

White Moss Road

Phase 1 Preliminary Risk Assessment

Curtins Ref: 077873-CUR-00-XX-RP-GE-007

Revision: V01

Issue Date: 07 May 2021

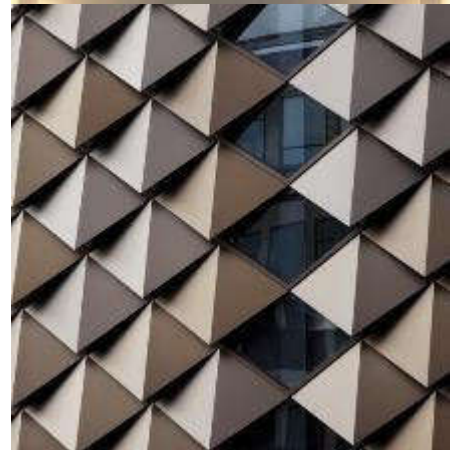
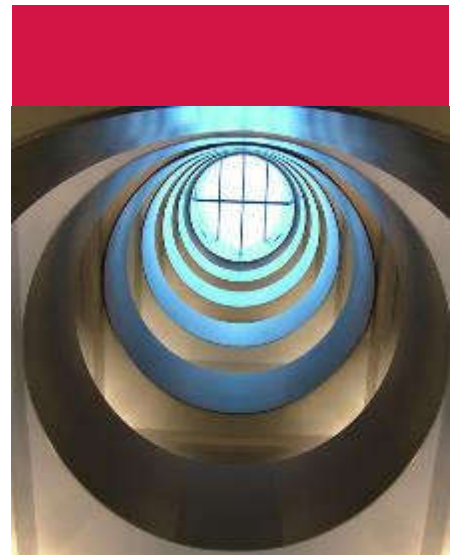
Client Name: One Manchester Housing

Client Address: Lovell House, Archway 6, Hulme, Manchester, M15 5RN

Site Address: White Moss Road, Manchester M9 6DA

Curtins
Merchant Exchange
17-19 Whitworth Street West
Manchester, M1 5WG
Tel: 0161 236 2394
www.curtins.com

CIVILS & STRUCTURES • TRANSPORT PLANNING • ENVIRONMENTAL • INFRASTRUCTURE • GEOTECHNICAL • CONSERVATION & HERITAGE • PRINCIPAL DESIGNER
Birmingham • Bristol • Cambridge • Cardiff • Douglas • Dublin • Edinburgh • Glasgow • Kendal • Leeds • Liverpool • London • Manchester • Nottingham



Rev	Description	Issued by	Checked	Date

This report has been prepared for the sole benefit, use, and information for the client. The liability of Curtins Limited with respect to the information contained in the report will not extend to any third party.

Author	Signature	Date
Z Henderson BSc (Hons) FGS Geo-Environmental Engineer		07 April 2021

Reviewed	Signature	Date
S Hyde BSc (Hons) MSc Senior Geo-Environmental Engineer		07 April 2021

Authorised	Signature	Date
P Winterburn BSc (Hons) CEng MICE MIStructE MCIWEM C.WEM Director		06 May 2021

Executive Summary

Appointment	In March 2021 Curtins were instructed by One Manchester Housing on behalf of Guinness Homes to undertake a Phase 1 Preliminary Risk Assessment of a plot of land off White Moss Road, Manchester M9 6DA. The site is centred on NGR SD 86430 03440 and covers an area of approximately 0.63 Ha. It is understood that the proposed site development is for residential dwellings.
Current Site Status	The site is located south of White Moss Road and encompasses a vacant area of open public space with several trees occupying space to the east and south of the south. The sites topography is generally flat.
Site History	Earliest mapping (1848) shows that the site was occupied by the Dam Head Farm and a large central pond, later accompanied by a smaller pond to the north. The surrounding area is generally undeveloped agricultural fields with several ponds noted within 250m of the site (no longer present from 1909), a wooded area 157m south and a watercourse adjacent to the north of this. The Booth Hall Infirmary (a children's hospital from 1932) is located 221m south of the site. Through the 1930s to 50s continued residential development to the east of the site occurs. By 1952 several small structures are located on site to the east. A large spoil mound is located 174m south of the site, no longer present on maps from 2006. From 1975 Dam Head Farm and from the 1980s the small structures to the east and the large pond are no longer present on maps. Residential developments populate areas surrounding the site in all directions including the associated White Moss Road adjacent to the northern boundary of site. Two electric substations are located 145m northwest and 176m east of the site and tanks are located 216m south of the site.
Geology	BGS mapping indicates the site is underlain by Glacial Till Deposits, Devensian superficial deposits, Manchester Marls Formation bedrock (majority of site) and Chester Formation bedrock (northwest corner). The BGS borehole scans recorded Made Ground overlying alternating layers of sand and clay. The site is located in a low probability radon area where 1-3% of homes are estimated to be at or above the radon Action Level.
Mining	The site is located within a Coal Mining reporting area. A review of available online data indicates the site is not located within the vicinity of recorded mine entries, or a development high risk area. The risk from shallow coal mining is therefore considered to be Low.
Hydrogeology	The site is underlain by a Secondary B Aquifer associated with the bedrock formations. The superficial deposits are designated as a Secondary Undifferentiated Aquifer. The site is not located within a Source Protection Zone (SPZ). There are no potable groundwater abstraction points within 1km.
Hydrology	The nearest surface water feature is an issue 171m south of the site. There are no surface water abstractions within 1km. There are no discharge consents within 500m of the site.
Unexploded Ordnance	The risk from UXO associated with WWII bombing to future intrusive investigation works is considered to be Low.
Initial Ground Contamination Assessment	The risk from Made Ground posed to the site's end-users and construction workers is considered to be Moderate / Low due to the anticipated lack of contamination in the Made Ground. The risk posed to groundwater and surface water is considered to be Very Low due to low permeability superficial soils and the distance to the nearest surface water feature. The risk posed to site end-users from ground generating gases arising from organic / putrescible soils near the site is considered to be Moderate.
Recommendations	The following recommendations are made with regards to further works at the site: 1. Undertake a GQRA as part of the ground investigation; and 2. Undertake Ground Gas Monitoring over a period of two-three months for methane, carbon dioxide, oxygen, hydrogen sulphide, gas flow in l/hr, weather conditions and barometric pressure (with confirmation if falling, steady or rising). It is further recommended that this work is completed in advance of any development works taking place.

Table of Contents

1.0	Introduction	1
1.1	Project Background	1
1.2	Scope of Services	1
2.0	Current Site and Surrounding Area Details	2
2.1	Site Location and Current Details	2
2.2	Surrounding Area Details	3
3.0	Site History	4
4.0	Geology, Hydrogeology and Hydrology	6
4.1	Geology and Hydrogeology	6
4.1.1	Mining	7
4.1.2	Other Ground Stability Issues	8
4.1.3	Ground Gas	8
4.2	Hydrology	8
5.0	Unexploded Ordnance Risk Assessment	9
5.1	Preliminary UXO Assessment	9
6.0	Conceptual Site Model & Qualitative Risk Assessment	10
6.1	Additional Risk Assessments	10
7.0	Conclusion and Recommendations	12
7.1	Contaminants of Concern	12
7.2	Other Considerations	12
8.0	References	13

Appendices

- Appendix A Drawings**
- Appendix B Envirocheck Report**
- Appendix C Qualitative Risk Assessment Rationale**

1.0 Introduction

1.1 Project Background

In March 2021 Curtins were instructed by One Manchester Housing on behalf of Guinness Homes to undertake a Phase 1 Preliminary Risk Assessment of a currently vacant land off White Moss Road, M9 6DA.

The location and extent of the site is shown in *Figure 2.1* on the following page. It is understood that the site is to be developed for residential dwellings.

At the time of writing, no proposed site plans were available for review.

1.2 Scope of Services

The Phase 1 PRA is intended to provide an overview of the geo-environmental and geotechnical setting of the site, prior to the proposed development of the site.

Through this overview, the Phase 1 PRA aims to develop both a working conceptual and ground model for the site, as well as present an initial assessment of any risks that could be presented to the development including its intended end users and the wider environment.

Specifically, the Phase 1 PRA provides an initial assessment of the site regarding:

- a) Potential on and offsite contamination from historical and/or current uses, including potential ground gas generating sources;
- b) The potential impact on the wider environment by historical and or current use of the site of interest;
- c) The potential impact from surrounding land uses and other environmental factors;
- d) Potential problems associated with geological features such as faulting, mineral extraction, mining and land instability; and
- e) The location of apparent sub-surface structures that may affect the proposed redevelopment.

Consideration of detailed flood risk, ecology and archaeological issues are outside of the scope of this report.

2.0 Current Site and Surrounding Area Details

2.1 Site Location and Current Details

Site use, location and description are shown below in *Table 2.1* and *Figure 2.1*.

Table 2.1 – Site Details

Site Address	White Moss Road, Manchester M9 6DA
NGR	SD 86430 03440
Area of Site	Approximately 0.63 Ha.
Current Site Use and Description	The site is located south of White Moss Road and surrounded by residential properties. The site is currently occupied by public open space, with grass surface cover. The sites topography is relatively flat with a number of trees noted to the east and south of the site.

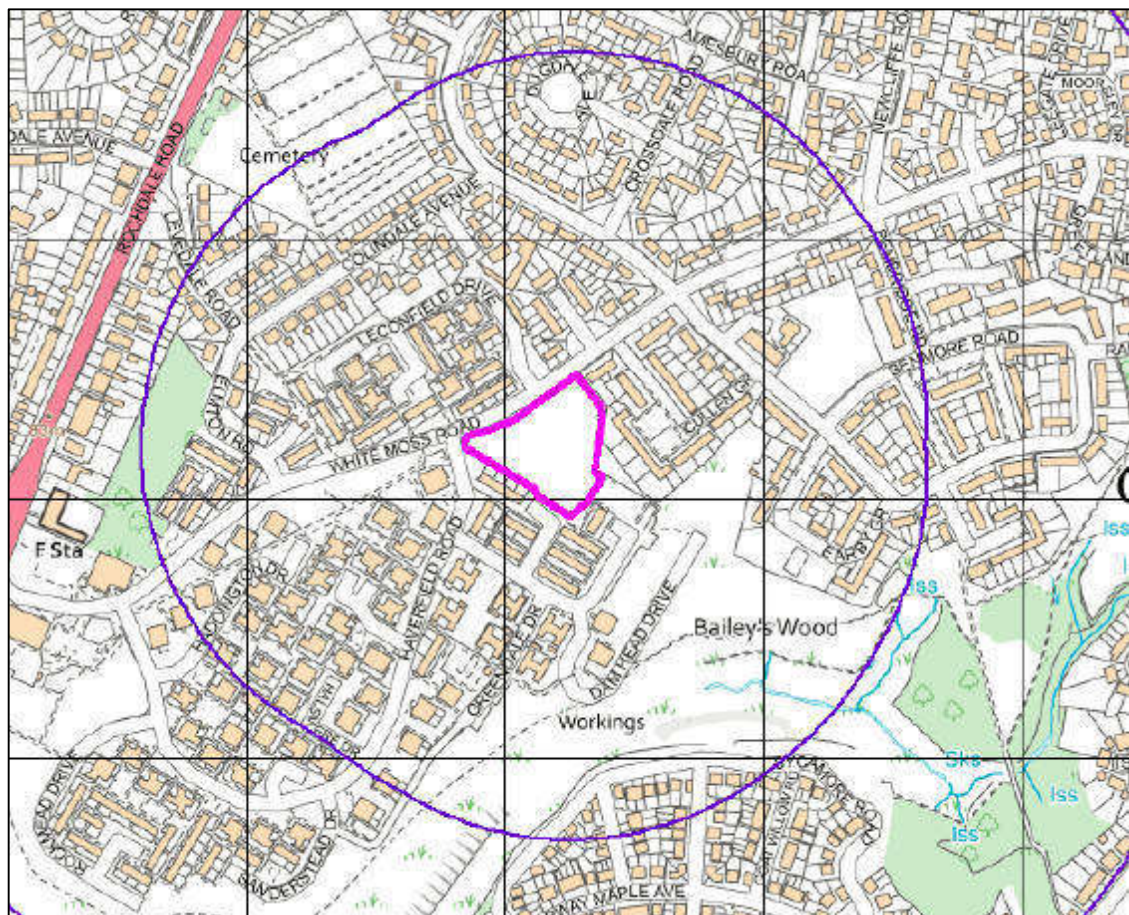


Figure 2.1 – Site Location Plan (site boundary shown in pink and 250m buffer in purple).
Crown Copyright. License Number 100022432.

2.2 Surrounding Area Details

The following information was established through undertaking an environmental database search. The full Envirocheck report (Ref. 1) is included in *Appendix B*.

Table 2.2 – Surrounding Land Uses

Surrounding Area	N	White Moss Road followed by residential development.
	E	Wanley Walk followed by residential development.
	W	Lilstock Walk followed by residential development.
	S	Residential development followed by an area of dense vegetation.

3.0 Site History

A review of the available historical mapping and other information for the site, as presented within the Envirocheck Report (Ref. 1), has been undertaken and is presented in *Table 3.0* below.

Table 3.0 – Previous Site and Surrounding Area Uses and Potential Sources of Contamination. *Bold text refers to on-site activity.*

Date	Description	Potential Sources of Contamination
1848 – 1932	The earliest available mapping (1848) shows the site occupied by Dam Head Farm and a large pond in the centre, forming part of wider agricultural fields. From 1893 a second smaller pond is situated along the northern boundary of site. A small pond is located 20m east of the site, and a further two ponds located 176m and 219m north of the site. Another pond is located approximately 210m southwest of the site. A large wooded area is located 157m south of the site, named Bailey's Wood by 1893. A small watercourse (issue) runs towards the west, 157m south of the site adjacent to the woods. By 1909 the Booth Hall Infirmary (Prestwich Union) is constructed 221m south of the site From 1909 the small ponds to the north of site and 20m east of site are no longer present on the historical maps. From 1923 the <i>Jews Cemetery</i> is noted 198m northwest of site.	• No local sources of contamination identified until 1909. • From 1909 potential for uncontrolled deposition of Made Ground off-site during construction of the infirmary.
1932 – 1956	The site remains unchanged. White Moss Road is partially constructed up to the northeast corner of site from the east. Within 100m of the site to the north residential developments are constructed. The infirmary is extended to the east and west, now named Booth Hall Hospital (children's hospital).	• Potential for uncontrolled deposition of Made Ground off-site during expansion of the hospital and construction of the residential dwellings within 100m of the site.
1956 – 1975	Multiple small structures have been constructed to the east of the site. Further residential developments have been constructed within 100m of the site and the wider area. Residential properties are now present adjacent to the eastern boundary of the site. A large spoil heap is located 174m south of the site, north of the hospital within Bailey's Wood.	• Potential for uncontrolled deposition of Made Ground on-site during construction of the structures to the east. • Potential for uncontrolled deposition of Made Ground off-site during construction of the residential dwellings within 100m of the site.
1975 - present	The Dan Head Farm is no longer present on site. The pond and small structures to the east are still present. From 1980s, the large pond and small structures to the east of the site on site are no longer present on historical maps. Residential developments, including apartment blocks and houses are constructed in all directions within 100m of the site. White Moss Road is fully constructed, present adjacent to the northern boundary of the site.	• Potential for uncontrolled deposition of Made Ground on-site during demolition of the Dam Head Farm and small structures. • Potential for uncontrolled deposition of Made Ground off-site during construction of residential dwellings and associated roads.

Date	Description	Potential Sources of Contamination
	Two electric substations are located 145m northwest and 176m east of the site. Continued expansion of the hospital; tanks are located 216m south of the site. From 2006 the spoil heap is no longer present on the historical maps.	• Potential contamination from infill of pond on site with unknown material.

Potential sources of onsite contamination are further discussed in *Section 6.0*.

4.0 Geology, Hydrogeology and Hydrology

4.1 Geology and Hydrogeology

A study of the Envirocheck (Ref. 1) Report and the British Geological Survey (BGS) 1:50,000 mapping records (Bedrock and Superficial Editions) for Manchester (Sheet 085) dated 2011 (Ref. 2) indicates the following geological and hydrogeological succession underlying the site:

Table 4.1 – Geological/Hydrogeological Succession

Geology	Associated Hydrogeological Classification
Glacial Till – Devensian, Diamicton ¹	Secondary Aquifer, Undifferentiated ²
Manchester Marls Formation ³ - majority of the site	Secondary Aquifer B ⁴
Chester Formation ⁵ – northwest corner of site	Secondary Aquifer B ⁴

Notes:

1. A heterogeneous mixture of clay, sand, gravel, and boulders varying widely in size and shape.
2. These layers have not been assigned an attribute either category A or B rock type due to not being possible. In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.
3. Red marl (calcareous mudstone and siltstone) with thin beds of fossiliferous marine limestone and dolomite; locally green; sandy in places; local breccias and pebbly beds.
4. Predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifer.
5. The formation shows a progressive change in lithology northwards, from a coarse-grained, typically well-cemented proximal facies to a fine-grained, less well-cemented distal facies. Comprises conglomerates and reddish brown, cross-bedded, pebbly sandstones with subordinate beds of red-brown mudstone.

BGS Records do not indicate the presence of Made Ground on site, however the site's historic land use, the demolished farmhouse and large infilled pond, suggests that made ground soils may be present beneath the site.

There are thirteen available BGS recorded borehole logs recorded within 250m of the site, (Ref. 3). The three in closest proximity to the site is summarised in *Table 4.2* below:

Table 4.2 – BGS Borehole Records

Record Reference	Location (NGR)	Details (bottom to top of strata/details/thickness of strata)	
SD80SE1004	100m southwest (386290, 403380)	0.00m to 0.30m bgl	MADE GROUND: Soil and brick fill (0.30m)
		0.30m to 1.82m bgl	Firm brown sandy CLAY (1.52m)
		1.82m to 2.32m bgl	Medium brown SAND (0.50m)
		2.32m to 5.50m bgl	Fine sandy SILT (3.18m)
		5.50m to 14.90m bgl	Fine brown SAND with bands of sandy silt (9.40m)
		14.90m to 15.55m bgl	GRAVEL and COBBLES (0.65m)
		15.55m to 16.46m bgl	Stiff brown sandy CLAY (0.91m)
		16.46m to 20.73m bgl	Very stiff brown CLAY (4.27m)
		20.73m to 24.68m bgl	Fine brown SAND with bands of very fine sandy silt (3.95m)
		24.68m bgl	Borehole terminated

Record Reference	Location (NGR)	Details (bottom to top of strata/details/thickness of strata)	
SD80SE1001	139m northeast (386580, 403560)	0.00m to 0.91m bgl 0.91m to 1.22m bgl 1.22m to 2.13m bgl 2.13m to 3.65m bgl 3.65m to 4.42m bgl 4.42m to 8.50m bgl 8.50m to 13.25m bgl 13.25m to 15.39m bgl 15.39m to 15.70m bgl 15.70m to 22.86m bgl 22.86m to 30.17m bgl 30.17m bgl	TOPSOIL (0.91m) Soft grey CLAY (0.31m) Dark brown sandy PEAT (0.91m) Very soft grey sandy CLAY (1.52m) Soft brown CLAY (0.77m) Fine silty SAND with bands of laminated clay (4.08m) Firm brown CLAY (4.75m) Fine brown SAND (2.14m) GRAVEL and COBBLES (0.31m) Fine brown SAND (7.16m) Fine brown SAND with bands of clayey silt (7.31m) Borehole terminated
SD80SE1003	182m west (386200, 403510)	0.00m to 0.22m bgl 0.22m to 2.10m bgl 2.10m to 6.25m bgl 6.25m to 7.32m bgl 7.32m bgl	MADE GROUND: Clinker, sand and brick fill (0.22m) Firm brown and grey mottled CLAY (1.88m) Firm dark brown sandy CLAY (4.15m) Firm brown CLAY with thin bands of sand (1.07m) Borehole terminated

There are three BGS recorded fault lines within 1km of the site. The nearest is located approximately 130m east of the site, orientated approximately north to south. The fault identified the boundary between the Manchester Marls Formation and Pennine Lower and Middle Coal Measures Formation. Six coal outcrops are noted to be present to the east of the fault. A further two faults are located within 500m of site, one approximately 390m southwest of the site, intersected by the fault 130m east of site and the other 570m east of the site.

The site is not situated within a Source Protection Zone (SPZ). There are no groundwater abstraction points within 1km of the site.

4.1.1 Mining

A review of the Coal Authority interactive mapping (Ref. 4) for the area indicates that the site is located within a Coal Mining Reporting Area, however it is not located within a Development High-Risk Area. The nearest Development High-Risk Areas are associated with coal outcrops to the east of the site.

There are no recorded mine entries within 500m of the site. The closest is approximately 860m north of the site.

There are no recorded coal workings and no probable coal workings within 500m of the site. The closest is approximately 540m northeast of the site.

Consequently, the risk to development from historic coal mining is considered to be **Low**. No further actions are required to further assess the risk to development from historic coal mining.

The closest recorded BGS mineral sites is located 356m south of the site, an opencast site known as the Blackley Parsonage Sand Pit which extracted sand and silica sand. The status of the site is ceased.

4.1.2 Other Ground Stability Issues

The Envirocheck Report (Ref. 1) confirms that there is a no hazard to low risk from the following ground stability hazards on the site; collapsible ground, compressible ground, ground dissolution, landslide ground, running sands and shrinking or swelling clay.

4.1.3 Ground Gas

Given historic development on site, primarily for farming use and the infill of the large pond on site, it is possible that made ground soils may be present on site. These soils may act as a source of ground gas generation.

There is one historical landfill located across the entire of site, extending to the southwest by approximately 550m and to the south by approximately 215m over the Blackley area. No further information regarding type of waste deposited or input dates is supplied.

There is one area of infilled land (non-water) located within 250m of the site. The nearest is located 174m south, which is an infilled pit, quarry etc. dated 1990.

Two infilled water features (Pond, marsh, river, stream etc.) are located on site, centrally and across the northeastern corner of the site.

The Envirocheck Report (Ref. 1) and BGS Radon Mapping (Ref. 5) confirms the site is situated in an area where 1-3% of homes are above the radon action level. Radon protection measures are therefore not considered necessary within the proposed development. However, where the new development incorporates a basement the advice of a specialist Radon assessor must be obtained.

4.2 Hydrology

The nearest surface water feature is an issue located 171m southeast which flows towards the west.

No recorded pollution incidents to controlled waters have occurred within 500m of the site.

There are no surface water abstractions within 1km.

There are no discharge consents located within 500m of the site.

5.0 Unexploded Ordnance Risk Assessment

Military activities including those conducted as part of both the First and Second World Wars have resulted in a legacy of unexploded ordnance (UXO) being present within the shallow soils of the UK.

UXO result from various sources including both allied (military training) and German (bombing raids) with a guide figure of approximately 10% of all munitions failing to function as designed.

The likelihood of UXO being encountered on a development site is influenced by several factors including; the proximity to strategic targets, the nature of the development works being undertaken and evidence of local damage in the post-war periods amongst others. To determine the likelihood of UXO being present on a site, a step-wise risk assessment process is followed. This process is outlined within CIRIA C681 Unexploded Ordnance: A Guide for the Construction Industry (Ref. 6) with the following commentary considered to represent a Preliminary Risk Assessment intended to guide if and where there is a requirement for a Detailed Risk Assessment.

5.1 Preliminary UXO Assessment

Risk mapping (Ref. 7) for UXO's has placed the site in a **Moderate** risk area. Moderate-risk regions are those with a bombing density between 11 and 50 bombs per 1000 acres. These areas are considered to have a significant but low UXB risk. In general, further action to mitigate the risk is considered prudent, although not essential. Care is required when assessing the risk for specific sites where the risk may be higher because of local wartime activity.

A review of the available historic mapping did not identify any evidence of bomb damage onsite or within close proximity of the site boundary. No ruins were recorded in the immediate vicinity of the development site, and no buildings appear to have been demolished following WWII on or surrounding the site. Detailed bomb strike mapping does not record any strikes or damage on the site (Ref. 4).

Considering the above, the risk of encountering potential UXO as part of future intrusive works is considered **Low**.

If unexploded ordnance is discovered during any works, stop immediately, prevent access to the area, and inform the police. If the site boundary or location changes then the UXO risk should be reassessed.

6.0 Conceptual Site Model & Qualitative Risk Assessment

The conceptual site model (CSM) and Qualitative Risk Assessment (QRA) are presented in the table within this section.

The CSM details the source-pathway-receptor linkages or potential pollutant linkages (PPL) that have been identified for the site. The QRA details the associated level of risk relating to these potential pollutant linkages.

The CSM and QRA concern risk to human health and water environment with additional, more specific risk assessment protocols contained within the main body of this reporting, as detailed in *Section 6.1* below.

The QRA follows the framework outlined within CIRIA C552 (Ref. 8) which is summarised within *Appendix C*.

The 'risk rating' within the QRA refers to the risk that the source, pathway, receptor linkage or PPL is complete. Unless specifically stated it does not necessarily refer to an immediate risk and is intended to be used as a tool to assess the necessity for further assessment/investigation.

6.1 Additional Risk Assessments

The following risk assessments, listed below, are not included within the main CSM and QRA but nonetheless can be of critical importance to the onward development of the site:

- The risk presented by Mining is discussed and assessed in *Section 4.1.1*.
- The risk presented by Radon is discussed and assessed in *Section 4.1.3*.
- The risk presented by Unexploded Ordnance is discussed and assessed in *Section 5.0*.

Under current health and safety legislation, employers are required to carry out their own appropriate risk assessments and mitigation to protect themselves and their employees, other human receptors and the environment from potential contamination. Such risks must be adequately mitigated by law, specifically the Construction Design Management (CDM) Regulations, 2015 (Ref. 9) which require that potential risks to human health and the environment from construction activities are appropriately identified and all necessary steps taken to eliminate / manage that risk. It has been assumed that any future construction works on site will be undertaken in compliance with these requirements.



- The table below represents the first stage in the land quality risk assessment process: The Qualitative Risk Assessment.
- For a development site to be deemed 'suitable for use', the level of risk needs to be brought down to acceptable levels, i.e. low to very low risk.
- The purpose of each stage of risk assessment is ultimately to establish, if there is a requirement for additional levels of assessment to be made to have sufficient confidence to support a risk characterisation or management decision, e.g. remedial action.
- In the absence of specific site data, a Generic Quantitative Risk Assessment is invariably recommended.

Conceptual Site Model			Qualitative Risk Assessment			Risk Rating	Recommended Actions
Source	Pathway(s)	Receptor(s)	Consequence	Likelihood of Occurrence			
Significant sources of on-site contamination: - Made Ground of unknown composition from uncontrolled deposition of materials onsite during the demolition of the Dam Head Farm and small structures to the east. - Made Ground of unknown composition from uncontrolled deposition of materials small structures to the east of the site. - Deposition of made ground associated with infilled ground from the ponds on site. Significant sources of off-site contamination: - Uncontrolled deposition of Made Ground during the construction of roads and structures and demolition near and adjacent to the site's boundaries.	Direct contact, ingestion, inhalation (dust and vapours)	End-user of site (Residents) & Construction Workers	Medium Chronic health risk	Low Likelihood Based on the site's limited development history and lack of historical industrial use, the likelihood of encountering significant contamination within the Made Ground is considered to be Low. There is potential for localised contamination related to ACM-containing structures considering small structures onsite before 2000s. Likelihood of construction workers coming into contact with contamination on site can be reduced by appropriate PPE.	Moderate / Low	Generic Quantitative Risk Assessment Recommended as part of the ground investigation.	
	Vertical migration through the superficial deposits (soils) May occur due to existing service corridors and physical processes including: capillary action and downwards into the natural deposits through infiltration.	Controlled Waters (Groundwater) Secondary B Aquifer (Bedrock), overlain by Secondary Aquifer – Undifferentiated (Glacial Till Deposits). There are no potable groundwater abstraction points within 1km. The site is not within a designated Source Protection Zone.	Mild Pollution of non-sensitive water resources	Unlikely While there is the potential for localised contamination to migrate vertically through the superficial deposits to the bedrock Secondary B Aquifer, there is a low likelihood of significant contamination being present in the Made Ground due to lack of historical industrial land use and taking into account the lack of an SPZ or abstraction points within 1km.	Very Low		No further action required
	Horizontal migration over and through the superficial deposits (soils)	Controlled Waters (Surface Water) Nearest surface water feature is an issue 171m southeast. No surface water abstraction points within 1km.	Mild Pollution of sensitive water resources	Unlikely Considering the distance from the site to the nearest surface water receptor and the expected low levels of contamination within the Made Ground, this pathway is considered unlikely.	Very Low		
Significant sources of ground gas: - Localised organically rich deposits present within infilled land, made ground and within natural soils. - Site within a Coal mining area. - Two infilled water features on site. - Historical landfill site across the entire site.	Vertical and horizontal migration through existing service corridors and the underlying superficial deposits	End-user of site (Residents)	Medium Human health risk	Likely There is potential for gas generation from any localised organically rich deposits present in the Made Ground or superficial soils and reflecting.	Moderate	Generic Quantitative Risk Assessment Recommended as part of the ground investigation.	

7.0 Conclusion and Recommendations

The qualitative risk assessment (QRA) determined a varied level of level of risk associated with the proposed development.

The QRA concluded by recommending that generic quantitative risk assessments (GQRA) were conducted to confirm the assessment of risk ascribed to each of the respective potential pollutant linkages (PPLs). It is recommended that the GQRA is conducted as part of a ground investigation in support of the engineering design of the proposed development.

In summary, the following recommendations are made:

- Undertake a GQRA as part of the ground investigation; and
- Undertake ground gas monitoring over a period of two-three months for potential hazardous gases.

It is further recommended that the site investigation works are completed in advance of any development works taking place.

7.1 Contaminants of Concern

Potential contaminants of concern associated with the sources identified within the Conceptual Site Model in *Section 6.0* of this reporting include but are not limited to: broad range aliphatic and aromatic hydrocarbons present within any fuel oils; polycyclic aromatic hydrocarbons (PAHs); inorganic compounds including heavy metals; and asbestos present in discarded building materials.

Potential contaminants associated with the airborne dust/particulates include but are not limited to: polycyclic aromatic hydrocarbons and inorganic compounds including toxic metals that are also accounted for by potential onsite contaminants of concern.

7.2 Other Considerations

The requirement for additional surveys, e.g. arboricultural and ecological surveys, should be confirmed through advice from a suitably qualified and experienced professional.

8.0 References

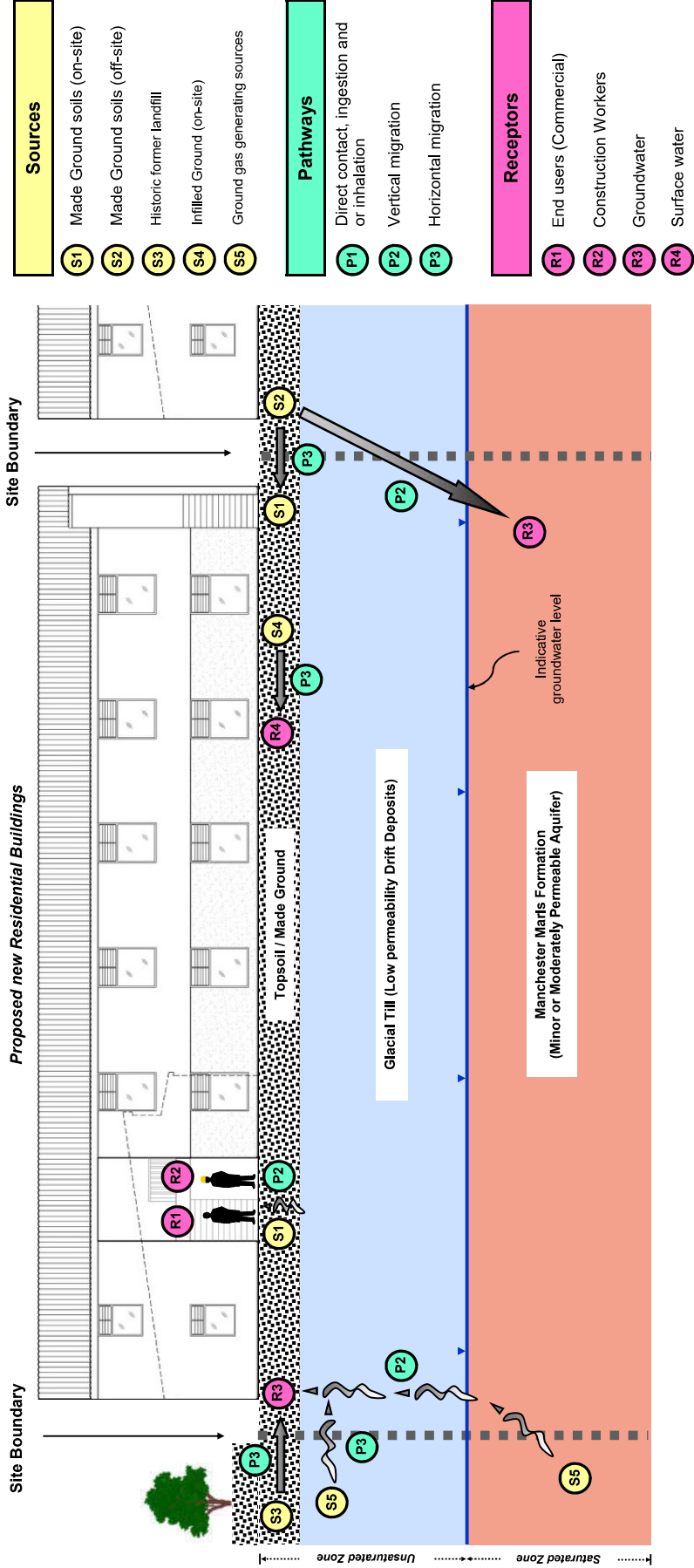
1. Landmark (2021) Envirocheck Report (report no. 273938535_1_1).
2. British Geological Survey (BGS) Solid and Drift Editions (2011) 1:50,000 mapping, Sheet No. 085 (Manchester).
3. BGS Geology of Britain Viewer [online], <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (accessed April 2021).
4. Coal Authority Interactive Map Viewer [online], <http://mapapps2.bgs.ac.uk/coalauthority/home.html> (accessed April 2021).
5. UK Maps of Radon [online], <http://www.ukradon.org/information/ukmaps> (accessed April 2021).
6. CIRIA (2009) Unexploded Ordnance: A Guide for the Construction Industry (report no. C681).
7. Zetica Regional Unexploded Bomb Risk map [online], <https://zeticauxo.com/downloads-and-resources/risk-maps/> (accessed April 2021).
8. CIRIA (2001) Contaminated Land Risk Assessment. A guide to good practice (report no. C552).
9. Health and Safety Executive (2015) Construction (Design and Management) Regulations.

Appendix A Drawings

- Curtins, Conceptual Site Model, 077873-CUR-00-XX-DR-GE-007-V01_Diagrammatic_CSM, 07/04/21

White Moss Road

077873-CUR-00-XX-DR-GE-07-V01



Merchant Exchange,
17-19 Whitworth Street West,
Manchester, M1 5WG

Project	Job Reference	Author	Client
White Moss Road, Manchester	B077873.07	ZH	One Manchester
Drawing Title	Date	Checked	Scale
Diagrammatic Conceptual Model	07/04/2021	SH	Not to scale

Appendix B Envirocheck Report

Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

273938535_1_1

Customer Reference:

EBMA2711

National Grid Reference:

386430, 403440

Slice:

A

Site Area (Ha):

0.63

Search Buffer (m):

1000

Site Details:

Site located at 386430,403440

M9 6DA

Client Details:

Ms S Hyde
Curtins Consulting Ltd
Merchant Exchange
17-19 Whitworth Street West
Manchester
M1 5WG

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	21
Hazardous Substances	-
Geological	28
Industrial Land Use	34
Sensitive Land Use	43
Data Currency	44
Data Suppliers	50
Useful Contacts	51

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Copyright Notice

© Landmark Information Group Limited 2021. The Copyright on the information and data and its format as contained in this Envirocheck® Report ("Report") is the property of Landmark Information Group Limited ("Landmark") and several other Data Providers, including (but not limited to) Ordnance Survey, British Geological Survey, the Environment Agency/Natural Resources Wales and Natural England, and must not be reproduced in whole or in part by photocopying or any other method. The Report is supplied under Landmark's Terms and Conditions accepted by the Customer.

A copy of Landmark's Terms and Conditions can be found with the Index Map for this report. Additional copies of the Report may be obtained from Landmark, subject to Landmark's charges in force from time to time. The Copyright, design rights and any other intellectual rights shall remain the exclusive property of Landmark and /or other Data providers, whose Copyright material has been included in this Report.

© Environment Agency & United Kingdom Research and Innovation 2021. © Natural Resources Wales & United Kingdom Research and Innovation 2021.

Natural England Copyright Notice

Site of Special Scientific Interest, National Nature Reserve, Ramsar, Special Protection Area, Special Conservation Area, Marine Nature Reserve data (derived from Ordnance Survey 1:10000 raster) is provided by, and used with the permission of, Natural England who retain the copyright and Intellectual Property Rights for the data.

Scottish Natural Heritage Copyright

Contains SNH information licensed under the Open Government Licence v3.0.

Ove Arup Copyright Notice

The Mining Instability data was obtained on licence from Ove Arup & Partners Limited (for further information, contact mining.review@arup.com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The supplied Mining Instability data is derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

Stantec Copyright Notice

The cavity data presented has been extracted from the PBA (now Stantec UK Ltd) enhanced version of the original DEFRA national cavity databases. Stantec UK Ltd retain the copyright & intellectual property rights in the data. Whilst all reasonable efforts are made to check that the information contained in the cavity databases is accurate we do not warrant that the data is complete or error free. The information is based upon our own researches and those collated from a number of external sources and is continually being augmented and updated by Stantec UK Ltd. In no event shall Stantec UK Ltd or Landmark be liable for any loss or damage including, without limitation, indirect or consequential loss or damage arising from the use of this data.

Radon Potential dataset Copyright Notice

Information supplied from a joint dataset compiled by The British Geological Survey and Public Health England.

Natural Resources Wales Copyright Notice

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data, Ordnance Survey Licence number 100019741. Crown Copyright and Database Right. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2021. Land & Property Services © Crown copyright and database right.

Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 2			1	27
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 9			2	1
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 9		Yes		
Pollution Incidents to Controlled Waters	pg 9				2
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances	pg 10			1	
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 10				(*11)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 12	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 12	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 12	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 13		6	19	46

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 21	1			2
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 21				1
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 21		1	3	13
Potentially Infilled Land (Water)	pg 22	2	9	20	60
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 28	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 28	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 31			3	4
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 32	Yes	n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 32	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 32	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 32	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 32	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 34		1	5	36
Fuel Station Entries	pg 37			1	2
Points of Interest - Commercial Services	pg 38			1	15
Points of Interest - Education and Health	pg 39			4	
Points of Interest - Manufacturing and Production	pg 39		2	1	5
Points of Interest - Public Infrastructure	pg 40		2	6	9
Points of Interest - Recreational and Environmental	pg 41			1	7
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 43		1		1
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves	pg 43			1	1
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 43	1			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	0	1	386431 403400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	0	1	386431 403450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (SW)	0	1	386431 403442
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	5	1	386431 403500
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	19	1	386400 403400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (S)	37	1	386450 403350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	75	1	386550 403450
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	87	1	386431 403300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	130	1	386600 403500
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	137	1	386450 403250
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	161	1	386500 403650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	239	1	386600 403200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	260	1	386150 403300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	272	1	386550 403750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	310	1	386650 403150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (S)	324	1	386300 403100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	367	1	386550 403850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (SW)	377	1	386200 403100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (SW)	415	1	386000 403250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (SW)	434	1	386100 403100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (SW)	447	1	386150 403050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	455	1	386431 403950

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	457	1	386500 403950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (N)	458	1	386400 403950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (W)	460	1	385950 403250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7NE (SW)	467	1	386050 403100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (SW)	470	1	386000 403150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (SW)	474	1	386100 403050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (SW)	483	1	385950 403200
1	Discharge Consents Operator: United Utilities Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Charlestown Rd, Charlestown, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0124 Permit Version: 1 Effective Date: 15th September 1993 Issued Date: Not Supplied Revocation Date: 15th September 1993 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Boggart Hole Brook Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A8NE (S)	407	2	386440 402980
2	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Victoria Avenue East, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0113 Permit Version: 2 Effective Date: 3rd September 2010 Issued Date: 3rd September 2010 Revocation Date: 24th November 2014 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook Status: Surrendered under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	547	2	386880 403840
2	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Victoria Avenue East, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0113 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 2nd September 2010 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	547	2	386880 403840

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Mossway Cso 120 Mossway, Middleton, Manchester, Greater Manchester, M24 1nt Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982901 Permit Version: 4 Effective Date: 20th February 2020 Issued Date: 20th February 2020 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18SE (NE)	554	2	386678 404003
4	Discharge Consents Operator: United Utilities Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Charlestown Rd/Polefield, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0132 Permit Version: 1 Effective Date: 15th September 1993 Issued Date: Not Supplied Revocation Date: 15th September 1993 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Boggart Hole Brook Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A8NW (S)	564	2	386250 402860
5	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Mossway Cso 120 Mossway, Middleton, Manchester, Greater Manchester, M24 1nt Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982901 Permit Version: 3 Effective Date: 14th November 1995 Issued Date: Not Supplied Revocation Date: 19th February 2020 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	586	2	386860 403920
5	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Mossway Cso 120 Mossway, Middleton, Manchester, Greater Manchester, M24 1nt Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982901 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 10th May 1995 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook Status: Authorisation revoked Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	586	2	386860 403920

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Mossway Cso 120 Mossway, Middleton, Manchester, Greater Manchester, M24 1nt Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982901 Permit Version: 2 Effective Date: 11th May 1995 Issued Date: Not Supplied Revocation Date: 13th November 1995 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook Status: Authorisation revoked Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	586	2	386860 403920
6	Discharge Consents Operator: United Utilities Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Charlestown Rd O/S 167, Charlestown, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0122 Permit Version: 1 Effective Date: 15th September 1993 Issued Date: Not Supplied Revocation Date: 15th September 1993 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Boggart Hole Brook Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	616	2	386950 403020
7	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Rochdale Road, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0114 Permit Version: 2 Effective Date: 3rd September 2010 Issued Date: 3rd September 2010 Revocation Date: 18th July 2014 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook Status: Surrendered under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18NW (N)	679	2	386380 404170
7	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Rochdale Road, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0114 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 2nd September 2010 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A18NW (N)	679	2	386380 404170

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	Discharge Consents Operator: United Utilities Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Booth Hall Road, Sso, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0120 Permit Version: 1 Effective Date: 15th September 1993 Issued Date: Not Supplied Revocation Date: 15th September 1993 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Boggart Hole Brook Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	830	2	385830 402810
8	Discharge Consents Operator: United Utilities Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Booth Hall Road, Sso, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0121 Permit Version: 1 Effective Date: 15th September 1993 Issued Date: Not Supplied Revocation Date: 15th September 1993 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Boggart Hole Brook Status: Authorisation revoked Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	830	2	385830 402810
9	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Middleton Old Rd/Market S, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0267 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boggarts Hole Brook Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	849	2	385750 402860
10	Discharge Consents Operator: United Utilities Water Plc (?) Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Booth Hall Road, Manchester Authority: Environment Agency, North West Region Catchment Area: Irk Reference: 016993772 Permit Version: 1 Effective Date: 21st June 2005 Issued Date: 21st June 2005 Revocation Date: 26th June 2009 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boggart Hole Brook Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	886	2	385812 402752

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	Discharge Consents Operator: United Utilities Water Plc (?) Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Outside 167 Charlestown Road Cso, Charlestown Road, Manchester Authority: Environment Agency, North West Region Catchment Area: Irk Reference: 016993782 Permit Version: 1 Effective Date: 21st June 2005 Issued Date: 21st June 2005 Revocation Date: 26th June 2009 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boggart Hole Brook Trib Irk Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	887	2	385811 402751
10	Discharge Consents Operator: United Utilities Water Plc (?) Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Outside 130&132 Charlestown Rd Cso, Charlestown Road, Manchester Authority: Environment Agency, North West Region Catchment Area: Irk Reference: 016993793 Permit Version: 1 Effective Date: 21st June 2005 Issued Date: 21st June 2005 Revocation Date: 26th June 2009 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boggart Hole Brook Trib Of Irk Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	888	2	385810 402750
10	Discharge Consents Operator: United Utilities Water Plc (?) Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Charlestown Road Cso 114 Charlestown Road, ., ., Manchester, M9 7br Authority: Environment Agency, North West Region Catchment Area: Irk Reference: Npswqd006371 Permit Version: 1 Effective Date: 29th April 2009 Issued Date: 29th April 2009 Revocation Date: 31st March 2018 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boggart Hole Brook Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	890	2	385807 402750
10	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Charlestown Road Cso 114 Charlestown Road, ., ., Manchester, M9 7br Authority: Environment Agency, North West Region Catchment Area: Irk Reference: Npswqd006371 Permit Version: 2 Effective Date: 1st April 2018 Issued Date: 12th March 2018 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boggart Hole Brook Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	892	2	385810 402745

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	Discharge Consents Operator: Manchester City Council Property Type: FOOD+BEVERAGE SERVICES/CAFE/RESTAURANT/PUB Location: Public Conveniences & Parks Cafe Boggart Hall Clough, Rochdale Rd, Manchester, Lancashire Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 0171/1344 Permit Version: 1 Effective Date: 25th February 1971 Issued Date: 25th February 1971 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Leven Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989 Positional Accuracy: Located by supplier to within 10m	A8SW (S)	890	2	386210 402530
12	Discharge Consents Operator: United Utilities Water Limited Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Blackley Sso, Middleton Old Road/Rochdale Road, Blackley, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982716 Permit Version: 1 Effective Date: 28th November 1994 Issued Date: Not Supplied Revocation Date: 16th June 1995 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boggart Hole Brook Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A7NW (SW)	933	2	385690 402800
13	Discharge Consents Operator: United Utilities Water Plc (?) Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Manchester New Road Cso 268 Manchester New Road, Middleton, Manchester, Greater Manchester, M24 1jr Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01roc0016 Permit Version: 2 Effective Date: 9th September 2004 Issued Date: 9th September 2004 Revocation Date: 5th November 2019 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A23SE (N)	975	2	386480 404470
13	Discharge Consents Operator: North West Water Limited Property Type: Not Given Location: Off Manchester New Road, ALKRINGTON Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: ROC0016 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Sewage Effluent Discharge-Storm Effluent Discharge: Unknown Environment: Receiving Water: Not Supplied Status: Not Supplied Positional Accuracy: Located by supplier to within 100m	A23SE (N)	980	2	386490 404475

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Manchester New Road Cso 268 Manchester New Road, Middleton, Manchester, Greater Manchester, M24 1jr Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016993577 Permit Version: 1 Effective Date: 6th November 2019 Issued Date: 6th November 2019 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A23SE (N)	983	2	386484 404478
13	Discharge Consents Operator: North West Water Limited Property Type: Not Given Location: Mainway, ALKRINGTON Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: ROC0011 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Sewage Effluent Discharge-Storm Effluent Discharge: Unknown Environment: Receiving Water: Not Supplied Status: Not Supplied Positional Accuracy: Located by supplier to within 100m	A23SE (N)	985	2	386490 404480
13	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Mainway/Worcester Road Cso 50 Mainway, Middleton, Manchester, Greater Manchester, M24 1pb Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01ROC0017 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 8th September 2004 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook River Irk Status: Authorisation revoked Positional Accuracy: Located by supplier to within 10m	A23SE (N)	985	2	386490 404480
13	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Manchester New Road Cso 268 Manchester New Road, Middleton, Manchester, Greater Manchester, M24 1jr Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01ROC0016 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 8th September 2004 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook River Irk Status: Consent revoked or revised: New Consent issued (Section 37(1)) Positional Accuracy: Located by supplier to within 10m	A23SE (N)	985	2	386490 404480

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	Discharge Consents Operator: United Utilities Water Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Off Manchester New Road Cso, Alkrington, Oldham, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01ROC0011 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: 1st January 1995 Revocation Date: 22nd June 2005 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: Boardman Brook Culvert Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A23SE (N)	986	2	386495 404480
14	Local Authority Pollution Prevention and Controls Name: Booth Hall Childrens Hospital Location: Charlestown Road, Blackley, MANCHESTER, Lancashire, M9 2AA Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/9/91 Dated: 28th April 1993 Process Type: Local Authority Air Pollution Control Description: PG5/1 Clinical waste incineration processes under 1 tonne an hour Status: Authorisation revoked Positional Accuracy: Manually positioned to the address or location	A8NE (S)	307	3	386560 403100
15	Local Authority Pollution Prevention and Controls Name: Tesco Petrol Station Blackley Location: Victoria Avenue East, Blackley, Manchester, M9 6hp Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/PFS/RM/053/11 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station Status: Permitted Positional Accuracy: Manually positioned to the address or location	A18SE (N)	458	3	386518 403949
16	Local Authority Pollution Prevention and Controls Name: Blackley Service Station Location: 976 Rochdale Road, Blackley, MANCHESTER, Lancashire, M9 7EP Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/PFS/RM/011/06 Dated: 18th June 1999 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station Status: Authorised Positional Accuracy: Automatically positioned to the address	A12SE (SW)	610	3	385858 403107
	Nearest Surface Water Feature	A13SE (SE)	171	-	386559 403255
17	Pollution Incidents to Controlled Waters Property Type: Private Sewage (Non-PLC): Sewerage Systems Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Sewage Debris/Litter Note: Boardman Brook Incident Date: 14th June 1995 Incident Reference: 95611417 Catchment Area: Irk Receiving Water: Not Given Cause of Incident: Blocked Sewer Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NW (N)	707	2	386400 404200
18	Pollution Incidents to Controlled Waters Property Type: Water Treatment & Distribution: Other Location: Boardman Brook, Near Manchester New Road, MIDDLETON, Greater Manchester Authority: Environment Agency, North West Region Pollutant: Inert : Clays Note: Not Supplied Incident Date: 5th October 1999 Incident Reference: 33017 Catchment Area: Irk Receiving Water: River Stretch (Freshwater) Cause of Incident: Drainage Failures : Highway Drainage Run-Off Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NW (N)	907	2	386400 404400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	Registered Radioactive Substances Name: Booth Hall Childrens Hospital Location: Charlestown Road, Blackley, MANCHESTER, Greater Manchester, M9 7AA Authority: Environment Agency, North West Region Permit Reference: AE5888 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation either revoked or cancelled Positional Accuracy: Automatically positioned to the address	A8NE (S)	305	2	386555 403100
	Water Abstractions Operator: Avecia Ltd Licence Number: 2569005012 Permit Version: 101 Location: Borehole At Blackley, Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 1000 Yearly Rate (m3): 1000 Details: Licence Holders Land At Blackley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st July 1999 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6NW (W)	1471	2	385001 402901
	Water Abstractions Operator: British Cables Company Limited Licence Number: 2569005044 Permit Version: 106 Location: 2 Boreholes At Blackley, Manchester Authority: Environment Agency, North West Region Abstraction: Metal: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land & Premises At Blackley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 11th October 2018 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6NW (W)	1558	2	384890 402950
	Water Abstractions Operator: Bt Cables Limited Licence Number: 2569005044 Permit Version: 105 Location: 2 Boreholes At Blackley, Manchester Authority: Environment Agency, North West Region Abstraction: Metal: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land & Premises At Blackley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 9th October 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6NW (W)	1558	2	384890 402950
	Water Abstractions Operator: Manchester Cables Ltd Licence Number: 2569005044 Permit Version: 104 Location: 2 Boreholes At Blackley, Manchester Authority: Environment Agency, North West Region Abstraction: Metal: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land & Premises At Blackley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th May 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6NW (W)	1558	2	384890 402950

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Belden (Uk) Ltd Licence Number: 2569005044 Permit Version: 103 Location: 2 Boreholes At Blackley, Manchester Authority: Environment Agency, North West Region Abstraction: Metal: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land & Premises At Blackley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 16th November 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6NW (W)	1558	2	384890 402950
	Water Abstractions Operator: Belden (Uk) Ltd Licence Number: 2569005044 Permit Version: 102 Location: 2 Boreholes At Blackley, Manchester Authority: Environment Agency, North West Region Abstraction: Metal: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 909 Yearly Rate (m3): 318181 Details: Land & Premises At Blackley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 3rd April 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6NW (W)	1558	2	384890 402950
	Water Abstractions Operator: British Cables Company Limited Licence Number: 2569005044 Permit Version: 106 Location: Boreholes X 2 At Blackley Manchester Authority: Environment Agency, North West Region Abstraction: Metal: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land & Premises At Blackley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 11th October 2018 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1816	2	384610 402990
	Water Abstractions Operator: Bt Cables Limited Licence Number: 2569005044 Permit Version: 105 Location: Boreholes X 2 At Blackley Manchester Authority: Environment Agency, North West Region Abstraction: Metal: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land & Premises At Blackley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 9th October 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1816	2	384610 402990

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Manchester Cables Ltd Licence Number: 2569005044 Permit Version: 104 Location: Boreholes X 2 At Blackley Manchester Authority: Environment Agency, North West Region Abstraction: Metal: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land & Premises At Blackley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th May 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1816	2	384610 402990
	Water Abstractions Operator: Belden (Uk) Ltd Licence Number: 2569005044 Permit Version: 103 Location: Boreholes X 2 At Blackley Manchester Authority: Environment Agency, North West Region Abstraction: Metal: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land & Premises At Blackley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 16th November 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1816	2	384610 402990
	Water Abstractions Operator: Belden (Uk) Ltd Licence Number: 2569005044 Permit Version: 102 Location: 2 Boreholes At Blackley, Manchester \$121 Authority: Environment Agency, North West Region Abstraction: Metal: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Land & Premises At Blackley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 3rd April 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1816	2	384610 402990
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Low Vulnerability Combined Vulnerability: Low Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: >550 mm/year Baseflow Index: <40% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: Low	A13NE (SW)	0	4	386431 403442
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - B	A13NE (SW)	0	4	386431 403442
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	A13NE (SW)	0	4	386431 403442
	Extreme Flooding from Rivers or Sea without Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
20	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 429.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	170	5	386552 403250
21	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	171	5	386555 403252
22	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 43.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	171	5	386558 403254
23	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 26.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	184	5	386605 403280
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 78.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	195	5	386598 403257
25	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 30.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	250	5	386706 403318
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 70.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	261	5	386676 403245
27	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	263	5	386671 403235

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
28	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	265	5	386673 403236
29	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 40.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	265	5	386709 403291
30	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 95.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	269	5	386678 403235
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (E)	275	5	386733 403321
32	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (E)	276	5	386734 403319
33	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 16.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	359	5	386733 403161
34	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	361	5	386745 403171
35	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 60.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	366	5	386749 403170
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 21.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13SE (SE)	366	5	386749 403170

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 85.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (E)	370	5	386837 403337
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 81.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (SE)	387	5	386834 403270
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 74.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (E)	393	5	386847 403288
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 29.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (SE)	396	5	386802 403190
41	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (SE)	396	5	386804 403195
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 29.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14SW (SE)	396	5	386804 403195
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 119.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (SW)	445	5	385990 403207
44	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 229.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NW (SW)	447	5	386192 403022
45	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 695.4 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18SE (NE)	516	5	386660 403969

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
46	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 20.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (SW)	540	5	385934 403120
47	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 358.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A19SW (NE)	540	5	386856 403858
48	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 396.7 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A19SW (NE)	544	5	386794 403922
49	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 4.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	547	5	385978 403058
50	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 94.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	551	5	385975 403056
51	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 104.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SE (SW)	561	5	385920 403105
52	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 108.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8NW (S)	561	5	386355 402835
53	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 174.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A14NW (E)	604	5	387045 403666
54	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 457.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NW (SE)	613	5	386803 402885

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
55	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 209.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	650	5	386399 402739
56	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 16.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	660	5	385846 403038
57	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	673	5	385841 403022
58	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	678	5	385838 403019
59	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 184.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NE (SW)	683	5	385833 403017
60	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	795	5	385586 403307
61	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 239.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A9NW (SE)	796	5	387019 402827
62	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 88.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	832	5	386299 402569
63	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 277.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boggart Hole Brook Catchment Name: Mersey Primacy: 1	A7NE (SW)	849	5	385783 402827

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
64	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 32.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	850	5	386353 404339
65	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 211.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boggart Hole Brook Catchment Name: Mersey Primacy: 1	A8SW (S)	854	5	386140 402591
66	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 21.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7NW (SW)	867	5	385696 402893
67	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	870	5	386375 404361
68	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 41.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	871	5	386389 404363
69	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 149.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boggart Hole Brook Catchment Name: Mersey Primacy: 1	A7SE (SW)	872	5	386028 402625
70	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A7SE (SW)	874	5	386053 402609
71	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 136.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boardman Brook Catchment Name: Mersey Primacy: 1	A18NW (N)	876	5	386382 404368
72	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 144.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boggart Hole Brook Catchment Name: Mersey Primacy: 1	A7NW (SW)	886	5	385690 402872

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
73	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 72.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boggart Hole Brook Catchment Name: Mersey Primacy: 1	A7SE (SW)	888	5	385921 402671
74	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 32.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boggart Hole Brook Catchment Name: Mersey Primacy: 1	A8SW (S)	902	5	386231 402513
75	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 138.6 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	903	5	385485 403257
76	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	903	5	385487 403246
77	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 251.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	903	5	385488 403240
78	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 87.7 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	903	5	385485 403257
79	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 107.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12NW (W)	909	5	385460 403447
80	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boggart Hole Brook Catchment Name: Mersey Primacy: 1	A8SW (S)	910	5	386261 402497
81	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boggart Hole Brook Catchment Name: Mersey Primacy: 1	A8SW (S)	910	5	386261 402497

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
82	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 25.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boggart Hole Brook Catchment Name: Mersey Primacy: 1	A8SW (S)	910	5	386270 402495
83	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	911	5	386259 402497
84	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 53.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	911	5	386256 402497
85	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 11.0 Watercourse Level: Underground Permanent: True Watercourse Name: Boggart Hole Brook Catchment Name: Mersey Primacy: 1	A8SW (S)	911	5	386295 402489
86	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 671.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boggart Hole Brook Catchment Name: Mersey Primacy: 1	A8SW (S)	911	5	386306 402488
87	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 37.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	946	5	386511 404439
88	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 115.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A12SW (W)	947	5	385430 403326
89	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 214.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Boardman Brook Catchment Name: Mersey Primacy: 1	A18NE (N)	958	5	386479 404453
90	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 117.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A8SW (S)	963	5	386261 402443

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
91	Historical Landfill Sites Licence Holder: Not Supplied Location: White Moss Road, Blackley, Manchester, Greater Manchester Name: Land off White Moss Road Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD16308 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste: Not Supplied Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: F003	A13NE (SW)	0	2	386431 403442
92	Historical Landfill Sites Licence Holder: Not Supplied Location: Symond Raod, Blackley, Manchester, Greater Manchester Name: Land to the rear of Symond Road Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD16236 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste: Not Supplied Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: F026	A18SW (N)	615	2	386304 404091
93	Historical Landfill Sites Licence Holder: Not Supplied Location: Higher Blackley, Manchester, Greater Manchester Name: Land at Pike Fold Lane Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD16307 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste: Not Supplied Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: F043	A12SW (W)	884	2	385503 403264
94	Licensed Waste Management Facilities (Locations) Licence Number: 50524 Location: Oldham Wastewater Treatment Works, The Causeway Off Gateway Crescent, Chadderton, Oldham, Lancashire, OL9 9XD Operator Name: United Utilities Water Plc Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Treatment - Biological Licence Status: To PPC Issued: 3rd January 2008 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: HP3231LK Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	811	2	386920 404160
	Local Authority Landfill Coverage Name: Manchester City Council - Had landfill data but passed it to the relevant environment agency		0	6	386431 403442
	Local Authority Landfill Coverage Name: Rochdale Metropolitan Borough Council - Has no landfill data to supply		513	7	386542 404001
95	Potentially Infilled Land (Non-Water) Bearing Ref: S Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A13SW (S)	174	-	386384 403226

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
96	Potentially Infilled Land (Non-Water) Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A13SW (SW)	314	-	386143 403220
97	Potentially Infilled Land (Non-Water) Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A12SE (SW)	443	-	386036 403148
98	Potentially Infilled Land (Non-Water) Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A18SW (NW)	480	-	386225 403916
99	Potentially Infilled Land (Non-Water) Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A19SW (NE)	530	-	386817 403883
100	Potentially Infilled Land (Non-Water) Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A12NE (W)	602	-	385767 403453
101	Potentially Infilled Land (Non-Water) Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A12NE (W)	627	-	385750 403539
102	Potentially Infilled Land (Non-Water) Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A9NW (SE)	668	-	386855 402855
103	Potentially Infilled Land (Non-Water) Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A7NE (SW)	713	-	386048 402797
104	Potentially Infilled Land (Non-Water) Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A7NE (SW)	734	-	386024 402788
105	Potentially Infilled Land (Non-Water) Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A18NW (NW)	736	-	386119 404149
106	Potentially Infilled Land (Non-Water) Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A12NW (W)	748	-	385624 403503
107	Potentially Infilled Land (Non-Water) Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A14NE (E)	767	-	387242 403499
108	Potentially Infilled Land (Non-Water) Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A19NW (NE)	830	-	386825 404239
109	Potentially Infilled Land (Non-Water) Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A7NE (SW)	851	-	385791 402816
110	Potentially Infilled Land (Non-Water) Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A12SW (W)	887	-	385497 403276
111	Potentially Infilled Land (Non-Water) Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1990	A12SW (W)	919	-	385458 403321
112	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A13NE (N)	0	-	386435 403455

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
113	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A13NW (N)	0	-	386421 403470
114	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NW (W)	10	-	386362 403457
115	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A13SE (E)	91	-	386568 403419
116	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NE (N)	146	-	386476 403640
117	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NE (N)	158	-	386483 403651
118	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NE (N)	182	-	386434 403676
119	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NE (N)	194	-	386437 403688
120	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NE (E)	200	-	386669 403514
121	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A13SW (SW)	204	-	386271 403262
122	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NW (N)	219	-	386412 403710
123	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NE (NE)	267	-	386640 403689
124	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13NE (E)	271	-	386743 403505
125	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NE (E)	271	-	386728 403562
126	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NE (E)	282	-	386756 403497
127	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13NE (E)	283	-	386751 403526
128	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NE (NE)	285	-	386640 403713
129	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SW (S)	302	-	386322 403114
130	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A14SW (E)	316	-	386791 403420
131	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A18SE (N)	332	-	386541 403817
132	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A8NE (SE)	332	-	386597 403089
133	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A13NW (NW)	333	-	386137 403697