



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

16012-TRE-BRY-XXX-RP-EN-000001 REV.P02

TE1885-TE-00-XX-RP-GE-001-V02

01 APRIL 2025

FINAL

Prepared for:

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Wilmott Dixon on behalf of Transport
for Greater Manchester

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1	FINAL	18/12/2024	Stuart Milne	Adrian Read	Adrian Read
2	Updated following comments from planners	01/04/2024	Alex Preston	Adrian Read	Adrian Read



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : i of vi

Engineer: Stuart Milne

Date: 01/04/2025

CONTENTS

1.	INTRODUCTION	1
1.1.	Proposed Development	1
1.2.	Previous Reports	1
1.3.	Objectives	2
1.4.	Assumptions.....	2
2.	SITE DETAILS AND DESCRIPTION	3
3.	SITE HISTORY	5
3.1.	Site History Review	5
3.2.	Unexploded Ordnance Risk Assessment.....	13
4.	ENVIRONMENTAL SETTING	14
4.1.	Geology	14
4.2.	Mining and Quarrying	14
4.3.	Hydrogeology.....	15
4.4.	Hydrology.....	16
4.5.	Flood Risk Summary.....	16
4.6.	Environmental Designations	17
4.7.	Landfill and Waste Management Activity.....	18
4.8.	Local Industrial Land Uses.....	19
4.9.	Radon Risk.....	21
4.10.	Possible Tunnel Infrastructure.....	21
4.11.	Waste Classification and Materials Re-Use.....	21
4.12.	Regulator Provided Information	22
5.	PREVIOUS INVESTIGATION FINDINGS.....	26
6.	GROUND GAS CONCEPTUAL SITE MODEL CONSIDERATION	29
6.1.	Potential Ground Gas Sources and Gas Generation Potential.....	29
6.2.	Appropriate Level of Ground Gas Monitoring	31
6.3.	Potential Pathways	33
6.4.	Receptors	34
7.	PRELIMINARY CONCEPTUAL SITE MODEL	35
7.1.	Uncertainties.....	35
8.	PROPOSED FURTHER WORKS.....	38
8.1.	Further works.....	38
9.	REGULATORY APPROVALS	39



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : ii of vi

Engineer: Stuart Milne

Date: 01/04/2025

10.	REFERENCES	40
11.	GLOSSARY OF TERMS	43

TABLES

Table 2.1 Current Site Overview.	3
Table 3.1 Site History.	6
Table 3.2 Summary of UXO Risk Assessment.	13
Table 4.1 Geological Summary.	14
Table 4.2 Coal Mining Report Summary	14
Table 4.3 Coal Mining Activities.	15
Table 4.4 Other Extractive Industries.	15
Table 4.5 Groundwater Occurrence and Abstraction.	15
Table 4.6 Surface Water Features.	16
Table 4.7 Flood Risk Summary	17
Table 4.8 Summary of Environmental Designations.	17
Table 4.9 Waste Management Activities.	18
Table 4.10 Other Potentially Contaminative Processes in the Locality.	19
Table 4.11 Radon Risk Status.	21
Table 4.12 Local Authority Landfill Records	24
Table 5.1 Report Review Summary	26
Table 5.2 Campbell Reith 2024 Reports Review Summary	27
Table 6.1 Potential Ground Gas Source Generation Potential (from BS 8576:2013 and The Local Authority Guide to Ground Gas, CIEH (2008))	30
Table 6.2 From Table 5.5a CIRIA C665 - Typical/idealised periods of monitoring (after Wilson et al, 2005)	32
Table 6.3 From Table 5.5b CIRIA C665 - Typical/idealised frequency of monitoring (after Wilson et al, 2005)	32
Table 6.4 Factors Considered for High Frequency (Continuous) Gas Monitoring.	33
Table 6.5 Potential Ground Gas Pathways Identified	33
Table 7.1 Preliminary Assessment of Potential Pollutant Linkages (Continued on Next Page).	36

FIGURES

Figure 2.1 Phase Plan	4
Figure 6.1 Decision Matrix For Initial Monitoring (Extracted from Figure 6 in BS 8576:2013)	31



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : iii of vi
Engineer: Stuart Milne
Date: 01/04/2025

APPENDICES

Appendix A - Drawings

Appendix B - Groundsure Report

Appendix C - Coal Authority Coal Mining Report

Appendix D - Regulator Provided Information

Appendix E - Previous Reports (Available as a Separate Document)

Appendix F - Definitions of Terms Used in Qualitative and Quantitative Risk Assessments

Appendix G - Controlled Waters Risk Assessment

Appendix H - Complying With Control of Asbestos Regulations 2012

Appendix I – UXO REPORT



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : iv of vi

Engineer: Stuart Milne

Date: 01/04/2025

EXECUTIVE SUMMARY

Introduction	Tier Environmental was commissioned by Wilmott Dixon on behalf of Transport for Greater Manchester to undertake a desk study and Phase I Preliminary Risk in support of a full planning application for the first phase (known as 'Phase 1 Bury Tram Stop') of the redevelopment of Bury Interchange. The purpose of this investigation was to establish land use history and review the available information to determine the geoenvironmental setting of the site and develop a preliminary conceptual site model with due consideration of potential soil and groundwater contamination, hazardous ground gases and mining. In accordance with Land Contamination Risk Management (LCRM) Environment Agency October 2020 the site is classified as a commercial development.
Proposed land use	The Bury Interchange project comprises two phases: 1. Southern Access - construction of a new pedestrian footbridge with access between Union Square, the existing Metrolink platform and Pyramid Park to enable Bury Tram Stop to continue operating during Phase 2 works. This phase of work also includes refurbishing the existing Metrolink platforms including replacement of the existing platform canopy and enhanced passenger amenities/facilities. 2. Bury Interchange - demolition and replacement of the existing Interchange Building. A planning application for the second phase comprising the interchange is to be prepared for an anticipated submission in early-to-mid 2026.
Site location and surrounding land uses	The site is located at Bury Interchange, Bury, BL9 0AY. The site comprises an active railway station (Bury Interchange) and line of track running south. The application site is bounded by Pyramid Park/Market Street to the east, East Lancashire railway line to the south, Duke Street/Knowsley Place to the west and Bury Interchange to the north (platforms located below interchange building and associated road infrastructure including Angouleme Way). The site comprises three distinct elements: 1. Knowsley Place/Union Square (west of Metrolink) - Premier Inn, offices and Q park 2. Metrolink corridor and platform 3. Pyramid Park (east of Metrolink) - vacant park which is subject to planning permission (LPA ref. 70903/Full) for comprehensive remediation. There is also a small area of the existing surface car park to the west of the interchange building which is identified for the location of a temporary contractor compound. In terms of the wider interchange (second phase of the scheme), this part of the site is bounded by Kay Gardens to the north, Haymarket Street to the west and Angouleme Way to the south.
Site history	The site comprises principally of railway infrastructure including goods sheds and rail lines from 1851 to circa 1976. The site is within an area of shallow earthworks in an 'L' shape from the Old Opera House circa 80m north and extending eastwards in conjunction with the railway lines, with the far north of the site at a higher level with an embankment down to the good sheds and railway level. Major redevelopment by 1980 sees removal of existing buildings, infilling of some land, and construction of the current station and rail layout. The wider site sees a new road layout and redevelopment of land adjacent to the site. The surrounding area has comprised industrial uses including a timber yard and warehouse 80m west of the site and woollen mill from earliest records, and notably an abattoir immediately west from 1851 which expands through to 1976 when it is no longer shown. By 1957 the land to the north of the site has been redeveloped with the expansion of the Market Hall with an open market immediately north, which are removed by 1973 for a car park. A second phase of redevelopment by 1976 sees construction of the approximately present-day layout. By 2013, disused land to the west of the site (now known as union square) is undergoing development into a hotel and offices. Pyramid Park The proposed new Southern Access footbridge lands on to the Pyramid Park site. Bury Council, as applicant, has recently secured full planning permission (LPA ref. 70903/Full) for the remediation of the Pyramid Park site and construction of a new vehicular access road. The Pyramid Park site was formerly a railway station and sidings before being reclaimed as public open space in the 1970's. Planning permission was subsequently granted in December 2024 subject to a suite of planning conditions. The remediation of the site is the first phase in advance of the Council procuring a developer to progress with a residential scheme (subject to separate planning application in due course).
Previous Reports Findings	Third party reporting for land to the east of the site, associated with the market redevelopment, and for land within Pyramid Park (planning permission ref. 70903/Full - approved December 2024) in the southeast of the site, have been reviewed. A series of ground investigations and desk studies for each site area were completed. No potential contaminants of concern were recorded within the market area for the proposed continued commercial land use. Asbestos in the form of fibre bundles of amosite or chrysotile were recorded in 8 no. samples of Made Ground in Pyramid Park, in addition to Made Ground with elevated PAH compounds, hydrocarbon odours, and inclusions of clinker, ash, coal and slag within or adjacent to the pyramid structures.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : v of vi

Engineer: Stuart Milne

Date: 01/04/2025

Geology, hydrogeology and hydrology	Superficial deposits (Devensian Till and Glaciofluvial Deposits), and the bedrock (Pennine Lower Coal Measures Formation) are both classified as Secondary A Aquifers. The site is not within a Source Protection Zone and there are no active potable abstraction wells within 2km. The nearest surface water feature is an artificial lake within a park circa 100m east of the site, in land east of Market Street, though this not considered to be in hydraulic conductivity with local groundwater, and the River Irwell located 675m west. Groundwater flow is anticipated to be towards the south in conjunction with the flow of the River Irwell. On this basis the controlled waters sensitivity is regarded as being low/moderate.
Ground gases	A sand pit was recorded 30m west of the north of the site from 1849, and a reservoir 50m south, infilled by 1891 and 1976 respectively. The site itself has been subject to significant earthworks, most recently in circa 1973-1976 when the old railway cuttings are infilled, likely associated with the BSG records identifying the site to be underlain by 'worked ground'. On site and nearby landfill records for other railway cuttings indicate use of 'inert' waste, notable in the west of the site in the 1970s during the wider redevelopment cycle. Gas generation potential for any on and off-site sources is considered to be relatively low.
Radon requirements	Basic radon protection measures are not currently required for the proposed development on this site. In addition to the above, basements represent areas that are more at risk because the walls are in contact with the ground as well as the floor. This, coupled with reduced natural ventilation below ground level, increases the risk of elevated radon levels. All basements are therefore considered under BR 211 to be at increased risk of elevated levels of radon regardless of geographic location. Currently, no basements or converted cellars / basements are proposed for the development and therefore no additional consideration of potential increased risk needs to be made; however, this should be revisited in the event that the proposals change to include for a basement.
Ecological sensitivity	The site does not lie within an ecologically sensitive area. However, the site is located within the Townside Site of Biological Interest (SBI - Grade B site) and within one SSSI Impact Risk Zone. The type of development proposed at the site does not constitute further consultation within the SSSI Impact Zone.
Potential contaminative features	Made Ground associated with historic land uses as railway sidings and goods sheds with potential for associated tank features, and a predominantly off site abattoir. The Department of the Environment Industry Profile for animal processing works, for the adjacent and partly on-site historic abattoir, suggest pathogens, solvents, bleaches and fuel oils as potential contaminants associated with this industry. Consideration has been given to the widespread redevelopment of the local area from the mid 1970 including construction of a new road (Angouleme Way) and car park within the historic abattoir site whereby a degree of Made Ground removal or remediation may have taken place though no records can confirm this. Local Authority landfill records show a known landfill centred at E 380314 ,N 410400 on the provided plan, which places it within the western boundary of the site, now known as union square. This is understood to be filled with inert subsoil as part of a Reclamation scheme in 1973 and since redeveloped in late 2000s and early 2010s as a hotel, offices and car park with remedial measures.
Mining and quarrying	The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report (CON29M) was ordered to further assess coal mining issues at the site. The report is contained within Appendix C. Results of this report do not indicate the site is at risk from past coal mining activity.
Unexploded ordnance	A Detailed UXO Desk Study was completed by EOD Contracts Ltd (Ref: EOD/24/24140/DTS, dated November 2024) for the combined Phase 1 and Phase 2 site boundaries. This is included within Appendix I. The risk level on site is deemed as Low and no further risk mitigation strategy is required. The nearest recorded bomb strike is over 450m from the site and therefore outside the expected offset (j curve) of 5.3m also 1946 aerial photography shows possible bomb damage associated with buildings 100m east of the site. The site has been subject to post war development including a subway under the site.
Other issues	Consideration should be given to anecdotal evidence of historic unrecorded tunnels within close vicinity to the site, though there is no evidence these features intercept the Phase 1 site boundary.
Waste soils classification	Based on the history of the site and the anticipated potential contaminants of concern it is considered possible that hazardous waste soil materials may be present beneath some areas of the site; however, this will be subject to confirmatory investigation, sampling, laboratory analysis and waste classification in accordance with the Guidance on the Classification and Assessment of Waste (WM3).
Materials re-use	Subject to volumetric fill requirements and a future assessment of suitability of re-use (both chemically and geotechnically), some materials may be considered for potential re-use in line with an appropriate end-of-waste protocol such as WRAP Quality Protocol for Aggregates from Inert Waste, U1 Exemption or a Materials Management Plan in accordance with the CL:AIRE Definition of Waste Code of Practice (DoWCoP). Please note that any previously landfilled or mining waste materials may not be appropriately subject to consideration under DoWCoP and may not be re-used under DoWCoP unless sufficient lines of evidence and agreement with the local Environment Agency Waste Team can be sought beforehand.



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : vi of vi

Engineer: Stuart Milne

Date: 01/04/2025

	In addition, Section 4.10 of this report includes statements with respect to re-use of excavated and stockpiled clean naturally occurring soils within the site and re-use on other sites. These statements are designed to provide a clear intention to reuse any clean, naturally occurring soils derived from future excavations at this site (which may also include temporary future stockpiling these materials).
Further works	Intrusive works should adhere to the Site Investigation Scope produced by Renaissance (Dated October 2024) presented in drawing BURY-REN-XX-XX-SK-S-01000-P03 and 01001-P03.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 1 of 44
Engineer: Stuart Milne
Date: 01/04/2025

1. INTRODUCTION

Tier Environmental was commissioned by Wilmott Dixon on behalf of Transport for Greater Manchester to undertake a Land Contamination Risk Management (LCRM) Preliminary Risk Assessment for an area of land referred to as Bury Interchange, located at Bury, BL9 0AY. (the "site").

The full title of this report, a 'Stage 1 - LCRM Tier 1 Preliminary Risk Assessment Report', is in accordance with that described in the Land Contamination Risk Management guidance (available at <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm>) which has superseded CLR 11.

1.1. Proposed Development

Under current proposals the development will comprise the construction of a new Transport Interchange in Bury Town Centre. The Bury Interchange project comprises two phases:

- 1. Southern Access - construction of a new pedestrian footbridge with access between Union Square, the existing Metrolink platform and Pyramid Park to enable Bury Tram Stop to continue operating during Phase 2 works. This phase of work also includes refurbishing the existing Metrolink platforms including replacement of the existing platform canopy and enhanced passenger amenities/facilities.
- 2. Bury Interchange - demolition and replacement of the existing Interchange Building.

A planning application for the second phase comprising the interchange is to be prepared for an anticipated submission in early-to-mid 2026.

As such, in accordance with the 'Updated technical background to the CLEA model' (Environment Agency, 2009) and 'Suitable 4 Use Levels' (LQM / CIEH 2015) the proposed generic land use for this development is commercial.

This report pertains to Phase 1 of the development.

1.2. Previous Reports

A Detailed UXO Desk Study was completed by EOD Contracts Ltd (Ref: EOD/24/24140/DTS, dated November 2024) for the combined Phase 1 and Phase 2 site boundaries, this is contained within Appendix I.

The following third part reports were provided for review:

- A Factual Report on Site Investigation for Land at Townside Fields, Bury, by Dunelm Geotechnical and Environmental on behalf of Campbell Reith (Ref: M1062/01, dated April 2022)
- A Geoenvironmental Appraisal of land at Bury Market, for Bury Council, by ID Geoenvironmental Ltd (Ref: 5237-G-R001 Rev A, dated August 2022).
- A Factual Report for Pyramid Park, Bury, by Geotechnics on behalf of Campbell Reith (Ref: PN234595, dated February 2024)

The above factual reports for Townside Fields/Pyramid Park are collated in the following produced by Campbell Reith, which were available on the Bury Council planning portal:

- A Geotechnical and Geoenvironmental Desk Study Report, by Campbell Reith (Ref: 13819-CRG-XX-XX-RP-LQ-0001, dated March 2022).
- A Phase 2 Interpretive Report (Contamination), by Campbell Reith (Ref: 13819-CRG-XX-XX-RP-LQ-0002, dated July 2022).



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 2 of 44
Engineer: Stuart Milne
Date: 01/04/2025

- A Land Quality Statement by Campbell Reith (Ref: 14111-CRH-XX-XX-RP-LQ-0001, dated April 2024)
- A Remediation Strategy and Quality Statement by Campbell Reith (Ref: 14111-CRH-XX-XX-RP-LQ-0001-P02, dated November 2024)

1.3. Objectives

Taking into account the proposed development of the site, the objectives of this appraisal were:

- To determine the historical and current land use.
- To establish the environmental setting of the site.
- To evaluate whether past mining or other extractive industries could have an influence on the site.
- To review previous pertinent third party reports;
- To determine likely ground and groundwater conditions.
- To determine the potential risks to human health and the wider environment.
- To determine potential risks posed to the site from hazardous ground gases and / or vapours.
- To derive a Preliminary Conceptual Site Model.

1.4. Assumptions

The following assumptions are made in this report:

- It is assumed that apart from the infilling of the subway that runs underneath the current Metrolink track and raising of ground levels due south of this, that ground levels will not change significantly from those described in this report or as shown on proposed development drawings. If this is not the case, then amendments to the recommendations made in this report may be required.
- Any references to observations of suspected asbestos-containing materials are for information only and should be verified by a suitably qualified asbestos specialist and/or confirmed by laboratory analysis.
- The use of the term 'Topsoil' within this report is based on a visual identification only and that these materials have not been classified in accordance with BS3882:2015.
- The use of the terms 'shallow' and 'deep' within this report (from a geotechnical perspective) assume *typically* between ground level to circa 3.00m below ground level (bgl) for 'shallow' and greater than 3.00m bgl regarded as 'deep';
- The comments and opinions presented in this report are based on the findings of the desk study, review of third party information, performed by Tier Environmental. There may be other conditions prevailing on the site which have not been revealed by this investigation and which have not been taken into account by this report at this stage.
- Responsibility cannot be accepted for any conditions not revealed by this investigation. Any diagram or opinion on the possible configuration of the findings is conjectural and given for guidance only. Confirmation of ground conditions should be undertaken if deemed necessary.

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PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 3 of 44

Engineer: Stuart Milne

Date: 01/04/2025

2. SITE DETAILS AND DESCRIPTION

Table 2.1 Current Site Overview.

Site name	Phase 1 Bury Interchange
Site address	Bury Interchange, Bury, BL9 0AY. A site location plan is included as Drawing No. TE1885-TE-00-XX-RP-001-V01 within Appendix A. The application site is bounded by Pyramid Park/Market Street to the east, East Lancashire railway line to the south, Duke Street/Knowsley Place to the west and Bury Interchange to the north (platforms located below interchange building and associated road infrastructure including Angouleme Way). The site comprises three distinct elements: 1. Knowsley Place/Union Square (west of Metrolink) - Premier Inn, offices and Q park 2. Metrolink corridor and platform 3. Pyramid Park (east of Metrolink) - vacant park which is subject to planning permission (LPA ref. 70903/Full) for comprehensive remediation. There is also a small area of the existing surface car park to the west of the interchange building which is identified for the location of a temporary contractor compound. In terms of the wider interchange (second phase of the scheme), this part of the site is bounded by Kay Gardens to the north, Haymarket Street to the west and Angouleme Way to the south.
National Grid Reference (NGR)	380399 410392
Approximate site area	1.032ha
Site shape	The site is an irregular elongate shape.
Current land use on the site	The site forms part of Bury Interchange station, with station and platform buildings in the north of the site, and railway lines extending south through the beyond site. Underground service drawings have not been provided to Tier Environmental; however, there remains a potential for such features to be present beneath the site.
Surrounding land uses	The site is set within a mixed commercial and residential area with the wider Bury Interchange to the north, car parking and commercial buildings including a hotel to the west and Bury College and a disused park to the east.
General topography and ground levels	The track level of the Phase 1 area is at approximately 86m AOD. The site is within a cutting with levels to the west at 91.4m AOD and to the east circa 94m AOD; the overpass is at circa 95m AOD.

Red line boundaries for each site Phase are shown below.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

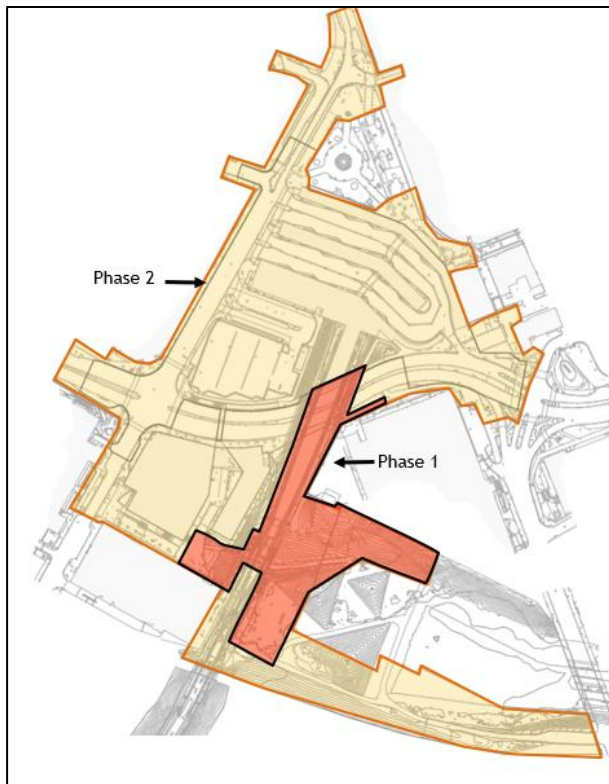
Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 4 of 44

Engineer: Stuart Milne

Date: 01/04/2025

Figure 2.1 Phase Plan





PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 5 of 44
Engineer: Stuart Milne
Date: 01/04/2025

3. SITE HISTORY

3.1. Site History Review

Extracts of Ordnance Survey (OS) plans dated from 1849 2024 were reviewed. These were obtained as part of the Groundsure report for the site, which is presented in Appendix B. In addition, available maps included in the third-party unexploded ordnance risk assessment and historic aerial photography on Google Earth have been reviewed.

Table 3.1 below presents a summary of the main aspects of the site relevant to the current and proposed future end uses. It is not the intention of this report to describe in detail all of the changes that have occurred on or adjacent to the site, where these are not relevant to the land use.



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

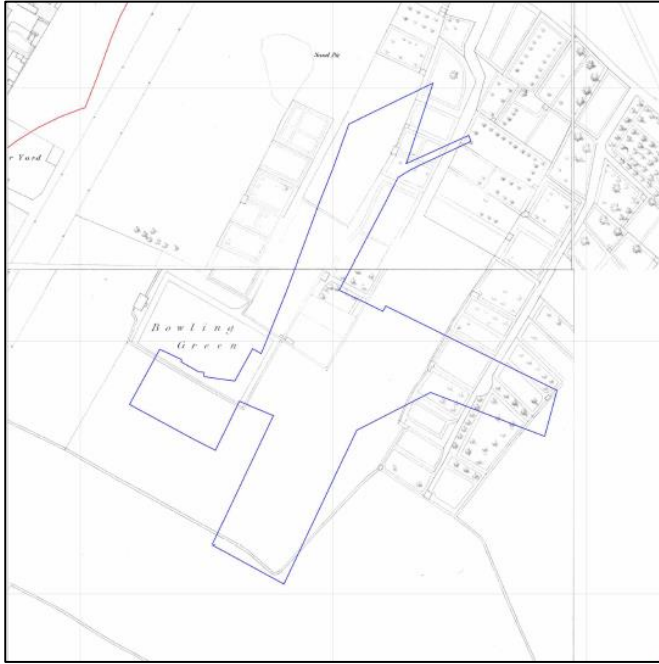
Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 6 of 44

Engineer: Stuart Milne

Date: 01/04/2025

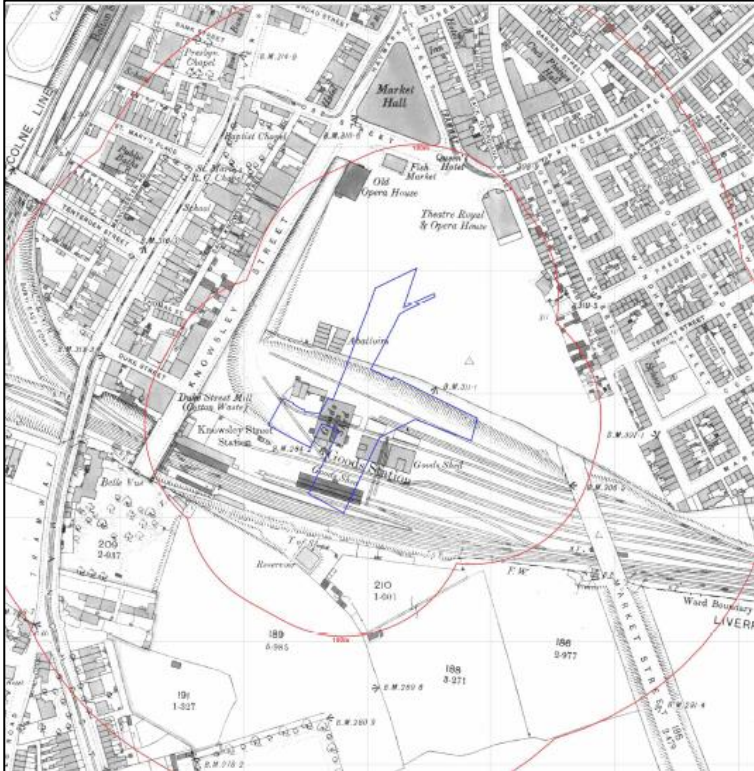
Table 3.1 Site History.

Time Period	On-site features	Off-site features
Pre-1850	 1849 1:1,056	
	- From 1849 the site is shown to be part of gardens and a bowling green, with a few small buildings spread across site. - The south of the site is broadly undeveloped.	- The site is surrounded by gardens and undeveloped land. - A timber yard and warehouse are located 80m west of the site - A sand pit is recorded 30m west of the north of the site. - A woollen mill is recorded 80m west of the site from 1849.



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

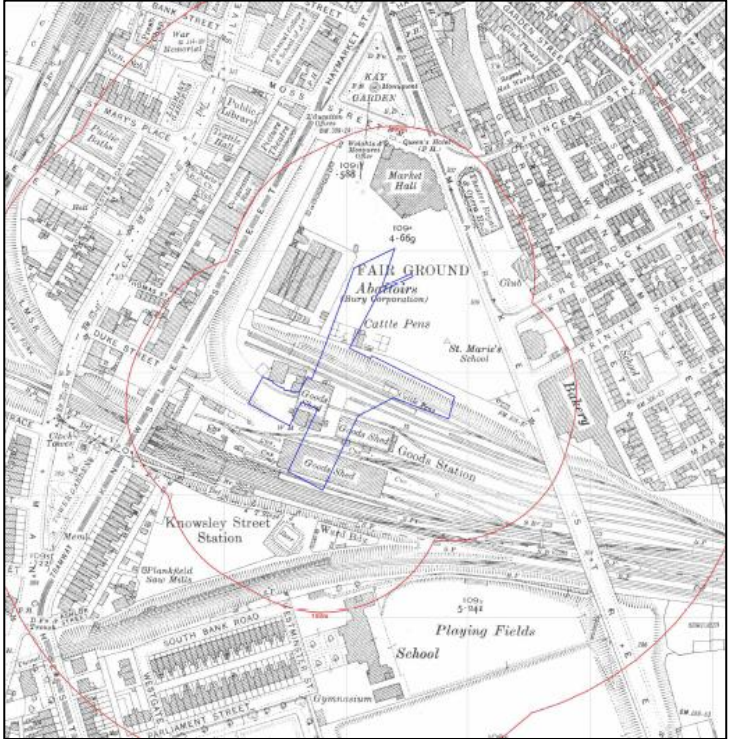
Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 7 of 44
Engineer: Stuart Milne
Date: 01/04/2025

Time Period	On-site features	Off-site features
1850-1900	 1891 1:2,500 - The site is shown to have railway infrastructure including a central shed and rail lines running east-west through the middle of the site from 1851 within limited change to 1891. - Further goods sheds are located in the south of the site and on the eastern edge extending off site. - The site is within an area of shallow earthworks with the far north of the site at a higher level with an embankment down to the good sheds and railway level.	- Buildings to the west of the north of the site are labelled as abattoirs from 1851. - Knowsley Street Station is located 50m west of the site. - The cotton mill is now labelled for cotton waste. - The immediate wide site has been subject to shallow earthworks in an 'L' shape from the Old Opera House circa 80m north and extending eastwards in conjunction with the railway lines. - A small reservoir is recorded 50m south of the site.



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 8 of 44
Engineer: Stuart Milne
Date: 01/04/2025

Time Period	On-site features	Off-site features
1900 to 1939 (Pre-war period)	 1930 1:2,500 - The on-site goods sheds have expanded slightly by 1930 and additional railway sidings are located in the north of the site at the foot of the embankment. - Small features surrounding the goods sheds are possible tank features. - Cattle pens are recorded in the east of the site by 1910 and in the north of the site adjacent to the abattoir by 1930	- By 1910 the abattoir has expanded to a large building 10m west of the site - By 1910 by wider railway infrastructure has expanded with a new line branching south west. - Further residential expansion is noted from 100m south of the site - By 1930 a bakery is located 70m east of the site. - By 1938 Bury Technical College has been constructed immediately east of the north of the site.



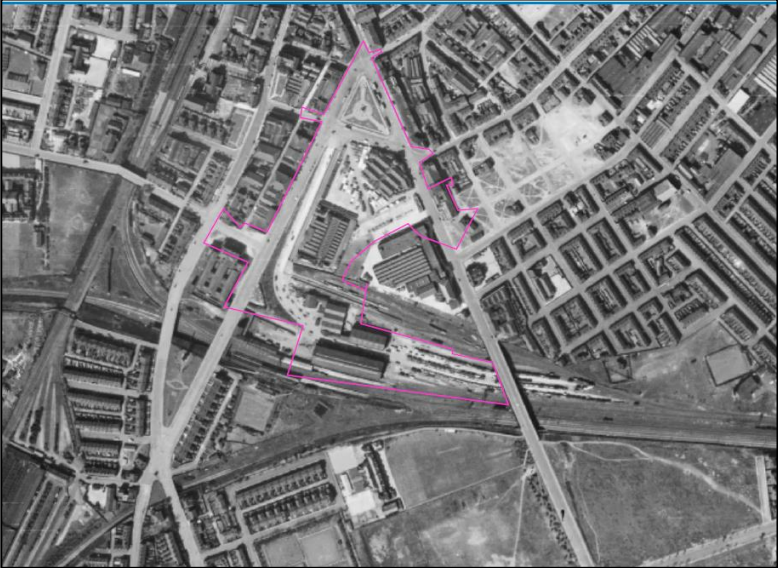
**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 9 of 44

Engineer: Stuart Milne

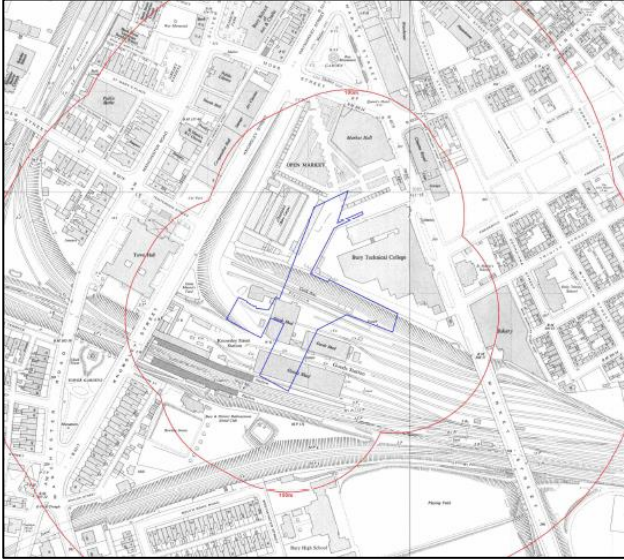
Date: 01/04/2025

Time Period	On-site features	Off-site features
1939 – 1945 (World War II period)	 Aerial Photograph from 1946 (from EOD Contracts Ltd Ref: EOD/24/24140/DTS, dated November 2023)	
	The site is not recorded to have any military uses	An area of housing circa 100m east of the site is noted to be derelict land and could possibly be associated with bomb damage.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

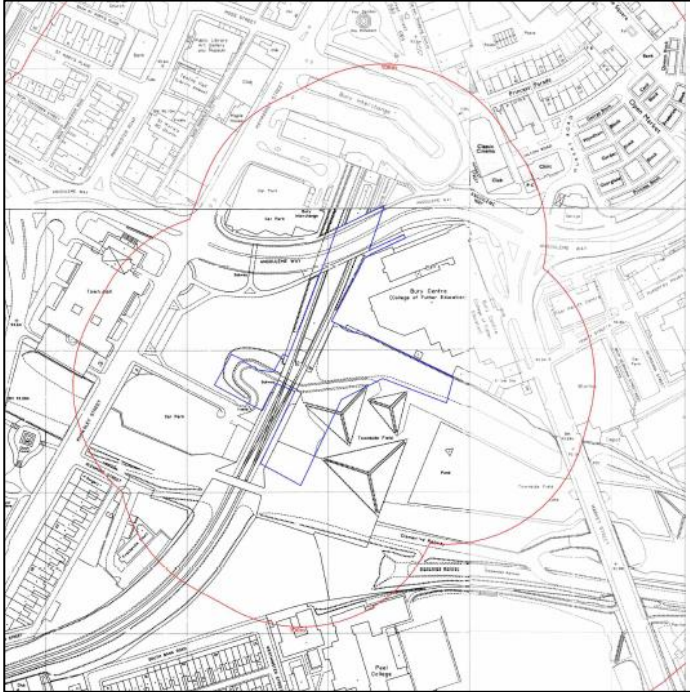
Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 10 of 44
Engineer: Stuart Milne
Date: 01/04/2025

Time Period	On-site features	Off-site features
1945-1980 (Post war period)	 1959 1:2,500 - The site remains broadly unchanged until circa 1976-1980 when there is major redevelopment. A building possibly associated with the abattoir is located within the north of the site from 1957. - The goods sheds and railway sidings are removed and a main north-south rail line is located through the centre of the site with Bury Interchange station positioned in the northern half of the site. - A road overpass, Angouleme Way passes through the north of the site. - Part of a triangular feature, possible mound of soil, is located in the east of the site associated with 3 No. similar features within Townside Field. - The site and immediate surrounding land have been subject to earthworks through the mid-1970s with regrading/infilling of land of the former railway cuttings. A subway is shown passing from Townside Field to the west of the tracks.	- By 1946 the Town Hall is constructed 80m west of the site. - Surrounding land sees development with new residential layouts through 1946-1959. - By 1957 the land to the north of the site has been redeveloped with the expansion of the Market Hall with an open market immediately north, and localised expansion of the abattoir. - By 1973 the market buildings to the north of the site have been removed for a car park and the abattoir is removed by 1976. A new road layout is constructed between 1973 and 1976. Buildings associated with Bury Interchange replace the carpark by the late 70s. - By 1976 the railway sidings to the east of the site have been broadly removed and redeveloped into 'Townside Field' a public park, with a lake. - By 1980 Bury Technical College is now 'College of Further Education'. - Buildings to the west have been removed by 1976



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

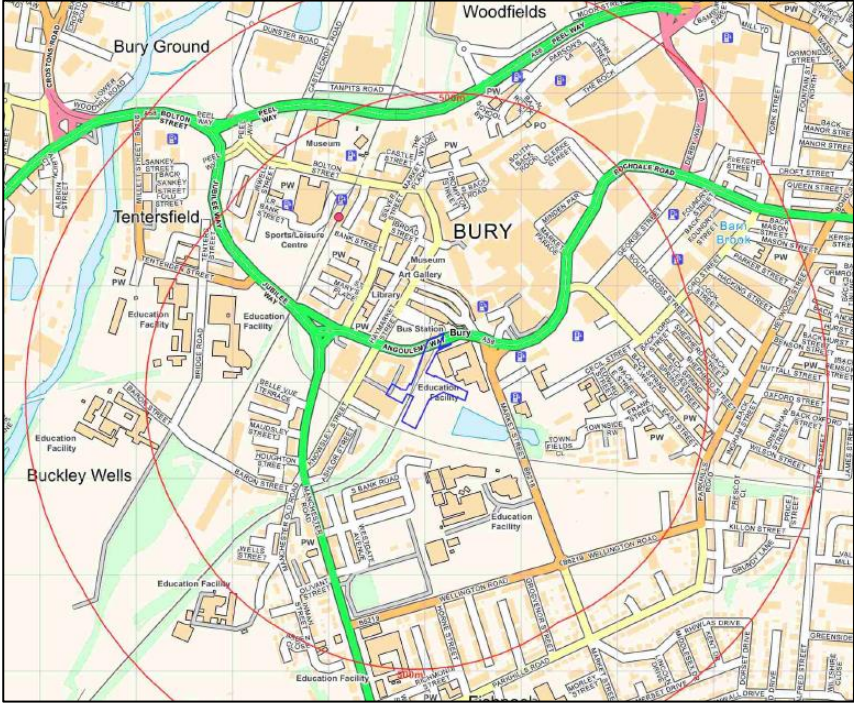
Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 11 of 44
Engineer: Stuart Milne
Date: 01/04/2025

Time Period	On-site features	Off-site features
1980 – 2000 (Late 20th century period)	 1987-1992 1:1,250 The site remains broadly unchanged.	A car part is located west of the site from circa 1980, and the area to the north of this is shown to be laid to grass.



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 12 of 44
Engineer: Stuart Milne
Date: 01/04/2025

Time Period	On-site features	Off-site features
2000 to 2024 (Modern day period)	 2024 1:10,000	
	The site remains broadly unchanged.	- By 2013 the land to the west of the site is undergoing development into flats in both the car park and grassed area. The lake in Townside Fields to the east is dry but not considered infilled and is possibly concrete lined. - The college to the east has seen some redevelopment between 2010-2024.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 13 of 44

Engineer: Stuart Milne

Date: 01/04/2025

3.2. Unexploded Ordnance Risk Assessment

A Detailed UXO Desk Study was completed by EOD Contracts Ltd (Ref: EOD/24/24140/DTS, dated November 2024) for the combined Phase 1 and Phase 2 site boundaries. The findings of the study determined the site is a Low risk. Considerations are included in the table below:

Table 3.2 Summary of UXO Risk Assessment.

	Comments
Is the site indicated to have been directly bombed?	The nearest recorded bomb strike is over 450m from the site and therefore outside the expected offset (j curve) of 5.3m
Any development cycles since 1945?	Post WWII the construction of the present buildings, car parking and a subway under the site, prior to the 1980s. The depth of these works is unknown.
Military Use	No military usage was noted and the site was not used in the production of explosives or munitions.
Assessment of UXO Risk	The risk level on site is deemed as Low.
Further works?	It is recommended that no further risk mitigation strategy is required.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 14 of 44

Engineer: Stuart Milne

Date: 01/04/2025

4. ENVIRONMENTAL SETTING

4.1. Geology

Table 4.1 Geological Summary.

Maps and publications referenced	Groundsure, BGS Sheet SD81SW
Made ground / artificial ground	The site is shown to be located within an area of 'worked ground' with areas of 'infilled ground' in the east and western edges of the south of the site, according to the Groundsure report. Given the history of development on the site, the presence of Made Ground is anticipated.
Drift geology	The site is underlain by Devensian Till of (Diamicton) across the entire site with localised areas of Glaciofluvial Deposits (Sand and Gravel)
Solid geology	Pennine Lower Coal Measures (Mudstone, Siltstone and Sandstone)
Dip of solid strata	Regionally circa 10° towards the south west
Faults	24m SW normal fault
Coal seams	Coal seams recorded circa 215m south west and 220m north east of the site.

4.2. Mining and Quarrying

Table 4.2 Coal Mining Report Summary

	Yes/No	Comments
Past underground mining	No	The property is not within a surface area that could be affected by any past recorded underground coal mining
Mine entries	No	There are no recorded coal mine entries known to the Coal Authority within, or within 20 metres, of the boundary of the property. It is noted on the Coal Authority viewer that a mine entry is recorded circa 100m south of the site.
Opencast mines	No	The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.
Coal mining subsidence	No	The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.
Mine gas	No	The Coal Authority has no record of a mine gas emission requiring action.
Future underground mining	No	The property is not in an area where the Coal Authority has received an application for, and is currently considering whether to grant a licence to remove or work coal by underground methods. It is acknowledged that reserves of coal exist in the local area which could be worked at some time in the future however this scenario is unlikely.
Withdrawal of support notices	No	The property is not in an area where a notice to withdraw support has been given. The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 15 of 44

Engineer: Stuart Milne

Date: 01/04/2025

	Yes/No	Comments
Payments to owners of former copyhold land	No	The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Table 4.3 Coal Mining Activities.

	Yes/No	Comments
Is the site in an area of potential shallow coal workings?	Yes	The wider site is within an area of potential shallow coal workings; a CON29M report was ordered to determine the risk and is discussed above
Is the site in a high risk development area?	No	Source: The Coal Authority
Are there any known shafts, adits, tips, lagoons, or opencast workings likely to affect the site?	No	Source: The Coal Authority
Is exploratory work required to investigate the potential risk from shallow mining or quarrying?	No	None required.

Table 4.4 Other Extractive Industries.

	Yes/No	Comments
Superficial drift deposits		
Evidence of extraction on or within 250 m of the site?	Yes	Cuttings and ground working associated with the railway between 1851 to 1983 Sand pit recorded in 1849 30m north of the site.
Action required?	Yes	Ground investigation and ground gas risk assessment.
Solid Strata		
Any evidence of mineral extraction on or within 250 m of the site?	No	
Action required?	No	

Other, undocumented mineral workings on or close to the site cannot be completely dismissed.

4.3. Hydrogeology

Table 4.5 Groundwater Occurrence and Abstraction.

	Presence/location	Comments
Environment Agency aquifer designation – Superficial Deposits	Devensian Till and Glaciofluvial Deposits	Secondary A Aquifer
Environment Agency aquifer designation – Bedrock	Pennine Lower Coal Measures	Secondary A Aquifer



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 16 of 44

Engineer: Stuart Milne

Date: 01/04/2025

	Presence/location	Comments
Groundwater vulnerability	Superficial	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: High
	Bedrock	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well-connected fractures
Anticipated groundwater depth(s)	60m east	The IDG report for the site 60m east recorded groundwater bodies in granular superficial deposits resting at levels of between 2.51m-4.57m bgl (89.83-90.42m AOD) in the upper deposit and 6.29m-7.93m bgl (86.17-87.41m AOD) in the lower deposit.
Direction of flow	South	Anticipated based on flow of the River Irwell
Current licensed abstractions – potable	NR	Source: Groundsure Report
Current licensed abstractions – non-potable	NR	Source: Groundsure Report
Private wells	NR	Source: Groundsure Report
Source Protection Zones	NR	Source: Groundsure Report
Springs	NR	Source: Groundsure Report

NR - none recorded.

For definition of Source Protection Zones, see Appendix G.

4.4. Hydrology

Table 4.6 Surface Water Features.

	Presence/location	Comments
Nearest surface water feature	100m east	Lake within Townside Fields (Pyramid Park, east of Market Street)– noted to be dry since circa 2013 and unlikely to be in hydraulic conductivity with local groundwater.
Other surface water features	NR	Closest feature is the River Irwell circa 675m west.
Canals, ponds, lakes, etc.	NR	Source: Groundsure Report
Water Framework Directive (WFD) Surface Water Bodies	NR	Source: Groundsure Report
Licensed surface water abstractions	NR within 250m	Source: Groundsure Report
Surface run-off and site drainage	On site	The full nature and extent of underground drainage system is unknown at this stage, however, it is understood that drainage report / plans, existing and proposed will be undertaken.

NR - none recorded. Environment Agency GQA assessments: A = very good to E = poor

4.5. Flood Risk Summary

Table 4.7 below represents a summary of the flood risk data contained within the Groundsure report obtained for the site.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 17 of 44

Engineer: Stuart Milne

Date: 01/04/2025

Table 4.7 Flood Risk Summary

	Presence/location	Comments
Risk of Flooding from Rivers and Sea (RoFRaS)	NR	Source: Groundsure Report
Historical Flood Events	NR	Source: Groundsure Report
Flood Defences	NR	Source: Groundsure Report
Areas Benefiting from Flood Defences	NR	Source: Groundsure Report
Flood Storage Areas	NR	Source: Groundsure Report
Records of Flood Zone 2	NR	Source: Groundsure Report
Records of Flood Zone 3	NR	Source: Groundsure Report
Surface water flooding	Highest risk on site	1 in 100 year >1.0m
Groundwater flooding	Highest risk on site	Moderate

NR - none recorded

4.6. Environmental Designations

Table 4.8 Summary of Environmental Designations.

	Presence/location	Comments
Sites of Special Scientific Interest (SSSI)	NR	Source: Groundsure Report
Conserved wetland sites (Ramsar sites)	NR	Source: Groundsure Report
Special Areas of Conservation (SAC)	NR	Source: Groundsure Report
Special Protection Areas (SPA)	NR	Source: Groundsure Report
National Nature Reserves (NNR)	NR	Source: Groundsure Report
Local Nature Reserves (LNR)	NR	Source: Groundsure Report
Designated Ancient Woodland	NR	Source: Groundsure Report
Biosphere Reserves	NR	Source: Groundsure Report
Forest Parks	NR	Source: Groundsure Report
Marine Conservation Zones	NR	Source: Groundsure Report
Green Belt	NR	Source: Groundsure Report
Proposed Ramsar sites	NR	Source: Groundsure Report
Possible Special Areas of Conservation (pSAC)	NR	Source: Groundsure Report
Potential Special Protection Areas (pSPA)	NR	Source: Groundsure Report
Nitrate Sensitive Areas	NR	Source: Groundsure Report
Nitrate Vulnerable Zones	NR	Source: Groundsure Report



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 18 of 44
Engineer: Stuart Milne
Date: 01/04/2025

	Presence/location	Comments
SSSI Units	NR	Source: Groundsure Report
Other	On site	Townside Site of Biological interest (SBI – Grade B site)
SSI Impact Risk Zone	On site	Not related to type of development

NR - none recorded

4.7. Landfill and Waste Management Activity

Table 4.9 Waste Management Activities.

	Presence/location	Comments
Active or recent landfill	NR	Source: Groundsure Report
Historical landfill (BGS records)	NR	Source: Groundsure Report
Historical landfill (LA/mapping records)	On site (in the west)	Bury Council provided records for Townside Fields: <i>'The site was filled with inert subsoil as part of a Reclamation scheme with material imported. The site is pre-licensing and was filled in 1973. The site was formerly used as car parking and open space. Site investigations carried out in 2005 and 2006 show generally reworked natural clays over shallow demolition wastes possibly from previous land uses. The entire landfill site was redeveloped in late 2000s and early 2010s as commercial development comprising a hotel, offices and car park under Planning Application 47200. Remedial measures were carried out which included significant earthworks, gas protection measures and clean cover in soft landscaped areas.'</i>
	On site (south east)	Railway Cuttings
	87m SW, 93m W, 178m W	Railway Cuttings
Historical landfill (EA/NRW records)	83m & 154m W	Site Address: Railway Cuttings East and West Of Manchester Road Waste Type: Inert First Recorded: 01/02/1988
	83m S	Site Address: Peel College, Greater Manchester Waste Type: no data First Recorded: no data
Historical waste sites	NR	Source: Groundsure Report
Licensed waste sites	NR	Source: Groundsure Report
Waste exemptions	103m E	Use of waste in construction
	153m NE	Sorting and de-naturing of controlled drugs for disposal
	160-163m, 212m SW	Sorting and de-naturing of controlled drugs for disposal
	183m SW	Sorting and de-naturing of controlled drugs for disposal
	215m NW	Preparatory treatments (baling, sorting, shredding etc)
Evidence of other landfilling or potential infilling on or within 250m of site	Yes	Earthworks associated with redevelopment of the site and surrounding land in the mid-1970s with regrading/infilling of land of the former railway cuttings. A sand pit is recorded 30m west of the north of the site and a reservoir 50m south, infilled by 1891 and 1976 respectively
Walkover evidence of fly-tipping on site?	NR	No evidence on site



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 19 of 44

Engineer: Stuart Milne

Date: 01/04/2025

	Presence/location	Comments
Is a landfill/ground gas risk assessment required?	Yes	Ground gas risk assessment required based on potential for widespread Made Ground associated with historic on and off site land uses. This will be undertaken as part of ground investigation report in due course. Consideration as to whether the materials in the vicinity of the former landfill can be re-used using the Definition of Waste Code of Practice (DoWCoP).

NR - none recorded

4.8. Local Industrial Land Uses

Other potentially contaminative activities are shown in Table 4.10 below with those features considered pertinent to the conceptual site model highlighted in **bold**. The entries relate to activities within *circa* 250 m of the site, with the exception of COMAH facilities where the assessment is extended to a distance of *circa* 500m from the site.

Table 4.10 Other Potentially Contaminative Processes in the Locality

	Location	Comments
Recent industrial land uses	11m N	Tram station
	61m NW	Telecommunications mast
	66m W, 96m NE, 160m SE	Electrical substation
	104m E	Business Park/Industrial Estate
	125m SW	Special purpose machinery and equipment
	153m NE	Bakery
	157m N	Containers and Storage
	205m N	Disability and mobility equipment
	240m N	Mechanical Engineers
Current or recent petrol stations	118m NE	Angouleme Way, Bury - Obsolete
Electricity cables	NR	Source: Groundsure Report
Gas pipelines	NR	Source: Groundsure Report
Sites determined as Contaminated Land	NR	Source: Groundsure Report
Control of Major Accident Hazards (COMAH)	NR	Source: Groundsure Report
Regulated explosive sites	NR	Source: Groundsure Report
Hazardous substance storage/usage	NR	Source: Groundsure Report
Historical licensed industrial activities (IPC)	NR	Source: Groundsure Report
Licensed industrial activities (Part A(1))	NR	Source: Groundsure Report
Licensed pollutant release (Part A(2)/B)	NR	Source: Groundsure Report
Radioactive Substance Authorisations	NR	Source: Groundsure Report



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 20 of 44

Engineer: Stuart Milne

Date: 01/04/2025

	Location	Comments
Licensed Discharges to controlled waters	122m W	360-366 Manchester Rd Effluent Type: Sewage Discharges - Final/Treated Effluent – Not Water Company Receiving Water: Trib River Irwell 20/06/1963, 01/04/1997, 12/11/2002
	197m W	Park farm Effluent Type: Sewage Discharges - Final/Treated Effluent – Not Water Company Receiving Water: Unknown 02/03/1956
Pollutant release to surface waters (Red List)	NR	Source: Groundsure Report
Pollutant release to public sewer	NR	Source: Groundsure Report
List 1 Dangerous Substances	NR	Source: Groundsure Report
List 2 Dangerous Substances	NR	Source: Groundsure Report
Pollution Incidents (EA/NRW)	50m NE	Incident Date: 29/05/2001 Pollutant: Other Pollutant Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
		Incident Date: 30/07/2002 Pollutant: Oils and Fuel Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
		Incident Date: 26/02/2011 Pollutant: Not identified Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
Pollution inventory substances	NR	Source: Groundsure Report
Pollution inventory waste transfers	NR	Source: Groundsure Report
Pollution inventory radioactive waste	NR	Source: Groundsure Report

NR - none recorded

COMAH – Control of Major Accident Hazards (regulations); NIHHS – Notification of Installations Handling Hazardous Substances (regulations)



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 21 of 44

Engineer: Stuart Milne

Date: 01/04/2025

4.9. Radon Risk

Table 4.11 Radon Risk Status.

	Comments
Estimated properties affected	Less than 1% of properties above the Action Level
Does a basement (or converted cellar/basement) form part of the proposed development?	As stated within BR 211, basements represent areas that are more at risk because the walls are in contact with the ground as well as the floor. This, coupled with reduced natural ventilation below ground level, increases the risk of elevated radon levels. All basements are therefore considered under BR 211 to be at increased risk of elevated levels of radon regardless of geographic location. Currently, no basements or converted cellars / basements are proposed as part of the first phase of the development and therefore no additional consideration of potential increased risk needs to be made; however, this should be revisited in the event that the proposals change to include for a basement.
Radon Protection Measures required?	No

4.10. Possible Tunnel Infrastructure

There is evidence of historic tunnels associated with previous land uses surrounding the site. TFGM have provided information on an abandoned refuse conveyor belt built circa 1971 and decommissioned by 1982 encountered during redevelopment of the new Bury Market. Drawings suggest this terminates circa 200m east of the site.

Additionally, anecdotal evidence suggests a foot tunnel may run approximately north-south between the Elizabethan Suite on Knowsley Street and the church on The Rock, via the Art Picture House on Market Street.

The extent of historic tunnels surrounding the site is unknown however there is no direct evidence to suggest the historic tunnels noted above are located within the Phase 1 site boundary.

4.11. Waste Classification and Materials Re-Use

If the site is to be redeveloped and materials are disposed off site, the material exported from the site to landfill should be hauled by a register waste character in accordance with Duty of Care Regulations 1991 and the Hazardous Waste Regulations 2005.

Based on the history of the site and the anticipated potential contaminants of concern, it is considered possible that hazardous waste soil materials may be present beneath some areas of the site; however, this will be subject to confirmatory investigation, sampling, laboratory analysis and waste classification in accordance with the Guidance on the Classification and Assessment of Waste (WM3). It is proposed that these investigations will be undertaken between March and May 2025.

It will be necessary to register the site in advance of the intended reclamation works with the Environment Agency before disposal to landfill can take place. There will be requirement for the waste producer to provide appropriate Waste Acceptance Criteria (WAC) testing of the Soils for disposal to ensure that the soils are appropriately classified and that the landfill is licensed to receive such soils. A consignment note shall be completed, signed and retained by all parties involved. The consignment note shall state the volume of waste, a physical description of the material and statement of its chemical composition. The waste consignment notes shall be kept by the contractor for a period of at least two years.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 22 of 44
Engineer: Stuart Milne
Date: 01/04/2025

Subject to volumetric fill requirements and a future assessment of suitability of re-use (both chemically and geotechnically), some materials may be considered for potential re-use in line with an appropriate end-of-waste protocol such as WRAP Quality Protocol for Aggregates from Inert Waste, U1 Exemption or a Materials Management Plan in accordance with the CL:AIRE Definition of Waste Code of Practice (DoWCoP). **Please note that any previously landfilled (which may be present on site based on the desk study conducted above) or mining waste materials may not be appropriately subject to consideration under DoWCoP and may not be re-used under DoWCoP unless sufficient lines of evidence and agreement with the local Environment Agency Waste Team can be sought beforehand.**

Re-Use of Excavated and Stockpiled Clean Naturally Occurring Soils on Other Sites

In addition, Tier Environmental are aware that CL:AIRE is classing stockpiled clean, naturally occurring soils as waste, unless their final destination is identified in a Materials Management Plan, before they are excavated. However, Tier Environmental consider that any clean naturally occurring soils arising from enabling works, earthworks or construction activities would be regarded as an asset and the default assumption for this site (prior to excavation and stockpiling) is not the intention to discard these materials where they may be reasonably re-used on this, or another, development site. Stockpiling is a recognised, recommended means of safely storing soils. Whilst there may be advantages to leaving soils in-situ, stripping topsoil and subsoil prior to earthworks is a routine construction activity. Tier Environmental consider that it is not unreasonable to state that in the event that the developer owns another site where the construction phase is ongoing, soils can be transferred between their sites as an owned product and never become waste.

The above paragraph above is therefore considered a clear intention to reuse any clean, naturally occurring soils derived from excavations at this site (which may also include temporary stockpiling these materials). It is considered; however, that in addition to this the following must be adhered to:

- Reuse does need to occur within a 'reasonable' timeframe (12 No. months); and,
- If soils are transferred to a third party (another developer), there needs to be some contractual agreement in place, as in this situation it is important to have something in place confirming that surplus soils are required by the third party.

Re-Use of Excavated and Stockpiled Clean Naturally Occurring Soils Within The Site They Are Excavated From

Further to the above, where soils are naturally occurring, uncontaminated and re-used on the site they are excavated from, they fall outside of the Waste Framework Directive (WFD) i.e. they will not be classified as a waste. Currently the CL:AIRE Definition of Waste Code of Practice states the following which appears to support this position: *"If the material is waste an Environmental Permit will be required to lawfully deposit or re-use it unless the material is "uncontaminated soil and other naturally occurring material excavated in the course of construction activities where it is certain that the material will be used for the purposes of construction in its natural state on the site from which it was excavated", which is excluded from waste regulation by the Waste Framework Directive (2008)."*

4.12. Regulator Provided Information

Relevant searches for the site have been conducted by the Environment Agency, Local Authority and Fire Service. Responses are summarised below and included in Appendix D.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 23 of 44
Engineer: Stuart Milne
Date: 01/04/2025

Environment Agency

The EA provided data for 2 No. historic landfills across 3 No. plots; 2 No. at Manchester Road circa 80m west of the site associated with railway cuttings, and 1 No. at Peel College circa 80m south of the site, on the southern boundary of Pyramid Park. These records correlate with data extracted from the Groundsure report in Table 4.9.

The EA also provided records for 2 No. pollution incidents close to Bury Metro Station from 2001 and 2011. These incidents are circa 50m east off site, and as per the Groundsure records in Table 4.10.

Fire Service

The following response was received from the Greater Manchester Combined Authority:

*I can confirm Greater Manchester Combined Authority holds information relating to the dates and cause of the incidents described in the attached spreadsheet. However, we are withholding part of the information since we consider that the following exemptions apply to it. The withheld information is exempt from disclosure under Section 40(2) of the Freedom of Information Act (FoIA). The information is personal data as defined by the Data Protection Act 2018 (DPA). As it is information about someone else I'm unable to give this to you; release of this information would constitute a breach of Principle 1 of the DPA. Principle 1 states that personal data shall be processed (used) fairly and lawfully and, in particular, shall not be used unless at least one of the conditions in Schedule 2 of the DPA is met; in this case none of those conditions have been met. This response therefore acts as a refusal notice under section 40(2) of the FoIA. Please note that GMFR's records **do not indicate that foam was used** in the incidents described in the attached. In addition, **GMFRS do not currently record volume of water or foam used, or details of run-off**. This information is therefore not included.*

The response refers to a document which contains 4 No. incidents covering vehicle, structural and refuse fires. Each were attacked with high pressure water delivery.

Local Authority

An Environmental Search Request was made with Bury Council. The following summary of findings is included below and in response reference ES913 in Appendix D.

Site Investigation Records

Bury Council have a number of records for Geoenvironmental reports, Remediation Strategies and Verification reports for surrounding land including Townside Fields, Pyramid Park, and Bury Market.

Townside Fields (Immediately west of the site):: Exceedances of contaminants were found and slightly elevated levels of ground gas. Remedial measures including gas protection measures were completed and planning conditions discharged.

Bury Market (60m east of the site): No elevated contaminants were found. No asbestos was encountered. Therefore, the potential risks to human health from soil contamination are considered low. A remediation strategy was not deemed necessary, however, further investigation is required in the areas which have been inaccessible at the time of the investigation.

Pyramid Park (Partially within the southeast of the site):: Planning Application determined in December 2024. Site investigations undertaken to date encountered highly variable Made Ground across the site with contamination associated with its former use; hydrocarbon, sweet odours, and visibly



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 24 of 44

Engineer: Stuart Milne

Date: 01/04/2025

oily material were noted. Inclusions within Made Ground included rail tracks and sleepers, ash, clinker and whole bricks. Remedial works are recommended.

Landfill Sites (within 250m)

The following landfill records have been summarised below:

Table 4.12 Local Authority Landfill Records

Name	Grid Reference	Distance from site	Details
Pyramid Park (Townside Fields)	380750 410250 (these coordinates centre of an area of residential housing further east than Pyramid Park)	There is a discrepancy in the Local Authority records as the site is shown to be centred at E 380314 ,N 410400 on the provided plan, where a car park and hotel are recorded. This would be in the west of the site not Pyramid Park.	The site was filled with inert subsoil as part of a Reclamation scheme with material imported from Moss Lane, Whitefield and Porritt Street, Freetown. The site is pre-licensing and was filled in 1973. The site was formerly used as car parking and open space. Site investigations carried out in 2005 and 2006 show generally reworked natural clays over shallow demolition wastes possibly from previous land uses. The entire landfill site was redeveloped in late 2000s and early 2010s as commercial development comprising a hotel, offices and car park under Planning Application 47200. Remedial measures were carried out which included significant earthworks, gas protection measures and clean cover in soft landscaped areas.
Peel College	380750 410250	83m S	The site is an infilled railway cutting. It is not known what the landfill was filled with. The site is pre-licensing act
Disused Railway Cutting, Bridge Road, or (Belle Vue)	380072 410400	154m W	The site is an infilled railway cutting which is now in use as a car park. The site was filled with inert waste under Licence No. RD/LIC/650/90 first issued 1991 and surrendered in 1993. The site is owned by Bury MBC
Railway Cuttings East and West of Manchester Road, Bury	380135 410417	154m W (associated with the above)	The site is filled with inert and construction waste types. This waste was deposited by Bury MBC under licence No. RD/LIC/503/88 first issued in 1988. Most of the fill was removed to reopen a railway line now used by the East Lancashire Railway.

Geology and Aquifers

The council summary for the site concurs with the Tier Environmental review in Table 4.1 and Table 4.5,

Environmental Permits within 250m

Bury Council have stated 'We are not aware of any sites with Integrated Pollution Prevention Control (IPPC) Part A1, or Local Authority Integrated Pollution Prevention and Control (LAIPPC) Part A2 Permits within 250m of the site. We are aware of two registered sites with a Local Authority Pollution Prevention and Control (LAPPC) Part B Permits within 250m of the site'. These records are associated with a demolition contractor for an address on Bank Street 200m north west of the Phase 1 site boundary, for 'mobile crushing and screening particulates'.

Ecological designations within 250 metres

Townside Fields is noted to be designated a 'Site of Biological Importance' (SBI), a Local Authority designation, and falls within the boundary of the site.

Air Quality Management Area (AQMA) at the site



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 25 of 44

Engineer: Stuart Milne

Date: 01/04/2025

The site is located within an area predicted to exceed the national Air Quality Objectives for Nitrogen Dioxide (NO₂) as detailed in the Air Quality (England) Regulations 2015. It is therefore important that the site does not lead to, or significantly add to, predicted exceedances of any of the objectives detailed in the Air Quality (England) Regulations 2015.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 26 of 44

Engineer: Stuart Milne

Date: 01/04/2025

5. PREVIOUS INVESTIGATION FINDINGS

The following third party reports have been reviewed:

- A Geotechnical and Geoenvironmental Desk Study Report, by Campbell Reith (Ref: 13819-CRG-XX-XX-RP-LQ-0001, dated March 2022).
- A Factual Report on Site Investigation for Land at Townside Fields, Bury, by Dunelm Geotechnical and Environmental on behalf of Campbell Reith (Ref: M1062/01, dated April 2022)
- A Phase 2 Interpretive Report (Contamination), by Campbell Reith (Ref: 13819-CRG-XX-XX-RP-LQ-0002, dated July 2022).
- A Geoenvironmental Appraisal of land at Bury Market, for Bury Council, by ID Geoenvironmental Ltd (Ref: 5237-G-R001 Rev A, dated August 2022).
- A Factual Report for Pyramid Park, Bury, by Geotechnics on behalf of Campbell Reith (Ref: PN234595, dated February 2024)
- A Land Quality Statement by Campbell Reith (Ref: 14111-CRH-XX-XX-RP-LQ-0001, dated April 2024)
- A Remediation Strategy and Quality Statement by Campbell Reith (Ref: 14111-CRH-XX-XX-RP-LQ-0001-P02, dated November 2024)

Table 5.1 Report Review Summary

Site history	Historical OS plans indicate the site has had several phases of development generally associated with commercial retail use. However, two garages and a timber yard have been present in the west of the site.
Mining and quarrying	The BGS plan shows a fault crossing the east of the site, trending northwest-southeast and the Arley Mine coal seam subcrops in the east of the site to the north of the fault and subcrops to the southeast of the site to the south of the fault. The geological plan indicates the coal seam dips to the west beneath the site. The Coal Authority's interactive viewer identifies a small section in the east of the site is determined a high-risk development area. The extent of the high-risk development area is consistent with the extent of an area shown on the interactive viewer as probable shallow coal mine workings. The assessment of the mining risk was undertaken for the high-risk development area located to the north and the south of the fault. The assessment for the north of the fault concluded a very low/negligible risk of unrecorded mine workings being present. The assessment to the south of the fault concluded that the risk of unrecorded shallow mineworkings can be discounted for the majority of the high-risk development area, but a small area, close to the eastern boundary of the site, has been identified where less than 10x rock cover would be provided above any possible unrecorded workings within the Arley Mine coal seam.
Fieldwork	Fieldwork was supervised by IDG between 21st February and 3rd March 2022 and comprised cable percussive boreholes (BH01 and BH02) to depths of 12m to 25m, and Window Sampling boreholes (WS01 – WS05) to depths of 4.45 – 5.45m.
Laboratory testing	A total of 8 No. samples of Made Ground and were submitted for testing of a suite of heavy metals, pH, speciated OAH and an asbestos screen, with 1 No. of these and 4 No. natural samples submitted for speciated TPH analysis. In addition, 2 No. samples of groundwater were tested for TPH, VOCs and SVOCs.
Ground conditions	The ground conditions encountered across the site typically comprised hardstanding underlain by Granular Made Ground proven to depths of 1.1m - 2.5m. Superficial Deposits were encountered beneath the Made Ground and comprised alternating layers of granular and cohesive deposits. In addition, a thin layer of organic peaty sand/sandy peat, up to 0.5m thick, was encountered directly beneath the Made Ground in WS01 and BH01. Mudstone bedrock was proven at depths of 14.1m and 14.5m in BH01 and BH02 respectively Groundwater bodies have been recorded in both the upper and lower granular superficial deposits resting at levels of between 2.51m-4.57m bgl (89.83-90.42m AOD) in the upper deposit and 6.29m-7.93m bgl (86.17-87.41m AOD) in the lower deposit.
Foundations and floor slab recommendations	The foundations for both the proposed new building and the market canopy will be piled. The coal mining risk assessment has identified a small area in the east of the site where less than 10x rock cover is provided above the Arley Mine coal seam and any potential workings within the seam. Should any piled foundations for the market canopy in this area extend to bedrock IDG consider the risk should be categorised as low. However, should the piled foundations for the market canopy terminate at a shallower depth, within the superficial deposits and effectively rely on skin friction, IDG consider the risk from any potential unrecorded workings within the Arley Mine coal seam would be negligible.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 27 of 44
Engineer: Stuart Milne
Date: 01/04/2025

Contamination – Human Health and Controlled Waters	No evidence of contamination has been identified in soils or groundwater beneath the site.
Gas protection	A hazardous ground gas risk assessment has determined the site should be classified as Characteristic Situation 1. The hazardous ground gas risk assessment may need to be reassessed after any additional investigation within the footprint of the proposed new building in the west of the site.
Radon Requirements	The site is not located in a radon affected area, as less than 1% of properties are above the Action Level. Building Control Regulations do not require radon protection measures to be installed.
Recommendations	Additional intrusive investigation was recommended to assess possible ground contamination relating to former land uses (garages and timber yard). Further intrusive investigation comprising rotary drilling may be required to determine the presence of the Arley Mine coal seam.

Table 5.2 Campbell Reith 2024 Reports Review Summary

Context	This report pertains to Townside Fields/Pyramid Park, parts of which are located within the south east of the Phase 1 and Phase 2 site boundaries
Site History	Historically, the site was largely occupied by railway sidings with goods sheds and cattle pens in the west of the site, likely associated with the former abattoirs to the northwest. Extensive ground workings to reduce site levels around 1890's appear to have taken place to facilitate the expansion of the railway sidings. Later, the site was used as public open space and a pond was present in the central and eastern section of the site along with three large pyramid features, still present today
Reports referenced	• A Geotechnical and Geoenvironmental Desk Study Report, by Campbell Reith (Ref: 13819-CRG-XX-XX-RP-LQ-0001, dated March 2022). • A Factual Report on Site Investigation for Land at Townside Fields, Bury, by Dunelm Geotechnical and Environmental on behalf of Campbell Reith (Ref: M1062/01, dated April 2022) • A Phase 2 Interpretive Report (Contamination), by Campbell Reith (Ref: 13819-CRG-XX-XX-RP-LQ-0002, dated July 2022). • A Factual Report for Pyramid Park, Bury, by Geotechnics on behalf of Campbell Reith (Ref: PN234595, dated February 2024)
Fieldwork	Intrusive works carried out by Dunelm Geotechnical and Environmental between 31st January and 3rd February 2022 comprised 6 No. Windowless Sample Boreholes (WS01-WS06) to a maximum depth of 4.45m bgl, and 10 No. Trial Pits (TP01-TP04, TP04A, TP05-TP09) to a maximum depth of 4.00m bgl A second phase of intrusive works by Geotechnics between 15th and 30th November 2023 comprised 19 No. machine dug trial pits (SA101, SA102, TP101 to TP104, TP106 to TP110, TP112, TP116A and TP118 to TP123) to a maximum depth of 4.00m bgl, 6 no. hand-dug pits (HP111, HP113 to HP115, HP117E and HP117W) to a maximum depth 1.10m bgl, and 8 no. cable percussive boreholes (BH101 to BH108) to a maximum depth of 11.77m bgl. A third phase of ground investigation works is mentioned in the Remediation Strategy. Completed in August 2024, this was intended to supplement the existing site information for the enabling works.
Ground conditions	The site is underlain by Topsoil or Made Ground of varying thickness over superficial deposits of Glacial Till comprising a mix of clays and sands. The underlying mudstone bedrock of the Pennine Lower Coal Measures was encountered at several locations between 3m and 11m below ground level (bgl).
Foundations and floor slab recommendations	Campbell Reith determined that traditional shallow strip foundations are viable where the Glacial Deposits are present within the top 2m of site and the proposed loading is modest (i.e. low-rise structures). In areas underlain by considerable thicknesses of Made Ground and/ or high loading (i.e. high-rise structures) are proposed, ground improvement methods (i.e. vibro stone columns) or a piled foundation solution may be required. Foundations placed within the Glacial Clays will need to be deepened to account for the volume change potential of the cohesive soils.
Concrete Class	Chemical laboratory test results suggest a concrete class of DS-3 is required. Additional testing was recommended in the mudstone bedrock if deeper foundations were considered.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 28 of 44

Engineer: Stuart Milne

Date: 01/04/2025

Contamination – Human Health	Asbestos in the form of fibre bundles of amosite or chrysotile were recorded in 8 no. samples of Made Ground retrieved during the 2023 enabling works ground investigation. The asbestos was quantified to be <0.001% to 0.009% w/w (chrysotile and amosite). Made Ground with hydrocarbon/sweet odours, and inclusions of clinker, ash, coal and slag were noted within or adjacent the pyramid structures. Elevated PAH compounds were also identified in Made Ground samples retrieved from the pyramids during the 2024 ground investigation. Further investigation of the soils beneath the pyramid structures was considered required to determine if any contamination is present that presents a risk to end users and to finalise the foundation design for any proposed buildings in this area.
Contamination –Controlled Waters	Campbell Reith summarised the site is considered to have a Moderate sensitivity with respect to hydrogeology due to the presence of a superficial and bedrock Secondary A Aquifer, and the fact site is not located within 1km of a Source Protection Zone. The site was considered to have a Low/Moderate sensitivity with respect to hydrology due to the distance to the River Roch which is located 700m west of the site. Following a controlled waters risk assessment, a low risk was identified from the potential migration of dissolved phase and mobile contaminants to the underlying Secondary A Aquifer. A benzo(a)pyrene DWS exceedance was encountered at one location, but the low permeability Glacial Till was considered to provide suitable limit to migration. Furthermore, a low risk was identified from migration of potential contaminants given the nearest surface watercourse is >700m from the site
Gas protection	The site has been preliminary classified as CIRIA Characteristic Situation 2 (low risk), however sporadic flow rates were encountered during the ground investigations. Campbell Reith states that based on the current data, the requirement for ground gas protection measures should be confirmed following confirmation of final development plans and completion of additional monitoring post completion of the enabling works phase
Waste Soils	A total of 5 no. samples were classified as Hazardous in accordance with WM3 due to elevated TPH concentrations. The remaining 47 no. were Non- Hazardous.
Remediation Proposals	Campbell Reith state that subject to wider geotechnical considerations the reuse of site won Made Ground, free from indications of gross contamination, can be replaced beneath a validated soils capping layer, or beneath the construction of roads, buildings or hard standing, without further work to remove ACMs. The Made Ground must be replaced at a depth >450mm in communal landscaped areas and >600mm in private garden areas. Wherever a formation level is reached in Made Ground, prior to works being completed to effect the desired levels and/or end use, a warning layer geotextile shall be placed in order to denote the boundary between the respective media and provide a risk mitigation barrier.
Recommendations	• A watching brief should be maintained throughout the earthworks to identify any as yet unidentified contaminations that may be present, particularly at excavation formation level. I • It is recommended that any hydrocarbon odorous soils are excavated and removed off site as a precautionary measure. • Additional ground gas monitoring post completion of the enabling works phase. • As asbestos has been detected, groundworks should be undertaken by a suitably qualified Contractor in accordance with the Control of Asbestos Regulations 2012, associated Approved Code of Practice (ACoP) and guidance prepared by CL:AIRE and the Joint Industry Working Group (JIWG), and CIRIA. • There is the potential for impacted Made Ground to be present beneath the existing pyramid structures. Therefore, the nature and composition of the soils beneath the pyramid structures will need to be assessed appropriately. • An invasive species specialist should be consulted to confirm the best approach to remediate the area of the current Japanese Knotweed stand in the east of the site



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 29 of 44
Engineer: Stuart Milne
Date: 01/04/2025

6. GROUND GAS CONCEPTUAL SITE MODEL CONSIDERATION

6.1. Potential Ground Gas Sources and Gas Generation Potential

BS 8576:2013 outlines the importance of determining the gas generation potential on a given site by examining the potential source's characteristics, such as the type of waste or organic content, that could produce hazardous gases like methane or carbon dioxide. However, risk assessment is a separate step, which considers pathways and receptors, using factors like Gas Screening Values (GSV) to estimate potential exposure and impact on receptors.

As such, it is important to delineate "generation potential" (linked to source characteristics) from "risk" (dependent on exposure likelihood and receptor sensitivity).

Tier Environmental has used material type descriptions and generation potential designations alongside the risk of lateral migration determinations from a combination of BS 8576:2013 and The Local Authority Guide to Ground Gas, CIEH (2008) and assessed their presence or otherwise for this site in the table below.

For further information of current site use, current surrounding land use, site history and surrounding land use history please refer to Sections 2 and 3.



PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 30 of 44
Engineer: Stuart Milne
Date: 01/04/2025

Table 6.1 Potential Ground Gas Source Generation Potential (from BS 8576:2013 and The Local Authority Guide to Ground Gas, CIEH (2008))

BS 8576:2013 Generation Potential of Source		Risk of Lateral Migration (from The Local Authority Guide to Ground Gas, CIEH (2008))	Potential On-Site Source?	Potential Off-Site Source?
Generation Potential	Material Types			
Very low	Natural carbonate soil and strata, e.g. chalk and limestone.	Negligible	No	No
	Natural soil strata with a low degradable organic content, e.g. alluvium	Negligible	No	No
	In-filled pond less than 15 m diameter, in-filled before 1930s to 1940s.	Negligible	No	No
	Made ground with low degradable organic content (e.g. up to 5% organic material such as pieces of wood, pieces of paper, rags, etc. with a high proportion of ash and no food or other easily degradable waste).	Negligible	Yes – Widespread Made Ground associated with historic land uses.	Yes – Widespread Made Ground associated with historic land uses.
	Mine workings shallow or shaft (where there is clear evidence that they are flooded). (Gas in coal is historically generated and is trapped or adsorbed so the actual current generation rate is very low but it accumulates in workings and large volumes can be emitted very quickly.)	Variable – depends on extent of workings, geology and hydrogeology	No	No
	Inert landfill sites. (Lack of regulation in the past means that most sites are never entirely inert – they can include timber, plasterboard and even domestic refuse and consequently care is needed when assessing such sites. They might require a higher risk classification.)	Low	Yes - Earthworks associated with redevelopment of the site and surrounding land in the mid-1970s with regrading/infilling of land of the former railway cuttings. A sand pit is recorded 30m west of the north of the site and a reservoir 50m south, infilled by 1891 and 1976 respectively	Yes – records describing ‘inert’ landfilling circa 1988 83m and 154m west associated with infilling of old railway cuttings.
	Hydrocarbon impacted soils (anaerobic degradation)	Negligible	Yes – Possible hydrocarbon sources associated with on site tanks and unknown potential historic leaks or spillage. Identified hydrocarbons in Campbell Reith 2024 reporting within Pyramid Park in the south east of the site.	Yes – Possible hydrocarbon sources associated with tanks and unknown potential historic leaks or spillage/
Very low / low	Natural soil strata with a high degradable organic content (DOC) e.g. peat (note: gas in peat is historically generated and is trapped or adsorbed in the soil so the actual current generation rate is very low)	Negligible	No	No
Low *	Made ground with total organic carbon (TOC) up to 6% (e.g. dock silt. No food or other easily degradable waste).	Negligible	No	No
	Foundry sand (includes phenolic binders, rags and wood that decay, albeit at low rates).	Very low	No	No
	Landfill 1945 to mid-1960s (see also “moderate”).	Low/moderate – depends on geology	No	No
Moderate	Sewage sludge / cess pits.	Very low	No	No
	Mine workings – unflooded, more than 50 years since last worked (gas is liberated from coal when mine workings are excavated; this continues for up to about 50 years).	Variable – depends on extent of workings, geology and hydrogeology	No	No
	Landfill 1945 to mid-1960s (this could also be “low” or, if disturbed, “high”).	Low/moderate – depends on geology	No	No
High	Landfill mid-1960s to early 1990s.	Moderate to very high	No	No
	Mine workings – unflooded – less than 50 years since last worked.	Variable – depends on extent of workings, geology and hydrogeology	No	No
Very High	Municipal landfill sites.	Moderate to very high or Low (assuming site has engineered containment systems)	No	No
	Landfill early 1990s onwards.	Low (assuming site has engineered containment systems)	No	No

Notes - * Higher TOCs might not always indicate high degradability. For example, coke breeze can contain up to 51% TOC but only 4% DOC. In this case, the assessor should estimate what proportion of the TOC is degradable.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 31 of 44

Engineer: Stuart Milne

Date: 01/04/2025

6.2. Appropriate Level of Ground Gas Monitoring

It can be seen from Table 6.1 that potential on-site ground gas sources have been identified that have a very low gas generation potential.

BS 8576:2013

In accordance with Section 8.7 from BS 8576:2013, the decision matrix below derived from Figure 6 in the British Standard has been used to determine the appropriate level of gas monitoring for the site. The extent of gas monitoring that is required is based on the generation potential of the source(s) determined in Table 6.1, i.e. what is the risk that large volumes of gas can be generated and can credibly migrate to pose a credible hazard to the identified receptors? The British Standard also describes that it might be appropriate to take into account the sensitivity of the receptor, the existence of site-specific migration pathways and mechanisms that could affect migration, such as groundwater level movements when determining the gas monitoring requirements.

Figure 6.1 Decision Matrix For Initial Monitoring (Extracted from Figure 6 in BS 8576:2013)

	Generation potential of source				
Gas monitoring requirements	Very low	Low	Moderate	High	Very high
Gas monitoring might not be necessary					
Gas monitoring over a period of 2 months with up to weekly measurements					
Gas monitoring over a period of 2 months up to 6 months with up to fortnightly readings					
Gas monitoring over a period of 6 months up to 12 months with up to fortnightly readings. Use high frequency monitoring where appropriate					

NOTE The darker the section on the matrix, the more likely it is that monitoring is needed.

Note from BS 8576:2013: There could be occasions when “low potential” sites require more monitoring than those with a higher gas generation potential. On a site where there are high gas concentrations and/or flow rates this can become apparent following a single round of monitoring and further monitoring is unlikely to alter the assessment of potential risks. On the other hand, some sites with low gas concentrations and/or flow rates are more susceptible to changes in atmospheric pressure, etc. and therefore require a longer period of monitoring in order to assess the potential risks with confidence.

An assessment has been made as to whether a potential off-site source of gas warrants additional consideration based on its distance from site, local geology and whether the risk of lateral migration gas migration is high enough. In turn it has been assessed whether doing so merits increasing the proposed periods of monitoring. There are records describing ‘inert’ landfilling circa 1988 83m and 154m west of the site associated with infilling of



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 32 of 44

Engineer: Stuart Milne

Date: 01/04/2025

old railway cuttings. In addition, Made Ground is anticipated associated with historic surrounding land uses including the wider railway sidings and an abattoir, with possible historic tanks. Given the very low gas generation potential of these sources, and the worst-case low risk of lateral migration, in addition to the fact the site is underlain by low permeability cohesive Devensian Till soils, and only locally granular Glaciofluvial Deposits which likely overly the Till, it is not considered these off site sources would impact the proposed period of monitoring.

On the basis of the above, it is not considered that the off-site sources, in the context of the conceptual site model are such that they warrant an increase to the proposed period of monitoring.

CIRIA C665

Additionally, due consideration has been made of Tables 5.5a and 5.5b in CIRIA C665 which offers guidance on "typical/idealized" monitoring periods and frequencies for gas monitoring based on proposed land use, sensitivity, and the gas generation potential of the source.

Table 6.2 and Table 6.3 demonstrate how, in accordance with CIRIA C665, the periods and frequency of monitoring have been selected for the site.

Table 6.2 From Table 5.5a CIRIA C665 - Typical/idealised periods of monitoring (after Wilson et al, 2005)

		Generation Potential of the Source				
		Very Low	Low	Moderate	High	Very High
Sensitivity of development	Low (commercial)	1 month	2 months	3 months	6 months	12 months
	Moderate (flats)	2 months	3 months	6 months	12 months	24 months
	High (residential with gardens)	3 months ¹	6 months	6 months	12 months ¹	24 months

Notes:

1 NHBC guidance also recommends this period of monitoring (Boyle and Witherington, 2007).

2 There is no industry consent over "high", "medium" or "low" generation potential of source.

Table 6.3 From Table 5.5b CIRIA C665 - Typical/idealised frequency of monitoring (after Wilson et al, 2005)

		Generation Potential of the Source				
		Very Low	Low	Moderate	High	Very High
Sensitivity of development	Low (commercial)	4	6	6	12	12
	Moderate (flats)	6	6	9	12	24
	High (residential with gardens)	6 ¹	9	12	24 ¹	24

Notes:

1 NHBC guidance also recommends this period of monitoring (Boyle and Witherington, 2007).

2 There is no industry consent over "high", "medium" or "low" generation potential of source.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 33 of 44

Engineer: Stuart Milne

Date: 01/04/2025

Consideration of High Frequency (Continuous) Gas Monitoring

Table 6.4 below has been prepared in order to assess whether high frequency (continuous) gas monitoring should be considered for the site.

Table 6.4 Factors Considered for High Frequency (Continuous) Gas Monitoring

Factors	Tier Environmental Assessment
Are there any mineshafts on site?	No
Are there any recently closed mining workings on or near to the site?	No
Are there any landfills on or near to the site where large volumes of gases could be emitted (see Table 6.1 for definitions of generation potential of different landfill types)	No
Is there any previous gas monitoring that indicates a higher gas regime than expected from the conceptual model?	No
Is the site in an area where there may be tidal influence on the groundwater (and therefore the gas regime may fluctuate)?	No
Are there time constraints that may trigger the requirement for continuous gas monitoring?	No
Are there any sensitive receptors that may warrant additional continuous gas monitoring?	No
Conclusions	High frequency (continuous) gas monitoring is not required

Overall Determination

Based on the assessment completed above it is considered that a monitoring period of 4 No. visits over 1 No. month would be suitable for the very low gas generation potential sources identified on and surrounding site.

6.3. Potential Pathways

Table 6.5 below summarises potential pathways identified as relevant to the site.

Table 6.5 Potential Ground Gas Pathways Identified

Potential Pathways	Present On / Beneath the Site?	Present Between Potential Off Site Source And The Site?
Permeable strata	Yes	Yes
Ingress into confined spaces (e.g. basements)	No	Yes (Unknown)
Fractures or joints in rock	Yes	Yes
Utility services or ducts – existing	Yes	Yes
Utility services or ducts – future / proposed as part of development	Yes	Yes
Foundation structures (e.g. vibro stone columns) either pre-existing or proposed	Yes	Yes
Drainage systems (including culverts)	Yes	Yes
Mine workings / voids / coal seams	No	No
Mine shafts	No	No
Other future construction created pathways	No	No



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 34 of 44

Engineer: Stuart Milne

Date: 01/04/2025

6.4. Receptors

Under current proposals the development will comprise the construction of a new Transport Interchange in Bury Town Centre, incorporating the upgrade of the current Metrolink platform, access link bridge and re-development of the former bus station. Likely receptors are therefore considered to be site workers, site users, adjacent site users and maintenance staff.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 35 of 44
Engineer: Stuart Milne
Date: 01/04/2025

7. PRELIMINARY CONCEPTUAL SITE MODEL

Based on the information provided in the previous sections of this report a combined preliminary conceptual site model and conceptual exposure model has been developed for the proposed future land use. This summarises the understanding of surface and sub-surface features, the potential contaminant sources, transport pathways and receptors. In assessing the likely contaminants of concern present at the site, reference has also been made to Defra and Environment Agency supporting documentation. A preliminary qualitative risk assessment has also been made of the likelihood of the linkage operating and its potential significance in accordance with CIRIA C552.

The potential pollutant linkages identified and the qualitative risk assessment for these are presented in Table 7.1 below. The terms used in the preliminary qualitative risk assessment are defined in Appendix F.

7.1. Uncertainties

The following uncertainties exist in the preliminary conceptual model:

- The presence of any features unrecorded by the historic maps.
- Any unrecorded geological features.
- Any unrecorded pollution events during the site's history.



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 36 of 44
Engineer: Stuart Milne
Date: 01/04/2025

Table 7.1 Preliminary Assessment of Potential Pollutant Linkages (Continued on Next Page).

Justification / Comments
- From 1849 the site is shown to be part of gardens and a bowling green, with a few small buildings spread across site. By 1851 through to 1891 the site is shown to have railway infrastructure including a central shed and rail lines. The site is within an area of shallow earthworks in an 'L' shape from the Old Opera House circa 80m north and extending eastwards in conjunction with the railway lines, with the far north of the site at a higher level with an embankment down to the good sheds and railway level. The sheds and sidings have expanded slightly by 1930 and cattle pens are recorded in the east and north of the site adjacent to an adjacent abattoir, which possibly expands into site by 1957. The site remains broadly unchanged until circa 1976-1980 when there is major redevelopment including removal of the goods sheds and railway sidings, and replaced with a main north-south rail line is through a new cutting in the centre of the site with Bury Interchange station positioned in the northern half of the site. A road overpass, Angouleme Way, passes through the north of the site. Pyramid Park, a public park to the east of the site, encroaches within the site boundary. The site and immediate surrounding land were subject to earthworks through the mid-1970s with regrading/infilling of land of the former railway cuttings. A subway is shown passing from Townside Field to the west of the tracks from the early 1980s. The site remains broadly unchanged to present day. - From earliest records the site is surrounded by a timber yard and warehouse 80m west of the site and woollen mill. Buildings to the west of the north of the site are labelled as abattoirs from 1851 which expands through to 1976 when it is no longer shown. By 1910 wider railway infrastructure has expanded with a new line branching south west and further residential expansion is noted from 100m south of the site. By 1930 a bakery is located 130m east of the site and by 1938 Bury Technical College has been constructed immediately east of the north of the site. Post war aerial photography records indicate an area of housing circa 100m east of the site is derelict land and could possibly be associated with bomb damage. By 1957 the land to the north of the site has been redeveloped with the expansion of the Market Hall with an open market immediately north, which are removed by 1973 for a car park. A new road layout is constructed between 1973 and 1976 and buildings associated with Bury Interchange replace the carpark by the late 1970s. By 1976 the railway sidings to the east of the site have been broadly removed and redeveloped into 'Townside Field' a public park, with a lake, later named Pyramid Park. By 2013 the land to the west of the site is undergoing development into flats (union square) and the park (pyramid park) is disused. - The Department of the Environment Industry Profile for animal processing works, for the adjacent and partly on-site historic abattoir, suggest pathogens, solvents, bleaches and fuel oils are potential contaminants associated with this industry. Consideration has been given to the widespread redevelopment of the local area from the mid 1970 including construction of a new road (Angouleme Way) and car park within the historic abattoir site whereby a degree of Made Ground removal or remediation <i>may</i> have taken place though no records can confirm this. The current layout also contains railway infrastructure including possible electrical components and sources of PolyChlorinated Biphenyls (PCBs). With respect to risk from pathogens, under normal environmental conditions, it is often assumed that most pathogens are no longer viable after 1-2 years in the soil and after 20+ years of dormancy, the biological risk is likely to be negligible and so hasn't been considered further. - Superficial deposits (Devensian Till and Glaciofluvial Deposits), and the bedrock (Middle Pennine Coal Measures Formation) are both classified as Secondary A Aquifers. The site is not within a Source Protection Zone and there are no active potable abstraction wells within 2km. The nearest surface water feature is a lake within a park circa 100m east of the site though this not considered to be in hydraulic conductivity with local groundwater and has been dry since 2013, and the River Irwell located 675m west. Groundwater flow is anticipated to be towards the south in conjunction with the flow of the River Irwell. On this basis the controlled waters sensitivity is regarded as being low/moderate. - The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report (CON29M) does not indicate the site is at risk from past coal mining activity. A sand pit was recorded 30m west of the north of the site from 1849, and a reservoir 50m south, infilled by 1891 and 1976 respectively. The site itself has been subject to significant earthworks, most recently in circa 1973-1976 when the old railway cuttings are infilled, likely associated with the BSG records identifying the site to be underlain by 'worked ground'. It should be noted that the current layout comprises a new railway cutting. Nearby and on-site landfill records for other railway cuttings indicate use of 'inert' waste. Bury Council also provided records for a landfill in Townside Fields (in the west of the site) filled with inert subsoil as part of a Reclamation scheme in 1973 and since redeveloped in late 2000s and early 2010s as a hotel, offices and car park with remedial measures. Gas generation potential for any on and off-site sources is considered to be relatively low. - The site is not located within an ecologically sensitive area, notwithstanding the SBI Grade B and SSSI Impact Zone.



**PRELIMINARY RISK ASSESSMENT REPORT FOR
BURY INTERCHANGE PHASE 1**

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 37 of 44
Engineer: Stuart Milne
Date: 01/04/2025

Source	Potential Contaminants of Concern	Pathway	Receptor	Consequence	Probability	Qualitative Risk Assessment
Anticipated widespread Made Ground across the site associated with historic land uses including railway sidings, goods sheds, part of an abattoir in the north of the site, and earthworks associated with landfilling records associated with the infilling of railway cuttings in the east and west of the site.	Metals PAHs pH Hexavalent chromium Acids Alkalis	Direct contact, dust inhalation and ingestion	Future site users (commercial)	Medium	Low Likelihood	Moderate / Low Risk
			Adjacent site users (commercial)	Medium	Low Likelihood	Moderate / Low Risk
			Construction, site investigation, demolition and future maintenance workers	Medium	Likely	Moderate Risk
		Migration of mobile contaminants from Made Ground soils to adjacent sites along services and conduits	Adjacent site users (commercial)	Medium	Unlikely	Low Risk
		Migration via water pipes	Future site users (commercial)	Medium	Low Likelihood	Moderate / Low Risk
		Lateral and/or vertical migration of mobile contaminants.	Aquifer 1 - Secondary A Aquifer associated with Devensian Till and Glacifluvial Deposits	Medium	Low Likelihood	Moderate / Low Risk
			Aquifer 2 - Secondary A Aquifer associated with Chester Formation Sandstone	Medium	Unlikely	Low Risk
	Naphthalene (a semi-volatile PAH) TPH / BTEX / MTBE VOCs / SVOCs Phenols PolyChlorinated Biphenyls (PCBs) Cyanides Glycols Coal tar Free phase product	Vapour inhalation, direct contact, dust inhalation and ingestion	Future site users (commercial)	Medium	Low Likelihood	Moderate / Low Risk
			Adjacent site users (commercial)	Medium	Low Likelihood	Moderate / Low Risk
			Construction, site investigation, demolition and future maintenance workers	Medium	Likely	Moderate Risk
		Migration of mobile contaminants from Made Ground soils to adjacent sites along services and conduits	Adjacent site users (commercial)	Medium	Unlikely	Low Risk
		Migration via water pipes	Future site users (commercial)	Medium	Low Likelihood	Moderate / Low Risk
		Lateral and/or vertical migration of mobile contaminants.	Aquifer 1 - Secondary A Aquifer associated with Devensian Till and Glacifluvial Deposits	Medium	Low Likelihood	Moderate / Low Risk
			Aquifer 2 - Secondary A Aquifer associated with Chester Formation Sandstone	Medium	Unlikely	Low Risk
	Asbestos	(Dust migration and) dust inhalation	Future site users (commercial)	Medium	Low Likelihood	Moderate / Low Risk
			Adjacent site users (commercial)	Medium	Low Likelihood	Moderate / Low Risk
			Construction, site investigation, demolition and future maintenance workers	Medium	Likely	Moderate Risk
Made Ground located beneath the site including landfilling understood to be inert waste.	Hazardous ground gasses (methane, carbon dioxide, hydrogen sulphide, carbon monoxide and depleted oxygen)	Inhalation (indoor and outdoor)	Future site users (commercial)	Severe	Unlikely	Moderate / Low Risk
			Adjacent site users (commercial)	Medium	Unlikely	Low Risk
			Construction, site investigation, demolition and future maintenance workers	Severe	Unlikely	Moderate / Low Risk
		Migration of hazardous ground gases from beneath the site to adjacent sites along services or other preferential conduits	Adjacent site users (commercial)	Medium	Unlikely	Low Risk
		Migration of ground gas / explosion	Buildings and services	Severe	Unlikely	Moderate / Low Risk

For definition of the terms used in the qualitative risk assessment, please see Appendix F.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 38 of 44
Engineer: Stuart Milne
Date: 01/04/2025

8. PROPOSED FURTHER WORKS

8.1. Further works

The Phase 1 Preliminary Risk Assessment has determined a low to moderate risk to human health and a moderate/low risk to superficial aquifer, and low risk to the bedrock aquifer, with respect to potential contamination. A moderate/low risk has been determined for ground gasses.

It is recommended that a ground investigation is undertaken in order to further assess the potential risks associated with the pollutant linkages identified in the Preliminary Conceptual Site Model (presented in Section 5).

The objectives of the Phase II Ground Investigation will be:

- to determine shallow soil and groundwater (if encountered) conditions, including whether significant contamination has resulted from past or current land uses (inclusive of asbestos);
- to determine the risks posed by any ground contamination and provide recommendations on remedial measures to manage such risks;
- to determine the risks posed to the site from hazardous ground gases (if enclosed spaces for part of the finalised proposals);
- to determine the existence, and if applicable, the extent of contamination within local groundwater beneath the site;
- to provide advice relating to geotechnical issues associated with the site.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 39 of 44

Engineer: Stuart Milne

Date: 01/04/2025

9. REGULATORY APPROVALS

The conclusions and recommendations presented above are considered reasonable based on the findings of the site investigation. However, these cannot be guaranteed to gain regulatory approval and, therefore, the report should be passed to the appropriate regulatory authorities and/or other organisations for their comment and approval prior to undertaking any works on site.

It is recommended that conditions placed on any planning permission are discharged prior to commencement of site works.



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 40 of 44
Engineer: Stuart Milne
Date: 01/04/2025

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PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 41 of 44
Engineer: Stuart Milne
Date: 01/04/2025

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PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001
Page No : 42 of 44
Engineer: Stuart Milne
Date: 01/04/2025

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PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 43 of 44

Engineer: Stuart Milne

Date: 01/04/2025

11.GLOSSARY OF TERMS

ACEC	Aggressive Chemical Environment for Concrete (classification)
aOD	Above Ordnance Datum
bgl	Below ground level
BGS	British Geological Survey
BRE	Building Research Establishment
CBR	California Bearing Ratio (test)
COMAH	Control of Major Accident Hazards (regulations)
Designated location	Site (and the ecosystem on that site) protected under national or international legislation. A potential ecological receptor to be considered as part of the assessment of land contamination. Example designated locations include SSSIs (q.v.), SACs (q.v.), national nature reserves, Ramsar sites and bird special protection areas.
DQA	Data Quality Assessment
DQO	Data Quality Objective
DQRA	Detailed Quantitative Risk Assessment
DWS	Drinking Water Standard
EQS	Environmental Quality Standard
GAC	Generic Assessment Criterion
GQA	General Quality Assessment (Environment Agency)
GSV	Gas Screening Value
HCV	Health Criteria Value
IPPC	Integrated Pollution Prevention and Control (regulations)
K _{ow}	Octanol-water partition coefficient
LEL	Lower Explosive Limit
LL	Liquid Limit
LoD	Limit of Detection (analytical)
LoQ	Limit of Quantification (analytical)
Mean Value Test	Statistical test (described in the CIEH Guidance) to estimate the mean value of a normally distributed population of data at a given level of confidence. Normally for contaminated land assessment, the 95th percentile (referred to as the 95%UCL or US95) is applied as a reasonable but conservative estimate of the mean concentration for comparison with the relevant assessment criteria.
Maximum Value Test	Statistical test (described in the CIEH Guidance) to identify whether an elevated concentration within a normally distributed data set forms part of the underlying population from which it has been sampled or whether it is an outlier (such as a localised area of contamination) that merits further consideration.
MC	Moisture Content
NGR	National Grid Reference
NIHHS	Notification of Installations Handling Hazardous Substances (regulations)
OS	Ordnance Survey
PI	Plasticity Index
PID	Photoionisation Detector
PL	Plastic Limit
ppm	Parts per million
ppmv	Parts per million by volume
QA	Quality Assurance
QC	Quality Control
SAC	Special Area of Conservation
SOM	Soil Organic Matter



PRELIMINARY RISK ASSESSMENT REPORT FOR BURY INTERCHANGE PHASE 1

Report No : 16012-TRE-BRY-XXX-RP-EN-000001

Page No : 44 of 44

Engineer: Stuart Milne

Date: 01/04/2025

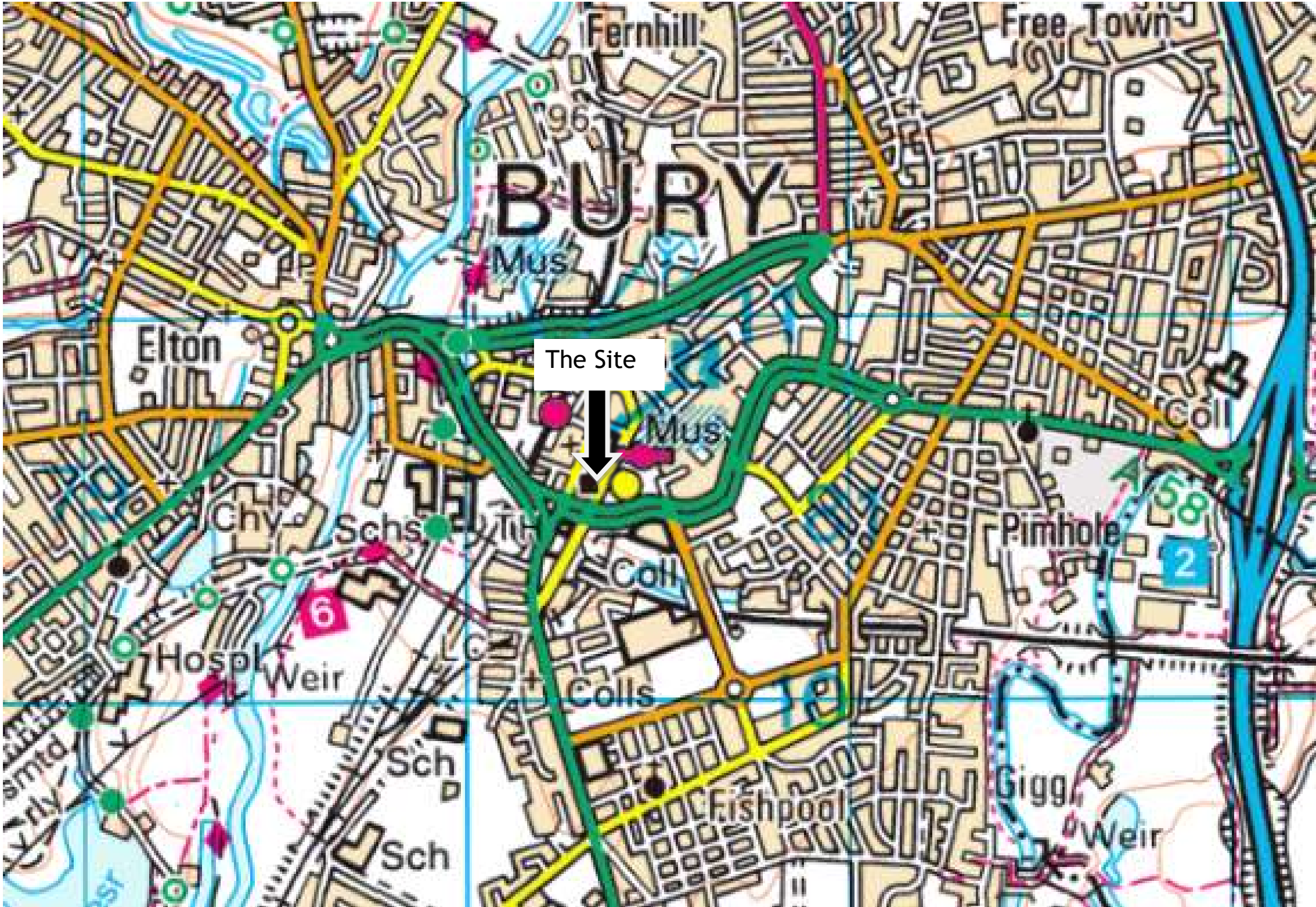
SPT	Standard Penetration Test
SPZ	Source Protection Zone (see Appendix G)
SSAC	Site-Specific Assessment Criterion
SSSI	Site of Special Scientific Interest
SVOC	Semi-Volatile Organic Compound
TEF	Toxicity Equivalent Factor
TPH	Total Petroleum Hydrocarbons
TWA	Time Weighted Average
US95	95 th percentile estimate of the true mean value of a data population (also known as 95%UCL).
VOC	Volatile Organic Compound

APPENDIX A - DRAWINGS



Site Location Plan

Contract Number	TE1885
Contract	Bury Interchange
Client	Wilmott Dixon



Scale	NTS	
Drawn by	SM	Approved AR
Drawing Number	TE1885-TE-00-XX-DR-GE-001-V01 16012-TRE-BRY-XXX-DR-GT-000002	

APPENDIX B - GROUNDSURE REPORT



PHASE 1 BURY INTERCHANGE, BURY, BL9 0AR v1

Order Details

Date: 06/12/2024
Your ref: TE1885_3461
Our Ref: GS-9IK-9AG-JKP-T12

Site Details

Location: 380399 410392
Area: 0.92 ha
Authority: [Bury Metropolitan Borough Council](#) ↗



[Summary of findings](#)

[p. 2 > Aerial image](#)

[p. 9 >](#)

[OS MasterMap site plan](#)

[p.14 > Insight User Guide](#) ↗

Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	26	11	29	126	-
23 >	1.2 >	Historical tanks >	0	0	3	16	-
24 >	1.3 >	Historical energy features >	0	2	1	18	-
25 >	1.4 >	Historical petrol stations >	0	0	0	1	-
25 >	1.5 >	Historical garages >	0	0	6	13	-
26	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
27 >	2.1 >	Historical industrial land uses >	33	15	38	186	-
37 >	2.2 >	Historical tanks >	0	0	6	28	-
39 >	2.3 >	Historical energy features >	0	4	2	42	-
41 >	2.4 >	Historical petrol stations >	0	0	0	2	-
41 >	2.5 >	Historical garages >	0	0	11	23	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
43	3.1	Active or recent landfill	0	0	0	0	-
43	3.2	Historical landfill (BGS records)	0	0	0	0	-
44 >	3.3 >	Historical landfill (LA/mapping records) >	2	0	3	0	-
44 >	3.4 >	Historical landfill (EA/NRW records) >	0	0	3	3	-
45	3.5	Historical waste sites	0	0	0	0	-
46	3.6	Licensed waste sites	0	0	0	0	-
46 >	3.7 >	Waste exemptions >	0	0	9	13	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
48 >	4.1 >	Recent industrial land uses >	0	1	10	-	-
49 >	4.2 >	Current or recent petrol stations >	0	0	1	1	-
50	4.3	Electricity cables	0	0	0	0	-
50	4.4	Gas pipelines	0	0	0	0	-
50	4.5	Sites determined as Contaminated Land	0	0	0	0	-



50	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
50	4.7	Regulated explosive sites	0	0	0	0	-
51	4.8	Hazardous substance storage/usage	0	0	0	0	-
51	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
51	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
51 >	4.11 >	Licensed pollutant release (Part A(2)/B) >	0	0	0	3	-
52	4.12	Radioactive Substance Authorisations	0	0	0	0	-
52 >	4.13 >	Licensed Discharges to controlled waters >	0	0	4	0	-
53	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
53	4.15	Pollutant release to public sewer	0	0	0	0	-
53	4.16	List 1 Dangerous Substances	0	0	0	0	-
53	4.17	List 2 Dangerous Substances	0	0	0	0	-
54 >	4.18 >	Pollution Incidents (EA/NRW) >	0	0	2	1	-
54	4.19	Pollution inventory substances	0	0	0	0	-
54	4.20	Pollution inventory waste transfers	0	0	0	0	-
55	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
56 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
58 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
60 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
61	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
61	5.5	Groundwater vulnerability- local information	None (within 0m)				
62 >	5.6 >	Groundwater abstractions >	0	0	0	0	8
65 >	5.7 >	Surface water abstractions >	0	0	0	0	32
72	5.8	Potable abstractions	0	0	0	0	0
73	5.9	Source Protection Zones	0	0	0	0	-
73	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
74	6.1	Water Network (OS MasterMap)	0	0	0	-	-



74 >	6.2 >	Surface water features >	0	1	1	-	-
75 >	6.3 >	WFD Surface water body catchments >	2	-	-	-	-
75 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
76 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
77	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
77	7.2	Historical Flood Events	0	0	0	-	-
77	7.3	Flood Defences	0	0	0	-	-
78	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
78	7.5	Flood Storage Areas	0	0	0	-	-
79	7.6	Flood Zone 2	None (within 50m)				
79	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
80 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
82 >	9.1 >	Groundwater flooding >	Moderate (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
83	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
84	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
84	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
84	10.4	Special Protection Areas (SPA)	0	0	0	0	0
84	10.5	National Nature Reserves (NNR)	0	0	0	0	0
85 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	1
85	10.7	Designated Ancient Woodland	0	0	0	0	0
85	10.8	Biosphere Reserves	0	0	0	0	0
85	10.9	Forest Parks	0	0	0	0	0
86	10.10	Marine Conservation Zones	0	0	0	0	0
86 >	10.11 >	Green Belt >	0	0	0	0	6
86	10.12	Proposed Ramsar sites	0	0	0	0	0



86	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
87	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
87	10.15	Nitrate Sensitive Areas	0	0	0	0	0
87	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
88 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
89	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
90	11.1	World Heritage Sites	0	0	0	-	-
91	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
91	11.3	National Parks	0	0	0	-	-
91 >	11.4 >	Listed Buildings >	0	0	16	-	-
92 >	11.5 >	Conservation Areas >	0	0	1	-	-
92	11.6	Scheduled Ancient Monuments	0	0	0	-	-
93	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
94 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
95	12.2	Open Access Land	0	0	0	-	-
95	12.3	Tree Felling Licences	0	0	0	-	-
95	12.4	Environmental Stewardship Schemes	0	0	0	-	-
95	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
96	13.1	Priority Habitat Inventory	0	0	0	-	-
96	13.2	Habitat Networks	0	0	0	-	-
96	13.3	Open Mosaic Habitat	0	0	0	-	-
96	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
97 >	14.1 >	10k Availability >	Identified (within 500m)				
99 >	14.2 >	Artificial and made ground (10k) >	3	0	1	21	-
101 >	14.3 >	Superficial geology (10k) >	2	0	3	12	-



102	14.4	Landslip (10k)	0	0	0	0	-
103 >	14.5 >	Bedrock geology (10k) >	1	1	1	8	-
104 >	14.6 >	Bedrock faults and other linear features (10k) >	0	1	3	7	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
106 >	15.1 >	50k Availability >	Identified (within 500m)				
107 >	15.2 >	Artificial and made ground (50k) >	1	0	0	1	-
108	15.3	Artificial ground permeability (50k)	0	0	-	-	-
109 >	15.4 >	Superficial geology (50k) >	2	0	3	4	-
110 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
110	15.6	Landslip (50k)	0	0	0	0	-
110	15.7	Landslip permeability (50k)	None (within 50m)				
111 >	15.8 >	Bedrock geology (50k) >	1	1	1	1	-
112 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
112 >	15.10 >	Bedrock faults and other linear features (50k) >	0	1	3	4	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
113 >	16.1 >	BGS Boreholes >	0	1	27	-	-
Page	Section	Natural ground subsidence >					
115 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
116 >	17.2 >	Running sands >	Very low (within 50m)				
117 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
118 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
119 >	17.5 >	Landslides >	Very low (within 50m)				
120 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
122	18.1	BritPits	0	0	0	0	-
123 >	18.2 >	Surface ground workings >	4	4	25	-	-
124 >	18.3 >	Underground workings >	0	0	0	0	3
124	18.4	Underground mining extents	0	0	0	0	-
125	18.5	Historical Mineral Planning Areas	0	0	0	0	-

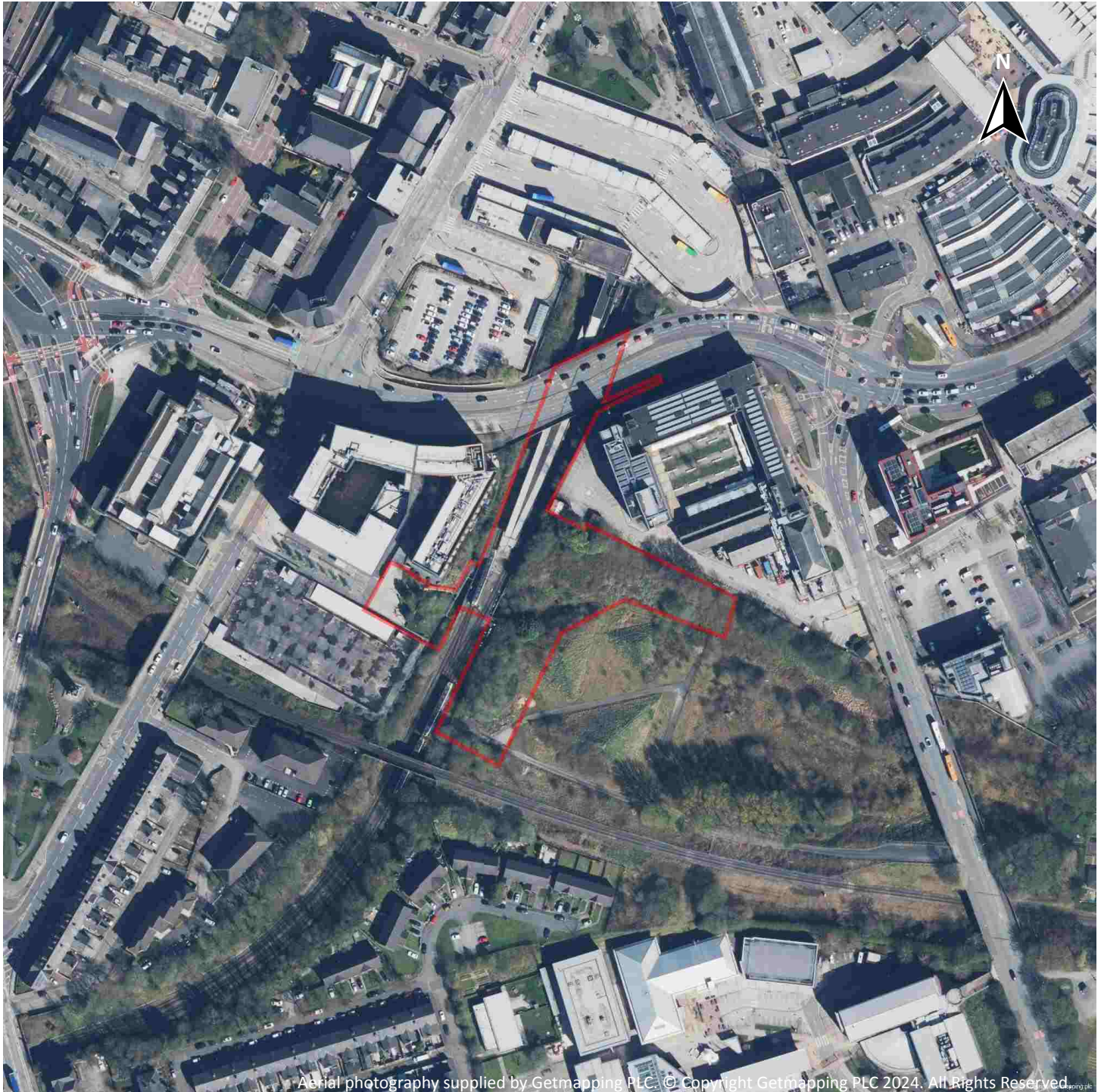


125	18.6	Non-coal mining	0	0	0	0	0
125	18.7	JPB mining areas	None (within 0m)				
125	18.8	The Coal Authority non-coal mining	0	0	0	0	-
126 >	18.9 >	Researched mining >	0	0	0	1	-
126	18.10	Mining record office plans	0	0	0	0	-
126	18.11	BGS mine plans	0	0	0	0	-
126 >	18.12 >	Coal mining >	Identified (within 0m)				
127	18.13	Brine areas	None (within 0m)				
127	18.14	Gypsum areas	None (within 0m)				
127	18.15	Tin mining	None (within 0m)				
127	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes >	On site	0-50m	50-250m	250-500m	500-2000m
128	19.1	Natural cavities	0	0	0	0	-
129 >	19.2 >	Mining cavities >	0	0	0	1	0
129	19.3	Reported recent incidents	0	0	0	0	-
129	19.4	Historical incidents	0	0	0	0	-
130	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
131 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
133 >	21.1 >	BGS Estimated Background Soil Chemistry >	2	2	-	-	-
133	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
134	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
135	22.1	Underground railways (London)	0	0	0	-	-
135	22.2	Underground railways (Non-London)	0	0	0	-	-
136 >	22.3 >	Railway tunnels >	2	0	1	-	-
136 >	22.4 >	Historical railway and tunnel features >	13	5	28	-	-
138	22.5	Royal Mail tunnels	0	0	0	-	-



138 >	22.6 >	Historical railways >	0	0	2	-	-
139 >	22.7 >	Railways >	14	16	11	-	-
140	22.8	Crossrail 2	0	0	0	0	-
141	22.9	HS2	0	0	0	0	-

Recent aerial photograph



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Capture Date: 07/04/2023

Site Area: 0.92ha



Recent site history - 2019 aerial photograph

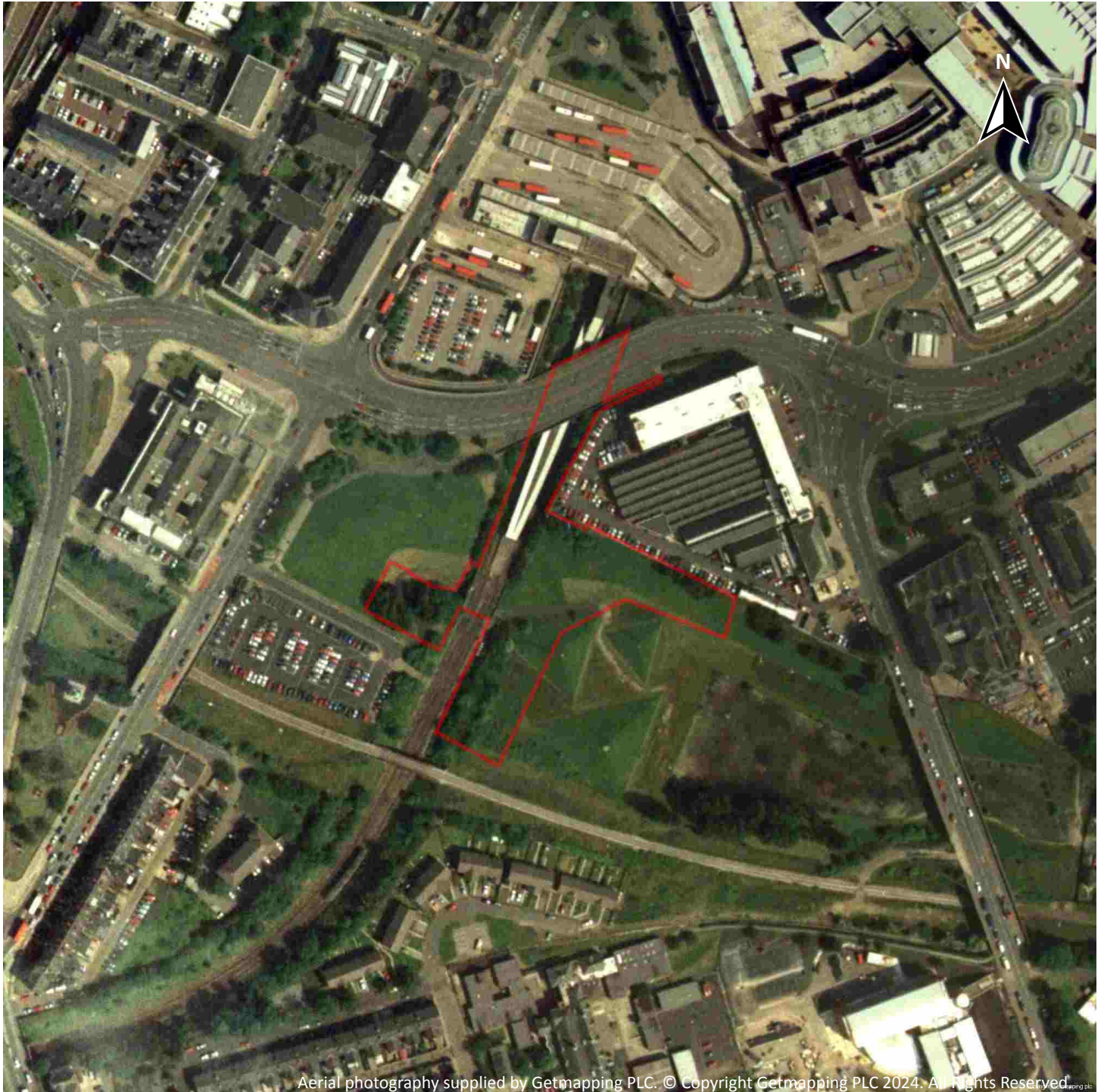


Capture Date: 23/05/2019

Site Area: 0.92ha



Recent site history - 2001 aerial photograph



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Capture Date: 07/05/2001

Site Area: 0.92ha



Recent site history - 2000 aerial photograph

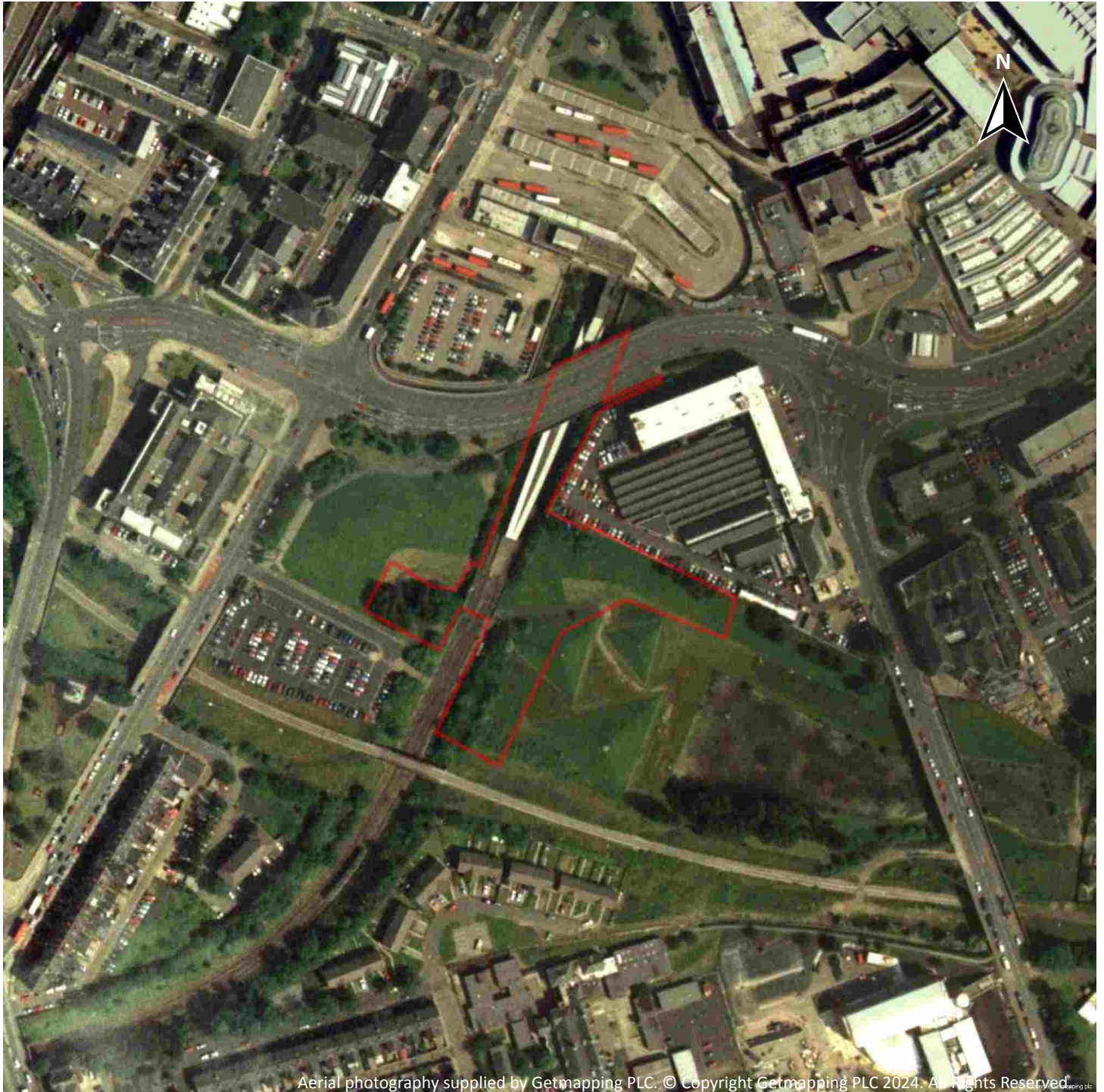


Capture Date: 27/06/2000

Site Area: 0.92ha



Recent site history - 1999 aerial photograph



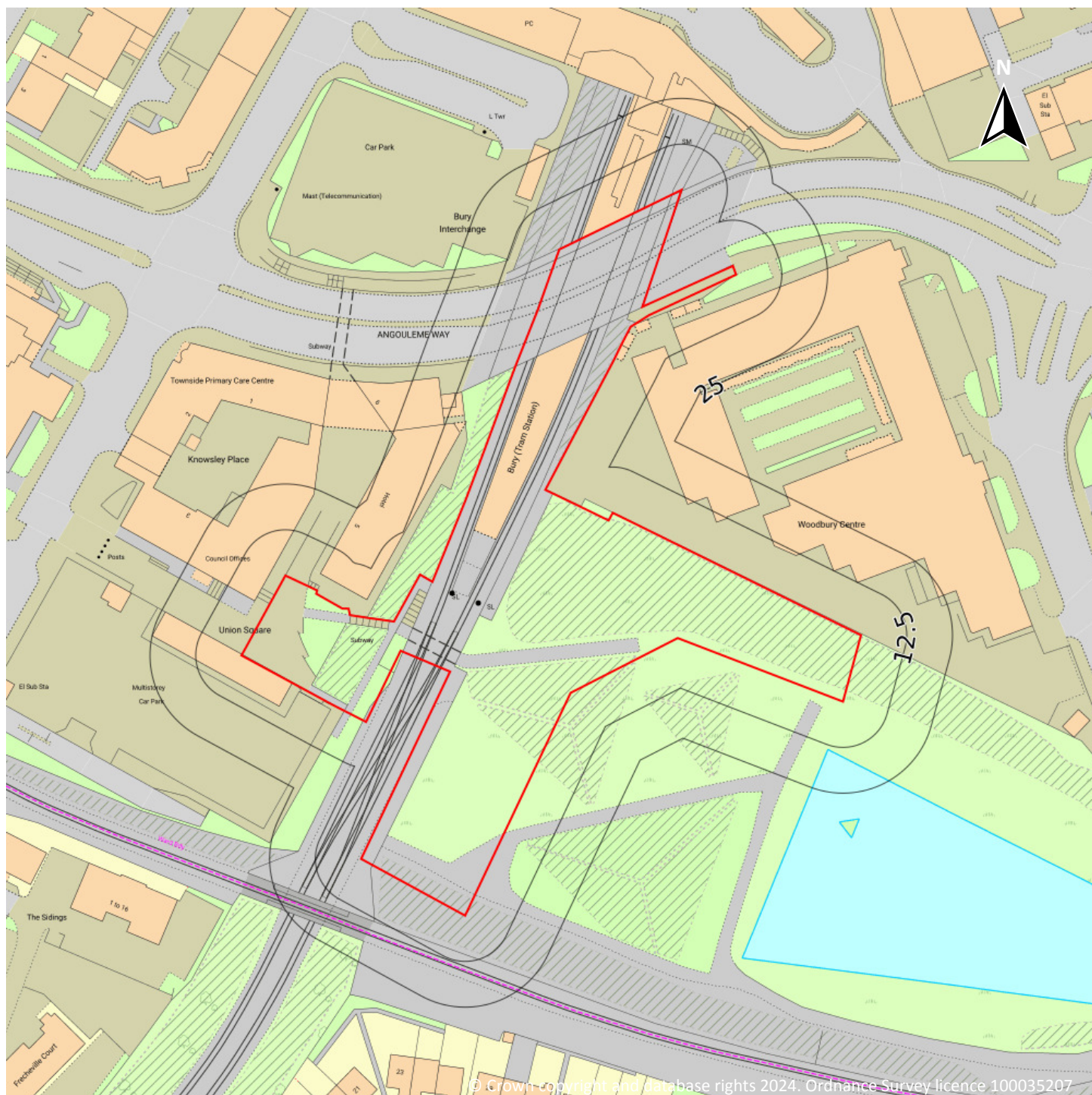
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Capture Date: 10/09/1999

Site Area: 0.92ha



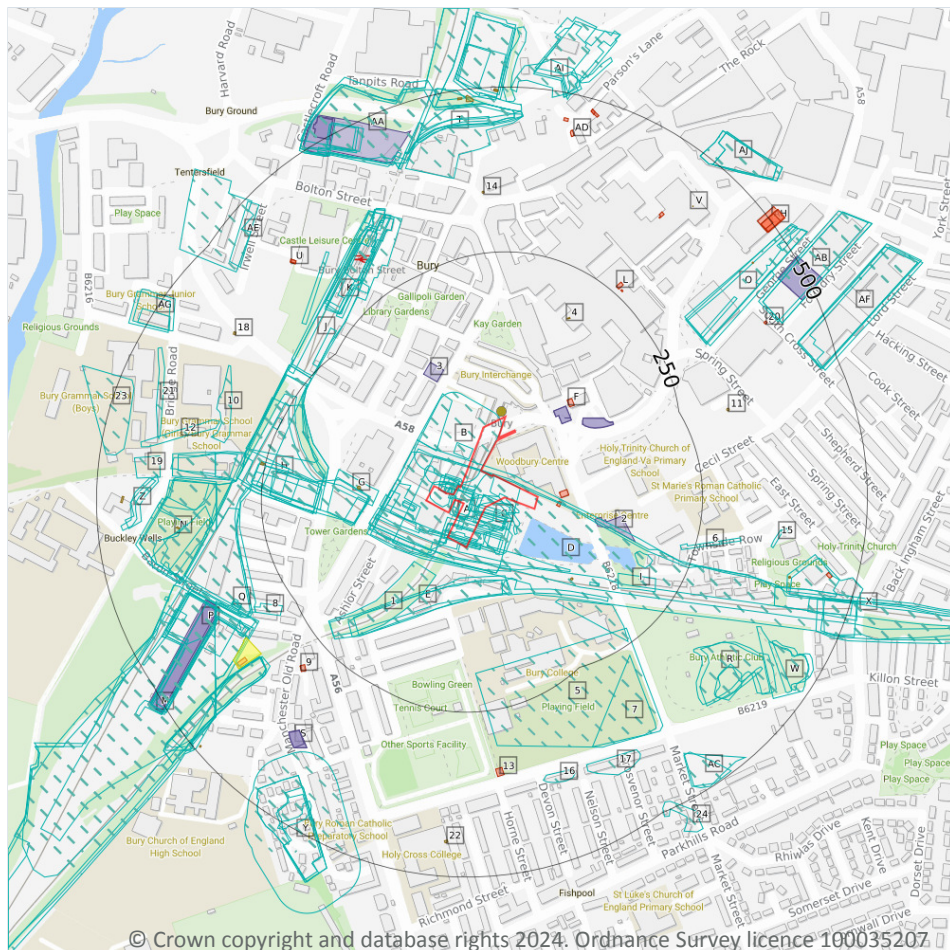
OS MasterMap site plan



Site Area: 0.92ha



1 Past land use



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

1.1 Historical industrial land uses

Records within 500m

192

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

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

ID	Location	Land use	Dates present	Group ID
A	On site	Cuttings	1967	653208



ID	Location	Land use	Dates present	Group ID
A	On site	Goods Station	1891	657699
A	On site	Railway Station	1967	666350
A	On site	Unspecified Pit	1983	675607
A	On site	Railway Building	1908	703028
A	On site	Railway Sidings	1851	722309
A	On site	Railway Building	1967	739659
A	On site	Railway Building	1956	751536
A	On site	Railway Building	1928 - 1938	762206
A	On site	Railway Buildings	1851 - 1891	770243
A	On site	Unspecified Ground Workings	1983	779095
A	On site	Railway Building	1891	785284
A	On site	Railway Sidings	1851	786289
A	On site	Unspecified Ground Workings	1851	786882
A	On site	Railway Building	1851	787359
A	On site	Railway Building	1908	789528
A	On site	Railway Building	1928 - 1938	789865
A	On site	Railway Building	1956	790397
A	On site	Goods Station	1928 - 1938	798951
A	On site	Goods Station	1956	800889
A	On site	Railway Building	1908	801911
A	On site	Goods Station	1908	805625
B	On site	Abattoirs	1908 - 1928	725983
C	On site	Railway Sidings	1891	754148
D	On site	Railway Sidings	1908 - 1938	778756
D	On site	Railway Sidings	1956 - 1967	784878
A	On site	Railway Station	1956	778607
A	2m SW	Railway Station	1908 - 1938	715889
B	3m N	Goods Station	1891	657700



ID	Location	Land use	Dates present	Group ID
A	10m SW	Railway Station	1851	727048
A	10m SW	Railway Station	1967	740912
A	15m S	Unspecified Ground Workings	1983	660957
A	17m W	Railway Building	1938	782343
A	18m S	Railway Sidings	1851	708050
A	21m W	Railway Building	1908 - 1928	748268
A	30m W	Railway Station	1891	803608
E	46m S	Cuttings	1967	710424
E	53m S	Cuttings	1956	781310
E	53m S	Cuttings	1908 - 1938	719786
B	54m NW	Cuttings	1891	653207
1	58m SW	Cuttings	1983	757213
G	73m W	Woollen Mill	1851	657526
D	78m S	Unspecified Ground Workings	1983	662677
G	85m W	Cuttings	1967	790478
H	86m W	Railway Sidings	1956 - 1967	804934
H	87m W	Cuttings	1983	742711
G	90m W	Cuttings	1908	744542
D	139m SE	Railway Building	1908	703029
D	142m SE	Unspecified Pit	1983	717145
H	155m W	Cuttings	1891	787802
H	155m W	Railway Sidings	1891	729594
H	158m W	Railway Sidings	1928 - 1938	770763
H	159m W	Railway Sidings	1908	750754
H	159m W	Cuttings	1908 - 1938	746835
H	160m W	Cuttings	1851	766796
I	160m SE	Cuttings	1851	653517
H	165m W	Cuttings	1967	746561



ID	Location	Land use	Dates present	Group ID
I	167m SE	Unspecified Heap	1983	688402
H	175m W	Cuttings	1956 - 1967	732344
5	187m S	Unspecified Pit	1956 - 1967	713634
H	196m W	Cuttings	1956	781482
H	214m W	Cuttings	1891	785651
6	228m E	Rope Walk	1851	691259
J	236m W	Railway Sidings	1967 - 1983	735837
K	249m NW	Railway Sidings	1956	707221
H	250m W	Railway Building	1956	702747
J	253m NW	Railway Building	1851	703026
7	265m SE	Unspecified Pit	1983	746753
K	268m NW	Railway Station	1956	764347
8	270m SW	Railway Building	1891	703027
K	271m NW	Railway Station	1851	764820
K	273m NW	Railway Sidings	1851	790382
K	276m NW	Railway Station	1967	721006
H	277m W	Cuttings	1956	797891
K	278m NW	Railway Station	1908 - 1938	802518
H	282m W	Cuttings	1891 - 1938	756410
K	284m NW	Railway Station	1891	768962
M	284m W	Railway Sidings	1956 - 1969	745220
K	293m NW	Railway Station	1983	767625
H	294m W	Cuttings	1851	782682
N	296m W	Sawmills	1928 - 1938	712881
O	309m NE	Unspecified Foundry	1908 - 1938	790591
O	310m NE	Unspecified Works	1967	683303
K	311m NW	Railway Sidings	1851	705807
O	311m NE	Unspecified Foundry	1956	747622



ID	Location	Land use	Dates present	Group ID
M	313m SW	Railway Sidings	1891	771309
10	314m W	Unspecified Ground Workings	1908	660963
O	316m NE	Rope Walk	1851	691258
P	317m SW	Railway Building	1891	717032
N	318m W	Sawmills	1956	751848
N	318m W	Unspecified Mills	1969	669943
Q	321m SW	Railway Building	1956	793632
H	322m W	Cuttings	1969 - 1980	723407
R	322m SE	Refuse Heap	1938	789116
Q	324m SW	Railway Building	1928	744670
Q	324m SW	Railway Buildings	1908	657825
N	325m W	Timber Yard	1908	706177
M	325m SW	Railway Sidings	1908 - 1938	798853
R	330m SE	Sand Pit	1956	674410
P	331m SW	Railway Buildings	1908	657809
Q	331m SW	Railway Building	1928	735024
Q	333m SW	Cuttings	1928	717986
12	336m W	Unspecified Pit	1891	675608
P	336m SW	Carriage Shed	1928 - 1938	783230
Q	337m SW	Cuttings	1908	709111
Q	337m SW	Cuttings	1938	802404
Q	338m SW	Cuttings	1956	710675
Q	338m SW	Cuttings	1967 - 1983	739230
M	341m SW	Railway Sidings	1955 - 1956	796910
K	354m NW	Railway Building	1851	703025
P	355m SW	Carriage Shed	1956	795148
P	358m SW	Railway Building	1969 - 1974	782871
M	359m SW	Railway Sidings	1974 - 1991	752378



ID	Location	Land use	Dates present	Group ID
P	359m SW	Railway Building	1980	739961
15	362m E	Unspecified Ground Workings	1956	660958
16	366m S	Unspecified Pit	1908	677523
T	370m N	Unspecified Commercial/Industrial	1956 - 1967	720112
R	376m SE	Unspecified Ground Workings	1928	662680
17	377m S	Unspecified Pit	1908	677522
R	377m SE	Refuse Heap	1908	800000
W	381m SE	Unspecified Pit	1908	720146
X	384m E	Cuttings	1891	743607
Y	386m SW	Nursery	1955	797882
X	397m E	Unspecified Mill	1967	673479
P	403m SW	Engine House	1851	670951
X	404m E	Unspecified Commercial/Industrial	1956	670472
19	405m W	Cuttings	1851	653155
Z	407m W	Unspecified Ground Workings	1956	741873
AA	408m N	Railway Sidings	1956 - 1967	772336
W	409m SE	Unspecified Pit	1928 - 1938	709406
AA	410m N	Railway Sidings	1928	802795
AA	410m N	Railway Sidings	1938	804329
Z	411m W	Unspecified Ground Workings	1928 - 1938	710262
W	413m SE	Unspecified Ground Workings	1956	662678
AA	413m N	Railway Sidings	1908	788590
21	415m W	Unspecified Ground Workings	1908	660961
AA	416m N	Railway Sidings	1851 - 1891	780342
P	416m W	Railway Building	1928	702924
AB	418m NE	Tram Depot	1928 - 1938	795008
AA	421m N	Railway Building	1908 - 1928	725838
AB	424m NE	Unspecified Depot	1967 - 1983	721636



ID	Location	Land use	Dates present	Group ID
AB	424m NE	Tram Depot	1956	756072
T	425m N	Railway Sidings	1851	791550
Q	426m SW	Railway Building	1891	702923
Y	427m SW	Nursery	1908	711121
Y	427m SW	Nursery	1938	780552
Q	432m SW	Cuttings	1969	799274
Q	433m SW	Cuttings	1974 - 1980	787364
AC	434m SE	Unspecified Pit	1955	727986
T	435m N	Railway Sidings	1956 - 1967	728210
AC	437m SE	Unspecified Pit	1974 - 1981	796059
X	439m E	Cuttings	1851	788573
Y	439m SW	Nursery	1928	740386
AE	442m NW	Police Station	1967	706525
AE	442m NW	Iron Foundry	1851	705133
P	447m SW	Railway Sidings	1851	771617
Y	448m SW	Nurseries	1965 - 1981	714180
AF	449m NE	Unspecified Mill	1928 - 1938	762015
AF	449m NE	Unspecified Commercial/Industrial	1891 - 1908	800793
AF	450m NE	Unspecified Works	1967 - 1983	763824
X	451m E	Cuttings	1908 - 1938	804507
Y	452m SW	Refuse Heap	1851	656513
X	458m E	Cuttings	1983	777090
AA	458m N	Goods Station	1956 - 1967	772882
AG	461m NW	Police Station	1956	798182
X	461m E	Cuttings	1956 - 1967	731891
AA	463m N	Goods Station	1891 - 1938	803920
AA	464m N	Goods Warehouse	1851	683728
23	465m W	Unspecified Pit	1969 - 1980	715136



ID	Location	Land use	Dates present	Group ID
AG	466m NW	Police Station	1928 - 1938	777989
AG	466m NW	Police Station	1969 - 1974	715771
AF	470m NE	Unspecified Mill	1956	753371
AA	473m NW	Railway Building	1956 - 1967	765926
AA	476m NW	Railway Building	1908	711286
T	476m N	Tan Yard	1851	671082
T	478m N	Unspecified Ground Workings	1928 - 1938	712902
T	480m N	Tannery	1908	707977
T	481m N	Tannery	1956	756580
T	485m N	Tannery	1928 - 1938	716900
24	487m SE	Unspecified Ground Workings	1891	662679
T	489m N	Unspecified Works	1967 - 1983	776560
AI	490m N	Unspecified Heap	1891	688842
AI	490m N	Sawmills	1938 - 1956	709874
AJ	492m NE	Unspecified Commercial/Industrial	1891 - 1908	735720
AJ	492m NE	Unspecified Mill	1928 - 1938	750781
AI	492m N	Sawmills	1928	729388
AI	493m N	Unspecified Ground Workings	1908	660648
Q	493m SW	Railway Building	1891	702922
AJ	495m NE	Unspecified Mill	1956	730449
AJ	495m NE	Unspecified Works	1967 - 1983	797481
AI	500m N	Unspecified Works	1967	683297
T	500m N	Tannery	1891	709233

This data is sourced from Ordnance Survey / Groundsure.



1.2 Historical tanks

Records within 500m

19

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

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

ID	Location	Land use	Dates present	Group ID
G	102m W	Unspecified Tank	1891	107619
D	119m SE	Unspecified Tank	1957 - 1959	91501
4	175m NE	Unspecified Tank	1930 - 1937	102041
H	251m W	Unspecified Tank	1937	87954
11	316m E	Unspecified Tank	1891	103002
14	341m N	Unspecified Tank	1930 - 1937	95404
N	376m W	Unspecified Tank	1930 - 1937	99410
18	379m NW	Unspecified Tank	1957 - 1959	97358
X	399m E	Unspecified Tank	1957	107217
X	400m E	Unspecified Tank	1959	92597
V	427m NE	Unspecified Tank	1891	90386
O	441m NE	Unspecified Tank	1891	90387
22	445m S	Unspecified Tank	1982 - 1992	103582
Z	458m W	Unspecified Tank	1957 - 1970	92571
T	481m N	Unspecified Tank	1937	90392
T	486m N	Unspecified Tank	1910	94725
Q	490m SW	Unspecified Tank	1910	102922
T	493m N	Tanks	1992	96242
T	494m N	Tanks	1973 - 1984	92564

This data is sourced from Ordnance Survey / Groundsure.



1.3 Historical energy features

Records within 500m

21

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

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

ID	Location	Land use	Dates present	Group ID
C	31m E	Electricity Substation	1992	58604
C	34m E	Electricity Substation	1976 - 1981	51080
F	91m NE	Electricity Substation	1993 - 1998	51608
L	259m NE	Electricity Substation	1973 - 1987	61370
L	259m NE	Electricity Substation	1993 - 1998	57339
9	291m SW	Electricity Substation	1980 - 1996	59867
13	338m S	Electricity Substation	1982 - 1992	53168
Q	357m SW	Electricity Substation	1994 - 1996	58082
U	378m NW	Electricity Substation	1984 - 1992	54505
U	379m NW	Electricity Substation	1973	57586
V	381m NE	Electricity Substation	1998	48885
20	412m NE	Electricity Substation	1993 - 1998	51727
AD	437m N	Electricity Transformer	1973 - 1987	53428
X	453m E	Electricity Substation	1976 - 1992	61555
AD	458m N	Electricity Substation	1993 - 1998	54892
AD	475m N	Electricity Substation	1973	61915
AD	477m N	Electricity Substation	1982 - 1998	56146
AH	484m NE	Electricity Substation	1993 - 1998	60131
AH	485m NE	Electricity Substation	1982	58931
AH	486m NE	Electricity Substation	1973	56690
AH	487m NE	Electricity Substation	1987	55206



This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

1

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

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

ID	Location	Land use	Dates present	Group ID
Q	333m SW	Petroleum Spirit Store	1930	1450

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m

19

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

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

ID	Location	Land use	Dates present	Group ID
F	66m NE	Garage	1959	16441
F	66m NE	Garage	1957	21761
2	92m E	Garage	1976 - 1981	22008
3	99m N	Garage	1957 - 1959	18009
F	102m NE	Garage	1976 - 1981	21935
F	103m NE	Garage	1992	19493
P	356m SW	Carriage Shed	1957 - 1958	17395
P	356m SW	Carriage Shed	1970	21893
P	357m SW	Carriage Shed	1982 - 1992	21975



ID	Location	Land use	Dates present	Group ID
P	358m SW	Carriage Shed	1891 - 1937	18898
S	369m SW	Garage	1959	18981
S	370m SW	Garage	1957	17924
S	370m SW	Garage	1980	21607
AA	422m N	Garage	1978	21308
AB	461m NE	Garage	1982	17319
AB	461m NE	Garage	1973	18426
AA	474m NW	Garage	1992	20457
AA	495m NW	Garage	1984	19031
AA	495m NW	Garage	1973	21493

This data is sourced from Ordnance Survey / Groundsure.

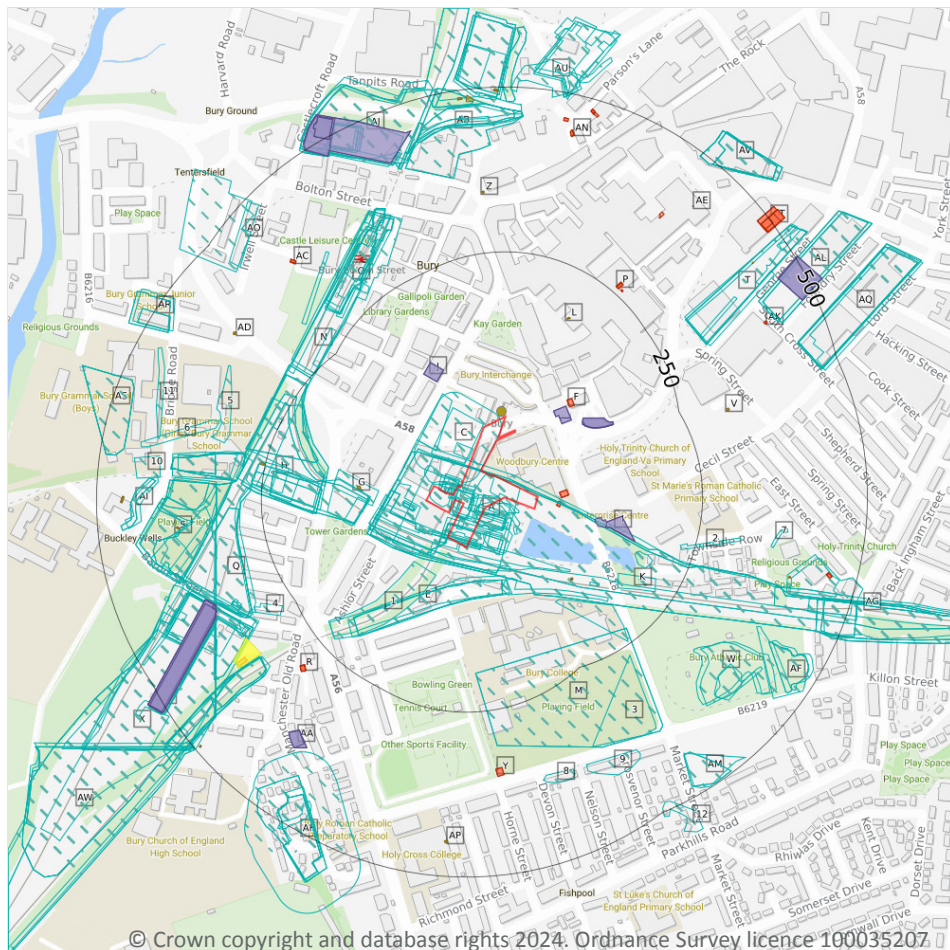
1.6 Historical military land

Records within 500m	0
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Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

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

2 Past land use - un-grouped



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

2.1 Historical industrial land uses

Records within 500m

272

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

Features are displayed on the Past land use - un-grouped map on [page 27 >](#)

ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Ground Workings	1983	779095
A	On site	Unspecified Pit	1983	675607
A	On site	Goods Station	1956	800889



ID	Location	Land Use	Date	Group ID
A	On site	Railway Building	1956	790397
A	On site	Railway Building	1956	751536
A	On site	Railway Sidings	1851	786289
A	On site	Unspecified Ground Workings	1851	786882
A	On site	Railway Sidings	1851	722309
A	On site	Railway Buildings	1851	770243
A	On site	Railway Building	1851	787359
A	On site	Cuttings	1967	653208
A	On site	Goods Station	1938	798951
A	On site	Railway Building	1938	762206
A	On site	Railway Building	1938	789865
A	On site	Railway Buildings	1891	770243
A	On site	Railway Building	1891	785284
A	On site	Goods Station	1891	657699
A	On site	Railway Station	1967	666350
A	On site	Railway Building	1967	739659
A	On site	Goods Station	1928	798951
A	On site	Railway Building	1928	789865
A	On site	Railway Building	1928	762206
A	On site	Railway Building	1908	789528
A	On site	Railway Building	1908	801911
A	On site	Goods Station	1908	805625
A	On site	Railway Building	1908	703028
B	On site	Railway Sidings	1956	784878
B	On site	Railway Sidings	1938	778756
B	On site	Railway Sidings	1967	784878
B	On site	Railway Sidings	1928	778756
B	On site	Railway Sidings	1908	778756



ID	Location	Land Use	Date	Group ID
C	On site	Abattoirs	1928	725983
D	On site	Railway Sidings	1891	754148
A	On site	Railway Station	1956	778607
A	2m SW	Railway Station	1938	715889
A	2m SW	Railway Station	1928	715889
A	2m SW	Railway Station	1908	715889
C	2m N	Abattoirs	1908	725983
C	3m N	Goods Station	1891	657700
A	10m SW	Railway Station	1851	727048
A	10m SW	Railway Station	1967	740912
A	15m S	Unspecified Ground Workings	1983	660957
A	17m W	Railway Building	1938	782343
A	18m S	Railway Sidings	1851	708050
A	21m W	Railway Building	1908	748268
A	22m W	Railway Building	1928	748268
A	30m W	Railway Station	1891	803608
E	46m S	Cuttings	1967	710424
E	53m S	Cuttings	1956	781310
E	53m S	Cuttings	1938	719786
E	53m S	Cuttings	1928	719786
E	53m S	Cuttings	1908	719786
C	54m NW	Cuttings	1891	653207
1	58m SW	Cuttings	1983	757213
G	73m W	Woollen Mill	1851	657526
B	78m S	Unspecified Ground Workings	1983	662677
G	85m W	Cuttings	1967	790478
H	86m W	Railway Sidings	1956	804934
H	87m W	Cuttings	1983	742711



ID	Location	Land Use	Date	Group ID
H	88m W	Railway Sidings	1967	804934
G	90m W	Cuttings	1908	744542
B	139m SE	Railway Building	1908	703029
B	142m SE	Unspecified Pit	1983	717145
H	155m W	Cuttings	1891	787802
H	155m W	Railway Sidings	1891	729594
H	158m W	Railway Sidings	1938	770763
H	158m W	Railway Sidings	1928	770763
H	159m W	Railway Sidings	1908	750754
H	159m W	Cuttings	1938	746835
H	159m W	Cuttings	1928	746835
H	159m W	Cuttings	1908	746835
H	160m W	Cuttings	1851	766796
K	160m SE	Cuttings	1851	653517
H	165m W	Cuttings	1967	746561
K	167m SE	Unspecified Heap	1983	688402
H	175m W	Cuttings	1956	732344
H	175m W	Cuttings	1967	732344
M	187m S	Unspecified Pit	1956	713634
M	187m S	Unspecified Pit	1967	713634
H	196m W	Cuttings	1956	781482
H	214m W	Cuttings	1891	785651
2	228m E	Rope Walk	1851	691259
N	236m W	Railway Sidings	1983	735837
O	248m NW	Railway Sidings	1967	735837
O	249m NW	Railway Sidings	1956	707221
H	250m W	Railway Building	1956	702747
N	253m NW	Railway Building	1851	703026



ID	Location	Land Use	Date	Group ID
3	265m SE	Unspecified Pit	1983	746753
O	268m NW	Railway Station	1956	764347
4	270m SW	Railway Building	1891	703027
O	271m NW	Railway Station	1851	764820
O	273m NW	Railway Sidings	1851	790382
O	276m NW	Railway Station	1967	721006
H	277m W	Cuttings	1956	797891
O	278m NW	Railway Station	1938	802518
O	278m NW	Railway Station	1928	802518
O	278m NW	Railway Station	1908	802518
H	282m W	Cuttings	1938	756410
H	282m W	Cuttings	1891	756410
H	282m W	Cuttings	1928	756410
H	282m W	Cuttings	1908	756410
O	284m NW	Railway Station	1891	768962
Q	284m W	Railway Sidings	1956	745220
Q	284m W	Railway Sidings	1967	745220
O	293m NW	Railway Station	1983	767625
H	294m W	Cuttings	1851	782682
S	296m W	Sawmills	1938	712881
S	296m W	Sawmills	1928	712881
T	309m NE	Unspecified Foundry	1938	790591
T	309m NE	Unspecified Foundry	1928	790591
T	309m NE	Unspecified Foundry	1908	790591
T	310m NE	Unspecified Works	1967	683303
O	311m NW	Railway Sidings	1851	705807
T	311m NE	Unspecified Foundry	1956	747622
U	313m SW	Railway Sidings	1891	771309



ID	Location	Land Use	Date	Group ID
5	314m W	Unspecified Ground Workings	1908	660963
T	316m NE	Rope Walk	1851	691258
U	317m SW	Railway Building	1891	717032
S	318m W	Sawmills	1956	751848
S	318m W	Railway Sidings	1956	745220
S	318m W	Unspecified Mills	1969	669943
U	318m W	Railway Sidings	1969	745220
U	321m SW	Railway Building	1956	793632
H	322m W	Cuttings	1980	723407
H	322m W	Cuttings	1969	723407
H	322m W	Cuttings	1974	723407
W	322m SE	Refuse Heap	1938	789116
U	324m SW	Railway Building	1928	744670
U	324m SW	Railway Buildings	1908	657825
S	325m W	Timber Yard	1908	706177
X	325m SW	Railway Sidings	1938	798853
X	325m SW	Railway Sidings	1928	798853
X	325m SW	Railway Sidings	1908	798853
W	330m SE	Sand Pit	1956	674410
U	331m SW	Railway Buildings	1908	657809
U	331m SW	Railway Building	1928	735024
U	333m SW	Cuttings	1928	717986
6	336m W	Unspecified Pit	1891	675608
U	336m SW	Carriage Shed	1938	783230
U	336m SW	Carriage Shed	1928	783230
U	337m SW	Cuttings	1938	802404
U	337m SW	Cuttings	1908	709111
U	338m SW	Cuttings	1983	739230



ID	Location	Land Use	Date	Group ID
U	338m SW	Cuttings	1956	710675
U	338m SW	Cuttings	1967	739230
U	341m SW	Railway Sidings	1956	796910
U	341m SW	Railway Sidings	1967	745220
O	354m NW	Railway Building	1851	703025
U	355m SW	Carriage Shed	1956	795148
U	358m SW	Railway Building	1969	782871
U	358m SW	Railway Building	1974	782871
U	359m SW	Railway Sidings	1980	752378
U	359m SW	Railway Building	1980	739961
7	362m E	Unspecified Ground Workings	1956	660958
8	366m S	Unspecified Pit	1908	677523
AB	370m N	Unspecified Commercial/Industrial	1956	720112
AB	370m N	Unspecified Commercial/Industrial	1967	720112
W	376m SE	Unspecified Ground Workings	1928	662680
9	377m S	Unspecified Pit	1908	677522
W	377m SE	Refuse Heap	1908	800000
U	381m SW	Railway Sidings	1956	796910
AF	381m SE	Unspecified Pit	1908	720146
AG	384m E	Cuttings	1891	743607
AH	386m SW	Nursery	1955	797882
AG	397m E	Unspecified Mill	1967	673479
U	403m SW	Engine House	1851	670951
AG	404m E	Unspecified Commercial/Industrial	1956	670472
10	405m W	Cuttings	1851	653155
AI	407m W	Unspecified Ground Workings	1956	741873
AJ	408m N	Railway Sidings	1956	772336
AJ	408m N	Railway Sidings	1967	772336



ID	Location	Land Use	Date	Group ID
AF	409m SE	Unspecified Pit	1938	709406
AF	409m SE	Unspecified Pit	1928	709406
AJ	410m N	Railway Sidings	1938	804329
AJ	410m N	Railway Sidings	1928	802795
AI	411m W	Unspecified Ground Workings	1938	710262
AI	411m W	Unspecified Ground Workings	1928	710262
AF	413m SE	Unspecified Ground Workings	1956	662678
AJ	413m N	Railway Sidings	1908	788590
11	415m W	Unspecified Ground Workings	1908	660961
AJ	416m N	Railway Sidings	1891	780342
U	416m W	Railway Building	1928	702924
AL	418m NE	Tram Depot	1938	795008
AL	418m NE	Tram Depot	1928	795008
AJ	421m N	Railway Building	1908	725838
AJ	424m N	Railway Building	1928	725838
AL	424m NE	Unspecified Depot	1983	721636
AL	424m NE	Tram Depot	1956	756072
AL	424m NE	Unspecified Depot	1967	721636
AB	425m N	Railway Sidings	1851	791550
U	426m SW	Railway Building	1891	702923
AH	427m SW	Nursery	1938	780552
AH	427m SW	Nursery	1908	711121
U	428m SW	Railway Sidings	1974	752378
U	432m SW	Cuttings	1969	799274
U	433m SW	Cuttings	1980	787364
U	433m SW	Cuttings	1974	787364
AJ	434m N	Railway Sidings	1851	780342
AM	434m SE	Unspecified Pit	1955	727986



ID	Location	Land Use	Date	Group ID
AB	435m N	Railway Sidings	1956	728210
AB	435m N	Railway Sidings	1967	728210
AM	437m SE	Unspecified Pit	1981	796059
AM	437m SE	Unspecified Pit	1974	796059
AG	439m E	Cuttings	1851	788573
AH	439m SW	Nursery	1928	740386
AO	442m NW	Police Station	1967	706525
AO	442m NW	Iron Foundry	1851	705133
U	447m SW	Railway Sidings	1851	771617
AH	448m SW	Nurseries	1981	714180
AH	448m SW	Nurseries	1974	714180
AH	448m SW	Nurseries	1965	714180
AQ	449m NE	Unspecified Mill	1938	762015
AQ	449m NE	Unspecified Commercial/Industrial	1891	800793
AQ	449m NE	Unspecified Mill	1928	762015
AQ	449m NE	Unspecified Commercial/Industrial	1908	800793
AQ	450m NE	Unspecified Works	1983	763824
AQ	450m NE	Unspecified Works	1967	763824
AG	451m E	Cuttings	1938	804507
AG	451m E	Cuttings	1928	804507
AG	451m E	Cuttings	1908	804507
AH	452m SW	Refuse Heap	1851	656513
AG	458m E	Cuttings	1983	777090
AJ	458m N	Goods Station	1956	772882
AJ	458m N	Goods Station	1967	772882
AR	461m NW	Police Station	1956	798182
AG	461m E	Cuttings	1956	731891
AG	461m E	Cuttings	1967	731891



ID	Location	Land Use	Date	Group ID
AJ	463m N	Goods Station	1938	803920
AJ	463m N	Goods Station	1891	803920
AJ	463m N	Goods Station	1928	803920
AJ	463m N	Goods Station	1908	803920
AJ	464m N	Goods Warehouse	1851	683728
AS	465m W	Unspecified Pit	1980	715136
AS	465m W	Unspecified Pit	1969	715136
AS	465m W	Unspecified Pit	1974	715136
AR	466m NW	Police Station	1938	777989
AR	466m NW	Police Station	1928	777989
AR	466m NW	Police Station	1969	715771
AR	466m NW	Police Station	1974	715771
AQ	470m NE	Unspecified Mill	1956	753371
AJ	473m NW	Railway Building	1956	765926
AJ	473m NW	Railway Building	1967	765926
AJ	476m NW	Railway Building	1908	711286
AB	476m N	Tan Yard	1851	671082
AB	478m N	Unspecified Ground Workings	1938	712902
AB	478m N	Unspecified Ground Workings	1928	712902
AB	480m N	Tannery	1908	707977
AB	481m N	Tannery	1956	756580
AB	485m N	Tannery	1938	716900
AB	485m N	Tannery	1928	716900
12	487m SE	Unspecified Ground Workings	1891	662679
AB	489m N	Unspecified Works	1983	776560
AB	489m N	Unspecified Works	1967	776560
AU	490m N	Unspecified Heap	1891	688842
AU	490m N	Sawmills	1938	709874



ID	Location	Land Use	Date	Group ID
AV	492m NE	Unspecified Mill	1938	750781
AV	492m NE	Unspecified Commercial/Industrial	1891	735720
AV	492m NE	Unspecified Mill	1928	750781
AV	492m NE	Unspecified Commercial/Industrial	1908	735720
AU	492m N	Sawmills	1928	729388
AU	493m N	Unspecified Ground Workings	1908	660648
U	493m SW	Railway Building	1891	702922
AV	495m NE	Unspecified Works	1983	797481
AV	495m NE	Unspecified Mill	1956	730449
AV	495m NE	Unspecified Works	1967	797481
AU	495m N	Sawmills	1956	709874
AW	497m SW	Railway Sidings	1965	745220
AW	499m SW	Railway Sidings	1991	752378
AW	499m SW	Railway Sidings	1988	752378
AU	500m N	Unspecified Works	1967	683297
AW	500m SW	Railway Sidings	1977	752378
AB	500m N	Tannery	1891	709233

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

34

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

Features are displayed on the Past land use - un-grouped map on [page 27 >](#)

ID	Location	Land Use	Date	Group ID
G	102m W	Unspecified Tank	1891	107619
G	102m W	Unspecified Tank	1891	107619
B	119m SE	Unspecified Tank	1959	91501



ID	Location	Land Use	Date	Group ID
B	119m SE	Unspecified Tank	1957	91501
L	175m NE	Unspecified Tank	1930	102041
L	175m NE	Unspecified Tank	1937	102041
H	251m W	Unspecified Tank	1937	87954
V	316m E	Unspecified Tank	1891	103002
V	316m E	Unspecified Tank	1891	103002
Z	341m N	Unspecified Tank	1930	95404
Z	341m N	Unspecified Tank	1937	95404
S	376m W	Unspecified Tank	1930	99410
S	376m W	Unspecified Tank	1937	99410
AD	379m NW	Unspecified Tank	1959	97358
AD	379m NW	Unspecified Tank	1957	97358
AG	399m E	Unspecified Tank	1957	107217
AG	400m E	Unspecified Tank	1959	92597
AE	427m NE	Unspecified Tank	1891	90386
T	441m NE	Unspecified Tank	1891	90387
AP	445m S	Unspecified Tank	1982	103582
AP	445m S	Unspecified Tank	1992	103582
AI	458m W	Unspecified Tank	1970	92571
AI	458m W	Unspecified Tank	1958	92571
AI	459m W	Unspecified Tank	1957	92571
AB	481m N	Unspecified Tank	1937	90392
AB	486m N	Unspecified Tank	1910	94725
AB	486m N	Unspecified Tank	1910	94725
U	490m SW	Unspecified Tank	1910	102922
U	490m SW	Unspecified Tank	1910	102922
AB	493m N	Tanks	1992	96242
AB	494m N	Tanks	1984	92564



ID	Location	Land Use	Date	Group ID
AB	494m N	Tanks	1973	92564
AB	494m N	Tanks	1978	92564
AB	494m N	Tanks	1978	92564

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

48

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

Features are displayed on the Past land use - un-grouped map on [page 27 >](#)

ID	Location	Land Use	Date	Group ID
D	31m E	Electricity Substation	1992	58604
D	31m E	Electricity Substation	1992	58604
D	34m E	Electricity Substation	1976	51080
D	34m E	Electricity Substation	1981	51080
F	91m NE	Electricity Substation	1993	51608
F	91m NE	Electricity Substation	1998	51608
P	259m NE	Electricity Substation	1982	61370
P	259m NE	Electricity Substation	1982	61370
P	259m NE	Electricity Substation	1987	61370
P	259m NE	Electricity Substation	1973	61370
P	259m NE	Electricity Substation	1993	57339
P	259m NE	Electricity Substation	1998	57339
R	291m SW	Electricity Substation	1996	59867
R	291m SW	Electricity Substation	1994	59867
R	292m SW	Electricity Substation	1984	59867
R	292m SW	Electricity Substation	1980	59867
Y	338m S	Electricity Substation	1982	53168



ID	Location	Land Use	Date	Group ID
Y	338m S	Electricity Substation	1992	53168
U	357m SW	Electricity Substation	1996	58082
U	357m SW	Electricity Substation	1994	58082
AC	378m NW	Electricity Substation	1992	54505
AC	379m NW	Electricity Substation	1984	54505
AC	379m NW	Electricity Substation	1973	57586
AE	381m NE	Electricity Substation	1998	48885
AK	412m NE	Electricity Substation	1993	51727
AK	412m NE	Electricity Substation	1998	51727
AN	437m N	Electricity Transformer	1973	53428
AN	437m N	Electricity Transformer	1982	53428
AN	437m N	Electricity Transformer	1982	53428
AN	437m N	Electricity Transformer	1987	53428
AG	453m E	Electricity Substation	1981	61555
AG	454m E	Electricity Substation	1976	61555
AG	454m E	Electricity Substation	1992	61555
AG	454m E	Electricity Substation	1992	61555
AN	458m N	Electricity Substation	1993	54892
AN	458m N	Electricity Substation	1998	54892
AN	475m N	Electricity Substation	1973	61915
AN	477m N	Electricity Substation	1993	56146
AN	477m N	Electricity Substation	1998	56146
AN	479m N	Electricity Substation	1982	56146
AN	479m N	Electricity Substation	1982	56146
AN	479m N	Electricity Substation	1987	56146
AT	484m NE	Electricity Substation	1993	60131
AT	484m NE	Electricity Substation	1998	60131
AT	485m NE	Electricity Substation	1982	58931



ID	Location	Land Use	Date	Group ID
AT	485m NE	Electricity Substation	1982	58931
AT	486m NE	Electricity Substation	1973	56690
AT	487m NE	Electricity Substation	1987	55206

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m

2

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

Features are displayed on the Past land use - un-grouped map on [page 27 >](#)

ID	Location	Land Use	Date	Group ID
U	333m SW	Petroleum Spirit Store	1930	1450
U	333m SW	Petroleum Spirit Store	1930	1450

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m

34

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

Features are displayed on the Past land use - un-grouped map on [page 27 >](#)

ID	Location	Land Use	Date	Group ID
F	66m NE	Garage	1959	16441
F	66m NE	Garage	1957	21761
F	71m NE	Garage	1957	21761
I	92m E	Garage	1976	22008
J	99m N	Garage	1957	18009
J	99m N	Garage	1959	18009

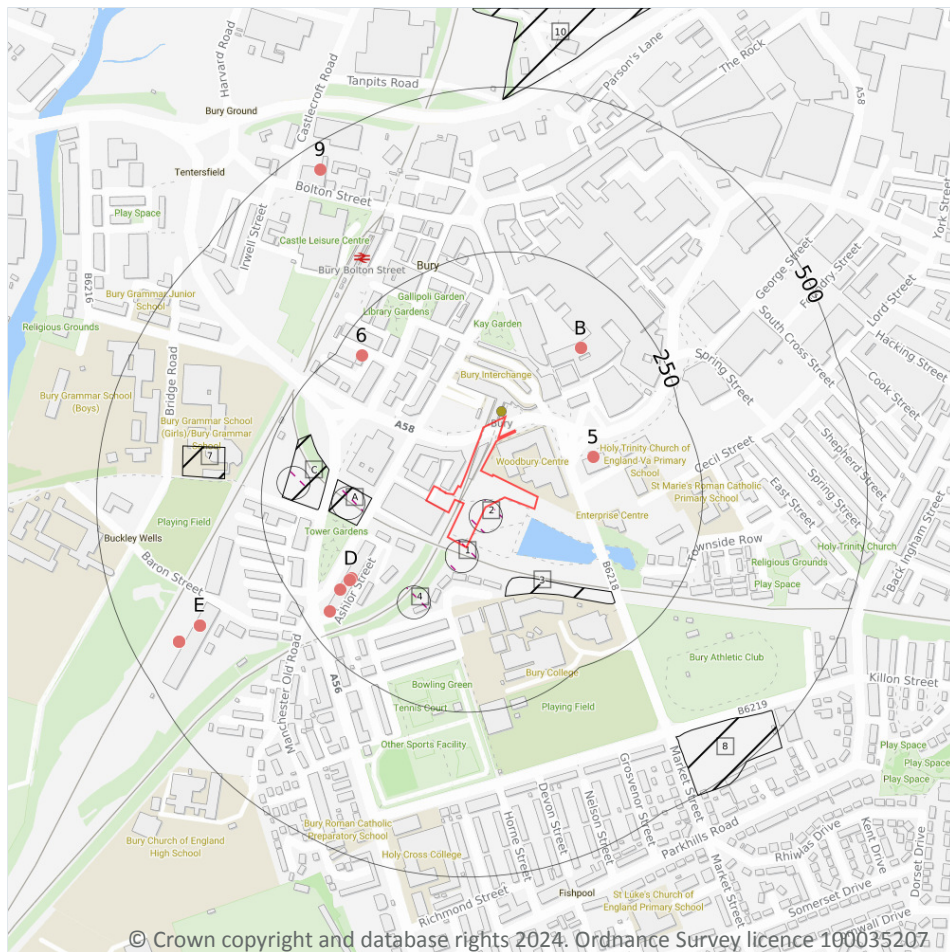


ID	Location	Land Use	Date	Group ID
F	102m NE	Garage	1981	21935
F	103m NE	Garage	1992	19493
F	103m NE	Garage	1992	19493
F	104m NE	Garage	1976	21935
I	111m E	Garage	1981	22008
U	356m SW	Carriage Shed	1970	21893
U	356m SW	Carriage Shed	1958	17395
U	356m SW	Carriage Shed	1957	17395
U	357m SW	Carriage Shed	1982	21975
U	358m SW	Carriage Shed	1891	18898
U	358m SW	Carriage Shed	1910	18898
U	358m SW	Carriage Shed	1930	18898
U	358m SW	Carriage Shed	1891	18898
U	358m SW	Carriage Shed	1910	18898
U	358m SW	Carriage Shed	1930	18898
U	358m SW	Carriage Shed	1937	18898
U	360m SW	Carriage Shed	1992	21975
AA	369m SW	Garage	1959	18981
AA	370m SW	Garage	1957	17924
AA	370m SW	Garage	1980	21607
AJ	422m N	Garage	1978	21308
AJ	422m N	Garage	1978	21308
AL	461m NE	Garage	1982	17319
AL	461m NE	Garage	1982	17319
AL	461m NE	Garage	1973	18426
AJ	474m NW	Garage	1992	20457
AJ	495m NW	Garage	1984	19031
AJ	495m NW	Garage	1973	21493

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (EA/NRW)
- Historical landfill (LA/OS)
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

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

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

3.2 Historical landfill (BGS records)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m	5
----------------------------	----------

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

Features are displayed on the Waste and landfill map on [page 43 >](#)

ID	Location	Site address	Source	Data type
1	On site	Railway Cuttings	Historical Mapping	Point
2	On site	-	Historical Mapping	Point
4	87m SW	Railway Cuttings	Historical Mapping	Point
A	93m W	Railway Cuttings	Historical Mapping	Point
C	178m W	Railway Cuttings	Historical Mapping	Point

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	6
----------------------------	----------

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

Features are displayed on the Waste and landfill map on [page 43 >](#)

ID	Location	Details		
A	83m W	Site Address: Railway Cuttings East and West Of Manchester Road, Town Hall, Manchester Road, Bury, Greater Manchester Licence Holder Address: Craig House, 5 Bank Street, Bury	Waste Licence: Yes Site Reference: RD/LIC/503/88, C077 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 20/04/1988 Licence Surrender: -	Operator: - Licence Holder: Bury Metropolitan Borough Council First Recorded 01/02/1988 Last Recorded: 30/06/1988
3	83m S	Site Address: Peel College, Greater Manchester Licence Holder Address: -	Waste Licence: - Site Reference: C087 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded - Last Recorded: -



ID	Location	Details		
C	154m W	Site Address: Railway Cuttings East and West Of Manchester Road, Town Hall, Manchester Road, Bury, Greater Manchester Licence Holder Address: Craig House, 5 Bank Street, Bury	Waste Licence: Yes Site Reference: RD/LIC/503/88, C077 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 20/04/1988 Licence Surrender: -	Operator: - Licence Holder: Bury Metropolitan Borough Council First Recorded 01/02/1988 Last Recorded: 30/06/1988
7	307m W	Site Address: Railway Cutting, Bridge Road-Bellvue Terrace, Bury, Greater Manchester Licence Holder Address: Lester House, Broad Street, Bury	Waste Licence: Yes Site Reference: RD/LIC/650/90,C093 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 06/03/1991 Licence Surrender: 31/12/1993	Operator: - Licence Holder: Bury Metropolitan Borough Council First Recorded 31/03/1991 Last Recorded: 30/09/1992
8	407m SE	Site Address: Wellington Road, Bury, Greater Manchester Licence Holder Address: -	Waste Licence: - Site Reference: C085 Waste Type: Industrial, Commercial, Household, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: County Borough of Bury Licence Holder: - First Recorded 30/06/1971 Last Recorded: 31/10/1971
10	481m N	Site Address: Woodfields, Bury, Greater Manchester Licence Holder Address: -	Waste Licence: - Site Reference: C079 Waste Type: Industrial, Commercial, Household, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: County Borough of Bury Cleansing Department Licence Holder: - First Recorded 31/10/1971 Last Recorded: -

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

3.5 Historical waste sites

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

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

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



3.6 Licensed waste sites

Records within 500m

0

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

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

3.7 Waste exemptions

Records within 500m

22

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

Features are displayed on the Waste and landfill map on [page 43](#) >

ID	Location	Site	Reference	Category	Sub-Category	Description
5	103m E	-	WEX354561	Using waste exemption	Not on a farm	Use of waste in construction
B	153m NE	14 Princess Parade Bury Lancashire BL9 0ql	EPR/YF0903HZ /A001	Treating waste exemption	Non-agricultural waste only	Sorting and de-naturing of controlled drugs for disposal
B	153m NE	14 Princess Parade Bury Lancashire BL9 0ql	EPR/QH0670U W/A001	Treating waste exemption	Non-agricultural waste only	Sorting and de-naturing of controlled drugs for disposal
D	160m SW	Westminster House 49 Knowsley Street Greater Manchester BL9 0st	EPR/FE5285G A/A001	Treating waste exemption	Non-agricultural waste only	Sorting and de-naturing of controlled drugs for disposal
D	163m SW	-	WEX331394	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
D	163m SW	-	WEX204196	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
D	183m SW	37, Knowsley Street, Bury, BL9 0st	WEX349139	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
D	212m SW	Westminster House, 49, Knowsley Street, Bury, BL9 0st	WEX040540	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
6	215m NW	3, St. Marys Place, Bury, BL9 0dz	WEX096857	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	393m SW	-	WEX283383	Using waste exemption	Not on a farm	Use of waste in construction

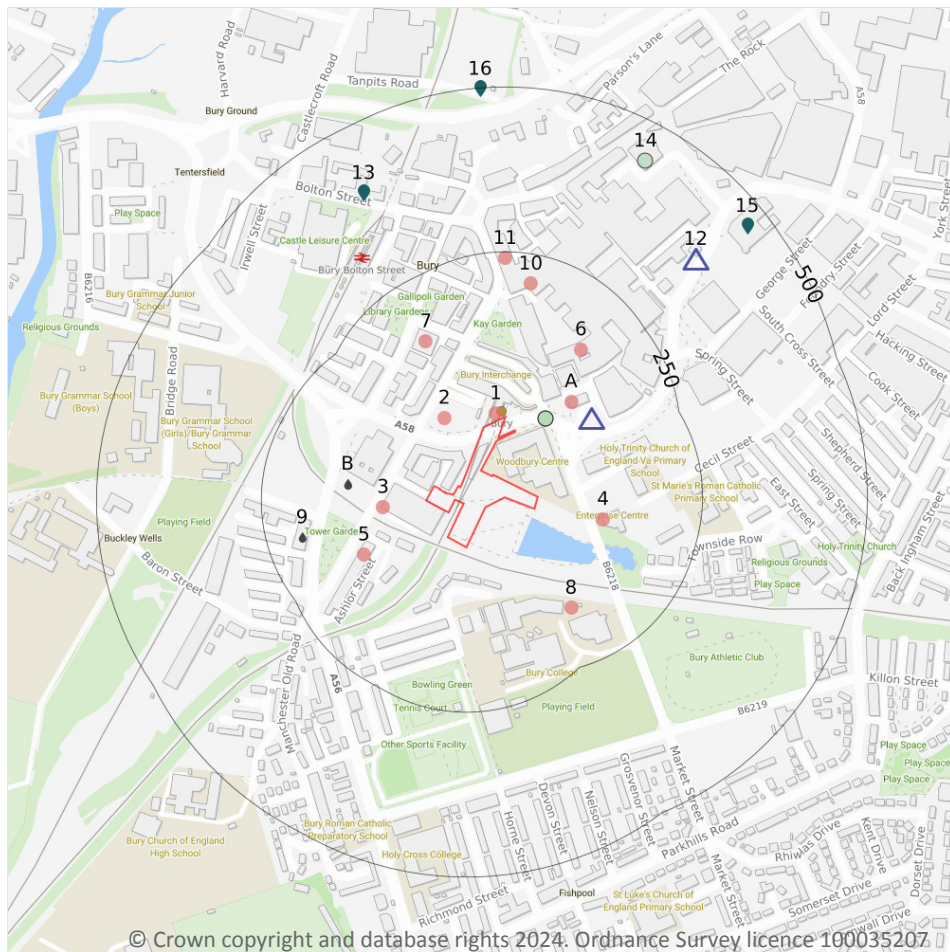


ID	Location	Site	Reference	Category	Sub-Category	Description
E	393m SW	-	WEX283383	Storing waste exemption	Not on a farm	Storage of waste in secure containers
E	393m SW	-	WEX283383	Disposing of waste exemption	Not on a farm	Deposit of waste from a railway sanitary convenience
E	393m SW	-	WEX283383	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
E	393m SW	-	WEX283383	Disposing of waste exemption	Not on a farm	Burning waste in the open
E	393m SW	-	WEX283383	Treating waste exemption	Not on a farm	Screening and blending of waste
E	433m SW	-	WEX142868	Storing waste exemption	Not on a farm	Storage of waste in secure containers
E	433m SW	-	WEX142868	Using waste exemption	Not on a farm	Use of waste in construction
E	433m SW	-	WEX142868	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
E	433m SW	-	WEX142868	Disposing of waste exemption	Not on a farm	Deposit of waste from a railway sanitary convenience
E	433m SW	-	WEX142868	Treating waste exemption	Not on a farm	Screening and blending of waste
E	433m SW	-	WEX142868	Disposing of waste exemption	Not on a farm	Burning waste in the open
9	463m NW	Chamberhall Pond, Off Castlecroft Road And Magdalne Road, Land Opposite Dunster Road, Bury, BL9 0In	WEX170518	Disposing of waste exemption	Not on a farm	Deposit of waste from dredging of inland waters

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- △ Current or recent petrol stations
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

11

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 48](#) >

ID	Location	Company	Address	Activity	Category
1	11m N	Bury (Manchester Metrolink)	Greater Manchester, BL9	Tram, Metro and Light Railway Stations and Stops	Public Transport, Stations and Infrastructure
2	61m NW	Mast (Telecommunication)	Greater Manchester, BL9	Telecommunications Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
3	66m W	Electricity Sub Station	Greater Manchester, BL9	Electrical Features	Infrastructure and Facilities
A	96m NE	Electricity Sub Station	Greater Manchester, BL9	Electrical Features	Infrastructure and Facilities
4	104m E	Enterprise Centre	Greater Manchester, BL9	Business Parks and Industrial Estates	Industrial Features
5	125m SW	Safety Management Consultants	15, Knowsley Street, Bury, Greater Manchester, BL9 OST	Special Purpose Machinery and Equipment	Industrial Products
6	153m NE	Eggfree Cake Box	15, Princess Parade, Bury, Greater Manchester, BL9 OQL	Baking and Confectionery	Foodstuffs
7	157m N	Bury Archives Service	Moss Street, Bury, Greater Manchester, BL9 ODR	Container and Storage	Transport, Storage and Delivery
8	160m SE	Electricity Sub Station	Greater Manchester, BL9	Electrical Features	Infrastructure and Facilities
10	205m N	Specsavers Hearcare	39-41, The Haymarket, Bury, Greater Manchester, BL9 OBX	Disability and Mobility Equipment	Consumer Products
11	240m N	Crown Energy	Athenaeum House, Market Street, Bury, Greater Manchester, BL9 OBL	Mechanical Engineers	Engineering Services

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	2
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Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on [page 48](#) >

ID	Location	Company	Address	LPG	Status
A	118m NE	OBSOLETE	Angouleme Way, Bury, Greater Manchester, BL9 OBZ	Not Applicable	Obsolete
12	375m NE	SAVE	Angouleme Way, Bury, Greater Manchester, BL9 OBZ	Not Applicable	Obsolete

This data is sourced from Experian.



4.3 Electricity cables

Records within 500m**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m**0**

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m**0**

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m**0**

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

This data is sourced from the Health and Safety Executive.



4.8 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

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

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

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

Records within 500m

3

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

Features are displayed on the Current industrial land use map on [page 48](#) >

ID	Location	Address	Details	
13	399m N	Alenco Dry Cleaners, 44 Bolton Street, Bury, BL9 0LL	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
15	467m NE	Save, Angeleume Road, BL9 0BZ	Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

ID	Location	Address	Details	
16	499m N	Beldam Asbestos Co Ltd, Lascar Wks, Tan Pits Lane, BL9 0LX	Process: Asbestos Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0
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Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

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

4.13 Licensed Discharges to controlled waters

Records within 500m	4
----------------------------	----------

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

Features are displayed on the Current industrial land use map on [page 48 >](#)

ID	Location	Address	Details	
B	122m W	360366MANCHESTERRD,W ALMERSLEY,BURY,GREATE RMANCHESTER	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 016993231 Permit Version: 2 Receiving Water: TRIB RIVER IRWELL	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: - Effective Date: 01/04/1997 Revocation Date: 11/11/2002
B	122m W	360366MANCHESTERRD,W ALMERSLEY,BURY,GREATE RMANCHESTER	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 016993231 Permit Version: 1 Receiving Water: TRIN RIVER IRWELL	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 20/06/1963 Revocation Date: 31/03/1997
B	122m W	360366MANCHESTERRD,W ALMERSLEY,BURY,GREATE RMANCHESTER	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 016993231 Permit Version: 3 Receiving Water: TRIB RIVER IRWELL	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 12/11/2002 Effective Date: 12/11/2002 Revocation Date: -



ID	Location	Address	Details	
9	197m W	PARKFARM,206MANCHESTER RD,WALMERSLEY,BURY, LANCASHIRE,BL95NP	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 01M/779 Permit Version: 1 Receiving Water: UNKNOWN	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 02/03/1956 Effective Date: 02/03/1956 Revocation Date: -

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

4.14 Pollutant release to surface waters (Red List)

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

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

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

4.15 Pollutant release to public sewer

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

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

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

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

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

4.17 List 2 Dangerous Substances

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

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m

3

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

Features are displayed on the Current industrial land use map on [page 48](#) >

ID	Location	Details	
A	50m NE	Incident Date: 29/05/2001 Incident Identification: 6997 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
A	50m NE	Incident Date: 30/07/2002 Incident Identification: 95921 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
14	442m NE	Incident Date: 20/08/2001 Incident Identification: 48060 Pollutant: Oils and Fuel Pollutant Description: Gas and Fuel Oils	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m

0

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

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

4.20 Pollution inventory waste transfers

Records within 500m

0

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

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



4.21 Pollution inventory radioactive waste

Records within 500m

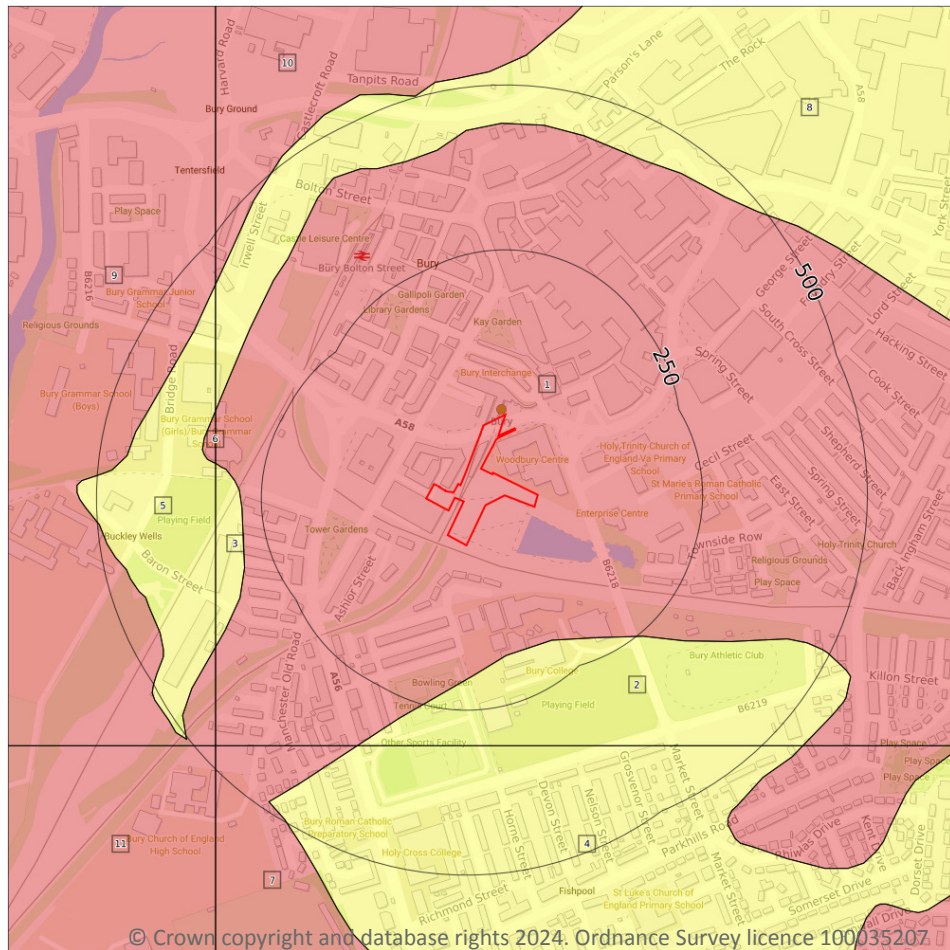
0

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

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



5 Hydrogeology - Superficial aquifer



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

5.1 Superficial aquifer

Records within 500m

11

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 56](#) >

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	178m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

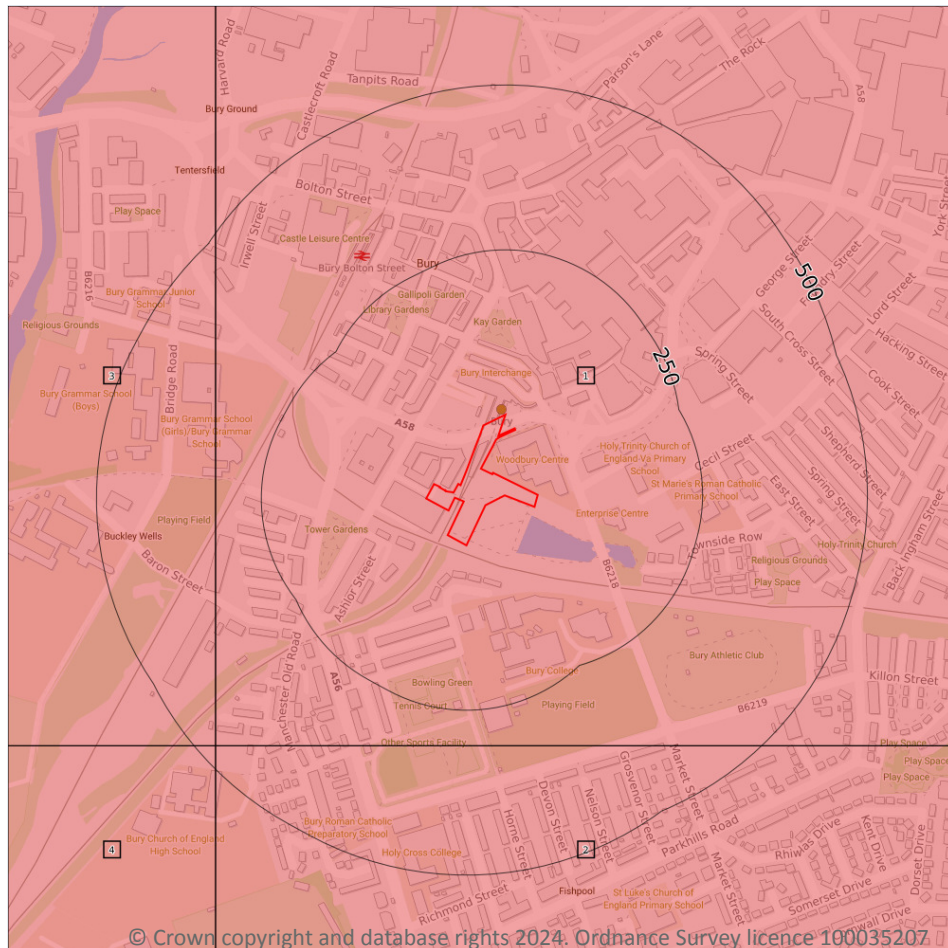


ID	Location	Designation	Description
3	280m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	304m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	319m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	324m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
7	346m SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
8	346m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
9	391m SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
10	449m NW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
11	475m SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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



Bedrock aquifer



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

5.2 Bedrock aquifer

Records within 500m

4

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 58](#) >

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	304m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

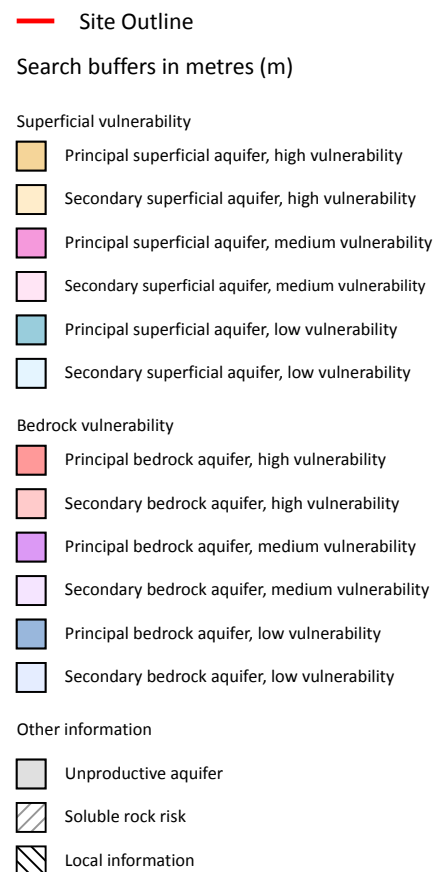
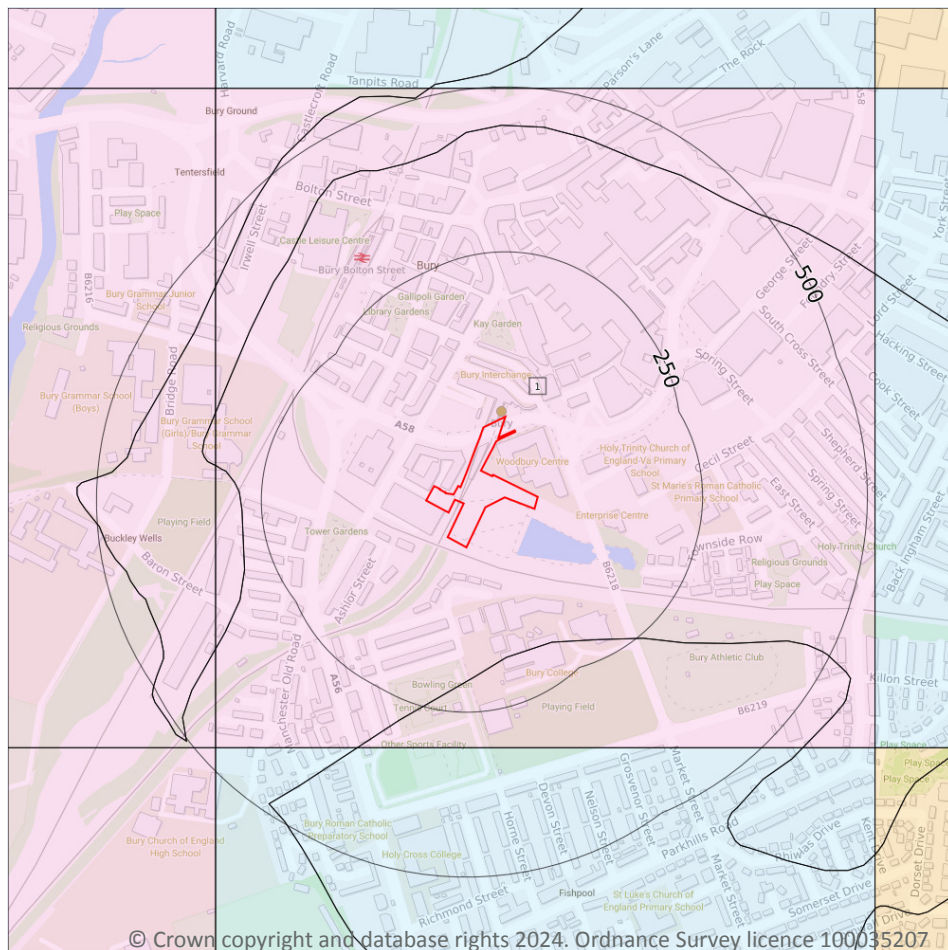


ID	Location	Designation	Description
3	319m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	475m SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

1

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

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

Features are displayed on the Groundwater vulnerability map on [page 60](#) >



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

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0
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This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

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

5.5 Groundwater vulnerability- local information

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

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

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



Abstractions and Source Protection Zones



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

5.6 Groundwater abstractions

Records within 2000m

8

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

Features are displayed on the Abstractions and Source Protection Zones map on [page 62 >](#)



ID	Location	Details	
-	1456m S	Status: Historical Licence No: 2569001258 Details: Pollution Remediation Direct Source: Ground Water - North West Region Point: "WELL POINT SYSTEM AT MANCHESTER ROAD, BURY" Data Type: Point Name: TOTALFINAELF UK LTD Easting: 380450 Northing: 408850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 12/06/2002 Expiry Date: - Issue No: 1 Version Start Date: 12/06/2002 Version End Date: -
-	1456m S	Status: Historical Licence No: 2569001258 Details: Pollution Remediation Direct Source: Ground Water - North West Region Point: WELL POINT SYSTEM AT MANCHESTER ROAD, BURY Data Type: Point Name: TOTALFINAELF UK LTD Easting: 380450 Northing: 408850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 12/06/2002 Expiry Date: - Issue No: 1 Version Start Date: 12/06/2002 Version End Date: -
-	1474m SE	Status: Historical Licence No: 2569002063 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "WELL AT WATER FARM, HEAP BRIDGE, BURY" Data Type: Point Name: FISH Easting: 381800 Northing: 409700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 14/02/1966 Version End Date: -
-	1474m SE	Status: Historical Licence No: 2569002063 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: WELL AT WATER FARM, HEAP BRIDGE, BURY Data Type: Point Name: FISH Easting: 381800 Northing: 409700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 14/02/1966 Version End Date: -



ID	Location	Details	
-	1537m E	Status: Historical Licence No: 2569002085 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "WELL AT WATERFOLD FARM, HEAP BRIDGE, NEAR BURY" Data Type: Point Name: WILKINSON Easting: 382000 Northing: 410100	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 15/02/1966 Version End Date: -
-	1537m E	Status: Historical Licence No: 2569002085 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: WELL AT WATERFOLD FARM, HEAP BRIDGE, NEAR BURY Data Type: Point Name: WILKINSON Easting: 382000 Northing: 410100	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 15/02/1966 Version End Date: -
-	1820m E	Status: Historical Licence No: 2569002059 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "WELL AT SPOUT BANK FARM, HEAP BRIDGEBURY, LANCASHIRE" Data Type: Point Name: FISH Easting: 382300 Northing: 410200	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 15/02/1966 Version End Date: -
-	1820m E	Status: Historical Licence No: 2569002059 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: WELL AT SPOUT BANK FARM, HEAP BRIDGEBURY, LANCASHIRE Data Type: Point Name: FISH Easting: 382300 Northing: 410200	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 15/02/1966 Version End Date: -

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



5.7 Surface water abstractions

Records within 2000m

32

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

Features are displayed on the Abstractions and Source Protection Zones map on [page 62 >](#)

ID	Location	Details	
A	692m NW	Status: Historical Licence No: 2569001285 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RMC NORTHERNT BURY CANAL WHARF Data Type: Point Name: CEMEX UK MATERIALS LTD Easting: 379706 Northing: 410696	Annual Volume (m ³): 5500 Max Daily Volume (m ³): 21 Original Application No: - Original Start Date: 23/03/2005 Expiry Date: 31/03/2015 Issue No: 2 Version Start Date: 01/04/2008 Version End Date: -
A	692m NW	Status: Historical Licence No: 2569001285R01 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RMC NORTHERNT BURY CANAL WHARF Data Type: Point Name: CEMEX UK MATERIALS LTD Easting: 379706 Northing: 410696	Annual Volume (m ³): 5500 Max Daily Volume (m ³): 21 Original Application No: - Original Start Date: 01/04/2015 Expiry Date: 31/03/2027 Issue No: 2 Version Start Date: 21/12/2018 Version End Date: -
-	999m N	Status: Historical Licence No: NW/069/0001/007 Details: Hydroelectric Power Generation Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT CHAMBER HALL WEIR Data Type: Point Name: Bury Council Easting: 380014 Northing: 411406	Annual Volume (m ³): 90000000 Max Daily Volume (m ³): 340416 Original Application No: - Original Start Date: 10/06/2016 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 10/06/2016 Version End Date: -



ID	Location	Details	
-	1016m SW	Status: Historical Licence No: 2569001056 Details: Dust suppression Direct Source: "Surface, Non-Tidal - North West Region" Point: "THE RIVER IRWELL AT HINDS LANE, BURY" Data Type: Point Name: J B SKIPS & SERVICES LTD Easting: 379450 Northing: 409850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1997 Version End Date: -
-	1016m SW	Status: Historical Licence No: 2569001056 Details: Dust suppression Direct Source: Surface, Non-Tidal - North West Region Point: THE RIVER IRWELL AT HINDS LANE, BURY Data Type: Point Name: J B SKIPS & SERVICES LTD Easting: 379450 Northing: 409850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1997 Version End Date: -
-	1360m NW	Status: Historical Licence No: 2569001170 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: KIRKLEES BRK AT WOOLFOLD, BURY93 Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 378700 Northing: 412500	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -
-	1360m NW	Status: Historical Licence No: 2569001170 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "KIRKLEES BRK AT WOOLFOLD, BURY \$93" Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 378700 Northing: 412500	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -
-	1360m NW	Status: Historical Licence No: 2569001170 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: KIRKLEES BRK AT WOOLFOLD, BURY \$93 Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 378700 Northing: 412500	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -



ID	Location	Details	
-	1360m NW	Status: Historical Licence No: 2569001170 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: KIRKLEES BRK AT WOOLFOLD, BURY Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 378700 Northing: 412500	Annual Volume (m ³): 850102 Max Daily Volume (m ³): 3182.2 Original Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -
-	1502m SW	Status: Historical Licence No: NW/069/0001/004 Details: Hydroelectric Power Generation Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT BEALEY'S WEIR Data Type: Point Name: Resolution Hydro Limited Easting: 379607 Northing: 409015	Annual Volume (m ³): 80000000 Max Daily Volume (m ³): 259200 Original Application No: NPS/WR/004482 Original Start Date: 20/12/2010 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/04/2019 Version End Date: -
-	1547m SW	Status: Historical Licence No: 2569001158 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "R IRWELL AT RADCLIFFE, MANCHESTER" Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 379400 Northing: 409100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 29/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/05/2001 Version End Date: -
-	1547m SW	Status: Historical Licence No: 2569001158 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "R IRWELL AT RADCLIFFE, MANCHESTER" Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 379400 Northing: 409100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 29/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/05/2001 Version End Date: -



ID	Location	Details	
-	1547m SW	Status: Historical Licence No: 2569001158 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: R IRWELL AT RADCLIFFE, MANCHESTER Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 379400 Northing: 409100	Annual Volume (m ³): 3636800 Max Daily Volume (m ³): 14183.52 Original Application No: - Original Start Date: 29/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/05/2001 Version End Date: -
-	1547m SW	Status: Historical Licence No: 2569001158 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: R IRWELL AT RADCLIFFE, MANCHESTER Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 379400 Northing: 409100	Annual Volume (m ³): 3636800 Max Daily Volume (m ³): 14183.52 Original Application No: - Original Start Date: 29/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/05/2001 Version End Date: -
-	1643m W	Status: Historical Licence No: 2569001160 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS FED BY ELTON BRK AT BURY [10 Data Type: Point Name: THE ELTON COP DYEING CO LTD Easting: 378800 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/02/1975 Version End Date: -
-	1648m S	Status: Historical Licence No: 2569001245 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "RIVER IRWELL AT RADCLIFFE, MANCHESTER" Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -



ID	Location	Details	
-	1648m S	Status: Historical Licence No: 2569001245 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "RIVER IRWELL AT RADCLIFFE, MANCHESTER" Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -
-	1648m S	Status: Historical Licence No: 2569001245 Details: Boiler Feed Direct Source: "Surface, Non-Tidal - North West Region" Point: "RIVER IRWELL AT RADCLIFFE, MANCHESTER" Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -
-	1648m S	Status: Historical Licence No: 2569001245 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RADCLIFFE, MANCHESTER Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -
-	1648m S	Status: Historical Licence No: 2569001245 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RADCLIFFE, MANCHESTER Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -
-	1648m S	Status: Historical Licence No: 2569001245 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RADCLIFFE, MANCHESTER Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -



ID	Location	Details	
-	1830m W	Status: Historical Licence No: 2569001155 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS) Data Type: Point Name: CURTAIN STYLING LTD Easting: 378600 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975 Version End Date: -
-	1830m W	Status: Historical Licence No: 2569001155 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS) Data Type: Point Name: CURTAIN STYLING LTD Easting: 378600 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975 Version End Date: -
-	1830m W	Status: Historical Licence No: 2569001155 Details: General use relating to Secondary Category (Medium Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS " Data Type: Point Name: CURTAIN STYLING LTD Easting: 378600 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975 Version End Date: -
-	1830m W	Status: Historical Licence No: 2569001155 Details: Boiler Feed Direct Source: "Surface, Non-Tidal - North West Region" Point: "RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS " Data Type: Point Name: CURTAIN STYLING LTD Easting: 378600 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975 Version End Date: -



ID	Location	Details	
-	1894m W	Status: Historical Licence No: 2569001160 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS FED BY ELTON BRK AT BURY *27 Data Type: Point Name: THE ELTON COP DYEING CO LTD Easting: 378500 Northing: 410900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/02/1975 Version End Date: -
-	1915m SW	Status: Historical Licence No: 2569004054 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "THE MANCHESTER, BOLTON AND BURY CANAL AT BANK TOP, BURY" Data Type: Point Name: BRITISH WATERWAYS Easting: 379200 Northing: 408790	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 04/12/1998 Version End Date: -
-	1915m SW	Status: Historical Licence No: 2569004054 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: THE MANCHESTER, BOLTON AND BURY CANAL AT BANK TOP, BURY Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 379200 Northing: 408790	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 04/12/1998 Version End Date: -
-	1924m W	Status: Historical Licence No: 2569001160 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS FED BY ELTON BRK AT BURY 88 Data Type: Point Name: THE ELTON COP DYEING CO LTD Easting: 378500 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/02/1975 Version End Date: -



ID	Location	Details	
-	1977m NE	Status: Historical Licence No: 2569001289 Details: Lake & Pond Throughflow Direct Source: Surface, Non-Tidal - North West Region Point: TRIBUTARY OF THE RIVER IRWELL, AT CLARENCE PARK LIDO Data Type: Point Name: BURY METROPOLITAN BOROUGH COUNCIL Easting: 381211 Northing: 412322	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 22/12/2008 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 22/12/2008 Version End Date: -
-	1977m NE	Status: Historical Licence No: 2569001289R01 Details: Lake & Pond Throughflow Direct Source: Surface, Non-Tidal - North West Region Point: TRIBUTARY OF THE RIVER IRWELL, AT CLARENCE PARK LIDO Data Type: Point Name: BURY METROPOLITAN BOROUGH COUNCIL Easting: 381211 Northing: 412322	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: NPS/WR/017227 Original Start Date: 01/04/2015 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/04/2015 Version End Date: -
-	1994m NW	Status: Historical Licence No: 2569001170 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY KIRKLESS BROOK AND SURFACE DRAINAGE Data Type: Point Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 379000 Northing: 411900	Annual Volume (m ³): 850102 Max Daily Volume (m ³): 3182.2 Original Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m

0

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

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



5.9 Source Protection Zones

Records within 500m

0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

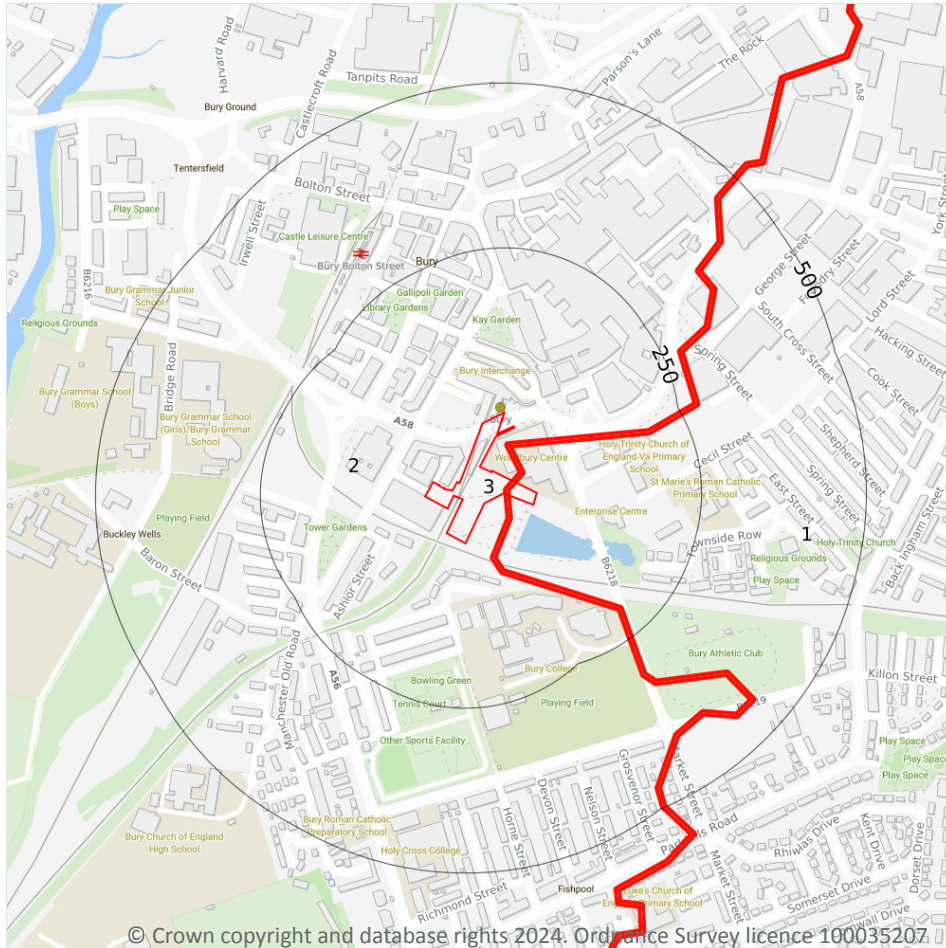
0

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

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



6 Hydrology



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

6.1 Water Network (OS MasterMap)

Records within 250m

0

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

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

2

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



Features are displayed on the Hydrology map on [page 74 >](#)

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	2
------------------------	----------

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

Features are displayed on the Hydrology map on [page 74 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Roch (Spodden to Irwell)	GB112069064600	Roch Irk Medlock	Irwell
2	On site	River	Irwell (Rossendale STW to Roch)	GB112069064620	Croal Irwell	Irwell

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

6.4 WFD Surface water bodies

Records identified	2
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Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on [page 74 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	664m W	River	Irwell (Rossendale STW to Roch)	GB112069064620 ↗	Moderate	Fail	Moderate	2019
-	968m E	River	Roch (Spodden to Irwell)	GB112069064600 ↗	Moderate	Fail	Moderate	2019

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



6.5 WFD Groundwater bodies

Records on site	1
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Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on [page 74 >](#)

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
3	On site	Northern Manchester Carboniferous Aquifers	GB41202G101800 ↗	Poor	Poor	Good	2019

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

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m**0**

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

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

7.2 Historical Flood Events

Records within 250m**0**

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

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

7.3 Flood Defences

Records within 250m**0**

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

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



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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

7.5 Flood Storage Areas

Records within 250m

0

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

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



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

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

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

7.7 Flood Zone 3

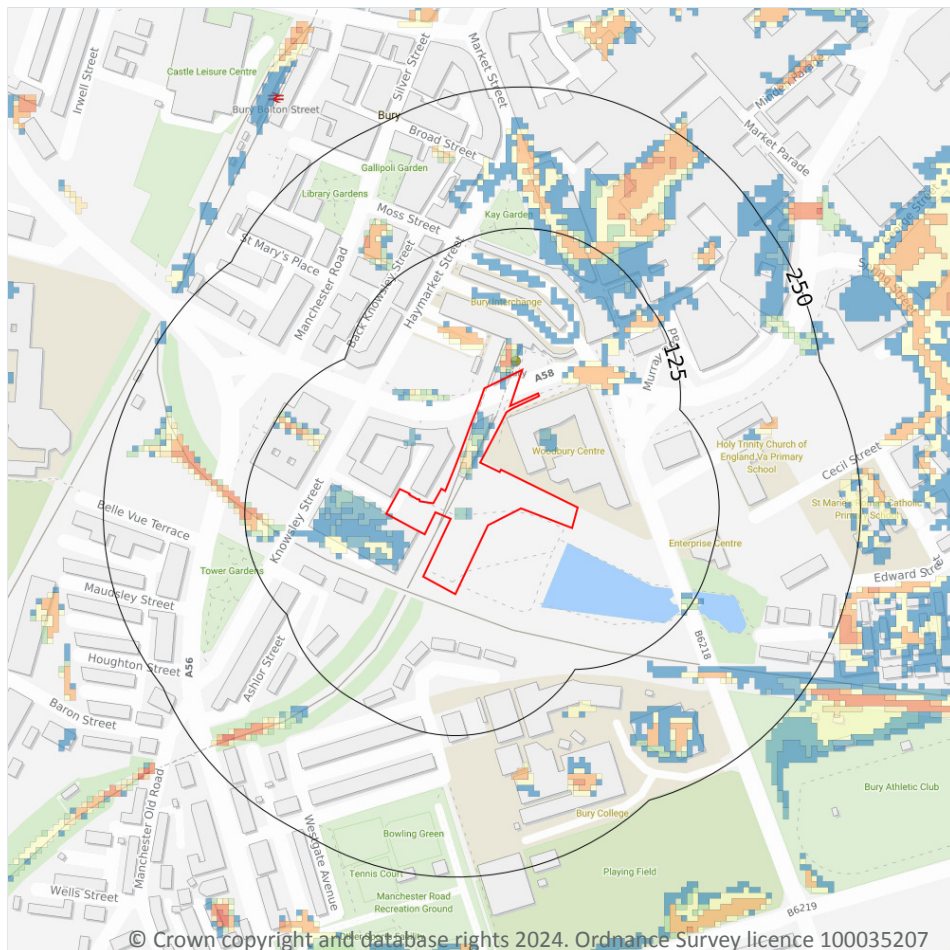
Records within 50m

0

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

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

8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

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

1 in 250 return period

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

1 in 100 return period

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

1 in 30 return period

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

8.1 Surface water flooding

Highest risk on site

1 in 100 year, Greater than 1.0m

Highest risk within 50m

1 in 30 year, 0.3m - 1.0m

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

Features are displayed on the Surface water flooding map on [page 80 >](#)

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



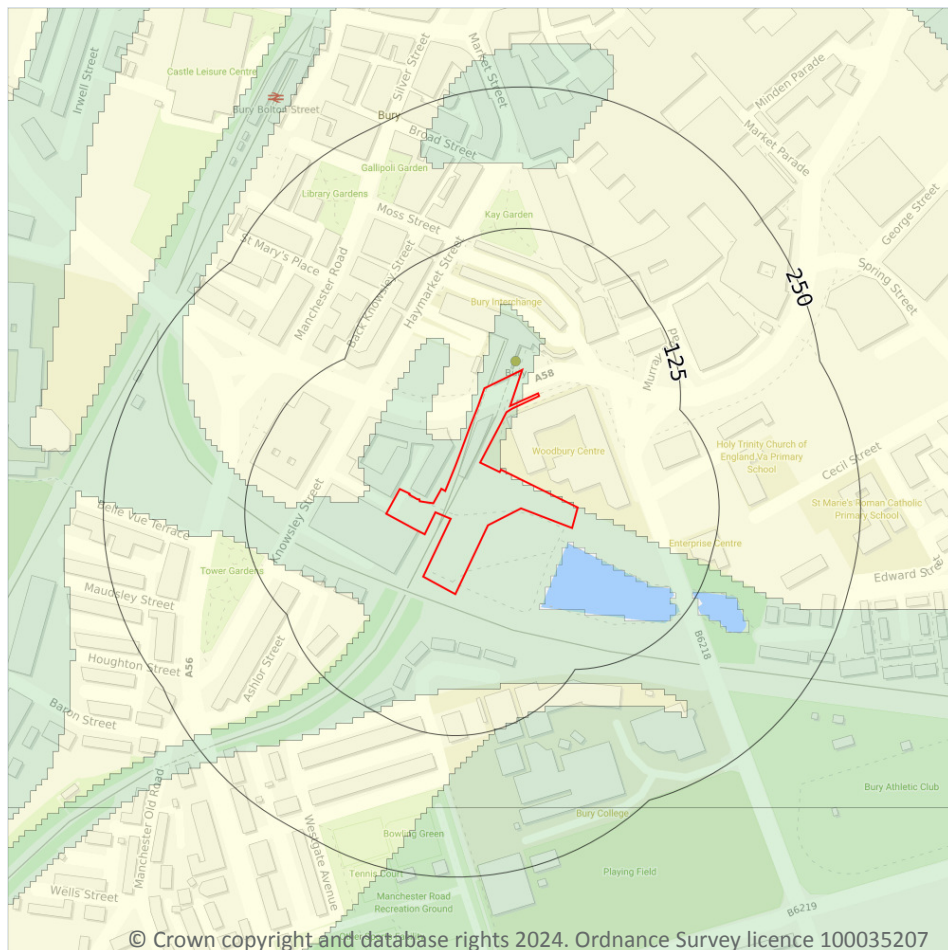
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Negligible

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

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

9.1 Groundwater flooding

Highest risk on site

Moderate

Highest risk within 50m

Moderate

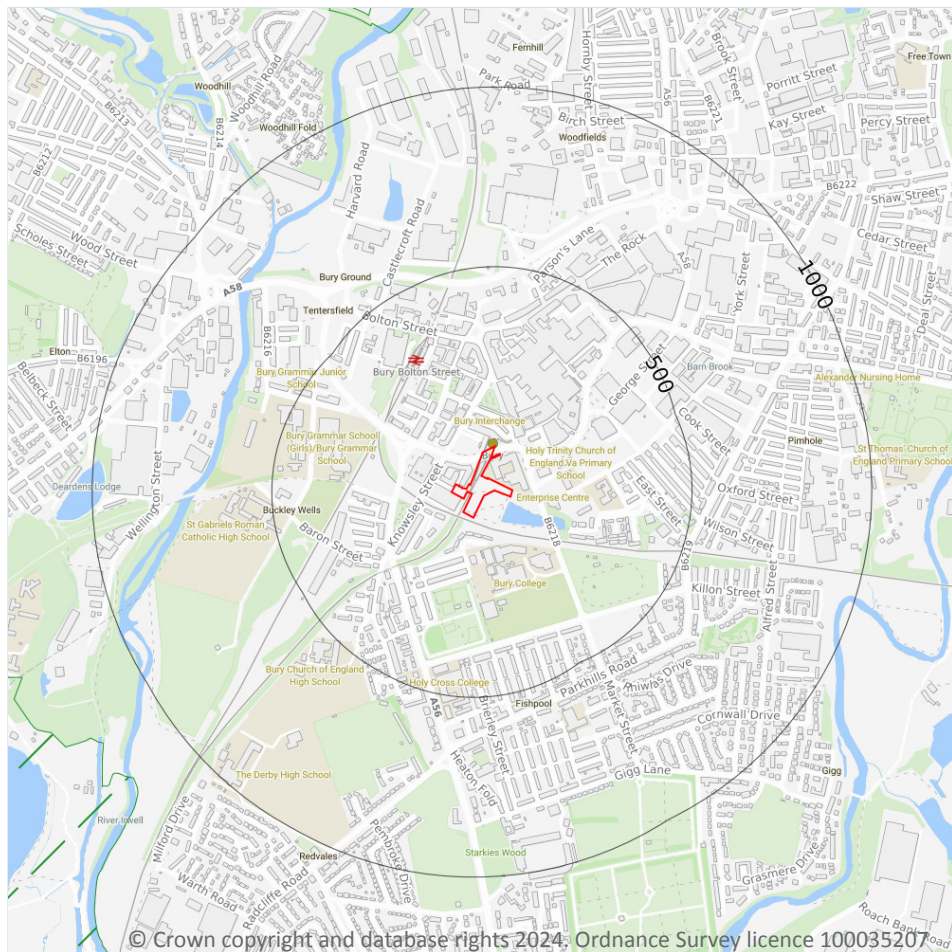
Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks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

Features are displayed on the Groundwater flooding map on [page 82 >](#)

This data is sourced from Ambiantal Risk Analytics.



10 Environmental designations



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

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m**0**

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m**0**

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m**0**

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m**0**

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m

1

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

Features are displayed on the Environmental designations map on [page 83](#) >

ID	Location	Name	Data source
-	1791m NE	Chesham Woods	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m

0

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

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

10.8 Biosphere Reserves

Records within 2000m

0

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

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

10.9 Forest Parks

Records within 2000m

0

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

This data is sourced from the Forestry Commission.



10.10 Marine Conservation Zones

Records within 2000m

0

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

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

10.11 Green Belt

Records within 2000m

6

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

Features are displayed on the Environmental designations map on [page 83](#) >

ID	Location	Name	Local Authority name
1	1179m SW	Merseyside and Greater Manchester Green Belt	Bury
-	1568m E	Merseyside and Greater Manchester Green Belt	Rochdale
-	1606m E	Merseyside and Greater Manchester Green Belt	Bury
-	1732m W	Merseyside and Greater Manchester Green Belt	Bury
-	1971m SE	Merseyside and Greater Manchester Green Belt	Bury
-	1976m E	Merseyside and Greater Manchester Green Belt	Bury

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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



having been identified for potential adoption under the framework.

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

0

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

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

