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WATERFOLD BUSINESS PARK, BURY PHASE I ENVIRONMENTAL SITE ASSESSMENT

PHASE I ENVIRONMENTAL SITE ASSESSMENT WATERFOLD BUSINESS PARK, BURY, BL9 7BR

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EXECUTIVE SUMMARY

Ramboll UK Limited (Ramboll) has been instructed by TPIF (Portfolio No.1) LLP (the "Client"), to undertake a Phase I Environmental Site Assessment of Waterfold Business Park, Bury, BL9 7BR (the "site"). The assessment has been carried out in relation to the proposed redevelopment of the site.

The review was undertaken by desk-based research, a site visit, review of previous reports and regulatory enquiries. The development site is located approximately 1km south-east of the centre of Bury town centre, Greater Manchester, and occupies an area of approximately 3.64 hectares. The site is currently a single large distribution warehouse and three floors of ancillary office space, with a fourth-floor plant room (to the eastern side of the building). The site is currently partially occupied by Menzies Distribution Limited, within the warehouse and a small portion of ground floor office space in the eastern side of the building.

The site was historically largely undeveloped from c.1850s and in agricultural use with Water Fold Farm present in the east. This use remained unchanged until the early 2000s when the site was redeveloped into its present-day configuration. This apparently involved land raising, and planning conditions from that time required uncontaminated natural materials to be imported for this purpose. No documentation is available to confirm the nature of the materials imported.

Historical potentially contaminative activities present in the vicinity include various cotton mills within 250m of the site from c.1850s, a railway line and viaduct located 30m south from c.1850s to present, a sewage works 100m south from c.1910 to c.1955 and a scrap yard 160m west from c.2006 to present. Based on current information available, the potential for significant ground contamination to exist at the site due to current and historical uses is considered to be low to moderate.

The site is considered to be situated in an area of moderate sensitivity with respect to groundwater resources due to the underlying Secondary A Aquifers in relation both the superficial and bedrock geology. There are three licensed groundwater abstractions within 1km of the site (none of which are for sensitive use); the EA classified the groundwater quantitative and chemical quality as 'Poor' under the Water Framework Directive (WFD). The vulnerability of the groundwater receptor in the vicinity of the site is considered to be moderate to high as approximately 35% of the total site area is occupied by soft vegetation.

The sensitivity of the hydrological receptor can be considered as moderate as the River Roch (the nearest surface watercourse) is classified as being of 'Moderate' ecological quality and 'Fail' chemical quality under the WFD classification scheme. There are fifteen licensed surface water abstractions within 2km of the site and none are for sensitive use. The site is considered to be in an area of high vulnerability with respect to surface water resources as the nearest surface water course is adjacent west.

There are no designated ecologically sensitive sites within a 1km radius of the subject site.

In the UK, a risk-based approach is used to assess the potential impact associated with ground contamination. Overall the current and former use of the site indicates that there is a **low to moderate** potential for significant or widespread soil and groundwater contamination.

In terms of the redevelopment of the site the inherent nature of the scheme will cap the site and limit the potential for ground contamination (if present) to be mobilised to the environment or result in significant exposure to future site users in relation to the future development. Potential pollutant linkages are considered to be of a low or low-moderate risk level. Targeted site investigation is recommended to clarify the ground conditions where infilling and buildings have been present historically.

1. INTRODUCTION

1.1 Background

This report presents the objectives, scope, findings and conclusions of a Phase I Environmental Site Assessment undertaken at Waterfold Business Park, Bury, BL9 7BR (the "site"). The review was undertaken in connection with the proposed redevelopment of the site.

This report was prepared by Ramboll UK Limited ("Ramboll") on behalf of TPIF (Portfolio No.1) LLP (the "client").

It is understood that planning permission will be sought for redevelopment of existing premises, comprising full demolition; erection of new building for Class B8 purposes with ancillary offices; installation of external plant and gatehouse; hardstanding for servicing and parking; attenuation pond; and boundary enclosure as per the site masterplan on SGP drawing 22-244-SGP-ZZ-ZZ-DR-A- 131001. This includes Unit 1 (18,337 m²) and its associated service yard and car park.

1.2 Objectives

The main objective of this assessment was to assess the potential for significant soil or groundwater contamination, both at and in the immediate vicinity of the site, and its likely implications to the client redevelopment scenario. A secondary objective is to establish the current regulatory flood zone classification for the site. No sampling or analysis of soils, waters or other materials was undertaken as part of the assessment. Review of compliance with environmental legislation is outside the scope of this assessment.

1.3 Scope of Works

The scope of the Phase I Environmental Site Assessment has included the following:

- examination of historic, recent and current Ordnance Survey plans to identify activities which might have led to contamination of soil or groundwater (for example, from manufacturing processes, from storage activities or waste disposal practices) both on the subject site and on adjacent sites;
- examination of published records and plans on the shallow and deep geology and hydrogeology of the site to assess the vulnerability and sensitivity of groundwater and surface water resources to contamination, if present, and the possible direction of movement off site, if mobile;
- search of a proprietary database of environmental permits, records and incidents at the site and surrounding area;
- enquiries of the Local Authority Planning and Environmental Health Departments to obtain information on environmental conditions, incidents and known contamination risks and on the Local Authority's Contaminated Land Strategy;
- enquiries of the Petroleum Enforcement Authority to determine if records exist of above ground or below ground licensed (petrol) storage facilities; and
- a site walk-over visit.

1.3.1 Scope of Works Notable Exceptions and Restrictions

No sampling or analysis of soils, waters or other materials has been carried out as part of the Phase I Environmental Site Assessment.

The assessment did not include an audit of operational environmental compliance issues or environmental compliance requirements associated with close-down of operations and site exit.

The assessment specifically excluded a detailed assessment as to the presence and condition of asbestos or asbestiform-containing materials at the site.

1.4 The Proposed Development

Planning permission will be sought for redevelopment of existing premises, comprising full demolition; erection of new building for Class B8 purposes with ancillary offices; installation of external plant and gatehouse; hardstanding for servicing and parking; attenuation pond; and boundary enclosure. It is understood that the proposed development will comprise a single warehouse unit with Gross Internal Area of 197,383 ft² (18,337 m²) with associated access roads, parking and loading areas (20 dock doors including four Euro-dock doors, 4 level access doors, 46 trailer spaces). The building will include 10,130 ft² of office space.

1.5 General Limitations and Reliance

This report has been prepared by Ramboll exclusively for the intended use by the client, being to accompany a full planning application to Rochdale Metropolitan Borough Council for demolition and redevelopment of the site in accordance with the agreement between Ramboll and the client defining, among others, the purpose, the scope and the terms and conditions for the services. No other warranty, expressed or implied, is made as to the professional advice included in this report or in respect of any matters outside the agreed scope of the services or the purpose for which the report and the associated agreed scope were intended or any other services provided by Ramboll.

In preparation of the report and performance of any other services, Ramboll has relied upon publicly available information, information provided by the client and information provided by third parties. Accordingly, the conclusions in this report are valid only to the extent that the information provided to Ramboll was accurate, complete and available to Ramboll within the reporting schedule.

Ramboll's services are not intended as legal advice, nor an exhaustive review of site conditions and/or compliance. This report and accompanying documents are initial and intended solely for the use and benefit of the client for this purpose only and may not be used by or disclosed to, in whole or in part, any other person without the express written consent of Ramboll. Ramboll neither owes nor accepts any duty to any third party, unless formally agreed by Ramboll through that party entering into, at Ramboll's sole discretion, a written reliance agreement.

Ramboll's scope of services for this assignment did not include collecting samples of any environmental media. Ramboll cannot rule out the existence of conditions, including, but not limited to, contamination not identified and defined by the data and information available to and/or obtained by Ramboll. Specifically, this assessment must not be considered as an asbestos survey (whether in built structures, waste, soils, etc.), even though the subject of asbestos-containing materials may have been discussed in the report.

2. SITE VISIT

The following information was derived from a site visit undertaken on 17th August 2023 by George Black of Ramboll. Discussions were held with a site representative of Menzies Distribution Limited, who has worked at the site since 2018. The purpose of the site visit was to assess the potential for ground contamination from current and recent activities.

Figures showing the location of the site, site boundary and key features on site are presented in Appendix 1. Photographs taken during the site visit are presented in Appendix 3.

2.1 Site Setting

The site is located in a light industrial and commercial area approximately 1km south-east of Bury town centre, at National Grid Reference 381820, 410220 (see Figure 1). Access to the site is via an access road in the north-east corner.

The development area ('the site') has a total site area of approximately 3.64 hectares, and is located at an elevation of approximately 76m above Ordnance Datum (AOD). The development red line boundary includes an area of road extending to the north from the eastern end of the site. This Phase 1 assessment does not include this additional road area, which will remain unchanged in road use. An area to the immediate west of the development site area and east of the River Roch is within the control of the applicant, but is not included within the development red line boundary and as such is not included within this Phase 1 assessment.

Land on-site is relatively flat. It was noted that the surrounding soft vegetation to the car parks in the south and east of site are typically between 1 to 2m higher than the car park. Land off-site to the south was noted to be approximately 3m higher than the subject site, due to an embankment associated with the railway line and viaduct bridge (off-site adjacent south-west), land to the west beyond the River Roch and to the east beyond the M66 Motorway was noted to be approximately 3m higher. Banking is present adjacent to the west of the site, which drops down towards the River Roch.

Adjacent and surrounding land uses are detailed in Table 2.1 below.

Table 2.1: Adjacent and Surrounding Land Uses

Direction	Distance	Occupant	Activities
North	Adjacent Adjacent Adjacent Adjacent Adjacent 10m	Paragon Meed Limited Icon Training & Assessment Roxtec Dunsters Farm Tower Lottery Partnership Surefreight International Ltd	Recruiter Training provider Safety equipment supplier Catering food and drink supplier Consultant Delivery company
South	Adjacent 40m 110m	Waterfold Lane Railway Line Undeveloped land	Public footpath Active Railway Possibly in agricultural use
East	20m	M66 Motorway	Motorway
West	25m 90m 100m	River Roch Pimhole Community Farm Coach House	River Agricultural Residential

2.2 Site Layout and Activities

The site is developed as a single distribution warehouse and three floors of ancillary office space, with a fourth-floor plant room (to the eastern side of the building). There is an external concrete hardstanding service yard area to the north / north-east of the warehouse, while there are asphalt-hardstanding car parking areas to the north / north-west, west and south of the warehouse. The service yard is in use for deliveries, loading, lorry parking, and storage. External features on-site include an electricity substation adjacent north and attached to the main building, a pump house and associated sprinkler tank in the north-east corner of the service yard and an external (out-of-use) generator in the north of site. Approximately 35% of the total site area comprises soft vegetation, including a large area of trees and shrub vegetation in the west of site between the on-site building and the River Roch. Self-set soft vegetation is also present along the southern, northern and western site boundaries, as well as in small pockets throughout the car park and in the north-east corner of site. The site layout is presented in Figure 2, Appendix 1.

The site is currently partially occupied by Menzies Distribution Limited, in the warehouse and a small portion of ground floor office space in the eastern side of the building. The car parking area to the west and south of the site was fenced off, associated with the vacant ancillary office space in the western portion of the site.

Activities at the site comprise storage and deliveries of Velcro products and biscuit confectionery, who are Menzies current clients as reported by the site contact.

2.3 Bulk Storage of Chemicals and Hazardous Substances

2.3.1 Underground Storage Tanks (USTs)

Site personnel were not aware of the current or former presence of USTs at the site and no visual evidence of USTs, such as fill points, pumps, gauges, or signage, markings or concrete scarring indicative of such potential uses was identified during the visit.

2.3.2 Above Ground Storage Tanks (ASTs)

There are four ASTs located on the site, as summarised in Table 2.2 below.

Table 2.2: Summary of Above Ground Storage Tanks On Site

Tank Name/No.	Contents & Capacity	Location	Construction and Containment
1	AdBlue 2,500 litres	Adjacent north-west of the Warehouse	Used by diesel vehicles on-site. An integrally bundled plastic tank, observed to be in good condition, located on level ground. The dispensing hose and fill point are located inside the tank, accessed by a hatch at the front. A small amount of diesel had pooled within the bund. No signs of heavy staining observed. The tank is refilled as required.
2	Diesel, 9,000 litres	On the northern site boundary	The tank is connected to the adjacent emergency generator. The site contact reported that the tank has not been operational for at least 5 years. The fuel gauge on the tank indicates a capacity of 9,000 litres, although it is presumed to be empty by the site contact. The pipes for the tank were located above ground. Although not confirmed the tank did not appear to have secondary containment. The adjacent generator could not

Tank Name/No.	Contents & Capacity	Location	Construction and Containment
			be accessed during the site visit. No signs of heavy staining were observed. The tank and generator are situated on a concrete plinth.
3	Diesel, estimated 800 litres	In the sprinkler pump house, in the north-west corner of the service yard, in the north of site.	The tank is for the fire sprinkler system pump and is connected by tubing to a 205 litre metal drum containing diesel and the sprinkler pump. All pipes appeared to be located above ground, and it was not known whether the tank had secondary containment. The hard standing in the vicinity of the tank appeared to be in good condition, with no heavy staining observed.
4	Water, unknown capacity	In the north-west corner of the service yard, in the north of site.	A large steel tank, observed to be in good condition, located on a concrete plinth. The tank is attached to the adjacent pump house, which contains both an electric and diesel fire sprinkler system pump.

2.3.3 Other Bulk Chemical Storage

Other bulk storage on-site is summarised below in Table 2.3.

Table 2.3: Summary of Other Bulk Storage On-Site

Item	Location	Containment and other comments
Diesel Oil / Gas Oil / Lubricant Oil	In the sprinkler pump house in the north-west corner of the service yard.	Six 205 litre drums containing diesel oil and gas oil, and one 25 litre plastic container were located either directly on concrete hardstanding or on a plastic drip tray within the sprinkler pump house. The red lubricant oil was also present in a plastic transferring container for adding to the electric fire sprinkler system pump. Only one of the 205 litre drums was actively in use, connected by tubing to the estimated 800 litre diesel AST for the sprinkler pump. No signs of heavy staining observed although the gas oil drip tray was almost full with an oily liquid.
Cleaners / Detergents	In the cleaners cupboards on the ground floor of both the warehouse and ancillary office accommodation	Small volumes of cleaners and detergents (<25 litre capacity) stored on shelving within the cleaners cupboards. No signs of heavy staining observed.

Good management of hazardous chemicals reduces the risk of uncontrolled release into the environment and contributes to good health and wellbeing¹.

2.4 Water, Wastewater and Drainage

Water is supplied from the municipal supply and is used for sanitary and kitchen uses. No groundwater or surface water is reported to be abstracted at the site.

A drainage drawing for the site was not available for review by Ramboll during the site visit. The building was reportedly provided with mains drainage to the municipal foul sewer system. No oil-water interceptors were reported to be present on site or identified on-site by Ramboll during the

¹ Sustainable Development Goal 3: Good Health and Wellbeing

site visit; however, their presence or absence cannot be confirmed without review of comprehensive drainage drawings.

The site contact reported that legionella management exercises are undertaken on-site weekly, although a copy of a Legionella Risk Assessment was not available.

Under the Health and Safety at Work Act 1974 and subsequent regulations, the dutyholder is required to assess the risk of Legionella exposure and put in place any necessary measures. The dutyholder may be the employer, or a person in control of the premises.

No current issues in relation to flooding were reported by the site contacts during the site visit.

The appropriate management of water, wastewater and drainage contribute to supply of clean drinking water and protection of water resources from pollution².

2.5 Waste Storage

Wastes generated on-site predominantly comprise domestic type waste, wood waste, packaging and paper in the area of the site occupied by Menzies Distribution Ltd, and general waste in the unoccupied office accommodation, produced by the on-site security guard. Waste from Menzies was stored in wheelie bins adjacent to an external sheltered area in the north of the site. The site contact reported that waste is collected on a weekly basis by B&M Waste Services. Wood pallets were stored both within the external shelter in the north of the site, and along the northern site boundary. A large metal skip was also present in the south-west corner of the Menzies service yard, and was reported to contain cardboard waste. The site contact also stated that this was temporarily on-site at the time of the site visit and is managed by Wheeldon Brothers Waste Ltd.

A Biffa general waste bin was located adjacent east of the building, in the car park adjacent to the entrance of the unoccupied office accommodation. The site contact stated that this is for wastes generated by the security guard.

No visual evidence of staining or leaching from waste storage areas onto unsurfaced ground was noted. A review of waste documentation was outside the scope of this review.

Good management of wastes contribute to improved resource management and minimises risk of pollution³.

2.6 Deleterious Materials

2.6.1 Asbestos Containing Materials (ACM)

No materials labelled as containing asbestos were identified during the site visit. The site contact had no knowledge of any asbestos surveys being undertaken at the site.

Under the Control of Asbestos Regulations (2012), the dutyholder must manage the risk from asbestos on a premises and to develop and implement an ACM management plan, with review and updating as appropriate. The dutyholder is the party who has, by virtue of contract or tenancy, the main responsibility for maintenance or repair of the building.

An asbestos survey has not been undertaken by Ramboll as it is outside the scope of this assessment.

2.6.2 Refrigerant Gases

The site is served by split air conditioning units with externally mounted cooling units. Three air conditioning units are located on the roof, serving the warehouse and office space and were noted to contain R410A (a non-ODS which is a fluorinated refrigerant gas (F-Gas)), while

² Sustainable Development Goal 6: Clean Water and Sanitation

³ Sustainable Development Goal 12: Responsible Consumption and Production

additional small external units were located on the ground floor and noted to contain R404A (a non-ODS and F-Gas). Three chillers were located in the external roof plant area, noted to contain R407C (a non-ODS and F-Gas)

Under the Fluorinated Greenhouse Gases (F-gas) Regulations 2015 (SI 2015/310) and Ozone-Depleting Substances (ODS) Regulations 2015 (SI 2015/168), ODS are to be phased out and must be recovered during servicing, maintenance and decommissioning. F-gas systems require leak testing and good record keeping. It is good practice to make sure that all equipment containing refrigerant gases is labelled with the type and amount of gas contained and that gases with lower global warming potential are used.

2.6.3 Polychlorinated Biphenyls (PCB)

An electricity substation operated by Electricity North West is located adjacent north of the warehouse. Responsibility for PCB oils (if present) would be expected to lie with Electricity North West. A lift motor room was also observed in the third-floor plant room, serving the out of use hydraulic lift. No other potential PCB-containing equipment was identified during the site visit.

Under the Polychlorinated Biphenyls Regulations 2000, the holder of equipment that contains PCBs must ensure it is decontaminated to less than 0.05% unless within an electrical transformer, which requires annual registration with the regulatory authorities.

2.7 Emissions to Air

No significant emissions to air were noted. Emissions are limited to gas boilers, vehicles and kitchen exhaust emissions. The site contact reported that the warehouse area is not heated, although gas-fire heating systems were noted in the third floor plant room.

Emissions to air of greenhouse gases and other pollutants such as ozone depleting chemicals contribute directly to climate change and associated effects. Minimisation of such emissions helps to reduce global warming and pollution⁴.

2.8 Energy Efficiency

2.8.1 Energy Performance Certificate (EPC)

An Energy Performance Certificate (EPC) for the building was not provided by the client. Under the Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 (as amended) non-domestic properties below an energy efficiency rating of E are prohibited from being let from 1st April 2023 unless a valid exemption has been obtained.

2.8.2 Air Conditioning Inspections (ACI)

No ACI reports or certificates were available for review during the site visit.

Under the Energy Performance of Buildings Regulations (Certificates and Inspections (England and Wales) Regulations/Regulation 17 of the Building (Scotland) Regulations 2004, an ACI report is required to be undertaken for systems of more than 12kW at least every 5 years. This is anticipated to be the responsibility of the tenant.

Energy efficiency and use of renewable sources of energy reduce carbon emissions to the atmosphere⁵.

⁴ Sustainable Development Goal 13: Climate Action, and 3: Good Health and Wellbeing

⁵ Sustainable Development Goal 7: Affordable and Clean Energy

2.9 Other Issues

According to the site representatives, there is no known history of complaints, enforcements or other regulatory actions regarding the site or immediate surrounding properties related to environmental conditions. No fire or spill events were reported. No flooding of the site is known to have occurred historically, according to site representatives.

Facility personnel were not aware of any environmental ground investigations or monitoring having taken place on site; and no visual evidence of environmental sampling or monitoring boreholes was identified by Ramboll during the site visit.

No invasive species were reported to be present on-site by the site contacts.

2.10 Potential for Ground Contamination from Current Uses

2.10.1 Potential On-site Contamination Sources

Minor staining in the vicinity of the on-site ASTs / other bulk chemical storage (in the sprinkler pump house and on external hardstanding).

2.10.2 Potential Off-site Contamination Sources

No significant potential off-site contamination sources were noted during the site visit.

3. HISTORICAL & REGULATORY INFORMATION

3.1 Map History

Ramboll has undertaken a review of historical mapping and aerial imagery (where available) obtained from a proprietary environmental database which is summarised below. Selected historical maps are presented in Appendix 2.

3.1.1 The Site

The earliest readily available maps from c.1850s show that the majority of the site was historically undeveloped (likely in agricultural use) with buildings / structures associated with Water Fold Farm in the east. The site remained unchanged until c.2001 when historical aerial photography showed that the site had been stripped with ongoing earthworks associated with the redevelopment.

By c.2003, the site had largely been redeveloped into its present-day configuration as a single large distribution warehouse with ancillary office accommodation, and with an external concrete hardstanding service yard area to the north / north-east of the warehouse and asphalt-hardstanding car parking areas to the north / north-west, west and south of the warehouse. By c.2005, an additional rectangle of asphalt hardstanding car parking was present adjacent south-west of the warehouse, with the site in its present-day configuration.

3.1.2 The Surrounding Area

The 1851 map showed the surrounding area to be largely undeveloped (likely in agricultural use), with structures associated with the on-site Water Fold Farm adjacent east. A railway line in an embankment and a viaduct were depicted 30m south, Water Fold Water Mill (woollen) was present 90m north-east, Fustian Mill was present 190m north-west, adjacent north of a woollen mill (250m west. By 1893, Water Mill had expanded adjacent north-west, while woollen mill (250m north-west) was marked as disused and was now adjacent west of a cotton mill. By 1910, a sewage works was depicted 100m south; the disused cotton mill was renamed Pimhole Mills (cotton waste) and the cotton mill 300m west was renamed Beech Mill. Stanley Mills (confectionary) was also depicted adjacent north of Beech Mill (300m north-west).

By 1930, Water Fold Mill was marked as disused and the area adjacent north-east was replaced by a cricket ground; Fustian Mill was renamed cotton mill and Beech Mill expanded south. By 1937, Cotton Mill (190m north-west) was marked as disused and Stanley Mill was demolished (300m north-west). By 1955, the sewage works was marked as disused. By 1959, the area adjacent north-west of the site was redeveloped as Pimhole. By 1970, Beech Mill was renamed as Wood Sreet Mill and Pimhole Mill. By 1980, a sheet metal works and a builders' yard was present 230m north-west. By 2001, the area surrounding the site was undergoing redevelopment with as part of the wider Waterfold Business Park. By 2006, a scrap yard was denoted 160m west, adjacent east of a mill.

3.2 Environmental Database Records

The information presented in Table 3.1 has been obtained from a review of a proprietary environmental database⁶ (dated 17th August 2023) procured by Ramboll relating to the site and surrounding land.

⁶ The Regulatory Agency in Scotland, The Scottish Environmental Protection Agency (SEPA) does not currently provide information to third-party database providers. Therefore information obtained through the environmental database may be out of date. Up to date information can only be obtained by requesting it directly from SEPA; which involves a statutory response time of 6 weeks. Enquiries to the regulator are not included in the scope of this work.

Table 3.1: Summary of Key Environmental Database Information

Data Type	Distance				Relevant records within 250m of the site
	On site	Within 250m	Within 500m	Within 1km	
Contaminated Land Register entries	0	0	0	0	None
Prosecutions or enforcement actions	0	0	0	0	None
Pollution incidents	0	2	3	12	170m NE, Category 2 – Significant Incident, storm sewage into the River Roch, dated 26 th January 1995 220m W, Category 2 – Significant Incident to land, vehicles and vehicle parts, dated 4 th June 2009
Former landfill sites	0	0	0	5	None
Current landfill sites	0	1	0	2	60m west, licensed to Clough Mill Ltd at Clough Mill Reservoir, licensed for naturally occurring uncontaminated excavated spoil, medium maximum input rate.
Registered Waste Sites	0	2	5	3	170m NW, licensed to Senior Waste Removal Ltd for a HCl Waste Transfer Station 240m W, licensed to Amberdeal Ltd for a vehicle depollution facility
Part A(1) Environmental Permits	0	0	0	2	None
Part A(2) Environmental Permits	0	0	0	1	None
Part B Environmental Permits	0	1	2	9	190m NW, licensed to Starbreakers for waste oil burners, less than 0.4mW net rated thermal input
Control of Major Accident Hazards Sites (COMAH)	0	0	0	1	None
Fuel Stations	0	0	1	3	None
Contemporary trade directory entries	0	31	56	191	Chemical manufacturers, 10m NE, now inactive Freight forwarders, cutlery manufactures, printers, engineering services, equipment production in the vicinity
Registered Radioactive Substances	0	0	0	0	Information on certain radioactive substance authorisations is not publicly accessible

	Distance				Relevant records within 250m of
EA discharge consents	0	0	2	2	None
Radon affected area (Y/N)	Y	-	-	-	N/A

According to the environmental database the site lies in a “Radon Affected Area” as defined by Public Health England. The site is recorded as being located in an area where between 1% and 3% of residential properties are projected to contain radon above the residential action threshold).

Under Health and Safety legislation, employers have a duty to manage workplace risks including the potential for radon exposure. Health and Safety Executive guidance recommends radon monitoring for workplaces located in radon Affected Areas. If the workplace radon threshold is exceeded, the Ionising Radiations Regulations 1999 require employers to take action to reduce risks.

According to BRE Report BR211 (2015) Radon: Protective Measures for New Buildings, radon protection measures are not required under building regulations for new buildings at this location.

The LinesearchbeforeUdig database, which lists pipelines distributing crude oil and refined hydrocarbon products owned and/or operated by a number of UK pipeline operators indicates that there are no records of underground oil or refined hydrocarbon product pipelines on the site or within 250m.

3.3 Regulatory Authority Enquiries

3.3.1 Local Authority Environmental Health Department

The Environmental Health Department of the Local Authority (Rochdale Metropolitan Borough Council) has provided the following information in relation to the site and the surrounding area (response dated 7th September 2023)

- The majority of the site has not been identified as requiring inspection under the Council’s Contaminated Land Strategy. A former mill, currently occupied by the motorway has been identified situated on the NE site corner, but there are no current plans to undertake any inspection of this area and has not been given a high priority.
- The department holds no records of any reports for the site, and there have been no reported pollution incidents on-site.
- There are no known landfills on-site. However, the Council has records of one situated within 250m to the SE, within Bury Metropolitan Borough Council land and that it falls under licence 0622. The Council is not aware of any environmental problems with the site.
- The Council is not aware of any elevated indoor radon gas concentrations within any buildings on the site and it was stated that the Environmental Protection Department would not require the installation of any measures on or around the site.
- The department had no access to the nuisance database. However, it was stated that the department was not aware of any issue relating to the site.
- There are no known private water supplies within 2km of the subject site.
- The department had no records of any processes requiring Part A(2) and Part B Environmental Permits on or to adjoining properties.

3.3.2 Local Authority Planning Department

Ramboll has obtained a planning history of the site from the Planning Department of the Rochdale Metropolitan Borough Council. Relevant applications are summarised as follows:

A summary of relevant applications is provided in Table 3.2 below.

Table 3.2: Summary of Relevant Planning Applications at the Site

Applicant	Application ref.	Details of Application	Status
AGP Architects Ltd	D32744	Erection of distribution warehouse with ancillary offices and facilities and formation of new bridge	Granted with Conditions on 8 th August 1996; no Conditions related to Contaminated Land.
Seddon Waterfold Ltd	D34534	Widening of River Roch to provide flood defence channel	Granted with Conditions on 27 th November 1997; no Conditions related to Contaminated Land.
Seddon Waterfold Ltd	D34657	Importing selected inert material onto the site to raise the existing levels for flood defence purposes in preparation for industrial development in pursuance of the requirements of conditions 11 and 18 of planning permission D32744	Granted with Conditions on 26 th January 1998; Conditions 17, 18 & 19 are related to Contaminated Land.
Seddon Waterfold Ltd	99/D36899	Erection of warehouse unit (class B8) and office unit (class B1) involving proposed diversion of a public right of way	Granted with Conditions on 26 th October 1999; no Conditions related to Contaminated Land.
PC World Business	03/D41876	Erection of office extension and ancillary car parking	Granted with Conditions on 5 th September 2003; no Conditions related to Contaminated Land.
Dixons Group	04/D42886	Erection Of 4,645 SQM Warehouse Extension (Class B8) And Extension To Service Yard Including Erection Of 3 Metre High Fence	Granted with Conditions on 22 nd April 2004; no Conditions related to Contaminated Land.
Mr Mark Llewelyn, Dixons Carphone Plc	16/01171/FUL	Proposed new entrance portal and canopy, installation of ground and first floor windows to existing warehouse and installation of extraction louvres to northern elevation; erection of a sub-station, installation of condenser within fenced compound, and alterations to car park layout	Granted with Conditions on 1 st December 2016; no Conditions related to Contaminated Land.

The Decision Notice for **Application D32744** relates to the redevelopment of the site with a distribution warehouse and ancillary offices, and included eighteen Planning Conditions. No conditions directly related to contaminated land, although Conditions 11 and 18 were of note as the subsequent planning application submitted to discharge these conditions, had contaminated land related conditions applied. Conditions 11 and 18 are as follows:-

- 11. Prior to the commencement of any development, details of proposed ground levels for the whole site and proposed finished floor levels shall be submitted for the written approval of the Local Planning Authority. The development shall be erected in the position indicated in brown on the approved plan.*
- 18. To safeguard the setting and appearance of the structure.*

The Decision Notice for **Application D34657** relates to the importing of inert material to raise the existing levels for flood defence purposes in preparation of the site for the industrial development in to its present-day use, in pursuance of Conditions 11 and 18 of **Application D32744**, and included twenty-five Planning Conditions, of which Conditions 17-19 related to contaminated land:-

- 17. The waste materials to be deposited at the site shall only be uncontaminated excavated natural materials.*
- 18. Any facilities for the storage of oils, fuels or chemicals shall be site on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound should be at least equivalent to the capacity of the tank plus 10%. All filling points, vents, gauges and sight glasses must be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipework should be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets should be detailed to discharge downwards into the bund.*
- 19. There shall be no discharge of foul or contaminated drainage from the site into either groundwater or any surface waters, whether direct or via soakaways.*

No further information has been made available from the Planning Department at Rochdale Metropolitan Borough Council regarding the discharge of these conditions.

3.3.3 Petroleum Enforcement Authority

An enquiry has been submitted to the Petroleum Enforcement Authority/Petroleum Officer at Greater Manchester Fire and Rescue in order to establish if the site is currently or has previously been licensed for the bulk storage of petroleum products. *This information is awaited.*

3.4 Historical Potential for Ground Contamination

3.4.1 The Site

Historical maps show that the site was historically undeveloped (likely in agricultural use), with Water Fold Farm present in the east of the site from at least the 1850s to the 2000s. The site was developed in the early 2000s and prior to that planning records indicate that material may have been imported to raise the site level; this consent was subject to a ground contamination planning condition, although no further information is available. The current facility has operated as a single large distribution warehouse with ancillary office accommodation and with associated car parking / service yards since the 2000s.

Potential contaminants associated with the agricultural land use and unknown imported fill material include pesticides and herbicides, polychlorinated biphenyls (PCBs), asbestos, and fuels & oils associated with farm machinery.

3.4.2 The Surrounding Area

The following potentially contaminative activities have been identified as having taken place in the surrounding area:

- Various cotton mills in the vicinity from at least the 1850s. Potential contaminants from these activities would mainly be associated with the boiler room and engine houses, and could include fuels and oils.
- Railway line located and embankment 30m south from at least the 1850s to present. Potential contaminants include fuels, oils, acids, paints, solvents, asbestos and coal products.
- Sewage works and associated infrastructure located 100m south from c.1910 to c.1955. Potential contaminants include biodegradable material in sludges generating carbon dioxide, methane and hydrogen sulphide, fuels and oils, PCBs, heavy metals and asbestos.
- Scrap yard 160m west from 2006 to present. Potential contaminants from these activities would mainly be associated with the exact nature of the material on-site, but could include asbestos, PCBs, heavy metals, fuels and oils.

The above activities represent potential off-site sources of contamination that (if present) could potentially migrate beneath the site.

The potential for off-site contamination (if present) to migrate beneath the site would be dependent on the underlying geological conditions, which are discussed in Section 4.

4. ENVIRONMENTAL SETTING

Desk-based research of the local geology, hydrogeology and hydrology was carried out in order to establish the potential for migration of contamination onto or away from the site, and to assess the sensitivity and vulnerability of the site's setting with respect to surface water, groundwater and ecological resources.

Information was obtained from a number of sources, including:

- examination of published geological maps produced by the British Geological Survey (BGS);
- review of publicly available BGS borehole logs for the site or near vicinity;
- a proprietary environmental database procured by Ramboll; and
- Regulatory Authority websites including the Environment Agency (EA).

4.1 Geology and Hydrogeology

According to BGS 1:50,000 mapping of the area and available BGS borehole logs, the site geology and hydrogeology is presented in Table 4.1 below.

Table 4.1: Summary of Geology and Hydrogeology

Formation	Description	Thickness	EA Aquifer Designation	Hydrogeological Significance
Alluvium (beneath the west and centre of the site, approximately 80% total site area)	Clay, silt, sand and gravel	Up to 3m	Secondary A	Permeable formations with potential to support localised abstractions.
River Terrace Deposits (beneath the east / south-east corner of site, approximately 20% total site area)	Sand and gravel	Up to 3m	Secondary A	Permeable formations with potential to support localised abstractions.
Pennine Lower Coal Measures (present below approximately 75% of the total site area)	Sandstone	Up to 720m	Secondary A	Permeable formations with potential to support localised abstractions.
Milnrow Sandstone (present beneath approximately 20% of the site in the south / south-west)	Sandstone	5 to 12m	Secondary A	Permeable formations with potential to support localised abstractions.
Darwen Flags (present beneath approximately 5% of the site in the south-east corner)	Sandstone	0 to 10m	Secondary A	Permeable formations with potential to support localised abstractions.

There are four records of BGS recorded mineral sites within 1km of the subject site. The nearest (located approximately 410m south) was Water Farm Sand Pit, an opencast mine for sand from the Devensian Glaciofluvial Deposits.

The EA currently classifies groundwater (in relation to the Northern Manchester Carboniferous Aquifers Water Body) at the site as being of 'poor' chemical quality and of 'poor' quantitative status under the Water Framework Directive (WFD) classification scheme.

According to EA information provided by a commercial environmental regulatory database provider, there are 15 licensed groundwater abstractions within a 2km radius of the site. Of these, three are within 1km, as detailed in Table 4.2 below.

Table 4.2: Licensed Groundwater Abstractions within 2km of the Site

Licence Holder	Distance from Site	Abstraction source	Purpose of Abstraction
R Wilkinson	50m SE	Not specified	General Agriculture; General Use (Medium Loss)
T S Fish	320m E		
	450m S		

The site is not situated within an EA designated groundwater Source Protection Zone.

The Environmental Health Department of Rochdale Metropolitan Borough Council confirmed that there are no private (unlicensed) abstractions within 2km of the subject site.

4.2 Coal Mining

According to the Coal Authority, the site is located in a Coal Mining Affected Area. The Coal Authority Interactive Map does not show the site to be in a mine entry zone of influence or Development High Risk Areas. The BGS has stated that the site is located in an area where there is No Hazard from other (non-coal) mining activities.

4.3 Hydrology

The nearest identified watercourse is the River Roch, located approximately 25m west of the site. The EA currently classifies the River Roch as being of 'moderate' ecological quality and 'fail' chemical quality under the WFD classification scheme.

According to an independent, third party environmental database, there are fifteen licensed surface water abstractions within a 2km radius of the site, as detailed in Table 4.3 below.

Table 4.3: Licensed Surface Water Abstractions within 2km of the Site

Licence Holder	Distance from Site	Abstraction source	Purpose of Abstraction
C V H F Limited	610m NE	River Roch	Boiler Feed & Manufacturing
J K Industries Limited	630m SW		Cooling & Boiler Feed & Manufacturing
	660m S	Reservoir	Boiler Feed & Manufacturing
Brother Investments Ltd	680m NE	River Roch	Production of Energy: Hydroelectric Power Generation
Terry Adams Ltd	810m SE	Not supplied	Industrial: Sand and Gravel Washing
	1.04km		Transfer Water
			Industrial: Sand and Gravel Washing
Bury Cooper Whitehead Ltd	1.34km	Gypsy Brook	Manufacturing
	1.46km	Green Brook	
Hexion Speciality Chemicals UK Ltd	1.91km S	Not supplied	Chemicals: General Cooling (Existing Licences Only) (Low Loss)
			Chemicals: General Washing / Process Washing
			Chemicals: Process Water

Licence Holder	Distance from Site	Abstraction source	Purpose of Abstraction
Bury Council	1.98km NW	River Irwell	Production of Energy: Hydroelectric Power Generation
J R Crompton PLC	1.98km W	Not supplied	Manufacturing
Cemex UK Materials Ltd	1.99km	River Irwell	Construction: General Use (Medium Loss)

4.4 Regulatory Flood Designations

Regulatory flood maps have been developed by regulatory agencies to be used in strategic planning and are not intended to provide site-specific information. However, the mapping can provide a useful indication of whether further consideration or assessment of flood risks to a site may be required.

The regulatory agency flood maps referred to in this report do not currently include an allowance for a change in the probability of flooding due to climate change.

4.4.1 Fluvial and Tidal Flooding

According to the EA's fluvial and tidal flood map for planning⁷, the majority of the site (approximately 95% total site area) is located in Flood Zone 2 (medium probability). This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1% in any year). The remaining 5% is located in Flood Zone 1 (low probability) and represents the higher ground along the eastern site boundary.

The area adjacent to the River Roch to the west of the site is located in Flood Zone 3 (high probability). However, this area is outside the development red line boundary. This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1% in any year).

4.4.2 Surface Water Flooding

According to the EA Flood Map for Surface Water which presents the theoretical potential for flooding from pluvial sources the majority of the site (approximately 50% of the total site area, including external areas to the north, west, south and east of the building and along the western site boundary) is located in an area of High flooding probability. This zone comprises land assessed as having a 1 in 30 or greater annual probability of pluvial flooding (>3.3% in any year).

Approximately 7.5% of the total site area (external areas only) is located in an area of Medium flooding probability. This zone comprises land assessed as having between a 1 in 100 and 1 in 30 probability of pluvial flooding (3.3% – 1% in any year).

Approximately 12.5% of the total site area (external areas only) is located in an area of Low flooding probability. This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of pluvial flooding (1% – 0.1% in any year).

Approximately 30% of the total site area (including the main on-site warehouse, and some external areas in the north-east, south-east and west) is located in an area of Very Low flooding probability. This zone comprises land assessed as having a less than 1 in 1,000 annual probability of pluvial flooding (<0.1% in any year).

⁷ <https://flood-map-for-planning.service.gov.uk/>

Surface water drainage networks are typically designed to accommodate only a 1 in 30 (3.3%) annual probability rainfall event. Older drainage networks may have a lower capacity, especially if they have not been maintained adequately. Although not true of every situation, surface water flooding is typically relatively shallow and would be expected to subside following the storm event assuming drainage assets are maintained in an appropriate condition.

4.5 Designated Ecological Sites

There are no sites within 2km of the subject site, that are designated as sites with statutory designation for their ecological value. Various designations may be assigned, including: Area of Outstanding Natural Beauty, Ramsar, a Site of Special Scientific interest, Special Area of Conservation, and Special Protection Area.

4.6 Environmental Sensitivity and Vulnerability

The site is considered to be situated in an area of **moderate** sensitivity with respect to groundwater resources due to the underlying Secondary A Aquifers in relation both the superficial and bedrock geology. There are three licensed groundwater abstractions within 1km of the site (none of which are for sensitive use); the EA classified the groundwater quantitative and chemical quality as 'Poor' under the WFD.

The vulnerability of the groundwater receptor in the vicinity of the site is considered to be moderate to high as approximately 35% of the total site area is occupied by soft vegetation.

The sensitivity of the hydrological receptor can be considered as moderate as the River Roch (the nearest surface watercourse) is classified as being of 'Moderate' ecological quality and 'Fail' chemical quality under the WFD classification scheme. There are fifteen licensed surface water abstractions within 2km of the site and none are for sensitive use.

The site is considered to be in an area of high vulnerability with respect to surface water resources as the nearest surface water course is adjacent west.

5. PREVIOUS REPORTS

The following report has been provided to Ramboll for review:

- Waterman Infrastructure & Environment Ltd, April 2016: Phase I Property Due Diligence (Ref WIB15500-173-R-1-1-3-DU)

5.1 2016 Phase I

This report summarises the findings of a Phase I Property Due Diligence – Preliminary Risk Assessment of the subject site (formerly occupied by PC World Business Direct) undertaken on behalf of Malcolm Hollis LLP, to identify any significant contaminative risks attached to the site, which may have impacted upon the proposed acquisition of the sites freehold. The scope of the report included examination of historic and recent maps to identify potentially contaminative activities both on the subject site and on adjacent sites; examination of ground conditions; enquiries of the Local Authority Planning and Environmental Health Departments to obtain information on environmental conditions, incidents and known contamination risks and on the Local Authority's Contaminated Land Strategy and a site walk-over visit.

The reports overall conclusions are in line with those found in this report.

6. QUALITATIVE RISK ASSESSMENT

6.1 Legislative Framework

The regime for contaminated land was set out in Part 2A (ss.78A-78YC) of the Environmental Protection Act 1990 (EPA), as inserted by S.57 of The Environment Act 1995 and came into effect in England on 1st April 2000 as The Contaminated Land (England) Regulations 2000 (SI 2000/227). These regulations were subsequently revoked with the provision of The Contaminated Land (England) Regulations 2006 (SI 2006/1380) (as amended), which came into force in August 2006, and consolidated the previous regulations and amendments. Revised statutory guidance ("the Guidance") for local authorities on how to implement the regime, including the decision-making process on whether land is contaminated land in the legal sense, has been published by Defra and entered into force in April 2012.

Under Part 2A of the EPA Section 78A(2), "contaminated land" is defined as "land which appears... to be in such a condition, by reason of substances in, on or under the land, that:

- a) significant harm is being caused or there is a significant possibility of such harm being caused⁸; or
- b) significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused".

The pollution of controlled waters is defined in Section 78A(9) of the Act as "the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter".

6.2 Sustainability

Identifying potential land contamination contributes to broader sustainability objectives. By using risk based approaches to assess potential land contamination, use of natural resources, carbon and social impacts can be minimised.

The assessments in this report may contribute to a number of UN Sustainable Development Goals (SDGs) including SDG 3: Good Health and Wellbeing, SDG 11: Sustainable Cities and Communities, and SDG 6: Clean Water and Sanitation.

6.3 Risk Assessment Framework

"Significant harm" or "significant pollution of controlled waters" is defined in the Guidance on risk-based criteria and must be the result of one or more relevant 'contaminant linkages' relating to the land.

The presence of a contaminant linkage relies on the Source-Pathway-Receptor concept, where all three factors must be present and potentially or actually linked for a potential risk to exist. For a risk of pollution or environmental harm to occur as a result of ground contamination, all of the following elements must be present:

- A source - a substance that is capable of causing pollution or harm;
- A receptor - something which could be adversely affected by the contaminant; and
- A pathway - a route by which the contaminant can reach the receptor.

If one of these elements is absent there can be no significant risk. If all are present then the magnitude of the risk is a function of the magnitude and mobility of the source, the sensitivity of the receptor and the nature of the migration pathway.

⁸ Water Act 2003 (Commencement No. 11) Order 2012

The potential severity of the risk and the probability of the risk occurring have been combined in accordance with the following matrix in order to give a level of risk for each potential hazard.

Table 6.1: Classification of Risk (after NHBC/EA 2008)

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very high	High	Moderate	Low
	Likely	High	Moderate	Moderate/Low	Low
	Low Likelihood	Moderate	Moderate/ Low	Low	Very low
	Unlikely	Moderate/ Low	Low	Very low	Very low

It has been assumed that the site will continue in its present use; future land-use have been considered in this assessment.

6.4 Preliminary Risk Assessment

A preliminary conceptual site model has been developed and qualitative risk assessment undertaken to identify and assess the potential risks associated with environmental conditions at and in the vicinity of the site based on the available information. This is presented in Table 6.2.

Table 6.2: Conceptual Site Model

Source	Pathway	Potential Receptor	Potential Consequence	Probability of Risk	Level of Risk
On-site Site is currently developed as a single large distribution warehouse and ancillary office space / plant rooms. There is an external concrete hardstanding service yard and asphalt-hardstanding car parking area. Service yard is in use for deliveries, loading, lorry parking, and storage. Approximately 30% of the total site area is soft vegetation (largely in the western area). No significant contamination sources identified from current and historical site use. Potential contaminants are dependent on the composition of the Made Ground, particularly due to the unknown nature of the fill material imported to site for land raising and due to the former presence of Water Fold Farm in the east of the site and could include fuels, oils, PCBs, pesticides and asbestos.	Leaching to Groundwater & Groundwater Flow	Secondary A Aquifers	Medium	Low Likelihood	Low to Moderate
		River Roch	Medium	Low Likelihood	Low to Moderate
		Buildings and structures	Mild	Low Likelihood	Low
	Dermal contact / ingestion of soils / dust / inhalation of dusts / fibres	Future site users	Medium	Unlikely	Low
		Construction workers	Medium	Likely	Moderate*
		Adjacent site users	Medium	Unlikely	Low
	Accumulation and inhalation of vapours in confined spaces	Future site users	Medium	Unlikely	Low
		Construction workers	Medium	Unlikely	Moderate*
		Adjacent site users	Medium	Unlikely	Low
	Ground gas generation and migration into buildings and confined spaces	Future site users	Medium	Low Likelihood	Low to Moderate
		Construction workers	Medium	Unlikely	Moderate*
		Adjacent site users	Medium	Unlikely	Low
		Buildings and structures	Medium	Low Likelihood	Low to Moderate

Source	Pathway	Potential Receptor	Potential Consequence	Probability of Risk	Level of Risk
Off-site Various cotton mills within 250m of site from c.1850s, a railway line 30m south from c.1850s to present, a sewage works 100m south from c.1910 to c.1955 and a scrap yard 160m west from 2006 to present. Potential contaminants include heavy metals, fuels and oils, asbestos, PCBs, biodegradable material in sludges generating carbon dioxide, methane and hydrogen sulphide, acids, paints, solvents and coal products.	Leaching and movement onto site via Groundwater Flow and subsequent inhalation of vapours	Future site users	Medium	Unlikely	Low
		Construction workers	Medium	Unlikely	
Notes: - Assessment completed assuming site in current condition. Should site levels be altered during development, a reassessment would be required. - Should the development proposals alter significantly a review of this risk assessment may be required. * Given the use of appropriate PPE and on-site health and safety precautions, risk to construction workers would be reduced to low.					

7. CONCLUSIONS AND RECOMMENDATIONS

In the UK, a risk-based approach is used to assess the potential impact associated with ground contamination. Using a risk based approach can also contribute to broader sustainability goals.

Overall, the current and former use of the site indicates that there is a low to moderate potential for significant or widespread soil and groundwater contamination. This is in part related to the lack of documentation relating to the possible presence and nature of fill material brought on to the site to raise the level prior to development.

It is considered that there is a low risk of the site being identified by the Regulatory Authorities as representing a significant risk to site users, or other environmental receptors, whilst in its current use and no further action is considered as necessary at this time.

In terms of the redevelopment of the site the inherent nature of the scheme will cap the site and limit the potential for ground contamination (if present) to be mobilised to the environment or result in significant exposure to future site users in relation to the future development. Potential pollutant linkages are considered to be of a low or low-moderate risk level.

Construction workers are more sensitive to exposure given the nature of the activities albeit in Ramboll's experience such residual risks can be managed through basic mitigation.

On the basis of this Phase I environmental assessment, and given the mill/farmland and the potential for undocumented fill material to be used in the warehouse construction, it is recommended that a targeted Phase II intrusive ground investigation should be carried out to assess the potential for soil and / or groundwater contamination (if present) associated with the Made Ground on-site. Ground conditions are not considered likely to present a barrier to development. An intrusive investigation could be undertaken following the grant of planning permission, and subsequent to demolition of the existing building to enable access to the building footprint, therefore further ground characterisation can be undertaken as a condition of planning permission.

APPENDIX 1

FIGURES

Figure 1: Site Location

Figure 2: Site Boundary and Layout

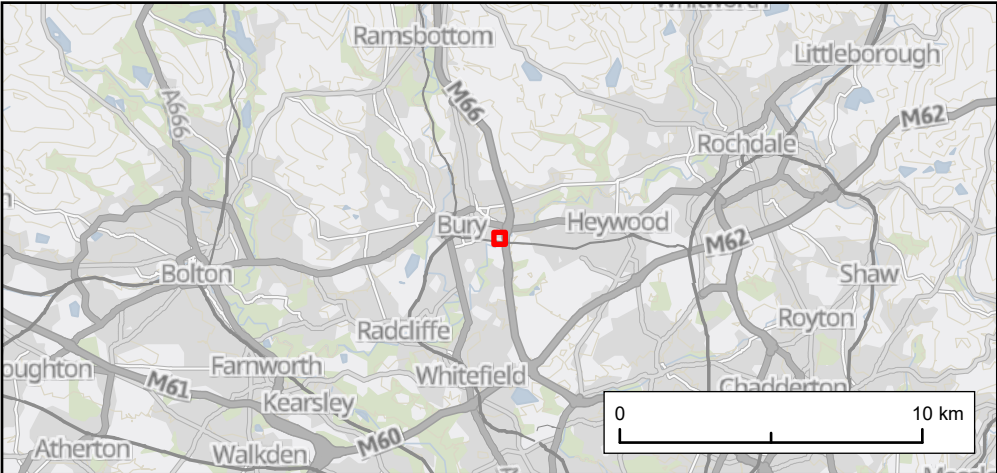
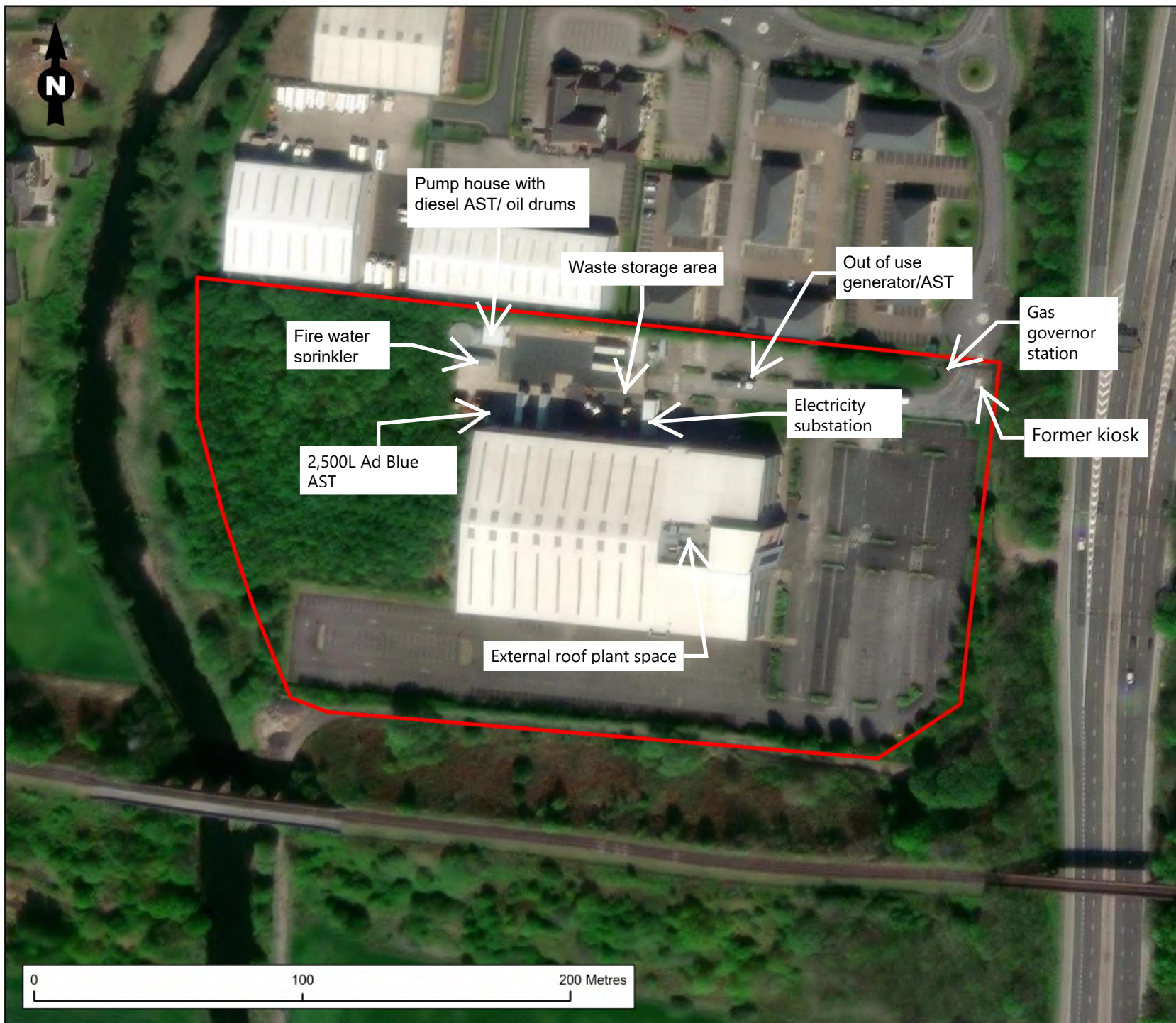


Figure Title Figure 1: Site Location	Project Name Waterfold Business Park, Bury, Greater Manchester BL9 7BR	Date October 2023		
		Scale on Main Map 1:2,000		
Project Number 1620016197	Client Tritax Management LLP	Issue 1	Prepared By HR	



Legend

Site Boundary

Figure Title

Site Layout

Project Name

Waterfold Business Park,
Bury, Greater Manchester,
BL9 7BR

Project Number

1620016197

Figure No.

2

Date

October 2023

Prepared By

HR

Scale

1:2,000 @A4

Issue

1

Client

Tritax Management LLP

RAMBOLL

APPENDIX 2

SELECTED HISTORICAL MAPS



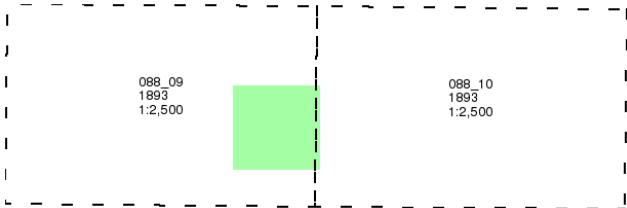
Lancashire And Furness

Published 1893

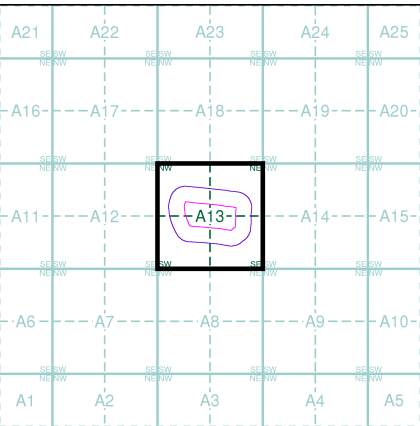
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

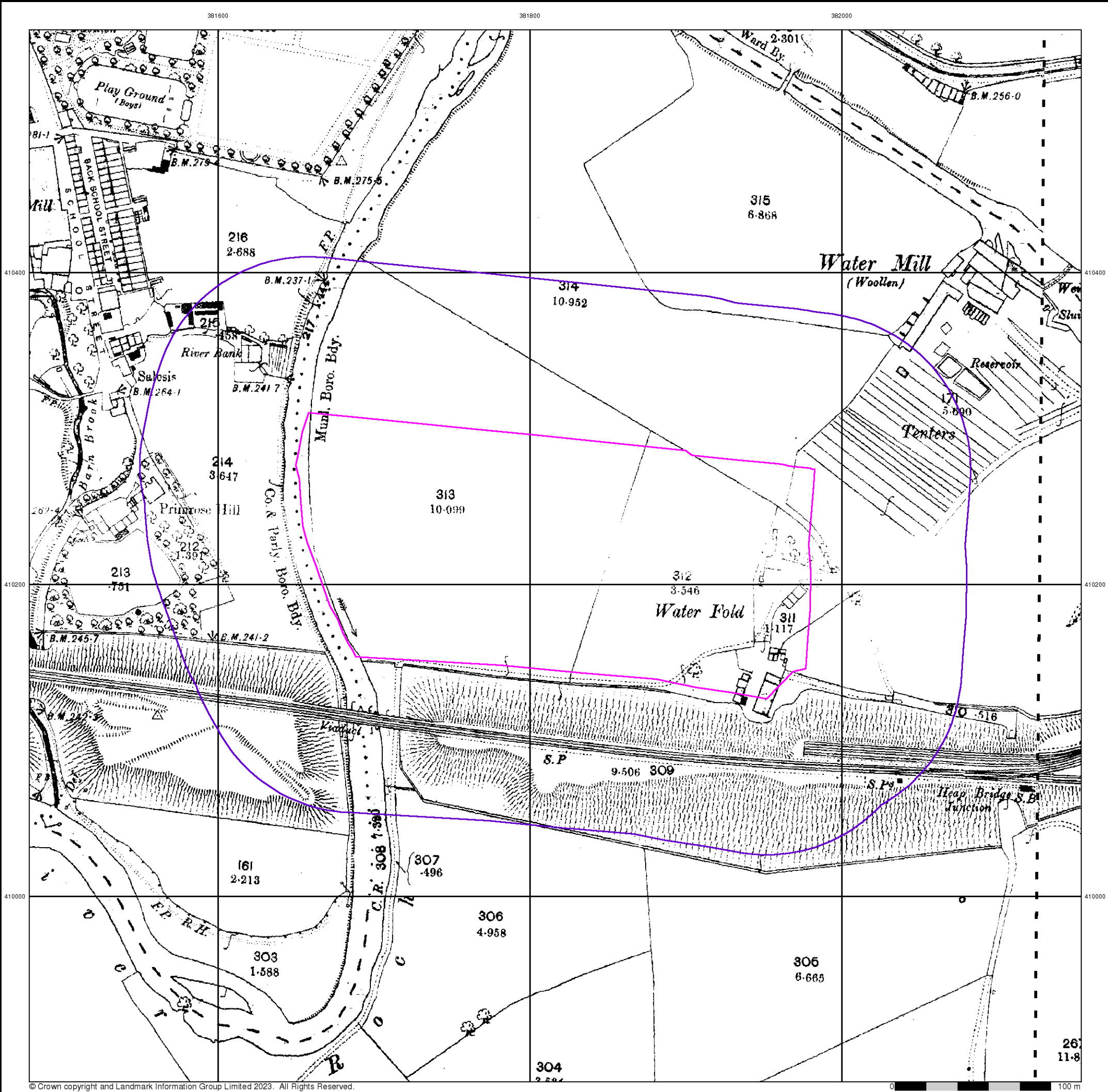
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National Grid Reference: 381820, 410220
Slice: A
Site Area (Ha): 4.76
Search Buffer (m): 100

Site Details

Waterfold Business Park, BURY, BL9 7BR



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





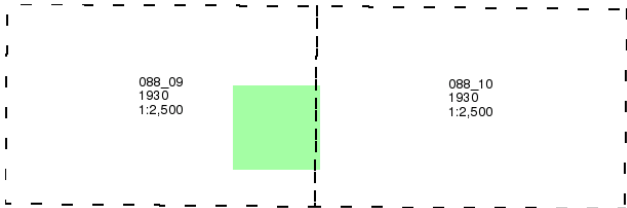
Lancashire And Furness

Published 1930

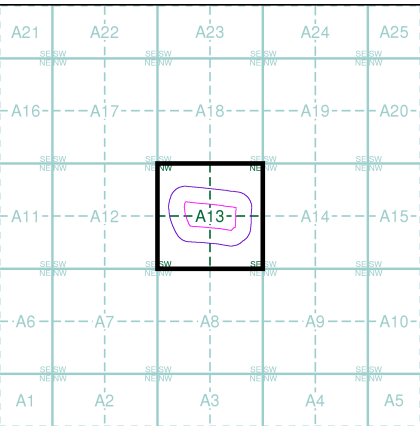
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

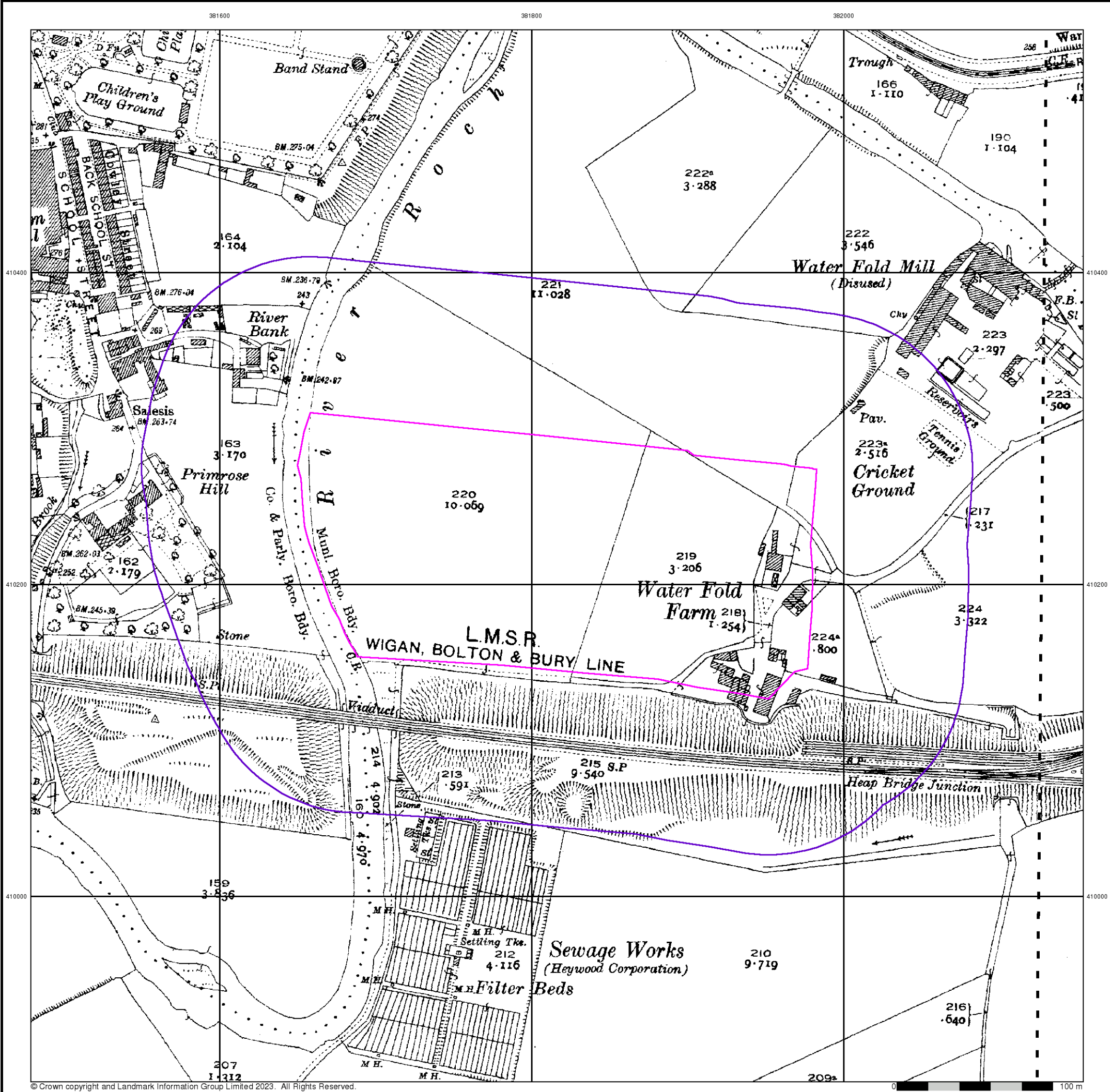
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National Grid Reference: 381820, 410220
Slice: A
Site Area (Ha): 4.76
Search Buffer (m): 100

Site Details

Waterfold Business Park, BURY, BL9 7BR



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





Ordnance Survey Plan

Published 1958

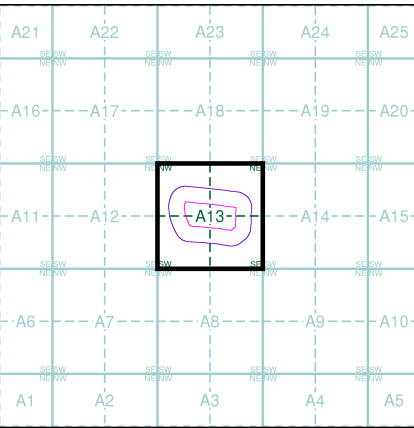
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SD8110NW	SD8110NE	SD8210NW
1958	1958	1958
1:1,250	1:1,250	1:1,250
SD8110SW	SD8110SE	SD8210SW
1958	1958	1958
1:1,250	1:1,250	1:1,250
SD8109NW	SD8109NE	
1958	1958	
1:1,250	1:1,250	

Historical Map - Segment A13



Order Details

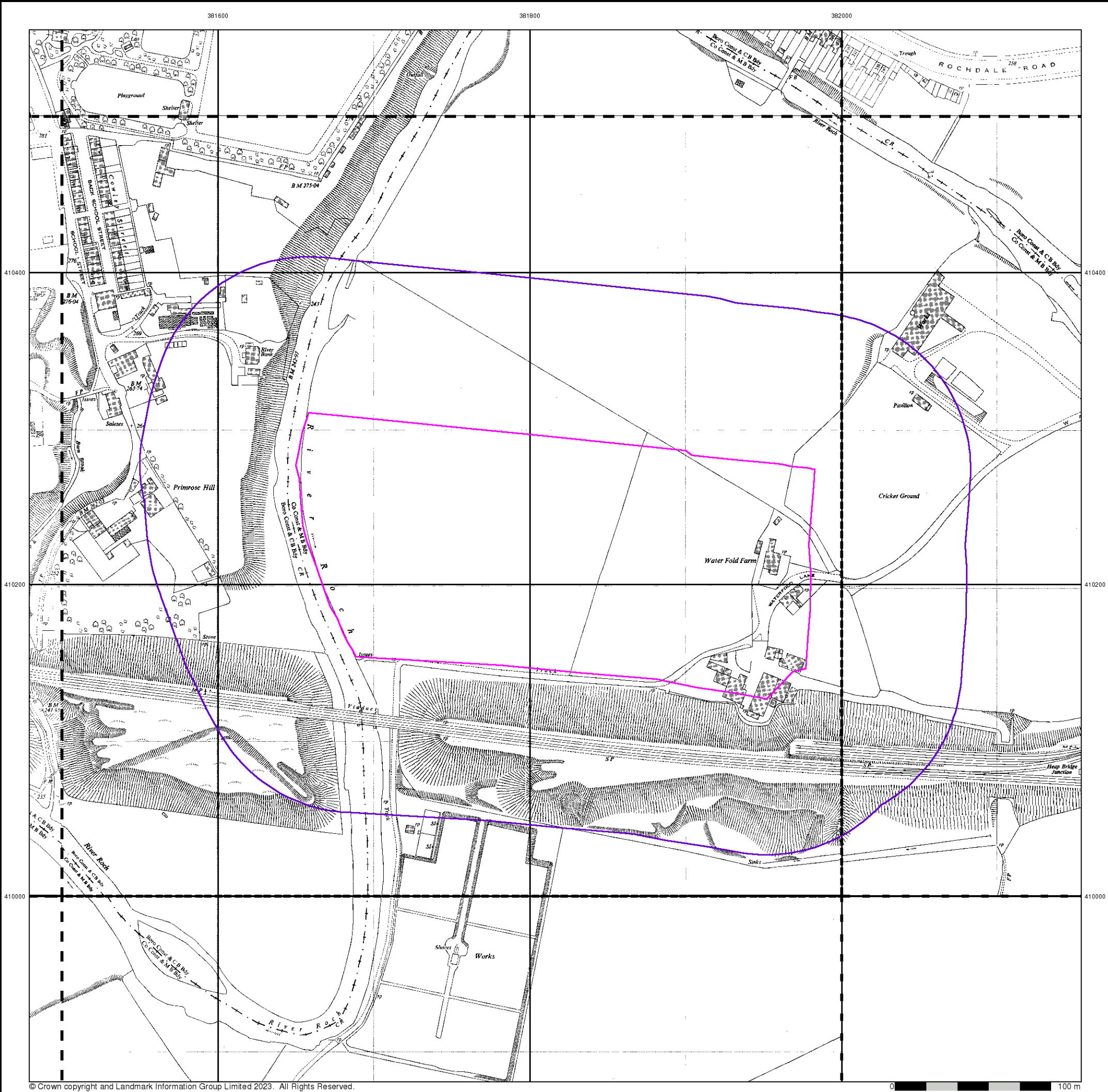
Order Number: 315801943_1_1
Customer Ref: 1610016197 Waterfold
National Grid Reference: 381820, 410220
Slice: A
Site Area (Ha): 4.76
Search Buffer (m): 100

Site Details

Waterfold Business Park, BURY, BL9 7BR



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





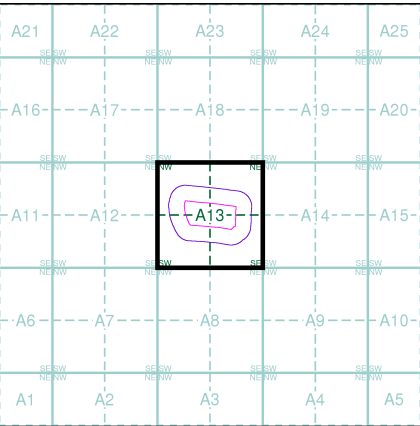
Additional SIMs
Published 1980 - 1984
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

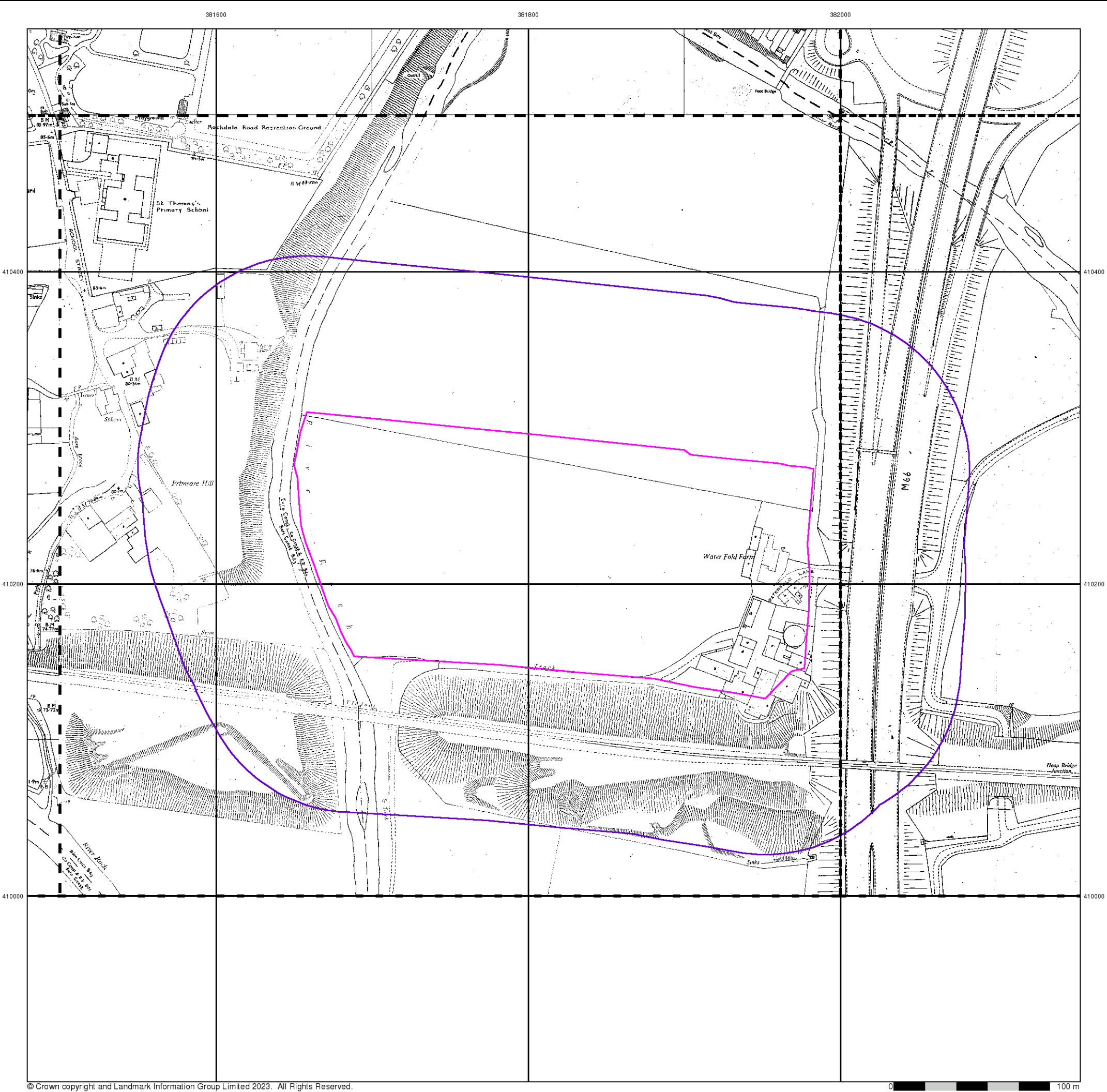
SD8110NW 1983 1:1,250	SD8110NE 1984 1:1,250	SD8210NW 1980 1:1,250
SD8110SW 1984 1:1,250	SD8110SE 1980 1:1,250	SD8210SW 1980 1:1,250

Historical Map - Segment A13



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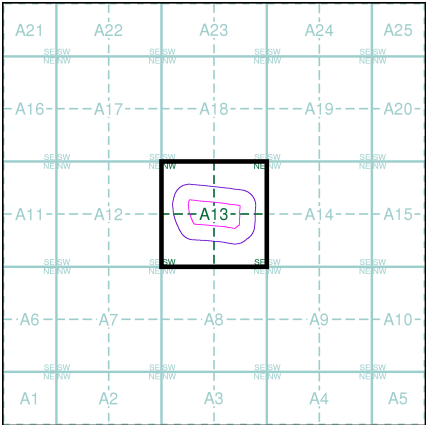
Historical Aerial Photography

Published 2001

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



Historical Aerial Photography - Segment A13



Order Details

Order Number: 315801943_1_1
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10k Raster Mapping

Published 1999

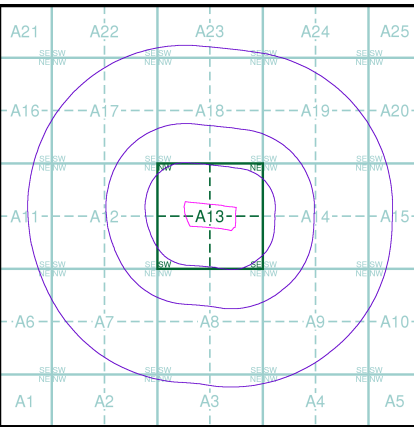
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SD81SW	1999	1:10,000
SD80NW	1999	1:10,000

Historical Map - Slice A



Order Details

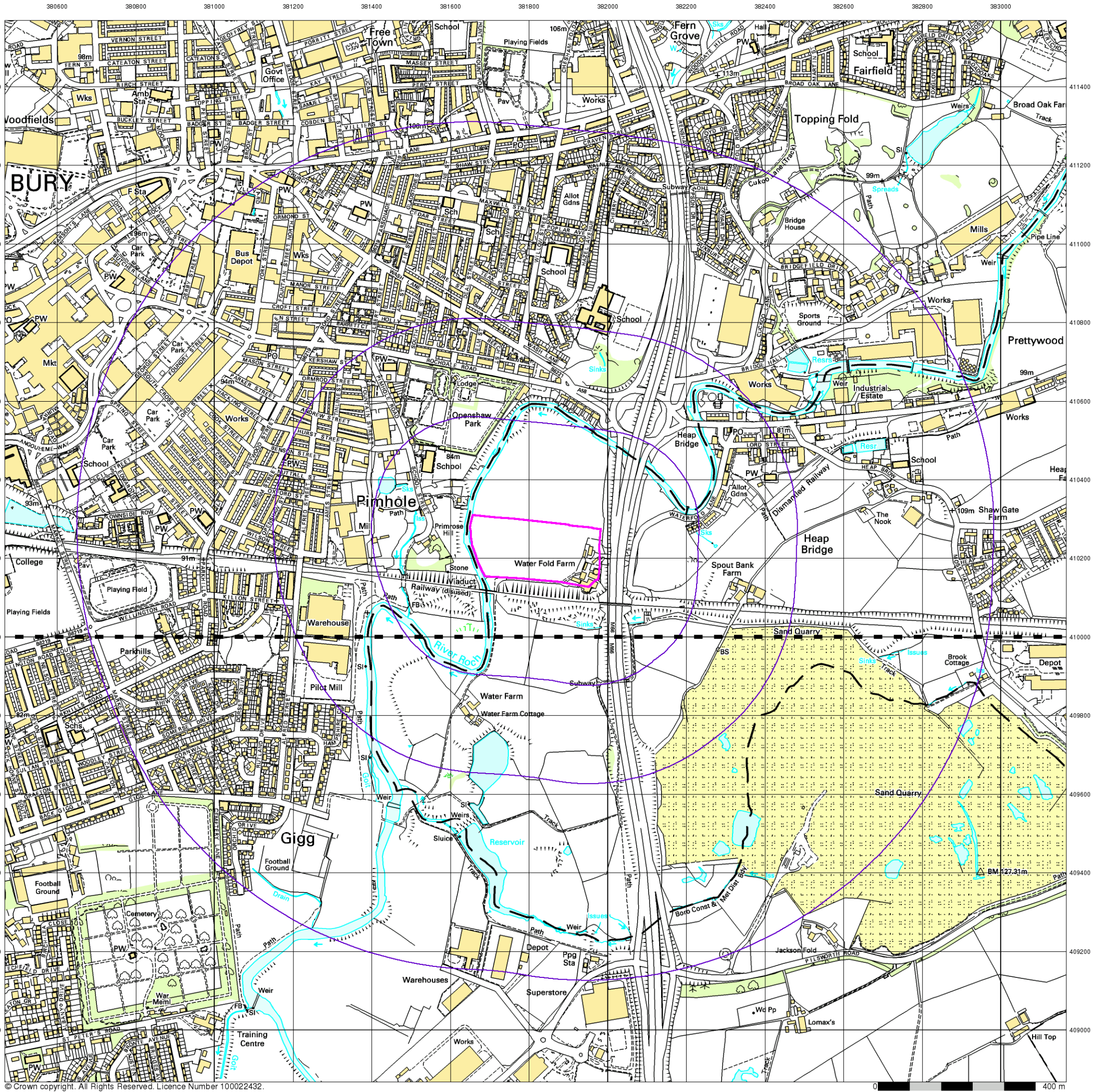
Order Number:	315801943_1_1
Customer Ref:	1610016197 Waterfold
National Grid Reference:	381820, 410220
Slice:	A
Site Area (Ha):	4.76
Search Buffer (m):	1000

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VectorMap Local

Published 2023

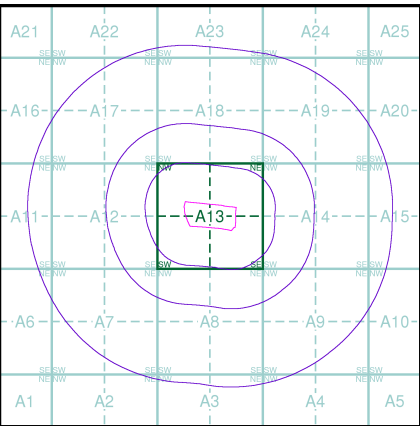
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

SD81SW
2023
Variable
SD80NW
2023
Variable

Historical Map - Slice A



Order Details

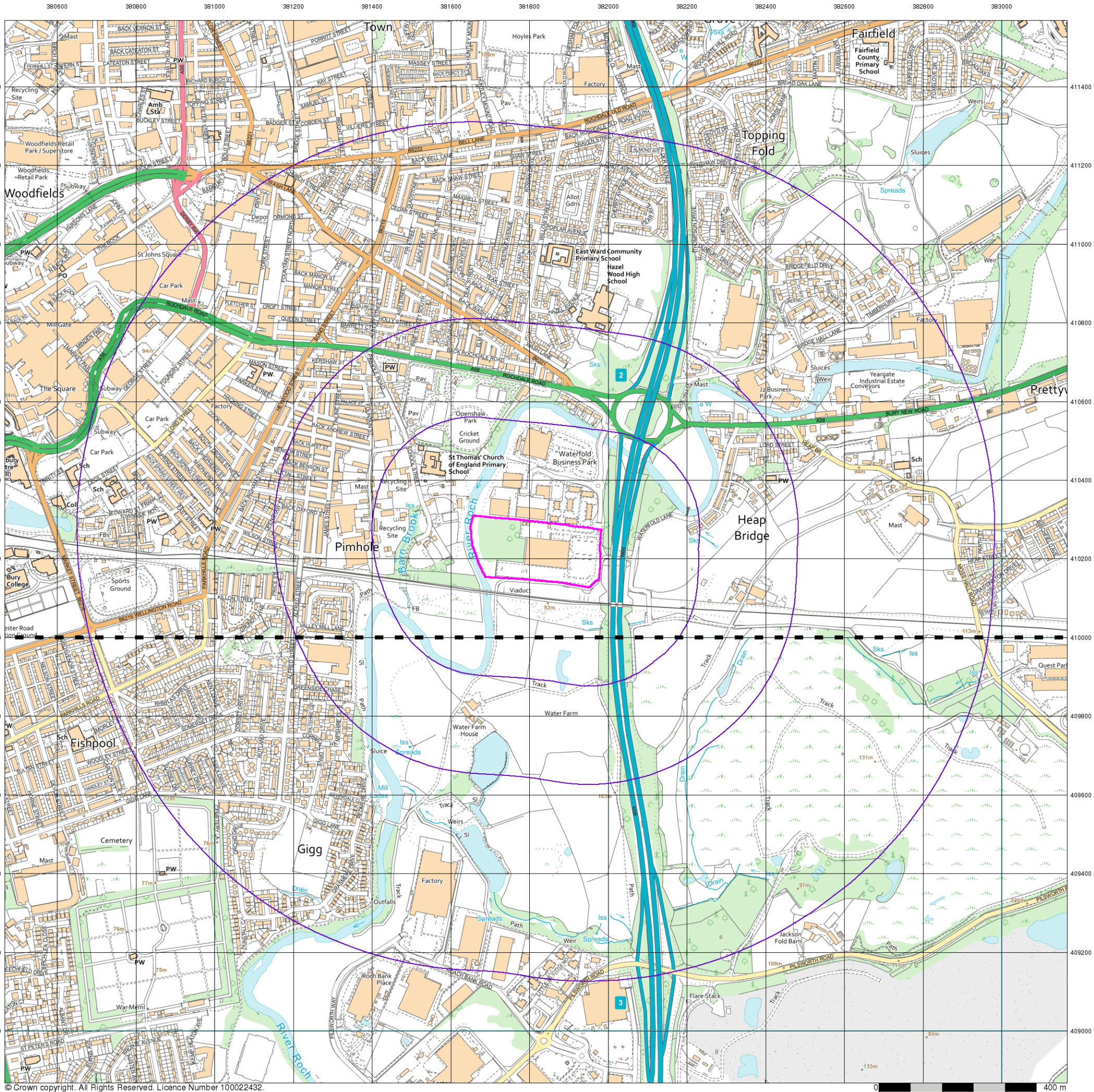
Order Number: 315801943_1_1
Customer Ref: 1610016197 Waterfold
National Grid Reference: 381820, 410220
Slice: A
Site Area (Ha): 4.76
Search Buffer (m): 1000

Site Details

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APPENDIX 3 PHOTOGRAPHIC LOG

Location: Default Site Location

Photo date: 08/17/2023

Photo time: 09:44

Photo direction: N

Description: Hot water boiler servicing the ancillary office space and toilets in the Menzies Distribution eastern portion of the building.

Latitude: 53.58838

Longitude: -2.27566



Location: Default Site Location

Photo date: 08/17/2023

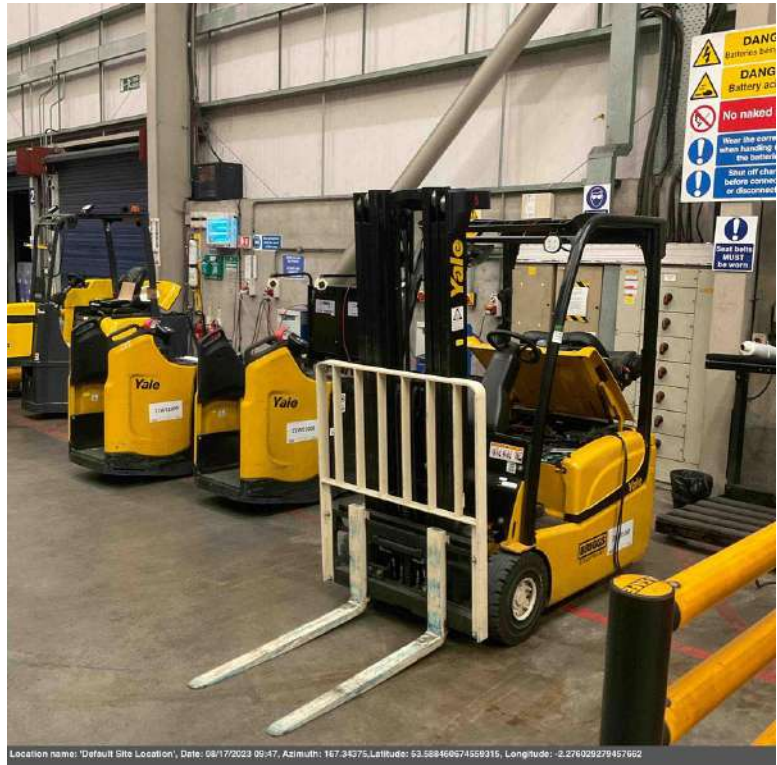
Photo time: 09:47

Photo direction: N

Description: View of the on-site electric powered mobile plant

Latitude: 53.58846

Longitude: -2.27603



Location: Default Site Location

Photo date: 08/17/2023

Photo time: 09:53

Photo direction: N

Description: 2,500L bunded AdBlue AST, with some staining located adjacent on the hardstanding.

Latitude: 53.58866

Longitude: -2.27652



Location: Default Site Location

Photo date: 08/17/2023

Photo time: 09:54

Photo direction: N

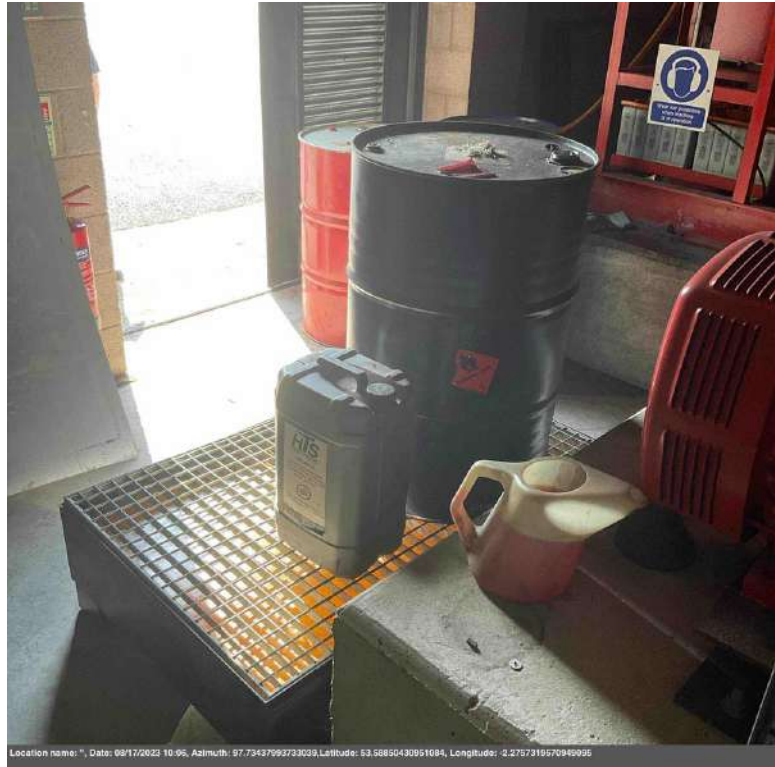
Description: Cardboard waste skip in the south-west corner of the Menzies service yard.

Latitude: 53.58862

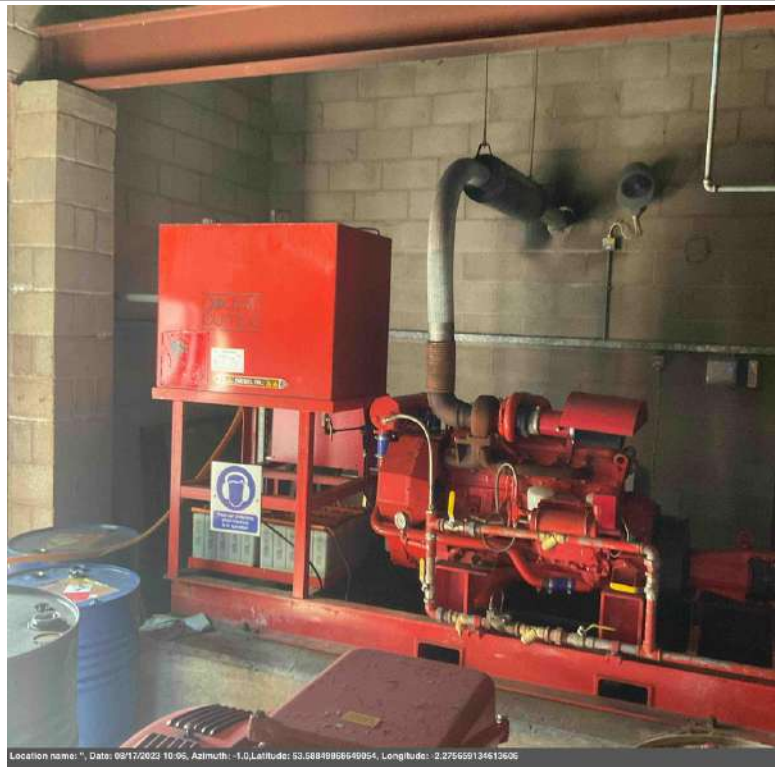
Longitude: -2.27651



Location: Default Site Location
Photo date: 08/17/2023
Photo time: 10:06
Photo direction: E
Description: 205 litre diesel drum and 25 litre lubricant oil stored on a drip tray
Latitude: 53.5885
Longitude: -2.27573



Location: Default Site Location
Photo date: 08/17/2023
Photo time: 10:06
Photo direction:
Description: Diesel powered pump / AST, located in the sprinkler tank pump house with associated 205L drums containing diesel / oil.
Latitude: 53.5885
Longitude: -2.27566



Location: Default Site Location

Photo date: 08/17/2023

Photo time: 10:07

Photo direction:

Description: 205L gas oil drum stored on a drip tray within the sprinkler tank pump house Oily liquid was noted in the bottom of the tray.

Latitude: 53.58857

Longitude: -2.27585



Location: Default Site Location

Photo date: 08/17/2023

Photo time: 10:13

Photo direction: N

Description: Corroded external R404A air conditioning units.

Latitude: 53.5886

Longitude: -2.27518



Location: Default Site Location

Photo date: 08/17/2023

Photo time: 10:23

Photo direction: N

Description: Small scale storage of cleaning products <25L on shelves within a cleaners cupboard.

Latitude: 53.5884

Longitude: -2.27547



Location name: 'Default Site Location', Date: 08/17/2023 10:23, Azimuth: -1.0, Latitude: 53.5884069675438, Longitude: -2.275471786143697

Location: Default Site Location

Photo date: 08/17/2023

Photo time: 10:43

Photo direction: N

Description: View of the out of use ancillary office accommodation.

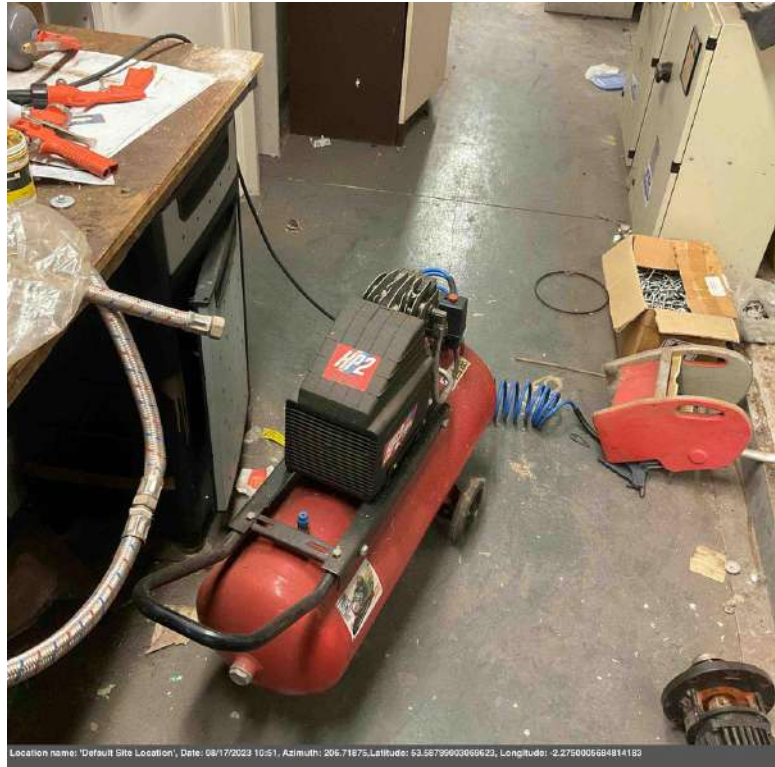
Latitude: 53.58831

Longitude: -2.27504



Location name: 'Default Site Location', Date: 08/17/2023 10:43, Azimuth: 8.7690625, Latitude: 53.588309423116596, Longitude: -2.27504180274459223

Location: Default Site Location
Photo date: 08/17/2023
Photo time: 10:51
Photo direction: N
Description: An oil compressor located within the third floor plant room.
Latitude: 53.58799
Longitude: -2.275



Location: Default Site Location
Photo date: 08/17/2023
Photo time: 10:51
Photo direction: N
Description: Lift room, adjacent to the lift shaft in the third floor plant room.
Latitude: 53.58797
Longitude: -2.27527



Location: Default Site Location
Photo date: 08/17/2023
Photo time: 10:53
Photo direction: N
Description: Gas fire Hoval boilers in the third floor plant room.
Latitude: 53.5882
Longitude: -2.27545



Location: Default Site Location
Photo date: 08/17/2023
Photo time: 10:55
Photo direction:
Description: Three Lennox Chillers on the third floor roof external plant area, noted to contain R407C.
Latitude: 53.5882
Longitude: -2.27526



Location: Default Site Location
Photo date: 08/17/2023
Photo time: 11:14
Photo direction: N
Description: Gas Governor Station by site entrance
Latitude: 53.58869
Longitude: -2.2739



Location: Default Site Location
Photo date: 08/17/2023
Photo time: 11:14
Photo direction: E
Description: Location of former kiosk at site entrance
Latitude: 53.58867
Longitude: -2.27383



Location: Default Site Location

Photo date: 08/17/2023

Photo time: 11:18

Photo direction: N

Description: View from north-east corner by the site entrance looking west along the access road, with damaged hardstanding.

Latitude: 53.58858

Longitude: -2.27377



Location: Default Site Location

Photo date: 08/17/2023

Photo time: 11:33

Photo direction: N

Description: View of externally wall-mounted air conditioning units, noted to contain R410A

Latitude: 53.58778

Longitude: -2.27545



Location: Default Site Location

Photo date: 08/17/2023

Photo time: 11:53

Photo direction: N

Description: View showing the Electricity Substation in the right of the image, waste storage area, and out of use emergency generator.

Latitude: 53.58863

Longitude: -2.27573



Location: Default Site Location

Photo date: 08/17/2023

Photo time: 11:57

Photo direction:

Description: View of wood pallet storage long northern site boundary in Menzies service yard, with pump house and sprinkler tank in the background.

Latitude: 53.58881

Longitude: -2.27582

