

Preliminary Geo-Environmental Risk Assessment

Dumers Lane, Bury

Presented to: **Dwyer Asset Management Ltd**

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Report Details

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Executive Summary

Brief	Delta-Simons was instructed by Dwyer Asset Management Ltd to produce a Preliminary Geo-Environmental Risk Assessment for a commercial building located off Dumers Lane, Bury, to support the submission of a planning application for change of use a from a Class E office to a B8 warehouse.
Site Use & Surrounding Area	The Site currently comprises a vacant large warehouse type building, multistorey car park and associated areas of car park and hardstanding, located within a predominantly commercial/light industrial area.
Environmental Setting	The Site is considered to be of low to moderate environmental sensitivity given the presence of the Secondary A Aquifers underlying the Site and the River Irwell adjacent to the south, whilst considering the current commercial/light industrial nature of the surrounding area and the absence of nearby sensitive water abstractions.
Contamination Potential Sources	Limited potential sources of contamination have been identified, comprising localised Made Ground deposits from the former bowling green and associated pavilion.
Contamination Land Risk Associated with Ownership	There is considered to be a low risk of enforcement action by the regulatory authorities. The potential for legal action by surrounding landowners / Third Parties based on the potential for contamination to migrate off-Site (ongoing or historically) and result in private or statutory nuisance is considered to be low.
Development Considerations	Widespread or significant contamination is considered unlikely and the preliminary risk assessment has identified a low risk of soil/groundwater contamination and hazardous ground gas at the Site. Asbestos may be present within the localised Made Ground.
Uncertainty and Data Gaps	No specific plans have been made available for the proposed change of use from a Class E office to a B8 warehouse although it is understood the works generally involve demolition of the multistorey car park and some external buildings and modifications to the existing building with no breaking ground. This assessment is based on desk study information only. No Site specific ground investigation data has made available for review.
Recommendations	Documentation evidencing the formal discharge of the contaminated land conditions for the current on-Site development should be obtained and maintained as part of the Site's audit trail. Enquiries have been made with the Local Planning Authority regarding in order to determine whether the Site is on their list of sites for further inspection under Part 2A of the Environmental Protection Act 1990. No response was received in the timeframe of this report.
This is intended as a summary only. Further detail and the limitations of the assessment are provided within the main body of the Report.	

Table of Contents

1.0	INTRODUCTION	1
1.1	Appointment	1
1.2	Context & Purpose	1
1.3	Scope of Works	1
1.4	Limitations	1
2.0	SITE CONTEXT & DATA REVIEW	3
2.1	Site Information	3
2.2	Physical Setting	5
2.3	Sensitive Land Use	6
2.4	Historical Use of the Site & Surrounding Area	7
2.4.1	Approach	7
2.4.2	Historical Information Review	7
2.4.3	Historical Use Summary	9
2.4.4	Unexploded Ordnance (UXO)	9
2.5	Environmental Database Review	9
2.6	Planning Review/Regulatory Enquiries	10
2.7	Previous Reports	11
3.0	CONCEPTUAL SITE MODEL	12
3.1	Introduction	12
3.2	Overall Site Sensitivity	12
3.3	Potential Contamination Sources	12
3.4	Potential Pathways	12
3.5	Potential Receptors	12
4.0	CONCLUSIONS & RECOMMENDATIONS	15
4.1	Land Contamination Risks and Liabilities	15
4.2	Recommendations and Other Development Considerations	15

FIGURES

Figure 1 – Site Location Map

APPENDICES

Appendix A – Limitations

Appendix B – Data Sources

Appendix C – Risk Definitions

Appendix D – Site Photographs

Appendix E – Historical Mapping

Appendix F – Landmark Envirocheck® Report

1.0 Introduction

1.1 Appointment

Delta-Simons Limited ("Delta-Simons") was instructed by Dwyer Asset Management Ltd (the "Client") to prepare a Preliminary (Geo-Environmental) Risk Assessment for commercial properties located off Dumers Lane, Redvales, Bury, Whitefield, BL9 9QL (the "Site").

This Report was undertaken in accordance with Delta-Simons fee proposal dated 26 May 2022. The standard limitations associated with this Assessment are presented in Appendix A.

1.2 Context & Purpose

The aim of this Report is to support the submission of a planning application for change of use from a Class E office to a B8 warehouse. It is understood the building was originally constricted for use as warehouse before being converted to a call centre. The proposed conversation back to B8 warehouse use will involve the demolition of the existing multistorey car park and external plant housing to ground level, strip out of the existing building including mezzanine floor and MEP, refurbishment to warehouse and roof repairs, installation of dock levellers and new MEP. No works to break ground are understood to be required.

This study assesses the likely environmental issues associated with soil and groundwater conditions that may affect the proposed development of the Site. This Report is designed in general accordance with guidance on Land Contamination: Risk Management pages of the GOV.UK web pages, the relevant requirements of the National Planning Policy Framework (NPPF) (as revised 2021) (paragraphs 174 & 183-184)¹ and the Planning Practice Guidance (Land Affected by Contamination)².

1.3 Scope of Works

- Review of the environmental setting of the Site, including the current use / status of the Site and surrounding area, and review of the geology, hydrogeology and hydrology;
- Review of the historical activities of the Site and surrounding area;
- Consult and review information from the Local Authority in relation to Part 2A of the Environmental Protection Act;
- Complete a Site reconnaissance by undertaking a visual inspection of readily accessible areas of the Site;
- Review identified previous relevant planning applications for the site, as available on the Local Authority online planning database, to assess whether existing data relating to land contamination is publicly available;
- Review of relevant third party reports relating to the Site or surrounding area;
- Review of the information available on the Coal Authority interactive map viewer data portal;
- Formulate a Conceptual Site Model (CSM) based upon the findings of all available information to identify any possible pollutant linkages in the context of the proposed redevelopment; and

Data sources used in this assessment are listed in Appendix B.

1.4 Limitations

The standard limitations associated with this Assessment are presented in Appendix A. In addition, there are the following specific limitations that apply to this Assessment:

1

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004408/NPPF_JULY_2021.pdf

² <https://www.gov.uk/guidance/land-affected-by-contamination>

- No specific plans have been made available for the proposed redevelopment, however it is understood the works will comprise the removal of the existing multistorey car park down to ground level (and provision of concrete surface where necessary) and removal of the external plant housing (as part of a separate application), strip out and refurbishment of the existing building, provision of new dock levellers, general building repairs and installation of new MEP equipment. No work to break ground are anticipated. It is therefore assumed the majority of the Site will be covered with a commercial building and hardstanding areas.
- The Consultant undertaking the Site inspection maintained a general awareness for evidence of invasive plant species, particularly Japanese Knotweed. While none were observed during the walkover, it should be noted that the Consultant is not a trained ecologist and a separate survey undertaken by an experienced Ecologist would be necessary if a more robust assessment is needed.
- The Report includes an initial assessment of unexploded ordnance (UXO) risks for the Site using online data sources. A detailed UXO assessment falls outside of the scope of this Report, further specialist assessment may be required;
- The Report includes a preliminary assessment for the potential for radon gas hazards. A detailed radon assessment falls outside of the scope of this Report, and the requirement for radon mitigation measures in the proposed development should be identified separately to the satisfaction of the Local Authority;
- Whilst statements have been made about the location of the site within the floodplain, this assessment does not constitute a formal Flood Risk Assessment and this should be undertaken separately.

2.0 Site Context & Data Review

The following sections provide a summary of the key site features based on the data sources listed in Appendix B. All distances, measurements and dates are approximate and the accuracy limitations of the data sources should be noted.

2.1 Site Information

Site Overview			
			
Contains OS data ©, Crown Copyright and Database Right (2022) Contains Data from, © 2022Landmark Information Group Ltd		Contains Data from, © 2022 Getmapping Plc Contains Data from, © 2022 Landmark Information Group Ltd	
Site Location		Site Layout	
Co-ordinates	Centred at National Grid Reference 380180, 408500.	Elevation	71 m AOD
		Area	1.52 Ha
Site Address and Location	Land at Dumers Lane, Redvales, Bury, Whitefield, BL9 9QL. The Site is located within an urban, predominantly commercial/light industrial area to the east of Manchester Road (A56), approximately 1.8 km west of the M66 and 2 km south of Bury centre. Google Maps Link Google, Imagery©2022 Inforterra Ltd & Bluesky, Maxar Technologies, The GeoInformation Group, Map data ©2022		
Site Occupant(s)	The Site is currently vacant.		

Site Description	The Site is relatively flat and has an approximately triangular shape. The southern area of the Site is occupied by a large warehouse type building erected in 1999. The building is currently vacant. The Site is almost completely covered by either the existing structures, concrete and tarmacadam hardstanding with small areas of soft landscaping along the southern and eastern boundary. A car park is present in the eastern of the Site and a multi-storey car park in the northern area of the Site. Access to the site is via an unnamed road in the east, which connects with Dumers Lane approximately 50m east of the Site. Delta-Simons conducted a Site visit on 1st June 2022. A series of Site photographs are presented as Appendix D, and pertinent information that was observed or reported on-Site is summarised as follows: • The Site comprises a large warehouse building (vacant) with associated external carpark area in the east, laid with tarmacadam. The external surfacing was noted to be in good condition (Photographs 1 and 2); • The southern boundary was observed to be formed by a sheet pile retaining wall structure in the northern bank of the River Irwell (Photographs 3 and 4); • The eastern part of the building comprised a three-storey office block with canteen areas and toilets. The block is constructed of steel frame, concrete floors, brick cladding with aluminium windows. The floors are divided by plastered partition walls into offices (Photographs 5 to 8); • The majority of the building footprint is occupied by open space with carpet flooring. A single storey mezzanine level lay in the centre of the building with several areas of washroom/toilets located on the ground floor (Photographs 9 to 12); • Nine approximately 8,000 litre capacity liquid nitrogen and argon tanks were observed within the Inert Gas Fire Suppression System room, located in the centre of the building on the ground floor. Numerous switchboards were present within the building (Photographs 13 to 15); • Two air-conditioning plantrooms were observed respectively in the south and the north of the third floor (Photographs 16 and 17); • Asbestos containing materials (ACM) were not observed during the Site walkover; and <i>While small volumes of cleaning chemicals were observed in the kitchen areas, no significant contamination concerns were observed. No bulk fuel storage was noted on Site.</i>
Description of Adjacent and Surrounding Land Uses	The Site is located within an urban, predominantly commercial/light industrial area to the east of Manchester Road (A56), approximately 1.8 km west of the M66 and 2 km south of Bury centre. Several medium and large distribution warehouses are situated immediately to the north and north-west of the Site. Dumers Lane is situated to the east of the Site, beyond which is a small business park comprising several buildings of industrial appearance. The River Irwell trends along the south and south-western boundary of the Site with residential housing beyond the south and a chemical manufacturers and open grassed field to the west.

Where identified, the potential on-Site or off-Site sources of contamination are considered further in Section 2.5.

2.2 Physical Setting

The physical setting of the subject property can influence the susceptibility to, and relative magnitude of, environmental impacts and liabilities associated with on- and off-Site sources of contamination. The following table provides physical setting information for the subject property and surrounding area.

Published Geology	British Geological Survey (BGS) online viewer (bgs.ac.uk/viewer) and mapping (bgs.ac.uk/maps) (1:50,000 Sheet Number 85, Manchester) indicates that ground conditions at the Site comprise: • Superficial deposits: River Terrace Deposits 1, comprising sand and gravel and Alluvium within the southern boundary comprising clay, silt, sand and gravel. • Bedrock: Pennine Lower Coal Measures Formation with Pennine Middle Coal Measures Formation within the south-western corner. • Given the current development and historical uses of the Site, a variable thickness of Made Ground materials is anticipated to be present at the surface overlying the superficial deposits.
Site-Specific Geology	There are no BGS recorded boreholes (bgs.ac.uk/viewer) on the Site. The nearest BGS recorded borehole to the Site is located approximately 40 m south of the Site, progressed in 1960 (Ref: SD80NW22) and indicates the following general sequence: • Sand and gravel fill to 1.83 m below ground level (bgl); • Sand and gravel with boulders to 3.35 m bgl; • Grey clay to 7.21 m bgl; • Stiff red and brown gravelly clay to 19.81 m bgl; • Weak red sandstone to 21.03 m bgl; • Red and grey clay with shale and boulders to 32.49 m bgl; • Red and blue shale to 43.28 m bgl; and • Alternating layers of blue, grey and red shale with clay partings and occasional coal (up to 0.3 m thickness) to 177.39 m bgl.
Aquifers and Groundwater Receptors	The Environment Agency (EA) data magic.defra.gov.uk provides the following aquifer classification and designations: • Superficial deposits: River Terrace Deposits 1 and Alluvium are classified as a Secondary A Aquifer. • Bedrock: Pennine Lower Coal Measures Formation and Pennine Middle Coal Measures Formation are classified as a Secondary A Aquifer. • Source Protection Zones: The Site is not in a designated groundwater Source Protection Zone (SPZ). • Groundwater Abstractions: Two licenced groundwater abstractions are recorded within 1km of the Site. These comprise an abstraction for "Pump & Treat: Pollution Remediation" 374 m north-east of the Site associated with a former petrol filling station and an abstraction 449 m north-west of the Site which has revoked license status and associated with manufacturing purposes.



Groundwater Levels and Flow Direction	The available BGS borehole information did not indicate the presence of any groundwater, however, due to the proximity to the River Irwell shallow groundwater is likely to be present within the River Terrace Deposits and Alluvium.
Hydrology	The nearest surface water feature is River Irwell located approximately 5 m south of the Site which flows in a south-easterly direction. According to the Envirocheck® Report, there are three surface water abstractions located within 500 m of the Site. These are associated with the former Intex Yarns works and are considered inactive although the permit end date is not supplied.
Site Topography	The Site topography is relatively flat and gently slopes from north to south. The southern boundary is formed by a flood defence structure which consists of a sheet pile retaining wall in the northern bank of the River Irwell. The wall is exposed between 2 and 3 m above ground level.
Mining & Quarrying	Reference to the Coal Authority on-line viewer (bgs.ac.uk/coalauthority) indicates that the Site is within a Coal Mining Reporting Area, and is within a Development High Risk Area. However, there will be no works below existing ground level and no change of existing levels. Consequently, a Coal Mining Risk Assessment (CMRA) is unlikely to be required under the planning regime. The Envirocheck report records several areas of historical Extractive Industries or Potential Excavations on Site associated with "Unspecified Deposited Material" between 1906 - 1937 and 1950 - 1980.
Ground Stability Hazards	The Envirocheck Report indicates the following hazards in the area of the Site: • Dissolution hazards - no hazard; • Landslide - very low hazard; • Shrinking and swelling clay - very low hazard; • Collapsible ground - no hazard; • Running sands - very low to low hazard; and, • Compressible - no hazard to moderate hazard.
Radon Gas	Public Health England (ukradon.org) data indicates that the Site lies within an area where less than 1% of homes are above the Public Health England recommended "action level" for radon. The Envirocheck® Report indicates that no radon protective measures are necessary in the construction of new buildings or extensions at the Site. A detailed radon assessment falls outside of the scope of this Report, and the requirement for radon mitigation measures in the proposed development should be identified separately to the satisfaction of the Local Authority.

2.3 Sensitive Land Use

Ecological Receptors	It is understood from information provided within the Envirocheck Report, the following are statutory ecological receptors are located within 500 m of the Site: • Areas of Adopted Green Belt, located approximately 330 m north-west;
Heritage Interest	Historic England Records (historicengland.org.uk) indicate that no areas of designated heritage interest are located on or adjacent to the Site.

2.4 Historical Use of the Site & Surrounding Area

2.4.1 Approach

The historical development of the Site and surrounding area has been assessed through a review of historical maps, aerial photographs, internet sources and Google Earth historical satellite imagery. A summary of the key historical Site uses and developments in the surrounding area is presented below. Copies of selected historical maps are included as Appendix E.

2.4.2 Historical Information Review

The following table provides a review of the historical information for the Site, adjacent and surrounding area.

Date	Source	Site Description	Surrounding Area
1851	OS Mapping	The Site appeared to comprise open farmland. An access route appeared to border the western Site boundary.	The areas immediately surrounding the Site were observed to comprise open farmland. The access route bordering the western Site boundary led to Britain Farm approximately 100 m north of the Site. The southern Site boundary bordered the bank of the River Irwell, which appeared to be largely undeveloped on both its north and south banks.
1893 to 1894	OS Mapping	No significant changes observed.	The areas immediately surrounding the north and east of the Site continued to comprise open farmland. Approximately 50 m south-east of the Site was New Bridge Mills (located downstream of the Site on the northern bank of the River Irwell). This development was annotated as a paper works with associated reservoirs, filter bed and chimney. Significant industrial development located on the opposite bank of the river to the south and west of the Site was noted. The following all appeared upstream of the Site on the southern bank of the River Irwell: Bleach and dye works (approximately 100 m west of the Site), oil and tallow works with associated reservoirs (approximately 150 m west of the Site), and chemical works (approximately 40 m south of the Site). Further filter beds were observed downstream of the Site on the southern bank of the River Irwell (approximately 170 m south-east of the Site).
1910	OS Mapping	No significant changes observed	The industrial development located on the opposite bank of the river to the south and west of the Site remained active and was noted to

Date	Source	Site Description	Surrounding Area
			contain tanks and chimneys. A Cotton Mill was also annotated.
1930 to 1937	OS Mapping	No significant changes observed.	No significant changes observed. The Oil and Tallow works began to be annotated Tallow and Candle works.
1957	OS Mapping	The Site was occupied by a bowling green and pavilion in the south-west, and a sports ground to the north. A manhole and is indicated in the south of the Site (MH).	The New Bridge Paper Mills had expanded to the northern side of Dumers Lane, with infrastructure now immediately adjacent to the east of the Site boundary. This infrastructure included buildings, an Electricity Sub Station. The industrial development located on the opposite bank of the river to the south and west of the Site remained active. The previously annotated Bleach and Dye works was now annotated as 'Mercerising', implying treatment of textiles. Settling Tanks were annotated downstream of the Site.
1967		No significant changes observed.	The New Bridge Paper Mills had expanded further along the north-east of the Site boundary. This infrastructure included a new large building with associated tanks.
1983 to 1992	OS Mapping	No significant changes observed.	The industrial development located on the opposite bank of the river to the south and west of the Site remained active. The previously Mercerising works and Candle and Tallow works were now annotated as warehouses and a Fibre Mill. Reservoirs and chimneys remained.
1995	OS Mapping	The Site appeared to have been cleared and comprised open land with an access point in the south-west of the Site.	The western Site boundary was flanked by 'Works' which included a large building.
2000	Historic Aerial imagery	The Site comprised a car park in the northern half of the Site, with a large building and associated smaller buildings in the southern half of the Site.	The demolition of the mills to the south-east of the Site appeared to have commenced.
2005	OS Mapping Google Earth, OS Mapping	No significant changes observed.	The demolition of the paper mills to the south-east of the Site appeared to have completed and a business park comprising several buildings of industrial appearance were noted. Residential development appeared to occupy the former eastern part of the paper mills.

Date	Source	Site Description	Surrounding Area
			The previously annotated 'Works' building along the western Site boundary was now annotated as Warehouse. An additional warehouse was developed to the east of this warehouse, approximately 90m north-east of the Site.
2021	Google Earth, OS Mapping	A mast was annotated in the south-west of the Site. No significant changes observed.	The building along the western Site boundary was now annotated as 'Depot', and the building along the eastern Site boundary was annotated as 'Factory'. The industrial development located on the opposite bank of the river to the south and west of the Site remained active.

2.4.3 Historical Use Summary

Based on a review of the compilation of historical sources dating back to 1851, it appears that the Site appeared to comprise open farmland to 1957. By 1957 the Site was occupied by a bowling green and pavilion in the south-west, and a sports ground to the north with several associated structures. By 2000 the Site was redeveloped and comprised a car park in the northern half of the Site, with a large building and associated smaller buildings in the southern half of the Site.

The surrounding area was also in use as agricultural land to 1851 mapping after which significant industrial development began to the north-east, south-east and on the opposite bank of the river to the south and west of the Site. The industrial development persisted until 2000, after which it underwent progressive development until only a reduced area of industrial development remained south of the Site on the opposite side of the river.

Potentially contaminative land uses identified in the surrounding area include the mills to the north and east of the Site from 1893 mapping to 2000, the works to the west and south of the Site from 1893 mapping to present day and the light industrial / commercial warehouses immediately to the north of the Site from 2000 to present day.

2.4.4 Unexploded Ordnance (UXO)

The Zetica Regional Unexploded Bomb Risk Map for the area of the Site (zeticauxo.com) indicates that there is a low risk of UXO in the area of the Site.

A detailed UXO assessment falls outside of the scope of this Report, and specialist assessment may be required to support future groundworks.

2.5 Environmental Database Review

The Landmark Envirocheck® Report provides a database of environmental information held by various statutory bodies including the EA, Local Authority (LA), Health & Safety Executive (HSE) and Public Health England amongst others. A copy of the Envirocheck Report is provided in Appendix F and the most relevant information is summarised below.

Features On-Site	There are no relevant entries included within the Landmark Envirocheck® Report relating to the Site. There are no BGS, LA and EA registered landfill sites on-Site.
Potentially Contaminative Features Off-Site	The Landmark Envirocheck® Report lists the following pertinent records within 250 m of the Site:

	- Two Discharge Consents operated by United Utilities and associate to a storm sewage overflow. The discharge consents are revoked. - One Integrated Pollution Control relate to J and W Whewell Ltd for the "Acid processes within the Chemical Industry". This has a revoked status; - Three Integrated Pollution Prevention and Control, the nearest of which is located approximately 45 m south-west relate to J and W Whewell Ltd for the Organic Chemicals; Phosphorus Containing Compounds Eg Substituted, Phosphines. This has an "Effective" status and is dated March 2004; - Two Local Authority Pollution Prevention and Controls, the nearest of which is located approximately 60 m east and relates to Bibby & Baron for the coating of metal and plastic processes. The permitted status is revoked; - Ten Pollution Incident to Controlled Waters, the nearest of which located approximately 50 m south of the Site and relates to a Category 3 - Minor Incident associated with the release Miscellaneous - Other (Adhesive to Road) in March 1998; - Five areas of Potentially Infilled Land (water), the nearest of which located approximately 170 m south of the Site and was mapped in 1955; - One Control of Major Accident Hazards Sites (COMAH) located approximately 80 m south-west of the Site and relate to J and W Whewell Ltd. These have an active status; - Fifteen Contemporary Trade Directory Entries (active and inactive), the nearest of which is located approximately 35 m north-east of the Site and relates to plastic products manufacturers (active); - One Commercial Services Points of Interest located approximately 130 m east of the Site and relate to Autosheenpcc (Vehicle Cleaning Services); - Twenty Manufacturing and Production Points of Interest, the nearest two of which is located approximately 40 m north of the Site and relate to Unspecified Works Or Factories; and - Four Public Infrastructure Points of Interest, the nearest two of which is located approximately 50 m south-east of the Site and relate to Weirs, Sluices and Dams. Within the wider area, pertinent entries include a BGS Recorded Landfill Site located approximately 370 m north-west of the Site. There are two historical landfills, the nearest of which is located approximately 490 m south-west of the Site.
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2.6 Planning Review/Regulatory Enquiries

On-line Planning Review	Bury Council www.bury.gov.uk	Date Accessed	13/06/2022
On-Site Applications	A number of planning application records relate the Site, mostly relating to signage and external elevations. The most significant records for the Site comprise: April 1999 - Application Number 35284, application for single and two storey car park.		

	July 1999 - Application Number 35579, application for five free standing plant room buildings and an external plant compound adjacent to existing building. No documentation is available on Bury Council's website regarding Conditions of the Decision Notice or any submissions relevant to land contamination. Decisions for both applications are recorded as 'Approve with Conditions'.
Off-Site Applications	Flood defence works are represented in several planning applications in the vicinity of the Site. These flood defence works planning applications have been screened for any pertinent information related to ground conditions or land contamination and no additional potentially contaminative activities or other information pertinent to this assessment was identified from these records.
Part 2A of the Environmental Protection Act (EPA) 1990	Bury Council's contaminated land officer was contacted for information on the Site, however, no response has been received at the time of report issue. However, given the known history and current use of the Site and surrounding area, it is considered that the Site would be considered a low priority for inspection under Part 2A.

2.7 Previous Reports

No third party reports have been made available to review from the Client or sourced through a review of planning application records.

3.0 Conceptual Site Model

3.1 Introduction

A Conceptual Site Model (CSM) represents the relationships between contaminant sources, pathways and receptors, to support the identification and assessment of contaminant linkages.

3.2 Overall Site Sensitivity

The Site is considered to be of a low to moderate environmental sensitivity given the presence of the Secondary A Aquifer in the superficial deposits, the nearby surface water course, the absence of a source protection zone or potable water supply abstractions and in consideration to the predominantly commercial/industrial use of the Site and wider surrounding industrial / commercial estate area.

3.3 Potential Contamination Sources

A source is a contaminant or pollutant that is in, on or under the land that has the potential to cause harm or pollution.

The Site is currently occupied by a commercial unit with associated offices, yard and vehicle parking area developed in circa 1999. During a Site reconnaissance no significant potential sources of contamination were identified.

The following identified potential contamination sources are considered in the CSM:

- Residual contaminants from the bowling green and associated pavilion – potentially containing metals and metalloids, petroleum hydrocarbons PAHs and asbestos-containing materials from the usage and/or demolition of the former building;

3.4 Potential Pathways

A pathway is a route by which a receptor is or could be affected by contaminant.

The potential pathways are considered to be as follows:

- Direct contact, ingestion or inhalation of soil bound contaminants / dust during or following redevelopment.
- Inhalation of organic vapours associated with contamination.
- Migration of ground gas / vapours into on-Site buildings causing asphyxiation or risk of explosion.
- Leaching of contamination into groundwater followed by migration of groundwater to the wider groundwater environment or discharge to surface waters.
- Direct contact between aggressive ground conditions and new infrastructure.

3.5 Potential Receptors

A receptor is something that could be adversely affected by a contaminant, for example a person, controlled waters, an organism, an ecosystem, or Part 2A receptors such as buildings crops or animals.

Relevant potential receptors are considered to include:

- Construction workers;
- Third parties during construction (adjacent Site users and adjacent residents);
- Future Site users and maintenance workers;
- The River Irwell water course adjacent of the south of the site;
- The underlying superficial aquifers (Secondary A); and
- The Built Environment (new buildings and infrastructure / utilities).

Contaminant Linkage Assessment					
Source(s)	Pathway(s)	Receptor(s)	Risk	Comments	Requires Investigation
Potentially contaminated soils and/or groundwater located beneath the Site.	Direct contact/ ingestion and inhalation of dust and vapours.	Site users.	Low Risk	Whilst significant potential sources of contamination have not been identified associated with the current use of the Site, there remains the potential for localised contamination associated with current and historical Site uses. However, given the future commercial use of the Site, which is predominantly covered by buildings and hardstanding, the risk to Site users is considered to be low. No significant potential sources of volatile contamination have been identified.	No
	Direct contact, ingestion and inhalation of dust and vapours.	Maintenance workers during any future sub-surface works at the Site.	Low Risk	Site workers may become exposed to localised contaminated soils and shallow groundwater during intrusive groundworks undertaken at the Site, however no works to break ground understood to be required therefore this risk is considered low. Safe working practices should be undertaken and appropriate Personal Protective Equipment (PPE) should be used to manage the risk.	No
	Leaching of contaminants and vertical migration.	Groundwater beneath the Site.	Low Risk	The Site is situated in an area of low to moderate groundwater and ecological sensitivity. Secondary A and Principal Aquifers underlie the Site, however there are no sensitive groundwater abstractions recorded in the vicinity. Historical industrial land use of the surrounding area is likely to have reduced the quality of groundwater across the wider area; on this basis it is unlikely that regulators would identify the Site as a specific source of groundwater contamination. Buildings and hardstanding cover will limit the infiltration of surface water, therefore reducing the potential for leaching and mobilisation of soil contamination. The risk is considered to be low.	No
	Permeation of hydrocarbons	Water supply pipes.	Low Risk	Hydrocarbons, especially aromatics and chlorinated solvents are known to permeate plastic pipes, particularly when	No

Contaminant Linkage Assessment					
Source(s)	Pathway(s)	Receptor(s)	Risk	Comments	Requires Investigation
	through plastic pipe work.			encountered at high concentrations. Given the absence of evidence of significant fuel or oil sources, the risk of contamination migrating into areas containing water supply pipes is considered to be low.	
	Lateral migration through any groundwater beneath the Site.	Off-Site receptors (neighbouring properties/ users).	Low Risk	Whilst significant potential sources of contamination have not been identified associated with the current use of the Site, there remains the potential for localised contamination associated with current and historical Site uses. However, given the nature to the Site, almost entirely hardcover, the potential for infiltration and leaching of any contaminants is reduced. Sensitive off-Site receptors have not been identified.	No
Ground gas.	Vertical and lateral migration of ground gases.	Site users & the buildings on-Site.	Low Risk	Whilst ground gases could be present associated with any Made Ground, given the limited historical development, a significant thickness of Made Ground beneath the building is unlikely.	No
Potentially contaminated soil and groundwater from off-Site sources.	Lateral migration and subsequent inhalation.	Groundwater beneath the Site and future Site users.	Low Risk	The Site is located within a commercial/light industrial setting, likely resulting in some impact to the wider groundwater quality of the Site area, however, significant potential off-Site sources have not been identified.	No

4.0 Conclusions & Recommendations

4.1 Land Contamination Risks and Liabilities

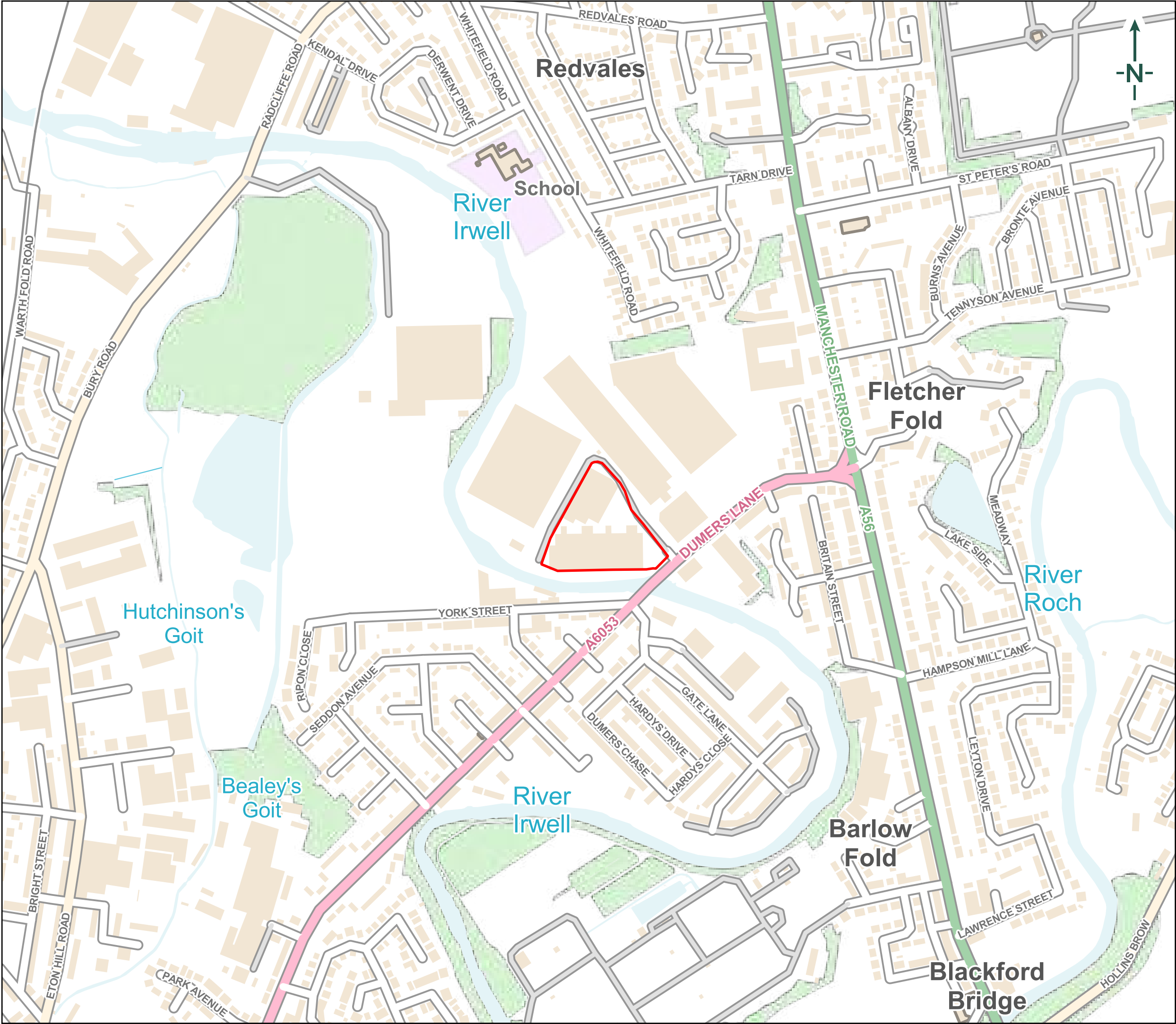
Uncertainty and Data Gaps	This assessment is based on desk study information only. No Site specific ground investigation data has made available for review.
Soils	Significant widespread soil contamination is not anticipated. There remains the potential for localised contamination associated with current and historical Site uses.
Groundwater	Historical industrial land use of the surrounding area is likely to have reduced the quality of groundwater across the wider area. Buildings and hardstanding cover will limit the infiltration of surface water, therefore reducing the potential for leaching and mobilisation of soil contamination. The risk is considered to be low.
Ground Gas	Given the limited historical development it is considered unlikely that a significant ground gas risk exists.
Volatile Organic Vapours	No significant potential sources of volatile contamination have been identified.
Potential Contaminated Land Development Risks	Widespread contamination is considered unlikely and the preliminary risk assessment has identified a low risk of soil/groundwater contamination and hazardous ground gas at the Site. Asbestos may be present within the Made Ground.

4.2 Recommendations and Other Development Considerations

Ground Investigation Recommendations	Delta-Simons has completed a land contamination risk assessment based upon available information. Significant potential sources of contamination have not been identified associated with the current land use, however, soil and groundwater contamination may be present associated with the historical use of the Site and the surrounding area. Whilst the presence of localised contamination cannot be completely ruled out, it is considered that the risk of significant possible contaminant linkages to exist in the context of the Site remaining in its current use is low. Delta-Simons considers that intrusive investigation of the Site in its current state is not required.
Other Development Considerations	The following development considerations/potentially pertinent factors could be anticipated with respect the site: • Pre-demolition asbestos survey; • Ecological surveys; • Flood Risk Assessment;

Figures

Figure 1 – Site Location Map



Legend

- Site Boundary
- Site Boundary

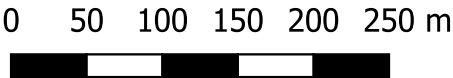
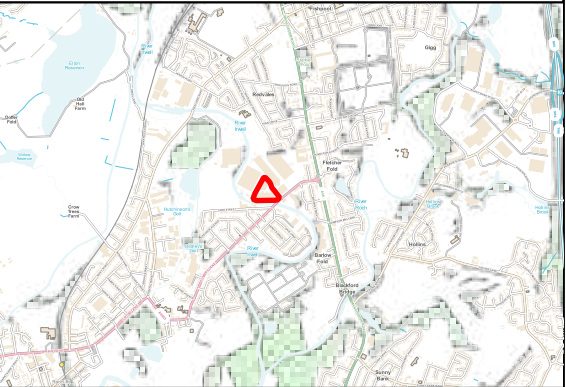


Figure Site Location Map		
Job Dumers Lane, Bury		
Client Dwyer Asset Management Ltd		
Figure No. 1	Revision 1	Date 16 June 2022
Drawn by GM	Checked by PS	Scale 1:5,000
Job No. 22-1127.01		



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Appendices

Appendix A - Limitations

Limitations

This Report was prepared by Delta-Simons Ltd (Delta-Simons) for the sole and exclusive use of the Client and for the specific purpose for which Delta-Simons was instructed. Nothing contained in this Report shall be construed to give any rights or benefits to anyone other than the Client and Delta-Simons, and all duties and responsibilities undertaken are for the sole and exclusive benefit of the Client and not for the benefit of any other party. Delta-Simons does not intend, without its written consent through a formal letter of reliance or warranty, for this Report to be disseminated to any party other than the named Client or to be used or relied upon by any party other than the named Client. Use of the Report by any other party is unauthorised and such use is at the sole risk of the user. Any party using or relying upon this Report, other than the Client, agrees by virtue of its use to indemnify and hold harmless Delta-Simons from and against all claims, losses and damages (of whatsoever nature and howsoever or whensoever arising), arising out of or resulting from the performance of the work by Delta-Simons. Unless explicitly agreed otherwise, in writing, this Report has been prepared under Delta-Simons' Standard Terms and Conditions as included within our proposal to the Client.

The recommendations contained within this Report represent Delta-Simons professional opinions, based upon the information detailed within the Report, exercising the reasonable skill and care to be expected of a professional consultant holding itself out as having the competence, experience and resources necessary for the purpose of carrying out similar work in scope and character to the services performed. The Report needs to be considered in the light of the proposal and associated limitations of scope. The Report needs to be read and considered in full and isolated sections cannot be used without full reference to other elements of the report and any previous works referenced within the Report.

Where Delta-Simons has obtained, reviewed and evaluated information in preparing this Report from the Client and others and Delta-Simons conclusions, opinions and recommendations has been reasonably determined using this information, Delta-Simons does not warrant the accuracy of the third-party information provided to it and cannot be responsible for any opinions which Delta-Simons has expressed, or conclusions which it has reached in reliance upon information which is subsequently proven to be inaccurate.

Site surveys document the conditions encountered at the time of survey only and conditions may change due to natural processes or human intervention. As such, surveys represent an assessment at a specific point in time and Delta-Simons cannot be responsible for adverse conditions which arise or become apparent after the time of the survey or for conditions which sit outside the scope for which the survey or Report was commissioned.

Where intrusive investigations have been completed, information, comments and opinions given in this report are based on the ground conditions encountered during the site work period and on the results of laboratory and field tests performed during the investigation. Ground conditions are inherently variable such that no investigation can be exhaustive to the extent that all adverse conditions are revealed. Conditions may therefore be present beneath the site that were not apparent in the data reviewed or obtained as part of this assessment. It should be noted that groundwater levels vary due to seasonal and other effects and may at times differ to those measured during the investigation. Delta-Simons does not warrant or guarantee that the Site is free of hazardous or potentially hazardous materials or conditions. Where risk assessment is undertaken, this is based upon the standards, guidance and common practice at the time of the assessment and Delta-Simons cannot be responsible for conditions which become apparent following changes in guidance or practice or advancements in scientific knowledge which change the position in relation to assessment of risk.

No aspect of this Report constitutes a design. Where this information is used in design, the designer should verify the information has been used appropriately.

Where budgets are prepared and presented within the Report, these are for information only to indicate the likely magnitude of a cost and do not represent an invitation to treat for the works. All budgets and programmes presented should be reviewed and verified by appropriately qualified and experienced independent Project Managers and Cost Consultants.

Appendix B – Data Sources

In completing this Assessment, Delta-Simons has utilised the following data sources and third party information:

- Current and Historical Ordnance Survey (OS) maps;
- British Geological Survey (BGS) data;
- Environment Agency (EA) online data;
- Coal Authority (CA) online data;
- A Landmark Envirocheck® Report for the Site (Ref. #####), dated #####;
- Historical Maps included as part of the Envirocheck Report; and
- Information provided by Bury Council.

Appendix C – Risk Definitions

Contaminated Land Risk Definitions

The following methodology is based on the methodology presented in CIRIA C552 Contaminated Land Risk Assessment: A Guide to Good Practice 2001. It requires the classification of the:

Magnitude of the potential consequence (severity) of the Risk occurring: and

Magnitude of the Probability (likelihood) of the Risk occurring.

The classifications are then compared to indicate the risk presented by each pollutant linkage.

Consequence to Receptor Definition Matrix

	Human Health	Controlled Waters	Buildings/Services
Severe Consequence	Acute or chronic permanent impact on human health.	Sensitive controlled water pollution ongoing, or just about	Catastrophic collapse
Medium Consequence	Chronic permanent impact on human health	Gradual pollution of sensitive controlled water	Degradation of materials
Mild Consequence	Chronic temporary impact on human health	Gradual pollution of non-sensitive controlled water	Damage to building rendering it unsafe to occupy (e.g. foundation damage resulting in instability).
Minor Consequence	Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc).	Slight discoloration of water	Easily repairable effects of damage to buildings, structures and services, i.e. discoloration of concrete

Probability Definitions

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

Standard Risk Matrix

		Consequence/Magnitude of impact			
		Severe	Medium	Mild	Minor
Probability	High	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

Classified Risks and Likely Action

Significance Level	Definition/Comments
Very High Risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required. Demonstrable contaminated land situation, highest threat & liability level, urgent action recommended.
High Risk	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the longer term. Likely contaminated land situation, risk assessment and action recommended.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, if it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term. Plausible contaminated land situation, risk assessment and possible action recommended.
Low Risk	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild. Unlikely contaminated land situation, possible risk assessment and possible action.
Very Low Risk	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe. Negligible risk, no action recommended except vigilance for changes in conditions.

Geotechnical Risk Classification

The geohazards listed in the report within Section 4 follow guidance presented in Clayton, C.R.I. (2001) *Managing Geotechnical Risk*, Thomas Telford and the Highways Agency document CD622 '*Managing Geotechnical Risk*' (2008) which aims to identify and manage the geotechnical risks associated with a scheme throughout its lifespan, from planning to construction to maintenance.

For each geohazard the probability of the hazard occurring (P) has been considered together with the impact it would have (I) if it were to happen to calculate the risk rating between 1 and 25.

Risks that fall within Moderate, Significant and Severe categories below are considered to be *substantial* and are therefore listed within the report.

Probability	(P)	X	Impact	(I)	=	(R)	Risk
Very Likely (VLk)	5		Very High (VH)	5		20 - 25	Severe
Likely (Lk)	4		High (H)	4		15 - 19	Substantial
Plausible (P)	3		Medium (M)	3		10 - 14	Moderate
Unlikely (U)	2		Low (L)	2		5 - 9	Minor
Very Unlikely (VU)	1		Very Low (VL)	1		1 - 4	Negligible

Appendix D - Site Photographs

Site Photographs



Photograph 1 – Building entrance (from unnamed road) and carpark.



Photograph 2 – Building entrance and carpark



Photograph 3 - Sheet pile retaining wall structure (southern boundary)



Photograph 4 - Sheet pile retaining wall structure (south-western boundary)



Photograph 5 - Offices



Photograph 6 - Corridor and offices



Photograph 7 - Site entrance and carpark beyond



Photograph 8 - Canteen



Photograph 9 - Open space area from single storey mezzanine (southern side)



Photograph 10 - Open space area from single storey mezzanine (northern side)



Photograph 11 – Single storey mezzanine from ground floor



Photograph 12 – Toilets (ground floor)



Photograph 13 - Inert Gas Fire Suppression System room (ground floor)



Photograph 14 - General switchboard (ground floor)



Photograph 15 - Switchboard (open space ground floor)



Photograph 16 - Northern plantroom (third floor)



Photograph 16 – Southern plantroom (third floor)

Appendix E - Historical Mapping

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

	Gravel Pit		Sand Pit		Other Pits
	Quarry		Shingle		Orchard
	Osiers		Reeds		Marsh
	Mixed Wood		Deciduous		Brushwood
	Fir		Furze		Rough Pasture
	Arrow denotes flow of water		Trigonometrical Station		
	Site of Antiquities		Bench Mark		
	Pump, Guide Post, Signal Post		Well, Spring, Boundary Post		
	•285 Surface Level				
	Sketched Contour		Instrumental Contour		
	Main Roads		Minor Roads		
	Sunken Road		Raised Road		
	Road over Railway		Railway over River		
	Railway over Road		Level Crossing		
	Road over River or Canal		Road over Stream		
	Road over Stream				
	County Boundary (Geographical)				
	County & Civil Parish Boundary				
	Administrative County & Civil Parish Boundary				
	County Borough Boundary (England)				
	County Burgh Boundary (Scotland)				
	Rural District Boundary				
	Civil Parish Boundary				

Ordnance Survey Plan 1:10,000

	Chalk Pit, Clay Pit or Quarry		Gravel Pit
	Sand Pit		Disused Pit or Quarry
	Refuse or Slag Heap		Lake, Loch or Pond
	Dunes		Boulders
	Coniferous Trees		Non-Coniferous Trees
	Orchard		Scrub
	Bracken		Heath
	Marsh		Reeds
	Building		Glasshouse
	Sloping Masonry		Pylon
	Cutting		Embankment
	Road Under		Road Over
	Level Crossing		Foot Bridge
	Standard Gauge Multiple Track		Standard Gauge Single Track
	Siding, Tramway or Mineral Line		Narrow Gauge
	Geographical County		Administrative County, County Borough or County of City
	Municipal Borough, Urban or Rural District, Burgh or District Council		Borough, Burgh or County Constituency
	Civil Parish		
	BP, BS Boundary Post or Stone		Police Station
	Church		Post Office
	Club House		Public Convenience
	Fire Engine Station		Public House
	Foot Bridge		Signal Box
	Fountain		Spring
	Guide Post		Telephone Call Box
	Mile Post		Telephone Call Post
	Mile Stone		Well

1:10,000 Raster Mapping

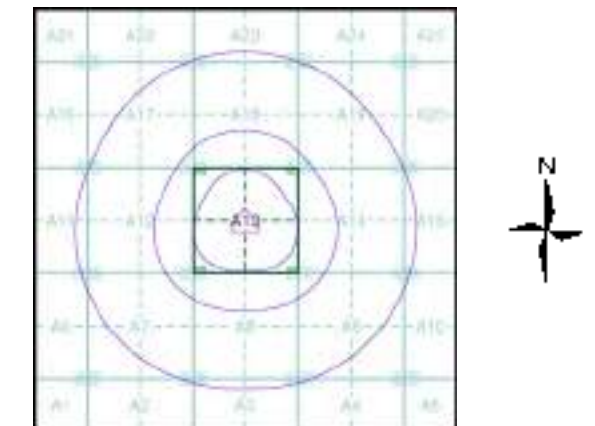
	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
	Area of wooded vegetation		Non-coniferous trees
	Non-coniferous trees (scattered)		Coniferous trees
	Coniferous trees (scattered)		Positioned tree
	Orchard		Coppice or Osiers
	Rough Grassland		Heath
	Scrub		Marsh, Salt Marsh or Reeds
	Water feature		Flow arrows
	Mean high water (springs)		Mean low water (springs)
	Telephone line (where shown)		Electricity transmission line (with poles)
	Bench mark (where shown)		Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)		Pylon, flare stack or lighting tower
	Site of (antiquity)		Glasshouse
	General Building		Important Building



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1848 - 1851	3
Lancashire And Furness	1:10,560	1894 - 1895	4
Lancashire And Furness	1:10,560	1910 - 1911	5
Lancashire And Furness	1:10,560	1923 - 1931	6
Lancashire And Furness	1:10,560	1932	7
Lancashire And Furness	1:10,560	1938	8
Ordnance Survey Plan	1:10,000	1965	9
Ordnance Survey Plan	1:10,000	1974	10
Manchester	1:25,000	1975	11
Ordnance Survey Plan	1:10,000	1980 - 1983	12
Ordnance Survey Plan	1:10,000	1989	13
Ordnance Survey Plan	1:10,000	1992	14
10K Raster Mapping	1:10,000	1999	15
10K Raster Mapping	1:10,000	2006	16
VectorMap Local	1:10,000	2021	17

Historical Map - Slice A



Order Details

Order Number: 296205844_1_1
Customer Ref: 22-1127.01
National Grid Reference: 380180, 408500
Slice: A
Site Area (Ha): 1.52
Search Buffer (m): 1000

Site Details

Tesco Mobile Customer Care, Cellnet Building, Dumers Lane, BURY, BL9 9QL



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

Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings Military and Industrial Buildings

Military and Communication Areas Subway Entrance

Fireproof Building Prominent Fireproof Building

Non-fireproof Building Non-fireproof Building (non-dwelling)

Factory, mill, and flour mill, with chimneys Factory, mill, and flour mill, without chimneys

Power Station, drawn to scale Hydroelectric Power Station

Radio Station, drawn to scale Telephone Station, drawn to scale

Abandoned Open-pit Mine or Quarry Open-pit Salt Mine

Pit Oil Deposit or Well Oil Seepage

Tailings Pile Fuel Storage Tanks Natural Gas Tank

Bench Mark Drill Hole Burial Mound Triangulation Point on Burial Mound

Single-track Railroad Double-track Railroad and Station Building

Coniferous Forest Deciduous Forest Mixed Forest

Lawns Citrus Orchard Wet Ground Scattered Vegetation

243.8 Values for prominent elevations

186.0 Numbers for spot elevations, depth soundings, contour lines, etc.

0.2 Velocity of the current, width of river bed, depth of river

180/12 Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	Ъ (-)
Д д (D)	Л л (L)	У у (U)	Ы (Y)
Е е (E)	М м (M)	Ф ф (F)	Ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings Military and Industrial Buildings

Military and Communication Areas Subway Entrance

Partly Demolished Buildings Demolished Buildings

Built-Up Area with Fireproof Buildings Predominant Built-Up Area with Non-Fireproof Buildings Predominant

Individual Fireproof Building Prominent Industrial Building

Individual Dwelling, Fireproof Ruins of an Individual Dwelling

Factory or Mill Chimney Factory or Mill with Chimney Factory or Mill without Chimney Mine or Open Pit Mine

Operating Shaft or Mine Non-Operating Shaft or Mine Salt Mine Tailings Pile

Pit Stone Quarry Gas Pump or Service Station Fuel Storage or Natural Gas Tank

Oil or Natural Gas Derrick Small Hydroelectric Power Station Power Station Transformer Station

Cemetery Burial Mound (height in metres) Triangulation Point on Burial Mound Triangulation Point

Bench Mark Bench Mark (monumented) Telegraph Office Telephone Station

Radio Station Radio Tower Airfield or Seaplane Base Landing Strip

Telegraph/Telephone Lines Main Highway Highway under Construction Improved Dirt Road (former truck road)

Double-track Railroad with First Class Station Railroad Under Construction

Shore Embankment River or Ditch with Embankment Direction and velocity of current Water Gauge Water Level Mark

Well Water Reservoir or Rain Water Pit Spring Isobath with value

Heavy (Index) Contour Line Contour Line and Value Half Contour Line Spot Elevation Value

Coniferous Deciduous Mixed Scrub

Key to Numbers on Mapping

SD80_Manchester

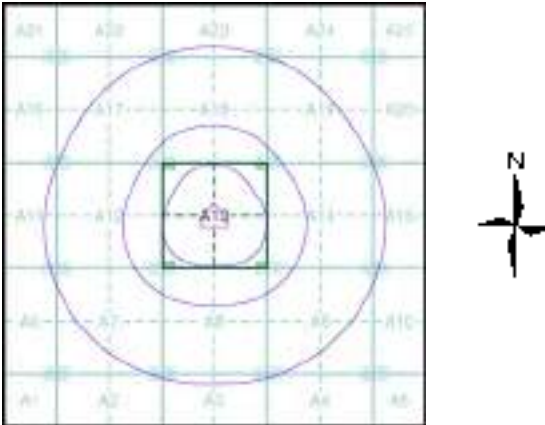
No.	Description
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Historical Mapping & Photography included:

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Lancashire And Furness	1:10,560	1894 - 1895	4
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Manchester	1:25,000	1975	12
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Ordnance Survey Plan	1:10,000	1992	15
10K Raster Mapping	1:10,000	1999	16
10K Raster Mapping	1:10,000	2006	17
VectorMap Local	1:10,000	2021	18

Russian Map - Slice A



Order Details

Order Number: 296205844_1_1
Customer Ref: 22-1127.01
National Grid Reference: 380180, 408500
Slice: A
Site Area (Ha): 1.52
Search Buffer (m): 1000

Site Details

Tesco Mobile Customer Care, Cellnet Building, Dumers Lane, BURY, BL9 9QL



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

Lancashire And Furness

Published 1894 - 1895

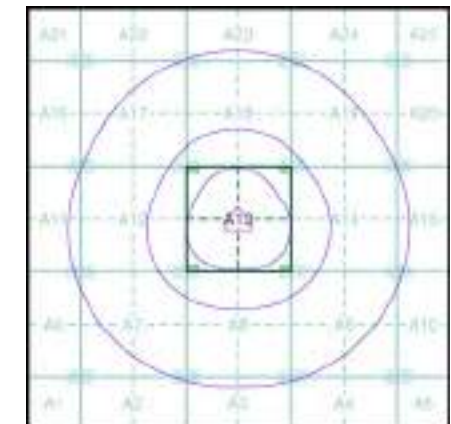
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

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095NE 1895 1:10,560	096NW 1894 1:10,560

Historical Map - Slice A

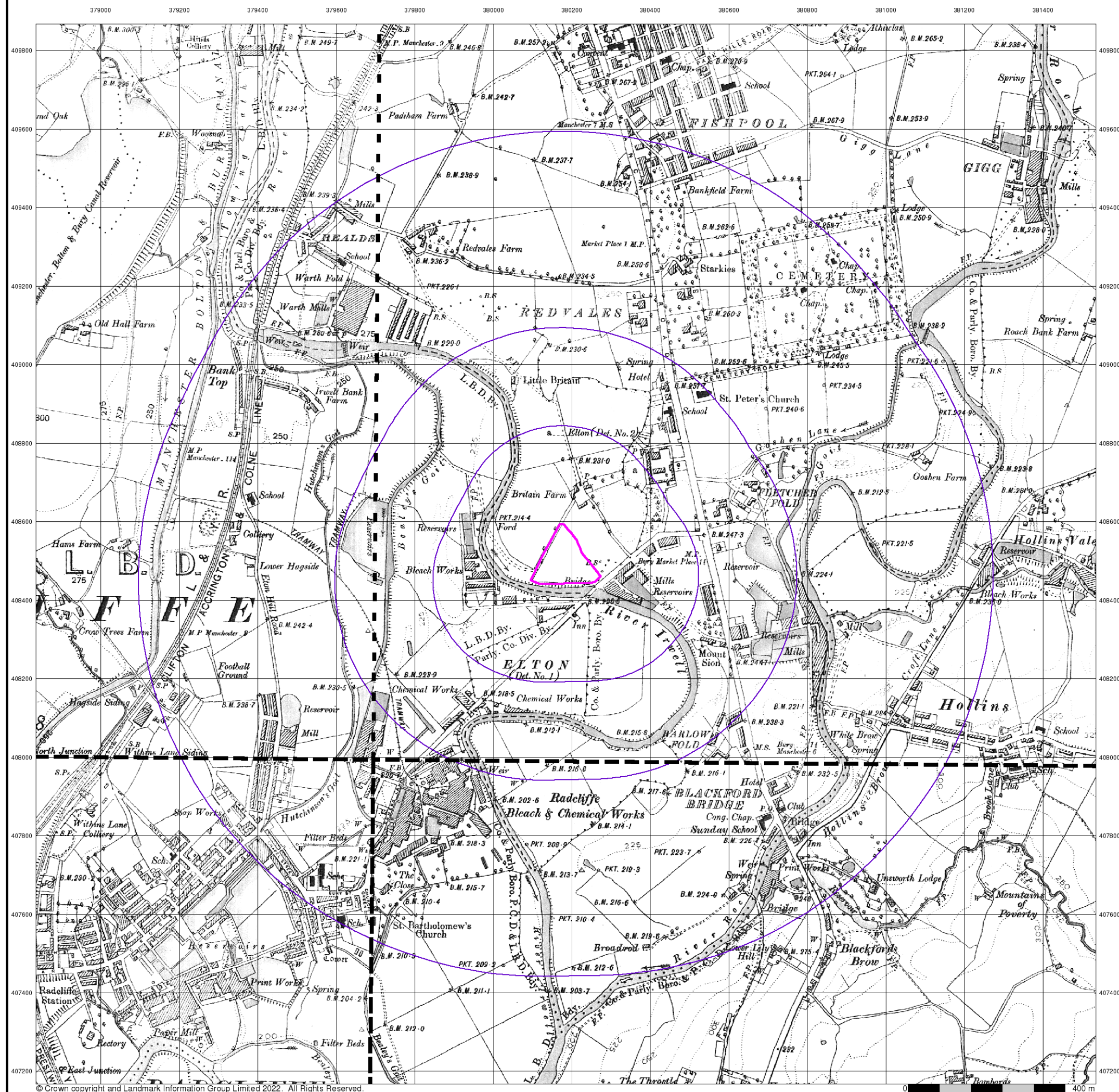


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Customer Ref: 22-1127.01
National Grid Reference: 380180, 408500
Slice: A
Site Area (Ha): 1.52
Search Buffer (m): 1000

Site Details

Tesco Mobile Customer Care, Cellnet Building, Dumers Lane, BURY, BL9 9QL



Lancashire And Furness

Published 1910 - 1911

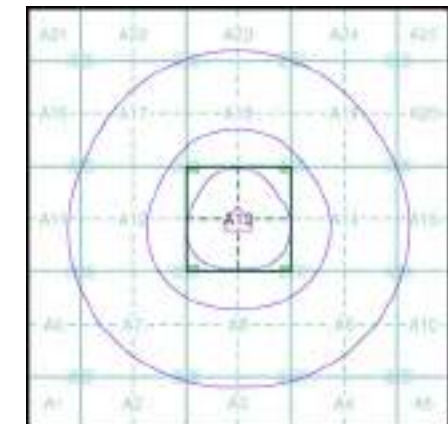
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps.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

Map Name(s) and Date(s)

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095NE 1910 1:10,560	096NW 1910 1:10,560

Historical Map - Slice A

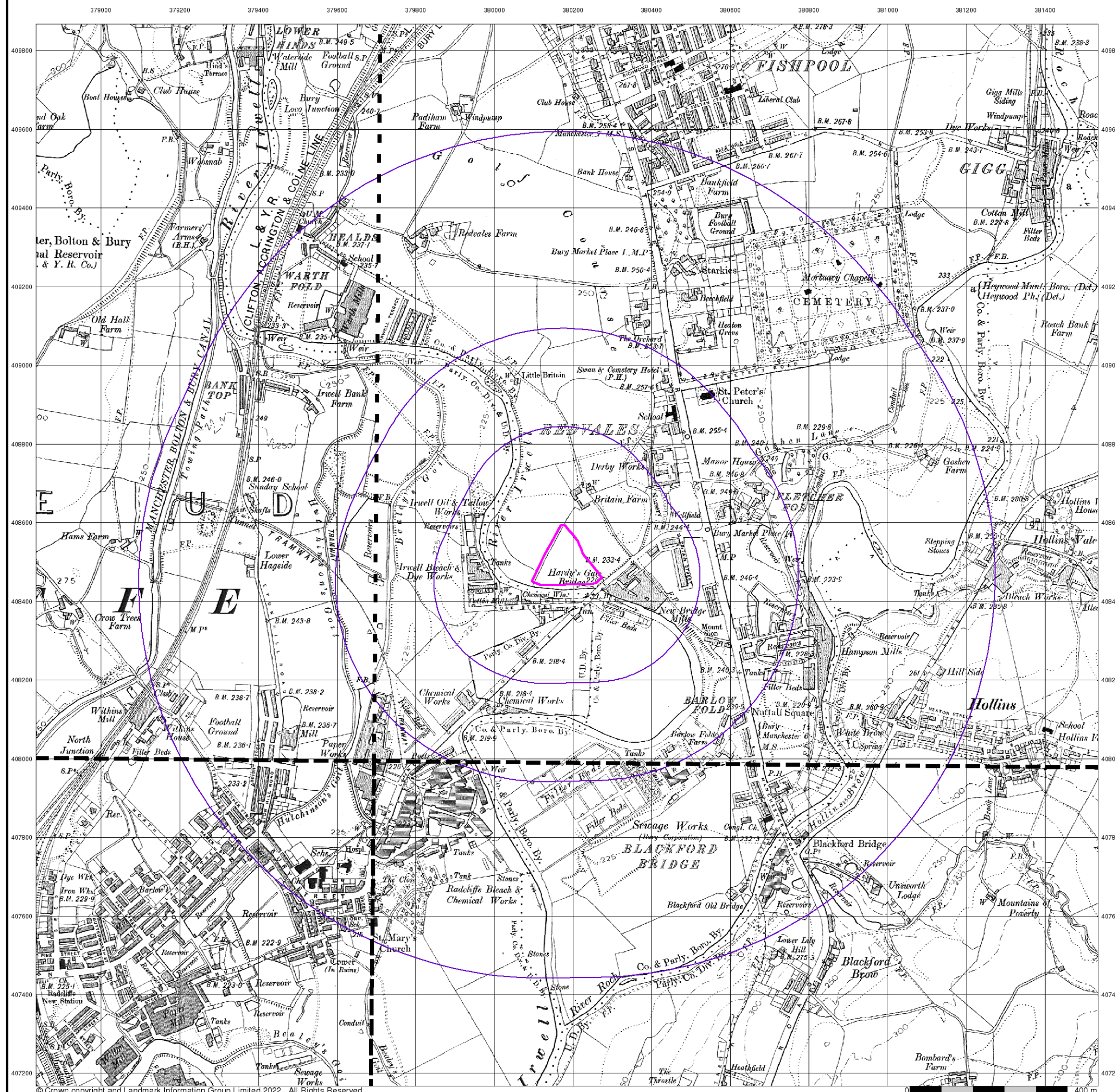


Order Details

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Customer Ref: 22-1127.01
National Grid Reference: 380180, 408500
Slice: A
Site Area (Ha): 1.52
Search Buffer (m): 1000

Site Details

Tesco Mobile Customer Care, Cellnet Building, Dumers Lane, BURY, BL9 9QL



Lancashire And Furness

Published 1923 - 1931

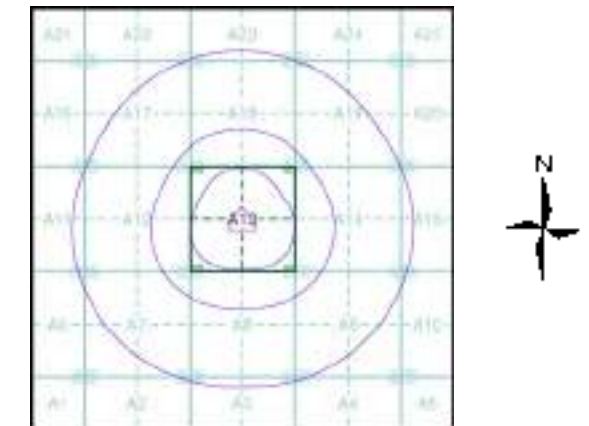
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

087SE 1931 1:10,560	088SW 1931 1:10,560
095NE 1930 1:10,560	096NW 1923 1:10,560

Historical Map - Slice A

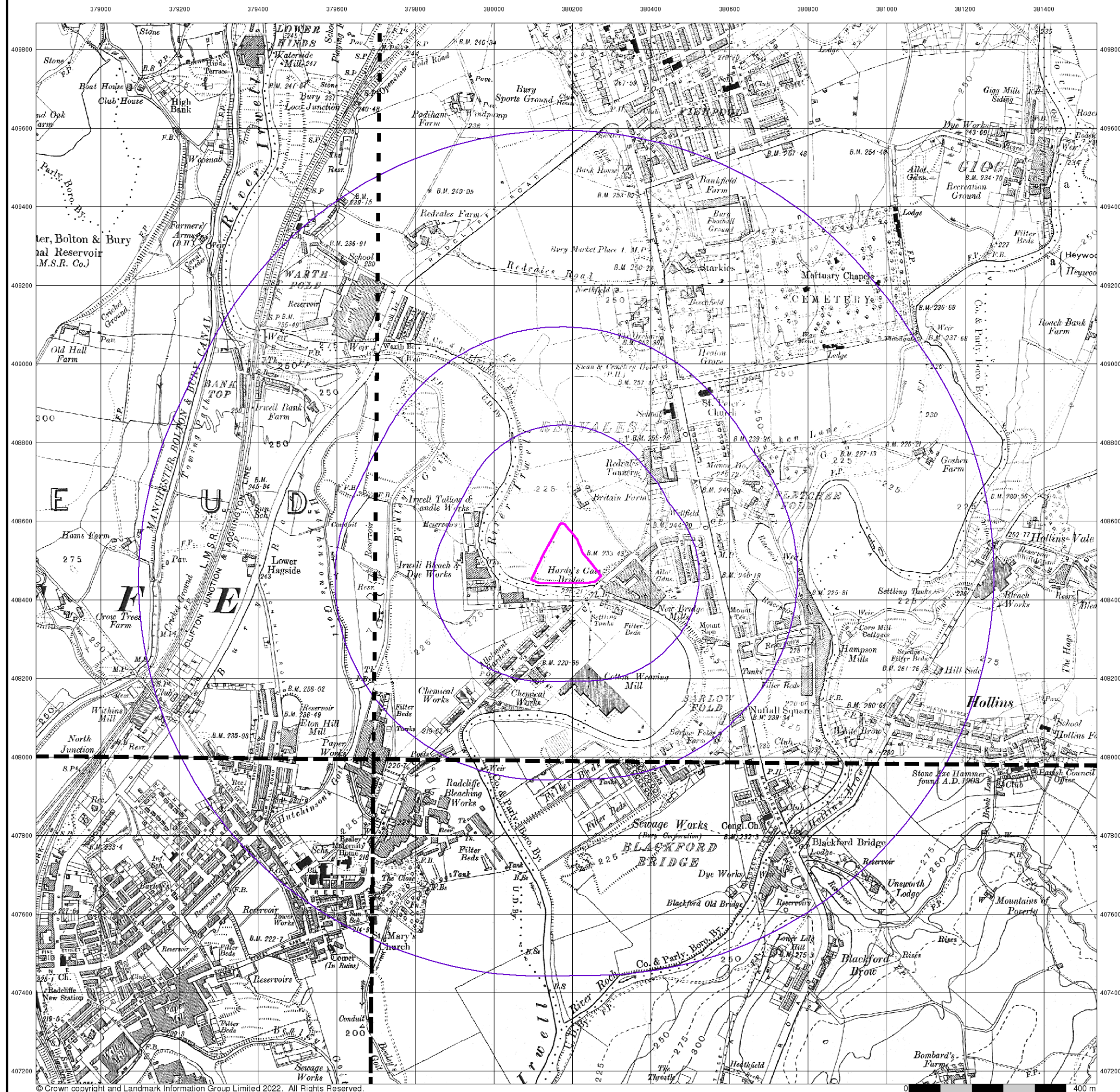


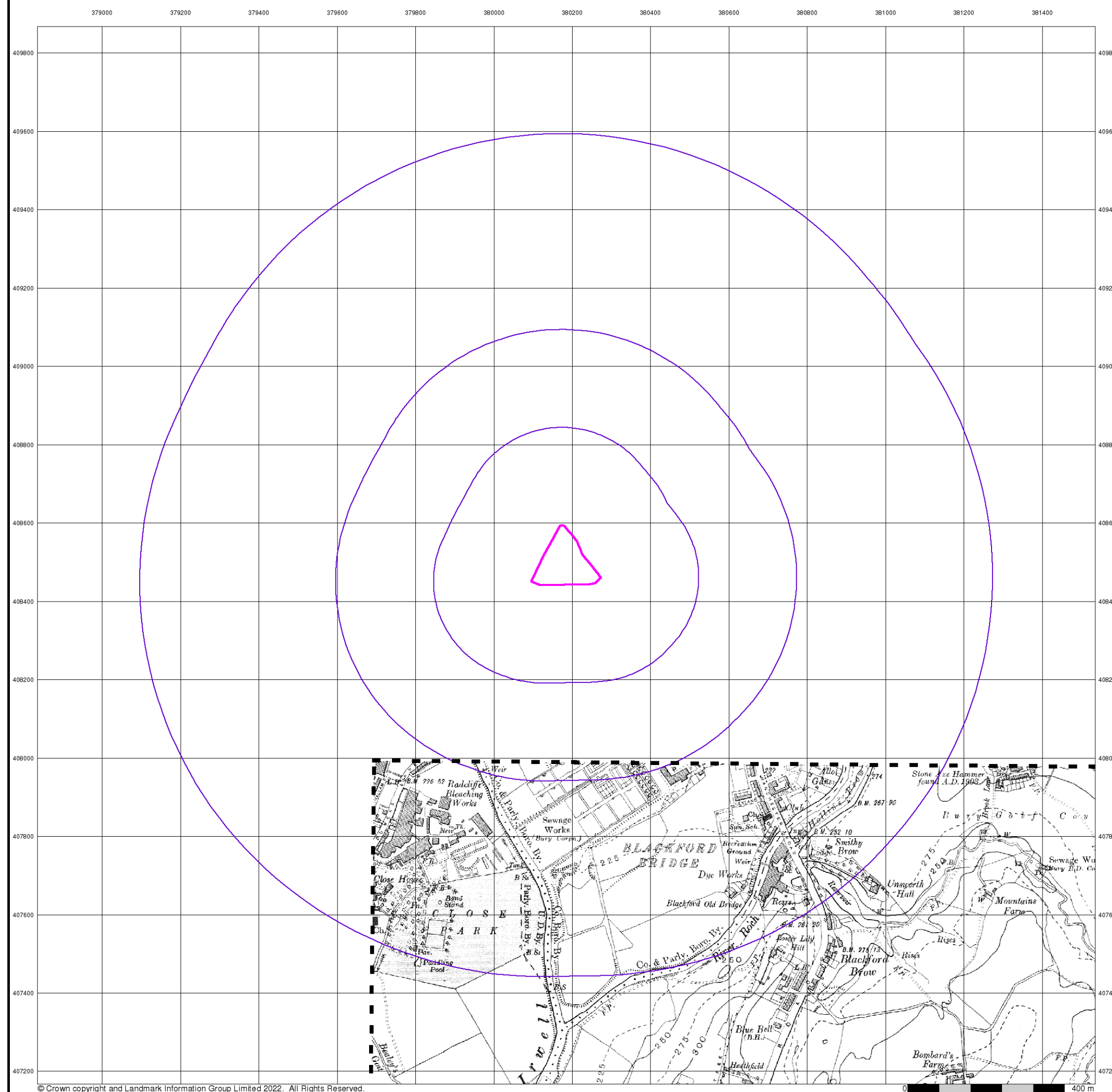
Order Details

Order Number: 296205844_1_1
 Customer Ref: 22-1127.01
 National Grid Reference: 380180, 408500
 Slice: A
 Site Area (Ha): 1.52
 Search Buffer (m): 1000

Site Details

Tesco Mobile Customer Care, Cellnet Building, Dumers Lane, BURY, BL9 9QL





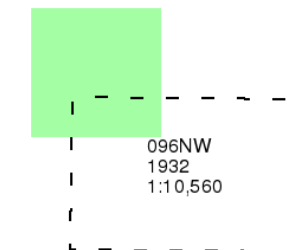
Lancashire And Furness

Published 1932

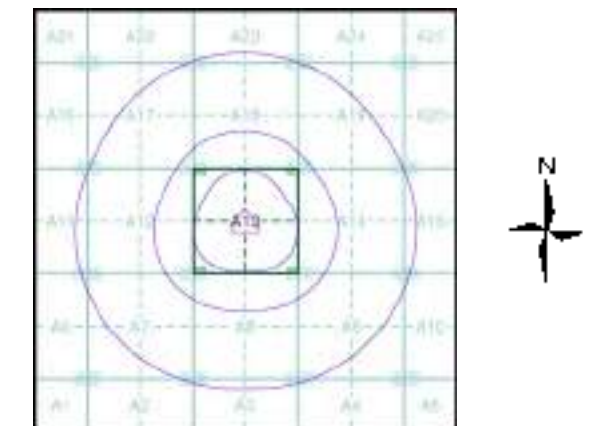
Source map scale - 1:10,560

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Map Name(s) and Date(s)



Historical Map - Slice A



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BURY, BL9 9QL



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

Lancashire And Furness

Published 1938

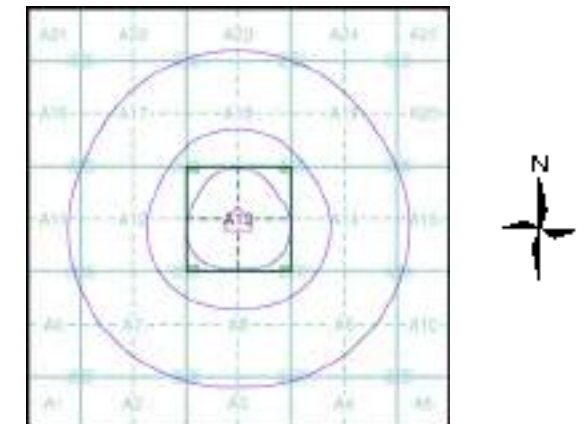
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

087SE 1938 1:10,560	088SW 1938 1:10,560
095NE 1938 1:10,560	096NW 1938 1:10,560

Historical Map - Slice A

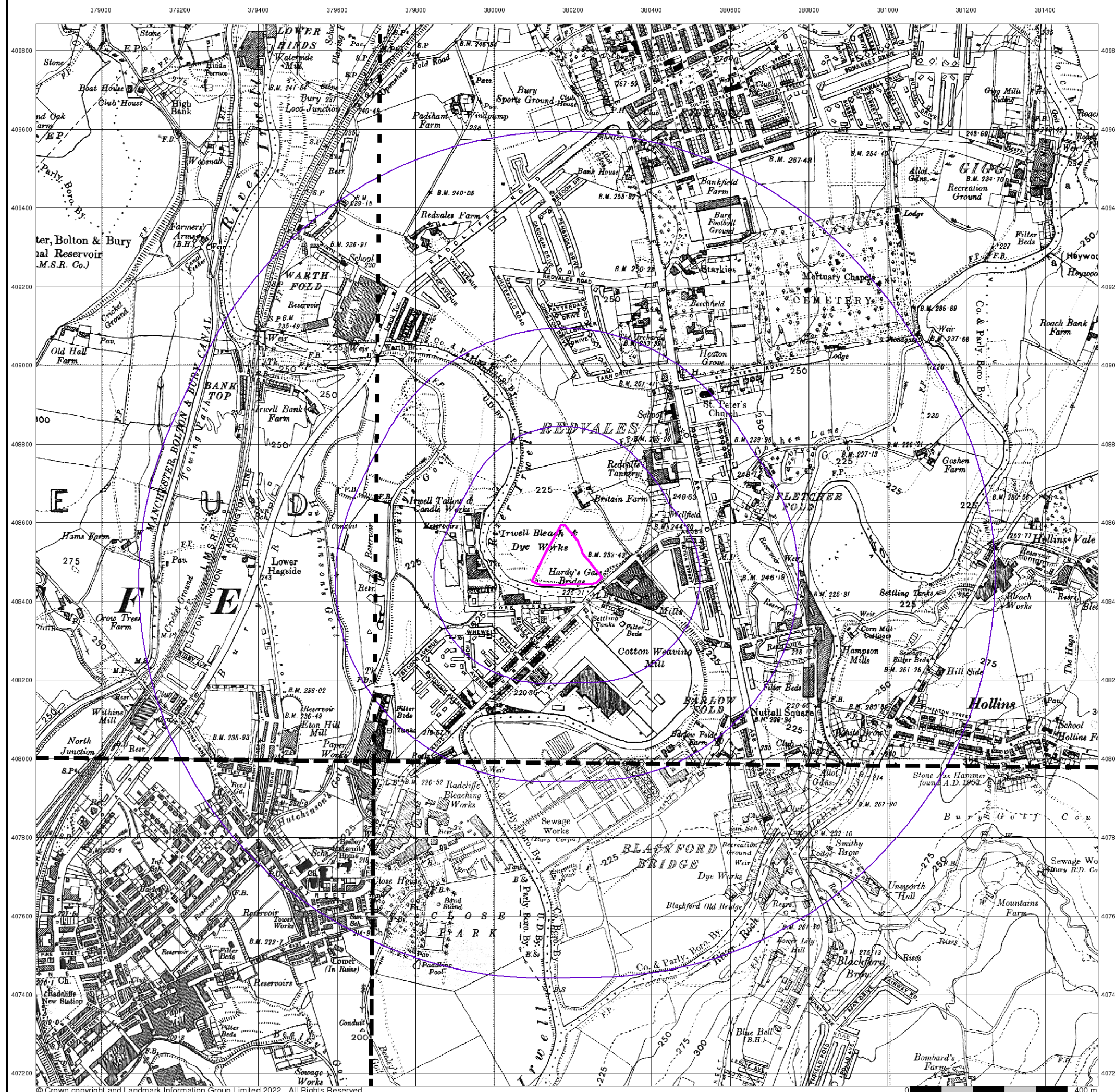


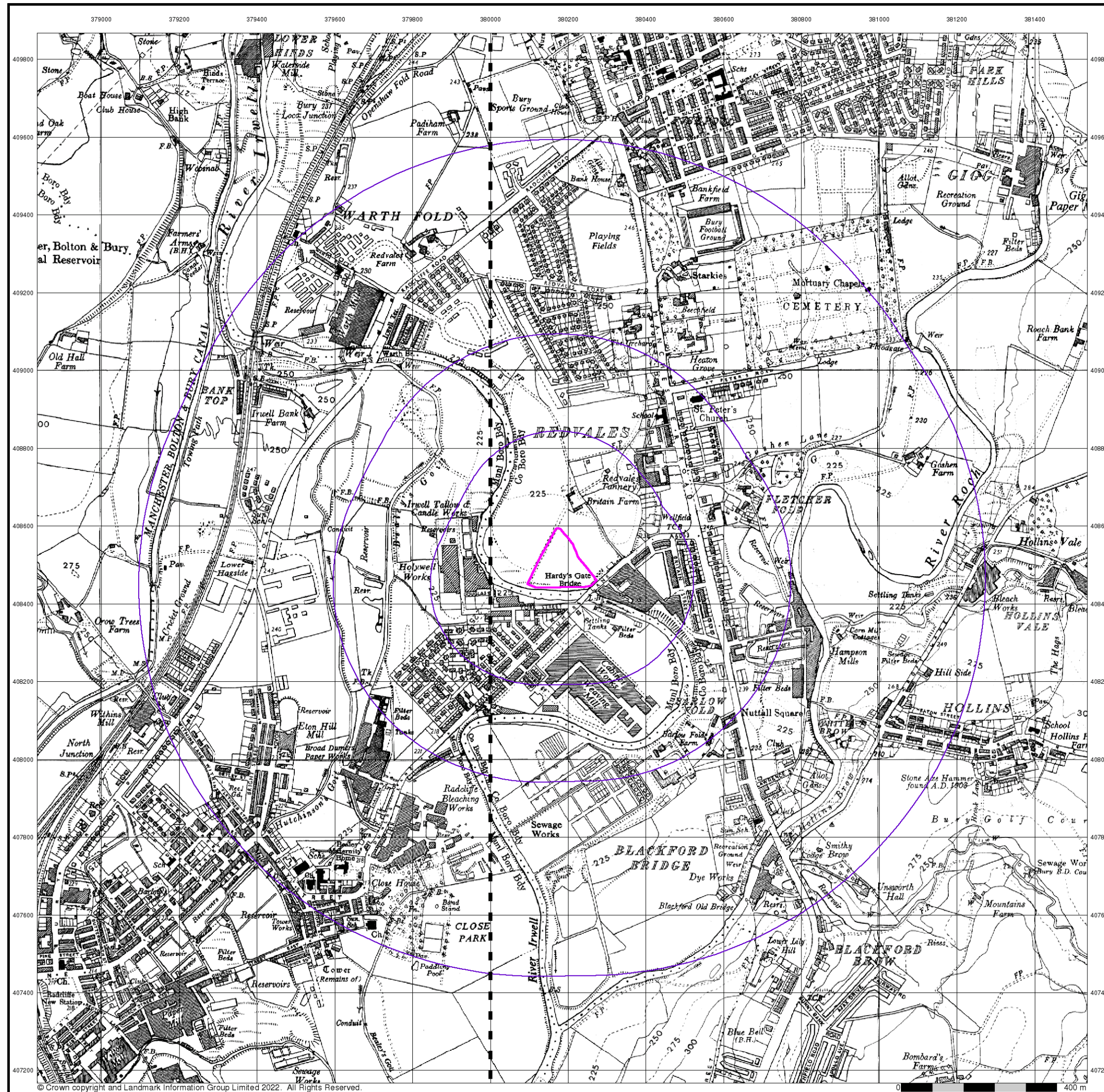
Order Details

Order Number: 296205844_1_1
Customer Ref: 22-1127.01
National Grid Reference: 380180, 408500
Slice: A
Site Area (Ha): 1.52
Search Buffer (m): 1000

Site Details

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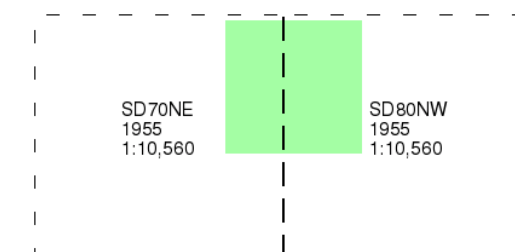
Ordnance Survey Plan

Published 1955

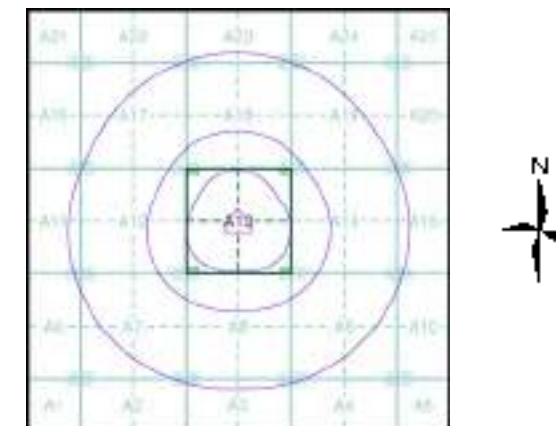
Source map scale - 1:10,000

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

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