID	Location	Name	Data source
A	759m NW	Clayton Vale	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 122**

ID	Location	Name	Local Authority name
A	789m N	Liverpool and Manchester	Manchester
1	1509m NE	Liverpool and Manchester	Tameside
-	1888m NE	Liverpool and Manchester	Oldham

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

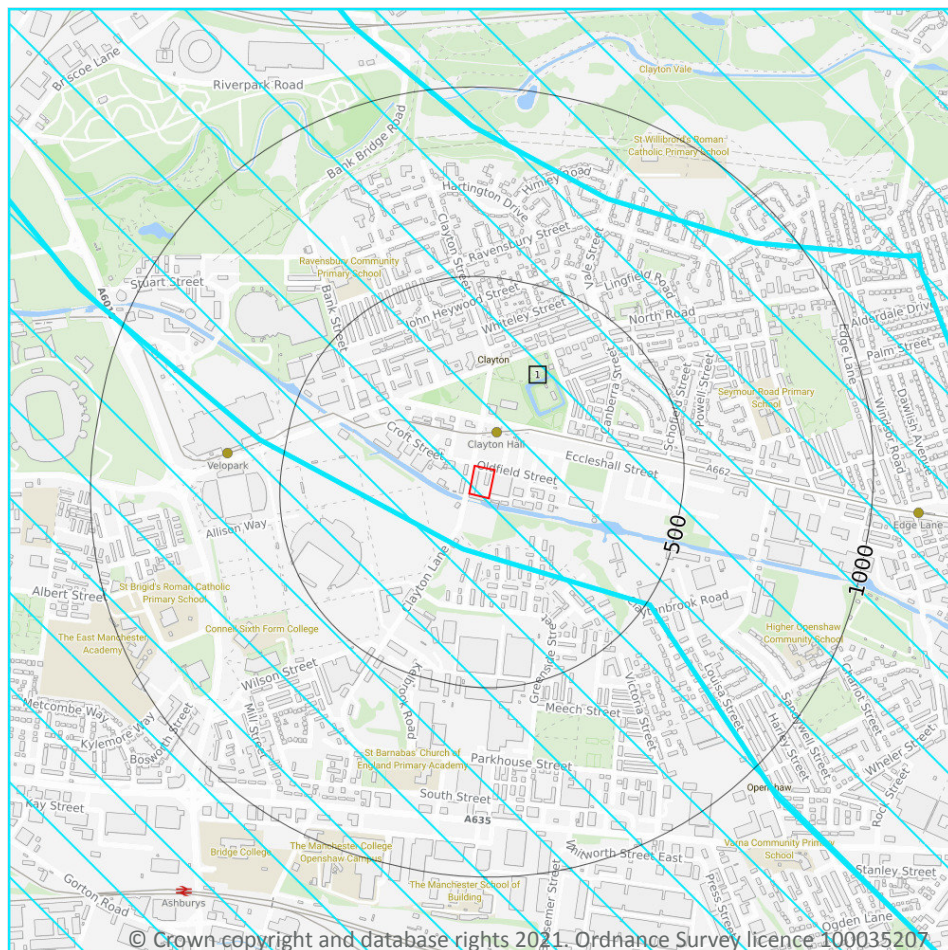
Records within 2000m

0

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.

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

SSSI Impact Zones and Units



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

10.17 SSSI Impact Risk Zones

Records on site

1

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

Features are displayed on the SSSI Impact Zones and Units map on **page 127**

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500t) Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0
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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



- Site Outline
- Search buffers in metres (m)
- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

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

4

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.

Features are displayed on the Visual and cultural designations map on **page 129**

ID	Location	Name	Grade	Reference Number	Listed date
1	18m S	Ashton Canal Lock Number 9 Immediately East Of Clayton Lane Bridge, Manchester, M11	II	1197832	06/06/1994
2	175m N	Church Of St Cross, Manchester, M11	II*	1283072	18/12/1963
3	191m E	Ashton Canal Lock Number 10 Between Clayton Bridge And Stockport Junction, Manchester, M11	II	1207712	06/06/1994
5	219m NE	Bridge Over Moat To Clayton Hall, Manchester, M11	II	1197796	06/06/1994

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

1

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.

Features are displayed on the Visual and cultural designations map on **page 129**

ID	Location	Ancient monument name	Reference number
4	196m NE	Clayton Hall moated site	1009339

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

2

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 132**

ID	Location	Classification	Description
1	On site	Urban	-
2	137m E	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

9

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 134**

ID	Location	Main Habitat	Other habitats
2	147m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	178m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	195m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	205m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
A	219m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	223m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	229m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	242m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	243m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0
----------------------------	----------

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	1
----------------------------	----------

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

Features are displayed on the Habitat designations map on **page 134**

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
1	44m SW	NLUD Ref: 421501629; BRITPITS ref: 29591	Low	National Land Use Database - Previously Developed Land	British Geological Survey BRITPITS database	UK Perspectives Aerial Photography

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

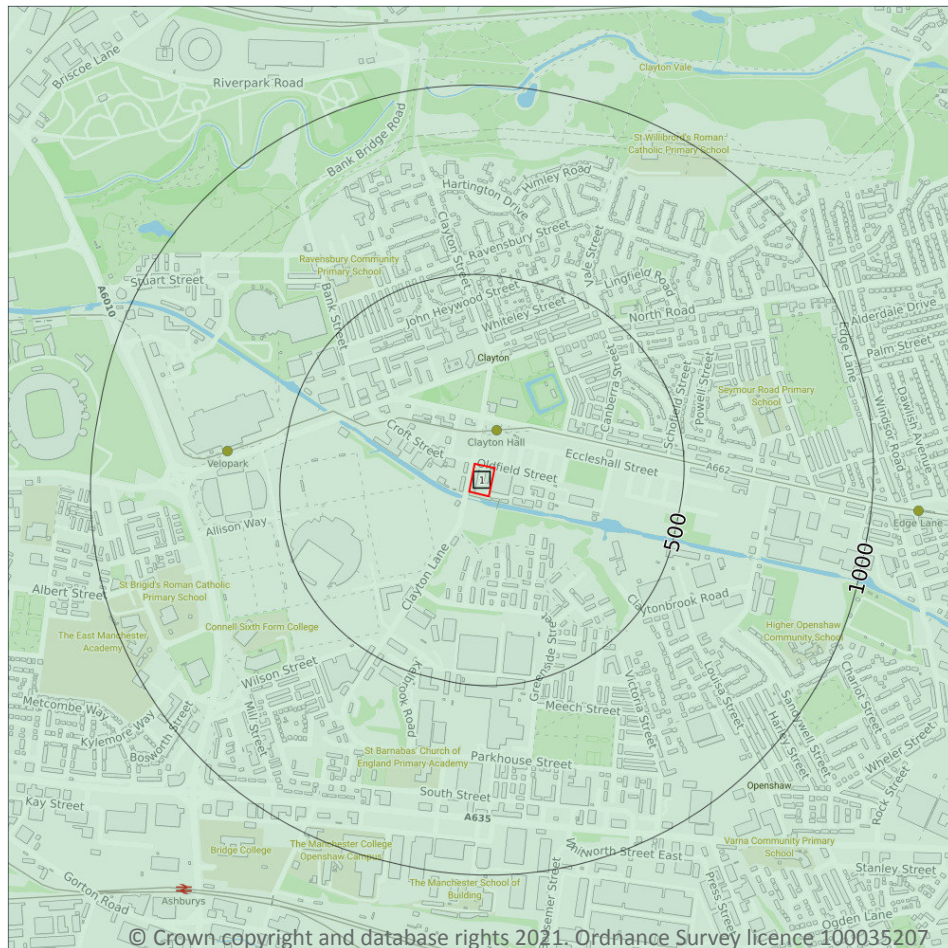
0

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

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

1

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

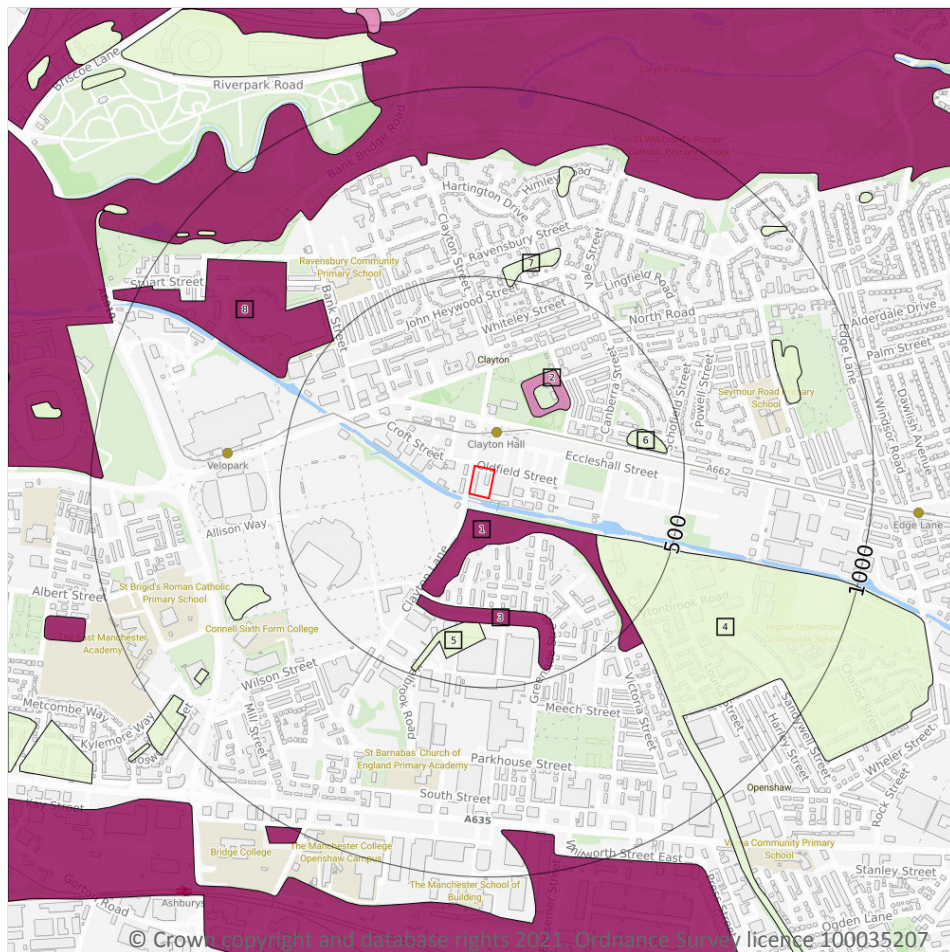
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 137**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	SJ89NE

This data is sourced from the British Geological Survey.



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



— Site Outline
Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m

8

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

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 138**

ID	Location	LEX Code	Description	Rock description
1	39m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	175m NE	WGR-VOID	Worked Ground (Undivided)	Void
3	291m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	300m E	WMGR-ARTDP	Infilled Ground	Artificial Deposit

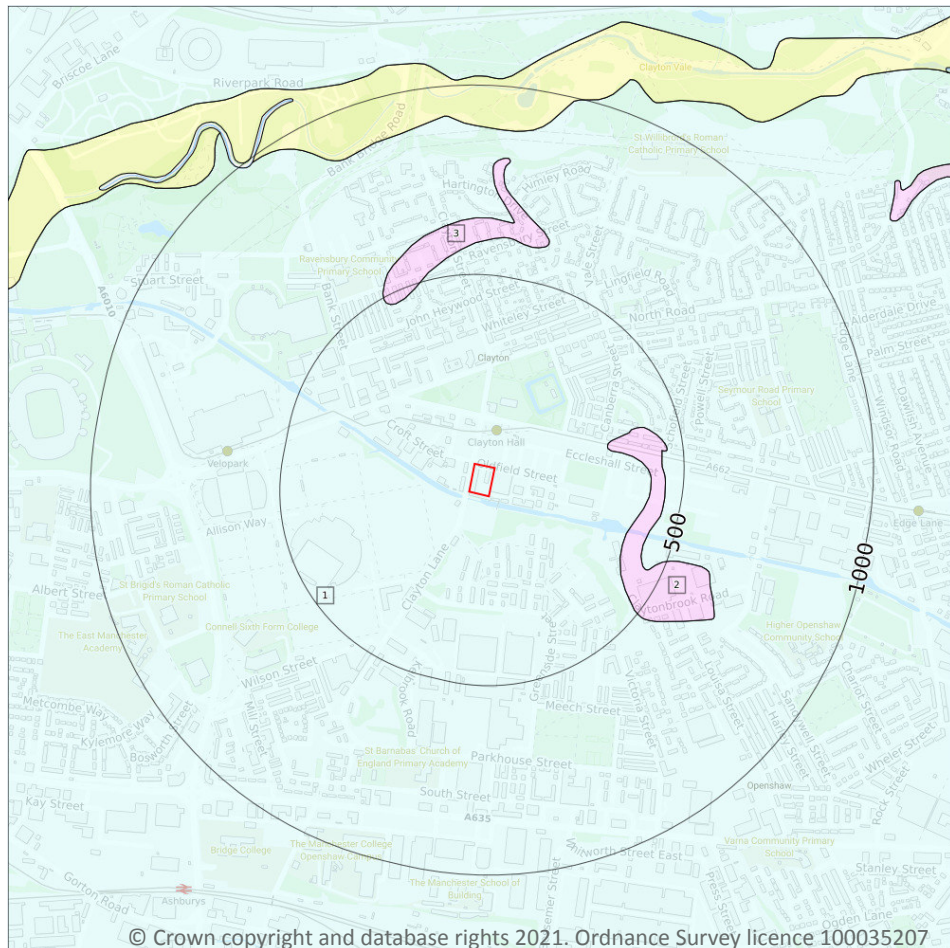


ID	Location	LEX Code	Description	Rock description
5	330m S	WMGR-ARTDP	Infilled Ground	Artificial Deposit
6	357m E	WMGR-ARTDP	Infilled Ground	Artificial Deposit
7	482m N	WMGR-ARTDP	Infilled Ground	Artificial Deposit
8	498m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m

3

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 140**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton
2	303m E	GFDUD-XSV	Glaciofluvial Deposits, Devensian - Sand And Gravel	Sand And Gravel
3	471m NW	GFDUD-XSV	Glaciofluvial Deposits, Devensian - Sand And Gravel	Sand And Gravel



This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

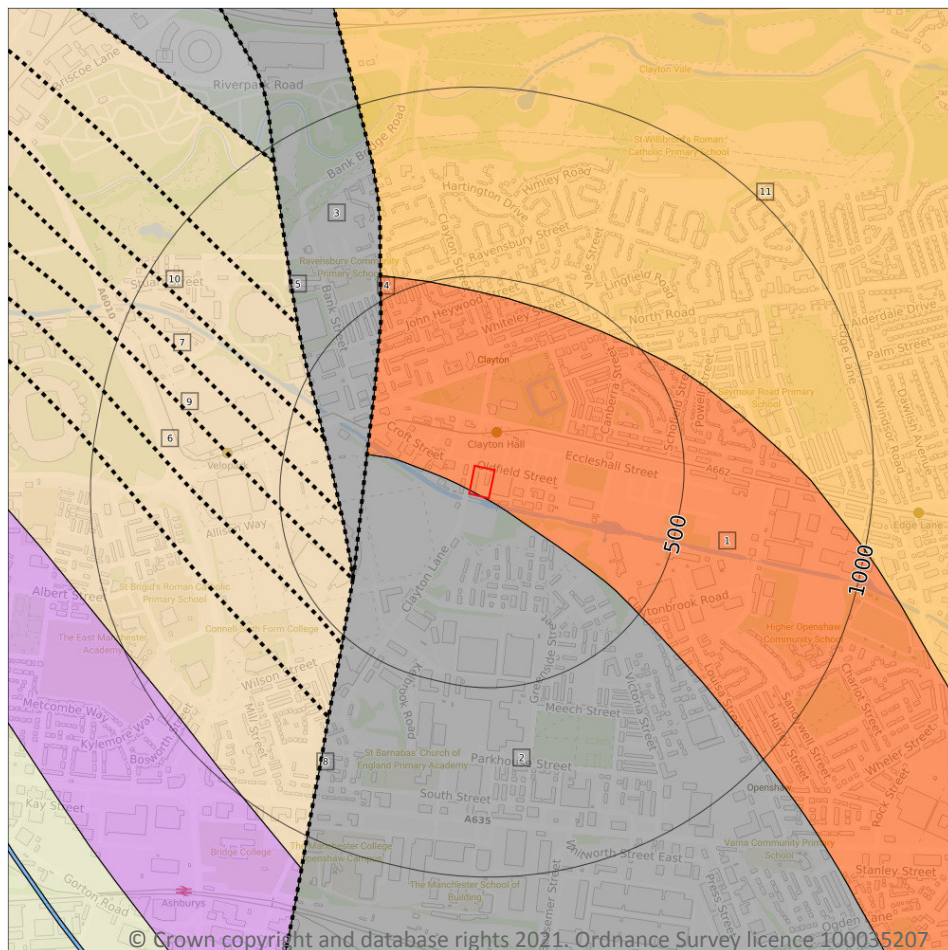
0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

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

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

14.5 Bedrock geology (10k)

Records within 500m

5

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 142**

ID	Location	LEX Code	Description	Rock age
1	On site	MM-MDST	Manchester Marls Formation - Mudstone	Late Permian Epoch [Obsolete name]
2	On site	CPB-SDST	Chester Pebble Beds Formation - Sandstone	Early Triassic Epoch
3	280m W	CPB-SDST	Chester Pebble Beds Formation - Sandstone	Early Triassic Epoch



ID	Location	LEX Code	Description	Rock age
6	341m W	PUCM-MDSS	Pennine Upper Coal Measures Formation - Mudstone, Siltstone And Sandstone	Westphalian D Sub-age - Bolsovian Sub-age
11	442m N	CS-SDST	Collyhurst Sandstone Formation - Sandstone	Cisuralian Epoch

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

6

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.

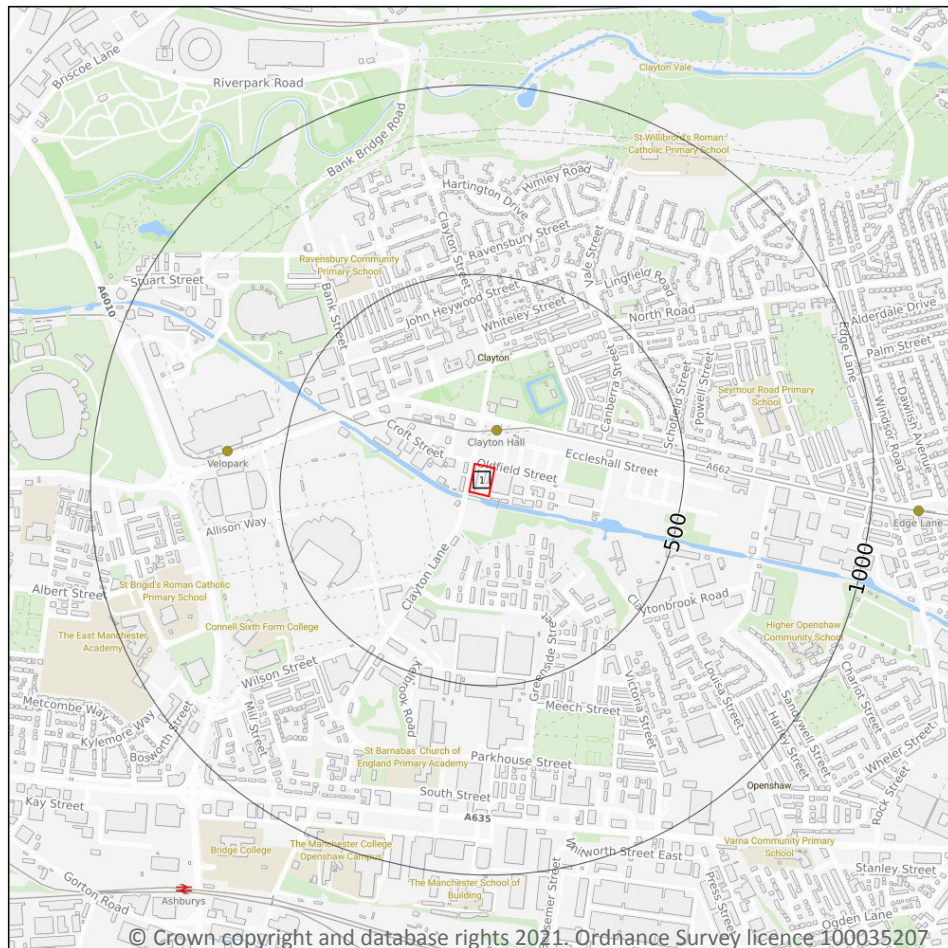
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 142**

ID	Location	Category	Description
4	280m W	FAULT	Normal fault, inferred; crossmarks on downthrow side
5	341m W	FAULT	Normal fault, inferred; crossmarks on downthrow side
7	341m W	ROCK	Coal seam, inferred
8	381m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
9	381m SW	ROCK	Coal seam, inferred
10	404m W	ROCK	Coal seam, inferred

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.

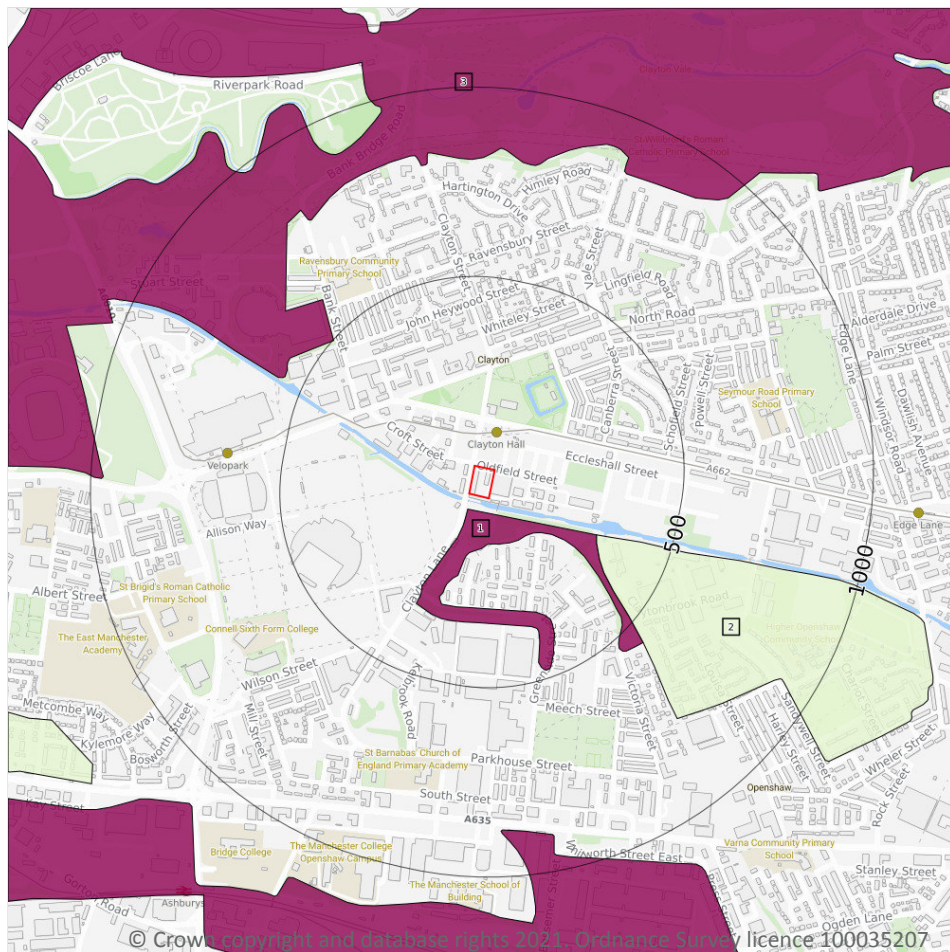
Features are displayed on the Geology 1:50,000 scale - Availability map on **page 144**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW085_manchester_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

3

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 145**

ID	Location	LEX Code	Description	Rock description
1	39m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	300m E	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
3	498m NW	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

1

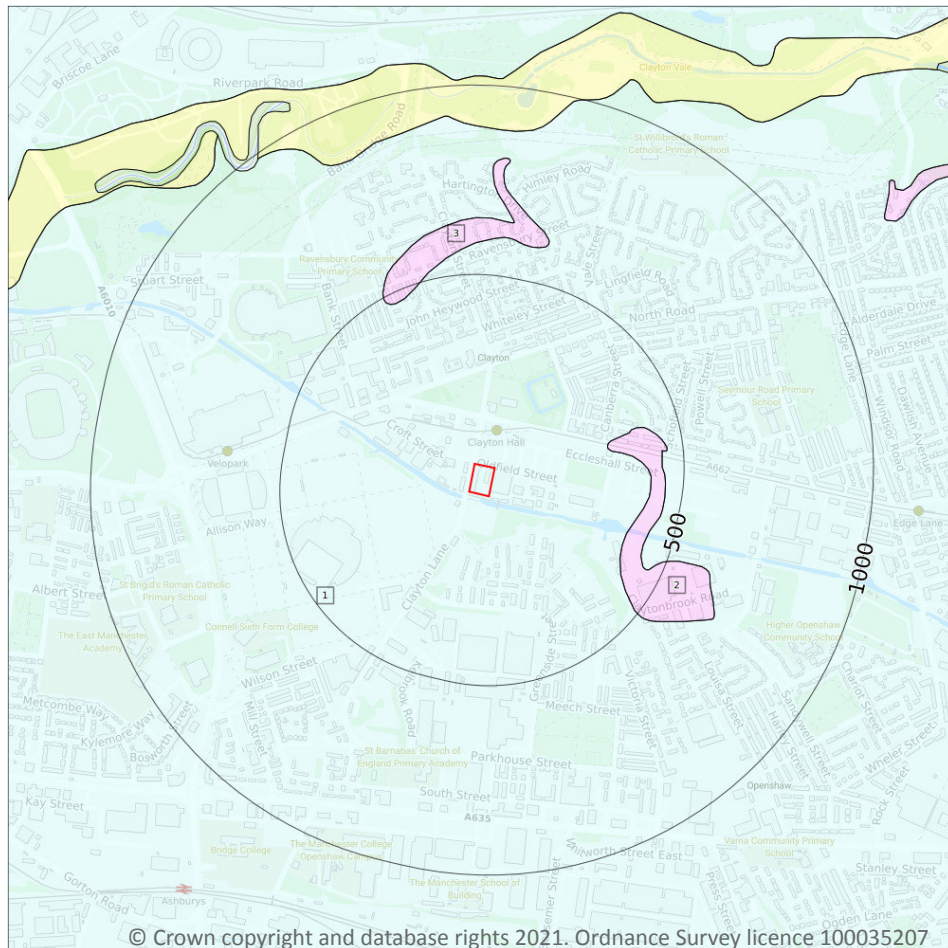
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
39m S	Mixed	Very High	Low

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m

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 147**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
2	303m E	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL
3	471m NW	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL



This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

1

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

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

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m

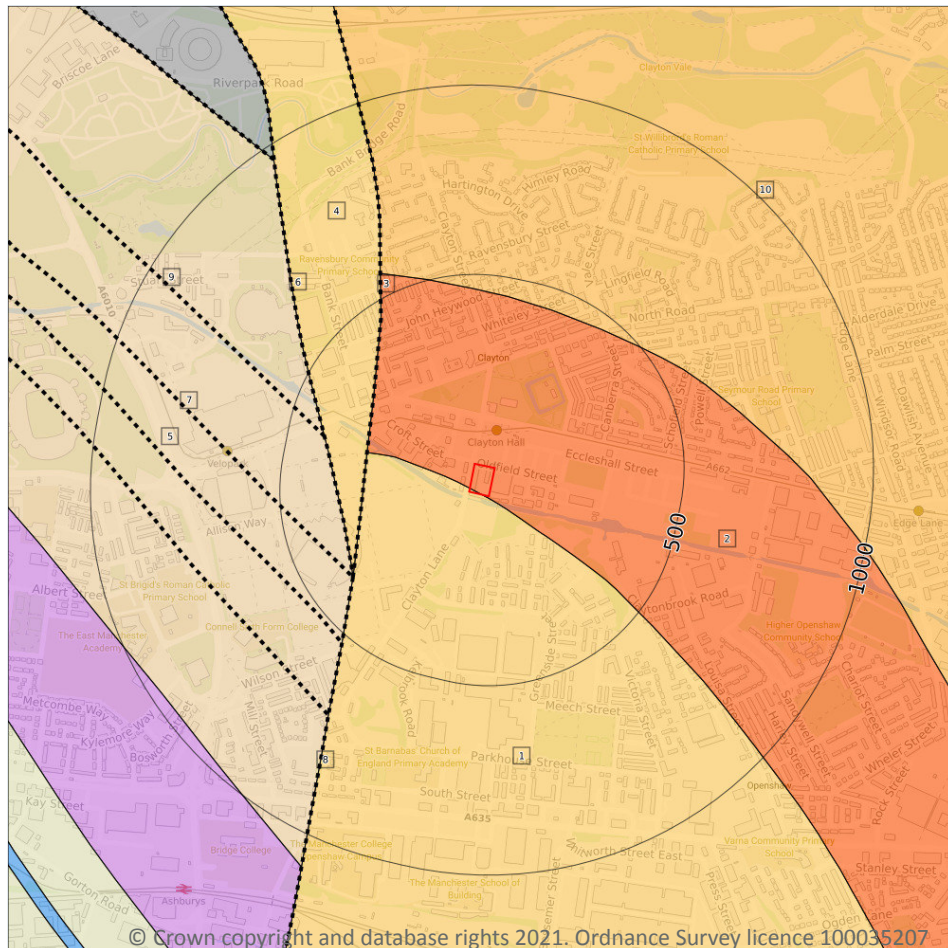
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

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

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

15.8 Bedrock geology (50k)

Records within 500m

5

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 149**

ID	Location	LEX Code	Description	Rock age
1	On site	CHES-SDST	CHESTER FORMATION - SANDSTONE	OLENEKIAN
2	On site	MM-IMDST	MANCHESTER MARLS FORMATION - MUDSTONE	-
4	279m W	CHES-SDST	CHESTER FORMATION - SANDSTONE	OLENEKIAN



ID	Location	LEX Code	Description	Rock age
5	341m W	PUCM-MDSS	PENNINE UPPER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
10	443m N	CS-SDST	COLLYHURST SANDSTONE FORMATION - SANDSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock 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 bedrock (the zone between the land surface and the water table).

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

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

5

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.

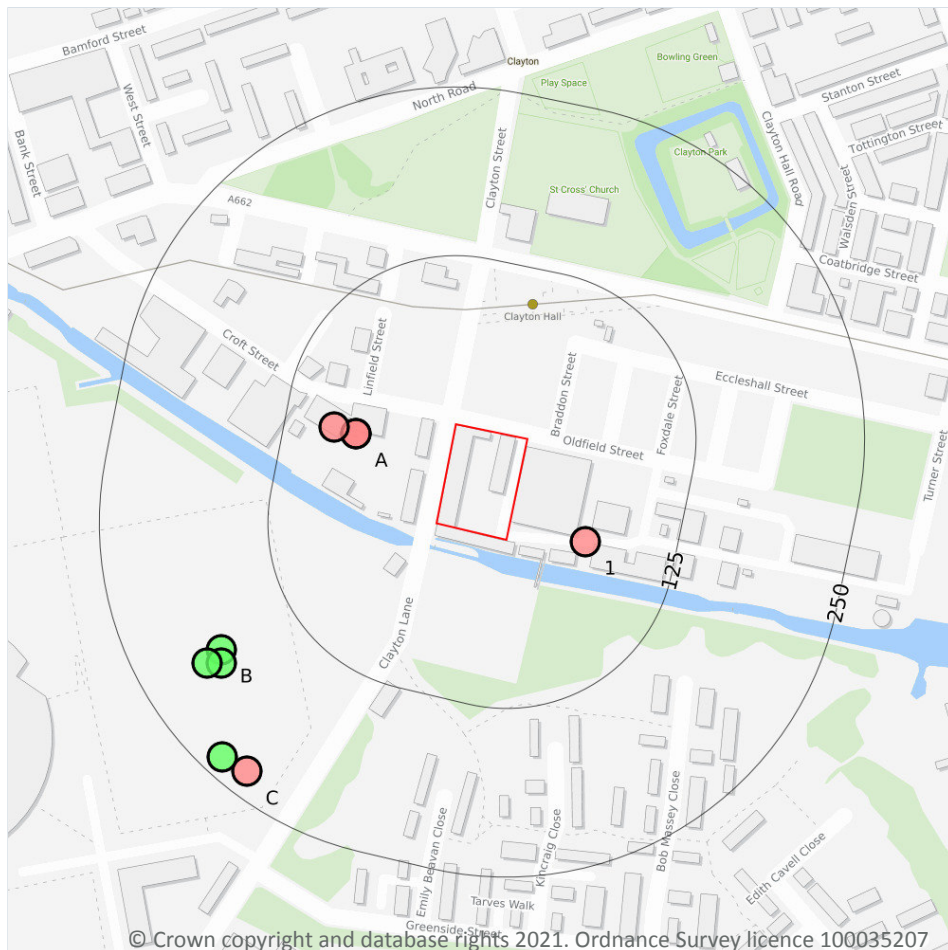
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 149**

ID	Location	Category	Description
3	279m W	FAULT	Fault, inferred
6	341m W	FAULT	Fault, inferred
7	381m SW	ROCK	Coal seam, inferred
8	381m SW	FAULT	Fault, inferred
9	404m W	ROCK	Coal seam, inferred

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

9

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 151**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	57m E	388030 398290	CLAYTON LANE	137.8	N	936623
A	71m W	387860 398370	VICTOR WOLF LTD CLAYTON SOUTH	137.16	N	937338
A	71m W	387860 398370	VICTOR WOLF LTD CLAYTON NORTH	137.16	N	937337

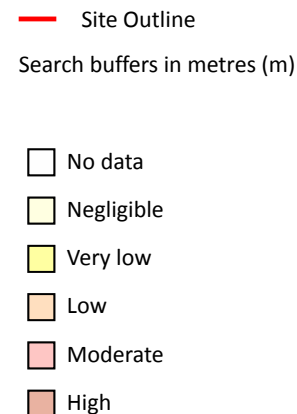
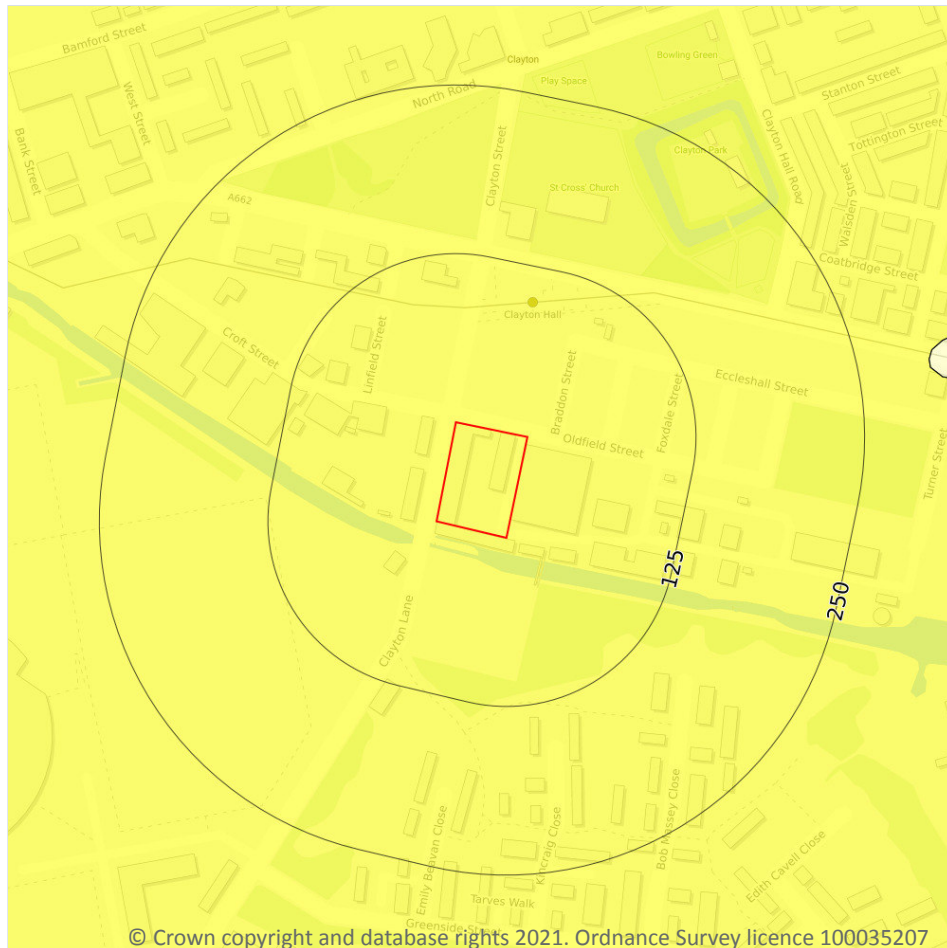


ID	Location	Grid reference	Name	Length	Confidential	Web link
A	88m W	387844 398375	MARSDEN CLAYTON LTD	103.33	N	936498
B	185m SW	387760 398210	CIBA CLAYTON MANCHESTER 2	15.0	N	937268
B	191m SW	387760 398200	CIBA CLAYTON MANCHESTER 1	15.4	N	937267
B	199m SW	387750 398200	CIBA CLAYTON MANCHESTER 3	30.0	N	937269
C	232m SW	387779 398120	CLAYTON ANILINE CO.	173.13	N	936500
C	235m SW	387761 398131	CLAYTON ANILINE WORKS, BORE AT CHIMNEY	22.86	N	936604

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m

1

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

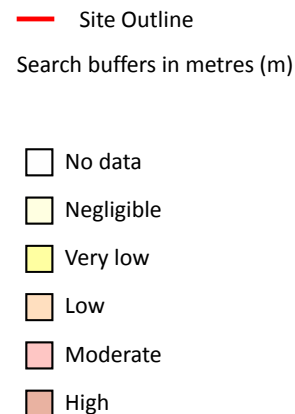
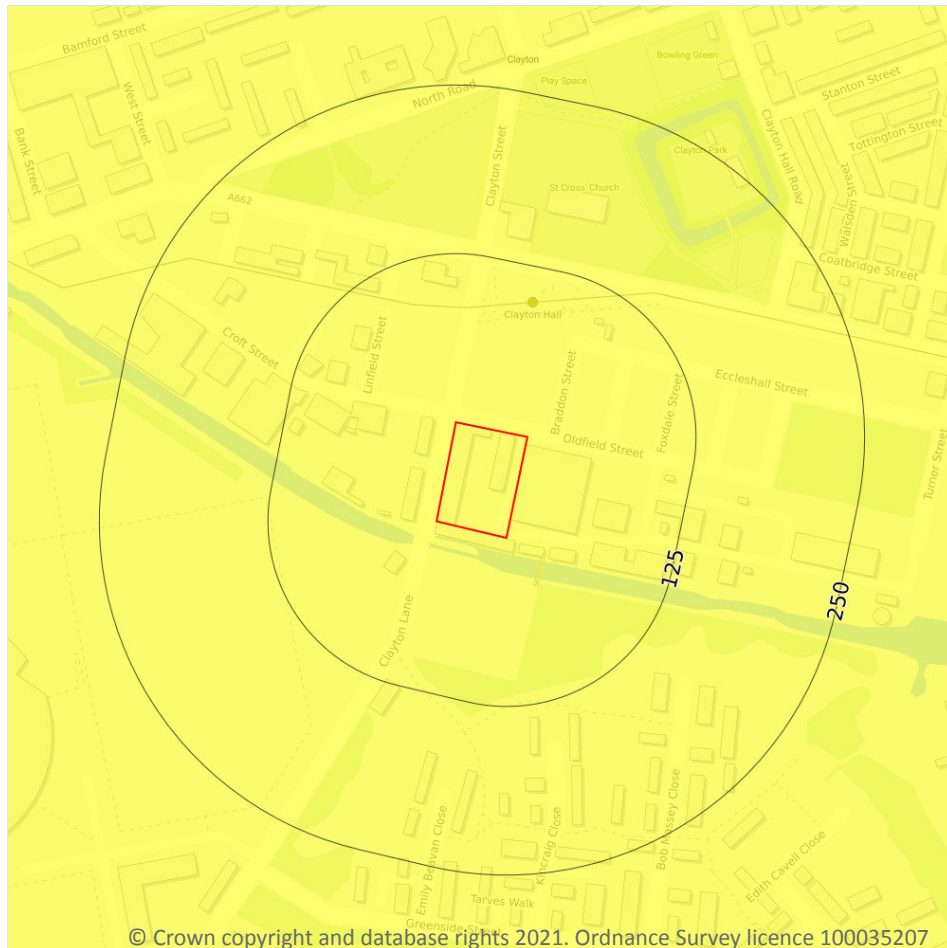
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 153**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

1

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

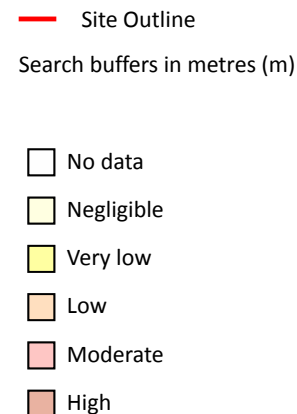
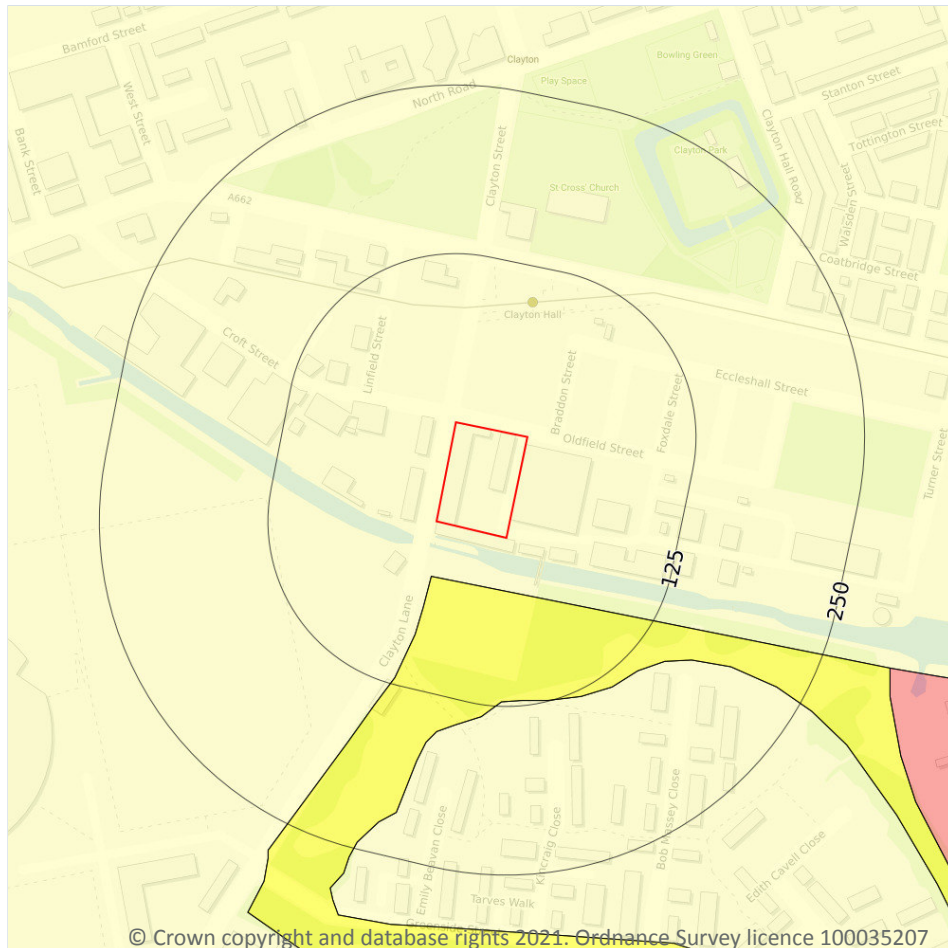
Features are displayed on the Natural ground subsidence - Running sands map on **page 154**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

2

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 155**

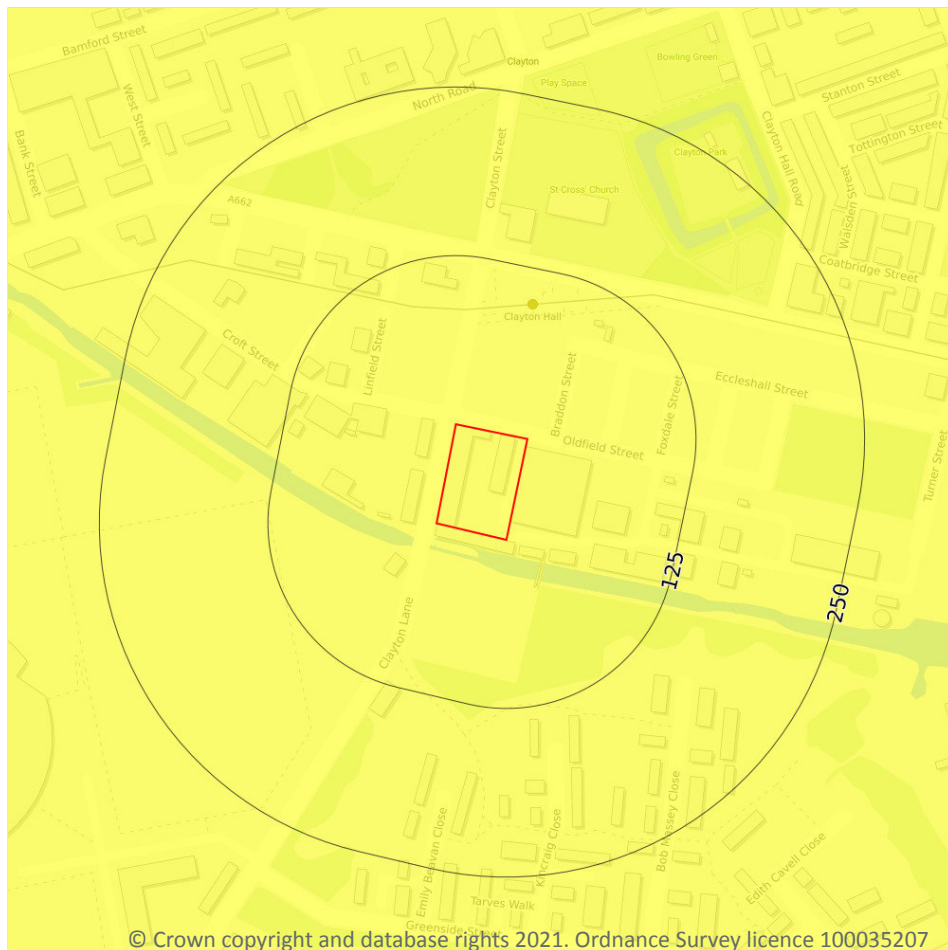
Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
39m S	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.



This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



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

17.4 Collapsible deposits

Records within 50m

1

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

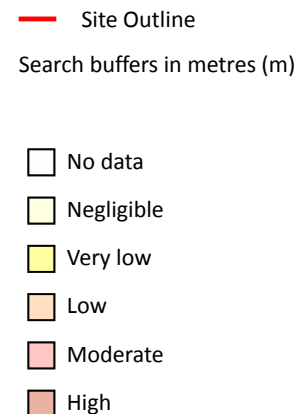
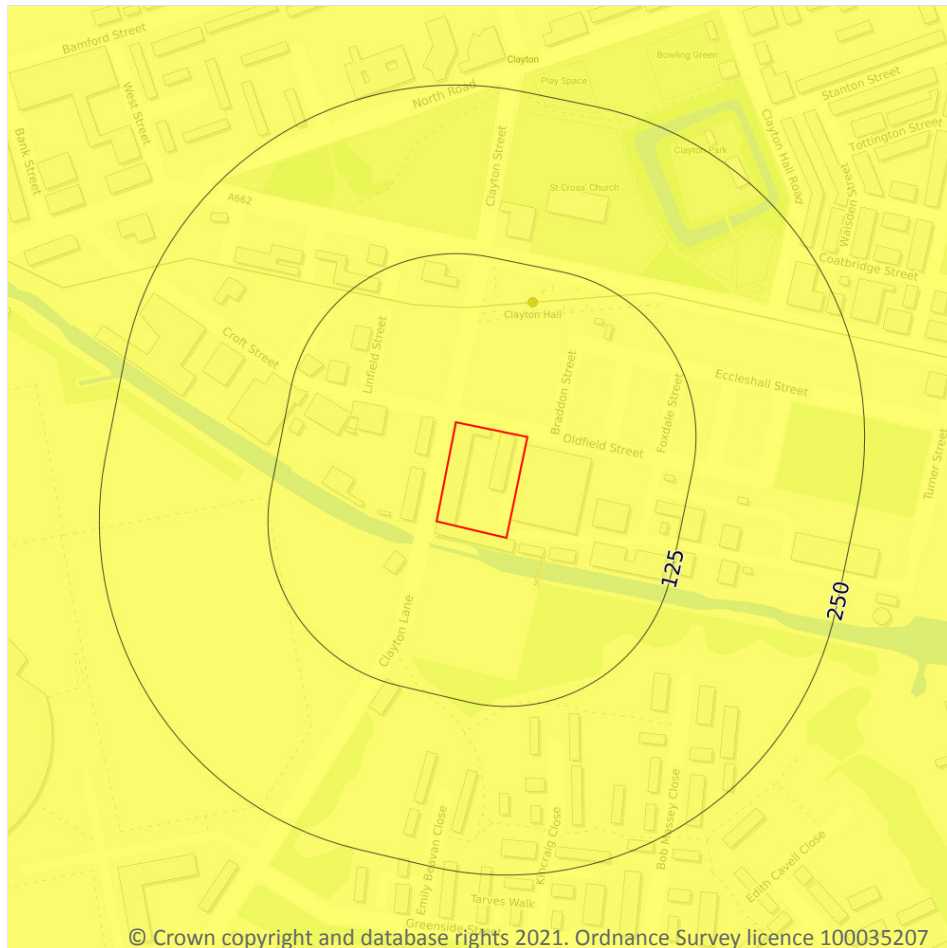
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 157**

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.

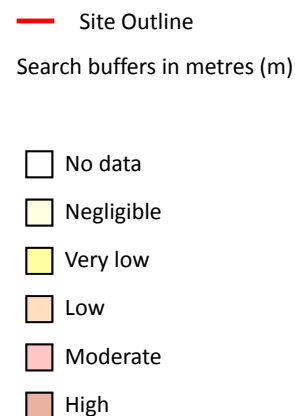
Features are displayed on the Natural ground subsidence - Landslides map on **page 158**

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.

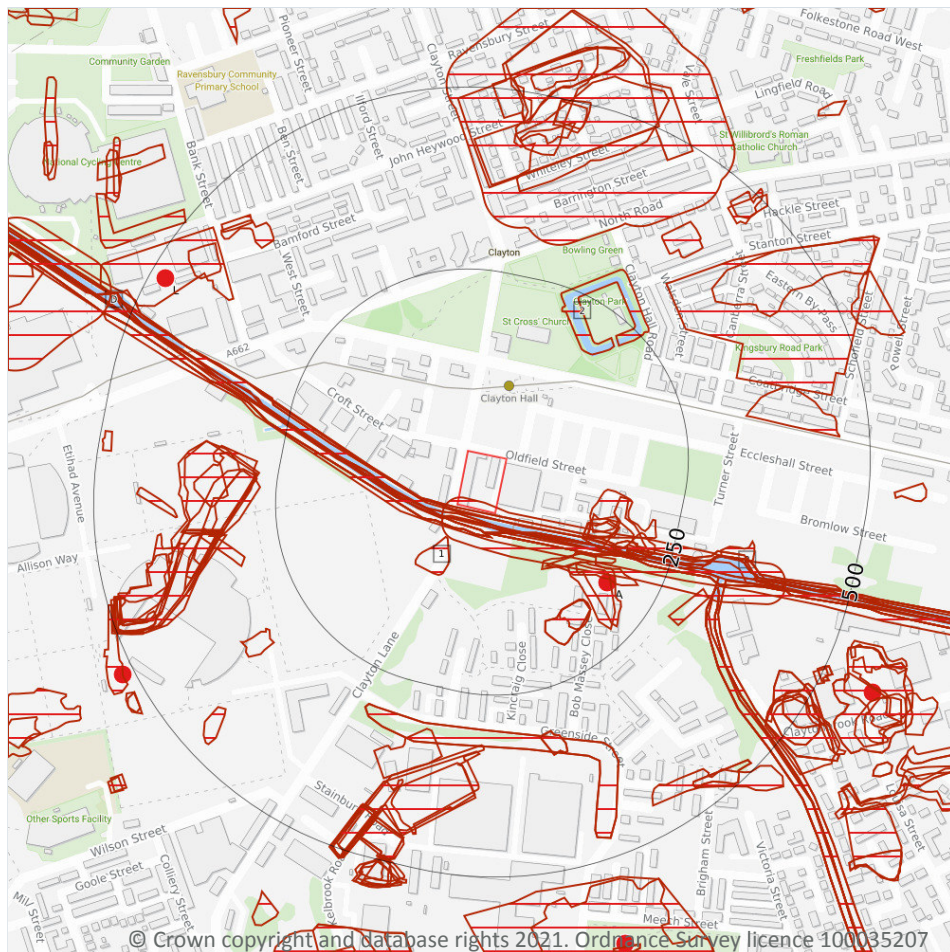
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 159**

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

2

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 161**

ID	Location	Details	Description
A	181m SE	Name: Stockport Junction Sand Pit Address: Openshaw, MANCHESTER, Lancashire Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
L	478m NW	Name: West End Brick Field Address: Clayton, MANCHESTER, Lancashire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

33

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 161**

ID	Location	Land Use	Year of mapping	Mapping scale
A	On site	Canal	1991	1:10000
B	3m S	Canal	1985	1:10000
B	3m S	Canal	1978	1:10000
C	8m S	Canal	1956	1:10560
C	8m S	Canal	1968	1:10560
B	9m S	Canal	1991	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
B	17m S	Canal	1923	1:10560
D	24m SW	Canal	1938	1:10560
D	24m SW	Canal	1933	1:10560
D	24m SW	Canal	1921	1:10560
D	24m SW	Canal	1906	1:10560
D	24m SW	Canal	1891	1:10560
E	27m S	Canal	1938	1:10560
E	27m S	Canal	1934	1:10560
E	27m S	Canal	1915	1:10560
E	27m S	Canal	1905	1:10560
E	27m S	Canal	1890	1:10560
1	48m S	Pond	1851	1:10560
A	94m SE	Refuse Heap	1968	1:10560
A	101m SE	Refuse Heap	1956	1:10560
A	124m E	Pond	1921	1:10560
A	124m SE	Sand Pit	1923	1:10560
A	125m E	Pond	1923	1:10560
A	129m E	Pond	1906	1:10560
A	131m E	Refuse Heap	1956	1:10560
A	131m E	Refuse Heap	1968	1:10560
A	132m SE	Sand Pit	1915	1:10560
A	160m E	Unspecified Ground Workings	1923	1:10560
A	161m SE	Pond	1915	1:10560
A	161m SE	Ponds	1905	1:10560
A	161m SE	Ponds	1923	1:10560
2	183m NE	Pond	1851	1:10560
A	187m E	Unspecified Pit	1915	1:10560

This is data is sourced from Ordnance Survey/Groundsure.



18.4 Underground workings

Records within 1000m

7

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 161**

ID	Location	Land Use	Year of mapping	Mapping scale
-	824m W	Colliery	1921	1:10560
-	824m W	Colliery	1906	1:10560
-	824m W	Colliery	1923	1:10560
-	853m W	Unspecified Disused Shafts	1985	1:10000
-	860m W	Unspecified Disused Shafts	1985	1:10000
-	862m W	Unspecified Shafts	1978	1:10000
-	869m W	Unspecified Shafts	1978	1:10000

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

1

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).

Features are displayed on the Mining, ground workings and natural cavities map on **page 161**



ID	Location	Name	Commodity	Class	Likelihood
-	961m SW	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m	2
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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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 161**

ID	Location	Mine Address	Mineral	Data source	Publisher
-	744m W	Manchester, Greater Manchester	Fireclay	'Underground Manchester - Secrets of the city revealed'	Willow Publishing
-	969m W	Ardwick, Greater Manchester	Bath Stone, Cornstone, Limestone	CATALOGUE OF PLANS OF ABANDONED MINES (NON COAL)	-

This data is sourced from Peter Brett Associates (PBA).

18.8 JPB mining areas

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

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

Location	Details
On site	In addition to being located inside an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) have information such as mining plans and maps held within their archive of mining activities that have occurred within 1km of this property which may supplement this information. Further details and a quote for services can be obtained by emailing this report to enquiries.gs@jpb.co.uk.

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

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

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

Location	Details
On site	The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider.

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.

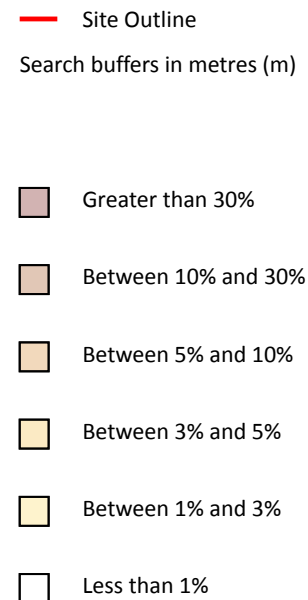
18.13 Clay mining

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 167**

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	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
13m NE	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
13m S	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
13m E	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

9

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).

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
On site	16	2.8	53	36	0.3	64	19	22	4
On site	20	3.5	47	32	0.3	74	16	25	3



Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
13m E	20	3.5	55	38	0.3	77	21	25	5
20m SW	15	2.6	48	33	0.3	62	15	22	3
20m W	20	3.5	49	34	0.3	72	15	25	4
23m N	25	4.4	44	30	0.3	85	15	29	3
26m SE	17	3	56	38	0.3	68	21	22	6
36m NE	26	4.6	56	38	0.3	95	21	30	5
41m NW	25	4.4	35	24	0.3	81	21	30	3

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

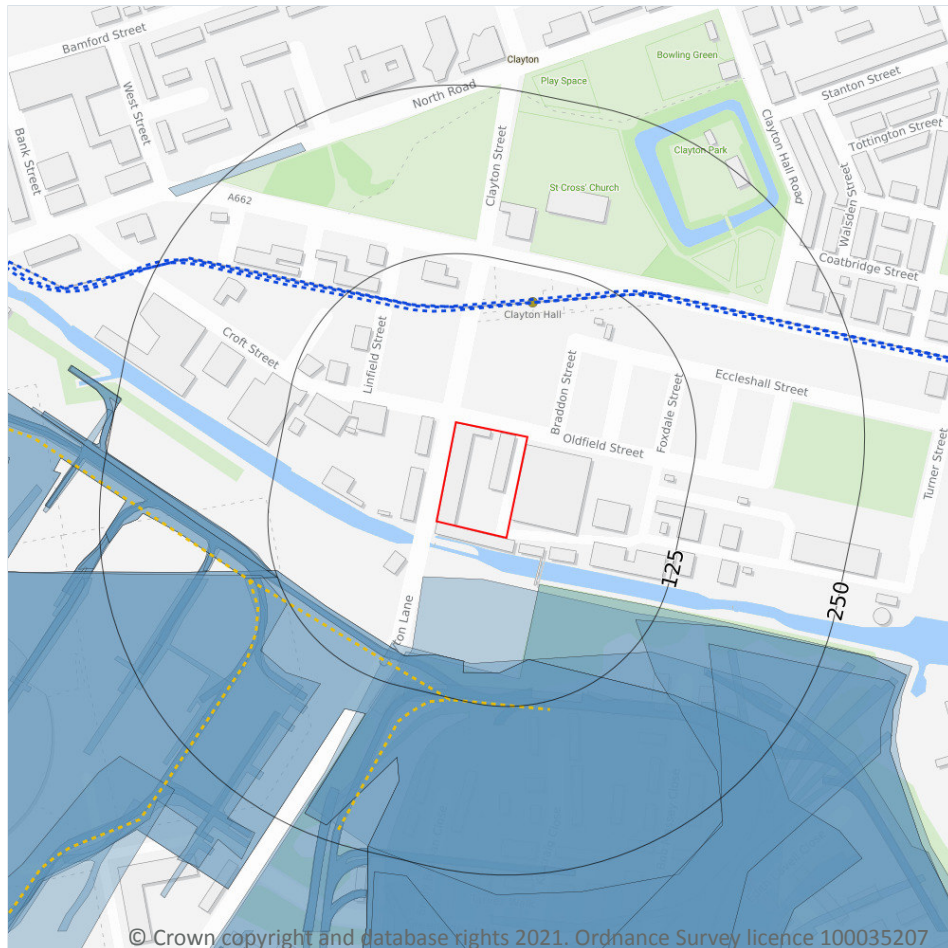
Records within 50m

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

27

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 170**

Location	Land Use	Year of mapping	Mapping scale
34m S	Railway Sidings	1934	10560
42m SE	Railway Sidings	1956	10560
91m S	Railway Sidings	1968	10560
92m S	Railway Sidings	1938	10560
100m SW	Mineral Railway Sidings	1949	1250
100m SW	Mineral Railway Sidings	1956	1250
101m SW	Railway Sidings	1949	2500
102m S	Railway Sidings	1970	1250
112m S	Tramway Sidings	1933	2500
113m SE	Railway Sidings	1915	10560
123m S	Railway Sidings	1950	1250
123m S	Railway Sidings	1950	2500
123m S	Railway Sidings	1972	1250
125m W	Railway Sidings	1938	10560
125m W	Railway Sidings	1933	10560
127m SW	Railway Sidings	1934	10560
129m W	Railway Sidings	1932	2500



Location	Land Use	Year of mapping	Mapping scale
141m W	Railway Sidings	1933	2500
169m SE	Railway Sidings	1923	10560
184m SE	Tramway Sidings	1922	2500
212m S	Railway Sidings	1970	1250
212m S	Railway Sidings	1949	1250
212m S	Railway Sidings	1956	1250
230m NW	Tramway Sidings	1908	2500
245m S	Railway Sidings	1972	1250
245m S	Railway Sidings	1950	2500
246m S	Railway Sidings	1950	1250

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

3

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

Features are displayed on the Railway infrastructure and projects map on **page 170**

Location	Description
108m SW	Dismantled
126m S	Dismantled
146m W	Dismantled

This data is sourced from OpenStreetMap.



21.7 Railways

Records within 250m

6

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways. Features are displayed on the Railway infrastructure and projects map on **page 170**

Location	Name	Type
83m N	-	tram
85m N	Not given	Multi Track
86m N	-	tram
146m NE	-	tram
165m NE	-	tram
243m NW	-	tram

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>.

Terms and conditions

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APPENDIX 6 - Coal Authority Report



The Coal
Authority

CON29M

coal mining report

1 BEBBINGTON STREET, MANCHESTER, M11 4SR



Known or potential coal mining risks

Past underground coal mining	Page 3
Future underground coal mining	Page 3
Withdrawal of support	Page 5



Further action

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

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



Professional opinion

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

Your reference: **GRO-20221**
Our reference: **51002347907001**
Date: **22 January 2021**

Client name:
James Doyle

If you require any further assistance please
contact our experts on:
0345 762 6848
groundstability@coal.gov.uk



The Law
Society

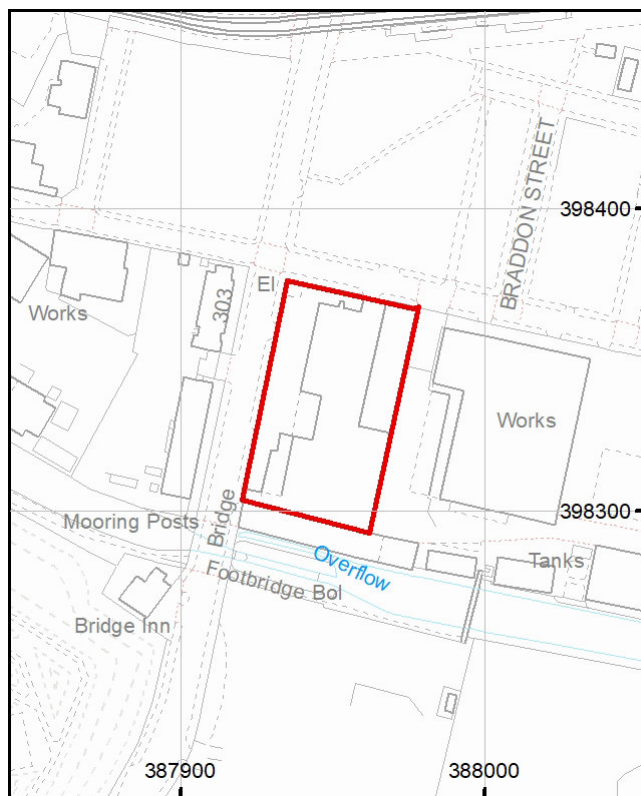
Enquiry boundary

Key

Approximate position of enquiry boundary shown



We can confirm that the location is
on the coalfield



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



Accessibility

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

Detailed findings

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1 Past underground coal mining

The property is in a surface area that could be affected by underground mining in 4 seams of coal at 400m to 840m depth, and last worked in 1961.

Any movement in the ground due to coal mining activity associated with these workings should have stopped by now.

2 Present underground coal mining

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

3 Future underground coal mining

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

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

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

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

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

4 Mine entries

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

5 Coal mining geology

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

6 Past opencast coal mining

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

7 Present opencast coal mining

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

8 Future opencast coal mining

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

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

9 Coal mining subsidence

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

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

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

10 Mine gas

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

11 Hazards related to coal mining

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

12 Withdrawal of support

The property is in an area where a notice to withdraw support was given in 1955.

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

13 Working facilities order

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

14 Payments to owners of former copyhold land

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

Statutory cover



Coal mining subsidence

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

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

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

www.gov.uk/government/publications/coal-mining-subsidence-damage-notice-form



Coal mining hazards

Our public safety and subsidence team provide a 24 hour a day, 7 days a week hazard reporting service, to help protect the public from hazards caused by past coal workings, such as a mine shaft or shallow working collapse. To report any hazards please call **01623 646 333**. Further information can be found on our website: www.gov.uk/coalauthority.

Glossary



Key terms

adit - horizontal or sloped entrance to a mine

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

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

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

coal seams - bed of coal of varying thickness

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

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

mine entries - collective name for shafts and adits

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

shaft - vertical entry into a mine

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

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

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

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

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

APPENDIX 7 - CIRIA Risk Assessment Methodology

Contaminated Land Risk Assessment

Contaminated Land Risk Assessment is a technique that identifies and considers the associated risk, determines whether the risks are significant and whether action needs to be taken. The four main stages of risk assessment are:

Hazard Identification ➡ Hazard Assessment ➡ Risk Estimation ➡ Risk Evaluation

CLR11 outlines the framework to be followed for risk assessment in the UK. The framework is designed to be consistent with UK legislation and policies including planning. The starting point of the risk assessment is to identify the context of the problem and the objectives of the process. Under CLR11, three tiers of risk assessment exist - Preliminary, Generic Quantitative and Detailed Quantitative.

Formulating and developing a conceptual model for the site is an important requirement of risk assessment, this supports the identification and assessment of pollutant linkages. Development of the conceptual model forms the main part of preliminary risk assessment, and the model is subsequently refined or revised as more information and understanding is obtained through the risk assessment process.

Risk is a combination of the likelihood of an event occurring and the magnitude of its consequences. Therefore, both the likelihood and the consequences of an event must be taken into account when assessing risk.

The risk assessment process needs to take into account the degree of confidence required in decisions. Identification of uncertainties is an essential step in risk assessment.

The likelihood of an event is classified on a four-point system using the following terms and definitions from CIRIA C552:

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

The severity is also classified using a system based on CIRIA C552. The terms and definitions are:

- **Severe:** Short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. A short-term risk to a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
Examples – High concentrations of contaminant on surface of recreation area, major spillage of contaminants from site into controlled waters, explosion causing building to collapse;

- **Medium:** Chronic damage to human health ('significant harm' as defined in DETR 2000). Pollution of sensitive water resources. A significant change in a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
Examples - Concentrations of contaminants exceed the generic assessment criteria, leaching of contaminants from a site to a Principal or Secondary Aquifer, death of species within a designated nature reserve;
- **Mild:** Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures, services or the environment;
Examples – Pollution of non-classified groundwater or damage to buildings rendering it unsafe to occupy.
- **Minor:** harm, not necessarily significant harm, which may result in financial loss or expenditure to resolve. Non-permanent health effects to human health (easily prevented by use of personal protective clothing etc). Easily repairable effects of damage to buildings, structures and services.
Examples – Presence of contaminants at such concentrations PPE is required during site work, loss of plants in landscaping scheme or discolouration of concrete.

Once the likelihood and severity have been determined, a risk category can be assigned using the table below.

		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very Low	Very low

Definitions of the risk categories obtained from the above table are as follows together with an assessment of the further work that might be required:

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

APPENDIX 8 - Relevant Contaminated Land Legislation

Legislative Background

Environmental liabilities and risks have been evaluated in terms of a source -pathway - target relationship in accordance with the approach set out in:

- The 1995 Environment Act;
- The Contaminated Land (England) Regulations 2000;
- The DETR circular 02/2000 Environmental Protection Act 1990: Part IIA Contaminated Land.

Contaminated land is defined within the legislative framework as land which is in such condition by reason of substances in, on or under the land that:

- 1) Significant harm is being caused or there is a significant possibility of such harm being caused;
- 2) Significant pollution of controlled waters is being or is likely to be caused.

The potential for harm is based on the presence of three factors:

- **Source** - substances that are potential contaminants or pollutants that may cause harm;
- **Pathway** - a potential route by which contaminants can move from the source to the receptor;
- **Receptor** - a receptor that may be harmed, for example the water environment, humans and water.

Where a source, pathway and target are all present a pollutant linkage exists and there is potential for harm to be caused. The presence of a source does not automatically imply that a contamination problem exists, since contamination must be defined in terms of pollutant linkages and unacceptable risk of harm. The nature and importance of both pathways and receptors are site specific and will vary according to the intended end use of the site, its characteristics and its surroundings.

The key principle which supports the SPR approach is 'suitable for use' criteria. This requires remedial action only where contamination is considered to pose unacceptable actual or potential risks to health or the environment and, taking into account the proposed use of the site.

Relevant Guidance Documents

This report has been prepared in accordance with the list of guidance below however the list is not exhaustive:

- CLR11 – Model Procedures;
- Contamination and Environmental Matters - Their implications for Property Professionals (2nd Edition RICS Nov 2003);
- Brownfields – Managing the development of previously developed land – A client's guide, CIRIA 2002;
- DEFRA and Environment Agency publications CLR7 – 10, supported by the TOX guides and SGV guides, dated March 2002;
- DETR Circular 02/2000, Contaminated Land: Implementation of Part IIA of the Environmental Protection Act 1990;
- Environment Agency technical advice to third parties on Pollution of Controlled Waters for Part IIA of the EPA1990, May 2002;

Relevant Legislative Documents

The following is a non-exhaustive list of legislative framework documents that has been considered in the production of this report:

- The Environment Act (1995);
- The Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance (2012);
- The Environment Protection Act (1990);
- The Contaminated Land (England) Act (2000);
- Contaminated Land (England) Regulations (2012);
- The Water Resources Act (1991);
- The Pollution Prevention and Control (England and Wales) Regulations (2000);
- The Landfill Regulations (England and Wales) Regulations (2002);
- The Landfill (England and Wales) (Amendment) Regulations (2004);
- Health and Safety at Work Act;



APPENDIX 9 - Limitations

Limitations

This contract was completed by Groundtech Consulting on the basis of a defined programme and scope of works and terms and conditions agreed with the client. This report was compiled with due skill and care, taking into consideration the project brief provided, project objectives, agreed scope of works, prevailing site conditions and budget allocation.

Other than that defined in the paragraph above, Groundtech Consulting provides no other accountability or warranty whether express or implied, is made in relation to the services. Unless otherwise agreed this report has been prepared exclusively for the use and reliance of the client in accordance with generally accepted industry practices and for the intended purposes as stated in the agreement under which this work was completed. This report may not be relied upon, or transferred to, by any other party without the written agreement of a Director of Groundtech Consulting. A third party who relies on this report, does so at their own and sole risk and no liability to such parties is provided by Groundtech Consulting.

It is the understanding of Groundtech Consulting that this report is to be used for the intended purpose as set out in the introduction. The purpose was instrumental in determining the scope and level of the services provided. Should the purpose of the report or the proposed end use of the site change, this report will no longer be directly applicable, and its validity readdressed. No reliance upon the report in the revised situation should be assumed by the client without the permission of Groundtech Consulting.

The report was written in 2020, later changes in legislation, statutory requirements and industry best practices have not been considered and this should be allowed for. Ground conditions can also change and should be investigated if there is any significant delay in acting on the findings of this report. The period of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions in this report should not be relied upon in the future without the written confirmation from Groundtech Consulting that it is safe to do so.

The observations and conclusions outlined in this report are based exclusively on the services that were provided as set out in the agreement between the client and Groundtech Consulting.

Groundtech Consulting are not liable for the existence of any condition, the discovery of which would require additional investigation outside the agreed scope of works or core competency. The services provided are based upon Groundtech Consulting observations of existing physical conditions at the site gained from site reconnaissance together with interpretation of information including documentation, obtained from third parties and from the client on the history and usage of the site. The findings and recommendations contained in this report are based in part upon information provided by third parties, and Groundtech Consulting assume the information to be correct.

No responsibility can be accepted for errors for third party information presented in this report. Groundtech Consulting were not authorised to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the services. Groundtech Consulting are not liable for any inaccurate information, misrepresentation of data or conclusions, which may inform the scope of investigation undertaken by Groundtech Consulting and forms the contract with the client.

Where field investigations have been carried out these have been restricted to a level of detail required to achieve the stated objectives of the work. Ground conditions can also be variable due to its heterogeneous properties and as investigation exploratory locations only allow examination of the ground at discrete locations. The potential exists for ground conditions to be encountered which are different to those considered in this report, particularly between exploratory holes. The extent of the limited area depends on the soil and groundwater conditions, together with other constraints such as the position of any existing structures and underground utilities. Geo-Environmental testing was carried out for a limited number of parameters [as stipulated in the contract] based on an understanding of the available operational and historical information, and it should not be inferred that other chemical species are not present.

The groundwater conditions entered on the exploratory hole records are those observed at the time of investigation. The groundwater level often has not had time to reach equilibrium and a monitoring period is required. Furthermore, groundwater levels are subject to seasonal variation or changes in local drainage conditions and higher groundwater levels may occur at other times of the year than were recorded during this investigation.



Any site drawings provided in this report are not meant to be an accurate base plan, but are preliminary and used to present the general relative locations of features on, and surrounding, the site.

