



Curlew Alternatives Eighth Property LP

Former Gamecock Public House, Booth Street West

Preliminary Geoenvironmental Assessment



This report has been prepared for **Curlew Alternatives Eight Property LP** in accordance with the terms and conditions of appointment for the **Former Gamecock Public House, Booth Street West**. Tweedie Evans Consulting Ltd cannot accept any responsibility for any use of or reliance on the contents by a third party.

Former Gamecock Public House, Booth Street West

Preliminary Geoenvironmental Assessment

ISSUE RECORD					
Report Reference: 1909009.001.01					
Version	Date	Amendments Record	Prepared by	Checked by	Authorised by
-	September 2019	-			
			Mari Langreiter	Ewan Tweedie	Richard Evans
A	April 2021	Change to client name and proposed development description, including Figure 2			
			James Naylor	Richard Evans	Alexandra Flint
B	May 2021	Minor amendment to text			
			Claire Hooley	Alexandra Flint	Richard Evans
Report Liability Date: September 2019					

Tweedie Evans Consulting Limited
The Old Chapel
35a Southover
Wells
Somerset
BA5 1UH
Tel: 01749 677760
Email: info@tecon.co.uk

TABLE OF CONTENTS

1	Introduction.....	1
2	Site Description.....	3
3	Site History	5
4	Environmental Setting.....	6
5	Outline Conceptual Model	11
6	Intrusive Investigation	14
7	Encountered Ground Conditions	16
8	Contamination Characterisation.....	18
9	Refined Conceptual Model.....	26
10	Conclusions & Recommendations.....	29

Figures

- Figure 1 Site Location Plan
- Figure 2 Proposed Development
- Figure 3 Exploratory Hole Location Plan

Appendices

- Appendix A Site Photographs
- Appendix B Historical Maps
- Appendix C Envirocheck®
- Appendix D Regulatory Correspondence
 - Environmental Protection – Manchester City Council
- Appendix E Risk Evaluation
- Appendix F Exploratory Hole Logs
 - TEC WS1 to WS3
 - TEC HDP1 and HDP2
- Appendix G Geochemical Certificates of Analysis
 - i2 Analytical Report No. 19-60328
- Appendix H Ground Gas Monitoring Results

1 INTRODUCTION

1.1 Terms of Reference

- 1.1.1 Tweedie Evans Consulting Ltd (TEC) has been appointed by Curlew Alternatives Eighth Property LP to undertake a preliminary geoenvironmental assessment of a former public house known as The Gamecock Public House located off Booth Street West, Manchester. All works were undertaken in accordance with our proposal letter dated 05 September 2019 and referenced 1909009.001.bidlet.

1.2 Background

- 1.2.1 The site is located off Booth Street West, Manchester (Figure 1). The centre of the site is situated at approximate National Grid Reference 384140, 396690 and covers an area of approximately 0.09 hectares. The nearest postcode is M15 6GE.
- 1.2.2 The site currently comprises a vacant two storey public house on ground floor level with an occupied residential flat on the first floor in an area of tarmac hardstanding used for car parking with associated soft landscaped area in the north-east of the site.
- 1.2.3 It is understood that the proposed development is to comprise the demolition of existing building and structure and redevelopment of site for Purpose Built Student Accommodation (PBSA) uses (Sui Generis use class) with ancillary amenity space, a ground floor 'community hub' (proposed for Use Classes F2(b), E(b), E(3), E(f)) associated landscape works and infrastructure (Figure 2).
- 1.2.4 The aim of these works is to provide preliminary information on geoenvironmental conditions and constraints associated with the site with regards to the proposed development.

1.3 Scope of Works

- 1.3.1 The scope of work undertaken as part of this report is presented below:
- Preliminary Risk Assessment. This phase of assessment involves development of an initial site conceptual model, based on desk study research and a site reconnaissance survey, in order to establish whether or not there are potentially unacceptable risks.
 - Generic Quantitative Risk Assessment. This phase of assessment involves refinement of the site conceptual model developed as part of the Preliminary Risk Assessment based on the findings of an intrusive investigation. Generic assessment criteria and assumptions, if appropriate, are used to evaluate potentially unacceptable risks. Should unacceptable risks be identified, a feasible remediation options appraisal is provided and/or a Detailed Quantitative Risk Assessment is recommended. The purpose of the Detailed Quantitative Risk Assessment is to further refine the conceptual model and use more detailed site specific information and criteria to determine whether there are unacceptable risks.
- 1.3.2 The above scope of work has been undertaken in accordance with current guidance such as CLR 11 '*Model Procedures for the Management of Land Contamination*' (Environment Agency, 2004), BS10175+A2 (2017) and, where appropriate NHBC and Eurocode 7.
- 1.3.3 The report is presented in the following format.
- Preliminary Risk Assessment:

Section 2 - Site Description
Section 3 - Site History
Section 4 - Environmental Setting
Section 5 - Outline Conceptual Model

- Generic Quantitative Risk Assessment:
Section 6 - Intrusive Investigation
Section 7 - Encountered Ground Conditions
Section 8 - Contamination Characterisation
Section 9 - Refined Conceptual Model
- Section 10 - Conclusions and Recommendations

2 SITE DESCRIPTION

2.1 Site Location

- 2.1.1 The site is located within a predominantly mixed residential and commercial area and is bounded by the following features (Table 2.1):

Table 2.1: Site Boundary Features

Direction from Site	Description
North	Booth Street West accommodating residential housing and commercial units
South	Cul-de-sac accommodating residential housing
West	Boundary lane accommodating residential housing
East	A multi-storey building accommodating commercial units with associated car parking areas

2.2 Land Use and Site Condition

- 2.2.1 A site reconnaissance survey was undertaken on 17th September 2019. A summary of the observations is presented below. Photographs taken during the site reconnaissance survey are presented in Appendix A.

Current Site Use

- 2.2.2 The general site area currently comprises a vacant public house (The Gamecock), comprising a 2-storey structure occupying the majority of the site. An occupied residential flat comprises the first floor of the building. A former car park laid to tarmac hardstanding comprises the majority of the external site areas, with an area of overgrown soft landscaping to the north-east of the site.
- 2.2.3 The site is accessed via cul-de-sac to the south of the site and the area of hardstanding formerly used for car parking.
- 2.2.4 The south-eastern site area was secured by a locked gate and fencing during the site walkover survey. A dismantled car with associated parts, as well as disused electric items was noted to be stored in the south-eastern site area. Access was not possible to this area.

Site Topography

- 2.2.5 The site and the surrounding areas were observed to be generally flat.

Hard and Soft Landscaping

- 2.2.6 The site was observed to be laid to a combination of hard and soft landscaping. The southern and western sections of the site comprised tarmac hardstanding which was noted to be in relatively poor condition, while the north-eastern section of the site was generally observed to be laid to overgrown vegetation. In addition, concrete paving blocks were noted along the northern façade of the building.
- 2.2.7 Semi-mature and mature deciduous trees were noted in the south-western, south-eastern and north-eastern corners of the site.

Fuel Storage

- 2.2.8 No evidence of below ground fuel storage was noted on site. In addition, no above ground fuel storage tanks were observed on site during the walkover.

Hazardous Chemicals and Waste Materials Storage

- 2.2.9 No evidence of hazardous chemical storage was noted on site during the walkover survey. However, waste materials such as former electrical devices from the public house, as well as a partially dismantled car and associated parts were noted in the secured area in the south-eastern corner of the site.

Asbestos Containing Materials

- 2.2.10 No evidence of asbestos containing materials (ACM) was observed on the ground surface of the site during the site reconnaissance. However, given the potential age of the site structure, the presence of ACM within the fabric of this building cannot be discounted.

Site Drainage

- 2.2.11 A number of manhole covers were observed within the car parking area on site. In addition, drains were noted in the south-eastern site area.

Evidence of Potential Contamination

- 2.2.12 No visual or olfactory evidence of contamination was observed at the site during the walkover survey.

3 SITE HISTORY

3.1 Introduction

3.1.1 Details of the site history have been obtained through the review of historical Ordnance Survey (OS) mapping. The mapping reviewed is contained within Appendix B.

3.1.2 It is not the purpose of this section to provide a comprehensive account of development history, but only to detail those factors that are or could be relevant to the potentially contaminative history of the site and surrounds and the development of an outline site conceptual model.

3.2 Site History

3.2.1 The following represents a summary of potentially significant features recorded within the site area (Table 3.1).

Table 3.1: Site Features

Site Features	OS Dates
Undeveloped area	1851
Residential housing	1891 - 1961
A building depicted as 'The Gamecock' (current site layout)	1976 - 2019

3.3 Neighbouring History

3.3.1 The land uses within the immediate vicinity of the site have been considered. Based upon the reviewed map information the following potentially significant features have been identified (Table 3.2).

Table 3.2: Surrounding Features

Surrounding Features	OS Dates	Distance	Direction
Road infrastructure constructed (including Booth Street West) with partial residential development	1851	-	Adjacent
Brewery	1893 - 1961	~110m	South
Drill Hall	1908 - 1951	~170m	North
Warehouse	1932	~180m	North
	1949 - 1956	~210m	South-west
	1950 - 1956	~200m	South-west
Works	1951 - 1963	~185m	South-east
	1951 - 1961	~250m	East

4 ENVIRONMENTAL SETTING

4.1 Information Sources

- 4.1.1 Environmental information for the site has been obtained through review of a Envirocheck® report for the site. This report provides extensive information, obtained from regulatory and commercial sources, regarding the environmental setting of the site. The Envirocheck® report has been included within Appendix C.

4.2 Geology and Hydrogeology

Geology

- 4.2.1 The Envirocheck® report and published mapping indicates the following sequence at the site:

Table 4.1: Geological Setting

Geological Unit	Thickness	BGS Description
Glaciofluvial Sheet Deposits	Unknown	Sand and Gravel
Cheshire Formation	Up to 300m	Conglomerates and reddish brown, cross-bedded, pebbly sandstones with subordinate beds of red-brown mudstone.

- 4.2.2 It is noted that the geological mapping for the area records the superficial Till deposits adjacent to the south of the site and bedrock of Manchester Marls Formation described by BGS to comprise red marl approximately 300m east of the site.

- 4.2.3 Three historic BGS Borehole records reported to be located on the Glaciofluvial Sheet Deposits overlying the Cheshire Formation near the site were available for review. These are as follows:

- **SJ89NW19:** This borehole is located approximately 100m to the north-east of the site and records the following ground conditions: made ground overlying loam to 1.5mbgl depth with a band of dark blue clay (thickness 0.3m). These, in turn, are reported to be underlain by gravel recorded to 2.4mbgl underlain by stiff clay to 5.2mbgl. Red sandstone is reported to have been encountered from depth 5.2mbgl to 14mbgl depth (borehole terminated).
- **SJ89NW20:** This borehole is located approximately 140m to the north-west of the site and it provides the following ground conditions: soil to 0.9mbgl overlying gravelly and stony clay to depth of 9.4mbgl. These, in turn, are reported to be underlain by soft red rock between 9.4mbgl and 11mbgl overlying red sandstone to the depth of ~14mbgl depth (borehole terminated).
- **SJ89NW21:** This borehole is located approximately 280m to the west of the site and records the following ground conditions: made ground overlying gravelly clay to 2.7mbgl depth and gravel to the depth of 3.4mbgl. These, in turn, are reported to be underlain by stiff clay and boulder clay to 12mbgl overlying red sandstone to 12.5mbgl depth (borehole terminated).

- 4.2.4 The BGS estimated soil chemistry on site is reported within the Envirocheck® as follows:

- Arsenic – 15-25mg/kg;

- Cadmium - <1.8 mg/kg;
- Chromium – 60-90 mg/kg;
- Lead – <100-200 mg/kg; and
- Nickel – 30-45 mg/kg.

4.2.5 All these estimated background concentrations are noted to be below relevant screening values for human health for a residential site end use.

4.2.6 In addition, the BGS urban soil chemistry averages on site are reported within the Envirocheck® as follows:

- Arsenic – 3-1008mg/kg;
- Cadmium – 0.3-80.3 mg/kg;
- Chromium – 29-1252 mg/kg;
- Lead – 20-2687 mg/kg; and
- Nickel – 5-137 mg/kg.

4.2.7 Maximum urban soil chemistry concentrations (with the exception of cadmium) are noted to be above relevant screening values for human health for a residential without homegrown produce site end use.

Ground Gas Generation

4.2.8 In accordance with current guidance, the ground gas generation potential of the geology (Glaciofluvial Sheet Deposits over Cheshire Formation) reported to underlie the site, is considered to be low and is unlikely to be a potential significant source of ground gas.

4.2.9 However, made ground, may provide a potential source of significant ground gas generation potential, subject to thickness and chemical composition.

4.2.10 The site is recorded as being within a lower probability radon area, with <1% of homes estimated to be at or above the action level. Therefore, no radon protective measures are reported to be necessary in the construction of new dwellings or extensions.

Hydrogeology

4.2.11 The Envirocheck® report and Environment Agency information records the following hydrogeological setting of the site:

Table 4.2: Hydrogeological Setting

Geological Unit	Environment Agency Aquifer Designation	Environment Agency Aquifer Classification
Glaciofluvial Sheet Deposits	Secondary A Aquifer	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.

Geological Unit	Environment Agency Aquifer Designation	Environment Agency Aquifer Classification
Cheshire Formation	Principal Aquifer	Layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

4.2.12 The nearest groundwater abstractions are recorded approximately 380m north and 410m west of the site and is reported to be utilised for general use and for heating pump by Manchester Metropolitan University.

4.2.13 It is reported that the site lies within an Environment Agency groundwater Source Protection Zone (SPZ) III (Total Catchment).

4.2.14 The site is reported as being located within an area at limited risk of groundwater flooding.

4.2.15 There are no recorded licensed discharge consents to land/soakaway within 250m of the site.

4.2.16 Based upon the above information the geological and hydrogeological setting of the site is considered to be of **Moderate Sensitivity**.

4.3 Hydrology

4.3.1 The closest surface water course to the site is the River Medlock located approximately 690m to the north of the site.

4.3.2 There are no recorded surface water abstractions, licensed discharge consents, or pollution incidents within 250m of the site.

4.3.3 The site is reported to be located immediately adjacent to the south and east from the areas within the extent of extreme flooding (adjacent Booth Street West and Boundary Lane).

4.3.4 Given the above information, the hydrology of the site is considered to be of **Low Sensitivity**.

4.4 Environmental Data

4.4.1 Additional environmental data from the Envirocheck® report for the site is summarised in Table 4.3.

Table 4.3: Additional Environmental Data Summary

Category	0-250m	250-500m	Details
<i>Authorisations, Incidents and Registers</i>			
Registered Radioactive Substances	0	9	Closest located ~470m East for University of Manchester for the disposal of radioactive waste and keeping and use of radioactive materials
<i>Unknown Filled Ground</i>			
Potentially Infilled Land (Water)	1	3	<u>0-250m:</u> Unknown Filled Ground (Pond, marsh, river, stream, dock etc) ~100m South-east (1848)
<i>Current Land Uses</i>			
Potentially contaminative land uses	4	24	<u>0-250m:</u> Printers ~125m North; Laundries ~150m North-west; and Cleaning Services (Domestic) ~230m North-west (inactive).

4.5 Engineering Considerations

4.5.1 Engineering considerations identified from the Envirocheck® report for the site are summarised below:

Table 4.4: Engineering Considerations

Hazard	Hazard Potential					
	No Hazard	Negligible	Very Low	Low	Moderate	High
Collapsible ground			X			
Compressible ground	X					
Ground dissolution	X					
Landslide			X			
Running sand			X			
Shrink/swell clays	X					
Coal mining					X	
Non-coal mining	X					

4.5.2 No visual evidence of potential ground subsidence/movement was observed during the site walkover.

4.5.3 It is noted that the site is reported to be located in an area which may be affected by coal mining activity and it is recommended that a coal mining report is obtained from the Coal Authority.

4.6 Regulatory Consultations

4.6.1 The following regulatory consultation has been undertaken with respect to possible environmental issues and ground conditions on-site and in the surrounding area.

Environmental Protection – Manchester City Council

4.6.2 Environmental Protection at Manchester City Council was contacted with regards to any potential contaminated land issues on site and within the surrounding area. The information provided is presented in Appendix D. A summary of the response is provided below.

- There are no records indicating contamination issues at the site and land within 25m of the site (2006-present); and
- There are no known landfill sites, waste management licences, Part A or B APC authorisations or private water supplies within 250m of the site.

4.7 General Summary

4.7.1 Given the above Environmental Setting and the general land use for the area, discussed in Section 2, this site is considered to be of **Low to Moderate Overall Environmental Sensitivity**.

5 OUTLINE CONCEPTUAL MODEL

5.1 Introduction

- 5.1.1 The assessment of potential risk associated with any identified contamination is based upon the identification and evaluation of Significant Pollutant Linkages.
- 5.1.2 A Significant Pollutant Linkage exists on a site only if three conditions are satisfied. These conditions are:
- *The presence of substances (potential contaminants / pollutants) that may cause harm (a **Source**)*
 - *The presence of a target which may be harmed e.g. site residents, groundwater (a **Receptor**)*
 - *A linkage between the Source and the Receptor e.g. ingestion of soil, inhalation of vapour (a **Pathway**)*
- 5.1.3 In each case, the existence of a pollutant linkage requires that not only does both a Source and a Receptor have to exist but that a demonstrable Pathway also exists. Therefore, the presence of measurable concentrations of contaminants within the ground or groundwater environment does not automatically imply that a contamination problem exists on site.
- 5.1.4 The nature and importance of both pathways and receptors, which are relevant to a particular site, will vary according to the actual or intended use of the site, its characteristics and its surroundings.
- 5.1.5 This process of the identification of Pollutant Linkages has been applied below to assess the potential risks associated with the site.

5.2 Hazard Identification

- 5.2.1 Potentially contaminative current and historic processes have been identified on and within the vicinity of the site and are presented in Table 5.1.

Table 5.1: Identified Potential Hazards

Potential Hazard/Source	Location	Details
Made ground	On site	As the site has been subject to development, the potential presence of made ground of unknown chemical composition cannot be discounted. In addition, it is noted that BGS urban soil chemistry average concentrations for some heavy metals are reported to exceed the relevant screening values for residential without plant uptake end use. Made ground, if present, may provide a potential source of ground gas, depending on the thickness and composition of fill material used.
Potentially contaminative historic processes	Off site	Potentially contaminative historical processes have been identified in the general site area. These include a potentially infilled land, warehouse, works, drill works and a brewery.

5.3 Potential Receptors and Pathways

5.3.1 Potential receptors identified as part of this preliminary risk assessment are:

- Current/future site users;
- Construction workers; and
- Controlled waters (Principal Aquifer and Secondary A Aquifer).

5.3.2 Potential contaminant pathways relating to the identified receptors and contaminants of concern include:

- Dermal contact – contact with soil, dust or water;
- Ingestion - ingestion of soil, dust or water;
- Inhalation – inhalation of soil, dust or vapours;
- Vertical migration – e.g. seepage of contaminants at the ground surface (i.e. leakage/spillage of hydrocarbons) through cracks in hardstanding and/or leaching of contaminants within the unsaturated zone resulting in vertical contaminant migration; and
- Horizontal migration – e.g. lateral migration of contaminants within the saturated zone and along preferential pathways such as drainage pipe bedding.

5.4 Hazard Assessment and Risk Estimation

5.4.1 Potential significant pollutant linkages identified as part of this preliminary risk assessment are summarised in the Outline Site Conceptual Model presented in Table 5.2. References to risk estimations are made in accordance with the methodology presented in CIRIA publication C552 (2001) titled '*Contaminated Land Risk Assessment: A Guide to Good Practice*' and summarised in Appendix E.

Table 5.2: Outline Conceptual Model (Hazard Assessment and Risk Estimation)

Potential Hazard/ Source	Potential Receptor	Potential Pathway to Receptors	Associated Hazard	Scale of Impact	Potential Consequence of Source-Receptor Linkage	Potential Likelihood for Significant Source-Receptor Linkage	Risk Classification
Made ground – on site	Future site end users and construction workers	Exposure to potential contaminants through ingestion, inhalation or dermal contact	Risk to human health	Local	Medium	Low Likelihood to Likely: Given the development history of the site, the potential for made ground or localised areas of contamination to be present cannot be discounted, although significant contamination is considered unlikely at this stage. However, it is noted that BGS urban soil chemistry average concentrations for some heavy metals are reported to exceed the relevant SSVs.	Low to Moderate Risk
	Controlled waters	Migration of potential contaminants along vertical and horizontal pathways and infiltration of water through the unsaturated zone	Risk to controlled waters (Principal Aquifer and associated SPZ III and Secondary A Aquifer)	Local to Regional	Medium	Low Likelihood: Given that the presence of made ground on site is considered likely and the presence of the underlying Aquifers, the potential for a residual risk to controlled waters cannot be fully discounted at this stage.	Low to Moderate Risk
	Future site users and proposed structures	Migration, ingress and inhalation of ground gas	Risk to human health and structures and controlled waters	Local	Medium to severe	Low Likelihood: Made ground may provide a potential source of ground gas subject to thickness and composition.	Low to Moderate Risk
Potentially contaminative historic processes - off site	Future site end users, construction workers, controlled waters and proposed structures	Potential on-site migration of contaminants and ground gas from off-site sources	Risk to human health and controlled waters on site	Local to regional	Medium	Unlikely to Low Likelihood: While the potential for on-site contaminant migration from identified historic off site features cannot be fully discounted at this stage, given the age and distance of these features, significant migration is considered to be very low. In addition, Manchester City Council is not aware of any contamination issues in the site area.	Low Risk

6 INTRUSIVE INVESTIGATION

6.1 Background

6.1.1 The ground investigation undertaken was designed to provide specific information regarding site conditions in support of the proposed site development.

6.1.2 In particular, the investigation was designed to provide further information on:

- Ground conditions to aid with the design of the development; and
- The potential significant pollutant linkages identified as part of the Preliminary Risk Assessment.

6.1.3 All site works were undertaken in accordance with BS5930:2015, BS10175+A2 (2017) and, where appropriate, Eurocode 7. Works were supervised by a suitably experienced geoenvironmental consultant from TEC.

6.2 Methodology

6.2.1 Intrusive works were undertaken on 17th September 2019 and comprised 3No. dynamic sample boreholes (WS1 to WS3), advanced to a maximum depth of 5.0mbgl using a Dando Terrier 2002 rig. It is noted that all exploratory hole locations were hand dug to 1.2mbgl due to the presence of potential services. It is further acknowledged that a white plastic pipe (potential service duct) was encountered in WS3 at 0.8mbgl depth and as a result, this exploratory borehole was moved slightly.

6.2.2 In addition, 2No. hand dug pits (HDP1 and HDP2) were advanced to shallow depths (0.5mbgl and 0.6mbgl, respectively) in the soft landscaped area.

6.2.3 A detailed description of encountered ground conditions is shown on exploratory hole logs presented in Appendix F.

6.2.4 Exploratory hole locations are presented in Figure 3 and the reasoning behind each investigation location is given in Table 6.1, as follows:

Table 6.1: Exploratory Hole Rationale

Location	Location Rationale
WS1 – WS3	Advanced across the site to allow for: <ul style="list-style-type: none">• Characterisation and sampling of underlying ground conditions; and• Installation of combined ground gas and groundwater monitoring well (WS1 and WS3).
HDP1 and HDP2	Advanced in the soft landscaped area to allow for sampling of the shallow made ground materials.

6.3 Field Testing

6.3.1 A single round of ground gas monitoring has been undertaken at the site to date, utilising a Gas Analyser GFM-430. The results are provided in Appendix H.

6.4 Chemical Testing

6.4.1 Laboratory testing was scheduled on the basis of field observations.

6.4.2 Representative soil samples and a single groundwater sample were collected and chemically tested at i2 Analytical Ltd, a UKAS/MCERTS accredited laboratory, for a selection of the following parameters:

Soils (Totals, Leachate and Groundwater)

- *Heavy metals (arsenic, chromium, cadmium, copper, lead, selenium, zinc, barium, mercury, nickel, beryllium, vanadium and water soluble boron);*
- *Phenol (monohydric), cyanide (total), water soluble sulphate, sulphide, total organic carbon, pH;*
- *Speciated Polycyclic Aromatic Hydrocarbons (PAHs);*
- *Fractionated Petroleum Hydrocarbons (TPHCWG) and BTEX (Totals and Groundwater only); and*
- *Asbestos Screen (Totals only).*

6.4.3 Geochemical certificates of analysis are presented Appendix G.

6.5 General Sampling

6.5.1 Soil samples were collected directly into pre-labelled sample containers. During the course of the sampling care was taken to minimise head space of the sample containers. Once filled sample containers were placed within cool boxes containing ice packs to maintain as cool a temperature as possible, nominally 4°C.

6.5.2 Samples were collected by courier for delivery to the selected laboratories. All samples were accompanied by detailed chain of custody sheets.

7 ENCOUNTERED GROUND CONDITIONS

7.1 Introduction

7.1.1 A summary of encountered ground conditions for the site is provided below. Photographs of the materials encountered are presented within Appendix A.

Made Ground

7.1.2 Made ground was encountered across the site to the observed depths of between 0.5mbgl (HDP2 terminated within made ground) and 2.8mbgl (WS3).

7.1.3 Made ground encountered in the window sample boreholes was generally observed to comprise tarmacadam overlying sandy gravel overlying sandy gravel and cobbles of brick and rare sandstone / dark brown locally sandy gravelly cobbly clay / brown slightly clayey gravelly sand.

7.1.4 Made ground encountered within the hand dug pits was recorded to comprise dark brown slightly sandy slightly gravelly clay with rare roots and rootlets noted.

7.1.5 The gravel and cobble component were observed to comprise sandstone, chert, brick, limestone, sandstone, slate, conglomerate, cinder and concrete. Locally rare fragments of plastic, glass, clay pipe and wood were noted. In addition, locally organic plant remains were encountered (WS1 at 2.0-2.4mbgl).

Natural Ground

7.1.6 Natural ground materials were recorded from a depth of 0.7mbgl (WS2) to a maximum observed depth of 5.0mbgl across the site, with the exception of HDP1 and HDP2, which terminated within made ground at shallow depths.

7.1.7 The natural ground materials were noted to be cohesive in nature near the surface (not encountered in WS3), overlying granular ground deposits which, in turn, were recorded to be underlain by cohesive ground materials. Granular ground materials comprising red-brown slightly gravelly slightly clayey fine sand were encountered in WS1 only (4.85-5.0mbgl).

7.1.8 The cohesive upper ground materials (not encountered in WS3) were noted to comprise firm orange-brown locally with light grey mottling gravelly sandy clay and were recorded between the depths of 0.7mbgl and 2.85mbgl.

7.1.9 The gravel component in the upper natural ground materials was recorded as fine to coarse rounded to sub-angular chert and sub-angular sandstone. Locally cobbles of chert and wood fragments were encountered.

7.1.10 These shallow natural ground materials were observed to be underlain by grey or brown clayey sandy gravel or slightly clayey gravelly sand encountered between the depths of 1.2mbgl and 4.4mbgl.

7.1.11 Stiff to very stiff brown slightly sandy slightly silty clay with rare fine gravel of mudstone/siltstone was encountered at all window sample locations between the depths of 3.05mbgl and 4.85mbgl.

7.2 Groundwater and Perched Water

7.2.1 Water strikes encountered during the site works are summarised in Table 7.1 below.

Table 7.1: Groundwater Strikes

Location	Date	Groundwater Strike (mbgl)	Strata
WS1	17/09/2019	~2.0 (2.67m after 20mins)	Granular Natural Ground
WS2	17/09/2019	~2.8 (2.78m after 20mins)	

7.2.2 Groundwater was encountered at two locations in the southern site area at approximate depths of between 2.0mbgl and 2.8mbgl within granular superficial ground deposits.

7.3 Contamination Summary

7.3.1 No visual or olfactory evidence of gross contamination was recorded during the intrusive investigation.

8 CONTAMINATION CHARACTERISATION

8.1 Legislation

8.1.1 Contaminated Land is defined in Part IIA of the Environmental Protection Act (1990) as:

8.1.2 "Any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reasons of substances in, on or under the land that:

- Significant harm is being caused or there is a significant possibility of such harm being caused;

or

- *significant pollution of controlled waters is being caused or there is a significant possibility of such pollution being caused."

**Section 86 of the Water Act 2003 amends section 78A of Environmental Protection Act 1990 for Controlled Waters.*

8.2 Generic Quantitative Risk Assessment

Human Health Screening

8.2.1 Current legislation and guidance on the assessment of contaminated land promotes a tiered risk approach (CLR 11). The generic quantitative risk assessment comprises a screening of identified contaminants against generic guideline values that are appropriate to the site setting and the receptors concerned. For risks to human health the basis for these generic guideline values are the methodologies set out by the Environment Agency's Contaminated Land Exposure Assessment (CLEA) guidelines.

8.2.2 The following regulatory and industry guidance has been utilised for the selection of Generic Assessment Criteria utilised as part of the GQRA. The order of the guidance listed is in terms of hierarchy for selection of GACs (where the land uses and parameters are considered most applicable).

1. *Category 4 Screen Levels (C4SLs) – DEFRA (2014)*
2. *Soil Guidance Values (SGVs) – Environment Agency (2009)*
3. *Suitable For Use Levels (S4ULs) – LQM/CIEH (2015)*
4. *EIC/AGS/CL:AIRE GAC (2009)*

8.2.3 The C4SLs for arsenic, cadmium, chromium (VI) and lead have been utilised as part of the GQRA. Benzene and benzo(a)pyrene C4SLs have not been utilised as part of the Tier 1 screening as they are based upon 6% soil organic matter (SOM) as opposed to 1% SOM utilised by LQM/CIEH (2015).

8.2.4 SGVs have been utilised, where appropriate, for dioxins, furans and dioxin-like PCBs; nickel; inorganic mercury and selenium (residential SGV used for proposed residential end use). SGVs for organic compounds are not utilised as they are derived using a 6% soil organic matter as opposed to 1% SOM utilised by LQM/CIEH (2015).

8.2.5 In the absence of a published UK derived GAC for cyanide, the GQRA for total cyanide is based upon comparison of recorded values against the Dutch Intervention Value for free cyanide (VROM 2000).

8.2.6 S4ULs and EIC/AGS/CL:AIRE GACs are adopted for the remaining potential contaminants using the hierarchy noted above.

8.2.7 The purpose of the site investigation was to provide information to establish the suitability of the site for a 19 storey block of residential units. Therefore, the standard land use for the site, for use in the generic assessment, has been defined as "*Residential without homegrown produce*" in accordance with current guidance.

Controlled Waters Screening

8.2.8 Risks to controlled waters have been assessed following current Environment Agency guidance such as "*Remedial Targets Methodology – Hydrogeological Risk Assessment for Land Contamination*". This guidance describes a tiered approach to the assessment and, if necessary, derivation of clean up targets for soils and groundwater with the emphasis on the protection of controlled waters.

8.2.9 In accordance with Environment Agency guidance, a Level 1 groundwater generic screening assessment (leachability) and a Level 2 ground water screening assessment (groundwater) have been undertaken, to identify the contaminants of concern that may pose a risk to controlled waters. This assessment has been undertaken by the comparison of groundwater and soil leachate contaminant concentrations with criteria applicable to the long term protection of water quality.

8.2.10 Based on our conceptual understanding, the nearest significant controlled water receptor is considered to be the underlying Secondary A and Principal Aquifers. In addition, the site is reported to be located within EA Source Protection Zone III. Therefore, analytical results have been conservatively assessed against The Water Supply (Water Quality) Regulations 2016 (Drinking Water Standards), where available. Where such standards are not available, analytical results have been assessed against World Health Organisation (WHO) Guidelines for Drinking Water Quality (2011) or Environment Agency Environmental Quality Standards (EQS).

8.3 Soil Analysis - Human Health

8.3.1 Soil samples were collected and analysed from made ground. Certificates of analysis for samples are contained within Appendix G.

8.3.2 Current regulatory guidance for the statistical assessment of environmental data within a contaminated land context is detailed within the CIEH and CL:AIRE joint publication titled '*Guidance on Comparing Soil Concentration Data with a Critical Concentration*' (2008). However, as judgemental sampling has been undertaken, statistical assessment as detailed in CL:AIRE (2008) has not been carried out as part of this assessment. Therefore, to identify Contaminants of Potential Concern (COPC) as part of this preliminary assessment, the analytical results for the ground materials sampled have been assessed by the screening of individual analyses against the relevant Tier 1 Site Screening Values (SSVs) adopted.

8.3.3 For generic assessment purposes, SSVs have been conservatively selected, where appropriate, based upon a sandy soil and Soil Organic Matter (SOM) of 1%.

Made Ground

8.3.4 5No. samples of made ground were scheduled for analysis from the site. The results obtained from made ground are summarised in Table 8.1 below:

Table 8.1: Soil Analysis Summary

Contaminant	Max (mg/kg)	Min (mg/kg)	SSV ¹ (mg/kg)	No. of Tests	No. of Exceedances
Arsenic	18	1	40	5	0
Boron	0.6	0.2	11000 ⁽³⁾	5	0
Cadmium	1.0	<0.2	150	5	0
Chromium (total)	33	12	910 ⁽³⁾	5	0
Chromium (VI)	<1.2	<1.2	21	5	0
Copper	60	19	7100 ⁽³⁾	5	0
Lead	480	70	310	5	1
Mercury	9.1	<1.2	56 ⁽³⁾	5	0
Nickel	19	10	130 ⁽²⁾	5	0
Selenium	<1.0	<1.0	350 ⁽²⁾	5	0
Zinc	87	65	40000 ⁽³⁾	5	0
Beryllium	0.91	0.19	1.7 ⁽³⁾	5	0
Vanadium	29	11	1200 ⁽³⁾	5	0
Barium	420	98	1300 ⁽⁴⁾	5	0
Cyanide (Total)	<1	<1	20 ⁽⁵⁾	5	0
Phenol (Monohydric)	<1	<1	4400 ⁽³⁾	5	0
Sulphide	24	<1	-	5	0
Water Soluble Sulphate (2:1) (g/l)	0.03	0.016	-	5	0
Total Organic Carbon (TOC)	2.5	0.7	-	5	0
Naphthalene	1.9	<0.05	2.3 ⁽³⁾	5	0
Acenaphthylene	1.0	<0.05	2900 ⁽³⁾	5	0
Acenaphthene	1.8	<0.05	3000 ⁽³⁾	5	0
Fluorene	2.9	<0.05	2800 ⁽³⁾	5	0
Phenanthrene	18	0.82	1300 ⁽³⁾	5	0
Anthracene	3.7	0.21	31000 ⁽³⁾	5	0
Fluoranthene	20	2.0	1500 ⁽³⁾	5	0
Pyrene	19	1.8	3700 ⁽³⁾	5	0
Benzo(a)anthracene	12	1.1	11 ⁽³⁾	5	0
Chrysene	8.0	1.1	30 ⁽³⁾	5	0
Benzo(b)fluoranthene	9.4	1.2	3.9 ⁽³⁾	5	1
Benzo(k)fluoranthene	3.8	0.57	110 ⁽³⁾	5	0
Benzo(a)pyrene	8.6	1.8	3.2 ⁽³⁾	5	1
Indeno(1,2,3-cd)pyrene	4.1	0.74	45 ⁽³⁾	5	0
Dibenz(a,h)anthracene	1.3	0.22	0.31 ⁽³⁾	5	2
Benzo(ghi)perylene	5.4	0.79	360 ⁽³⁾	5	0
Speciated Total EPA-16 PAHs	121	11.8	-	5	-
Benzene	<1.0	<1.0	0.38 ⁽³⁾	5	0
Toluene	<1.0	<1.0	880 ⁽³⁾	5	0
Ethylbenzene	<1.0	<1.0	83 ⁽³⁾	5	0
p & m-xylene	<1.0	<1.0	79 ⁽³⁾	5	0
o-xylene	<1.0	<1.0	88 ⁽³⁾	5	0
MTBE (Methyl Tertiary Butyl Ether)	<1.0	<1.0	73 ⁽⁴⁾	5	0
TPH Aliphatic C5 - C6	<0.001	<0.001	42 ⁽³⁾	5	0

Contaminant	Max (mg/kg)	Min (mg/kg)	SSV ¹ (mg/kg)	No. of Tests	No. of Exceedances
TPH Aliphatic C6 - C8	<0.001	<0.001	100 ⁽³⁾	5	0
TPH Aliphatic C8 - C10	<0.001	<0.001	27 ⁽³⁾	5	0
TPH Aliphatic C10 - C12	5.8	<1.0	130 ⁽³⁾	5	0
TPH Aliphatic C12 - C16	12	<2.0	1100 ⁽³⁾	5	0
TPH Aliphatic C16 - C21	86	<8.0	65000 ⁽³⁾	5	0
TPH Aliphatic C21 - C35	100	<8.0	65000 ⁽³⁾	5	0
TPH Aromatic C5 - C7	<0.001	<0.001	370 ⁽³⁾	5	0
TPH Aromatic C7 - C8	<0.001	<0.001	860 ⁽³⁾	5	0
TPH Aromatic C8 - C10	<0.001	<0.001	47 ⁽³⁾	5	0
TPH Aromatic C10 - C12	1.2	<1.0	250 ⁽³⁾	5	0
TPH Aromatic C12 - C16	26	<2.0	1800 ⁽³⁾	5	0
TPH Aromatic C16 - C21	160	<10	1900 ⁽³⁾	5	0
TPH Aromatic C21 - C35	260	<10	1900 ⁽³⁾	5	0
TPH C10-C40	630	12	-	5	-

Notes:

- 1 DEFRA C4SLs (2014) based on "Residential without homegrown produce" end use
- 2 Environment Agency SGVs (2009) based on "Residential" end use
- 3 LQM/CIEH S4ULs (2015) based on "Residential without homegrown produce" end use
- 4 CL:AIRE, AGS & EIS (2009) based on "Residential" end use
- 5 Dutch Intervention Value for free cyanide (VROM 2000)

8.3.5 Exceedances of the Tier 1 SSVs for a residential without homegrown produce end use have been reported on site for the following determinands:

- Lead (480mg/kg in WS2 at 0.3-0.7mbgl);
- Benzo(b)fluoranthene (9.4mg/kg in WS3 at 0.4-0.7mbgl);
- Benzo(a)pyrene (8.6mg/kg in WS3 at 0.4-0.7mbgl); and
- Dibenz(a,h)anthracene (1.3mg/kg in WS3 at 0.4-0.7mbgl and 0.45mg/kg in HDP2 at 0.1-0.3mbgl).

8.3.6 An asbestos fibre screen was also undertaken of the sampled materials. Fibrous material was determined as absent in all analysed samples.

8.4 Soil Analysis - Controlled Waters (Leachability)

8.4.1 A single sample of made ground material (WS3 at 0.4-0.7mbgl) was scheduled for leachability analysis. The results are shown below in Table 8.2.

Table 8.2: Leachability Analysis – Made Ground

Contaminant	WS3 (µg/l)	SSV ⁽¹⁾ (µg/l)	No. of Exceedances
Arsenic	12	10	1
Boron	<10	1000	0
Cadmium	<0.08	5.0	0
Chromium	2.5	50	0
Copper	8.9	2000	0
Lead	13	10	1
Mercury	<0.5	1.0	0
Nickel	1.2	20	0
Selenium	<4.0	10	0

Contaminant	WS3 (µg/l)	SSV ⁽¹⁾ (µg/l)	No. of Exceedances
Zinc	8.6	3000 ⁽⁴⁾	0
Beryllium	<0.2	-	0
Vanadium	9.1	60 ⁽³⁾	0
Barium	72	700 ⁽⁴⁾	0
Cyanide (Total)	<10	50	0
Total Phenol (Monohydric)	<10	0.5	0
Sulphate	2900	250000	0
Sulphide	<5.0	-	-
pH	7.8	-	0
Naphthalene	<0.01	22.4 ^[2]	0
Acenaphthylene	<0.01	-	-
Acenaphthene	3.4	-	-
Fluorene	1.5	-	-
Phenanthrene	1.0	-	-
Anthracene	<0.01	0.1 ⁽²⁾	0
Fluoranthene	<0.01	0.12 ⁽³⁾	0
Pyrene	<0.01	-	-
Benzo(a)anthracene	<0.01	-	-
Chrysene	<0.01	-	-
Benzo(b)fluoranthene	<0.01	0.10	0
Benzo(k)fluoranthene	<0.01	0.10	0
Benzo(a)pyrene	<0.01	0.01 ⁽³⁾	0
Indeno(1,2,3-cd)pyrene	<0.01	0.10	-
Dibenz(a,h)anthracene	<0.01	-	-
Benzo(g,h,i)perylene	<0.01	0.10	0
Total PAH	5.9	-	-

Notes:

- 1 Water Supply (Water Quality Regulations) 2018 - Drinking Water Standards (DWS)
- 2 EQS, Annual Average (AA) - Freshwaters
- 3 EQS, Maximum Allowable Concentration (MAC) - Freshwaters
- 4 WHO Guidelines for Drinking Water Quality (2004)

8.4.2 The laboratory analytical results of the sampled leachable made ground recorded the following marginal exceedances of the Tier 1 SSVs for inorganic determinands:

- Single marginal exceedances of arsenic (12µg/l) and lead 13 (µg/l) in relation to the SSV values of 10 µg/l in WS3.

8.5 Soil Analysis - Controlled Waters (Groundwater)

8.5.1 A single sample of groundwater from WS1 was scheduled for analysis. The results are shown below in Table 8.3.

Table 8.3: Groundwater Analysis

Contaminant	WS1 (µg/l)	SSV ⁽¹⁾ (µg/l)	No. of Exceedances
Arsenic	1.74	10	0
Boron	220	1000	0
Cadmium	<0.02	5.0	0
Chromium	<0.2	50	0
Copper	<0.5	2000	0
Lead	0.4	10	0

Contaminant	WS1 (µg/l)	SSV ⁽¹⁾ (µg/l)	No. of Exceedances
Mercury	<0.05	1.0	0
Nickel	2.9	20	0
Selenium	1.4	10	0
Zinc	1.4	3000 ⁽⁴⁾	0
Beryllium	<0.1	-	0
Vanadium	<0.2	60 ⁽³⁾	0
Barium	78	700 ⁽⁴⁾	0
Cyanide (Total)	<10	50	0
Total Phenol (Monohydric)	<10	0.5	0
Sulphide	<5.0	-	-
Sulphate	179000	250000	0
pH	7.3	-	0
Naphthalene	<0.01	22.4 ^[2]	0
Acenaphthylene	<0.01	-	-
Acenaphthene	<0.01	-	-
Fluorene	<0.01	-	-
Phenanthrene	<0.01	-	-
Anthracene	<0.01	0.1 ⁽²⁾	0
Fluoranthene	<0.01	0.12 ⁽³⁾	0
Pyrene	<0.01	-	-
Benzo(a)anthracene	<0.01	-	-
Chrysene	<0.01	-	-
Benzo(b)fluoranthene	<0.01	0.10	0
Benzo(k)fluoranthene	<0.01	0.10	0
Benzo(a)pyrene	<0.01	0.01 ⁽³⁾	0
Indeno(1,2,3-cd)pyrene	<0.01	0.10	-
Dibenz(a,h)anthracene	<0.01	-	-
Benzo(g,h,i)perylene	<0.01	0.10	0
Total PAH	<0.2	-	-
Benzene	<1.0	10 ⁽⁴⁾	0
Toluene	<1.0	700 ⁽⁴⁾	0
Ethylbenzene	<1.0	300 ⁽⁴⁾	0
p & m-xylene	<1.0	500 ⁽⁴⁾	0
o-xylene	<1.0	500 ⁽⁴⁾	0
MTBE	<1.0	-	-
TPH Aliphatic C5 - C6	<1.0	15000	0
TPH Aliphatic C6 - C8	<1.0	15000	0
TPH Aliphatic C8 - C10	<1.0	300	0
TPH Aliphatic C10 - C12	<10	300	0
TPH Aliphatic C12 - C16	<10	300	0
TPH Aliphatic C16 - C21	<10	300 ⁽⁵⁾	0
TPH Aliphatic C21 - C35	<10	300 ⁽⁵⁾	0
TPH Aromatic C5 - C7	<1.0	-	0
TPH Aromatic C7 - C8	<1.0	-	0
TPH Aromatic C8 - C10	<1.0	-	0
TPH Aromatic C10 - C12	<10	100	0
TPH Aromatic C12 - C16	<10	100	0
TPH Aromatic C16 - C21	<10	90	0
TPH Aromatic C21 - C35	<10	90	0

Notes:

1 Water Supply (Water Quality Regulations) 2018 - Drinking Water Standards (DWS)

- 2 EQS, Annual Average (AA) – Freshwaters
- 3 EQS, Maximum Allowable Concentration (MAC) - Freshwaters
- 4 WHO Guidelines for Drinking Water Quality (2004)
- 5 There are no WHO guideline values for aliphatic fractions C16-C35 and therefore guideline values for aliphatic fractions C8-C16 have been applied.

8.5.2 No exceedances of screening values were recorded within the sampled groundwater in WS1 in relation to the relevant Tier 1 SSVs for controlled waters.

8.5.3 It is noted that all concentrations of organic contaminants (PAHs, TPHs and BTEX) were recorded to be below the laboratory limit of detect within the analysed sample.

8.6 Waste

8.6.1 Waste Acceptance Criteria (WAC) testing has not been carried out as part of this assessment. The geochemical analysis results may be used to aid in Basic Characterisation for potential waste materials produced at the site although WAC testing may be required to be undertaken to support any off-site disposal of materials generated as part of the development works.

8.7 Ground Gas

8.7.1 A single round of ground gas monitoring has been undertaken to-date, on the 17th September 2019 immediately following installation, from the 2no. monitoring wells (WS1 and WS3). All gas monitoring was undertaken using a calibrated GFM 436 infra-red gas analyser fitted with an internal flow pod. The monitoring results are presented in Appendix H and summarised in Table 8.4 below.

Table 8.4: Summary of Ground Gas Monitoring Data

Borehole	Response Zone/Strata	Evidence of potential source of ground gas	No. of monitoring occasions	Methane (%)	Maximum Carbon dioxide (%)	Minimum Oxygen (%)	Flow (l/hr)	Water levels (mbgl)	Range of atmospheric pressure (mb)
WS1	Made Ground and Natural Ground	None	1	0.0	0.5	19.7	0.0	2.67	1021
WS3				0.0	1.4	19.4	0.0	Dry	1021

8.7.2 Atmospheric pressure was recorded at 1021mb, and was rising, during the monitoring round. The days prior to monitoring atmospheric pressure was typically high but falling.

8.7.3 No measurable flow rates or concentrations of methane were recorded during the monitoring. Maximum, and stable, concentrations of carbon dioxide were recorded between 0.5% v/v and 1.4%v/v.

8.7.4 The maximum recorded concentrations of carbon dioxide are noted to be below initial screening levels for a high sensitivity end use (i.e. 5% carbon dioxide for housing).

8.7.5 The site is not a registered landfill site and no landfills have been identified within 250m of the site; there are no mine openings reported within 250m of the site; and made ground materials were observed to be of generally low degradable content with recorded TOCs between 0.7% and 2.5%. Therefore, no potential significant ground gas sources have been identified on site or in the immediate vicinity.

- 8.7.6 On the basis of the results obtained from the initial monitoring round, the site may be placed into Characteristic Situation 1 and ground gas protection measures would not be required within proposed properties on site. Notwithstanding this, given the depth of made ground recorded on site, additional monitoring would be recommended to confirm this.
- 8.7.7 The site is not reported to be located within a radon affected area as less than 1% of homes are reported to be above the Action Level. Therefore, no radon protective measures are required within the construction of new homes or extensions.

9 REFINED CONCEPTUAL MODEL

9.1 Introduction

- 9.1.1 The Preliminary Risk Assessment undertaken as part of this report identified the presence of potential significant pollutant linkages associated with the site and surrounds. Therefore, in accordance with the approach recommended in CLR11, additional information was collected about the site and its surroundings as part of a Generic Quantitative Risk Assessment. Based upon this additional information and the proposed development layout, the site conceptual model has been refined and pollutant linkages confirmed for evaluation where considered necessary.

9.2 Hazard Identification

- 9.2.1 Potential sources of contamination have been identified on and within the vicinity of the site and are presented in Table 9.1.

Table 9.1: Identified Hazards

Identified Hazard/Source	Location	Details
Made ground	On site	<p>Made ground was encountered across the site to the maximum thickness of 2.8mbgl. Marginally elevated contaminant concentrations (lead and PAHs) were recorded, in relation to the Tier 1 SSVs for a residential without homegrown produce site end use.</p> <p>Based upon the limited ground gas monitoring undertaken to-date, together with the observed composition of the made ground encountered and the low TOC concentrations recorded on site, this is not considered a potential source of significant ground gas.</p> <p>Although marginally elevated leachable levels of arsenic or lead were recorded no elevated contaminant concentrations in relation to the controlled waters SSVs were recorded within the sampled groundwater.</p> <p>Therefore, arsenic and lead are not considered to be present at concentrations that may pose a significant risk to controlled water receptors.</p>
Potentially contaminative historic land uses	Off site	<p>Limited potentially contaminative historical processes/land uses have been identified in proximity to the site (including potentially infilled land, warehouse, works, drill works and a brewery). However, given the age and distance of these identified features and based on site observations, field testing and laboratory analysis, the potential for on-site contaminant migration is considered unlikely.</p>

9.3 Identified Potential Receptors and Pathways

- 9.3.1 Potential receptors identified as part of the generic risk assessment are:

- Current/future site users;
- Construction workers; and
- Controlled waters (Principal and Secondary Aquifers).

9.3.2 Potential contaminant pathways identified as part of the generic risk assessment include:

- Dermal contact – contact with soil, dust or water;
- Ingestion - ingestion of soil, dust or water;
- Inhalation – inhalation of soil, dust or vapours;
- Vertical migration – e.g. seepage of contaminants at the ground surface (i.e. leakage/spillage of hydrocarbons) through cracks in hardstanding and/or leaching of contaminants within the unsaturated zone resulting in vertical contaminant migration; and
- Horizontal migration – e.g. lateral migration of contaminants within the saturated zone and along preferential pathways such as drainage pipe bedding.

9.4 Hazard Assessment and Risk Estimation

9.4.1 Potential significant pollutant linkages identified following completion of the intrusive works are summarised in the Refined Site Conceptual Model presented in Table 9.2.

Table 9.2: Refined Conceptual Model (Hazard Assessment and Risk Estimation)

Identified Hazard/Source	Identified Receptor	Potential Pathway to Receptors	Associated Hazard	Scale of Impact	Potential Consequence of Source-Receptor Linkage	Potential Likelihood for Significant Source-Receptor Linkage	Risk Classification
Made ground – on site	Current and future site users and construction workers	Exposure to potential contamination through ingestion, inhalation and dermal contact.	Risk of harm to human health	Local to regional	Medium	Unlikely to Low Likelihood: Exceedances of lead and PAHs were recorded within the encountered made ground materials. However, it is understood that the entire site will be covered by building footprints/hardstanding thus mitigating any potential risk to future site end users. Short term exposure to the contaminants encountered on the site is considered unlikely to cause significant harm to construction workers where good brownfield site working practices are adopted.	Low Risk
	Controlled Waters	Infiltration of water through the unsaturated zone resulting in leaching of potential contaminants and subsequent potential vertical and horizontal migration along preferential pathways.	Risk of harm to human health and controlled waters (underlying Aquifers)	Regional	Medium	Unlikely to Low Likelihood: The leachable contaminant concentrations recorded within the sampled made ground and contaminant concentrations recorded within the sampled groundwater are not considered to be in a form or magnitude that may pose a significant risk to controlled waters.	Low Risk
	Future site end users and proposed development structures	Migration, ingress and inhalation of ground gasses	Risk of harm to human health and buildings	Local	Medium to Severe	Unlikely to Low Likelihood: Based upon the observed composition of the made ground materials encountered on site and the ground gas monitoring undertaken to date, this is not considered to be a potential source of significant ground gas.	Low Risk
Potentially contaminative historic processes – off site	Current and future site users, proposed development structures	Exposure to potential contamination through ingestion, inhalation and dermal contact; and migration, ingress and inhalation of ground gasses	Risk of harm to human health and buildings	Local	Medium	Unlikely: While potentially contaminative historic process have been recorded in proximity to the site, no visual or olfactory evidence of potentially significant contamination was observed within the ground materials encountered at the site. In addition, given the age and distance of these identified features, the potential for on-site contaminant migration is considered unlikely.	Low Risk

10 CONCLUSIONS & RECOMMENDATIONS

10.1 Conclusions

- 10.1.1 Tweedie Evans Consulting Ltd (TEC) has been appointed by Curlew Alternatives Eighth Property LP to undertake a preliminary geoenvironmental assessment of a former public house known as The Gamecock Public House located off Booth Street West, Manchester. All works were undertaken in accordance with our proposal letter dated 05 September 2019 and referenced 1909009.001.bidlet.
- 10.1.2 The site currently comprises a two-storey vacant public house on ground floor level with an occupied residential flat on the first floor in an area of tarmac hardstanding used for car parking with associated soft landscaped area in the north-east of the site.
- 10.1.3 It is understood that the proposed development is to comprise the demolition of existing building and structure and redevelopment of site for Purpose Built Student Accommodation (PBSA) uses (Sui Generis use class) with ancillary amenity space, a ground floor 'community hub' (proposed for Use Classes F2(b), E(b), E(3), E(f)) associated landscape works and infrastructure
- 10.1.4 Historic mapping indicates that prior to the current site layout, the site comprised residential development from the mid-19th century. The current public house is depicted on site from 1976.
- 10.1.5 The site is considered to be of low to moderate environmental sensitivity due primarily to the underlying geology being designated as a Principal Aquifer (Cheshire Formation) and the site being located within an EA Source Protection Zone III.
- 10.1.6 Made ground was encountered across the site, to a maximum recorded depth of 2.8mbgl. Elevated concentrations of contaminants of potential concern (lead and PAHs) were recorded within the made ground on site, in relation to a residential without homegrown produce site end use. However, where made ground remains following site preparation works it is considered that the provision of hardstanding and building footprints (as proposed across the site area) would mitigate against any potential risk to site end users.
- 10.1.7 Based on current guidance (Wilson, Card and Haines (2009), site observations, recorded TOC concentrations and a single ground gas monitoring round results, the underlying made ground is not considered likely to act as a potential source of significant ground gas generation. Initial ground gas monitoring suggests the site would be classified as Characteristic Situation 1 however additional monitoring would be recommended to confirm this given the thickness of made ground recorded.
- 10.1.8 Limited groundwater sampling undertaken did not suggest the presence of significant risk to controlled waters.
- 10.1.9 Based upon our current conceptual understanding of the site and the proposed end use, the main potential Significant Pollutant Linkages identified are considered to be:
- Human health (including construction workers and future site end users) – exposure to slightly elevated lead and PAHs through ingestion, inhalation and dermal contact pathways, should areas of soft landscaping be included in the proposed development.

10.2 Geoenvironmental Risk Management Recommendations

Identification of Feasible Remediation Options

- 10.2.1 Significant risks identified within the conceptual model can be mitigated through the breaking of the significant pollution linkage by the removal of at least the source, receptor or pathway. Within reference to the site's conceptual model the following preliminary remediation approach has been prepared. This preliminary remediation approach will need to be presented in more detail within a Remediation Strategy, the content of which will require agreement in writing of the Regulatory Authorities prior to commencing any remediation on site, should areas of soft landscaping be included in the proposed development.

Human Health

- 10.2.2 Elevated concentrations of lead and some PAHs have been recorded within the sampled made ground on site, in relation to Tier 1 SSVs for a proposed residential without homegrown produce end use. However, where made ground remains following site preparation works, it is considered that the provision of hardstanding and building footprints (as proposed across the site area) would mitigate against any potential risk to site end users from the identified contamination.
- 10.2.3 However, should soft landscaping be proposed and where made ground remains after finished site levels have been achieved, exposure to potential contaminants cannot be discounted. Therefore, it would be recommended that a suitable cover system, in accordance with BRE465, be provided within such areas.
- 10.2.4 Given the presence of made ground and recorded presence of elevated lead and PAHs, good brownfield practises should be adopted by construction workers to mitigate against the identified potential risks. Exposure to the identified elevated contaminants recorded within the made ground are not considered likely to cause harm to construction workers, provided appropriate health and safety procedures and brownfield working practices are observed.
- 10.2.5 A safe system of work and strategy to deal with the identified contamination will be required during any excavation activities. This would include details of any required monitoring and appropriate Personal Protective Equipment (PPE) that should be utilised during the groundworks.
- 10.2.6 Should water supply pipes be placed within the made ground encountered at the site, due consideration would need to be given to the UK Water Industry Research Ltd (UKWIR) guidance.
- 10.2.7 Waste Acceptance Criteria (WAC) testing may be required to be undertaken to support any off-site disposal of material generated as part of the development works.
- 10.2.8 Based upon our conceptual understanding of the site to-date, it would be anticipated that a similar ground profile to those encountered within the assessment are present across the site. However, should made ground or visual or olfactory evidence of potentially significant contamination be identified during the development works, further investigation and assessment may be required.

Controlled Waters

- 10.2.9 No specific measures for the protection of groundwater have been identified as part of these works.

Ground Gas

- 10.2.10 Based on the conceptual site model and encountered ground conditions the site is likely to be characterised as Characteristic Situation 1 with respect of the potential risk from ground gas with no specific ground gas protection measures being required. Notwithstanding this, additional monitoring would be recommended to confirm this assessment given the depth of made ground encountered.
- 10.2.11 No radon protection measures are reported to be required.

Coal Mining Activity

- 10.2.12 It is noted that the site is reported to be located in an area which may be affected by coal mining activity and it is recommended that a coal mining report is obtained from the Coal Authority.

Recommended Works

- 10.2.13 Additional ground gas monitoring would be recommended to confirm the gas assessment contained within this assessment.
- 10.2.14 Only limited access for investigation has been possible to date although given the assessment presented it is considered likely that similar ground materials to those currently recorded will be present across the site. However, should materials be encountered during future works which vary significantly from those recorded or should evidence of gross contamination be encountered additional assessment would be recommended.

TWEEDIE EVANS CONSULTING LIMITED

BIBLIOGRAPHY

- British Geological Survey (BGS) Lexicon of rocks: www.bgs.ac.uk/lexicon.
- BS10175 British Standards Institute (2011+A2:2017) Investigation of Potentially Contaminated Land - Code of Practice.
- BS8576 British Standards Institute (2013) Guidance on investigations for ground gas – Permanent gases and Volatile Organic Compounds (VOCs).
- CIRIA C552 (2001) Contaminated Land Risk Assessment: A Guide to Good Practice.
- DEFRA and the Environment Agency (2004) Model Procedures for the Management of Land Contamination. R&D Publication CLR11.
- Wilson, Card and Haines (2009) Ground Gas Handbook.
- BRE 414 (2001) Protective measures for housing on gas contaminated land.
- BS5930 British Standards Institute (2015) Code of Practice for Site Investigation.
- BS8485 British Standards Institute (2015) Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings.
- CIEH & CL:AIRE (2008) Guidance on Comparing Soil Contamination Data with a Critical Concentration.
- CIRIA C665 (2007) Assessing Risk Posed by Hazardous Ground Gases to Buildings (revised).
- CL:AIRE, AGS & EIC (2009) The Soil Generic Assessment Criteria for Human Health Risk Assessment.
- DEFRA & Environment Agency (2004). Model Procedures for the Management of Land Contamination. R&D Publication CLR11.
- DEFRA (2014) SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination – Policy Companion Document (March 2014).
- Department for the Environment (1995/1996) DOE Industry Profiles.
- Environment Agency (2003) Review of the fate and transport of selected contaminants in the soil environment. Draft Technical Report P5-079/TR1. Bristol: Environment Agency.
- Environment Agency (2006) Remedial Targets Methodology: Hydrogeological Risk Assessment for Land Contamination.
- Environment Agency (2009) Soil Guideline Values.
- Environment Agency (2013) Waste Sampling and Testing for Disposal to Landfill.
- Environment Agency (2013) Groundwater Protection: Principles and Practice (GP3) Version 1.1.
- LQM & CIEH (2015) The LQM/CIEH S4ULs for Human Health Risk Assessment.
- NHBC (2019). NHBC Standards.
- NHBC, Environment Agency & CIEH (2008) Guidance for the Safe Development of Housing on Land Affected by Contamination. R&D Publication 66.
- Norbury, D (2016) Soil and Rock Description in Engineering Practice, 2nd Edition, Whittles Publishing.
- Water Industry Research Ltd (UKWIR) (2009-2010) Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites (10/WM/03/21).
- BRE (2004) Cover Systems for Land Regeneration – Thickness of cover systems for contaminated land (BRE465).
- CL:AIRE (2012) Research Bulletin RB 17: A Pragmatic Approach to Ground Gas Risk Assessment (November 2012).
- Environment Agency (2009) Updated technical background to the CLEA model. Science Report SC050021/SR3. Bristol: Environment Agency.
- Environment Agency (2009) CLEA Software (Version 1.05) Handbook. Science Report SC050021/SR4.
- Environment Agency (2015) CLEA Software Version 1.071.
- HSE (1991) Protection of workers and the general public during the development of contaminated land.

FIGURES



Approximate Site Location:



Ordnance Survey © Crown Copyright [2019] All rights reserved.
Licence number 100043301



TEC
The Old Chapel
35a Southover
Wells, Somerset
BA5 1UH

Tel: 01749 677760
Email: info@tecon.co.uk
Web: www.tecon.co.uk

Site Name:
Former Gamecock Public House,
Booth Street West

Drawing Name:
Site Location Plan
Rev A

Client Name:
Curlew Alternatives Eighth Property LP

Project No:
1909009

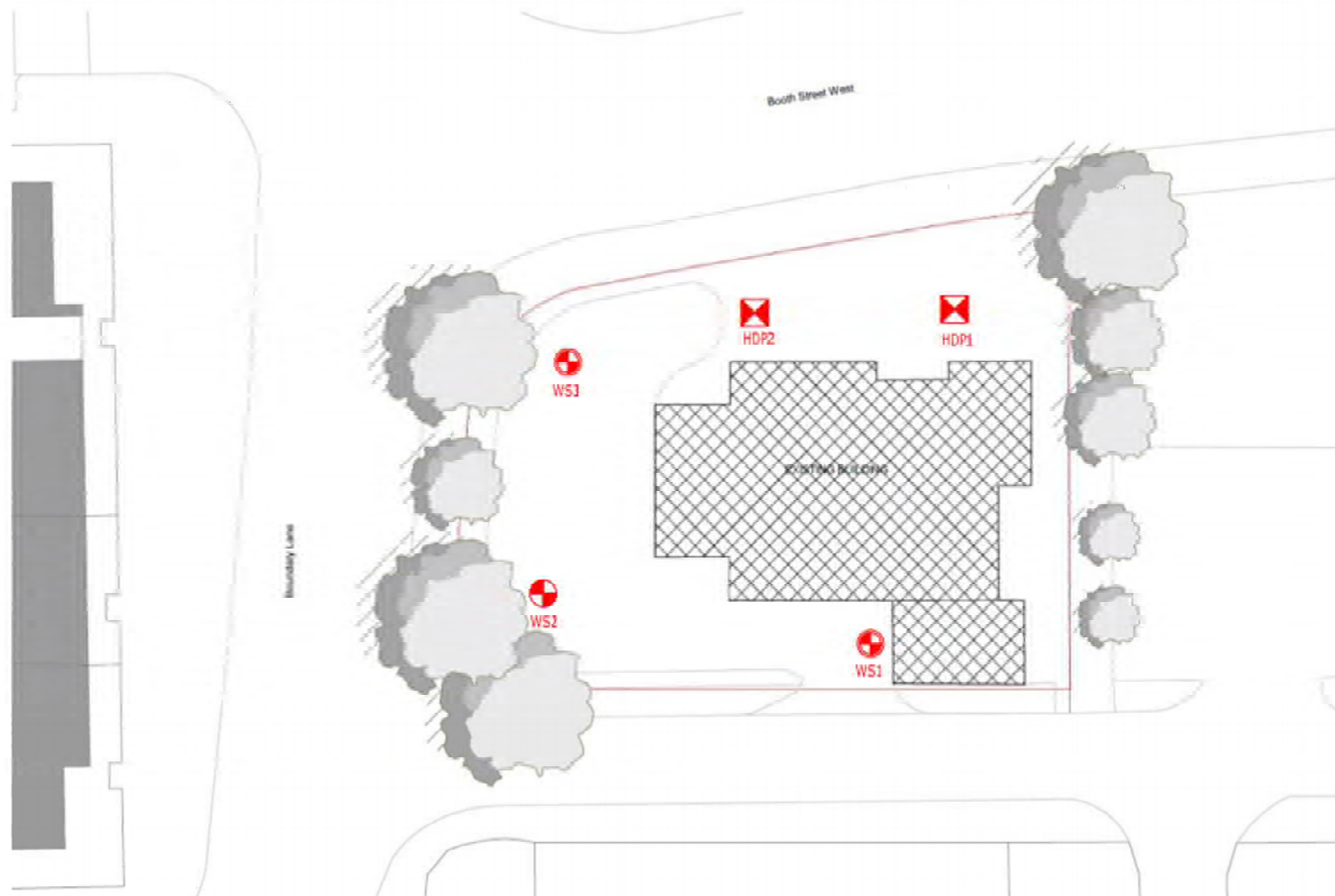
Figure No:
1

Date:
April 2021

Scale:
NTS



	TEC The Old Chapel 35a Southover Wells, Somerset BA5 1UH	Tel: 01749 677760 Email: info@tecon.co.uk Web: www.tecon.co.uk	Site Name: Former Gamecock Public House, Booth Street West	Drawing Name: Proposed Development Plan Rev A	Client Name: Curlew Alternatives Eighth Property LP	Project No: 1909009	Figure No: 2	Date: April 2021	Scale: NTS
---	--	---	--	---	--	------------------------	-----------------	---------------------	---------------



TEC Exploratory Hole with Installation Location: 

TEC Exploratory Hole location: 

TEC Hand Dug Pit: 

Extract of Simpsonhaugh Concept Proposal
Ref: 10224-SHP-RP-CP02 Revision 00
Dated July 2019



TEC
The Old Chapel
35a Southover
Wells, Somerset
BA5 1UH
Tel: 01749 677760
Email: info@tecon.co.uk
Web: www.tecon.co.uk

Site Name:
Former Gamecock Public House,
Booth Street West

Drawing Name:
Exploratory Hole Location Plan
Rev A

Client Name:
Curlew Alternatives Eighth Property LP

Project No:
1909009

Figure No:
3

Date:
April 2021

Scale:
NTS

APPENDIX A
Site Photographs



Photograph 1: View of the front of the public house, facing east.



Photograph 2: View of the back of the public house, facing south-west.



Photograph 3: View of the south-eastern corner of the site, facing east.



Photograph 4: View of the western site area, facing north.



Photograph 5: Arisings from WS1 (1-4mbgl)



Photograph 6: Arisings from WS1 (4-5mbgl)



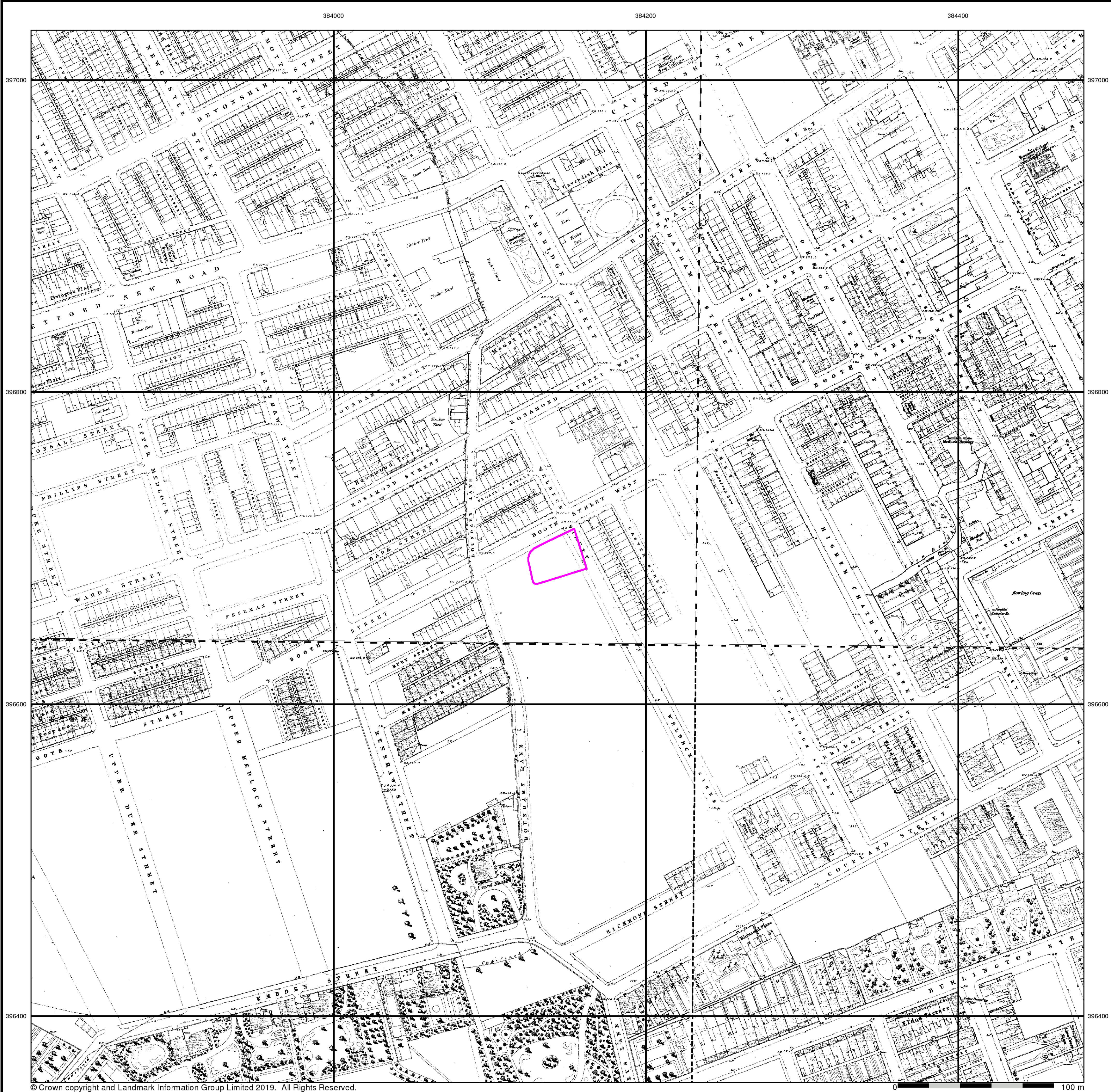
Photograph 7: Arisings from WS2 (1-4mbgl)



Photograph 8: Arisings from WS3 (1-4mbgl)

APPENDIX B

Historical Maps



TWEEDIE EVANS CONSULTING
Lancashire And Furness

Published 1851

Source map scale - 1:1,056

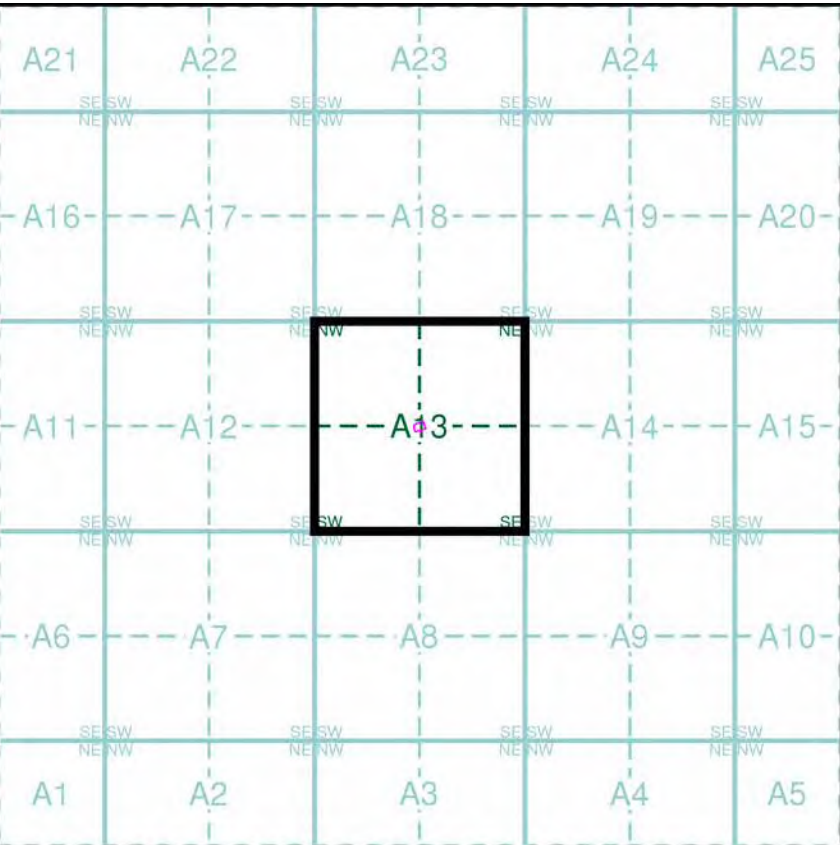
The 1:1056 scale of Ordnance Survey mapping was adopted from Ireland in 1848 and was used to survey towns with a population of over 4000, plus county towns of lesser population, in those counties mapped at the six-inch scale in 1841-55. The scale was the largest scale at which London was mapped by the Ordnance Survey and a 'skeleton' survey of the capital, showing little more than streets, street names, frontages and altitudes, was undertaken between 1848 and 1850. The majority of the 1:1056 surveys were later replaced by 1:500 surveys; although almost all the remainder were revised at this scale, sometimes more than once before 1895. The type of detail shown on the 1:1056 scale is broadly similar to that on 1:500; the apparent omission of minor details such as sewer access points and street lights may be as much a reflection of the generally earlier date of these plans, as of the specification of the map.

Please note: Due to the partial coverage of Historical Town Plans, it is possible that not all segments within an order will contain mapping. Only the segments that have Town Plan coverage will be generated.

Map Name(s) and Date(s)

000_00_038	000_00_039
1851	1851
1:1,056	1:1,056
000_00_043	000_00_044
1851	1851
1:1,056	1:1,056

Historical Town Plan - Segment A13



Order Details

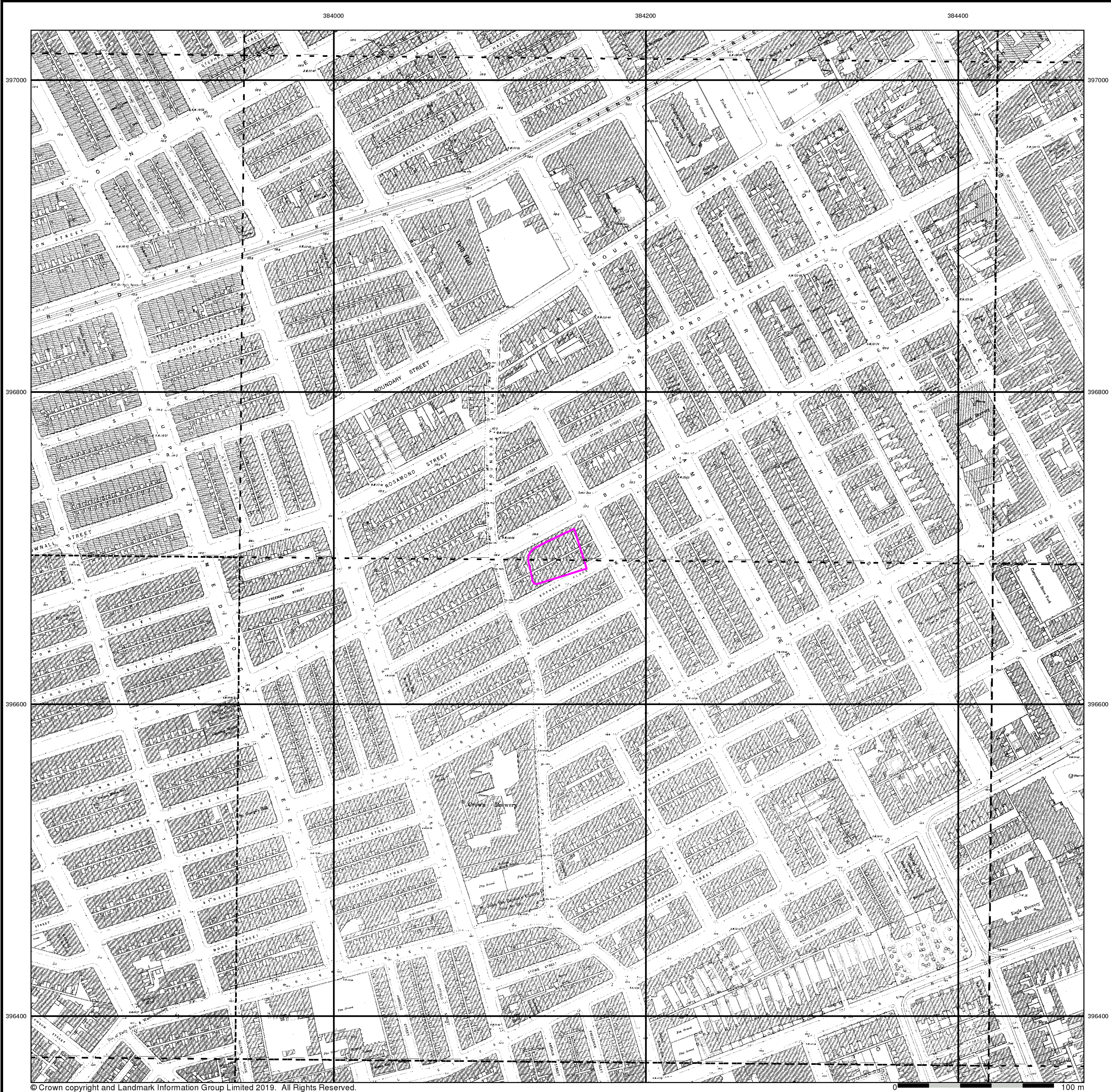
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 0

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TWEEDIE EVANS CONSULTING
Lancashire And Furness

Published 1891

Source map scale - 1:500

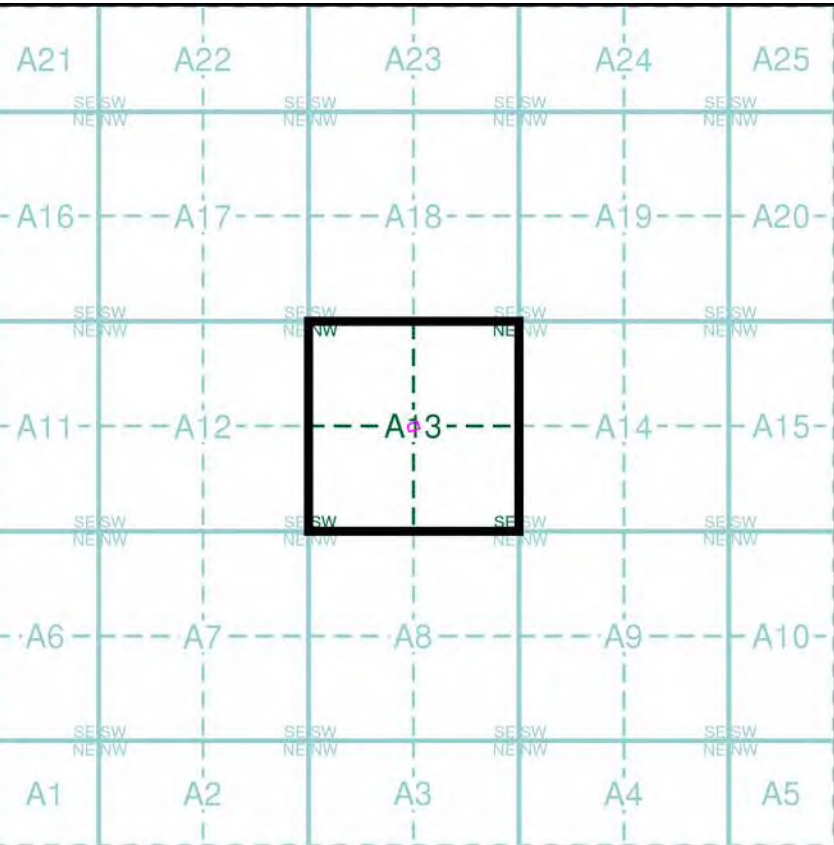
The 1:500 scale Ordnance Survey mapping was introduced in 1855 as a replacement for the 1:528 scale and to complement the 1:2500 scale that had been implemented in 1853. By 1895, the 1:500 scale covered most towns over a population of about 4000 at the time of survey, although very few towns were mapped more than once at this scale, and none have been since 1910. The 1:500 scale gives particular emphasis to such features as lamp posts, man holes, arched passages and minor building projections. Also often featured are divisions between tenements, interior ground floor layouts of public buildings, and on earlier plans, the functions of the various parts of larger industrial premises are also indicated. Content of the plans does vary however, from one town to the next in terms of, for example, the completeness of railway tracks and the coverage of public buildings.

Please note: Due to the partial coverage of Historical Town Plans, it is possible that not all segments within an order will contain mapping. Only the segments that have Town Plan coverage will be generated.

Map Name(s) and Date(s)

107_10_01891	107_10_01891	11_01891
1891	1891	1891
1:500	1:500	1:500
04_10_02004	04_10_02004	11_02004
1891	1891	1891
:500	1:500	1:500
04_14_00004	04_14_00004	15_00004
1891	1891	1891
:500	1:500	1:500
04_14_00004	04_14_00004	15_00004
1891	1891	1891
:500	1:500	1:500

Historical Town Plan - Segment A13



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 0

Site Details

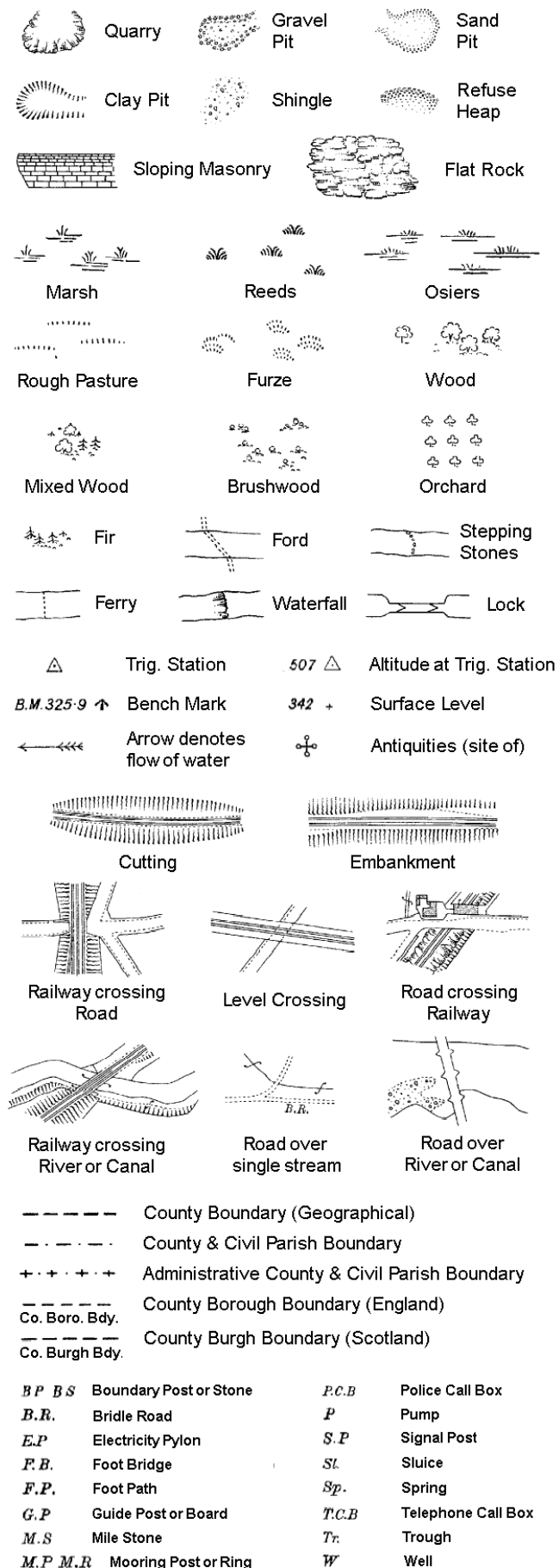
, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



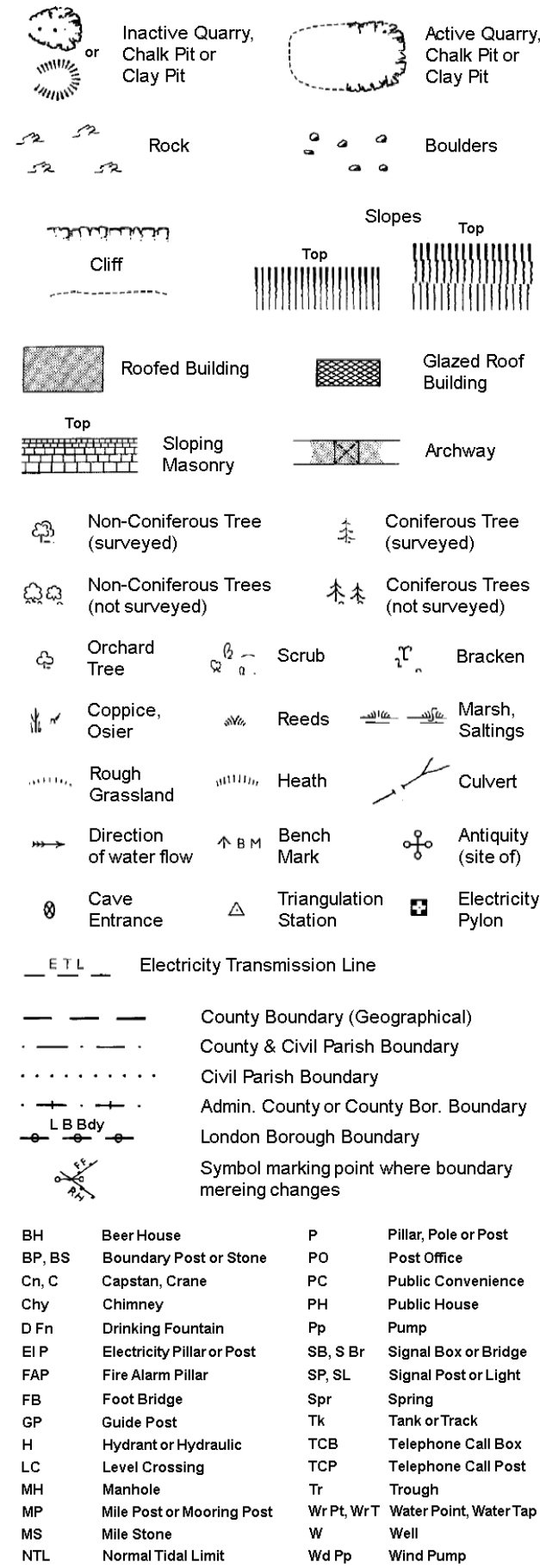
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

Historical Mapping Legends

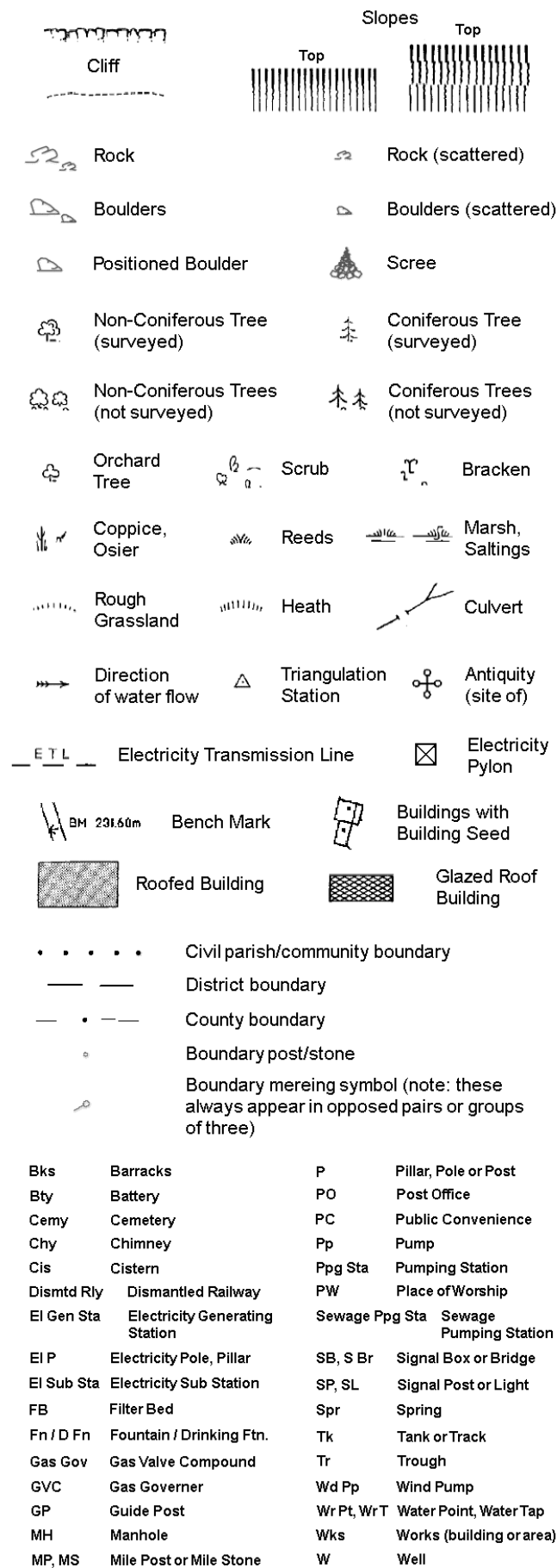
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



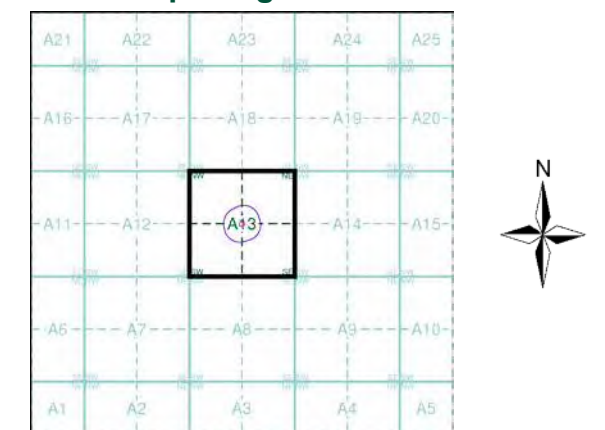
Large-Scale National Grid Data 1:2,500 and 1:1,250



TWEEDIE EVANS CONSULTING
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:2,500	1893	2
Lancashire And Furness	1:2,500	1908	3
Lancashire And Furness	1:2,500	1932 - 1933	4
Ordnance Survey Plan	1:1,250	1948 - 1950	5
Ordnance Survey Plan	1:2,500	1950 - 1951	6
Ordnance Survey Plan	1:1,250	1952 - 1978	7
Ordnance Survey Plan	1:2,500	1955 - 1963	8
Ordnance Survey Plan	1:1,250	1961 - 1973	9
Ordnance Survey Plan	1:2,500	1965	10
Ordnance Survey Plan	1:1,250	1969 - 1985	11
Ordnance Survey Plan	1:2,500	1970	12
Supply of Unpublished Survey Information	1:1,250	1974 - 1976	13
Supply of Unpublished Survey Information	1:1,250	1977	14
Additional SIMs	1:1,250	1977 - 1990	15
Additional SIMs	1:1,250	1984 - 1985	16
Ordnance Survey Plan	1:1,250	1987	17
Additional SIMs	1:1,250	1987 - 1990	18
Additional SIMs	1:1,250	1990	19
Large-Scale National Grid Data	1:1,250	1992	20
Large-Scale National Grid Data	1:1,250	1993 - 1995	21
Large-Scale National Grid Data	1:1,250	1995	22
Large-Scale National Grid Data	1:1,250	1996	23
Historical Aerial Photography	1:2,500	2000	24

Historical Map - Segment A13



Order Details

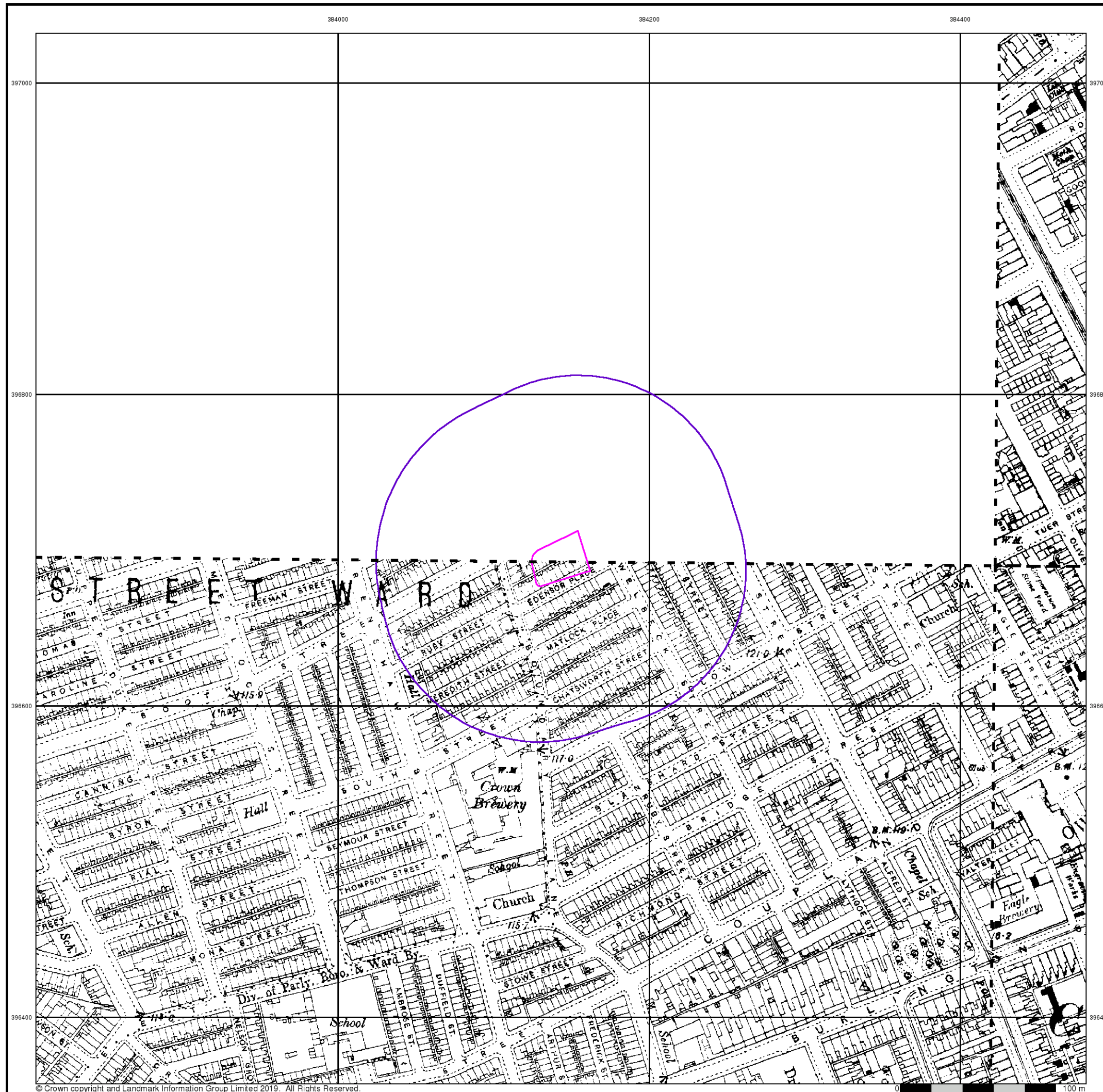
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



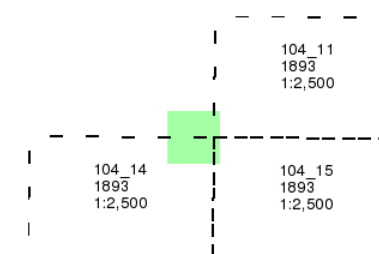
TWEEDIE EVANS CONSULTING
Lancashire And Furness

Published 1893

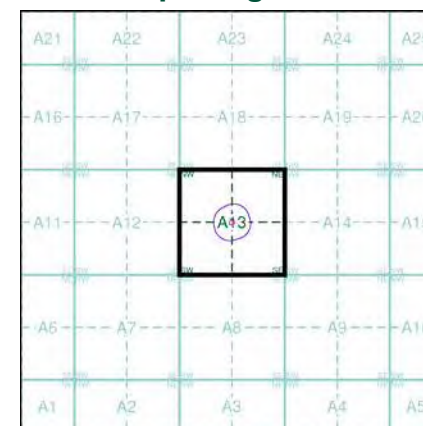
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TWEEDIE EVANS CONSULTING
Lancashire And Furness

Published 1908

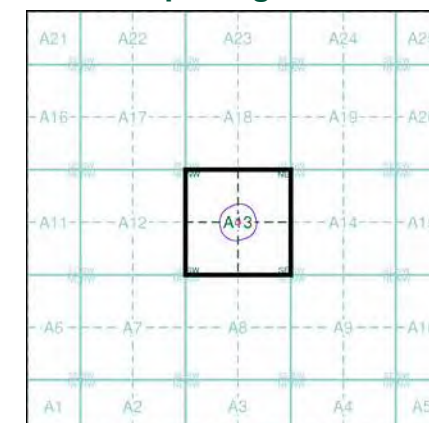
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

104_10 1908 1:2,500	104_11 1908 1:2,500
104_14 1908 1:2,500	104_15 1908 1:2,500

Historical Map - Segment A13



Order Details

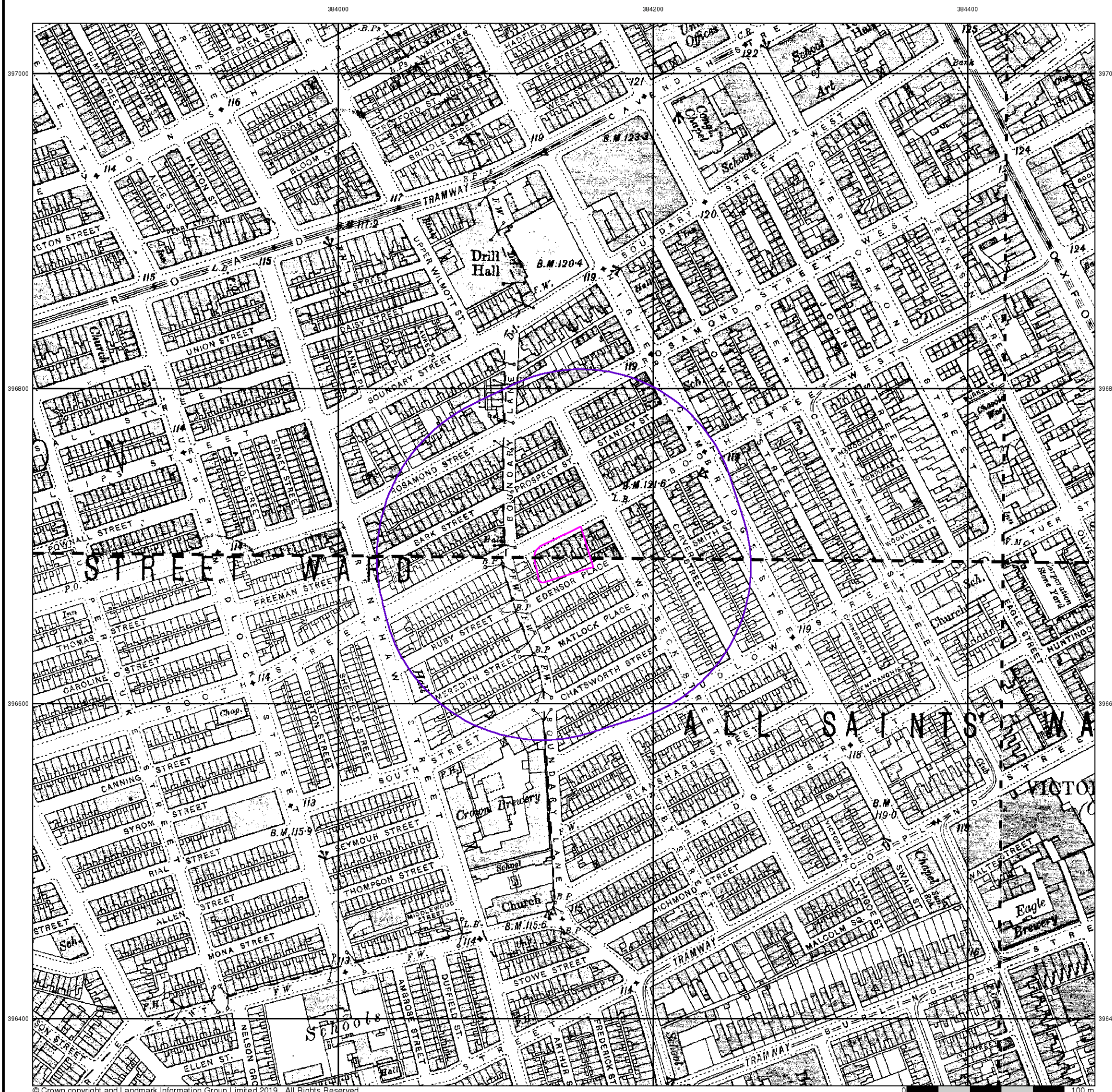
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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





TWEEDIE EVANS CONSULTING
Lancashire And Furness

Published 1932 - 1933

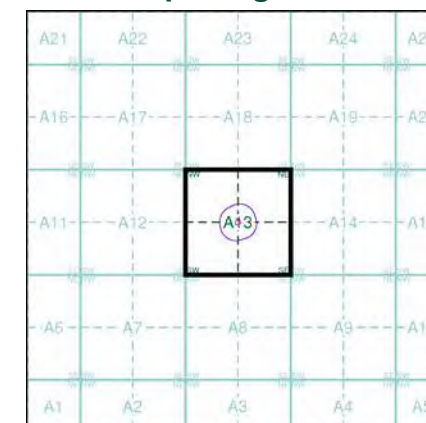
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

104_10 1932 1:2,500	104_11 1932 1:2,500
104_14 1932 1:2,500	104_15 1933 1:2,500

Historical Map - Segment A13



Order Details

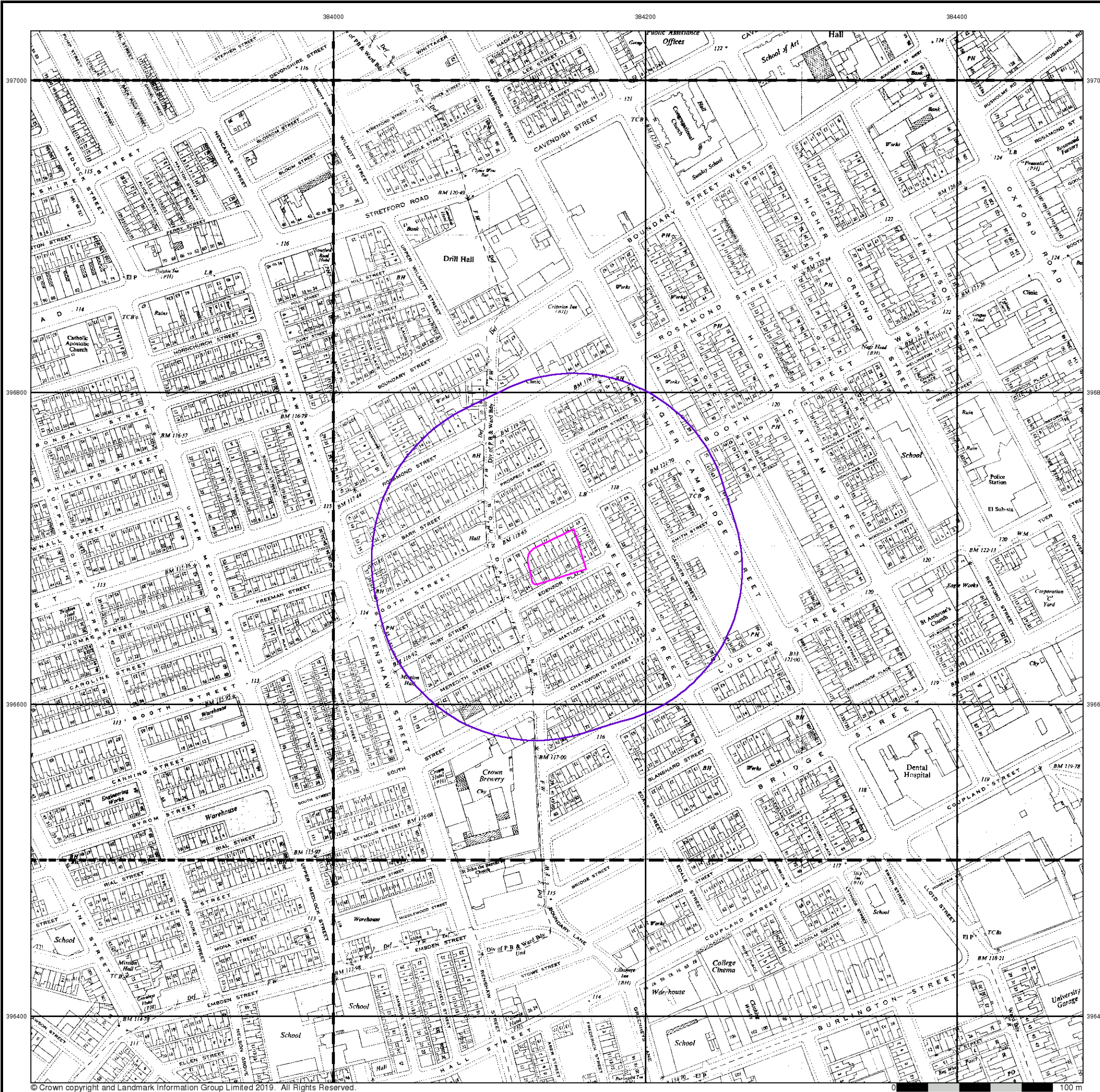
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING Ordnance Survey Plan

Published 1948 - 1950

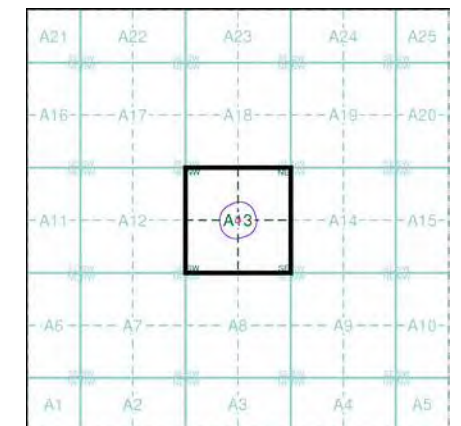
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SJ8397SE	SJ8497SW
1948	1948
1:1,250	1:1,250
SJ8396NE	SJ8496NW
1950	1948
1:1,250	1:1,250
SJ8396SE	SJ8496SW
1950	1949
1:1,250	1:1,250

Historical Map - Segment A13



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TWEEDIE EVANS CONSULTING Ordnance Survey Plan

Published 1950 - 1951

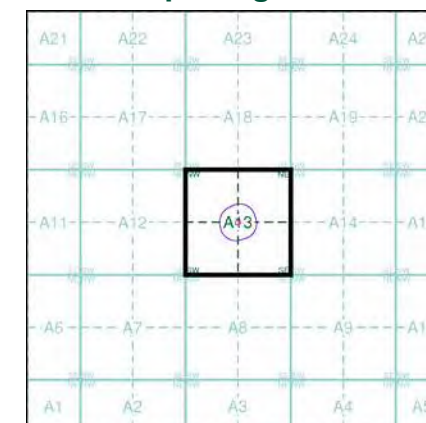
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

SJ8397	SJ8497
1950	1950
12,500	12,500
SJ8396	SJ8496
1951	1951
12,500	12,500

Historical Map - Segment A13



Order Details

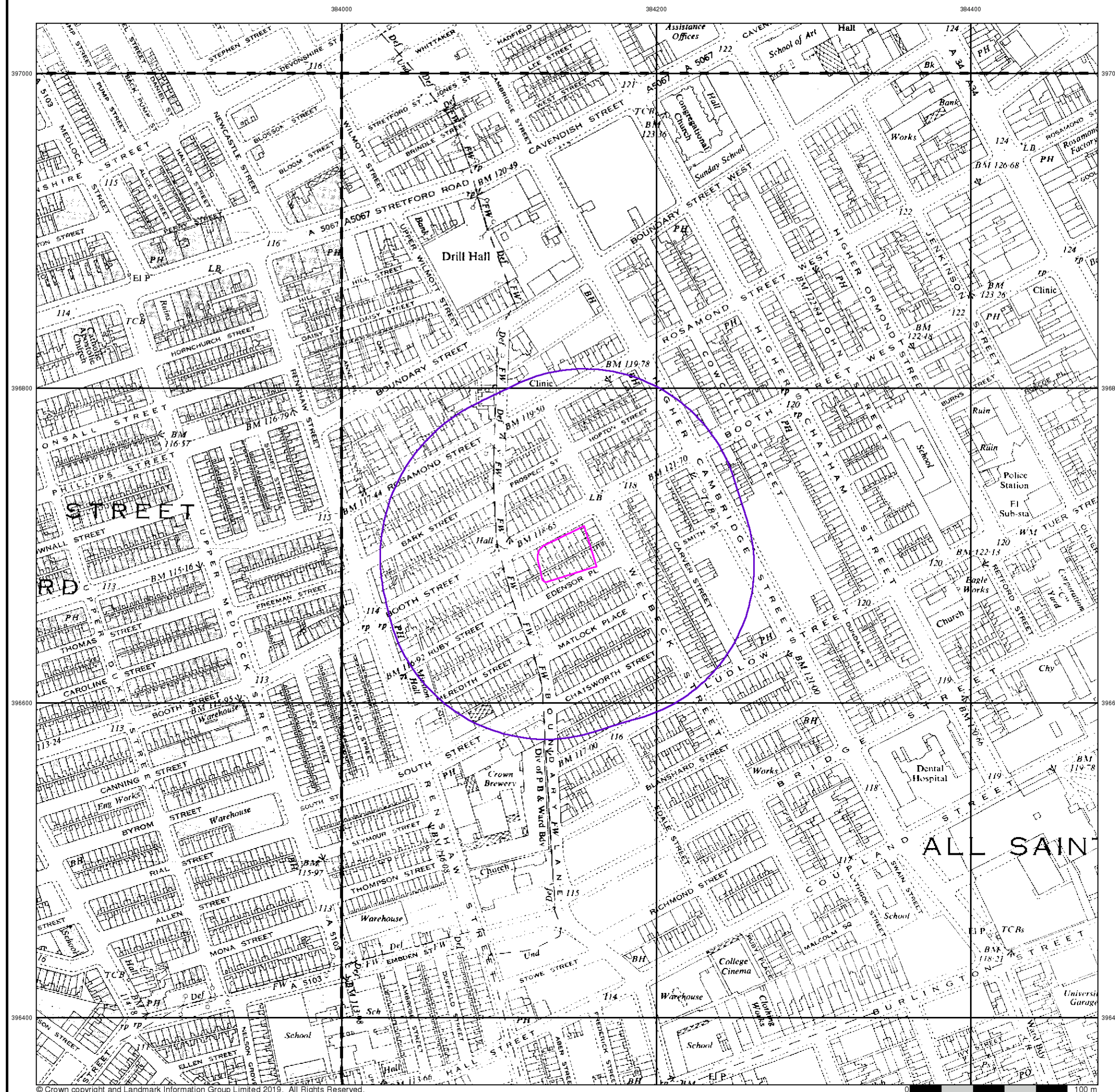
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

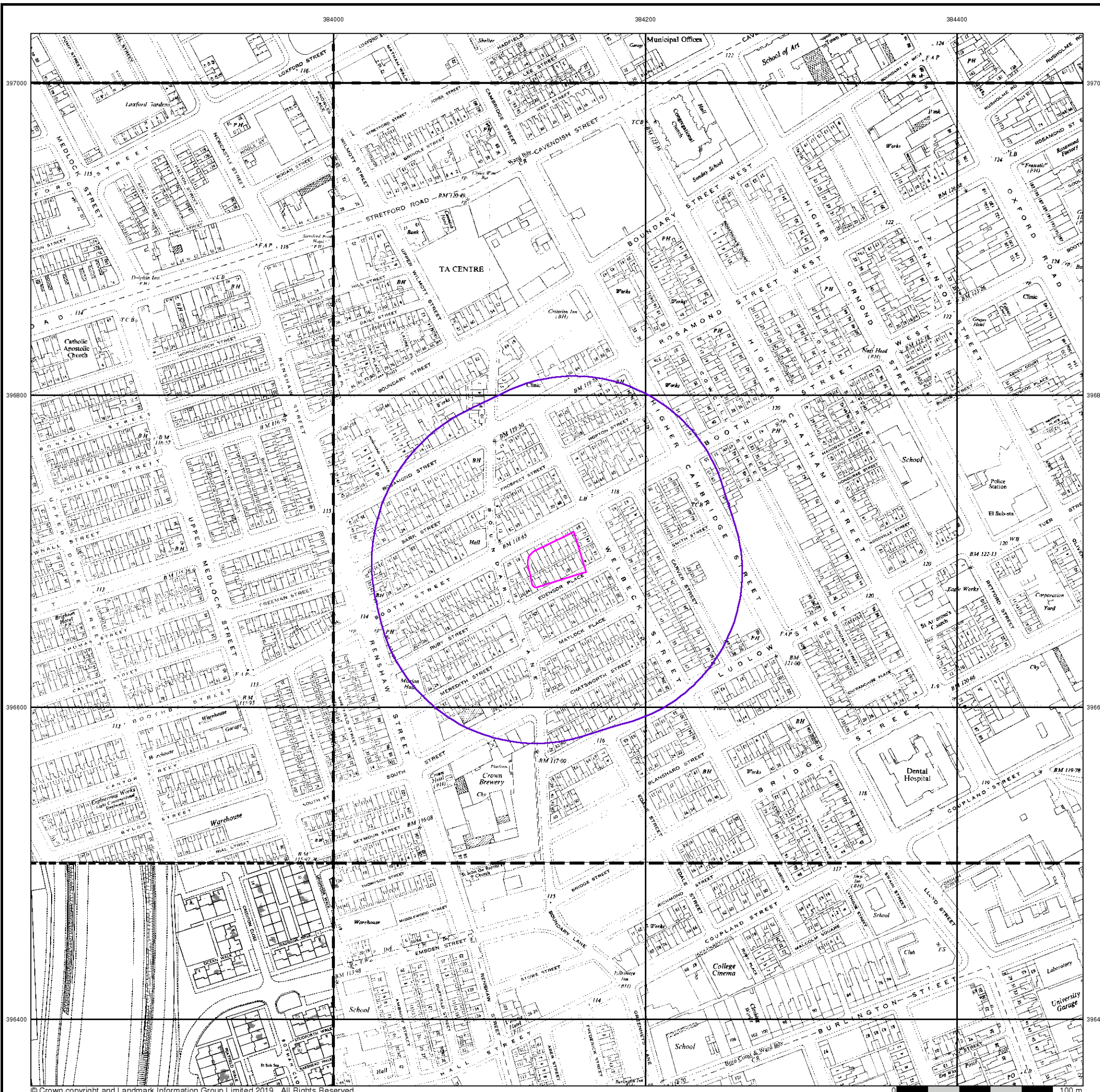
Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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





TWEEDIE EVANS CONSULTING
Ordnance Survey Plan

Published 1952 - 1978

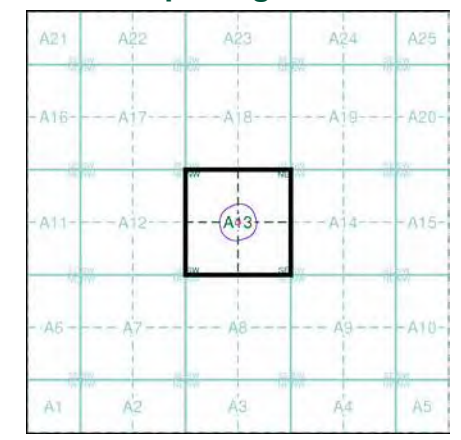
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SJ8397SE	SJ8497SW
1954	1954
1:1,250	1:1,250
SJ8396NE	SJ8496NW
1956	1952
1:1,250	1:1,250
SJ8396SE	SJ8496SW
1978	1952
1:1,250	1:1,250

Historical Map - Segment A13



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TWEEDIE EVANS CONSULTING

Ordnance Survey Plan

Published 1955 - 1963

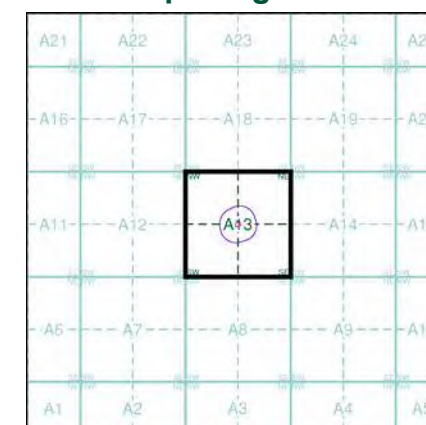
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

SJ8397 1956 12,500	SJ8497 1955 12,500
	SJ8496 1963 12,500

Historical Map - Segment A13



Order Details

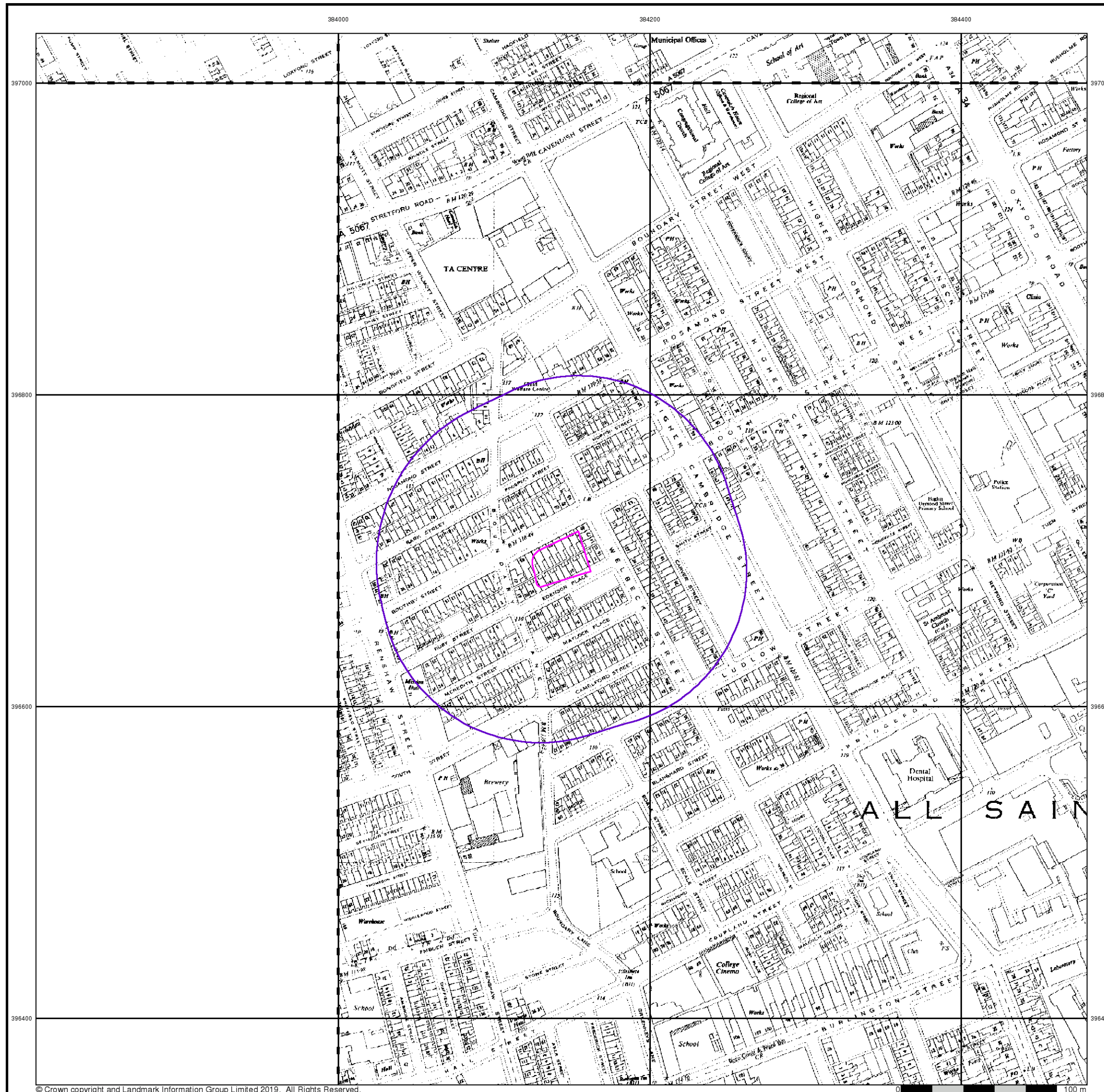
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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





TWEEDIE EVANS CONSULTING

Ordnance Survey Plan

Published 1961 - 1973

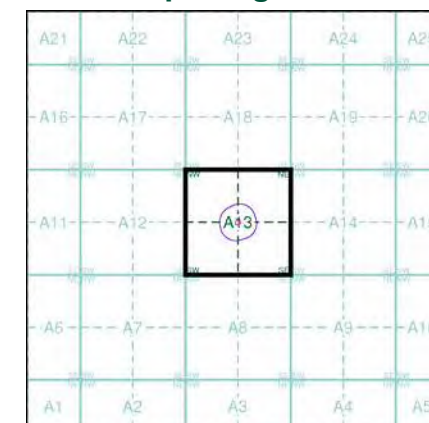
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SJ8397SE	SJ8497SW
1969	1962
1:1,250	1:1,250
SJ8396NE	SJ8496NW
1973	1961
1:1,250	1:1,250
	SJ8496SW
	1964
	1:1,250

Historical Map - Segment A13



Order Details

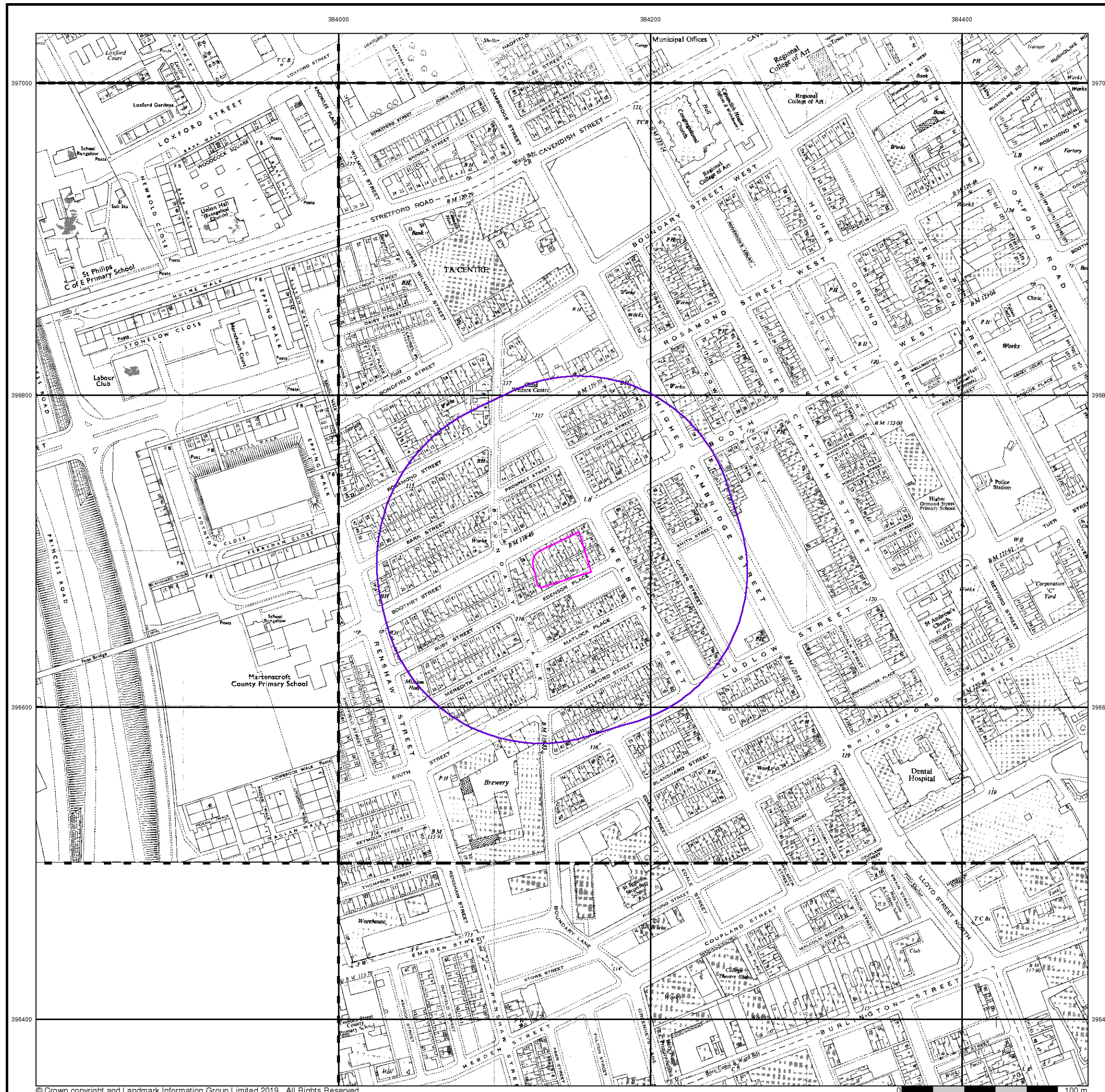
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

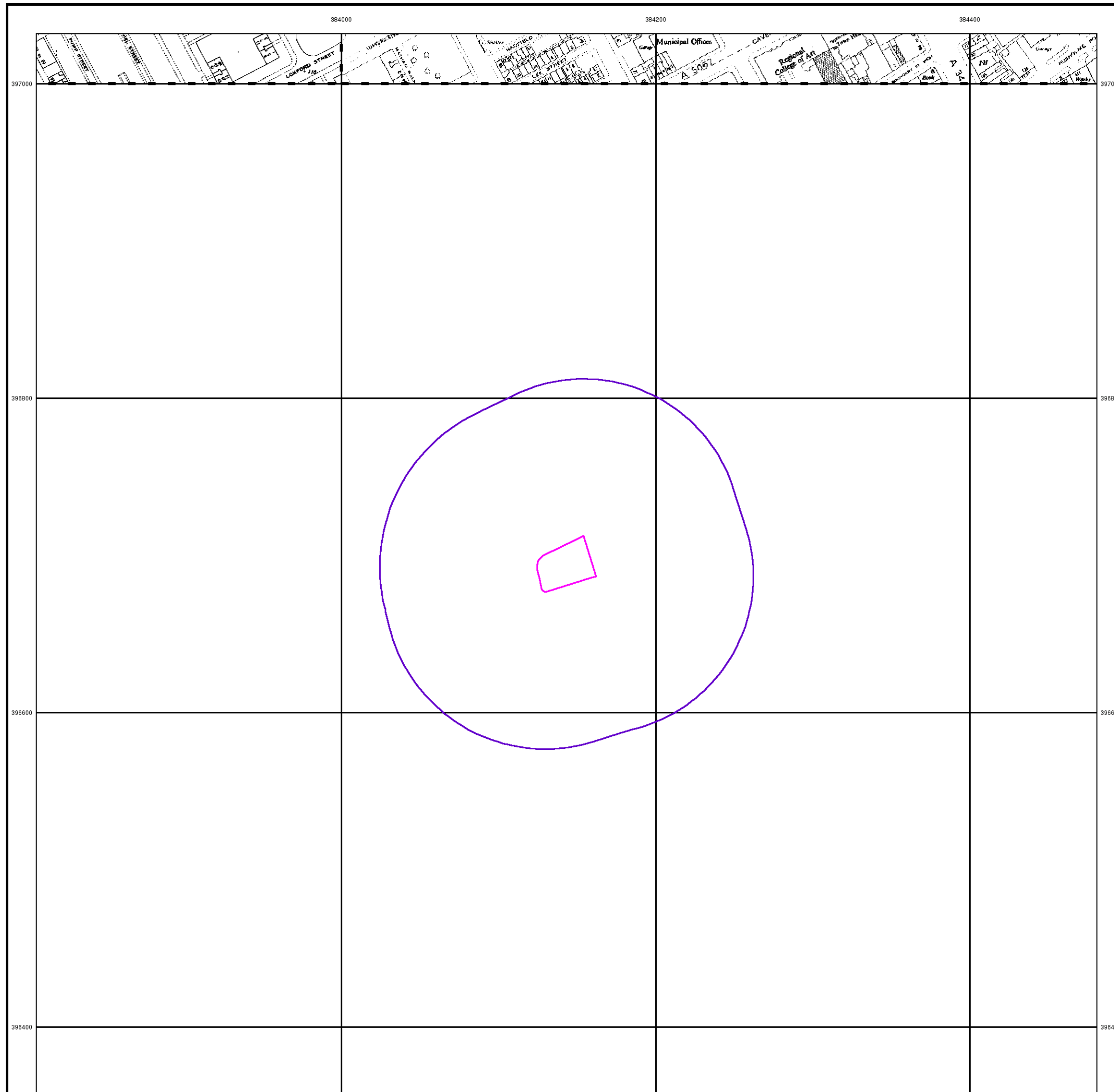
Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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





TWEEDIE EVANS CONSULTING
Ordnance Survey Plan

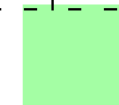
Published 1965

Source map scale - 1:2,500

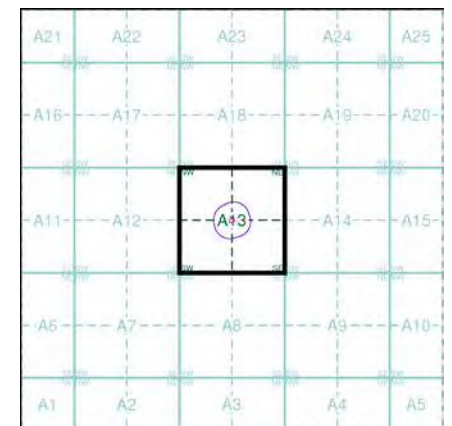
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain.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

Map Name(s) and Date(s)

SJ8397 1965 1:2,500	SJ8497 1965 1:2,500
---------------------------	---------------------------



Historical Map - Segment A13



Order Details

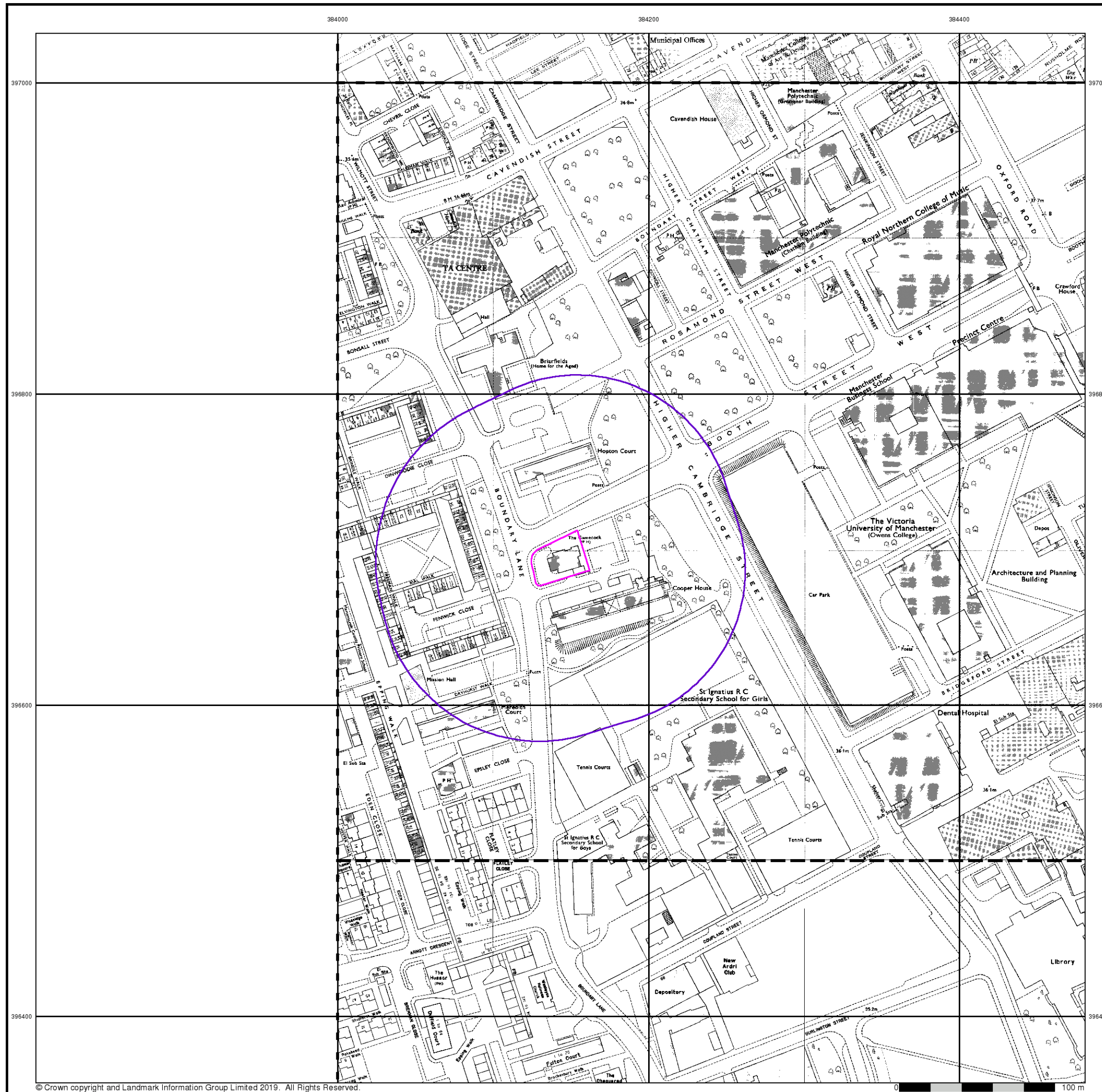
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TWEEDIE EVANS CONSULTING Ordnance Survey Plan

Published 1969 - 1985

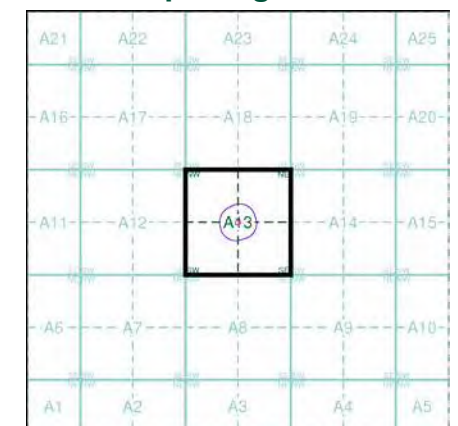
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SJ8497SW
1969
1:1,250
SJ8496NW
1976
1:1,250
SJ8496SW
1985
1:1,250

Historical Map - Segment A13



Order Details

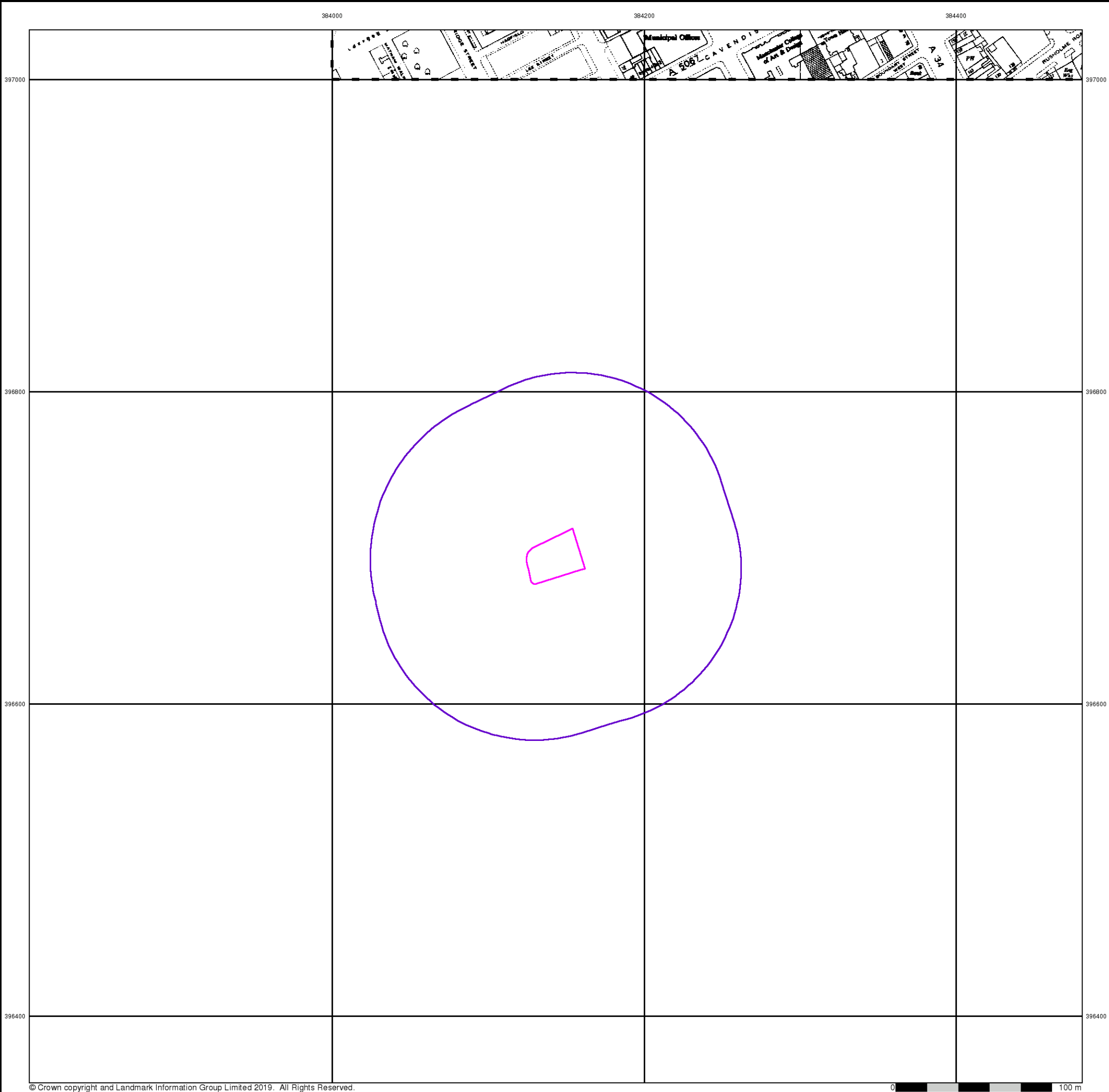
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



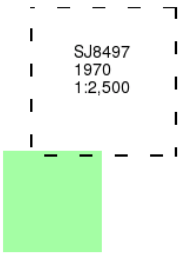
TWEEDIE EVANS CONSULTING
Ordnance Survey Plan

Published 1970

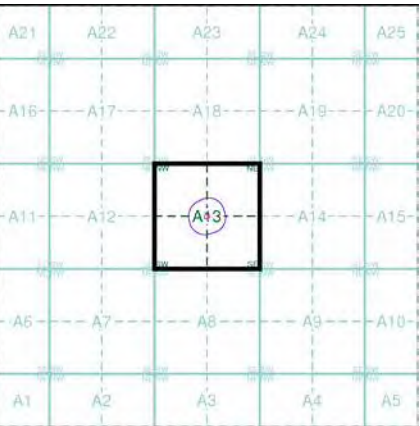
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

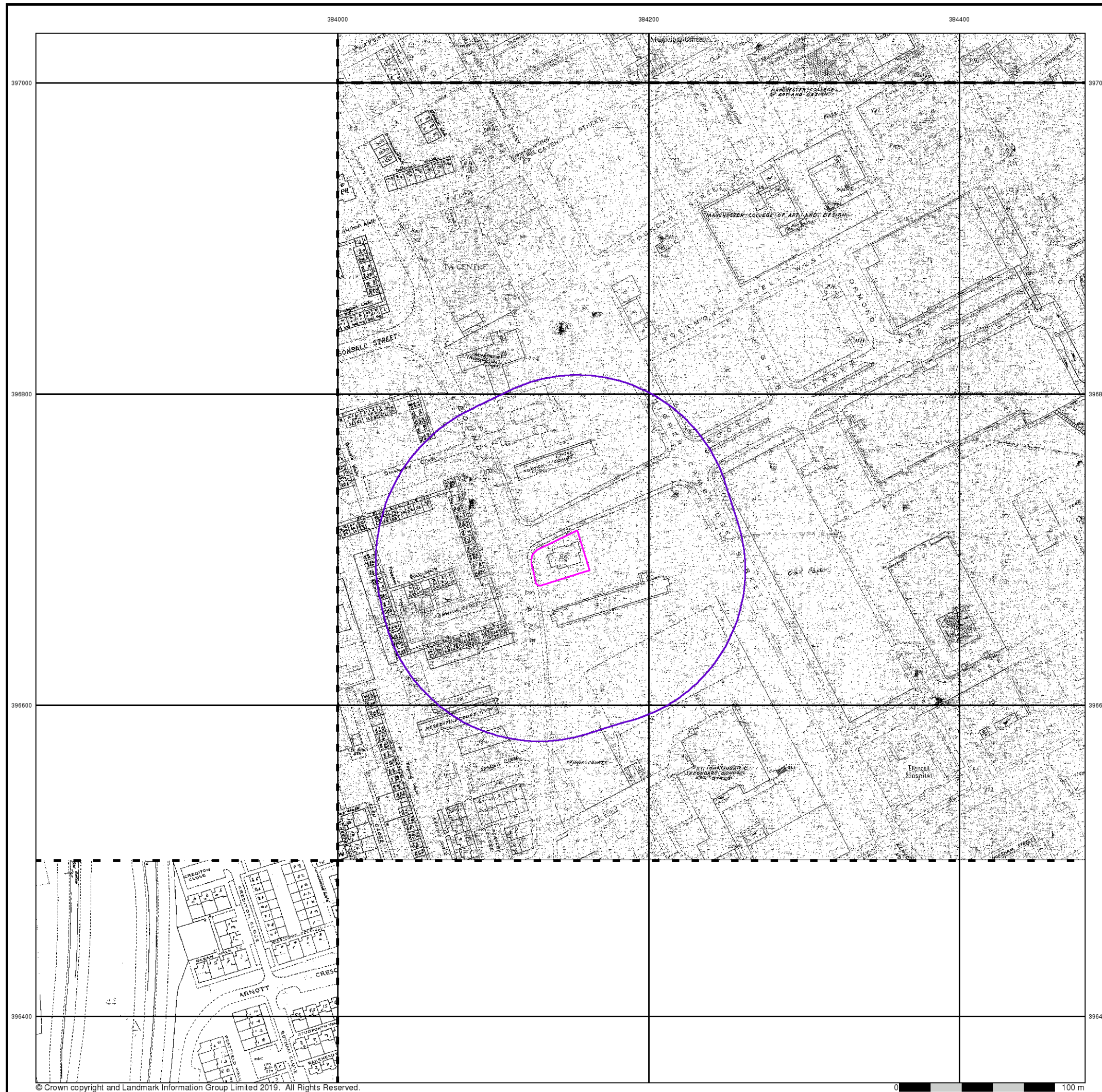
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TWEEDIE EVANS CONSULTING Supply of Unpublished Survey Information

Published 1974 - 1976

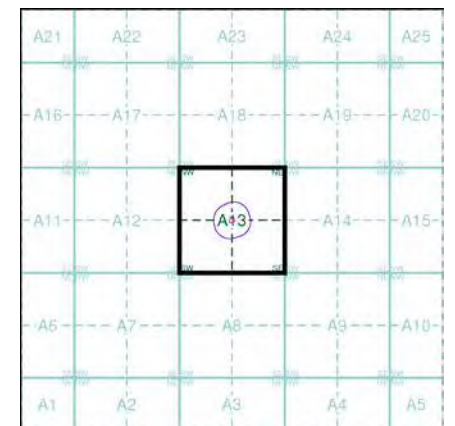
Source map scale - 1:1,250

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a 'work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

BJ8497SW
1975
1:1,250
BJ8496NW
1974
1:1,250
BJ8396SE
1976
1:1,250

Historical Map - Segment A13



Order Details

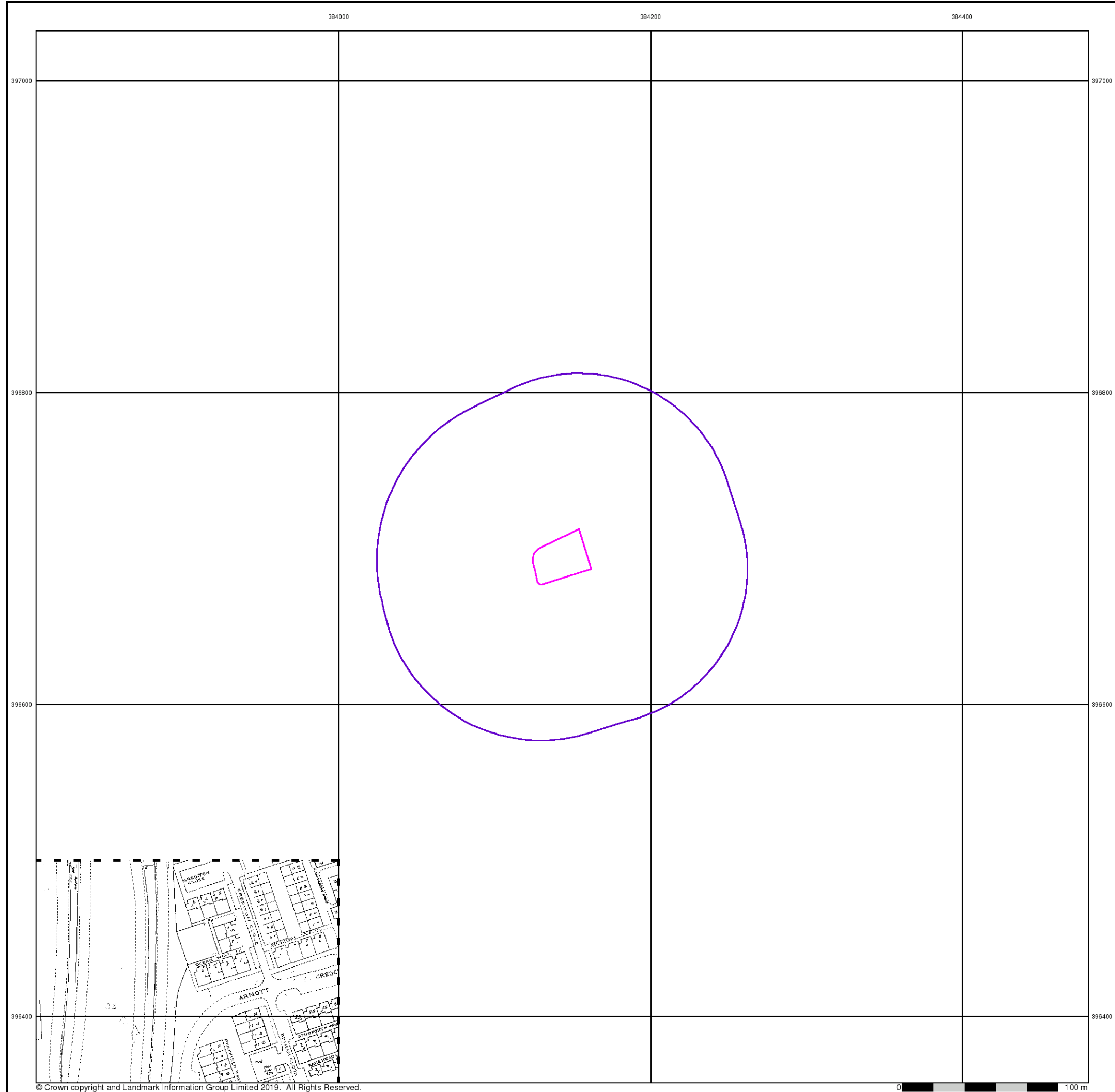
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



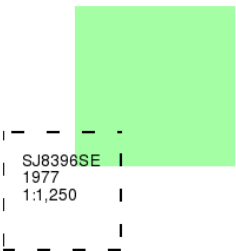
TWEEDIE EVANS CONSULTING
Supply of Unpublished Survey
Information

Published 1977

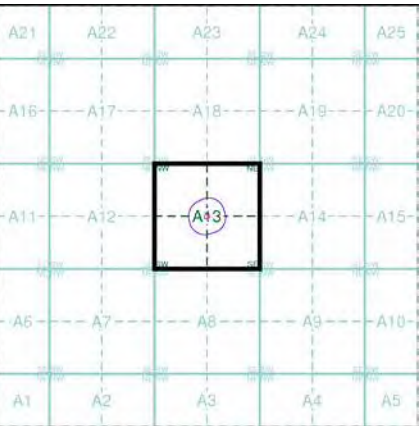
Source map scale - 1:1,250

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a 'work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TWEEDIE EVANS CONSULTING

Additional SIMs

Published 1977 - 1990

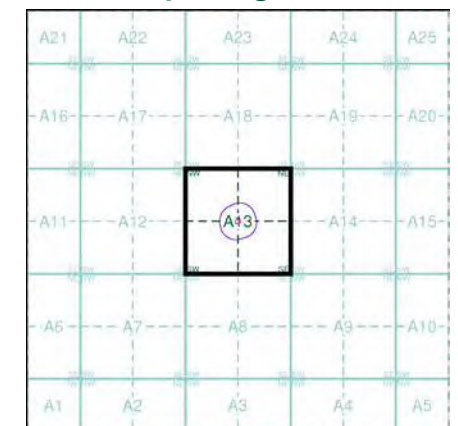
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

6J8397SE	6J8497SW
1980	1978
1:1,250	1:1,250
6J8396NE	6J8496NW
1990	1990
1:1,250	1:1,250
6J8396SE	6J8496SW
1977	1977
1:1,250	1:1,250

Historical Map - Segment A13



Order Details

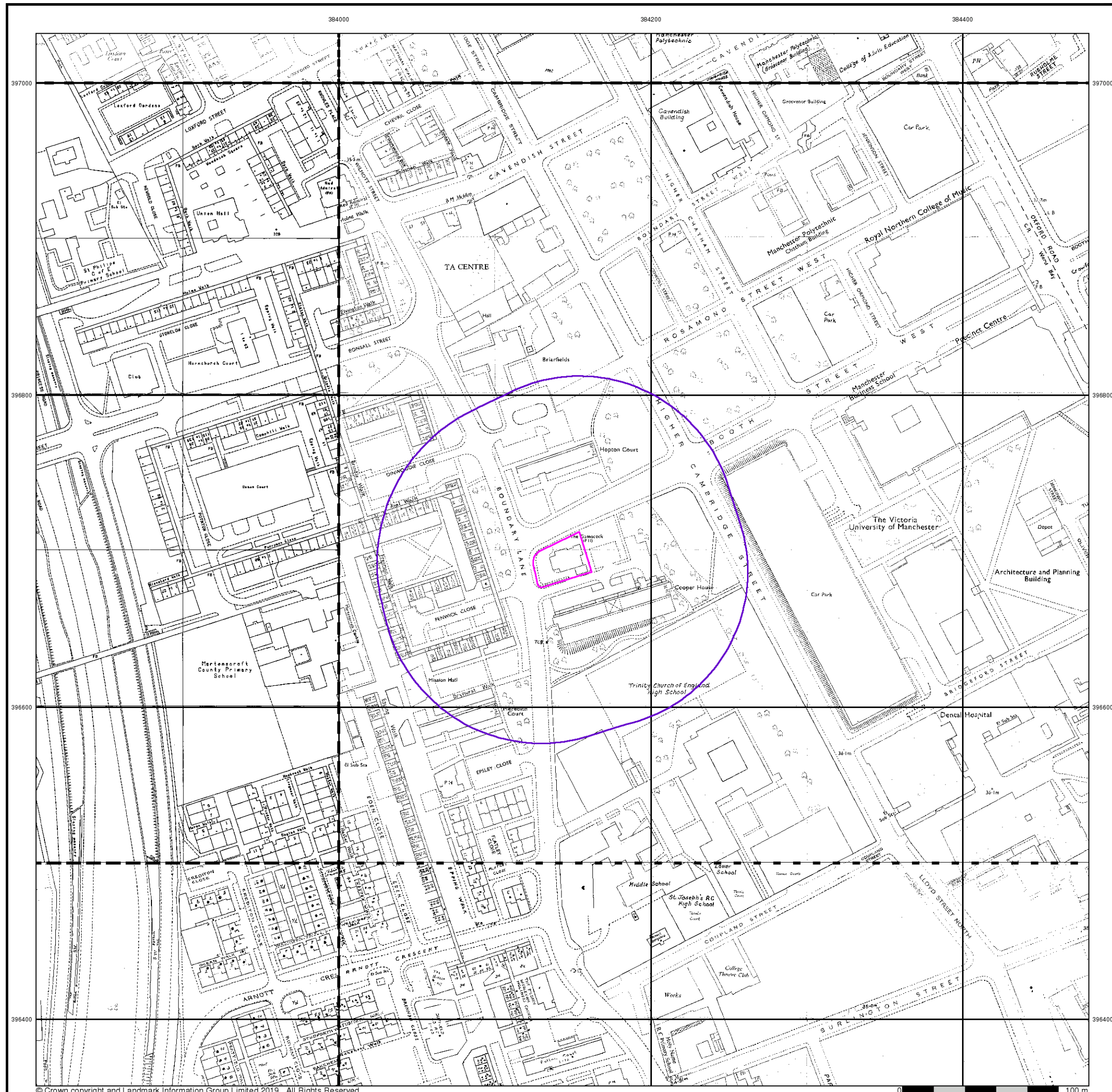
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

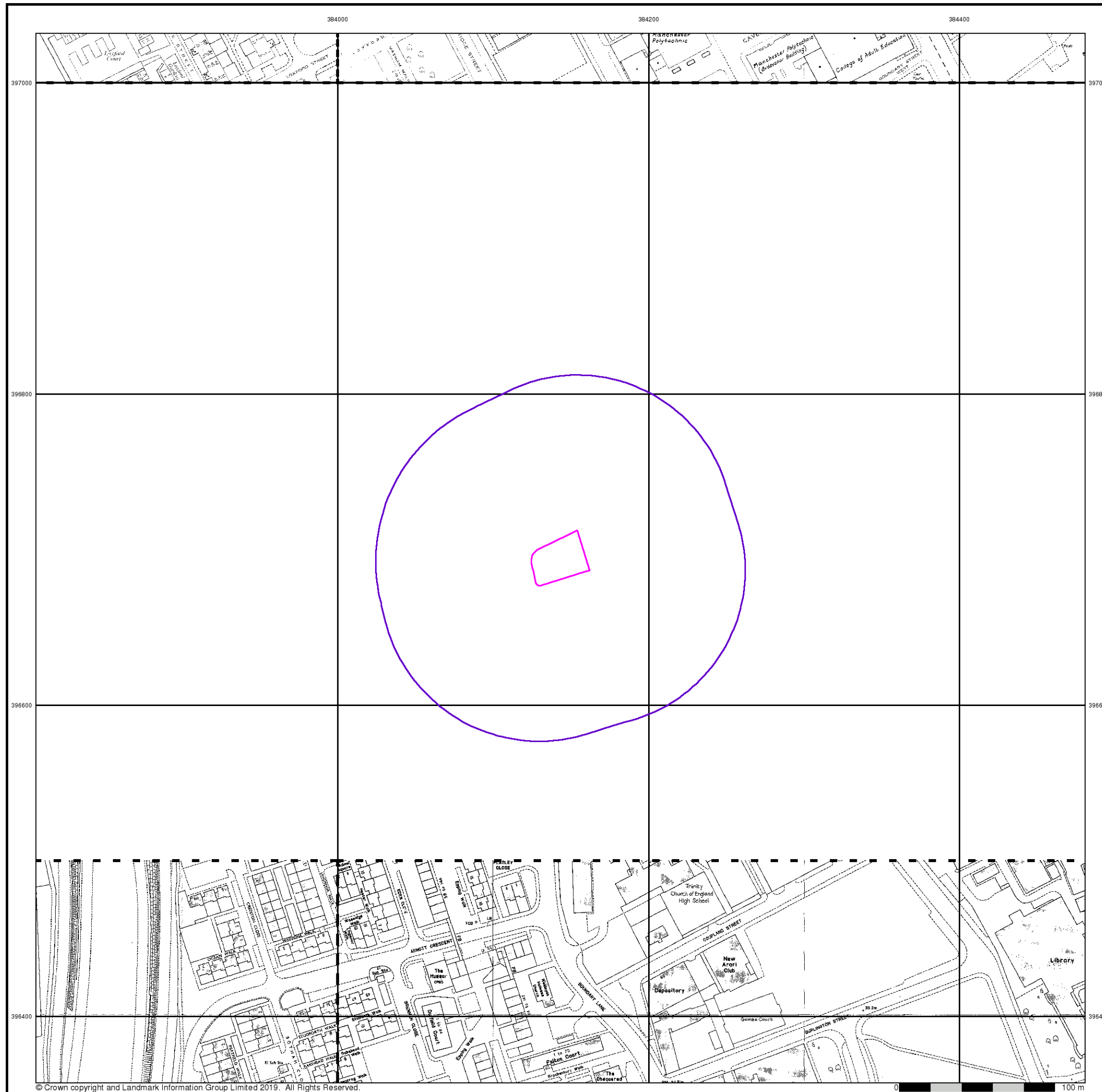
Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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





TWEEDIE EVANS CONSULTING

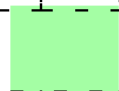
Additional SIMs

Published 1984 - 1985

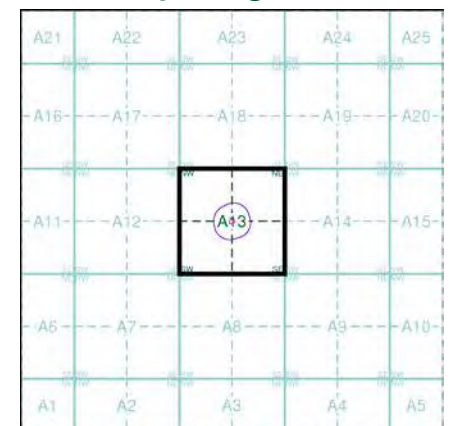
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

5J8397SE	5J8497SW
1985	1985
1:1,250	1:1,250
	
5J8396SE	5J8496SW
1984	1985
1:1,250	1:1,250

Historical Map - Segment A13



Order Details

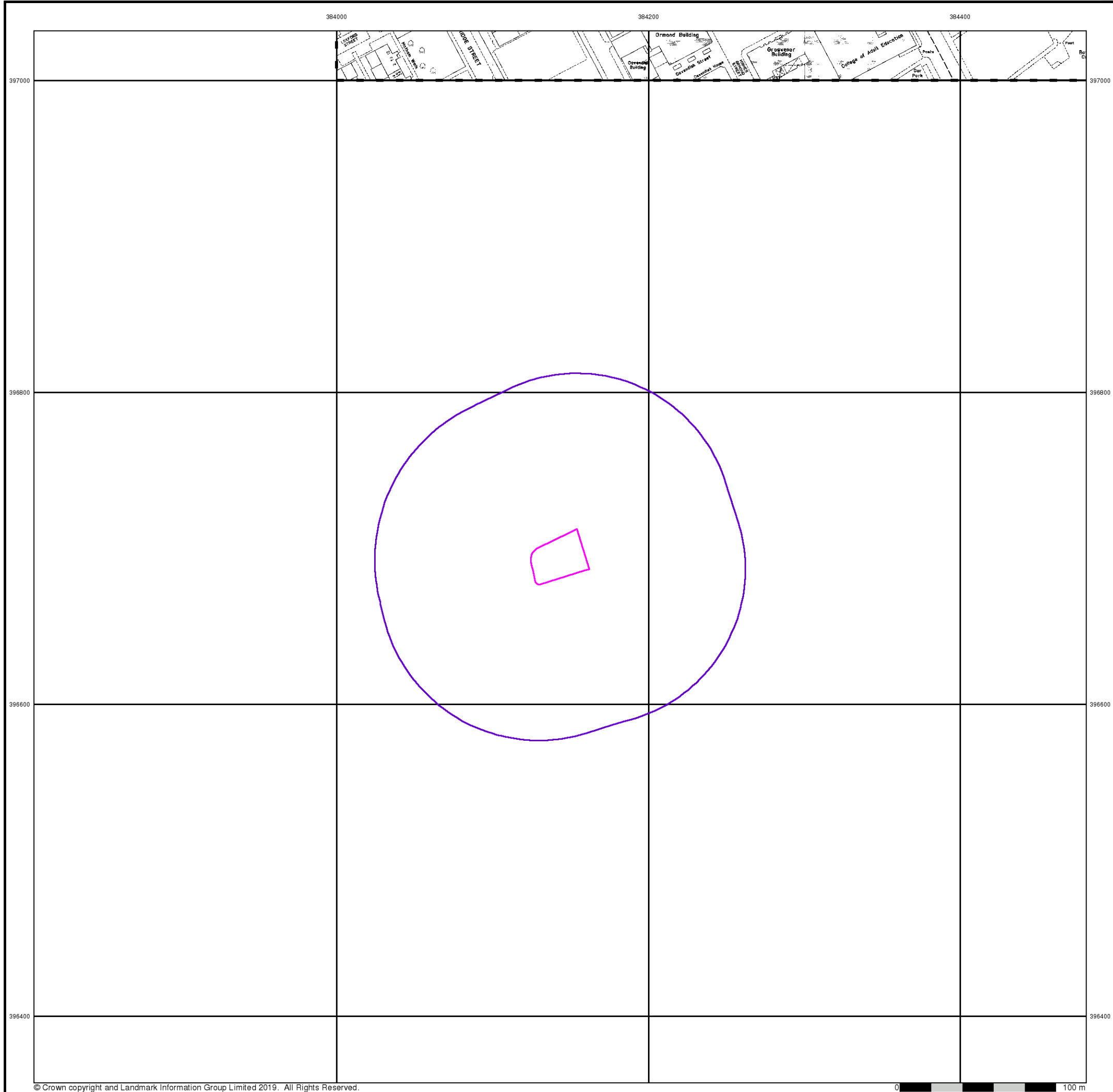
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



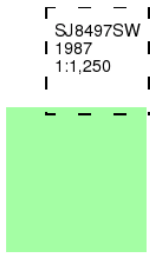
TWEEDIE EVANS CONSULTING
Ordnance Survey Plan

Published 1987

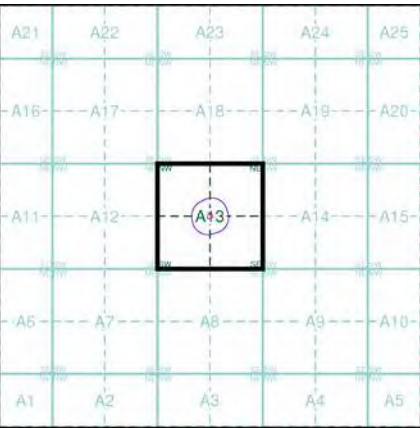
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

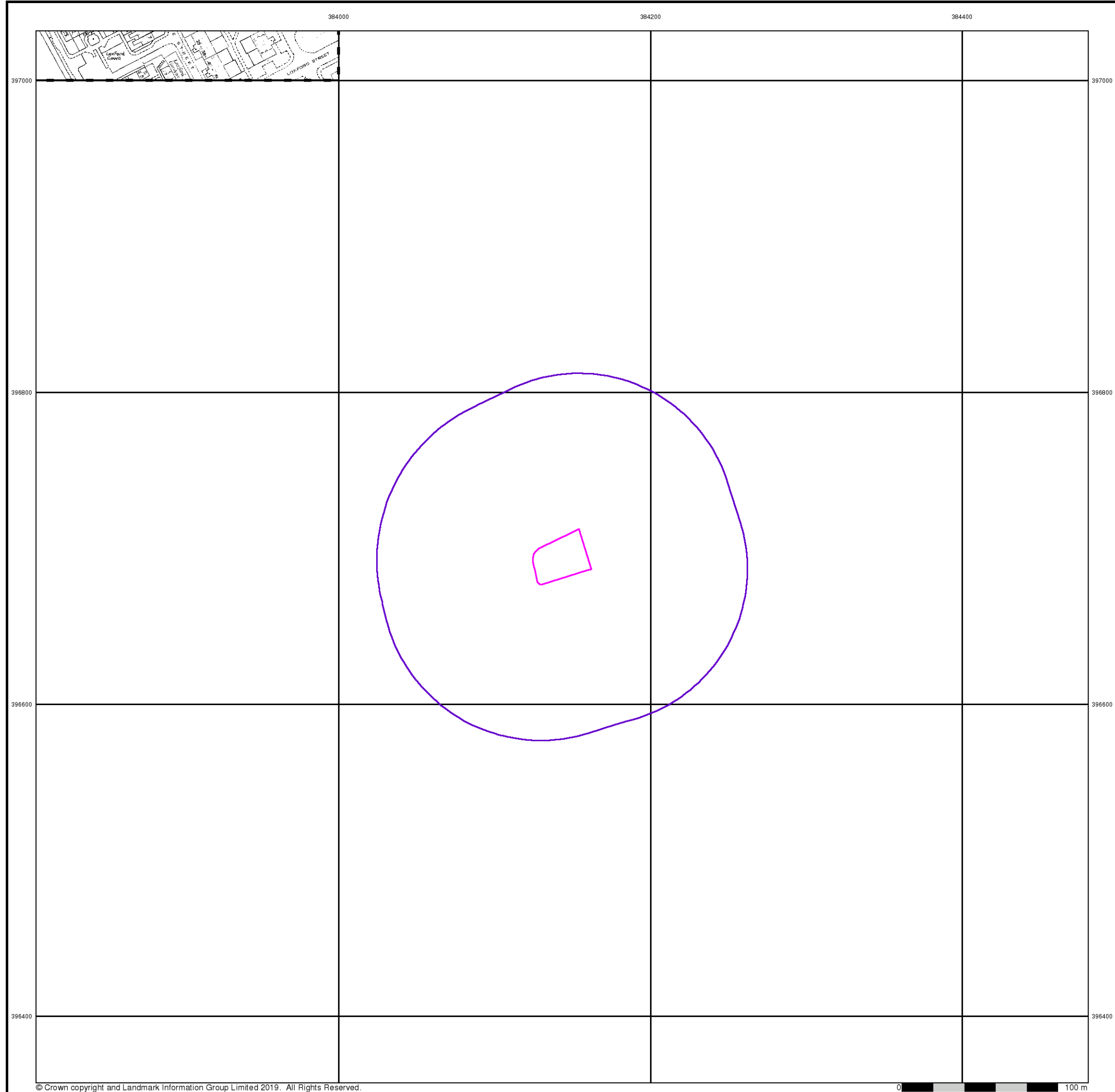
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TWEEDIE EVANS CONSULTING

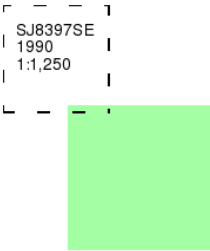
Additional SIMs

Published 1990

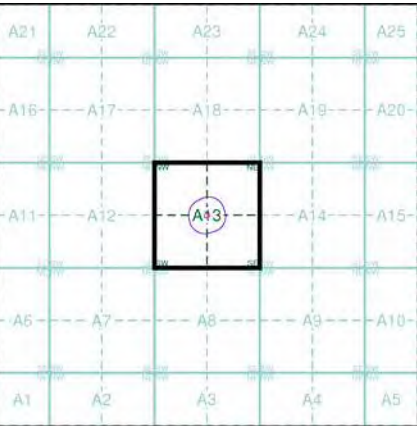
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TWEEDIE EVANS CONSULTING Large-Scale National Grid Data

Published 1992

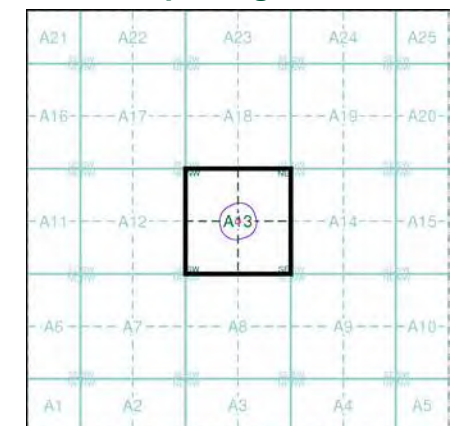
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SJ8397SE	SJ8497SW
1992	1992
1:1,250	1:1,250
SJ8396NE	SJ8496NW
1992	1992
1:1,250	1:1,250
SJ8396SE	SJ8496SW
1992	1992
1:1,250	1:1,250

Historical Map - Segment A13



Order Details

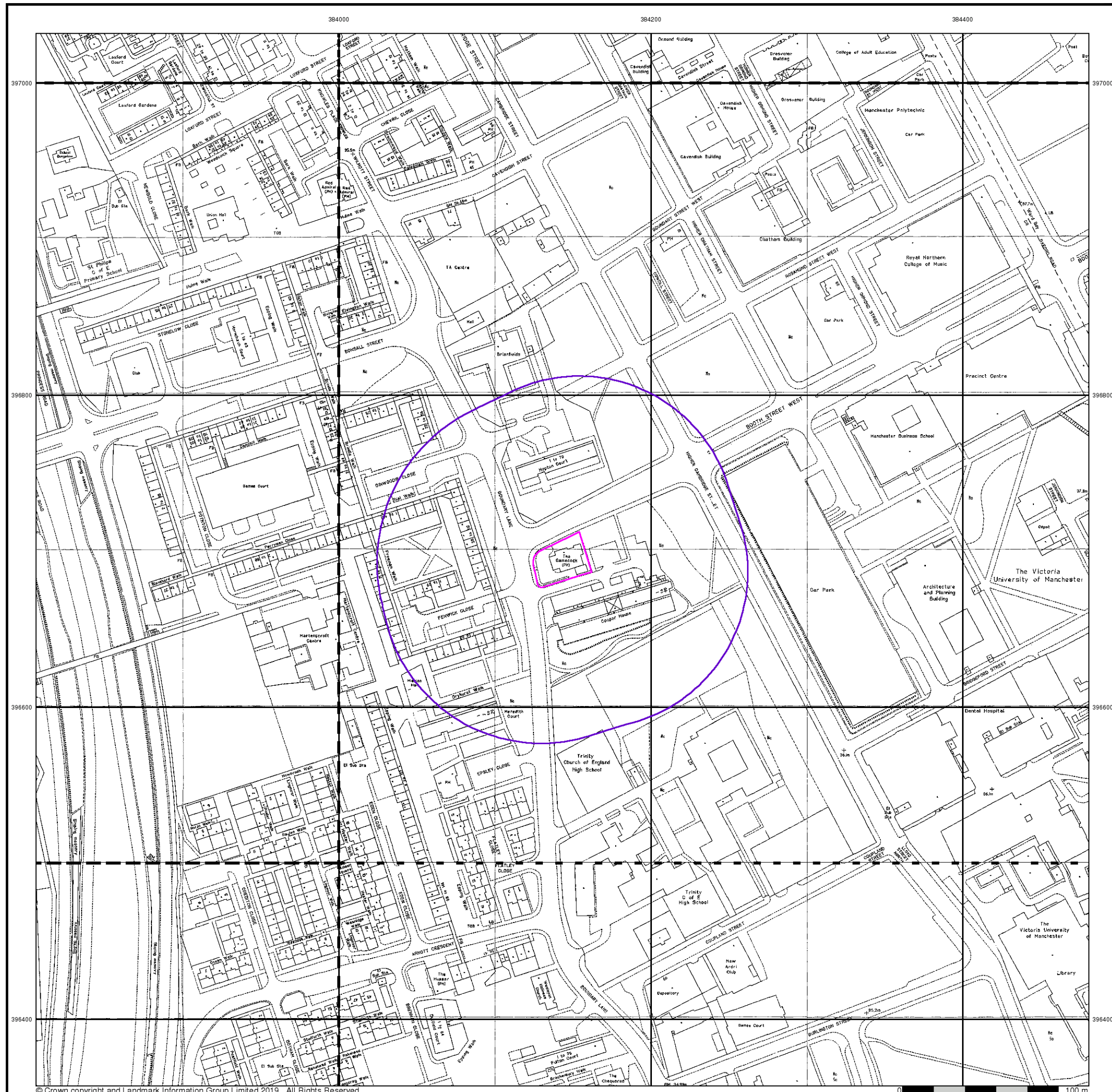
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

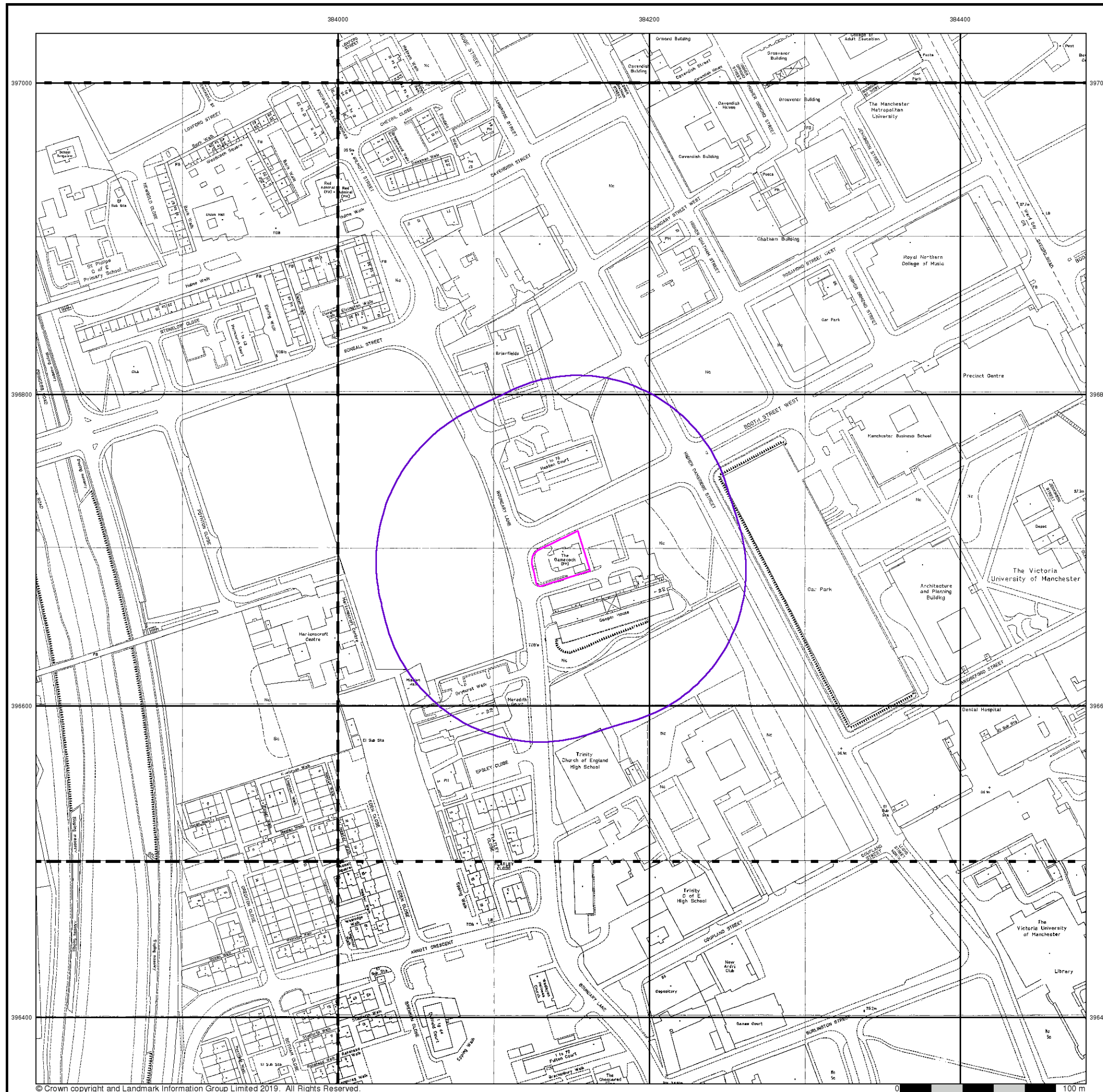
Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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





© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.



TWEEDIE EVANS CONSULTING Large-Scale National Grid Data

Published 1993 - 1995

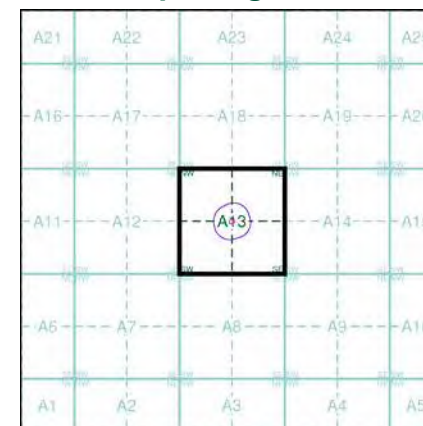
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

6J8497SW	1995	1:1,250
6J8396NE	1995	1:1,250
6J8496NW	1995	1:1,250
6J8396SE	1993	1:1,250
6J8496SW	1993	1:1,250

Historical Map - Segment A13



Order Details

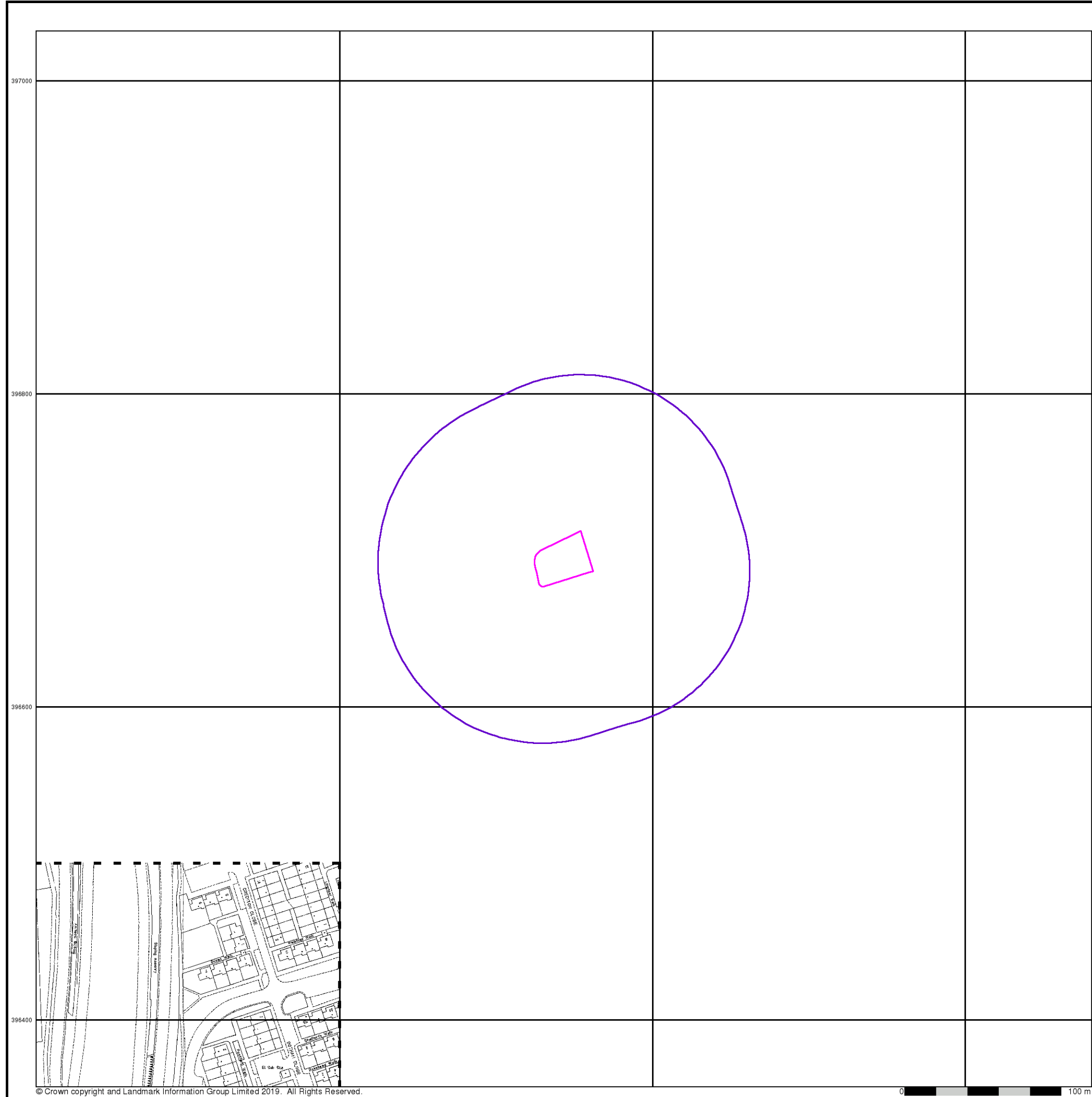
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



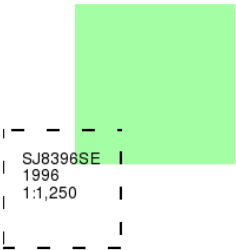
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



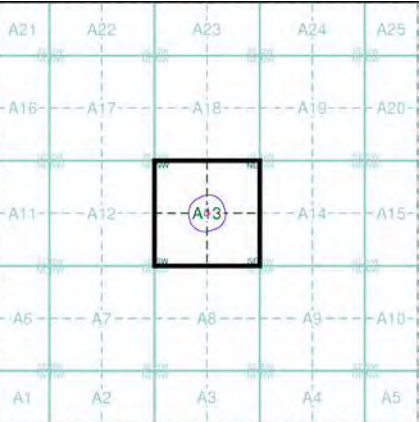
TWEEDIE EVANS CONSULTING
Large-Scale National Grid Data
Published 1996
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details
, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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

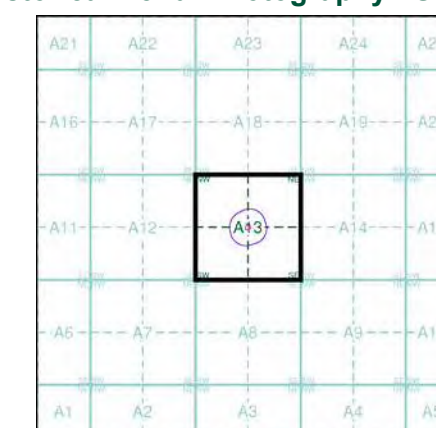


TWEEDIE EVANS CONSULTING
Historical Aerial Photography

Published 2000

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

Historical Aerial Photography - Segment A13



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

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

Ordnance Survey Plan 1:10,000

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

1:10,000 Raster Mapping

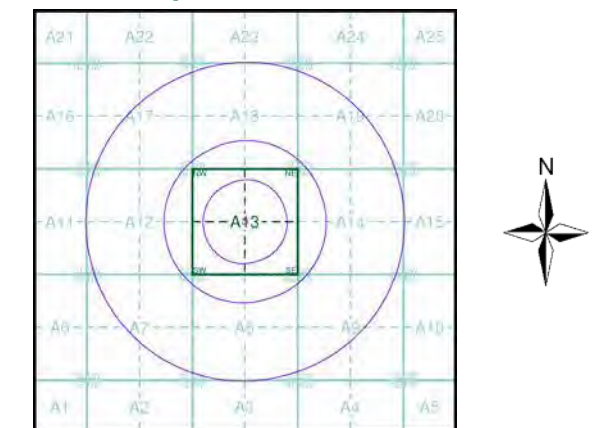
	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil,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



TWEEDIE EVANS CONSULTING
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1848	3
Cheshire	1:10,560	1882	4
Lancashire And Furness	1:10,560	1894 - 1896	5
Cheshire	1:10,560	1899	6
Lancashire And Furness	1:10,560	1909	7
Cheshire	1:10,560	1911	8
Lancashire And Furness	1:10,560	1923	9
Lancashire And Furness	1:10,560	1932 - 1933	10
Cheshire	1:10,560	1938	11
Lancashire And Furness	1:10,560	1938	12
Ordnance Survey Plan	1:10,000	1956	13
Ordnance Survey Plan	1:10,000	1968	14
Ordnance Survey Plan	1:10,000	1972	15
Manchester	1:25,000	1975	16
Ordnance Survey Plan	1:10,000	1980 - 1981	17
Ordnance Survey Plan	1:10,000	1985 - 1987	18
Ordnance Survey Plan	1:10,000	1989	19
Ordnance Survey Plan	1:10,000	1993 - 1994	20
10K Raster Mapping	1:10,000	1999	21
10K Raster Mapping	1:10,000	2006	22
VectorMap Local	1:10,000	2019	23

Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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

Russian Military Mapping Legends

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



243.8 Values for prominent elevations

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

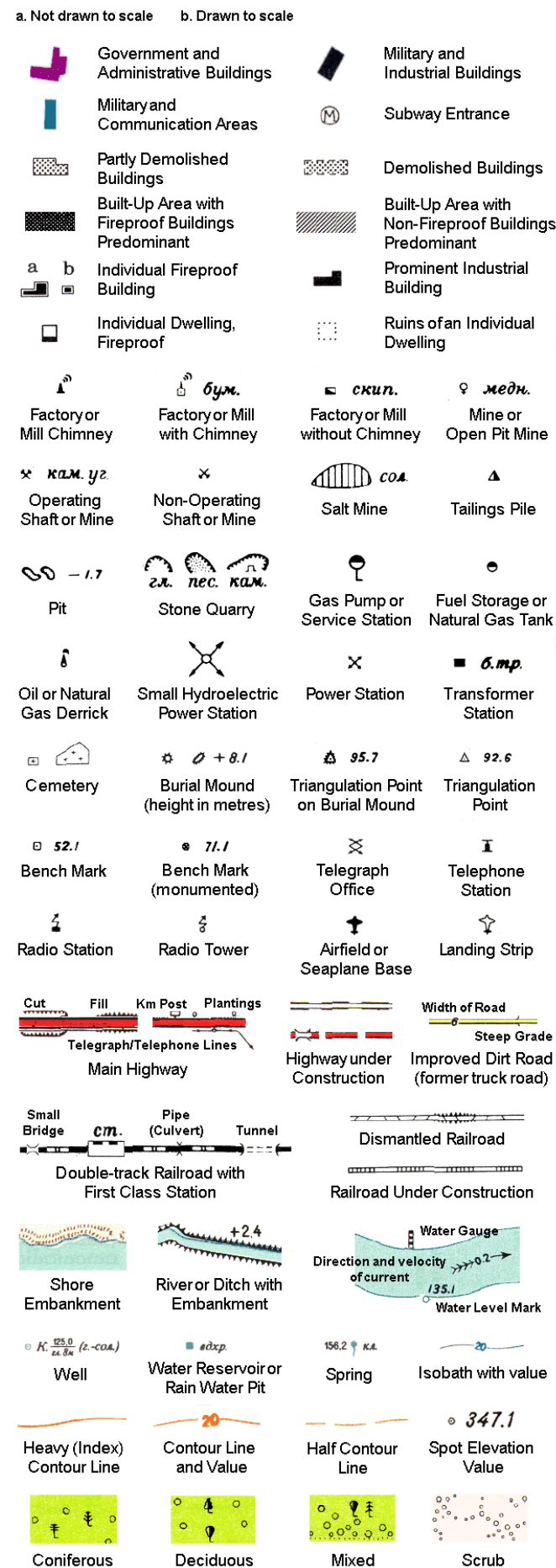
0.2 Velocity of the current, width of river bed, depth of river

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

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

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

1:25,000 mapping



Key to Numbers on Mapping

SJ89_Manchester

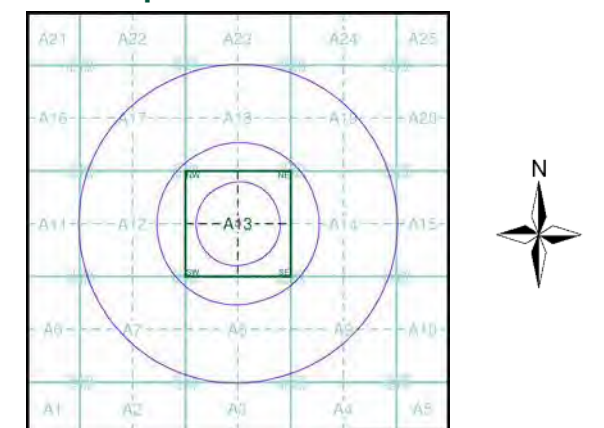
No.	Description
66	Factory (Gas)
217	Education Establishment (University)

TEC

TWEEDIE EVANS CONSULTING
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1848	3
Cheshire	1:10,560	1882	4
Lancashire And Furness	1:10,560	1894 - 1896	5
Cheshire	1:10,560	1899	6
Lancashire And Furness	1:10,560	1909	7
Cheshire	1:10,560	1911	8
Lancashire And Furness	1:10,560	1923	9
Lancashire And Furness	1:10,560	1932 - 1933	10
Cheshire	1:10,560	1938	11
Lancashire And Furness	1:10,560	1938	12
Ordnance Survey Plan	1:10,000	1956	13
Ordnance Survey Plan	1:10,000	1968	14
Ordnance Survey Plan	1:10,000	1972	15
Manchester	1:25,000	1975	16
Ordnance Survey Plan	1:10,000	1980 - 1981	17
Ordnance Survey Plan	1:10,000	1985 - 1987	18
Ordnance Survey Plan	1:10,000	1989	19
Ordnance Survey Plan	1:10,000	1993 - 1994	20
10K Raster Mapping	1:10,000	1999	21
10K Raster Mapping	1:10,000	2006	22
VectorMap Local	1:10,000	2019	23

Russian Map - Slice A



Order Details

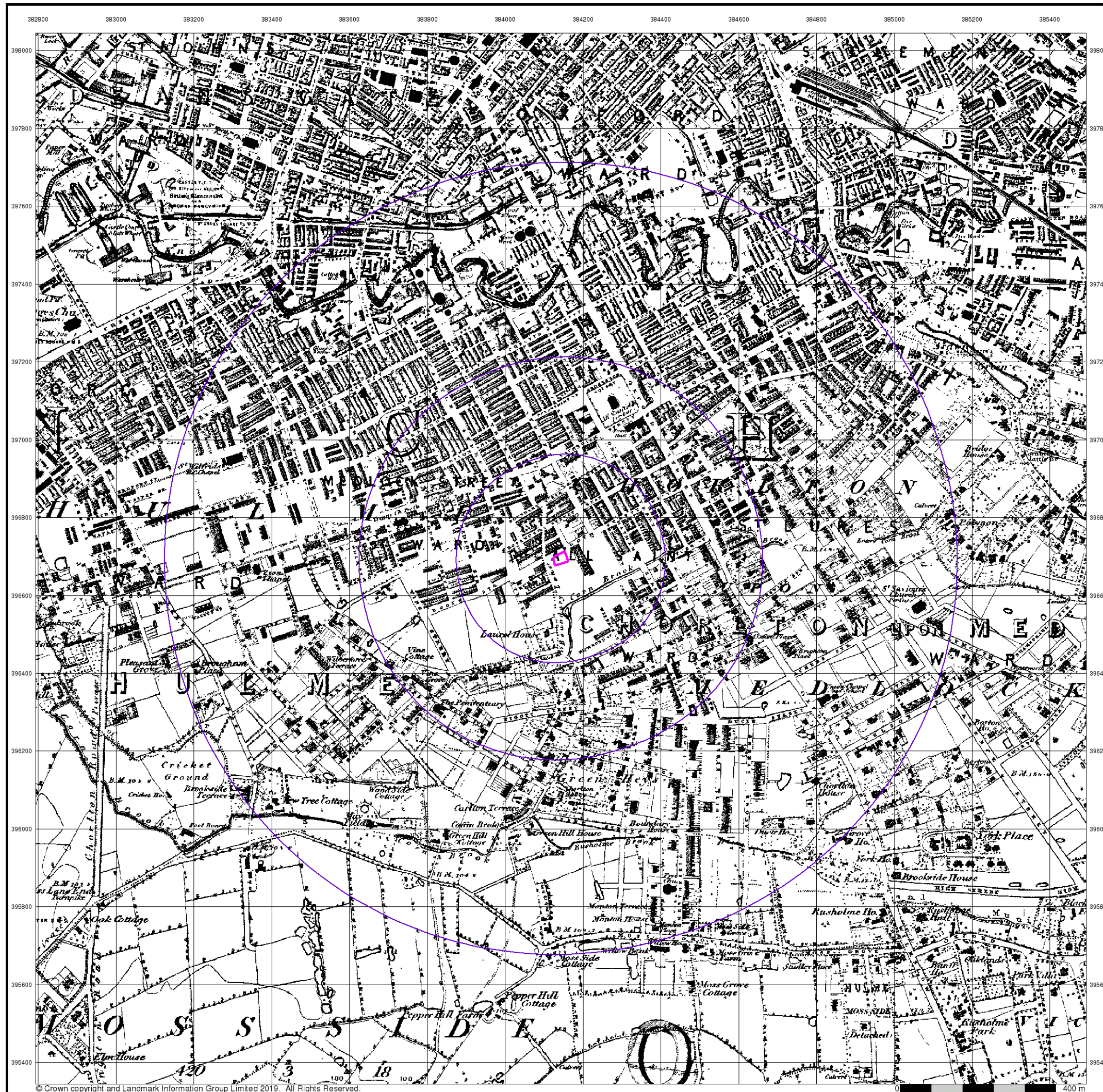
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



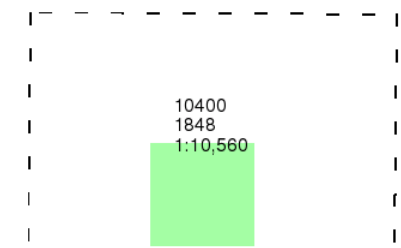
TWEEDIE EVANS CONSULTING
Lancashire And Furness

Published 1848

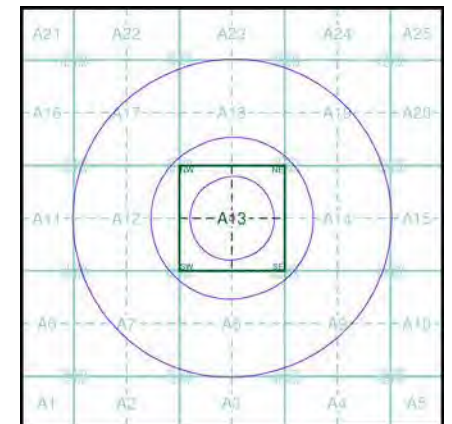
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



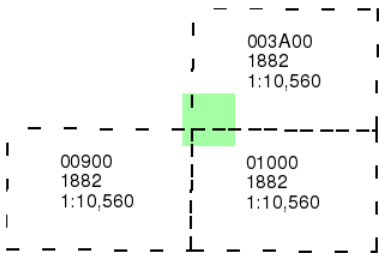
TWEEDIE EVANS CONSULTING
Cheshire

Published 1882

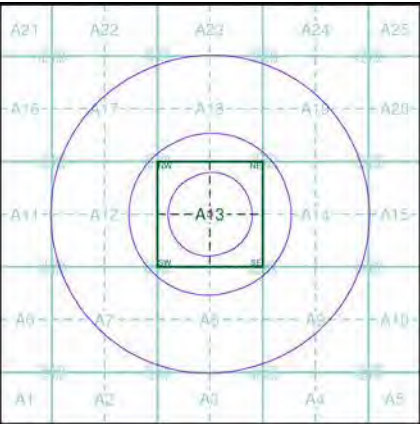
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



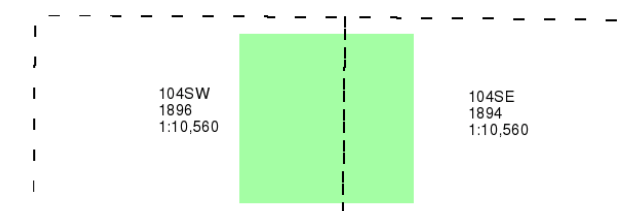
TWEEDIE EVANS CONSULTING
Lancashire And Furness

Published 1894 - 1896

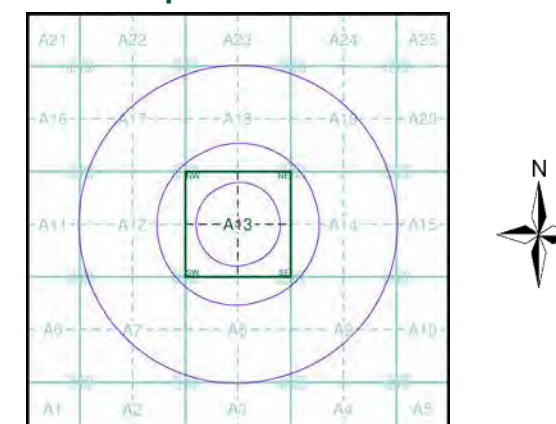
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

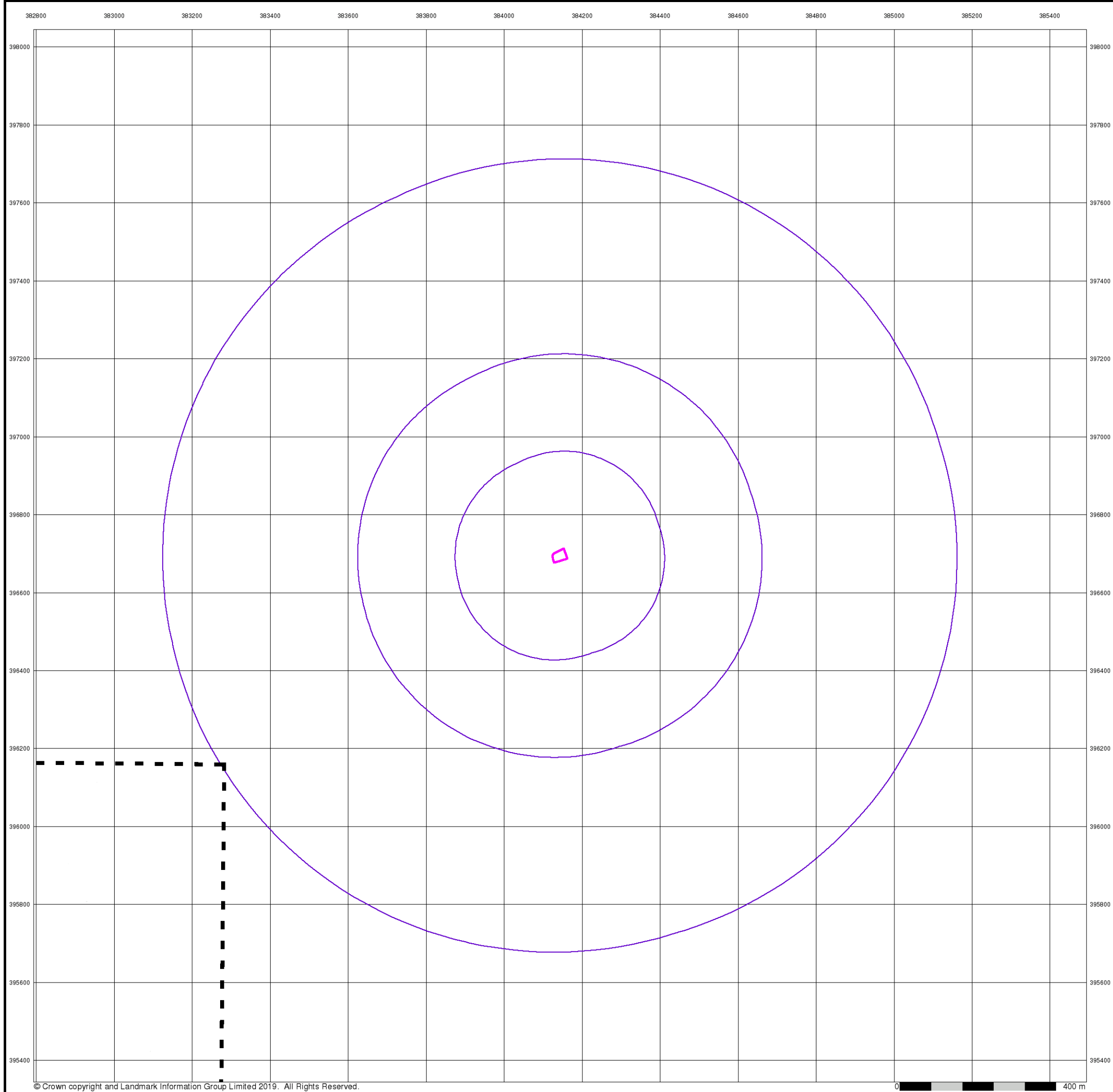
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



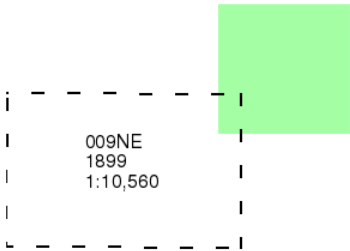
TWEEDIE EVANS CONSULTING
Cheshire

Published 1899

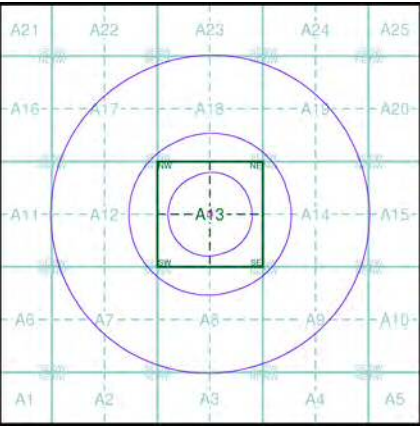
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



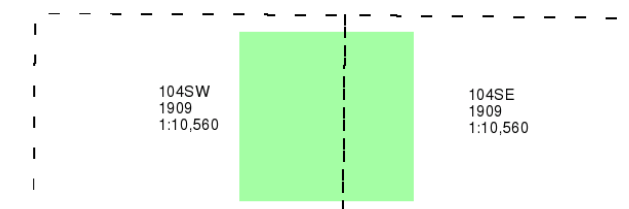
TWEEDIE EVANS CONSULTING
Lancashire And Furness

Published 1909

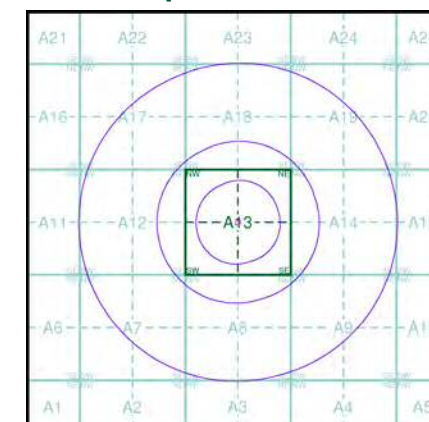
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

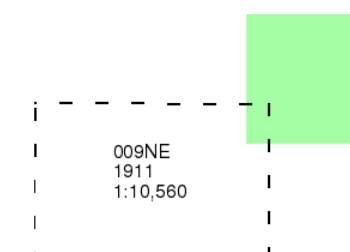
Cheshire

Published 1911

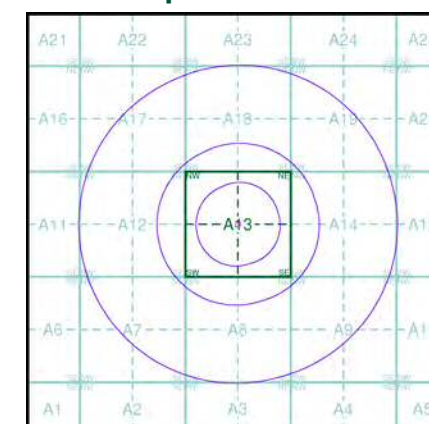
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



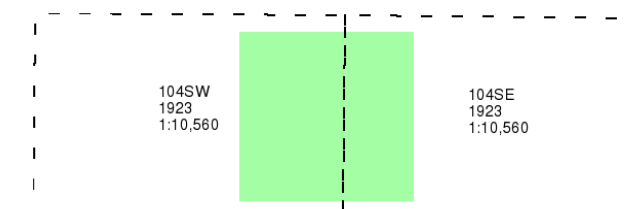
TWEEDIE EVANS CONSULTING
Lancashire And Furness

Published 1923

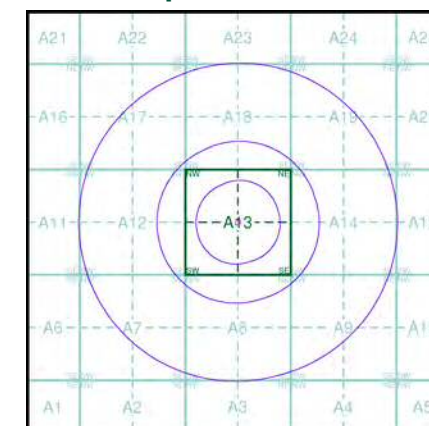
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



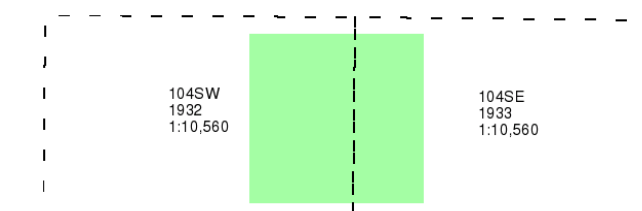
TWEEDIE EVANS CONSULTING
Lancashire And Furness

Published 1932 - 1933

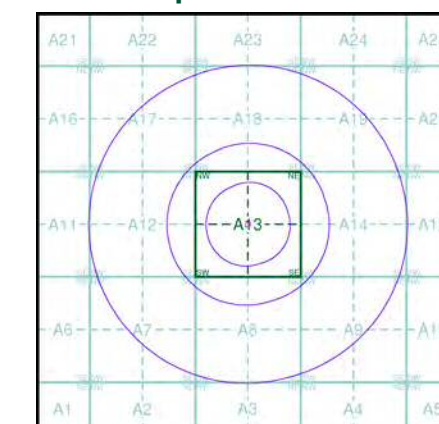
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



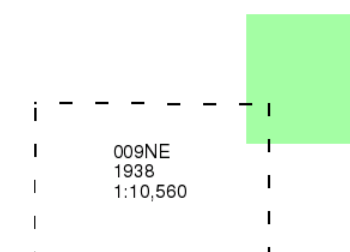
TWEEDIE EVANS CONSULTING
Cheshire

Published 1938

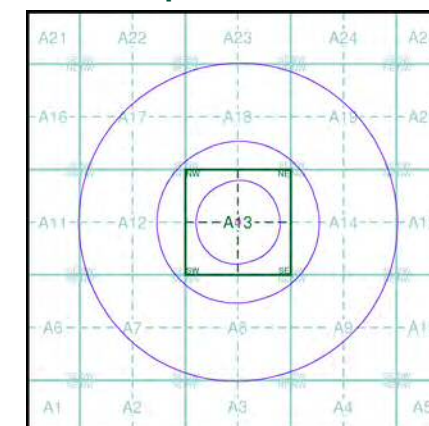
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



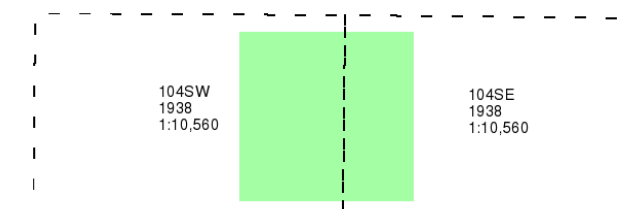
TWEEDIE EVANS CONSULTING
Lancashire And Furness

Published 1938

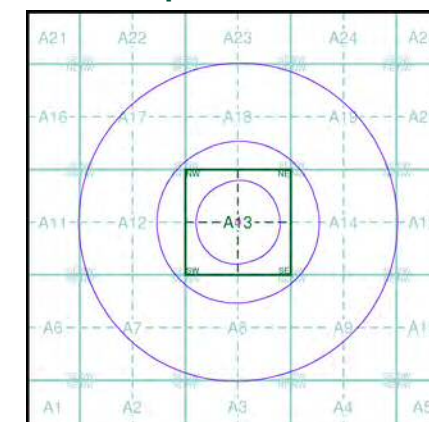
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

Ordnance Survey Plan

Published 1956

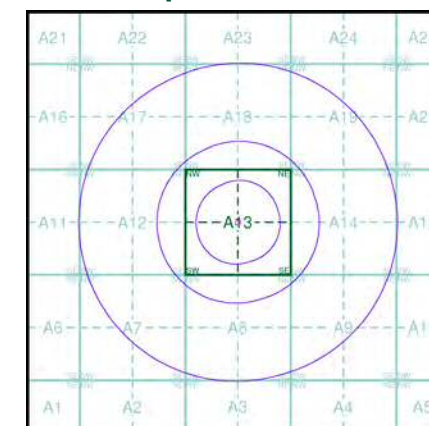
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SJ89NW 1956 1:10,560	SJ89NE 1956 1:10,560
----------------------------	----------------------------

Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

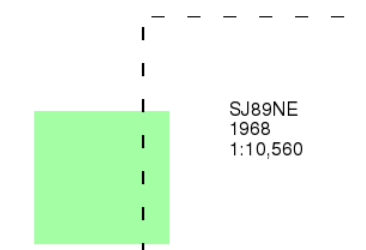
Ordnance Survey Plan

Published 1968

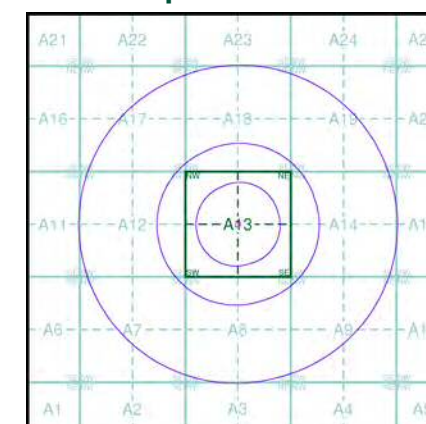
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

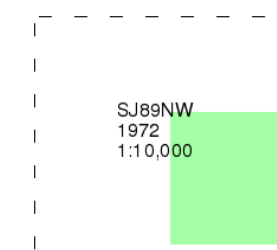
Ordnance Survey Plan

Published 1972

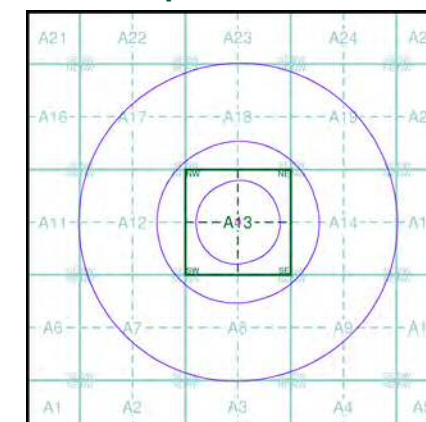
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

Manchester

Published 1975

Source map scale - 1:25,000

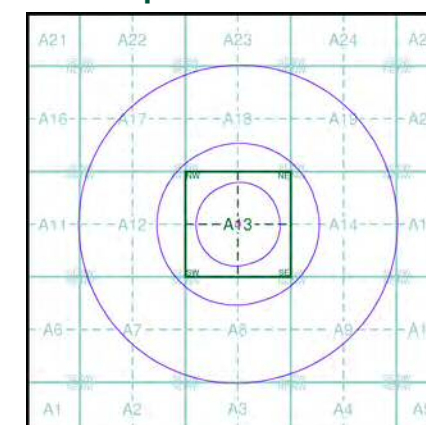
These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.

They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

Map Name(s) and Date(s)

SJ89
1975
1:25,000

Russian Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

Ordnance Survey Plan

Published 1980 - 1981

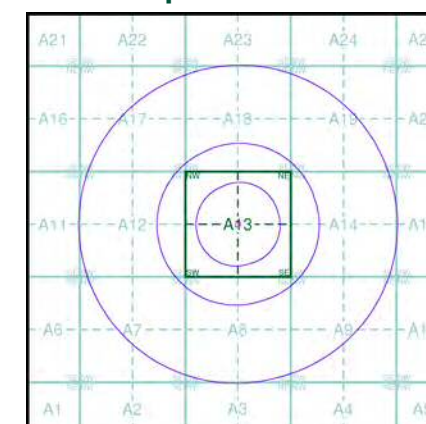
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SJ89NW 1980 1:10,000	SJ89NE 1981 1:10,000
----------------------------	----------------------------

Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

Ordnance Survey Plan

Published 1985 - 1987

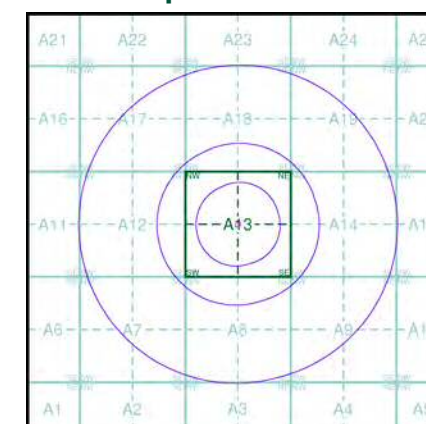
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SJ89NW 1985 1:10,000	SJ89NE 1987 1:10,000
----------------------------	----------------------------

Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

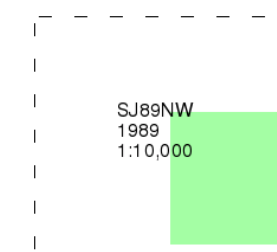
Ordnance Survey Plan

Published 1989

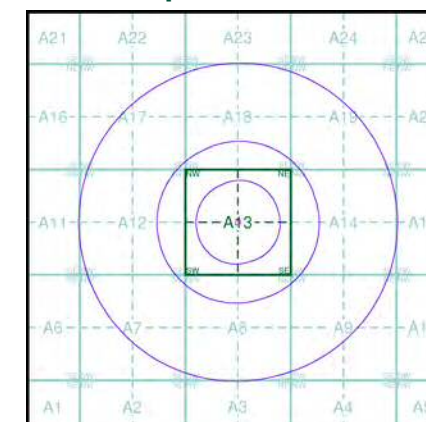
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

Ordnance Survey Plan

Published 1993 - 1994

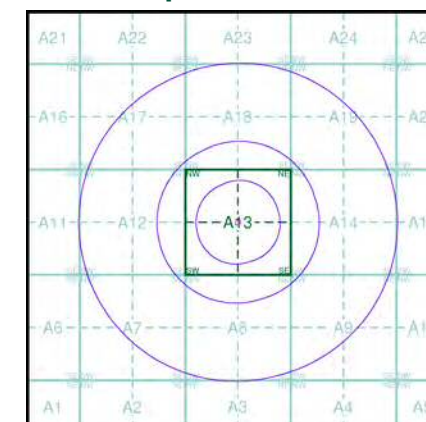
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SJ89NW 1994 1:10,000	SJ89NE 1993 1:10,000
----------------------------	----------------------------

Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

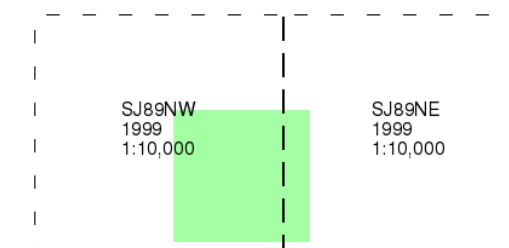
10k Raster Mapping

Published 1999

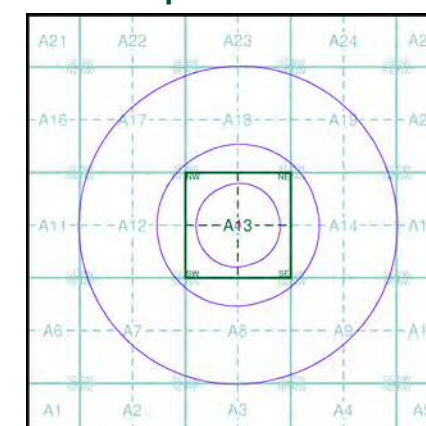
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

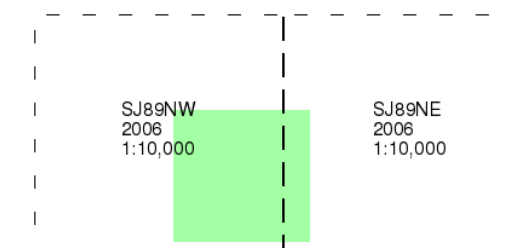
10k Raster Mapping

Published 2006

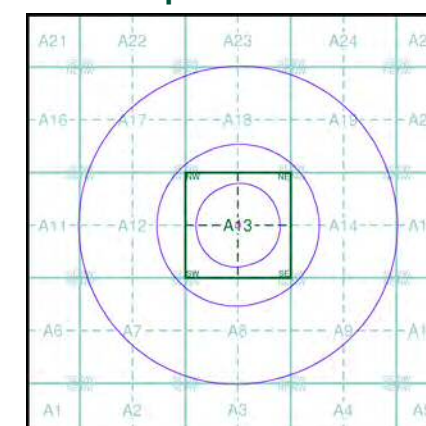
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

VectorMap Local

Published 2019

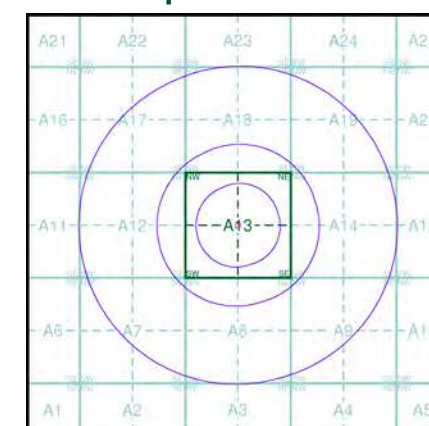
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SJ89NW 2019 Variable	SJ89NE 2019 Variable
----------------------------	----------------------------

Historical Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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

APPENDIX C

Envirocheck®

Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

217821742_1_1

Customer Reference:

1909009

National Grid Reference:

384140, 396690

Slice:

A

Site Area (Ha):

0.09

Search Buffer (m):

1000

Site Details:

, Flat at, the Gamecock
Boundary Lane
Manchester
M15 6GE

Client Details:

Mr E Tweedie
Tweedie Evans Consulting Ltd
The Old Chapel
35a Southover
Wells
Somerset
BA5 1UH

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	41
Hazardous Substances	-
Geological	44
Industrial Land Use	49
Sensitive Land Use	-
Data Currency	71
Data Suppliers	78
Useful Contacts	79

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 2019. 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 2019. © Natural Resources Wales & United Kingdom Research and Innovation 2019.

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.

Peter Brett Associates Copyright Notice

The cavity data presented has been extracted from the PBA enhanced version of the original DEFRA national cavity databases. PBA/DEFRA 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 PBA. In no event shall PBA/DEFRA 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 2019. 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	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			6	46
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control	pg 14				17
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 18				3
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 18				Yes
Pollution Incidents to Controlled Waters	pg 18				8
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances	pg 20			9	55
River Quality	pg 30		1		2
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 30			6	10 (*13)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 38	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 38	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 38	Yes	n/a	n/a	n/a
Source Protection Zones	pg 38	1			2
Extreme Flooding from Rivers or Sea without Defences	pg 38		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 38		Yes	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 38		1		14

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 41				1
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 41				1
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)					
Potentially Infilled Land (Water)	pg 41		1	3	26
Registered Landfill Sites	pg 43				1
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 44	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 44	Yes		Yes	Yes
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry	pg 45		Yes	Yes	Yes
BGS Urban Soil Chemistry Averages	pg 47	Yes			
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 48	Yes	n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities	pg 48				1
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 48	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 48	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 48	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 48		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 49		4	24	118
Fuel Station Entries	pg 62				2
Points of Interest - Commercial Services	pg 62			4	23
Points of Interest - Education and Health	pg 64			3	6
Points of Interest - Manufacturing and Production	pg 65			7	32
Points of Interest - Public Infrastructure	pg 68				12
Points of Interest - Recreational and Environmental	pg 69			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					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
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: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	0	1	384143 396693
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (NE)	342	1	384400 396950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	400	1	384250 397100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	441	1	384200 397150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	449	1	384250 397150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A14NW (E)	493	1	384650 396750
1	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Hulme Walk, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0362 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Unknown Environment: Not Supplied Receiving Water: Not Supplied Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	309	2	383870 396870
2	Discharge Consents Operator: Manchester Metropolitan University Property Type: EDUCATION/NURSERY/SCHOOL/COLLEGE/UNI/TRAINING VENUE Location: Manchester Metropolitan University Birley Fields Campus, Hulme, Manchester, ., M15 6bh Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: Eprub3936ax Permit Version: 1 Effective Date: 14th August 2013 Issued Date: 14th August 2013 Revocation Date: Not Supplied Discharge Type: Trade Discharges - Cooling Water Discharge: Land/Soakaway Environment: Groundwater Via A Borehole Receiving Water: Groundwater Via A Borehole Status: New issued under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A12SE (W)	360	2	383779 396591
3	Discharge Consents Operator: Manchester Metropolitan University Property Type: EDUCATION/NURSERY/SCHOOL/COLLEGE/UNI/TRAINING VENUE Location: Gshp At Manchester Metropolitan Uni Manchester Metropolitan Uni, Lower Chatham Street, ., Manchester, M15 6bh Authority: Environment Agency, North West Region Catchment Area: Medlock Reference: Eprdp3526gn Permit Version: 1 Effective Date: 1st April 2011 Issued Date: 23rd August 2010 Revocation Date: Not Supplied Discharge Type: Trade Discharges - Cooling Water Discharge: Land/Soakaway Environment: Groundwaters Receiving Water: Groundwaters Status: New issued under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18SW (N)	367	2	384083 397072

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	Discharge Consents Operator: Manchester Metropolitan University Property Type: EDUCATION/NURSERY/SCHOOL/COLLEGE/UNI/TRAINING VENUE Location: Gshp At Manchester Metropolitan Uni Manchester Metropolitan Uni, Lower Chatham Street, ., Manchester, M15 6bh Authority: Environment Agency, North West Region Catchment Area: Medlock Reference: Eprdp3526gn Permit Version: 1 Effective Date: 1st April 2011 Issued Date: 23rd August 2010 Revocation Date: Not Supplied Discharge Type: Trade Discharges - Cooling Water Discharge: Land/Soakaway Environment: Receiving Water: Groundwaters Status: New issued under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18SW (N)	406	2	384096 397114
4	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Hulme Walk/Princess Rd, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0363 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Unknown Environment: Receiving Water: Not Supplied Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A12NE (W)	374	2	383780 396840
5	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Hulme Walk/Leaf Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0364 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Unknown Environment: Receiving Water: Not Supplied Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A12NE (W)	450	2	383690 396810
6	Discharge Consents Operator: United Utilities Water Plc (?) Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Chester Street Cso Junction Of Chester Street/, Lower Osmond Street, ., Manchester, M1 5qf Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016983278 Permit Version: 1 Effective Date: 1st December 1999 Issued Date: 19th February 1999 Revocation Date: 8th July 2018 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: The River Medlock 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	A18SW (N)	642	2	384080 397350

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Lower Ormold St/Hulme St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0282 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: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A18SW (N)	654	2	384070 397360
6	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Chester Street Cso Junction Of Chester Street/, Lower Osmond Street, .., Manchester, M1 5qf Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016983278 Permit Version: 2 Effective Date: 9th July 2018 Issued Date: 9th July 2018 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: The River Medlock Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18SW (N)	655	2	384071 397362
7	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Newcastle St/Chester St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0361 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Unknown Environment: Receiving Water: Not Supplied Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	660	2	383780 397260
8	Discharge Consents Operator: Swinton Insurance Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Car Pk, Malborough St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016991176 Permit Version: 1 Effective Date: 8th September 1987 Issued Date: Not Supplied Revocation Date: 1st July 1991 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Lapsed (under Environment Act 1995, Schedule 23) Positional Accuracy: Manually corrected supplier location	A18NW (N)	705	2	384000 397400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	Discharge Consents Operator: United Utilities Water Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Oxford Rd, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0342 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 19th December 1999 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Unknown Environment: Receiving Water: Not Supplied Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A18NE (N)	728	2	384150 397440
9	Discharge Consents Operator: United Utilities Water Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Oxford Rd, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982631 Permit Version: 1 Effective Date: 30th September 1994 Issued Date: Not Supplied Revocation Date: 19th December 1999 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Manually corrected supplier location	A18NE (N)	728	2	384150 397440
10	Discharge Consents Operator: British Broadcasting Corporation Property Type: LAND TRANSPORT + VIA PIPELINES/FREIGHT Location: Bbc Vehicle Maintenance Base Swo, Pritchard Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016991346 Permit Version: 1 Effective Date: 22nd September 1994 Issued Date: Not Supplied Revocation Date: 22nd September 1994 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A18NE (N)	731	2	384400 397400
11	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Oxford Road/Grosvenor Street Cso Oxford Road, ., Manchester, Greater Manchester, M1 7dz Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0189 Permit Version: 3 Effective Date: 5th February 2016 Issued Date: 5th February 2016 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18NE (N)	748	2	384150 397460

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Oxford Road/Grosvenor Street Cso Oxford Road, ., Manchester, Greater Manchester, M1 7dz Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0189 Permit Version: 2 Effective Date: 3rd September 2010 Issued Date: 3rd September 2010 Revocation Date: 4th February 2016 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18NE (N)	748	2	384150 397460
11	Discharge Consents Operator: United Utilities Water Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Oxford/New Wakefield St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0165 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 31st March 1998 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Authorisation revoked Positional Accuracy: Located by supplier to within 10m	A18NE (N)	748	2	384150 397460
11	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Oxford Road/Grosvenor Street Cso Oxford Road, ., Manchester, Greater Manchester, M1 7dz Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0189 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: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 10m	A18NE (N)	748	2	384150 397460
11	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Mallard St Off Charles St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982736 Permit Version: 1 Effective Date: 30th September 1994 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 10m	A18NE (N)	788	2	384170 397500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	Discharge Consents Operator: United Utilities Water Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Medlock St(Off Charles St), Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0343 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 1st January 1995 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Unknown Environment: Receiving Water: Not Supplied Status: Consent revoked or revised: New Consent issued (Section 37(1)) Positional Accuracy: Located by supplier to within 100m	A18NE (N)	788	2	384170 397500
11	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: York St/Charles St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0281 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: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A18NE (N)	789	2	384180 397500
12	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Mount Street/Greek Street Cso Off Mancunian Way, ., Manchester, Greater Manchester, M1 7dn Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0187 Permit Version: 3 Effective Date: 5th February 2016 Issued Date: 5th February 2016 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	756	2	384541 397361
12	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Mount Street/Greek Street Cso Off Mancunian Way, ., Manchester, Greater Manchester, M1 7dn Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0187 Permit Version: 2 Effective Date: 3rd September 2010 Issued Date: 3rd September 2010 Revocation Date: 4th February 2016 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	775	2	384530 397390

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
12	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Mount Street/Greek Street Cso Off Mancunian Way, ., Manchester, Greater Manchester, M1 7dn Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0187 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: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	775	2	384530 397390
13	Discharge Consents Operator: United Utilities Water Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Lower Cambridge St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0285 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 15th November 1999 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Consent revoked or revised: New Consent issued (Section 37(1)) Positional Accuracy: Located by supplier to within 100m	A18NW (NW)	756	2	383830 397395
13	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Cambridge Street Cso 282d9 1 Cambridge Street, ., Manchester, Greater Manchester, M1 5bw Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982721 Permit Version: 3 Effective Date: 11th April 2018 Issued Date: 11th April 2018 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	761	2	383830 397400
13	Discharge Consents Operator: United Utilities Water Plc (?) Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Cambridge Street Cso 282d9 1 Cambridge Street, ., Manchester, Greater Manchester, M1 5bw Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982721 Permit Version: 2 Effective Date: 15th November 1999 Issued Date: Not Supplied Revocation Date: 10th April 2018 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m	A18NW (N)	761	2	383850 397410

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: Wilmott St At River St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0184 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 18th October 1999 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	761	2	383830 397400
13	Discharge Consents Operator: United Utilities Water Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Lower Cambridge St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982721 Permit Version: 1 Effective Date: 30th September 1994 Issued Date: Not Supplied Revocation Date: 14th November 1999 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Manually corrected supplier location	A18NW (NW)	761	2	383830 397400
14	Discharge Consents Operator: United Utilities Water Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Brook St/Mount St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982723 Permit Version: 1 Effective Date: 28th November 1994 Issued Date: Not Supplied Revocation Date: 14th July 2000 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Manually corrected supplier location	A18NE (NE)	777	2	384450 397430
15	Discharge Consents Operator: Factory Communications Ltd Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: 112-116 Princess Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016991403 Permit Version: 1 Effective Date: 24th April 1989 Issued Date: Not Supplied Revocation Date: 31st March 1992 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A18NE (N)	802	2	384300 397500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Discharge Consents Operator: Factory Communications Ltd Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: 112-116 Princess Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016991403 Permit Version: 2 Effective Date: 1st April 1992 Issued Date: Not Supplied Revocation Date: 10th February 1993 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A18NE (N)	802	2	384300 397500
15	Discharge Consents Operator: Factory Communications Ltd Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: 112-116 Princess Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016991403 Permit Version: 3 Effective Date: 11th February 1993 Issued Date: Not Supplied Revocation Date: 1st November 1994 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A18NE (N)	802	2	384300 397500
15	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Charles Street Cso 7 Charles Street, .., Manchester, M1 7en Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0183 Permit Version: 3 Effective Date: 1st April 2018 Issued Date: 19th March 2018 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18NE (N)	805	2	384320 397500
15	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Charles Street Cso 7 Charles Street, .., Manchester, M1 7en Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0183 Permit Version: 2 Effective Date: 3rd September 2010 Issued Date: 3rd September 2010 Revocation Date: 31st March 2018 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18NE (N)	805	2	384320 397500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Charles Street Cso 7 Charles Street, ., ., Manchester, M1 7en Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0183 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: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A18NE (N)	805	2	384320 397500
15	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Charles St Princess St Cso 28116 106 Princess Street, ., ., Manchester, M1 6ng Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0166 Permit Version: 2 Effective Date: 3rd September 2010 Issued Date: 3rd September 2010 Revocation Date: 31st March 2018 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18NE (N)	817	2	384330 397510
15	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Charles St Princess St Cso 28116 106 Princess Street, ., ., Manchester, M1 6ng Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0166 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: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A18NE (N)	817	2	384330 397510
15	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Whitworth St/Sackville St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0253 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 1st January 2017 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Authorisation revoked Positional Accuracy: Located by supplier to within 10m	A18NE (N)	817	2	384330 397510

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Charles St Princess St Cso 28116 106 Princess Street, ., ., Manchester, M1 6ng Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0166 Permit Version: 3 Effective Date: 1st April 2018 Issued Date: 21st March 2018 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A18NE (N)	820	2	384330 397513
15	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Princess St/Granby Row Cs, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Upper Mersey Reference: 016982956 Permit Version: 1 Effective Date: 23rd June 1995 Issued Date: Not Supplied Revocation Date: 31st March 1998 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Consent revoked: Discharge ceased (Water Resources Act 1991, Schedule 10 & 6) Positional Accuracy: Located by supplier to within 100m	A18NE (N)	827	2	384330 397520
15	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Princess St/Whitworth St Cso, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982950 Permit Version: 1 Effective Date: 23rd June 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 10m	A18NE (N)	827	2	384330 397520
16	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Great Bridgewater St, Opposite Chepstow Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982707 Permit Version: 1 Effective Date: 30th September 1994 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A18NW (NW)	819	2	383810 397455

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Great Bridgewater St, Opposite Chepstow Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0252 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 1st January 1995 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Consent revoked or revised: New Consent issued (Section 37(1)) Positional Accuracy: Located by supplier to within 100m	A18NW (NW)	823	2	383810 397460
17	Discharge Consents Operator: Factory Communications Ltd Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: 112-116 Princess Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016991403 Permit Version: 1 Effective Date: 24th April 1989 Issued Date: Not Supplied Revocation Date: 31st March 1992 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A18NE (N)	826	2	384400 397500
17	Discharge Consents Operator: Factory Communications Ltd Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: 112-116 Princess Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016991403 Permit Version: 2 Effective Date: 1st April 1992 Issued Date: Not Supplied Revocation Date: 10th February 1993 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A18NE (N)	826	2	384400 397500
18	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Mount St/Rutland St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0287 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: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	844	2	384580 397440

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Albion Street/Hewitt St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982706 Permit Version: 1 Effective Date: 30th September 1994 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A17NE (NW)	877	2	383700 397465
19	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Albion Street/Hewitt St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0251 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 1st January 1995 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Medlock Status: Consent revoked or revised: New Consent issued (Section 37(1)) Positional Accuracy: Located by supplier to within 100m	A17NE (NW)	882	2	383700 397470
20	Discharge Consents Operator: United Utilities Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Trumpet Street, Sso, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0168 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: River Tib Culvert-Medlock Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A17NE (NW)	944	2	383720 397550
21	Discharge Consents Operator: Fq Developments Limited Property Type: CONSTRUCTION OF BUILDINGS Location: Owen Street, ., ., Manchester, M15 4pz Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: Eprfb3091rh Permit Version: 1 Effective Date: 4th October 2016 Issued Date: 4th October 2016 Revocation Date: 2nd July 2018 Discharge Type: Trade Effluent Discharge-Site Drainage Discharge: Freshwater Stream/River Environment: Receiving Water: The River Medlock Status: Surrendered under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	950	2	383421 397334

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	Discharge Consents Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Great Bridgewater St, Opposite Chepstow Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0163 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: River Tib Culvert Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A17NE (N)	969	2	383790 397610
23	Integrated Pollution Prevention And Control Name: Ondeo Industrial Solutions Limited Location: Royal Brewery Epr/Cp3531gm, Denmark Road, Moss Side,, Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: HP3836KU Original Permit Ref: Cp3531gm Effective Date: 15th March 2010 Status: Superseded By Variation Application Type: Variation App. Sub Type: Simple Standard Variation Positional Accuracy: Manually positioned to the address or location Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N	A8SW (S)	783	2	383920 395923
23	Integrated Pollution Prevention And Control Name: Ondeo Industrial Solutions Limited Location: Royal Brewery Epr/Cp3531gm, Denmark Road, Moss Side,, Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: CP3531GM Original Permit Ref: Cp3531gm Effective Date: 1st April 2009 Status: Superseded By Variation Application Type: Transfer App. Sub Type: Whole with Fit and Proper Person Positional Accuracy: Automatically positioned to the address Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N	A8SW (S)	783	2	383920 395923
23	Integrated Pollution Prevention And Control Name: Heineken Uk Ltd Location: Royal Brewery, 201, Denmark Road, Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: SP3736UP Original Permit Ref: Bv7796iw Effective Date: 1st August 2008 Status: Superseded By Variation Application Type: Variation App. Sub Type: Standard Positional Accuracy: Automatically positioned to the address Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y	A8SW (S)	783	2	383920 395923

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
23	Integrated Pollution Prevention And Control Name: Heineken Uk Ltd Location: Royal Brewery, 201, Denmark Road, Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: UP3131UM Original Permit Ref: Bv7796iw Effective Date: 22nd February 2008 Status: Superseded By Variation Application Type: Variation App. Sub Type: Simple Standard Variation Positional Accuracy: Automatically positioned to the address Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y	A8SW (S)	783	2	383920 395923
23	Integrated Pollution Prevention And Control Name: Vws (Uk) Ltd Location: Royal Brewery Effluent Treatment Plant, Denmark Road, Moss Side,, Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: Ep3637pu Original Permit Ref: Ep3637pu Effective Date: 13th January 2006 Status: Superseded By Variation Application Type: Application App. Sub Type: New Positional Accuracy: Automatically positioned to the address Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N	A8SW (S)	783	2	383920 395923
23	Integrated Pollution Prevention And Control Name: Heineken Uk Ltd Location: Royal Brewery, ROYAL BREWERY, DENMARK ROAD, MANCHESTER, Lancashire, M15 6LD Authority: Environment Agency, North West Region Permit Reference: Bv7796iw Original Permit Ref: Bv7796iw Effective Date: 22nd December 2005 Status: Superseded By Variation Application Type: Application App. Sub Type: New Positional Accuracy: Automatically positioned to the address Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y	A8SW (S)	783	2	383920 395923
23	Integrated Pollution Prevention And Control Name: Heineken Uk Ltd Location: Royal Brewery, Royal Brewery, Denmark Road, Manchester, Greater Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: DP3431LK Original Permit Ref: Bv7796iw Effective Date: 27th November 2006 Status: Superseded By Variation Application Type: Variation App. Sub Type: Simple Standard Variation Positional Accuracy: Manually positioned to the address or location Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y	A8SW (S)	784	2	383920 395922

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
23	Integrated Pollution Prevention And Control Name: Heineken Uk Limited Location: Royal Brewery, Manchester - Epr/Bv7796iw/V010, Royal Brewery, Denmark Road,, MANCHESTER, Greater Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: HP3330JX Original Permit Ref: Bv7796iw Effective Date: 26th February 2018 Status: Effective Application Type: Variation App. Sub Type: Standard Positional Accuracy: Located by supplier to within 100m Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y	A8SW (S)	811	2	383900 395900
23	Integrated Pollution Prevention And Control Name: Suez Industrial Water Ltd Location: Royal Brewery Epr/Cp3531gm, Denmark Road, Moss Side,, Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: UP3232YC Original Permit Ref: Cp3531gm Effective Date: 8th May 2017 Status: Effective Application Type: Variation App. Sub Type: Minor Positional Accuracy: Located by supplier to within 100m Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N Activity Code: 5.4 A(1) a) (i) Activity Description: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT Primary Activity: Y	A8SW (S)	811	2	383900 395900
23	Integrated Pollution Prevention And Control Name: Heineken Uk Ltd Location: Royal Brewery Manchester, Royal Brewery, Denmark Road,, MANCHESTER, Greater Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: DP3530YY Original Permit Ref: Bv7796iw Effective Date: 18th April 2017 Status: Superseded By Variation Application Type: Variation App. Sub Type: Standard Positional Accuracy: Located by supplier to within 100m Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y	A8SW (S)	811	2	383900 395900
23	Integrated Pollution Prevention And Control Name: Suez Industrial Water Ltd Location: Royal Brewery Epr/Cp3531gm, Denmark Road, Moss Side,, Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: RP3335DD Original Permit Ref: Cp3531gm Effective Date: 30th June 2016 Status: Superseded By Variation Application Type: Variation App. Sub Type: Minor Positional Accuracy: Located by supplier to within 100m Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N Activity Code: 5.4 A(1) a) (i) Activity Description: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT Primary Activity: Y	A8SW (S)	811	2	383900 395900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
23	Integrated Pollution Prevention And Control Name: Ondeo Industrial Solutions Limited Location: Royal Brewery Epr/Cp3531gm, Denmark Road, Moss Side,, Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: KP3630WM Original Permit Ref: Cp3531gm Effective Date: 5th December 2014 Status: Superseded By Variation Application Type: Variation App. Sub Type: Substantial Positional Accuracy: Located by supplier to within 100m Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N Activity Code: 5.4 A(1) a) (i) Activity Description: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT Primary Activity: Y	A8SW (S)	811	2	383900 395900
23	Integrated Pollution Prevention And Control Name: Heineken Uk Ltd Location: Royal Brewery Manchester, Royal Brewery, Denmark Road,,, MANCHESTER, Greater Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: KP3830WK Original Permit Ref: Bv7796iw Effective Date: 5th December 2014 Status: Superseded By Variation Application Type: Variation App. Sub Type: Substantial Positional Accuracy: Located by supplier to within 100m Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y	A8SW (S)	811	2	383900 395900
23	Integrated Pollution Prevention And Control Name: Heineken Uk Ltd Location: Royal Brewery Manchester, Royal Brewery, Denmark Road,,, MANCHESTER, Greater Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: LP3732VH Original Permit Ref: Bv7796iw Effective Date: 28th August 2014 Status: Superseded By Variation Application Type: Variation App. Sub Type: Standard Positional Accuracy: Located by supplier to within 100m Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y	A8SW (S)	811	2	383900 395900
23	Integrated Pollution Prevention And Control Name: Ondeo Industrial Solutions Limited Location: Royal Brewery Epr/Cp3531gm, Denmark Road, Moss Side,, Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: ZP3037VD Original Permit Ref: Cp3531gm Effective Date: 23rd June 2014 Status: Superseded By Variation Application Type: Variation App. Sub Type: Minor Positional Accuracy: Located by supplier to within 100m Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N Activity Code: 5.4 A(1) a) (i) Activity Description: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT Primary Activity: Y	A8SW (S)	811	2	383900 395900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
23	Integrated Pollution Prevention And Control Name: Heineken Uk Ltd Location: Royal Brewery Manchester, Royal Brewery, Denmark Road,,, MANCHESTER, Greater Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: QP3438EM Original Permit Ref: Bv7796iw Effective Date: 26th March 2014 Status: Superseded By Variation Application Type: Variation App. Sub Type: Simple Standard Variation Positional Accuracy: Located by supplier to within 100m Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y	A8SW (S)	811	2	383900 395900
23	Integrated Pollution Prevention And Control Name: Heineken Uk Ltd Location: Royal Brewery, Royal Brewery, Denmark Road,,, MANCHESTER, Greater Manchester, M15 6LD Authority: Environment Agency, North West Region Permit Reference: JP3631CT Original Permit Ref: Bv7796iw Effective Date: 6th November 2012 Status: Superseded By Variation Application Type: Variation App. Sub Type: Simple Standard Variation Positional Accuracy: Located by supplier to within 100m Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y	A8SW (S)	811	2	383900 395900
24	Local Authority Pollution Prevention and Controls Name: Jessop & Baird Ltd Location: Medlock House, Hulme Street, Hulme, MANCHESTER, Lancashire, M15 6AL Authority: Manchester City Council, Environmental Health Department Permit Reference: 41/93 Dated: 14th June 1993 Process Type: Local Authority Air Pollution Control Description: PG6/32 Adhesive coating Status: Authorisation revoked Positional Accuracy: Automatically positioned to the address	A17SE (NW)	576	3	383796 397169
25	Local Authority Pollution Prevention and Controls Name: Dunlop LtdGrg Division Location: P O Box 151, MANCHESTER, Lancashire, M60 1PD Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/58/93 Dated: 2nd December 1993 Process Type: Local Authority Air Pollution Control Description: PG6/28 Rubber processes Status: Authorisation revoked Positional Accuracy: Manually positioned to the address or location	A18SW (NW)	635	3	383890 397289
26	Local Authority Pollution Prevention and Controls Name: Asda Hulme Location: 100 Princess Road, Hulme, MANCHESTER, Lancashire, M15 5AQ Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/PFS/RM/006/06 Dated: 25th February 1998 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station Status: Authorised Positional Accuracy: Manually positioned to the address or location	A7NE (SW)	738	3	383791 396022
	Nearest Surface Water Feature	A18NW (N)	691	-	384119 397402
27	Pollution Incidents to Controlled Waters Property Type: Spillage; Accident - Static Site Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Chemicals - Herbicides/Fungicide Note: Malkin Brook Incident Date: 17th July 1992 Incident Reference: 92641296 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8SE (S)	698	2	384300 396000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
28	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: River Medlock; None Pollution Found Incident Date: 6th October 1995 Incident Reference: 95632478 Catchment Area: Medlock Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	770	2	384500 397400
29	Pollution Incidents to Controlled Waters Property Type: Private Sewage (Non-PLC): Sewerage Systems Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Crude Sewage Note: River Medlock; Crude Sewage Incident Date: 25th March 1996 Incident Reference: 96630555 Catchment Area: Medlock Receiving Water: Not Given Cause of Incident: Blocked Sewer Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NE (N)	784	2	384200 397495
29	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Affected; Diesel Spill Incident Date: 22nd August 1996 Incident Reference: 96631887 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Accidental Spillage/Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Unknown	A18NE (N)	789	2	384200 397500
30	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Pollution Found Incident Date: 11th January 1996 Incident Reference: 96630052 Catchment Area: Medlock Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NE (N)	802	2	384300 397500
31	Pollution Incidents to Controlled Waters Property Type: Road Location: Mancunian Way , HULME Authority: Environment Agency, North West Region Pollutant: Chemicals - Unknown Note: 20 Litres Of Chemical Irgasol In Drains Incident Date: 7th September 1998 Incident Reference: SO981631 Catchment Area: Manchester Ship Canal Receiving Water: Freshwater Stream/River Cause of Incident: Road Traffic Accident Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	803	2	383500 397200
32	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Foam Note: River Medlock; Detergent Incident Date: 30th March 1995 Incident Reference: 95630655 Catchment Area: Medlock Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NE (N)	826	2	384400 397500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Affected Incident Date: 8th November 1996 Incident Reference: 96632315 Catchment Area: Medlock Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (N)	953	2	384500 397600
34	Registered Radioactive Substances Name: University Of Manchester Location: Oxford Road, Manchester, M13 9PL Authority: Environment Agency, North West Region Permit Reference: CB0137 Dated: 8th December 2006 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Application has been authorised and any conditions apply to the operator Positional Accuracy: Automatically positioned to the address	A14NW (E)	474	2	384615 396824
34	Registered Radioactive Substances Name: University Of Manchester Location: Oxford Road, MANCHESTER, M13 9PL Authority: Environment Agency, North West Region Permit Reference: Bz3067 Dated: 28th June 2005 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Initial variation to an authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A14NW (E)	474	2	384615 396824
34	Registered Radioactive Substances Name: University Of Manchester Location: Oxford Road, MANCHESTER, Lancashire, M13 9PL Authority: Environment Agency, North West Region Permit Reference: Bx8548 Dated: 1st October 2004 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Application has been authorised and any conditions apply to the operator Positional Accuracy: Automatically positioned to the address	A14NW (E)	474	2	384615 396824
34	Registered Radioactive Substances Name: University Of Manchester Location: Oxford Road, MANCHESTER, Lancashire, M13 9PL Authority: Environment Agency, North West Region Permit Reference: Bx8564 Dated: 2nd September 2004 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A14NW (E)	474	2	384615 396824
34	Registered Radioactive Substances Name: Central Manchester University Hospitals Nhs Foundation Trust Location: Oxford Road, Manchester, Lancashire, M13 9PL Authority: Environment Agency, North West Region Permit Reference: Bm2918 Dated: 19th November 2001 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A14NW (E)	474	2	384615 396824

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
35	Registered Radioactive Substances Name: Victoria University Of Manchester Location: Williamson Building, Oxford Road, MANCHESTER, Greater Manchester, M13 9PL Authority: Environment Agency, North West Region Permit Reference: Bt9640 Dated: 3rd February 2003 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Substantial variation to a registration under the Act of an open source which is not the subject of an authorisation, or an application for an authorisation Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the address or location	A14SW (E)	483	2	384645 396692
35	Registered Radioactive Substances Name: Victoria University Of Manchester Location: Williamson Building, Oxford Road, MANCHESTER, Greater Manchester, M13 9PL Authority: Environment Agency, North West Region Permit Reference: BG4739 Dated: 16th August 1999 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Substantial variation to a registration under the Act of an open source which is not the subject of an authorisation, or an application for an authorisation Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SW (E)	483	2	384645 396692
35	Registered Radioactive Substances Name: Victoria University Of Manchester Location: Williamson Building, Oxford Road, MANCHESTER, Greater Manchester, M13 9PL Authority: Environment Agency, North West Region Permit Reference: AP8713 Dated: 20th February 1995 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SW (E)	483	2	384645 396692
35	Registered Radioactive Substances Name: University Of Manchester Location: Williamson Building, Oxford Road, MANCHESTER, Greater Manchester, M13 9PL Authority: Environment Agency, North West Region Permit Reference: AD0155 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: Manually positioned to the address or location	A14SW (E)	483	2	384645 396692
36	Registered Radioactive Substances Name: Manchester Metropolitan University Location: John Dalton Building, Chester Street, MANCHESTER, Lancashire, M1 5GD Authority: Environment Agency, North West Region Permit Reference: Bw5861 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A18SW (N)	517	2	384070 397222
36	Registered Radioactive Substances Name: Manchester Metropolitan University Location: John Dalton Building, Chester Street, MANCHESTER, Greater Manchester, M1 5GD Authority: Environment Agency, North West Region Permit Reference: AP8403 Dated: 9th March 1995 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A18SW (N)	517	2	384070 397222

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
36	Registered Radioactive Substances Name: Manchester Metropolitan University Location: John Dalton Building, Chester Street, MANCHESTER, Greater Manchester, M1 5GD Authority: Environment Agency, North West Region Permit Reference: AO3155 Dated: 16th October 1994 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A18SW (N)	517	2	384070 397222
36	Registered Radioactive Substances Name: Manchester Metropolitan University Location: John Dalton Building, Chester Street, MANCHESTER, Greater Manchester, M1 5GD Authority: Environment Agency, North West Region Permit Reference: AC9718 Dated: 31st March 1991 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A18SW (N)	517	2	384070 397222
36	Registered Radioactive Substances Name: Manchester Metropolitan University Location: John Dalton Building, Chester Street, MANCHESTER, Greater Manchester, M1 5GD Authority: Environment Agency, North West Region Permit Reference: AC9688 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 superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A18SW (N)	517	2	384070 397222
36	Registered Radioactive Substances Name: Manchester Metropolitan University Location: John Dalton Building, Chester Street, Manchester, M1 5gd Authority: Environment Agency, North West Region Permit Reference: Ca1464 Dated: Not Supplied Process Type: Not Supplied Description: Not Supplied Status: Application has been determined by the EA Positional Accuracy: Automatically positioned to the address	A18SW (N)	517	2	384069 397222
36	Registered Radioactive Substances Name: Manchester Metropolitan University Location: John Dalton Building, Chester Street, Manchester, M1 5gd Authority: Environment Agency, North West Region Permit Reference: BI0324 Dated: Not Supplied Process Type: Not Supplied Description: Not Supplied Status: Application has been determined by the EA Positional Accuracy: Automatically positioned to the address	A18SW (N)	517	2	384069 397222
37	Registered Radioactive Substances Name: Central Manchester University Hospitals Nhs Foundation Trust Location: Radiological Protection Service, 327 Oxford Road, MANCHESTER, Greater Manchester, M13 9PL Authority: Environment Agency, North West Region Permit Reference: BA0536 Dated: 6th March 1998 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SW (E)	586	2	384706 396470

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
37	Registered Radioactive Substances Name: Central Manchester University Hospitals Nhs Foundation Trust Location: 327, Oxford Road, Manchester, M13 9PG Authority: Environment Agency, North West Region Permit Reference: CA6121 Dated: 26th October 2006 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A14SW (E)	595	2	384720 396482
37	Registered Radioactive Substances Name: University Of Manchester Location: 327 Oxford Road, MANCHESTER, Lancashire, M13 9PG Authority: Environment Agency, North West Region Permit Reference: Bw5900 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation either revoked or cancelled Positional Accuracy: Automatically positioned to the address	A14SW (E)	595	2	384720 396482
37	Registered Radioactive Substances Name: University Of Manchester Location: 327 Oxford Road, MANCHESTER, Greater Manchester, M13 9PG Authority: Environment Agency, North West Region Permit Reference: Br5949 Dated: 28th February 2002 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SW (E)	595	2	384720 396482
37	Registered Radioactive Substances Name: University Of Manchester Location: 327 Oxford Road, MANCHESTER, Greater Manchester, M13 9PG Authority: Environment Agency, North West Region Permit Reference: Bl5954 Dated: 11th September 2001 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Initial variation to an authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SW (E)	595	2	384720 396482
37	Registered Radioactive Substances Name: University Of Manchester Location: 327 Oxford Road, MANCHESTER, Greater Manchester, M13 9PG Authority: Environment Agency, North West Region Permit Reference: AY6961 Dated: 10th July 1997 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SW (E)	595	2	384720 396482
37	Registered Radioactive Substances Name: University Of Manchester Location: 327 Oxford Road, MANCHESTER, Greater Manchester, M13 9PG Authority: Environment Agency, North West Region Permit Reference: AU1097 Dated: 16th February 1996 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SW (E)	595	2	384720 396482
37	Registered Radioactive Substances Name: University Of Manchester Location: 327 Oxford Road, MANCHESTER, Greater Manchester, M13 9PG Authority: Environment Agency, North West Region Permit Reference: AO5492 Dated: 20th October 1994 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SW (E)	595	2	384720 396482

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
37	Registered Radioactive Substances Name: University Of Manchester Location: Health And Safety Services, Radiological Protection, 327 Oxford Road, MANCHESTER, Lancashire, M13 9PG Authority: Environment Agency, North West Region Permit Reference: AG3983 Dated: 12th February 1993 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA dated pre April 1991 Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A14SW (E)	595	2	384720 396482
37	Registered Radioactive Substances Name: University Of Manchester Location: Radiological Protection Service, 327 Oxford Road, MANCHESTER, Greater Manchester, M13 9PG Authority: Environment Agency, North West Region Permit Reference: AD0180 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: Manually positioned to the address or location	A14SW (E)	595	2	384720 396482
38	Registered Radioactive Substances Name: Medeval Ltd Location: Skelton House, Lloyd Street North, Manchester Science Park, Manchester, M15 6SH Authority: Environment Agency, North West Region Permit Reference: BY5447 Dated: 12th May 2006 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation either revoked or cancelled Positional Accuracy: Automatically positioned to the address	A8NE (SE)	653	2	384411 396083
38	Registered Radioactive Substances Name: Medeval Ltd Location: Skelton House, Manchester Science Park, Lloyd Street North, MANCHESTER, Greater Manchester, M15 6SH Authority: Environment Agency, North West Region Permit Reference: AC8525 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 superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A8NE (SE)	653	2	384411 396083
38	Registered Radioactive Substances Name: Icon Development Solutions Limited Location: Skelton House, Manchester Science Park, Lloyd Street North, Manchester, M15 6SH Authority: Environment Agency, North West Region Permit Reference: BY5455 Dated: Not Supplied Process Type: Not Supplied Description: Not Supplied Status: Authorisation certificate surrendered by operator Positional Accuracy: Automatically positioned to the address	A8NE (SE)	653	2	384410 396083
38	Registered Radioactive Substances Name: Cypotex Discovery Ltd Location: Skelton House, Manchester Science Park, Lloyd Street North, MANCHESTER, Greater Manchester, M15 6SH Authority: Environment Agency, North West Region Permit Reference: BI8023 Dated: 4th October 2001 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A8NE (SE)	654	2	384410 396082

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
38	Registered Radioactive Substances Name: Medeval Ltd Location: Skelton House, Lloyd Street North, Manchester Science Park, MANCHESTER, Greater Manchester, M15 6SH Authority: Environment Agency, North West Region Permit Reference: AC8533 Dated: 31st March 1991 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A8NE (SE)	658	2	384411 396078
38	Registered Radioactive Substances Name: Medeval Ltd Location: Skelton House, Manchester Science Park, Lloyd Street North, Manchester, Greater Manchester, M15 6sh Authority: Environment Agency, North West Region Permit Reference: Bw5853 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A8NE (SE)	659	2	384409 396076
39	Registered Radioactive Substances Name: Manchester Incubator Co Ltd Location: Incubator Building, 48, Grafton Street, MANCHESTER, M13 9XX Authority: Environment Agency, North West Region Permit Reference: Bz3075 Dated: 23rd June 2005 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Application has been authorised and any conditions apply to the operator Positional Accuracy: Automatically positioned to the address	A14SE (E)	729	2	384843 396428
39	Registered Radioactive Substances Name: Manchester Incubator Co Ltd Location: Manchester Incubator Building, Grafton Street, Manchester, M13 9XX Authority: Environment Agency, North West Region Permit Reference: By9248 Dated: 4th February 2005 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SE (E)	729	2	384843 396427
39	Registered Radioactive Substances Name: Renovo Ltd Location: Manchester Incubator Building, Grafton Street, Manchester, M13 9XX Authority: Environment Agency, North West Region Permit Reference: By9264 Dated: 4th February 2005 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the address or location	A14SE (E)	729	2	384843 396427
39	Registered Radioactive Substances Name: The University Of Manchester Location: South Campus, Oxford Road, Manchester, M13 9pl Authority: Environment Agency, North West Region Permit Reference: NP3893SR Dated: Not Supplied Process Type: Not Supplied Description: Not Supplied Status: Application has been determined by the EA Positional Accuracy: Located by supplier to within 10m	A14SE (E)	729	2	384840 396420

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
39	Registered Radioactive Substances Name: Manchester Incubator Co Ltd Location: Manchester Incubator Building, Grafton Street, Manchester, M13 9xx Authority: Environment Agency, North West Region Permit Reference: Bw6175 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SE (E)	744	2	384853 396412
39	Registered Radioactive Substances Name: Renovo Ltd Location: Manchester Incubator Building, Grafton Street, Manchester, M13 9xx Authority: Environment Agency, North West Region Permit Reference: By5196 Dated: 19th October 2004 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SE (SE)	760	2	384859 396386
40	Registered Radioactive Substances Name: Renovo Ltd Location: Manchester Incubator Building, Grafton Street, Manchester, M13 9xx Authority: Environment Agency, North West Region Permit Reference: Bw6183 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A14SE (E)	783	2	384914 396469
41	Registered Radioactive Substances Name: University Of Manchester Innovation Centre (Umic) Location: 48 Grafton Street, Manchester, M13 9xx Authority: Environment Agency, North West Region Permit Reference: TB3139DJ Dated: Not Supplied Process Type: Not Supplied Description: Not Supplied Status: Application has been determined by the EA Positional Accuracy: Automatically positioned to the address	A14SE (E)	845	2	384952 396387
41	Registered Radioactive Substances Name: Renovo Ltd Location: Manchester Incubator Building, Grafton Street, MANCHESTER, M13 9XX Authority: Environment Agency, North West Region Permit Reference: BI1959 Dated: 27th July 2001 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the road within the address or location	A9NE (E)	886	2	384984 396357
41	Registered Radioactive Substances Name: Renovo Ltd Location: Manchester Incubator Building, Grafton Street, MANCHESTER, M13 9XX Authority: Environment Agency, North West Region Permit Reference: BI1967 Dated: 27th July 2001 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the road within the address or location	A9NE (E)	886	2	384984 396357
42	Registered Radioactive Substances Name: Motac Neuroscience Ltd Location: Manchester Incubator Building, Grafton Street, MANCHESTER, M13 9XX Authority: Environment Agency, North West Region Permit Reference: BI1924 Dated: 27th July 2001 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	851	2	384934 396330

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	Registered Radioactive Substances Name: Motac Neuroscience Ltd Location: Manchester Incubator Building, Grafton Street, MANCHESTER, M13 9XX Authority: Environment Agency, North West Region Permit Reference: BI1916 Dated: 27th July 2001 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: Manually positioned to the road within the address or location	A9NE (SE)	851	2	384934 396330
42	Registered Radioactive Substances Name: Manchester Incubator Co Ltd Location: Manchester Incubator Building, Grafton Street, MANCHESTER, M13 9XX Authority: Environment Agency, North West Region Permit Reference: BI1932 Dated: 27th July 2001 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	859	2	384946 396336
42	Registered Radioactive Substances Name: Syngenta Ltd Location: Manchester Incubator Building, Grafton Street, MANCHESTER, M13 9XX Authority: Environment Agency, North West Region Permit Reference: BI2955 Dated: 27th July 2001 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	864	2	384953 396341
42	Registered Radioactive Substances Name: Syngenta Ltd Location: Manchester Incubator Building, Grafton Street, MANCHESTER, M13 9XX Authority: Environment Agency, North West Region Permit Reference: BI2963 Dated: 27th July 2001 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: Manually positioned to the road within the address or location	A9NE (SE)	864	2	384953 396341
43	Registered Radioactive Substances Name: Umist Location: PO Box 88, MANCHESTER, Lancashire, M60 1QD Authority: Environment Agency, North West Region Permit Reference: Bq2154 Dated: 9th April 2002 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation either revoked or cancelled Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	861	2	384500 397500
43	Registered Radioactive Substances Name: Umist Location: PO Box 88, MANCHESTER, Lancashire, M60 1QD Authority: Environment Agency, North West Region Permit Reference: AC8878 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: Located by supplier to within 100m	A19NW (NE)	861	2	384500 397500
43	Registered Radioactive Substances Name: Umist Location: Po Box 88, Sackville Street, MANCHESTER, M60 1QD Authority: Environment Agency, North West Region Permit Reference: AZ8692 Dated: 13th November 1997 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A18NE (N)	863	2	384477 397512

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
43	Registered Radioactive Substances Name: Umist Location: Po Box 88, Sackville Street, MANCHESTER, M60 1QD Authority: Environment Agency, North West Region Permit Reference: AX0526 Dated: 30th January 1997 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A18NE (N)	863	2	384478 397512
43	Registered Radioactive Substances Name: Umist Location: Po Box 88, Sackville Street, MANCHESTER, M60 1QD Authority: Environment Agency, North West Region Permit Reference: AP0143 Dated: 16th January 1995 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A18NE (N)	863	2	384478 397512
44	Registered Radioactive Substances Name: Umist Location: Po Box 88, Sackville Street, MANCHESTER, M60 1QD Authority: Environment Agency, North West Region Permit Reference: Bk5380 Dated: 6th March 2001 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the address or location	A19NW (NE)	874	2	384612 397456
45	Registered Radioactive Substances Name: Central Manchester And Manchester Childrens Nhs Trust Location: Manchester Royal Eye Hospital, Nelson Street, MANCHESTER, Greater Manchester, M13 9WH Authority: Environment Agency, North West Region Permit Reference: AP9353 Dated: 1st April 1991 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Unknown	A9NE (SE)	916	2	384932 396191
46	Registered Radioactive Substances Name: The University Of Manchester Location: North Campus, Manchester, M1 3bu Authority: Environment Agency, North West Region Permit Reference: Bx8661 Dated: Not Supplied Process Type: Not Supplied Description: Not Supplied Status: Application has been determined by the EA Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	932	2	384600 397530
46	Registered Radioactive Substances Name: The University Of Manchester Location: North Campus, Manchester, M1 3bu Authority: Environment Agency, North West Region Permit Reference: Bx8645 Dated: Not Supplied Process Type: Not Supplied Description: Not Supplied Status: Application has been determined by the EA Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	932	2	384600 397530

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
47	Registered Radioactive Substances Name: Central Manchester University Hospitals Nhs Foundation Trust Location: Manchester Royal Infirmary, Oxford Road, MANCHESTER, M13 9WL Authority: Environment Agency, North West Region Permit Reference: Bz5027 Dated: 19th September 2005 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A9NE (SE)	945	2	384979 396212
47	Registered Radioactive Substances Name: Central Manchester University Hospitals Nhs Foundation Trust Location: Manchester Royal Infirmary, Oxford Road, Manchester, M13 9wl Authority: Environment Agency, North West Region Permit Reference: CD4508 Dated: Not Supplied Process Type: Not Supplied Description: Not Supplied Status: Application has been determined by the EA Positional Accuracy: Automatically positioned to the address	A9NE (SE)	945	2	384979 396212
47	Registered Radioactive Substances Name: Central Manchester University Hospitals Nhs Foundation Trust Location: Manchester Royal Infirmary, Oxford Road, Manchester, M13 9wl Authority: Environment Agency, North West Region Permit Reference: CD4486 Dated: Not Supplied Process Type: Not Supplied Description: Not Supplied Status: Application has been determined by the EA Positional Accuracy: Automatically positioned to the address	A9NE (SE)	945	2	384979 396212
47	Registered Radioactive Substances Name: Central Manchester University Hospitals Nhs Foundation Trust Location: Nuclear Medicine Department, Manchester Royal Infirmary, Oxford Road, Manchester, Greater Manchester, M13 9WL Authority: Environment Agency, North West Region Permit Reference: Bz4675 Dated: 19th September 2005 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A9NE (SE)	964	2	385004 396218
47	Registered Radioactive Substances Name: Central Manchester University Hospitals Nhs Foundation Trust Location: Nuclear Medicine Department, Manchester Royal Infirmary, Oxford Road, Manchester, Greater Manchester, M13 9WL Authority: Environment Agency, North West Region Permit Reference: Bw6051 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A9NE (SE)	964	2	385004 396218
47	Registered Radioactive Substances Name: Central Manchester University Hospitals Nhs Foundation Trust Location: Nuclear Medicine Department, Manchester Royal Infirmary, Oxford Road, Manchester, Greater Manchester, M13 9WL Authority: Environment Agency, North West Region Permit Reference: Bm2926 Dated: 19th November 2001 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A9NE (SE)	964	2	385004 396218

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
47	Registered Radioactive Substances Name: Central Manchester University Hospitals Nhs Foundation Trust Location: Nuclear Medicine Department, Manchester Royal Infirmary, Oxford Road, Manchester, Greater Manchester, M13 9WL Authority: Environment Agency, North West Region Permit Reference: AS1266 Dated: 29th March 1995 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A9NE (SE)	964	2	385004 396218
47	Registered Radioactive Substances Name: Manchester Central Hospitals Nhs Trust Location: Nuclear Medicine Department, Manchester Royal Infirmary, Oxford Road, Manchester, Greater Manchester, M13 9WL Authority: Environment Agency, North West Region Permit Reference: AB9712 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: Manually positioned to the address or location	A9NE (SE)	964	2	385004 396218
	River Quality Name: Corn Bk GQA Grade: River Quality C Reach: Qsl At Openshaw To Msc Estimated Distance (km): 5.6 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A13NE (N)	140	2	384153 396851
	River Quality Name: Medlock GQA Grade: River Quality E Reach: Lords Bk To Irwell Estimated Distance (km): 9.5 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A18SE (N)	577	2	384277 397275
	River Quality Name: Rochdale Canal GQA Grade: River Quality B Reach: Ashton Canal To Knott Mill Estimated Distance (km): 1.8 Flow Rate: Flow greater than 80 cumecs Flow Type: Canal Year: 2000	A18NW (N)	853	2	383851 397510
48	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0006/003 Permit Version: 2 Location: Borehole 1 At Lower Chatham Street Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 4th April 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A18SE (N)	380	2	384180 397091

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
48	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0006/003 Permit Version: 2 Location: Borehole 1 At Lower Chatham Street Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: Heat Pump Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 4th April 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A18SE (N)	380	2	384180 397091
48	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0006/003 Permit Version: 1 Location: Borehole 1 At Lower Chatham Street Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st April 2011 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A18SE (N)	380	2	384180 397091
48	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0006/003 Permit Version: 1 Location: Borehole 1 At Lower Chatham Street Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: Heat Pump Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st April 2011 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A18SE (N)	380	2	384180 397091
49	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0004/003 Permit Version: 1 Location: Borehole At Manchester Metropolitan University Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: Heat Pump Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st January 2015 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A12NE (W)	413	2	383715 396746

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
49	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0004/003 Permit Version: 1 Location: Borehole At Manchester Metropolitan University Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st January 2015 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A12NE (W)	413	2	383715 396746
50	Water Abstractions Operator: Dunlop Rubber Co Limited Licence Number: 2569007027 Permit Version: Not Supplied Location: Borehole, Cambridge Street, MANCHESTER Authority: Environment Agency, North West Region Abstraction: Cooling Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 1811 Yearly Rate (m3): 154564 Details: Licence Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A18SW (N)	512	2	384000 397200
51	Water Abstractions Operator: Heineken Uk Ltd Licence Number: 2569007007 Permit Version: 102 Location: Borehole At Premises Moss Side Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: General Cooling (Existing Licences Only) (High Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Moss Side, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 23rd November 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8SW (S)	811	2	383900 395900
51	Water Abstractions Operator: Heineken Uk Ltd Licence Number: 2569007007 Permit Version: 102 Location: Borehole At Premises Moss Side Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Moss Side, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 23rd November 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8SW (S)	811	2	383900 395900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
51	Water Abstractions Operator: Scottish And Newcastle Uk Ltd Licence Number: 2569007007 Permit Version: 101 Location: Borehole At Premises Moss Side Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: General Cooling (Existing Licences Only) (High Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Moss Side, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8SW (S)	811	2	383900 395900
51	Water Abstractions Operator: Scottish And Newcastle Uk Ltd Licence Number: 2569007007 Permit Version: 101 Location: Borehole At Premises Moss Side Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Moss Side, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8SW (S)	811	2	383900 395900
51	Water Abstractions Operator: Scottish Courage Brewing Ltd Licence Number: 2569007007 Permit Version: 100 Location: Borehole At Premises Moss Side Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: General Cooling (Existing Licences Only) (High Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 900 Yearly Rate (m3): 227000 Details: Premises At Moss Side, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 31st December 2003 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8SW (S)	811	2	383900 395900
51	Water Abstractions Operator: Scottish Courage Brewing Ltd Licence Number: 2569007007 Permit Version: 100 Location: Borehole At Premises Moss Side Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Moss Side, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 31st December 2003 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SW (S)	811	2	383900 395900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
51	Water Abstractions Operator: Heineken Uk Ltd Licence Number: 2569007007 Permit Version: 103 Location: Borehole At Premises Moss Side Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Moss Side, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th May 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SW (S)	813	2	383865 395909
51	Water Abstractions Operator: Heineken Uk Ltd Licence Number: 2569007007 Permit Version: 103 Location: Borehole At Premises Moss Side Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: General Cooling (Existing Licences Only) (High Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Moss Side, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th May 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SW (S)	813	2	383865 395909
52	Water Abstractions Operator: North Western Electricity Board Licence Number: 2569006023 Permit Version: Not Supplied Location: Rochdale Canal, Dickinson Street, MANCHESTER Authority: Environment Agency, North West Region Abstraction: Cooling Abstraction Type: Not Supplied Source: Canal Daily Rate (m3): 82 Yearly Rate (m3): 25230 Details: Licence Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A18NW (N)	990	2	384100 397700
	Water Abstractions Operator: West Contracting Licence Number: Nw0690006001 Permit Version: 1 Location: Boreholes At Origin Developments, Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 May Authorised End: 30 September Permit Start Date: 19th January 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A23SE (N)	1045	2	384378 397733

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: West Contracting Licence Number: Nw/069/0006/001 Permit Version: 1 Location: Boreholes At Origin Developments, Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 May Authorised End: 30 September Permit Start Date: 19th January 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A23SE (N)	1045	2	384378 397733
	Water Abstractions Operator: Hydes Brewery Ltd Licence Number: 2569007009 Permit Version: 103 Location: Borehole At Premises, Moss Lane West Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: 46 Moss Lane West, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 19th July 2018 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SW (SW)	1229	2	383220 395850
	Water Abstractions Operator: Hydes Brewery Ltd Licence Number: 2569007009 Permit Version: 102 Location: Borehole At Premises, Moss Lane West Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: 46 Moss Lane West Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 12th April 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SW (SW)	1229	2	383220 395850
	Water Abstractions Operator: Hydes Brewery Ltd Licence Number: 2569007009 Permit Version: 101 Location: Borehole At Premises, Moss Lane West Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 373 Yearly Rate (m3): 66826 Details: 46 Moss Lane West, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 7th October 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SW (SW)	1229	2	383220 395850

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Hydes Brewery Ltd Licence Number: 2569007009 Permit Version: 101 Location: Borehole At Premises, Moss Lane West Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: 46 Moss Lane West, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 7th October 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SW (SW)	1229	2	383220 395850
	Water Abstractions Operator: British Telecommunications Plc Licence Number: 2569007069 Permit Version: 100 Location: Borehole At George St, 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): 860 Yearly Rate (m3): 1100 Details: Premises At Rutherford Hse, York St Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A23SW (N)	1289	2	384100 398000
	Water Abstractions Operator: Moseley Rubber Co Ltd Licence Number: 2569006001 Permit Version: 100 Location: Borehole At Premises, Broadie St, Ardwick, Manchester Authority: Environment Agency, North West Region Abstraction: Rubber: 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): 331858 Details: Premises At Broadie St., Ardwick Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th February 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A20NW (NE)	1366	2	385240 397540
	Water Abstractions Operator: G T Energy Uk Limited Licence Number: Nw/069/0004/005 Permit Version: 2 Location: Area Of Abstraction - Lower Carboniferous Limestone Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Heat Pump Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Devonshire Street, Manchester Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 11th June 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A15NE (E)	1570	2	385729 396778

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Gt Energy Limited Licence Number: Nw/069/0004/005 Permit Version: 1 Location: Area Of Abstraction - Lower Carboniferous Limestone Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Heat Pump Abstraction Type: Water may be abstracted from any point within an area Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 17th January 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A15NE (E)	1570	2	385729 396778
	Water Abstractions Operator: Cds Computer Design Systems Ltd Licence Number: 2569007053 Permit Version: 100 Location: R Irwell At Irwell Works, Ordsall Lane, Salford 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: Surface Daily Rate (m3): 455 Yearly Rate (m3): 22730 Details: Irwell Works, Ordsall Lane, Salford Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st November 1987 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A16NW (NW)	1772	2	382500 397400
	Water Abstractions Operator: Her Majesty'S Court Service Licence Number: 2569007089 Permit Version: 2 Location: 2 Boreholes At Gartside Street Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Gartside Street Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th July 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A22NW (NW)	1795	2	383335 398310
	Water Abstractions Operator: Bovis Lend Lease Ltd Licence Number: 2569007089 Permit Version: 1 Location: 2 Boreholes At Gartside Street Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Gartside Street Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 28th January 2005 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A22NW (NW)	1795	2	383335 398310

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	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: 300-550 mm/year Baseflow Index: <40% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	A13SE (SE)	0	4	384143 396693
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Principal Aquifer	A13SE (SE)	0	4	384143 396693
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13SE (SE)	0	4	384143 396693
53	Source Protection Zones Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A13SE (SE)	0	2	384143 396693
54	Source Protection Zones Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone II (Outer Protection Zone): Either 25% of the source area or a 400 day travel time whichever is greater.	A8NW (S)	575	2	383931 396138
55	Source Protection Zones Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone I (Inner Protection Zone): Travel time of 50 days or less to the groundwater source.	A8SW (S)	716	2	383880 396006
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NW (NW)	1	2	384137 396707
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (E)	54	2	384215 396683
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (E)	156	2	384306 396750
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
56	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6195.1 Watercourse Level: Underground Permanent: True Watercourse Name: Corn Brook Catchment Name: Mersey Primacy: 1	A13SE (SE)	162	5	384295 396596

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
57	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 236.6 Watercourse Level: Underground Permanent: True Watercourse Name: River Medlock Catchment Name: Mersey Primacy: 1	A18SW (N)	663	5	384014 397360
58	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 93.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Medlock Catchment Name: Mersey Primacy: 1	A18NW (N)	693	5	384115 397404
59	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 177.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Medlock Catchment Name: Mersey Primacy: 1	A18NE (N)	721	5	384371 397400
60	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 207.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Medlock Catchment Name: Mersey Primacy: 1	A18NW (N)	748	5	383949 397431
61	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 536.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Medlock Catchment Name: Mersey Primacy: 1	A18NE (N)	763	5	384422 397426
62	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Medlock Catchment Name: Mersey Primacy: 1	A18NE (N)	771	5	384163 397482
63	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 263.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Medlock Catchment Name: Mersey Primacy: 1	A18NE (N)	781	5	384167 397492
64	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 14.2 Watercourse Level: Underground Permanent: True Watercourse Name: River Medlock Catchment Name: Mersey Primacy: 1	A18NE (N)	812	5	384332 397505
65	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 231.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Medlock Catchment Name: Mersey Primacy: 1	A17NE (NW)	817	5	383803 397450

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
66	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1011.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 2	A18NE (N)	823	5	384324 397517
67	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 594.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Rochdale Canal Catchment Name: Mersey Primacy: 1	A18NW (N)	873	5	383893 397545
68	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 295.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Medlock Catchment Name: Mersey Primacy: 1	A17NE (NW)	875	5	383595 397393
69	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 282.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Rochdale Canal Catchment Name: Mersey Primacy: 1	A18NW (N)	902	5	383806 397544
70	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NW (N)	903	5	383808 397546

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
71	Historical Landfill Sites Licence Holder: Demolition Service Limited Location: Hulme, Manchester Name: Moss Side Shopping Centre Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD16588 First Input Date: 31st May 1994 Last Input Date: 5th June 1995 Specified Waste: Deposited Waste included Inert and Industrial Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 4200/9100 BGS Ref: Not Supplied Other Ref: F061 ,0103, RD/LIC/1036/93	A7NE (SW)	703	2	383675 396141
72	Licensed Waste Management Facilities (Locations) Licence Number: 50191 Location: Little Ireland Phase B, Great Marlborough Street, Manchester, M1 5NN Operator Name: Terra Vac (uk) Ltd Operator Location: Strategic Business Centre, Blue Ridge Park, Thunderhead Ridge, Glasshoughton, Castleford, WF10 4UA Authority: Environment Agency - North East Region, Ridings Area Site Category: Mobile Plant Licence Status: Issued Issued: 17th June 2002 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A18NW (N)	680	2	383998 397374
	Local Authority Landfill Coverage Name: Manchester City Council - Had landfill data but passed it to the relevant environment agency		0	6	384143 396693
	Local Authority Landfill Coverage Name: Trafford Metropolitan Borough Council - Has not been able to supply Landfill data		976	7	383251 396250
73	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A13SE (SE)	103	-	384194 396588
74	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A12SE (SW)	385	-	383771 396536
75	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A14NW (E)	404	-	384559 396762
76	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A8NE (SE)	500	-	384480 396301
77	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A12SE (W)	558	-	383579 396577
78	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A9NW (SE)	624	-	384663 396316
79	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1896	A18SW (N)	645	-	384058 397350
80	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A8NW (S)	652	-	384069 396029
81	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A7NE (SW)	665	-	383762 396123
82	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A18NE (N)	746	-	384411 397412

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
83	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1896	A18NW (N)	767	-	383864 397422
84	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1909	A18NW (N)	771	-	383872 397429
85	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1896	A17SE (NW)	790	-	383684 397352
86	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A9NW (SE)	790	-	384714 396122
87	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A7NE (SW)	796	-	383638 396051
88	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A14NE (E)	797	-	384956 396744
89	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A7NE (SW)	798	-	383545 396134
90	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A14SE (E)	837	-	384943 396388
91	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A8SE (S)	841	-	384241 395844
92	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A7SE (SW)	863	-	383578 396013
93	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A18NW (N)	904	-	383807 397547
94	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A17SW (NW)	906	-	383440 397289
95	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A14NE (E)	914	-	385072 396772
96	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A19NW (NE)	941	-	384759 397433
97	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A18NW (N)	963	-	384132 397674
98	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1896	A18NW (N)	965	-	383971 397660
99	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A8SE (S)	969	-	384261 395717
100	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1848	A9SW (SE)	978	-	384601 395813
101	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A18NE (N)	978	-	384172 397690
102	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1923	A19NW (NE)	980	-	384754 397487

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
103	Registered Landfill Sites Licence Holder: Demolition Services Ltd Licence Reference: 01036 Site Location: Moss Side District Shopping Centre, Moss Side, Manchester, Greater Manchester Licence Easting: 383500 Licence Northing: 396100 Operator Location: Croft House, Whitehall Road, Drighlington, Bradford, West Yorkshire Authority: Environment Agency - North West Region, South Area Site Category: Landfill Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year) Waste Source: Some restriction on source of waste Restrictions: Status: Licence has completion certificateSurrendered Dated: 1st April 1994 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the road within the address or location Boundary Accuracy: Not Applicable Authorised Waste: Max.Waste Permitted By Licence Rubble,Hardcore,Stone,Brickwk,Concrete Prohibited Waste: Asbestos Liquid Wastes Sludge Wastes Special Wastes Waste In Drums Waste In Skips Waste N.O.S Whether/Not Pack./Pre-Trt	A7NE (SW)	854	2	383500 396100

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Triassic Rocks (Undifferentiated)	A13SE (SE)	0	1	384143 396693
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SE (SE)	0	1	384143 396693
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 45 - 60 mg/kg	A13NE (NE)	358	1	384405 396967
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NE (NE)	360	1	384370 397000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14NW (E)	478	1	384630 396782
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18SE (N)	534	1	384169 397246
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A18SW (N)	635	1	384098 397345

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18NW (N)	867	1	383929 397549
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 384270, 396640 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 31.40 mg/kg Concentration: Cadmium Measured 1.70 mg/kg Concentration: Chromium Measured 63.00 mg/kg Concentration: Lead Measured 203.20 mg/kg Concentration: Nickel Measured 26.60 mg/kg Concentration:	A13SE (SE)	118	1	384270 396640
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 383760, 396710 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 14.70 mg/kg Concentration: Cadmium Measured 0.50 mg/kg Concentration: Chromium Measured 38.70 mg/kg Concentration: Lead Measured 110.90 mg/kg Concentration: Nickel Measured 13.20 mg/kg Concentration:	A12NE (W)	365	1	383760 396710
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 384230, 396230 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 14.10 mg/kg Concentration: Cadmium Measured 0.70 mg/kg Concentration: Chromium Measured 51.90 mg/kg Concentration: Lead Measured 174.60 mg/kg Concentration: Nickel Measured 19.20 mg/kg Concentration:	A8NE (S)	458	1	384230 396230
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 384720, 396660 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 117.40 mg/kg Concentration: Cadmium Measured 2.50 mg/kg Concentration: Chromium Measured 361.90 mg/kg Concentration: Lead Measured 1513.50 mg/kg Concentration: Nickel Measured 129.20 mg/kg Concentration:	A14SW (E)	559	1	384720 396660

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 383750, 397170 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 22.80 mg/kg Concentration: Cadmium Measured 1.10 mg/kg Concentration: Chromium Measured 108.60 mg/kg Concentration: Lead Measured 284.90 mg/kg Concentration: Nickel Measured 30.40 mg/kg Concentration:	A17SE (NW)	604	1	383750 397170
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 383660, 396290 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 26.50 mg/kg Concentration: Cadmium Measured 0.50 mg/kg Concentration: Chromium Measured 76.20 mg/kg Concentration: Lead Measured 272.90 mg/kg Concentration: Nickel Measured 32.60 mg/kg Concentration:	A7NE (SW)	608	1	383660 396290
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 384430, 397270 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 12.70 mg/kg Concentration: Cadmium Measured 0.60 mg/kg Concentration: Chromium Measured 66.10 mg/kg Concentration: Lead Measured 64.40 mg/kg Concentration: Nickel Measured 18.50 mg/kg Concentration:	A18SE (NE)	623	1	384430 397270
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 384760, 396320 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 36.70 mg/kg Concentration: Cadmium Measured 1.70 mg/kg Concentration: Chromium Measured 88.30 mg/kg Concentration: Lead Measured 690.30 mg/kg Concentration: Nickel Measured 42.60 mg/kg Concentration:	A9NW (SE)	702	1	384760 396320
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 383340, 396800 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 27.60 mg/kg Concentration: Cadmium Measured 1.70 mg/kg Concentration: Chromium Measured 66.10 mg/kg Concentration: Lead Measured 192.60 mg/kg Concentration: Nickel Measured 25.30 mg/kg Concentration:	A12NW (W)	792	1	383340 396800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 384750, 397300 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 18.80 mg/kg Concentration: Cadmium Measured 0.60 mg/kg Concentration: Chromium Measured 81.30 mg/kg Concentration: Lead Measured 157.30 mg/kg Concentration: Nickel Measured 25.60 mg/kg Concentration:	A19SW (NE)	837	1	384750 397300
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 384140, 395740 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 17.90 mg/kg Concentration: Cadmium Measured 1.00 mg/kg Concentration: Chromium Measured 70.10 mg/kg Concentration: Lead Measured 317.80 mg/kg Concentration: Nickel Measured 28.20 mg/kg Concentration:	A8SW (S)	937	1	384140 395740
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 383250, 396270 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured 15.80 mg/kg Concentration: Cadmium Measured 0.60 mg/kg Concentration: Chromium Measured 63.00 mg/kg Concentration: Lead Measured 319.40 mg/kg Concentration: Nickel Measured 23.70 mg/kg Concentration:	A7NW (SW)	968	1	383250 396270
	BGS Urban Soil Chemistry Averages Source: British Geological Survey, National Geoscience Information Service Sample Area: Manchester Count Id: 300 Arsenic Minimum 3.00 mg/kg Concentration: Arsenic Average 28.00 mg/kg Concentration: Arsenic Maximum 1008.00 mg/kg Concentration: Cadmium Minimum 0.30 mg/kg Concentration: Cadmium Average 1.40 mg/kg Concentration: Cadmium Maximum 80.30 mg/kg Concentration: Chromium Minimum 29.00 mg/kg Concentration: Chromium Average 92.00 mg/kg Concentration: Chromium Maximum 1252.00 mg/kg Concentration: Lead Minimum 20.00 mg/kg Concentration: Lead Average 270.00 mg/kg Concentration: Lead Maximum 2687.00 mg/kg Concentration: Nickel Minimum 5.00 mg/kg Concentration: Nickel Average 32.00 mg/kg Concentration: Nickel Maximum 137.00 mg/kg Concentration:	A13SE (SE)	0	1	384143 396693

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13SE (SE)	0	8	384143 396693
	Man-Made Mining Cavities Easting: 384900 Northing: 397100 Distance: 841 Quadrant Reference: A19 Quadrant Reference: SE Bearing Ref: NE Cavity Type: SHAFT ENTRY SANDSTONE WORKINGS Commodity: Sandstone Solid Geology Detail: BUNTER SANDSTONE MANCHESTER MARLS COLLYHURST SANDSTONE Superficial Geology Detail: Glacial Till	A19SE (NE)	841	9	384900 397100
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	384143 396693
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	384143 396693
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	384143 396693
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	384143 396693
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	384143 396693
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	384143 396693
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	117	1	384164 396564
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	384143 396693
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	384143 396693

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
104	Contemporary Trade Directory Entries Name: Muprint Ltd Location: Liberty Central, 28 Higher Cambridge Street, Manchester, Greater Manchester, M15 6AA Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A13NE (N)	125	-	384164 396836
105	Contemporary Trade Directory Entries Name: Dolly Tub Laundry Service Location: 1a, Bonsall Street, Manchester, M15 6DR Classification: Laundries & Launderettes Status: Active Positional Accuracy: Automatically positioned to the address	A13NW (NW)	152	-	384034 396819
105	Contemporary Trade Directory Entries Name: The Dolly Tub Location: 1, Bonsall Street, Manchester, M15 6DR Classification: Ironing & Home Laundry Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (NW)	152	-	384034 396819
106	Contemporary Trade Directory Entries Name: Flanny Cleaning Services Location: Flat 13, Hornchurch Court, Bonsall Street, Manchester, Lancashire, M15 6DS Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (NW)	230	-	383943 396837
107	Contemporary Trade Directory Entries Name: Williams Land Rover Location: Birchall Way, Manchester, M15 6DU Classification: Car Dealers Status: Active Positional Accuracy: Automatically positioned to the address	A13SW (SW)	258	-	383898 396562
108	Contemporary Trade Directory Entries Name: University Dental Hospital Of Manchester Location: University Dental Hospital of Manchester, Higher Cambridge Street, Manchester, M15 6FH Classification: Hospitals Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	265	-	384383 396542
109	Contemporary Trade Directory Entries Name: Cedrics Motors Location: 1 Greenheys Lane, Manchester, Greater Manchester, M15 6NQ Classification: Mot Testing Centres Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (S)	338	-	384191 396345
109	Contemporary Trade Directory Entries Name: Cedric'S Motors Location: 1-5, Greenheys Lane, Manchester, M15 6NQ Classification: Mot Testing Centres Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (S)	363	-	384232 396329
109	Contemporary Trade Directory Entries Name: 1st Callautolocksmith.Co.Uk Location: 9, Greenheys Lane, Manchester, M15 6NQ Classification: Lock Suppliers and Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	386	-	384226 396304
110	Contemporary Trade Directory Entries Name: Lig Biowise Ltd Location: Williams House, Lloyd Street North, Manchester Science Park, Manchester, M15 6SE Classification: Laboratory Equipment, Instruments & Supplies Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (SE)	369	-	384405 396410
111	Contemporary Trade Directory Entries Name: Gothard Pine Location: Fallover House, 30, Bronte Street, Manchester, M15 6QL Classification: Furniture Manufacturers - Home & Office Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	386	-	384031 396304

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
112	Contemporary Trade Directory Entries Name: Sky Blue Box Location: 5, Brownbank Walk, Manchester, M15 6WS Classification: Printers Textile Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (SW)	409	-	383940 396315
113	Contemporary Trade Directory Entries Name: Protein Technologies Location: Unit 51, Greenheys Business Centre, 10, Pencroft Way, Manchester, M15 6JJ Classification: Laboratories Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (S)	414	-	384268 396287
113	Contemporary Trade Directory Entries Name: Scientific Laboratory Supplies Ltd Location: Greenheys Business Centre, Pencroft Way, Manchester, Lancashire, M15 6JJ Classification: Laboratory Equipment, Instruments & Supplies Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	414	-	384268 396287
113	Contemporary Trade Directory Entries Name: Kaiku Ltd Location: Greenheys Business Centre, Pencroft Way, Manchester, M15 6JJ Classification: Scientific Apparatus & Instruments - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	414	-	384268 396287
113	Contemporary Trade Directory Entries Name: Idvac Location: Unit 15, Greenheys Business Centre, 10, Pencroft Way, Manchester, M15 6JJ Classification: Coating Specialists Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (S)	414	-	384268 396287
113	Contemporary Trade Directory Entries Name: Ipec Location: Greenheys Business Centre, Pencroft Way, Manchester, Lancashire, M15 6JJ Classification: Engineers - General Status: Inactive Positional Accuracy: Manually positioned to the address or location	A8NE (S)	414	-	384267 396286
113	Contemporary Trade Directory Entries Name: Grand Healthcare Location: 40 Greenheys Business Centre, Pencroft Way, Manchester, Lancashire, M15 6JJ Classification: Disability Equipment - Manufacturers & Suppliers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A8NE (S)	414	-	384267 396286
113	Contemporary Trade Directory Entries Name: Green Digits Location: Greenheys Business Centre, Pencroft Way, Manchester, Lancashire, M15 6JJ Classification: Recycling Services Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A8NE (S)	414	-	384268 396287
114	Contemporary Trade Directory Entries Name: Euro-Industrial Engineering Ltd Location: 133, Grosvenor Street, Manchester, M1 7HE Classification: Pumps - Sales, Servicing & Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (NE)	449	-	384404 397085
115	Contemporary Trade Directory Entries Name: M247 Location: Turing House, Manchester, Greater Manchester, M15 5RL Classification: Fibre Optics Status: Active Positional Accuracy: Automatically positioned to the address	A12SE (SW)	451	-	383745 396441
116	Contemporary Trade Directory Entries Name: Esso Location: Oxford Road, Manchester, Greater Manchester, M13 9NR Classification: Petrol Filling Stations Status: Active Positional Accuracy: Manually positioned within the geographical locality	A14SW (E)	464	-	384596 396525

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
117	Contemporary Trade Directory Entries Name: Zilico Location: Rutherford House, 40, Pencroft Way, Manchester Science Park, Manchester, M15 6SZ Classification: Medical Equipment Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (S)	473	-	384310 396238
117	Contemporary Trade Directory Entries Name: Ipec Location: Rutherford House, 40, Pencroft Way, Manchester Science Park, MANCHESTER, M15 6SZ Classification: Electronic Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	473	-	384312 396239
117	Contemporary Trade Directory Entries Name: Pharmalogical Location: Rutherford House, 40, Pencroft Way, Manchester Science Park, Manchester, Lancashire, M15 6SZ Classification: Chemists' & Pharmacists' Suppliers & Wholesalers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A8NE (S)	473	-	384312 396239
117	Contemporary Trade Directory Entries Name: Igm Resins Location: Rutherford House, 40, Pencroft Way, Manchester Science Park, Manchester, M15 6GG Classification: Chemicals - Distributors & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	473	-	384312 396239
118	Contemporary Trade Directory Entries Name: Yating Lighting Location: Oxford Rd, Manchester, Lancashire, M13 9PL Classification: Lighting Manufacturers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A14NW (E)	474	-	384615 396824
119	Contemporary Trade Directory Entries Name: Ats Euromaster Ltd Location: 20, Wilmott Street, Manchester, Lancashire, M15 6BE Classification: Tyre Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (NW)	497	-	383881 397130
120	Contemporary Trade Directory Entries Name: Best Rest Location: 120-122, Grosvenor Street, Manchester, M1 7HL Classification: Bed & Mattress Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A18SE (NE)	510	-	384426 397144
121	Contemporary Trade Directory Entries Name: W M Engineering Ltd Location: Enterprise House, Lloyd Street North, Manchester Science Park, Manchester, M15 6SE Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (SE)	521	-	384435 396244
121	Contemporary Trade Directory Entries Name: Sensalyse Ltd Location: Enterprise House, Lloyd Street North, Manchester Science Park, Manchester, M15 6SE Classification: Laboratories Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (SE)	521	-	384435 396244
122	Contemporary Trade Directory Entries Name: Print Copy Shop Location: Mandela Buildings, 99, Oxford Road, Manchester, M1 7EL Classification: Copying & Duplicating Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (N)	538	-	384328 397221
122	Contemporary Trade Directory Entries Name: Print Location: Mandela Buildings, 99, Oxford Road, Manchester, M1 7EL Classification: Copying & Duplicating Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (N)	538	-	384328 397221

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
123	Contemporary Trade Directory Entries Name: Clay Studio Ltd Location: 61, Old Birley Street, Manchester, M15 5RF Classification: Ceramic Manufacturers, Supplies & Services Status: Active Positional Accuracy: Automatically positioned to the address	A12SE (W)	541	-	383622 396488
124	Contemporary Trade Directory Entries Name: Danebridge Engineering Co Ltd Location: 3, Lower Chatham Street, Manchester, M1 5QL Classification: Air Conditioning Equipment & Systems Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (N)	572	-	384044 397273
125	Contemporary Trade Directory Entries Name: Gesco Location: Oxford Rd, Manchester, M1 7ED Classification: Plastics - Injection Moulding Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A18SE (N)	572	-	384246 397276
126	Contemporary Trade Directory Entries Name: Smart And Effective Cleaning And Support Services Location: Flat 1, 1, New Welcome Street, Manchester, M15 5NA Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	573	-	383561 396793
127	Contemporary Trade Directory Entries Name: U-Print Location: Steve Biko Building, Oxford Road, Manchester, M13 9PR Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A14SW (SE)	575	-	384676 396430
127	Contemporary Trade Directory Entries Name: U Print Location: Manchester Students Union Oxford Road, Manchester, Greater Manchester, M13 9PR Classification: Copying & Duplicating Services Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A14SW (SE)	580	-	384681 396429
128	Contemporary Trade Directory Entries Name: Ossur (Uk) Ltd Location: Synergy House, Guildhall Close, Manchester Science Park, Manchester, M15 6SY Classification: Disability Equipment - Manufacturers & Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	578	-	384268 396116
128	Contemporary Trade Directory Entries Name: Relisys Location: Synergy House, Guildhall Close, Manchester Science Park, Manchester, M15 6SY Classification: Computer Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	578	-	384268 396116
128	Contemporary Trade Directory Entries Name: Sasc Location: Synergy House, Guildhall Close, Manchester Science Park, Manchester, Lancashire, M15 6SY Classification: Chemical Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	578	-	384268 396116
129	Contemporary Trade Directory Entries Name: Influx Design & Print Location: 98, Grosvenor Street, Manchester, M1 7HL Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	579	-	384497 397179
129	Contemporary Trade Directory Entries Name: Euro Exim Ltd Location: 96-98, Grosvenor Street, Manchester, M1 7HL Classification: Chemicals - Distributors & Wholesalers Status: Active Positional Accuracy: Automatically positioned to the address	A19SW (NE)	583	-	384506 397177

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
129	Contemporary Trade Directory Entries Name: Fleetwood Agencies Location: Grosvenor House, 94-96, Grosvenor Street, Manchester, M1 7HL Classification: Rubber & Plastic Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	584	-	384507 397176
129	Contemporary Trade Directory Entries Name: Final Print Location: Grosvenor Street, All Saints, Manchester, Greater Manchester, M1 7HL Classification: Printers Status: Active Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	586	-	384509 397178
129	Contemporary Trade Directory Entries Name: Billington Food Service Location: 39-44 Davy Close, Park Farm Industrial Estate, Wellingborough, Northamptonshire, NN8 6XX Classification: Food Products - Manufacturers Status: Active Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	586	-	384509 397178
129	Contemporary Trade Directory Entries Name: Wildwood Charcoal & Coppice Products Location: 53 Warehead Cottages, Hainaker, Chichester, West Sussex, PO18 0NF Classification: Coal & Smokeless Fuel Merchants & Distributors Status: Active Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	586	-	384509 397178
130	Contemporary Trade Directory Entries Name: Residential Real Estate Management Location: Student Village, Lower Chatham Street, Manchester, M1 5SX Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (N)	601	-	383973 397285
131	Contemporary Trade Directory Entries Name: Ormond Street Motors Location: 2-4, Lower Ormond Street, Manchester, M1 5QF Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (N)	612	-	384078 397320
131	Contemporary Trade Directory Entries Name: Manchester Print Co Location: 8, Lower Ormond Street, Manchester, M1 5QF Classification: T-Shirts Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (N)	612	-	384078 397320
131	Contemporary Trade Directory Entries Name: Easy Wheels Location: 8, Lower Ormond Street, Manchester, M1 5QJ Classification: Confectionery Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (N)	613	-	384078 397320
132	Contemporary Trade Directory Entries Name: Williams Select Location: 19-21, Upper Brook Street, Manchester, M13 9XH Classification: Car Dealers Status: Active Positional Accuracy: Automatically positioned to the address	A19SW (NE)	640	-	384690 397062
132	Contemporary Trade Directory Entries Name: Williams Jaguar Ltd Location: 19-21, Upper Brook Street, Manchester, M13 9XH Classification: Car Dealers Status: Active Positional Accuracy: Automatically positioned to the address	A19SW (NE)	640	-	384690 397062
132	Contemporary Trade Directory Entries Name: Stratstone Jaguar Location: 19-21, Upper Brook Street, Manchester, M13 9XH Classification: Car Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	641	-	384691 397062

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
133	Contemporary Trade Directory Entries Name: I D Location: 219, Hulme Walk, Manchester, M15 5FQ Classification: Mechanical Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	640	-	383486 396730
134	Contemporary Trade Directory Entries Name: Hunters Contracts Ltd Location: MacIntosh House, 4a, Cambridge Street, Manchester, M1 5GG Classification: Office Furniture & Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (N)	640	-	383916 397306
135	Contemporary Trade Directory Entries Name: Qiagen Location: Skelton House, Lloyd Street North, Manchester Science Park, Manchester, M15 6SH Classification: Chemists' & Pharmacists' Suppliers & Wholesalers Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (SE)	653	-	384411 396083
136	Contemporary Trade Directory Entries Name: Road Runners Removals Location: Kreativ House, 2 Acker St, Rochdale, Lancashire, OL16 1HZ Classification: Road Haulage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14SW (SE)	668	-	384773 396418
137	Contemporary Trade Directory Entries Name: Williams Bmw Location: 45, Upper Brook Street, Manchester, M13 9WS Classification: Car Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (E)	669	-	384784 396937
137	Contemporary Trade Directory Entries Name: Williams B M W Location: 45, Upper Brook Street, Manchester, M13 9WS Classification: Car Customisation & Conversion Specialists Status: Active Positional Accuracy: Automatically positioned to the address	A14NW (E)	669	-	384783 396937
137	Contemporary Trade Directory Entries Name: Robins & Day Manchester Location: 53-57, Upper Brook Street, Manchester, M13 9TD Classification: Car Dealers Status: Active Positional Accuracy: Automatically positioned to the address	A14NE (E)	693	-	384820 396904
137	Contemporary Trade Directory Entries Name: Citroen Manchester - Central Location: 53-57, Upper Brook Street, Manchester, M13 9TD Classification: Car Customisation & Conversion Specialists Status: Active Positional Accuracy: Automatically positioned to the address	A14NE (E)	694	-	384820 396905
138	Contemporary Trade Directory Entries Name: In Our Coats Location: 225, Hulme Street, Hulme, Manchester, M15 5EF Classification: Greeting Card Publishers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SE (NW)	685	-	383555 397075
139	Contemporary Trade Directory Entries Name: Alpha M Services Location: Apartment 52, 99, Greenheys Lane West, Manchester, M15 5AX Classification: Car Engine Tuning & Diagnostic Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	687	-	383646 396189
140	Contemporary Trade Directory Entries Name: Bookbind Location: 2-4, Oxford Road, Manchester, Lancashire, M1 5QA Classification: Bookbinders Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18NE (N)	711	-	384146 397423

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
141	Contemporary Trade Directory Entries Name: Asda Petrol Location: 100, Princess Road, Manchester, M15 5AS Classification: Petrol Filling Stations Status: Active Positional Accuracy: Automatically positioned to the address	A7NE (SW)	723	-	383757 396058
142	Contemporary Trade Directory Entries Name: Epistem Ltd Location: 48, Grafton Street, Manchester, M13 9XX Classification: Laboratories Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	729	-	384843 396428
143	Contemporary Trade Directory Entries Name: Merseyside Metalworks Location: 81-97, Upper Brook Street, Manchester, M13 9TX Classification: Air Conditioning Equipment & Systems Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	732	-	384888 396777
144	Contemporary Trade Directory Entries Name: Mels Location: 2, Stockland Close, Manchester, M13 9WY Classification: Ironing & Home Laundry Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	744	-	384713 397202
145	Contemporary Trade Directory Entries Name: Harrison Motors Location: 51 New Wakefield St, Manchester, Lancashire, M1 5NP Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A18NW (N)	749	-	384080 397457
146	Contemporary Trade Directory Entries Name: Impex Trading Co Location: Flat 23, Oxford Place, 7, Oxford Road, Manchester, M1 6EY Classification: Carpets & Rugs - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	759	-	384176 397471
147	Contemporary Trade Directory Entries Name: Auto Trader Location: 1, Tony Wilson Place, Manchester, M15 4FN Classification: Car Customisation & Conversion Specialists Status: Inactive Positional Accuracy: Automatically positioned to the address	A17NE (NW)	778	-	383735 397371
147	Contemporary Trade Directory Entries Name: Auto Trader Ltd Location: 1, Tony Wilson Place, Manchester, M15 4FN Classification: Car Customisation & Conversion Specialists Status: Active Positional Accuracy: Automatically positioned to the address	A17NE (NW)	791	-	383729 397382
148	Contemporary Trade Directory Entries Name: Heineken Location: Royal Brewery, 201, Denmark Road, Manchester, M15 6LD Classification: Brewers Status: Active Positional Accuracy: Manually positioned within the geographical locality	A8SW (S)	783	-	383920 395923
148	Contemporary Trade Directory Entries Name: Scottish-Newcastle Ltd Location: 201, Denmark Road, Manchester, M15 6LD Classification: Brewers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SW (S)	783	-	383920 395923
149	Contemporary Trade Directory Entries Name: Autogas Cars Direct Location: 1, City Road East, Manchester, Lancashire, M15 4PN Classification: Car Dealers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	787	-	383625 397305
150	Contemporary Trade Directory Entries Name: Justakajamesdesigns Location: 234, Greenheys Lane West, Manchester, M15 5AF Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NW (SW)	797	-	383454 396254

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
151	Contemporary Trade Directory Entries Name: D C Motor Engineers Location: 45, York Street, Manchester, M1 7DE Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A18NE (N)	798	-	384226 397506
152	Contemporary Trade Directory Entries Name: George Woodhead & Co Ltd Location: 2, Gloucester Street, Manchester, M1 5GP Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NW (N)	806	-	383844 397455
152	Contemporary Trade Directory Entries Name: John Sherratt & Co Ltd Location: Hotspur House, 2, Gloucester Street, Manchester, M1 5QR Classification: Bookbinding & Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NW (N)	806	-	383844 397455
152	Contemporary Trade Directory Entries Name: Aaa Location: 2, Gloucester Street, Manchester, M1 5GP Classification: Distribution Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NW (N)	806	-	383844 397455
152	Contemporary Trade Directory Entries Name: 24 Design Ltd Location: Hotspur House, 2, Gloucester Street, Manchester, Lancashire, M1 5QR Classification: Furniture Manufacturers - Home & Office Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18NW (N)	806	-	383844 397455
153	Contemporary Trade Directory Entries Name: Graham'S Motors Location: 59, Whitworth Street West, Manchester, Lancashire, M1 5WW Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18NW (N)	812	-	383939 397495
153	Contemporary Trade Directory Entries Name: Smiler Service Location: Flat 111, The Lock Building, 41, Whitworth Street West, Manchester, M1 5BD Classification: Freight Forwarders Status: Active Positional Accuracy: Automatically positioned to the address	A18NW (N)	855	-	383933 397538
153	Contemporary Trade Directory Entries Name: Bandbox Laundry Premier Outlet Location: Unit C 41 Whitworth Street, Manchester, Greater Manchester, M1 5BE Classification: Laundry & Dry Cleaning Supplies Status: Active Positional Accuracy: Automatically positioned to the address	A18NW (N)	855	-	383933 397538
154	Contemporary Trade Directory Entries Name: Copybook Press Ltd Location: 45-47 City Road East, Manchester, M15 4PN Classification: Printers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	814	-	383522 397242
155	Contemporary Trade Directory Entries Name: Engravings Services Ltd Location: 21, Radnor Street, Hulme, Manchester, M15 5RD Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7SE (SW)	817	-	383716 395973
156	Contemporary Trade Directory Entries Name: L T Switchgear Ltd Location: 120, Princess Road, Manchester, M15 5AT Classification: Electrical Goods - Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7SE (SW)	829	-	383799 395917
156	Contemporary Trade Directory Entries Name: Bridgwater Hospital Location: 120, Princess Road, Manchester, M15 5AT Classification: Hospitals Status: Active Positional Accuracy: Automatically positioned to the address	A7SE (SW)	829	-	383799 395917

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
156	Contemporary Trade Directory Entries Name: Bridgewater Hospital Location: 120, Princess Road, Manchester, M15 5AT Classification: Hospitals Status: Active Positional Accuracy: Automatically positioned to the address	A7SE (SW)	830	-	383798 395916
157	Contemporary Trade Directory Entries Name: Manchester Incubator Building Ltd Location: 48, Grafton Street, Manchester, M13 9XX Classification: Laboratories Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	845	-	384952 396387
157	Contemporary Trade Directory Entries Name: Nanoco Technologies Ltd Location: 48, Grafton Street, Manchester, M13 9XX Classification: Laboratories Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	845	-	384952 396387
158	Contemporary Trade Directory Entries Name: Nuffield Health Diagnostic Location: Nelson Street, Manchester, Greater Manchester, M13 9NQ Classification: Hospitals Status: Active Positional Accuracy: Manually positioned within the geographical locality	A9NE (SE)	849	-	384870 396219
159	Contemporary Trade Directory Entries Name: Splash Graphix Ltd Location: Unit 6, St Wilfreds Enterprise Centre, Birchvale Close, Manchester, M15 5BJ Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	862	-	383302 396950
159	Contemporary Trade Directory Entries Name: Complete Office Printer Support Location: St. Wilfrids Enterprise Centre, Birchvale Close, Manchester, M15 5BJ Classification: Office Equipment Servicing & Maintenance Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	865	-	383296 396943
160	Contemporary Trade Directory Entries Name: Watt Energy Ltd Location: River Pl, City Rd East, Manchester, M15 4PG Classification: Gas Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SE (NW)	862	-	383510 397300
161	Contemporary Trade Directory Entries Name: Broomwell Healthwatch Ltd Location: 86, Princess Street, Manchester, Lancashire, M1 6NG Classification: Medical & Dental Laboratories Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18NE (N)	877	-	384297 397578
161	Contemporary Trade Directory Entries Name: Seba (UK) Ltd Location: 84 Princess St, Manchester, Lancashire, M1 6NG Classification: Machine Tool Accessories & Services Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18NE (N)	877	-	384296 397577
161	Contemporary Trade Directory Entries Name: Northern Contract Cleaners Location: Asia House, 82, Princess Street, Manchester, M1 6NF Classification: Cleaning Services - Commercial Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	922	-	384288 397624
161	Contemporary Trade Directory Entries Name: William Chitham Location: 121, Princess Street, Manchester, M1 7AD Classification: Photo & Digital Imaging Bureaus Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	926	-	384333 397620
161	Contemporary Trade Directory Entries Name: Harris Darkrooms Location: 121, Princess Street, Manchester, M1 7AD Classification: Photographic Processors Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	926	-	384333 397620

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
161	Contemporary Trade Directory Entries Name: Subway Location: Second Floor, 121, Princess Street, Manchester, Lancashire, M1 7AG Classification: Printers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18NE (N)	926	-	384333 397620
161	Contemporary Trade Directory Entries Name: Chamber Communication Ltd Location: 121, Princess Street, Manchester, Lancashire, M1 7AG Classification: Telecommunications Equipment & Systems Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18NE (N)	926	-	384333 397620
162	Contemporary Trade Directory Entries Name: Crown Knitwear Ltd Location: 10-20, Grosvenor Street, MANCHESTER, M1 7JJ Classification: Knitwear Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	890	-	384785 397340
162	Contemporary Trade Directory Entries Name: Le Missey Ltd Location: 10-20, Grosvenor Street, Manchester, Lancashire, M1 7JJ Classification: Knitwear Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	890	-	384785 397340
163	Contemporary Trade Directory Entries Name: Pro Cleaners Hulme Location: 17c, Chichester Road South, Manchester, M15 5PL Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NW (SW)	906	-	383389 396155
164	Contemporary Trade Directory Entries Name: Royal Manchester Childrens Hospital Location: Manchester, M13 9WL Classification: Hospitals Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NE (SE)	907	-	384944 396228
164	Contemporary Trade Directory Entries Name: Central Manchester Hospital Location: The Lodge Atm, Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL Classification: Hospitals Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NE (SE)	907	-	384944 396228
164	Contemporary Trade Directory Entries Name: Manchester Royal Infirmary Location: The Lodge Atm, Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL Classification: Hospitals Status: Active Positional Accuracy: Automatically positioned to the address	A9NE (SE)	907	-	384944 396228
164	Contemporary Trade Directory Entries Name: The Kellgren Centre Location: Manchester Royal Infirmary, Oxford Road, Manchester, Greater Manchester, M13 9WL Classification: Hospitals Status: Active Positional Accuracy: Automatically positioned to the address	A9NE (SE)	907	-	384944 396228
164	Contemporary Trade Directory Entries Name: Central Manchester Healthcare Trust Location: Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL Classification: Hospitals Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NE (SE)	945	-	384979 396212
164	Contemporary Trade Directory Entries Name: Manchester Royal Eye Hospital Location: Manchester Royal Infirmary, Oxford Rd, Manchester, Lancashire, M13 9WL Classification: Hospitals Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A9NE (SE)	945	-	384979 396212

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
164	Contemporary Trade Directory Entries Name: St Mary'S Hospital Location: Manchester Royal Infirmary,Oxford Rd, Manchester, Lancashire, M13 9WL Classification: Hospitals Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A9NE (SE)	945	-	384979 396212
164	Contemporary Trade Directory Entries Name: Manchester Royal Infirmary Location: K20, Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL Classification: Hospitals Status: Active Positional Accuracy: Automatically positioned to the address	A9NE (SE)	945	-	384979 396212
164	Contemporary Trade Directory Entries Name: Manchester Childrens Hospital Location: Manchester Royal Infirmary,Oxford Rd, Manchester, Lancashire, M13 9WL Classification: Hospitals Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A9NE (SE)	945	-	384979 396212
165	Contemporary Trade Directory Entries Name: Pest Control Manchester Location: 14, Commercial Street, Manchester, M15 4PZ Classification: Pest & Vermin Control Status: Active Positional Accuracy: Automatically positioned to the address	A17SE (NW)	920	-	383497 397369
165	Contemporary Trade Directory Entries Name: Everything Mirror Location: 14, Commercial Street, Manchester, M15 4PZ Classification: Mirrors & Decorative Glass Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SE (NW)	920	-	383497 397369
165	Contemporary Trade Directory Entries Name: Manchester Pest Control Location: 14, Commercial Street, Manchester, M15 4PZ Classification: Pest & Vermin Control Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SW (NW)	938	-	383460 397358
166	Contemporary Trade Directory Entries Name: First North Western Location: Bridgewater House, 58, Whitworth Street, Manchester, M1 6LS Classification: Railways Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	921	-	384158 397633
166	Contemporary Trade Directory Entries Name: Aeon Location: Bridgewater House 58-60, Whitworth Street, Manchester, M1 6LT Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	928	-	384165 397640
167	Contemporary Trade Directory Entries Name: C G (Europe) Ltd Location: Enterprise House, 15, Whitworth Street West, Manchester, Lancashire, M1 5WG Classification: China & Glassware Manufacturers & Repairs Status: Inactive Positional Accuracy: Manually positioned to the address or location	A17NE (NW)	922	-	383721 397526
168	Contemporary Trade Directory Entries Name: Hayes Of Manchester Location: 29, Wadeson Road, Manchester, M13 9UG Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address	A19SE (NE)	923	-	384937 397201
169	Contemporary Trade Directory Entries Name: Hajis Auto Centre Location: Unit 29b,Wadeson Road, Manchester, Greater Manchester, M13 9UG Classification: Mot Testing Centres Status: Active Positional Accuracy: Manually positioned within the geographical locality	A19SE (NE)	927	-	384950 397186

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
169	Contemporary Trade Directory Entries Name: Tyrewyse Ltd Location: 8-10, Kale Street, Manchester, M13 9XG Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A19SE (NE)	972	-	384985 397215
169	Contemporary Trade Directory Entries Name: Crescent Auto Centre Ltd Location: 29, Wadeson Road, Manchester, M13 9UG Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SE (NE)	972	-	384986 397215
170	Contemporary Trade Directory Entries Name: Professional Cleaners Hulme Location: 17c Chichester Road, Manchester, Greater Manchester, M15 5PJ Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7NW (SW)	931	-	383305 396244
171	Contemporary Trade Directory Entries Name: Aquatech - Pressmain Location: Dolphin House, 130, Princess Road, Manchester, Lancashire, M16 7BY Classification: Pumps - Sales, Servicing & Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A7SE (S)	940	-	383795 395798
171	Contemporary Trade Directory Entries Name: Aquatech Pressmain Location: Dolphin House, 130, Princess Road, Manchester, M16 7BY Classification: Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7SE (S)	940	-	383795 395798
172	Contemporary Trade Directory Entries Name: William Hodgson & Co Location: Sixth Floor, Churchgate House, 56, Oxford Street, Manchester, Lancashire, M1 6EU Classification: Oils - Edible Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18NW (N)	944	-	384028 397647
173	Contemporary Trade Directory Entries Name: Archmate Ltd Location: Flat 15, Granby House, Granby Row, Manchester, M1 7AR Classification: Rubber & Plastic Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	947	-	384447 397612
174	Contemporary Trade Directory Entries Name: Maronixardwick Location: 50 Downing St, Manchester, Lancashire, M1 7JE Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A19SE (NE)	956	-	384911 397296
175	Contemporary Trade Directory Entries Name: Soleheat Location: St. James Buildings, 79, Oxford Street, Manchester, M1 6HT Classification: Under Floor Heating Status: Active Positional Accuracy: Automatically positioned to the address	A18NW (N)	969	-	384075 397678
175	Contemporary Trade Directory Entries Name: C H A Technologies Group Location: St. James Buildings, 79, Oxford Street, Manchester, M1 6FQ Classification: Textile Manufacturing Status: Active Positional Accuracy: Automatically positioned to the address	A18NW (N)	969	-	384075 397678
175	Contemporary Trade Directory Entries Name: Heatrise Location: St. James Buildings, 79, Oxford Street, Manchester, M1 6HT Classification: Under Floor Heating Status: Active Positional Accuracy: Automatically positioned to the address	A18NW (N)	969	-	384075 397678

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
175	Contemporary Trade Directory Entries Name: C H A Technologies Group Location: St. James Buildings, 79, Oxford Street, Manchester, M1 6FQ Classification: Knitting Yarn Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NW (N)	970	-	384075 397678
175	Contemporary Trade Directory Entries Name: Faupel Plc Location: St. James Buildings, 79, Oxford Street, Manchester, Lancashire, M1 6FQ Classification: Soft Furnishings - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NW (N)	970	-	384075 397678
175	Contemporary Trade Directory Entries Name: Jany (UK) Location: St. James Buildings, 79, Oxford Street, Manchester, Lancashire, M1 6FQ Classification: Commercial Vehicle Bodybuilders & Repairers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18NW (N)	970	-	384075 397678
176	Contemporary Trade Directory Entries Name: Nuffield Hospital Location: Nelson Street, Manchester, Greater Manchester, M13 9NQ Classification: Hospitals Status: Active Positional Accuracy: Manually positioned to the address or location	A9NE (SE)	977	-	385043 396265
177	Contemporary Trade Directory Entries Name: Simon & Simon Location: Lock 90, Trumpet Street, Manchester, Greater Manchester, M1 5LW Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A17NE (NW)	982	-	383683 397574
177	Contemporary Trade Directory Entries Name: E F G Matthews Office Furniture Ltd Location: Albion Street, Manchester, M1 5LL Classification: Office Furniture & Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A17NE (NW)	992	-	383661 397574
178	Contemporary Trade Directory Entries Name: G & M Fabrics Location: Symco House, Little Peter St, Manchester, M15 4PS Classification: Pattern Makers - Paper Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A17NE (NW)	991	-	383493 397460
179	Contemporary Trade Directory Entries Name: Colour Point (Manchester) Ltd Location: Unit 4, Olympia Trading Estate, Great Jackson Street, Manchester, M15 4NP Classification: Photographic Processors Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SW (NW)	997	-	383320 397283
179	Contemporary Trade Directory Entries Name: Pro2col Imaging Ltd Location: Unit 4, Olympia Trading Estate, Great Jackson Street, Manchester, Lancashire, M15 4NP Classification: Photo & Digital Imaging Bureaus Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SW (NW)	997	-	383320 397283
180	Contemporary Trade Directory Entries Name: Best Laundrette Location: 40, Brunswick Street, Manchester, M13 9TQ Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	1000	-	385122 396964
180	Contemporary Trade Directory Entries Name: Best Laundrette Location: 40, Brunswick Street, Manchester, M13 9TQ Classification: Laundries & Launderettes Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	1000	-	385122 396964

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
181	Fuel Station Entries Name: Asda Hulme Location: Greenhays Lane West Archway, Hulme , Manchester, Greater Manchester, M15 5AQ Brand: ASDA Premises Type: Hypermarket Status: Open Positional Accuracy: Manually positioned to the address or location	A7NE (SW)	581	-	383694 396292
182	Fuel Station Entries Name: Ormond Street Motors Location: 2-4, Lower Ormond Street , , Manchester, Greater Manchester, M1 5QF Brand: Obsolete Premises Type: Not Applicable Status: Obsolete Positional Accuracy: Automatically positioned to the address	A18SW (N)	612	-	384078 397320
183	Points of Interest - Commercial Services Name: Cedrics Motors Location: Greenheys Lane, Manchester, M15 6NQ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (S)	339	10	384191 396344
183	Points of Interest - Commercial Services Name: Cedric's Motors Location: 1-5 Greenheys Lane, Manchester, M15 6NQ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (S)	363	10	384232 396329
183	Points of Interest - Commercial Services Name: Cedric's Motors Location: 1-5 Greenheys Lane, Manchester, M15 6NQ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (S)	364	10	384232 396328
183	Points of Interest - Commercial Services Name: Bob's Auto Locksmiths Location: Greenheys Lane, Manchester, M15 6NQ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (S)	386	10	384226 396303
184	Points of Interest - Commercial Services Name: Asda Hulme Location: Greenhays Lane West, Archway, Hulme, Manchester, M15 5AQ Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A7NE (SW)	571	10	383681 396323
184	Points of Interest - Commercial Services Name: Car Wash Location: Greenhays Lane West, Archway, Hulme, Manchester, Lancashire, M15 5AQ Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A7NE (SW)	581	10	383694 396292
185	Points of Interest - Commercial Services Name: Greenbrow Motors Location: 1 Great Marlborough Street, Manchester, M1 5NJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NW (N)	721	10	384058 397426
186	Points of Interest - Commercial Services Name: D C Motor Engineers Location: 45 York Street, Manchester, M1 7DE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	797	10	384225 397506
187	Points of Interest - Commercial Services Name: Repair A Screen Location: 32 Holdgate Close, Manchester, M15 5EP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NW (SW)	802	10	383405 396330

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
187	Points of Interest - Commercial Services Name: Repair A Screen Location: 32 Holdgate Close, Manchester, M15 5EP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NW (SW)	803	10	383405 396329
188	Points of Interest - Commercial Services Name: Publicity Location: 2 Gloucester Street, Manchester, M1 5GP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NW (N)	806	10	383844 397455
188	Points of Interest - Commercial Services Name: All About Audiences Distribution Location: Hotspur House 2, Gloucester Street, Manchester, M1 5QR Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NW (N)	806	10	383843 397455
189	Points of Interest - Commercial Services Name: Graham's Motors Location: 59 Whitworth Street West, Manchester, M1 5WW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NW (N)	812	10	383939 397495
189	Points of Interest - Commercial Services Name: J E Gordon Ltd Location: 60 Whitworth Street West, Manchester, M1 5WW Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A18NW (N)	817	10	383963 397507
189	Points of Interest - Commercial Services Name: Smiler Service Location: Unit 3c The Lock Building, 41 Whitworth Street West, Manchester, M1 5BD Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NW (N)	867	10	383932 397550
190	Points of Interest - Commercial Services Name: Kickstart Motorcycles Location: 77 Arches, Whitworth Street West, Manchester, M1 5WQ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17NE (NW)	904	10	383702 397496
191	Points of Interest - Commercial Services Name: Pest Control Manchester Location: 14 Commercial Street, Manchester, M15 4PZ Category: Contract Services Class Code: Pest and Vermin Control Positional Accuracy: Positioned to address or location	A17SW (NW)	938	10	383460 397358
192	Points of Interest - Commercial Services Name: Benz Automotive Location: Hanover House 29a, Wadeson Road, Manchester, M13 9UG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SE (NE)	960	10	384983 397196
192	Points of Interest - Commercial Services Name: Hajis Auto Centre Location: Unit 29b, Wadeson Road, Manchester, M13 9UG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SE (NE)	965	10	384984 397204
192	Points of Interest - Commercial Services Name: Tyrewise Location: 8-10 Kale Street, Manchester, M13 9XG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SE (NE)	972	10	384986 397215
192	Points of Interest - Commercial Services Name: Crescent Auto Centre Ltd Location: 29 Wadeson Road, Manchester, M13 9UG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SE (NE)	972	10	384986 397215

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
192	Points of Interest - Commercial Services Name: Crescent Auto Centre Ltd Location: 29 Wadeson Road, Manchester, M13 9UG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SE (NE)	972	10	384986 397215
192	Points of Interest - Commercial Services Name: Tyrewyse Ltd Location: 8-10 Kale Street, Manchester, M13 9XG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SE (NE)	972	10	384985 397215
192	Points of Interest - Commercial Services Name: Majestic Valeting Location: 29 Wadeson Road, Manchester, M13 9UG Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A19SE (NE)	972	10	384986 397215
193	Points of Interest - Commercial Services Name: M G Mechanical Services Location: 82 Hewitt Street, Manchester, M15 4GB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17NE (NW)	962	10	383593 397498
194	Points of Interest - Commercial Services Name: I T True Ltd Location: St. James Building 79, Oxford Street, Manchester, M1 6FQ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NW (N)	970	10	384075 397678
194	Points of Interest - Commercial Services Name: Faupel Plc Location: St. James Buildings 79, Oxford Street, Manchester, M1 6FQ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NW (N)	970	10	384075 397678
195	Points of Interest - Education and Health Name: University Dental Hospital of Manchester Location: University Dental Hospital of Manchester, Higher Cambridge Street, Manchester, M15 6FH Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A13SE (SE)	265	10	384383 396542
195	Points of Interest - Education and Health Name: University Dental Hospital Location: University Dental Hospital of Manchester, Higher Cambridge Street, Manchester, M15 6FH Category: Health Practitioners and Establishments Class Code: Accident & Emergency Department Positional Accuracy: Positioned to address or location	A13SE (SE)	265	10	384383 396542
195	Points of Interest - Education and Health Name: University Dental Hospital Location: University Dental Hospital of Manchester, Higher Cambridge Street, Manchester, M15 6FH Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A13SE (SE)	265	10	384383 396542
196	Points of Interest - Education and Health Name: Bridgewater Hospital Location: 120 Princess Road, Manchester, M15 5AT Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A7SE (SW)	829	10	383799 395917
196	Points of Interest - Education and Health Name: Bridgewater Hospital Location: 120 Princess Road, Manchester, M15 5AT Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A7SE (SW)	829	10	383799 395917

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
196	Points of Interest - Education and Health Name: Bridgewater Wellness Clinic Location: 120 Princess Road, Manchester, M15 5AT Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A7SE (SW)	830	10	383798 395916
197	Points of Interest - Education and Health Name: Royal Manchester Children's Hospital Location: Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A9NE (SE)	945	10	384979 396212
197	Points of Interest - Education and Health Name: Manchester Royal Infirmary Location: Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL Category: Health Practitioners and Establishments Class Code: Accident & Emergency Department Positional Accuracy: Positioned to address or location	A9NE (SE)	945	10	384979 396212
197	Points of Interest - Education and Health Name: Manchester Royal Infirmary Location: Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A9NE (SE)	945	10	384979 396212
198	Points of Interest - Manufacturing and Production Name: Factory Location: M15 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A8NE (S)	376	10	384225 396314
198	Points of Interest - Manufacturing and Production Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8NE (S)	387	10	384245 396308
199	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SE (NE)	444	10	384420 397067
200	Points of Interest - Manufacturing and Production Name: Vetter Location: 3 Archway, Manchester, M15 5QJ Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A12SE (SW)	445	10	383785 396395
201	Points of Interest - Manufacturing and Production Name: Manchester Science Partnerships Location: Kilburn House, Lloyd Street North, Manchester Science Park, Manchester, M15 6SE Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A8NE (SE)	493	10	384440 396280
201	Points of Interest - Manufacturing and Production Name: Manchester Science Park Location: Kilburn House, Lloyd Street North, Manchester Science Park, Manchester, M15 6SE Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A8NE (SE)	493	10	384440 396280
201	Points of Interest - Manufacturing and Production Name: Manchester Science Park Location: Kilburn House, Lloyd Street North, Manchester Science Park, Manchester, M15 6SE Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A8NE (SE)	493	10	384440 396280

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
202	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	663	10	384026 397362
203	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	667	10	383845 397303
203	Points of Interest - Manufacturing and Production Name: Tank Location: M1 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A18NW (N)	735	10	383867 397388
204	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	668	10	383994 397360
204	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18NW (N)	723	10	383943 397403
204	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18NW (N)	732	10	384010 397430
204	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18NW (N)	750	10	384007 397447
205	Points of Interest - Manufacturing and Production Name: Works Location: M1 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	749	10	384197 397460
205	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	751	10	384201 397461
205	Points of Interest - Manufacturing and Production Name: Works Location: M1 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	762	10	384211 397472
205	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	764	10	384215 397473
205	Points of Interest - Manufacturing and Production Name: Manchester Business Centre Ltd Location: 60 Charles Street, Manchester, M1 7DF Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A18NE (N)	771	10	384212 397481

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
205	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	802	10	384266 397506
205	Points of Interest - Manufacturing and Production Name: Anchester House Management Location: Manchester House 86, Princess Street, Manchester, M1 6NG Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A18NE (N)	877	10	384296 397577
206	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	750	10	384027 395935
206	Points of Interest - Manufacturing and Production Name: Works Location: M14 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	750	10	384027 395934
207	Points of Interest - Manufacturing and Production Name: Tank Location: M15 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A7SE (SW)	757	10	383769 396012
208	Points of Interest - Manufacturing and Production Name: Tank Location: M15 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	780	10	383867 395943
208	Points of Interest - Manufacturing and Production Name: Tank Location: M15 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	847	10	383846 395879
209	Points of Interest - Manufacturing and Production Name: Tanks Location: M15 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	826	10	383937 395874
210	Points of Interest - Manufacturing and Production Name: St Wilfrid's Enterprise Centre Location: M15 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	855	10	383311 396954
210	Points of Interest - Manufacturing and Production Name: Firmstart Ltd Location: St. Wilfrids Enterprise Centre, Birchvale Close, Manchester, M15 5BJ Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A12NW (W)	865	10	383296 396943
210	Points of Interest - Manufacturing and Production Name: Firmstart Manchester Ltd Location: St. Wilfrids Enterprise Centre, Birchvale Close, Manchester, M15 5BJ Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A12NW (W)	865	10	383296 396943
211	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	858	10	383564 397345

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
211	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	878	10	383543 397353
212	Points of Interest - Manufacturing and Production Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	886	10	384783 397336
212	Points of Interest - Manufacturing and Production Name: Factory Location: M1 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A19SW (NE)	886	10	384786 397333
213	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A17NE (NW)	963	10	383567 397482
213	Points of Interest - Manufacturing and Production Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A17NE (NW)	969	10	383495 397432
213	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A17NW (NW)	986	10	383452 397416
213	Points of Interest - Manufacturing and Production Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A17NW (NW)	996	10	383457 397435
214	Points of Interest - Manufacturing and Production Name: Locus Properties Ltd Location: 19 Albion Wharf, Manchester, M1 5LN Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A17NE (NW)	992	10	383660 397574
215	Points of Interest - Public Infrastructure Name: Asda Petrol Location: 100 Princess Road, Manchester, M15 5AS Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A7NE (SW)	581	10	383694 396292
215	Points of Interest - Public Infrastructure Name: Asda Hulme Location: Greenhays Lane West, Archway, Hulme, Manchester, M15 5AQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A7NE (SW)	581	10	383694 396292
215	Points of Interest - Public Infrastructure Name: Hulme Location: 100 Princess Road, Manchester, M15 5AS Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A7NE (SW)	582	10	383694 396291
216	Points of Interest - Public Infrastructure Name: Greenheys Section Divisional Police Headquarters Location: Greenheys Police Station, Charles Halle Road, Manchester, M15 6NP Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A8NW (S)	591	10	384059 396090

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
217	Points of Interest - Public Infrastructure Name: Weirs Location: M1 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A18NW (NW)	767	10	383841 397412
218	Points of Interest - Public Infrastructure Name: Manchester Oxford Road Rail Station Location: Great Marlborough Street, M1 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A18NW (N)	770	10	384029 397472
218	Points of Interest - Public Infrastructure Name: Manchester Oxford Road Station Location: Great Marlborough Street, M1 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A18NW (N)	770	10	384029 397472
219	Points of Interest - Public Infrastructure Name: Moss Side Fire Station Location: Moss Side Fire Station 9, Denhill Road, Manchester, M15 5NR Category: Central and Local Government Class Code: Fire Brigade Stations Positional Accuracy: Positioned to address or location	A7SE (SW)	841	10	383745 395929
219	Points of Interest - Public Infrastructure Name: Fire Location: Moss Side Fire Station 9, Denhill Road, Manchester, M15 5NR Category: Central and Local Government Class Code: Fire Brigade Stations Positional Accuracy: Positioned to address or location	A7SE (SW)	841	10	383745 395930
219	Points of Interest - Public Infrastructure Name: Greater Manchester Fire & Rescue Services Location: Moss Side Fire Station 9, Denhill Road, Manchester, M15 5NR Category: Central and Local Government Class Code: Fire Brigade Stations Positional Accuracy: Positioned to address or location	A7SE (SW)	841	10	383745 395930
220	Points of Interest - Public Infrastructure Name: Graveyard Location: M13 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	901	10	385055 396567
220	Points of Interest - Public Infrastructure Name: Graveyard Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	908	10	385062 396568
221	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NE (NW)	494	10	383692 396933
221	Points of Interest - Recreational and Environmental Name: Playground Location: Leaf Street, M15 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A12NE (NW)	502	10	383687 396941
222	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	706	10	384752 397087
223	Points of Interest - Recreational and Environmental Name: Play Area Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	818	10	384825 397179

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
224	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A14NE (E)	822	10	384982 396743
224	Points of Interest - Recreational and Environmental Name: Playground Location: Glenbarry Close, M13 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A14NE (E)	822	10	384982 396743
225	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	913	10	384710 395957
225	Points of Interest - Recreational and Environmental Name: Playground Location: Denmark Road, M15 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A9SW (SE)	914	10	384711 395956

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Stockport Metropolitan Borough Council - Environment Team (Land & Water) Salford City Council - Environmental Health Department Trafford Metropolitan Borough Council - Renewal and Environmental Protection Bury Metropolitan Borough Council - Environmental Health Department Tameside Metropolitan Borough Council - Environmental Health Department Manchester City Council - Environmental Health Department	December 2014 November 2013 November 2013 October 2013 October 2017 September 2014	Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update
Discharge Consents Environment Agency - North West Region	July 2019	Quarterly
Enforcement and Prohibition Notices Environment Agency - North West Region	March 2013	Annual Rolling Update
Integrated Pollution Controls Environment Agency - North West Region	October 2008	Variable
Integrated Pollution Prevention And Control Environment Agency - North West Region	July 2019	Quarterly
Local Authority Integrated Pollution Prevention And Control Bury Metropolitan Borough Council - Environmental Health Department Tameside Metropolitan Borough Council - Environmental Health Department Salford City Council - Environmental Health Department Stockport Metropolitan Borough Council - Environmental Health Department, EEDD Trafford Metropolitan Borough Council - Environmental Health Department Manchester City Council - Environmental Health Department	February 2015 June 2015 March 2015 October 2014 October 2014 September 2014	Variable Variable Variable Variable Variable Variable
Local Authority Pollution Prevention and Controls Bury Metropolitan Borough Council - Environmental Health Department Trafford Metropolitan Borough Council - Environmental Health Department Tameside Metropolitan Borough Council - Environmental Health Department Salford City Council - Environmental Health Department Stockport Metropolitan Borough Council - Environmental Health Department, EEDD Manchester City Council - Environmental Health Department	February 2015 July 2015 June 2015 March 2015 October 2014 September 2014	Not Applicable Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Bury Metropolitan Borough Council - Environmental Health Department Tameside Metropolitan Borough Council - Environmental Health Department Salford City Council - Environmental Health Department Stockport Metropolitan Borough Council - Environmental Health Department, EEDD Trafford Metropolitan Borough Council - Environmental Health Department Manchester City Council - Environmental Health Department	February 2015 June 2015 March 2015 October 2014 October 2014 September 2014	Variable Variable Variable Variable Variable Variable
Nearest Surface Water Feature Ordnance Survey	January 2019	
Pollution Incidents to Controlled Waters Environment Agency - North West Region	January 2000	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - North West Region	March 2013	Annual Rolling Update
Prosecutions Relating to Controlled Waters Environment Agency - North West Region	March 2013	Annual Rolling Update
Registered Radioactive Substances Environment Agency - North West Region	June 2016	
River Quality Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points Environment Agency - Head Office	July 2012	Annually

Agency & Hydrological	Version	Update Cycle
Substantiated Pollution Incident Register Environment Agency - North West Region - South Area	July 2019	Quarterly
Water Abstractions Environment Agency - North West Region	July 2019	Quarterly
Water Industry Act Referrals Environment Agency - North West Region	October 2017	Quarterly
Groundwater Vulnerability Map Environment Agency - Head Office	June 2018	Annually
Groundwater Vulnerability - Soluble Rock Risk Environment Agency - Head Office	June 2018	Annually
Bedrock Aquifer Designations Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations Environment Agency - Head Office	January 2018	Annually
Source Protection Zones Environment Agency - Head Office	July 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	August 2019	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	August 2019	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	August 2019	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	August 2019	Quarterly
Flood Defences Environment Agency - Head Office	August 2019	Quarterly
OS Water Network Lines Ordnance Survey	April 2019	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water Suitability Environment Agency - Head Office	October 2013	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites Environment Agency - Head Office	July 2019	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - North West Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - North West Region - South Area	July 2018	Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency - North East Region - Ridings Area Environment Agency - North West Region - South Area	July 2019 July 2019	Quarterly Quarterly
Local Authority Landfill Coverage Bury Metropolitan Borough Council Manchester City Council - Planning Department Salford City Council - Environmental Health Department Stockport Metropolitan Borough Council - Environmental Health Department, EEDD Tameside Metropolitan Borough Council Trafford Metropolitan Borough Council - Environmental Health Department	May 2000 May 2000 May 2000 May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Bury Metropolitan Borough Council Manchester City Council - Planning Department Salford City Council - Environmental Health Department Stockport Metropolitan Borough Council - Environmental Health Department, EEDD Tameside Metropolitan Borough Council Trafford Metropolitan Borough Council - Environmental Health Department	May 2000 May 2000 May 2000 May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable
Potentially Infilled Land (Non-Water) Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water) Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites Environment Agency - North West Region - South Area	March 2003	Not Applicable
Registered Waste Transfer Sites Environment Agency - North West Region - South Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency - North West Region - South Area	March 2003	Not Applicable

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements Trafford Metropolitan Borough Council Bury Metropolitan Borough Council Manchester City Council - Planning Department Stockport Metropolitan Borough Council - Environment and Economic Development Tameside Metropolitan Borough Council - Planning and Building Control Salford City Council	April 2016 February 2016 February 2016 February 2016 February 2016 June 2016	Variable Variable Variable Variable Variable Variable
Planning Hazardous Substance Consents Trafford Metropolitan Borough Council Bury Metropolitan Borough Council Manchester City Council - Planning Department Stockport Metropolitan Borough Council - Environment and Economic Development Tameside Metropolitan Borough Council - Planning and Building Control Salford City Council	April 2016 February 2016 February 2016 February 2016 February 2016 June 2016	Variable Variable Variable Variable Variable Variable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	April 2019	Bi-Annually
BGS Urban Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Urban Soil Chemistry Averages British Geological Survey - National Geoscience Information Service	October 2015	Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	July 2019	Quarterly
Fuel Station Entries Catalist Ltd - Experian	September 2019	Quarterly
Gas Pipelines National Grid	July 2014	
Points of Interest - Commercial Services PointX	September 2019	Quarterly
Points of Interest - Education and Health PointX	September 2019	Quarterly
Points of Interest - Manufacturing and Production PointX	September 2019	Quarterly
Points of Interest - Public Infrastructure PointX	September 2019	Quarterly
Points of Interest - Recreational and Environmental PointX	September 2019	Quarterly
Underground Electrical Cables National Grid	December 2015	

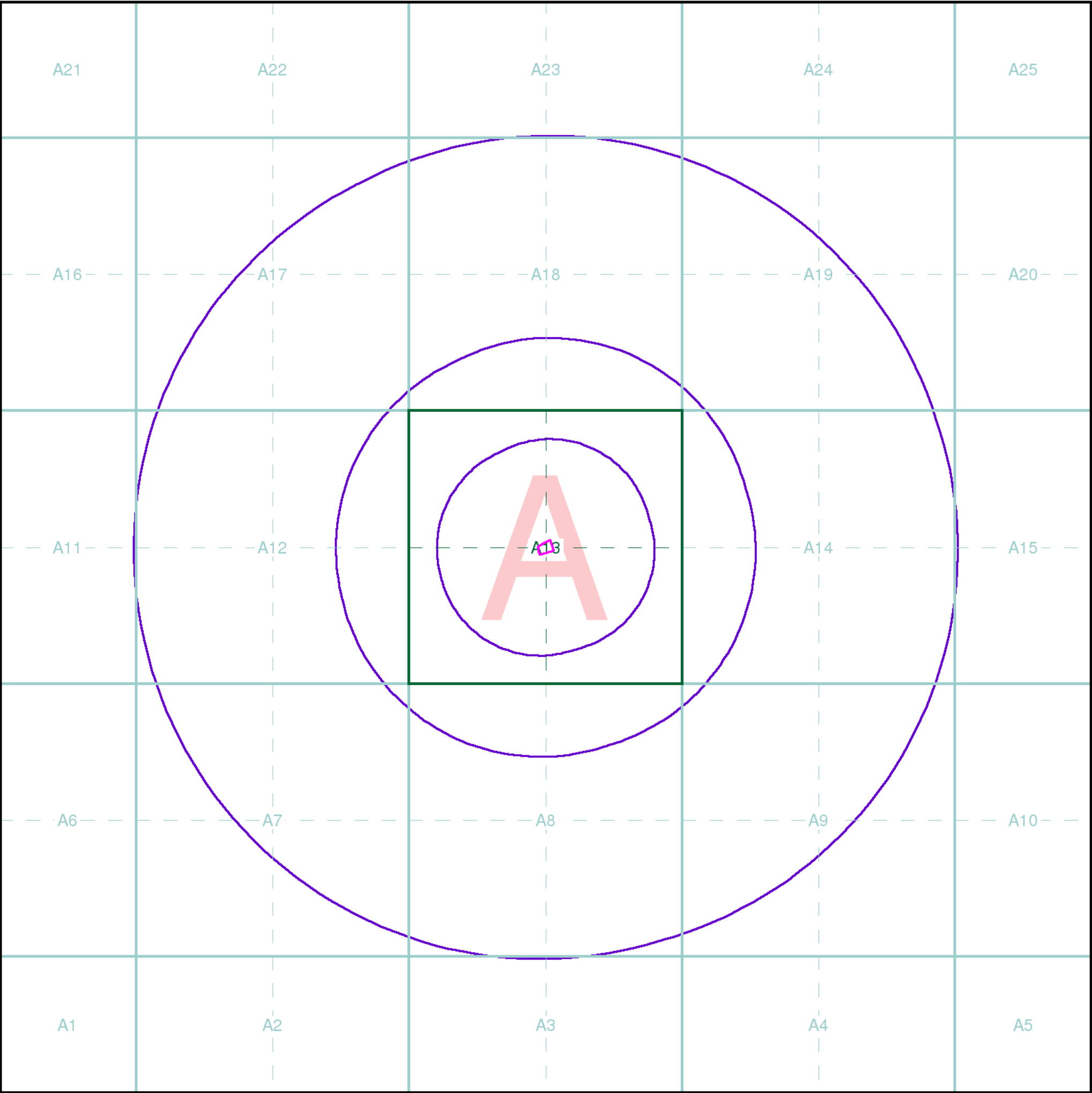
Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural England	August 2018	Bi-Annually
Areas of Adopted Green Belt Bury Metropolitan Borough Council Manchester City Council Salford City Council Stockport Metropolitan Borough Council Tameside Metropolitan Borough Council Trafford Metropolitan Borough Council	March 2019 March 2019 March 2019 March 2019 March 2019 March 2019	As notified As notified As notified As notified As notified As notified
Areas of Unadopted Green Belt Bury Metropolitan Borough Council Manchester City Council Salford City Council Stockport Metropolitan Borough Council Tameside Metropolitan Borough Council Trafford Metropolitan Borough Council	March 2019 March 2019 March 2019 March 2019 March 2019 March 2019	As notified As notified As notified As notified As notified As notified
Areas of Outstanding Natural Beauty Natural England	June 2019	Bi-Annually
Environmentally Sensitive Areas Natural England	January 2017	
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	March 2019	Bi-Annually
Marine Nature Reserves Natural England	July 2019	Bi-Annually
National Nature Reserves Natural England	July 2019	Bi-Annually
National Parks Natural England	April 2017	Bi-Annually
Nitrate Vulnerable Zones Environment Agency - Head Office Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	December 2017 October 2015	Bi-Annually
Ramsar Sites Natural England	April 2019	Bi-Annually
Sites of Special Scientific Interest Natural England	March 2019	Bi-Annually
Special Areas of Conservation Natural England	June 2019	Bi-Annually
Special Protection Areas Natural England	April 2019	Bi-Annually

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	 Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Peter Brett Associates	

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	Manchester City Council - Environmental Health Department PO Box 463, Town Hall Extension, Albert Square, Manchester, Greater Manchester, M60 3NY	Telephone: 0161 234 4884 / 234 4873. Fax: 0161 234 4508 Website: www.manchester.gov.uk
4	Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
5	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	Manchester City Council - Planning Department Town Hall, Manchester, Greater Manchester, M60 2LA	Telephone: 0161 234 5000 Fax: 0161 234 4508 Website: www.manchester.gov.uk
7	Trafford Metropolitan Borough Council - Environmental Health Department P O Box 14, Trafford Town Hall, Talbot Road, Stretford, Greater Manchester, M32 0YJ	Telephone: 0161 912 4566 Fax: 0161 873 7783 Website: www.trafford.gov.uk
8	The Coal Authority - Property Searches 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
9	Peter Brett Associates Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN	Telephone: 0118 950 0761 Fax: 0118 959 7498 Email: reading@pba.co.uk Website: www.pba.co.uk
10	PointX 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.



TWEEDIE EVANS CONSULTING
Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice
Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment
A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant
A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:



Envirocheck reports are compiled from 136 different sources of data.

Client Details
Mr E Tweedie, Tweedie Evans Consulting Ltd, The Old Chapel, 35a Southover, Wells, Somerset, BA5 1UH

Order Details
Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details
, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Full Terms and Conditions can be found on the following link:
<http://www.landmarkinfo.co.uk/Terms/Show/515>



TWEEDIE EVANS CONSULTING

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral
- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

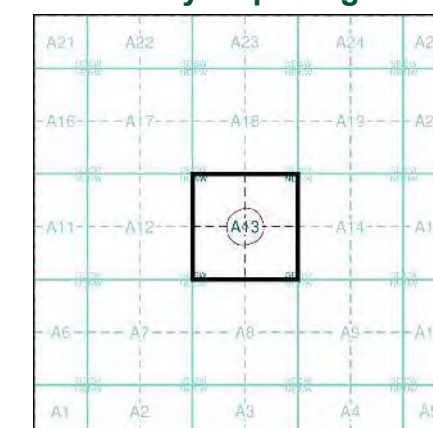
Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Geological

- BGS Recorded Mineral Site

Site Sensitivity Map - Segment A13



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Plot Buffer (m): 100

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Map ID
 - Several of Type at Location
- Agency and Hydrological**
- Contaminated Land Register Entry or Notice (Location)
 - Contaminated Land Register Entry or Notice
 - Discharge Consent
 - Enforcement or Prohibition Notice
 - Integrated Pollution Control
 - Integrated Pollution Prevention Control
 - Local Authority Integrated Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control Enforcement
 - Pollution Incident to Controlled Waters
 - Prosecution Relating to Authorised Processes
 - Prosecution Relating to Controlled Waters
 - Registered Radioactive Substance
 - River Network or Water Feature
 - River Quality Sampling Point
 - Substantiated Pollution Incident Register
 - Water Abstraction
 - Water Industry Act Referral
- Hazardous Substances**
- COMAH Site
 - Explosive Site
 - NIHHS Site
 - Planning Hazardous Substance Consent
 - Planning Hazardous Substance Enforcement
 - BGS Recorded Mineral Site
- Waste**
- BGS Recorded Landfill Site (Location)
 - BGS Recorded Landfill Site
 - EA Historic Landfill (Buffered Point)
 - EA Historic Landfill (Polygon)
 - Integrated Pollution Control Registered Waste Site
 - Licensed Waste Management Facility (Landfill Boundary)
 - Licensed Waste Management Facility (Location)
 - Local Authority Recorded Landfill Site (Location)
 - Local Authority Recorded Landfill Site
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Registered Landfill Site (Location)
 - Registered Landfill Site (Point Buffered to 100m)
 - Registered Landfill Site (Point Buffered to 250m)
 - Registered Waste Transfer Site (Location)
 - Registered Waste Transfer Site
 - Registered Waste Treatment or Disposal Site (Location)
 - Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING Industrial Land Use Map

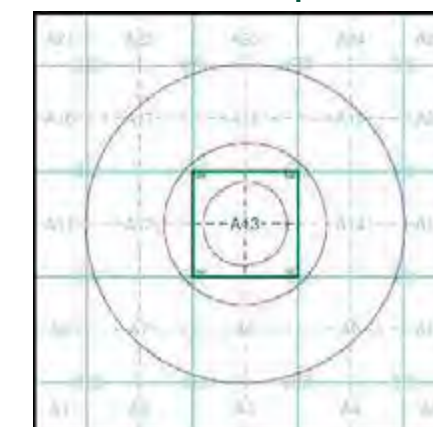
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

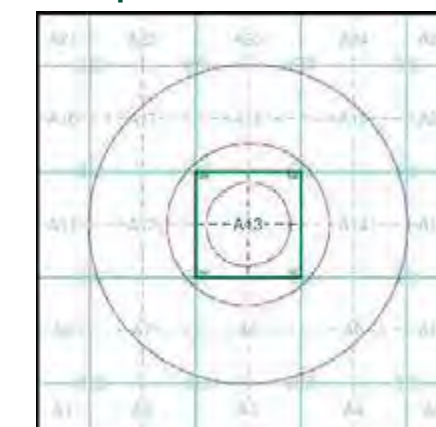
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

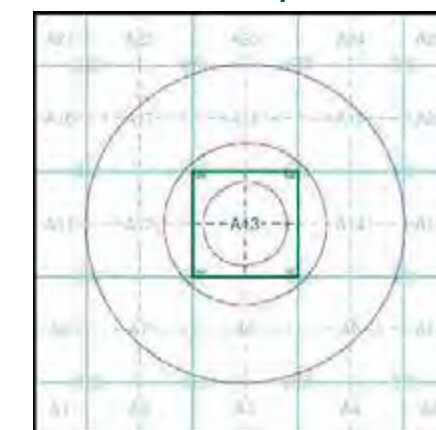
OS Water Network Data

- | | |
|--------------|-------------------------|
| Canal | Drain |
| Reservoir | Other |
| Foreshore | Lake |
| Marsh | Transfer |
| Tidal River | Lock Or Flight Of Locks |
| Inland River | Sea |

Contours (height in meters)

- Standard Contour 105 100 95
- Master Contour
- Spot Height 167.3
- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Risk of Flooding from Surface Water

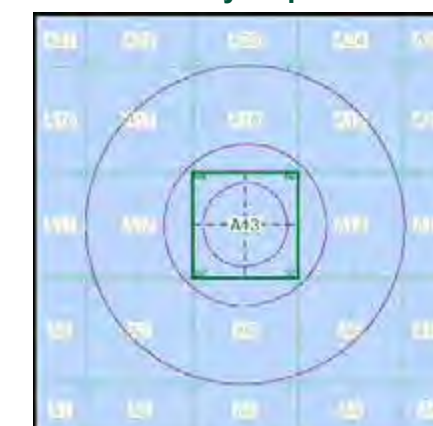
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

E/NRW Suitability Map - Slice A



Order Details

Order Number: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

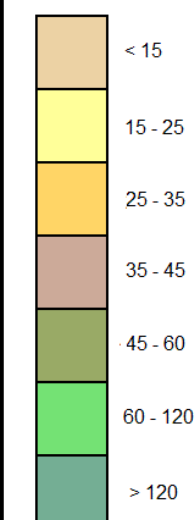
General

Specified Site Specified Buffer(s) Bearing Reference Point

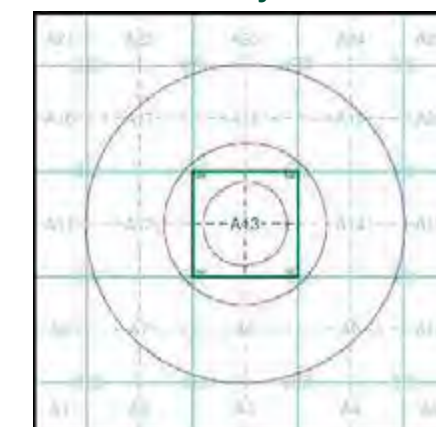
Urban Soil Chemistry Arsenic

BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Arsenic Concentrations mg/kg



Urban Soil Chemistry Arsenic - Slice A



Order Details

Order Details: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



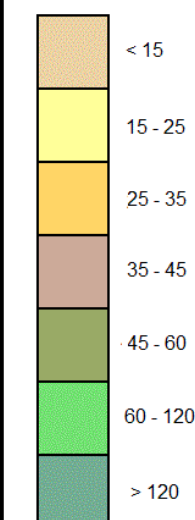
TWEEDIE EVANS CONSULTING

General

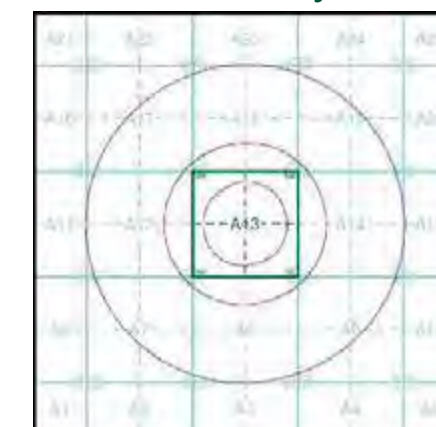
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg



Estimated Soil Chemistry Arsenic - Slice A



Order Details

Order Details: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

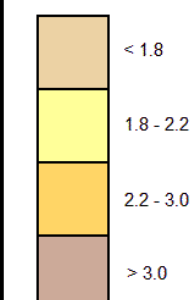
General

Specified Site Specified Buffer(s) Bearing Reference Point

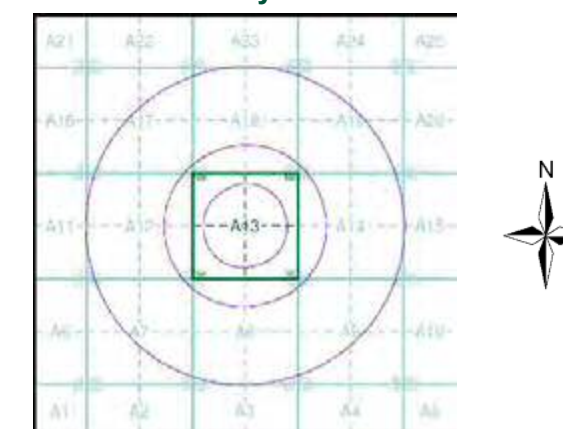
Urban Soil Chemistry Cadmium

BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Cadmium Concentrations mg/kg



Urban Soil Chemistry Cadmium - Slice A



Order Details

Order Details: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



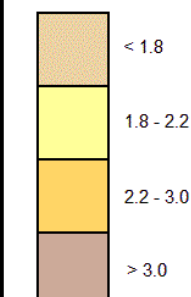
TWEEDIE EVANS CONSULTING

General

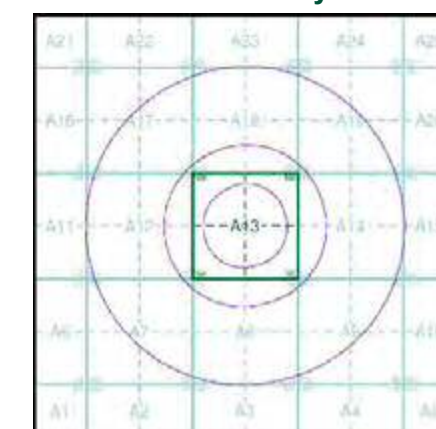
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg



Estimated Soil Chemistry Cadmium - Slice A



Order Details

Order Details: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

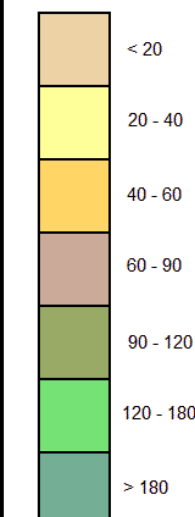
General

Specified Site Specified Buffer(s) Bearing Reference Point

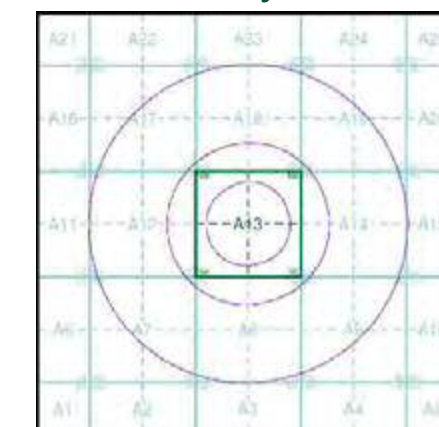
Urban Soil Chemistry Chromium

BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Chromium Concentrations mg/kg



Urban Soil Chemistry Chromium - Slice A



Order Details

Order Details: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



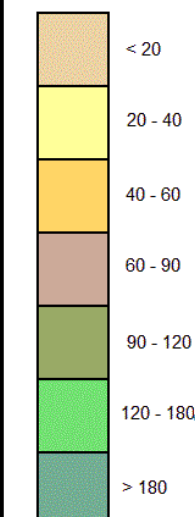
TWEEDIE EVANS CONSULTING

General

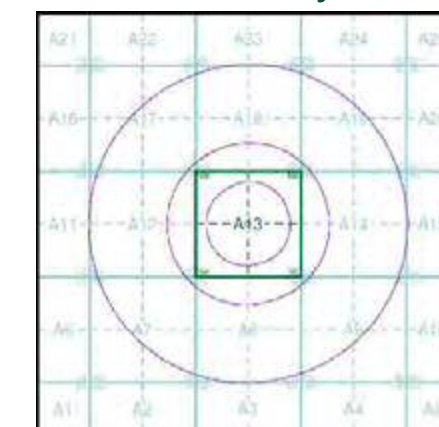
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg



Estimated Soil Chemistry Chromium - Slice A



Order Details

Order Details: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

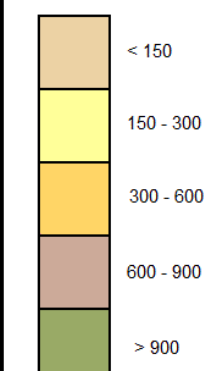
General

Specified Site Specified Buffer(s) Bearing Reference Point

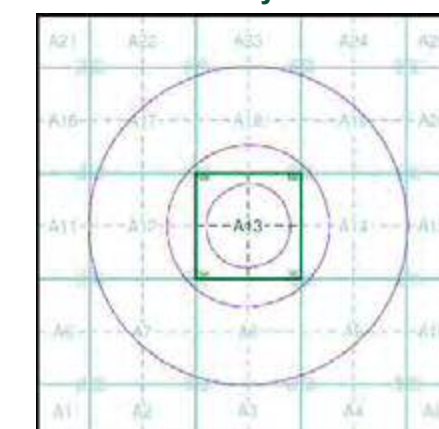
Urban Soil Chemistry Lead

BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Lead Concentrations mg/kg



Urban Soil Chemistry Lead - Slice A



Order Details

Order Details: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



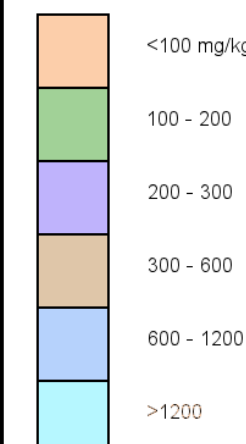
TWEEDIE EVANS CONSULTING

General

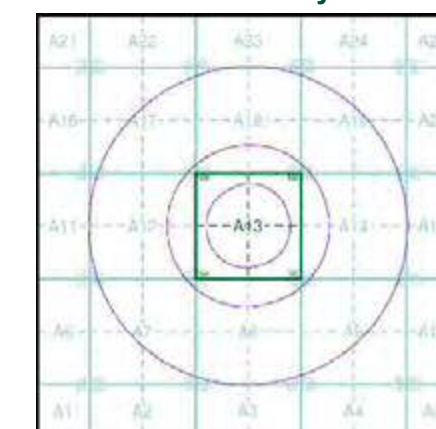
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg



Estimated Soil Chemistry Lead - Slice A



Order Details

Order Details: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

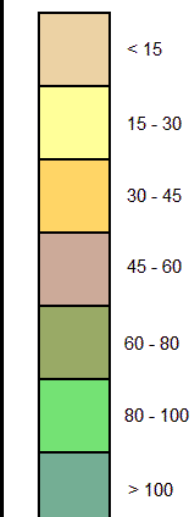
General

Specified Site Specified Buffer(s) Bearing Reference Point

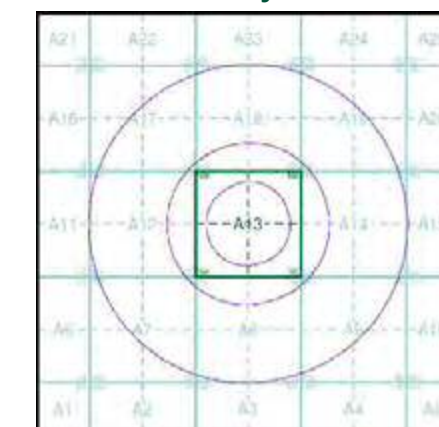
Urban Soil Chemistry Nickel

BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Nickel Concentrations mg/kg



Urban Soil Chemistry Nickel - Slice A



Order Details

Order Details: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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



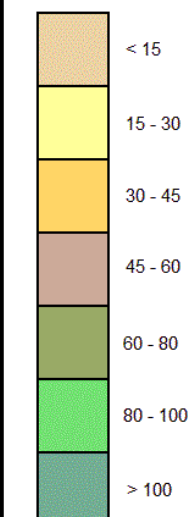
TWEEDIE EVANS CONSULTING

General

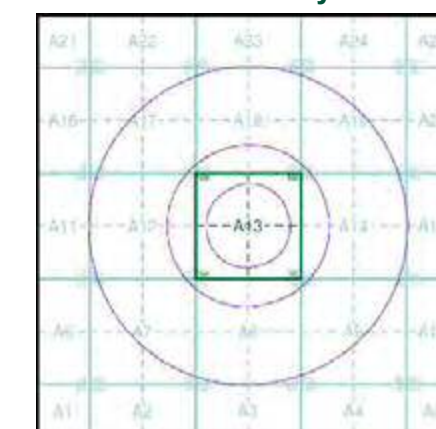
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg



Estimated Soil Chemistry Nickel - Slice A



Order Details

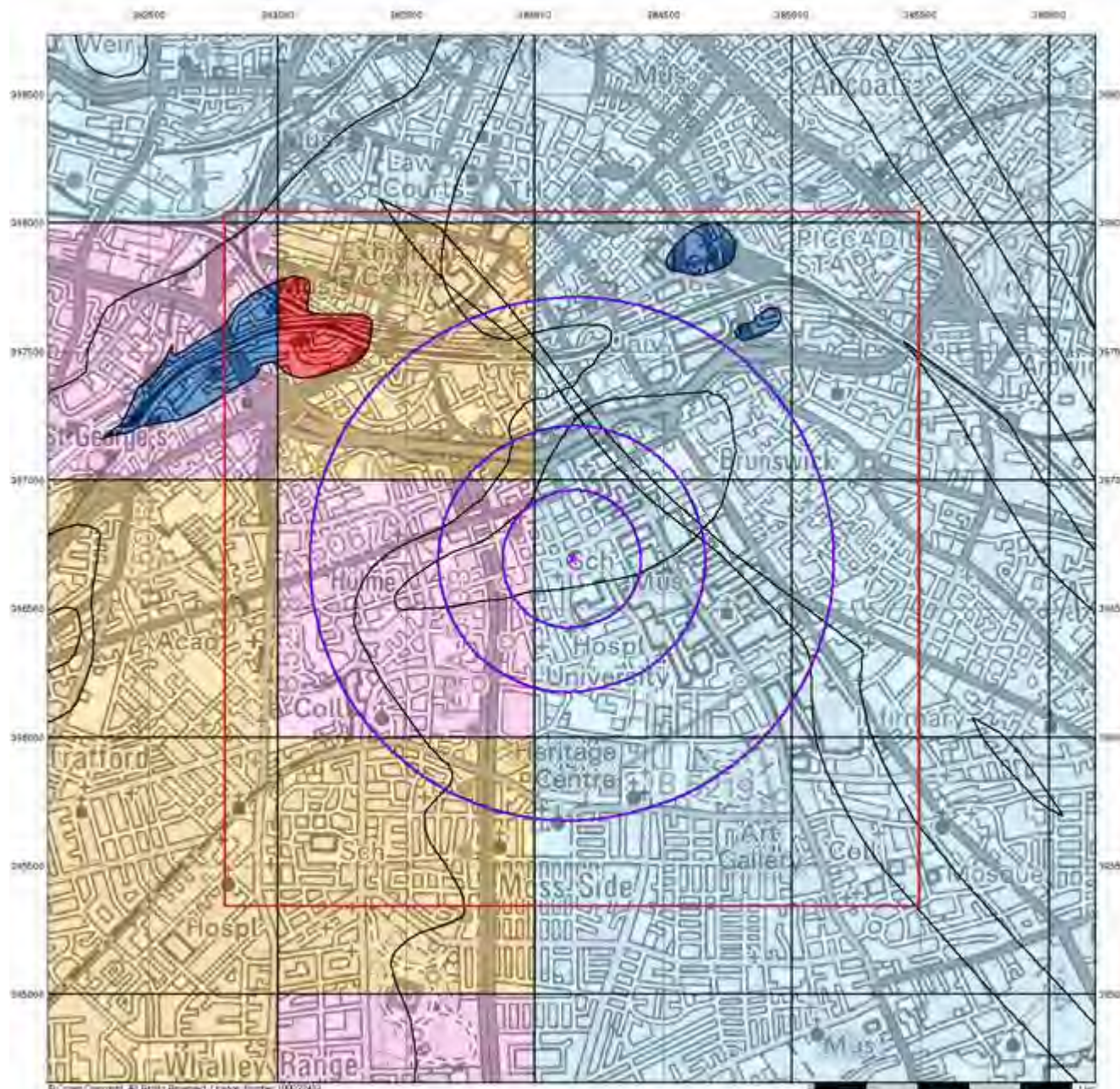
Order Details: 217821742_1_1
Customer Ref: 1909009
National Grid Reference: 384140, 396690
Slice: A
Site Area (Ha): 0.09
Search buffer (m): 1000

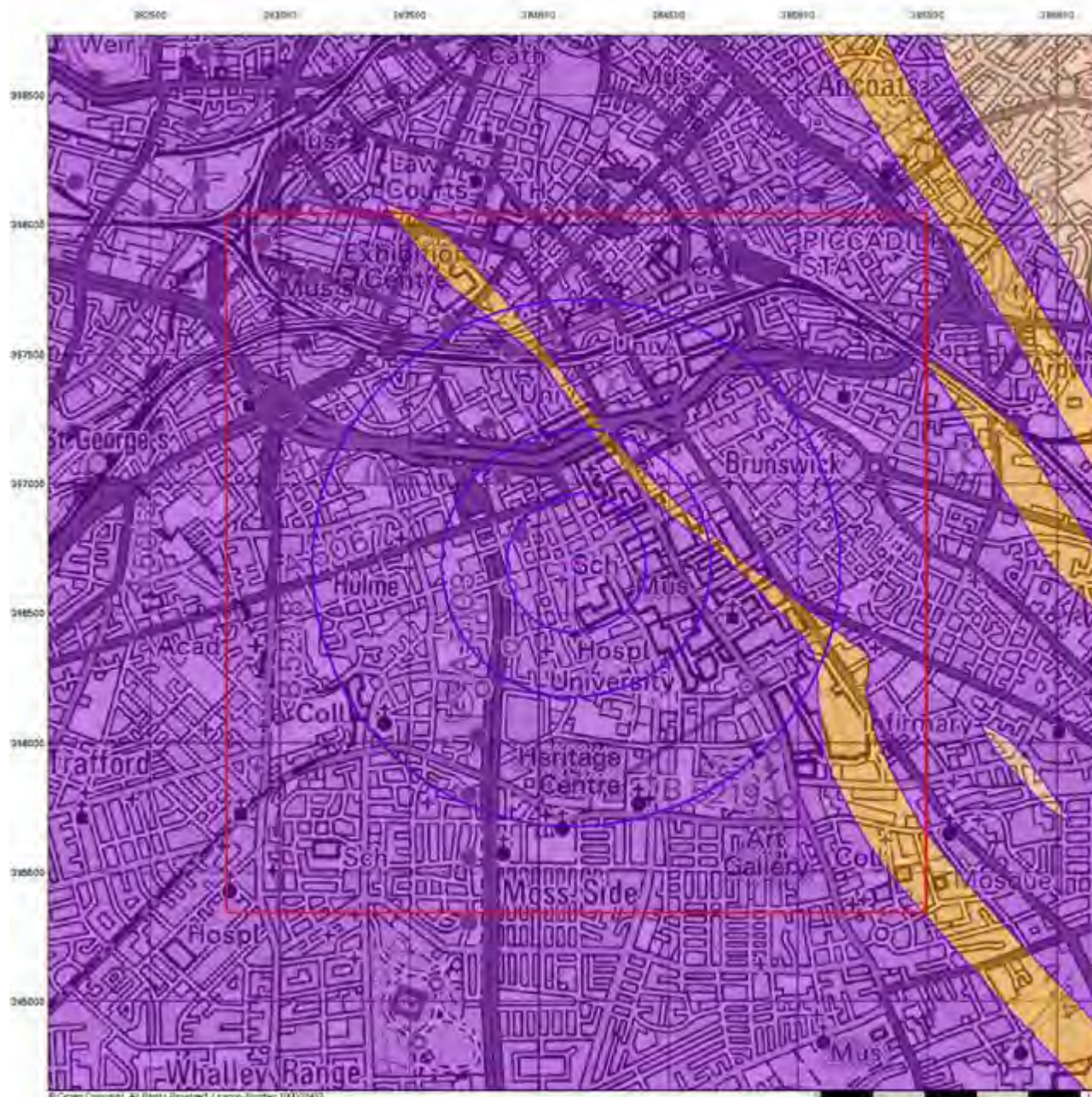
Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
INFORMATION GROUP

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





TWEEDIE EVANS CONSULTING

Bedrock Aquifer Designation

General

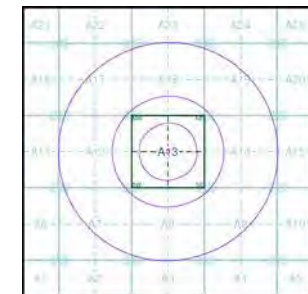
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

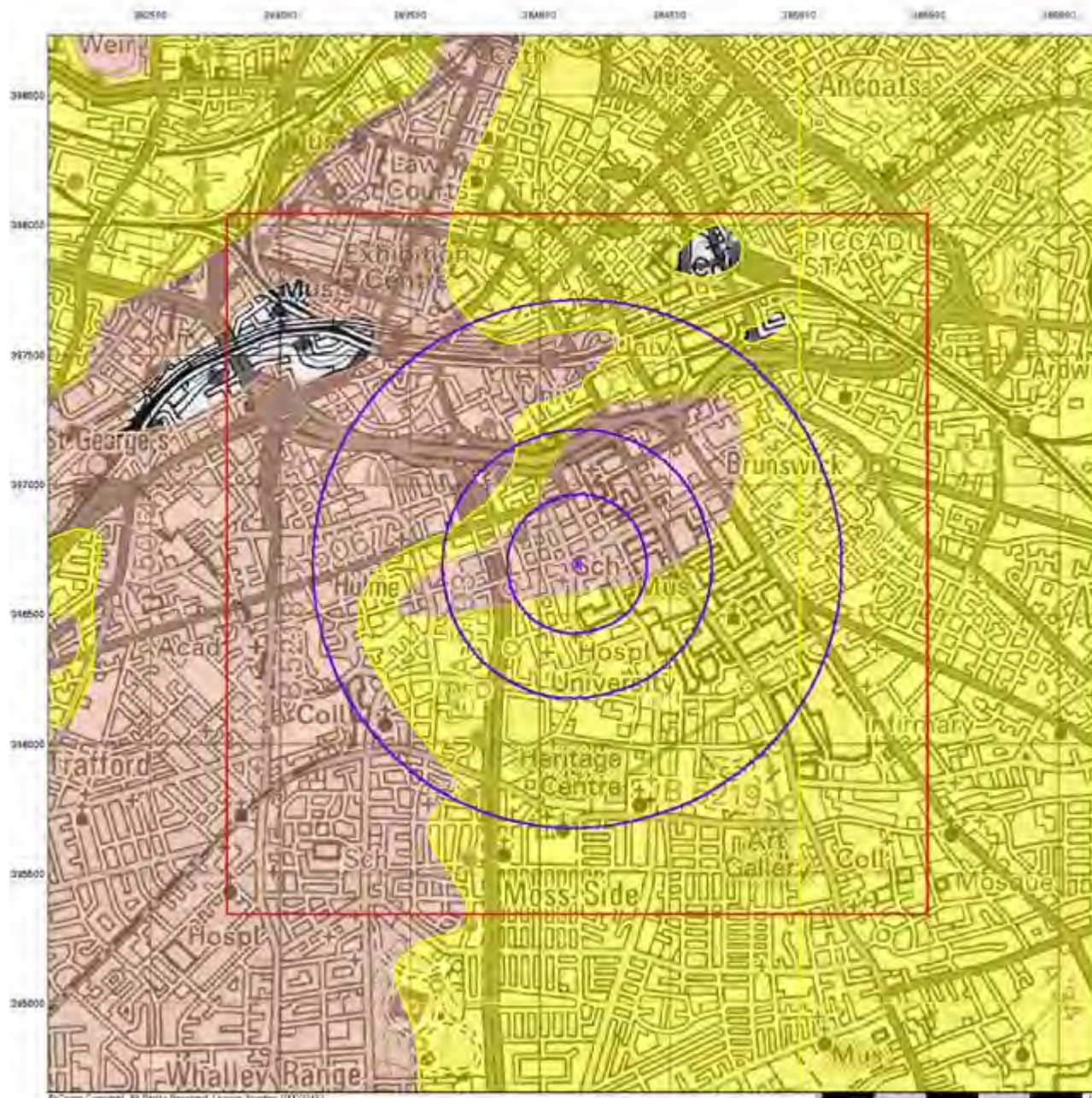
Order Number: 217821742_1_1
 Customer Ref: 1909009
 National Grid Reference: 384140, 396690
 Slice: A
 Site Area (Ha): 0.09
 Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TWEEDIE EVANS CONSULTING

Superficial Aquifer Designation

General

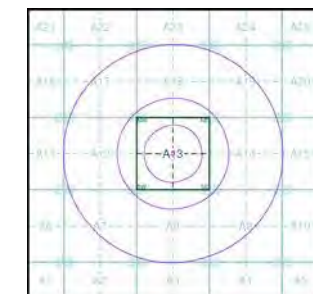
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

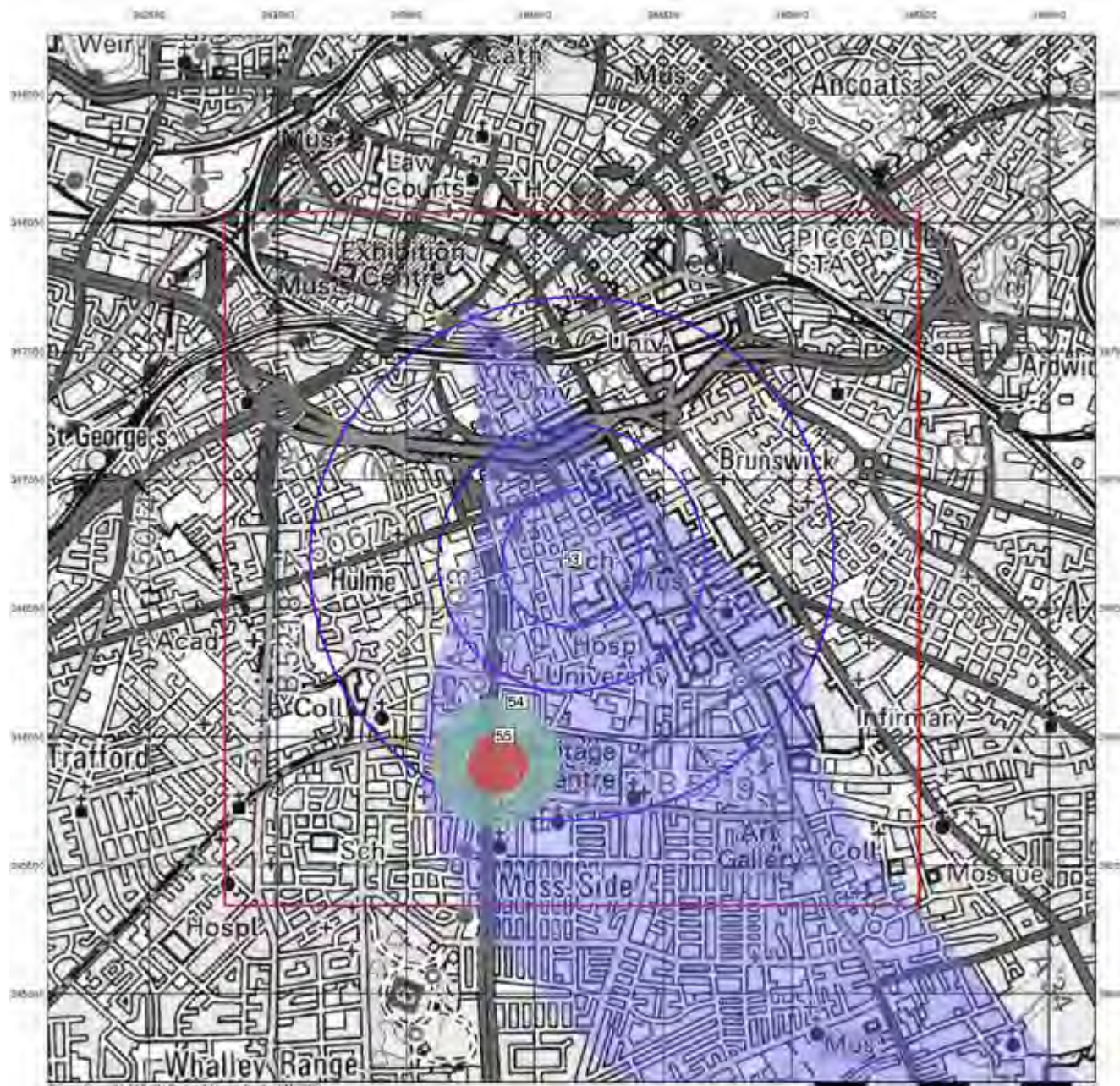
Order Number: 217821742_1_1
 Customer Ref: 1909009
 National Grid Reference: 384140, 396690
 Slice: A
 Site Area (Ha): 0.09
 Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TWEEDIE EVANS CONSULTING

Source Protection Zones

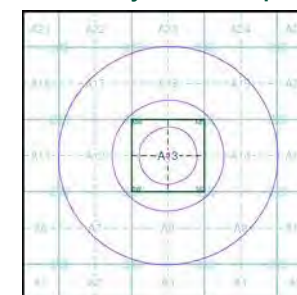
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A



Order Details

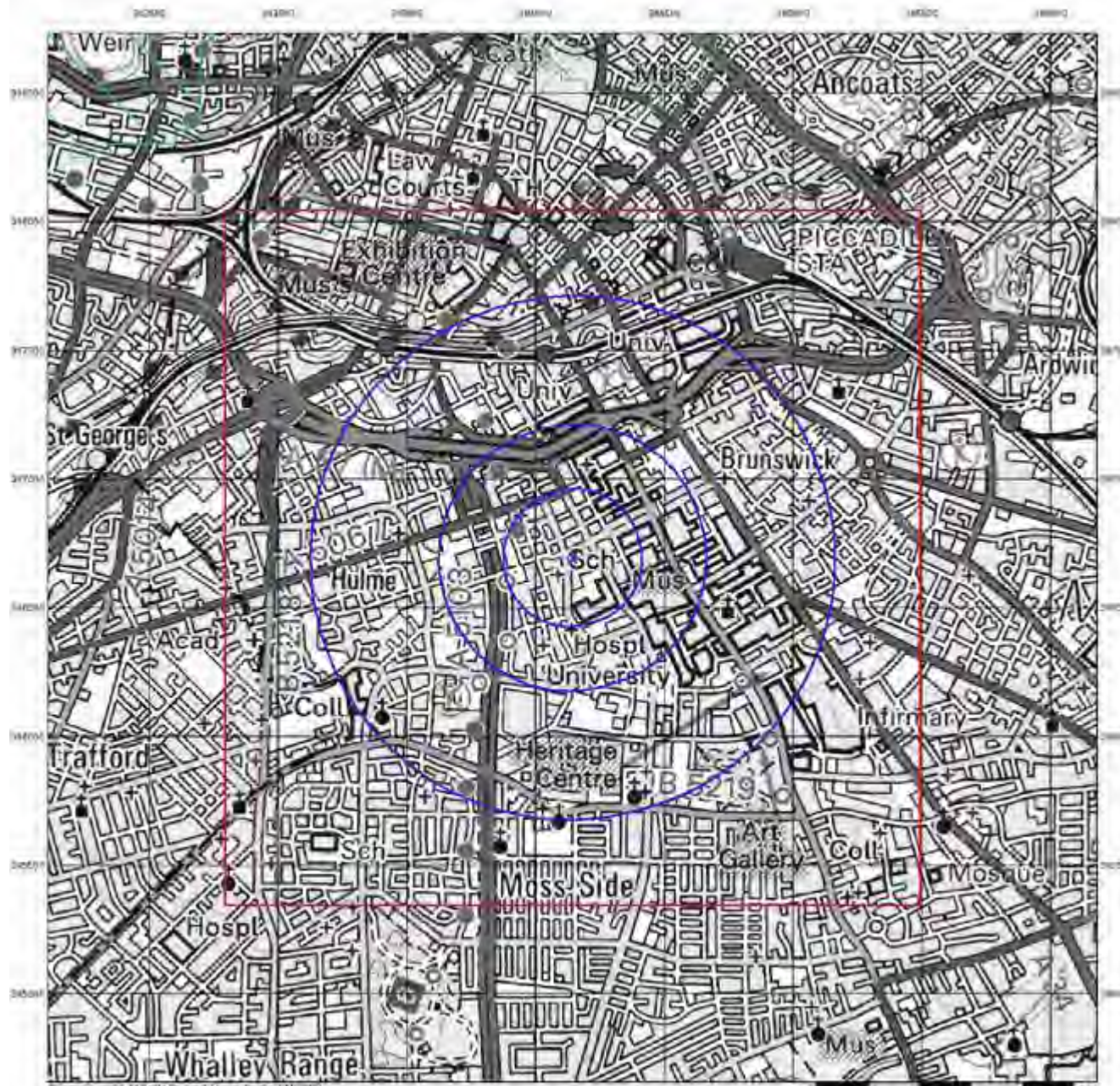
Order Number: 217821742_1_1
 Customer Ref: 1909009
 National Grid Reference: 384140, 396690
 Slice: A
 Site Area (Ha): 0.09
 Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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



TEC

TWEEDIE EVANS CONSULTING

Sensitive Land Uses

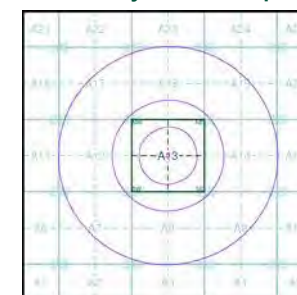
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

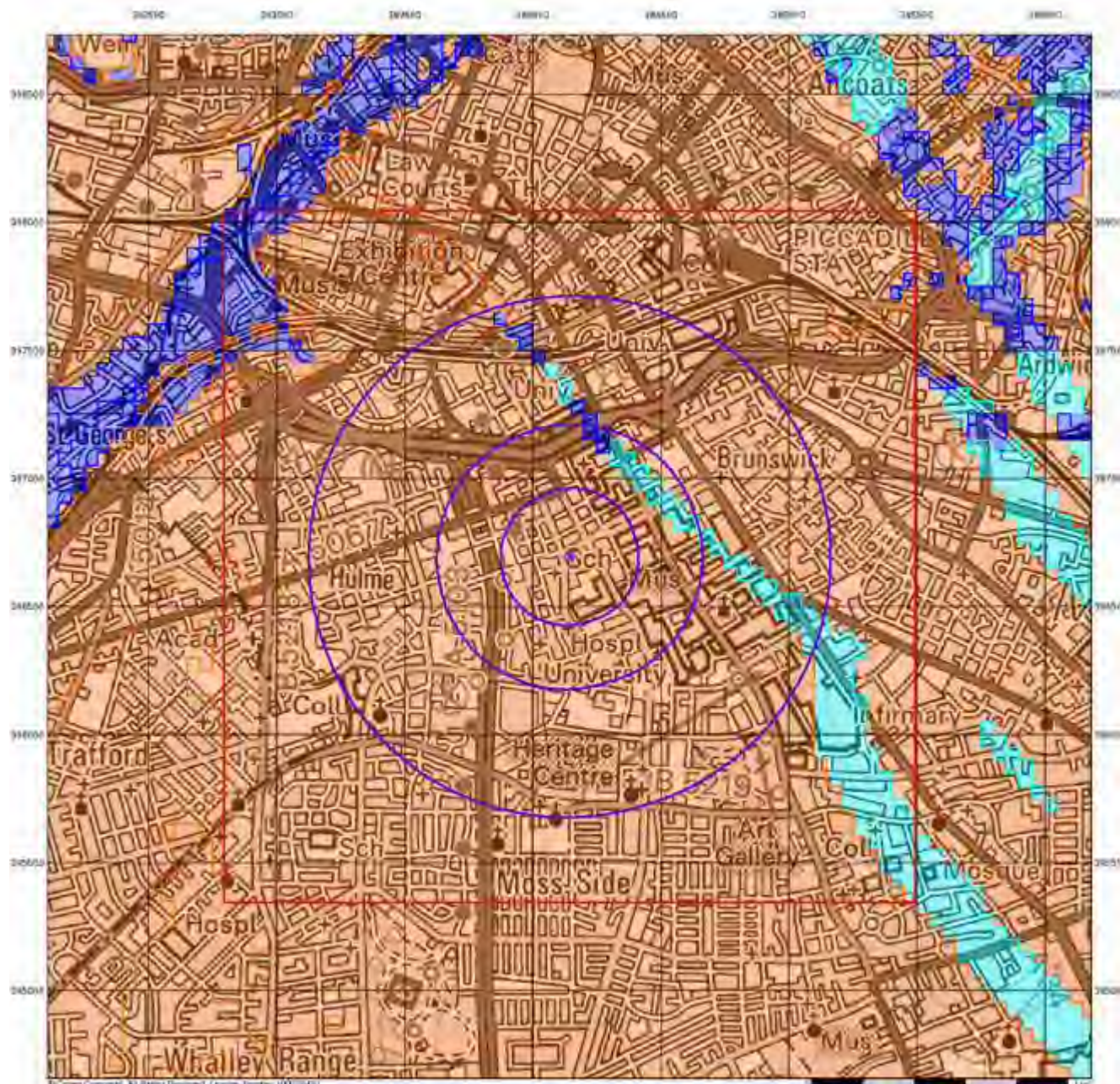
Order Number: 217821742_1_1
 Customer Ref: 1909009
 National Grid Reference: 384140, 396690
 Slice: A
 Site Area (Ha): 0.09
 Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE

Landmark
 INFORMATION GROUP

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



TWEEDIE EVANS CONSULTING

BGS Flood GFS Data

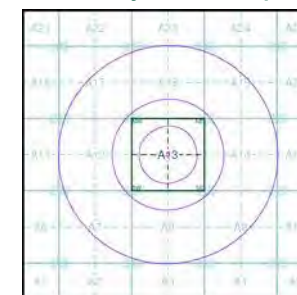
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Site

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 217821742_1_1
 Customer Ref: 1909009
 National Grid Reference: 384140, 396690
 Slice: A
 Site Area (Ha): 0.09
 Search Buffer (m): 1000

Site Details

, Flat at, the Gamecock, Boundary Lane, Manchester, M15 6GE



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

APPENDIX D
Regulatory Correspondence

Caroline Moule

From: Ian Westbrook <i.westbrook@manchester.gov.uk>
Sent: 20 September 2019 15:19
To: Mari Langreiter
Subject: Environmental search: The Gamecock, Boundary Lane, Manchester, M15 6GE
Attachments: 644390.docx

Dear Ms Langreiter,

As requested, I have carried out an environmental search of the area in the vicinity of The Gamecock, Boundary Lane, Manchester, M15 6GE, and the attached report summaries the findings.

Regards,

Ian Westbrook
Neighbourhood Officer (Environmental Protection)

Environmental Protection
Neighbourhoods Directorate
Manchester City Council
1 Hammerstone Road
Gorton
Manchester
M18 8EQ

External: 0161 234 5004
Internal: 31381
Email: i.westbrook@manchester.gov.uk
Web: <http://www.manchester.gov.uk>

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager. The full text of the Council's email disclaimer is available at www.manchester.gov.uk/emaildisclaimer.

Your personal data is very important to us. Please refer to our privacy notice at www.manchester.gov.uk/privacy for further information.

This footnote also confirms that this email message has been swept for the presence of computer viruses.

1. Environmental Information Data

DATE: 20 September 2019 TIME: 15:03

Buffer Search Radius: 25, 100, 250, 2000 metres

Site Centre Coordinates (British National Grid): 384143, 396693

Approx. area of search feature: 832m²

Polygon buffer search

Selection Summary: A total of 1 features were selected on 1 out of 13 target layers.

2. Site Location Map



3. CLS Records (2006-present)

Contaminated Land Section records of contamination issues at the site and land adjacent to the site (2006-present):

No records were identified within 25m

4. CLS Records (pre-2006)

Contaminated Land Section records of contamination issues at the site and land adjacent to the site (pre-2006):

No records were identified within 25m

5. Landfill sites

Landfill sites within 250 metres:

No records were identified within 250m

6. Part 2A Determined Land

Environmental Protection Act 1990 Part 2A, sites determined to be statutory contaminated land within 250 metres:

NOTE ON MANCHESTER CITY COUNCIL'S CONTAMINATED LAND INSPECTION STRATEGY

As set out in its Contaminated Land Inspection Strategy, the Council is now carrying out detailed inspections of potentially contaminated sites. A copy of the strategy is available on request. This can also be downloaded from the Council's website.

No records were identified within 250m

7. Notices

Environmental Protection Act 1990 Notices

No records were identified within 100m

8. Waste Management Licences

Environmental Permitting (England & Wales) Regulations 2010, Waste Management Licences within 250 metres (MCC current and historic):

No records were identified within 250m

9. Waste Management Licences

Environmental Permitting (England & Wales) Regulations 2016, Waste Management Licences within 250 metres (EA current):

No records were identified within 250m

10. Part A(1) Permitted Processes

Environmental Permitting (England & Wales) Regulation 2016, Part A(1) Permitted Processes within 250 metres (MCC current and historic):

No records were identified within 250m

11. Part A(1) Permitted Processes

Environmental Permitting (England & Wales) Regulations 2016, Part A(1) Permitted Process within 250 metres (EA Current):

No records were identified within 250m

12. Part A(2) Permitted Processes

Environmental Permitting (England & Wales) Regulations 2016, Part A2 Permitted Processes within 250 metres:

No records were identified within 250m

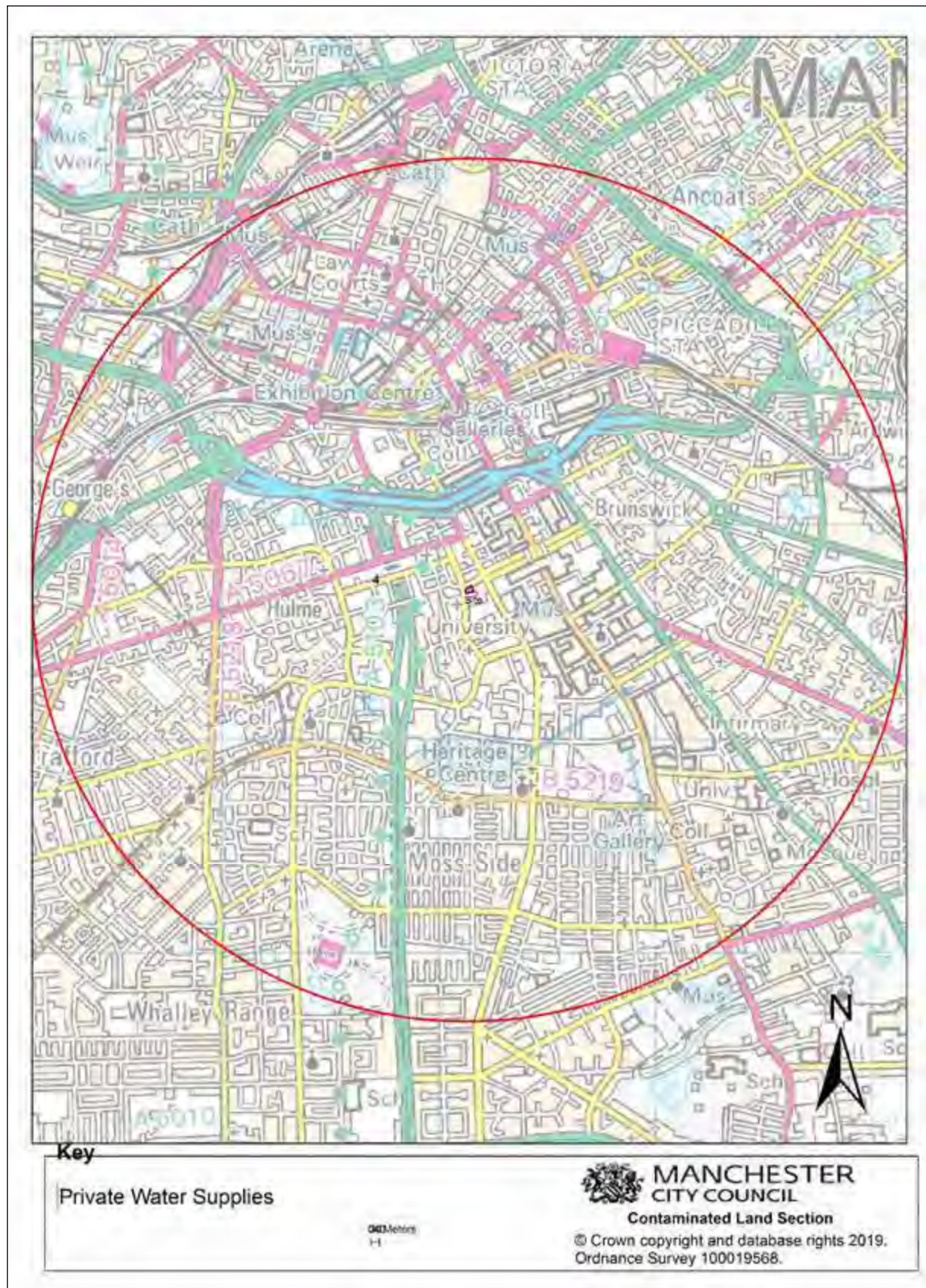
13. Part B Permitted Processes

Environmental Permitting (England & Wales) Regulations 2016, Part B Permitted Processes within 250 metres of the site:

No records were identified within 250m

14. Private Water Supplies

Private Water Supplies Regulations 2016, registered abstractions within 2000 metres:



14.1 GIS Attribute Data for Private Water Supplies

Selection Summary for layer

0 feature(s) identified on site.

1 feature(s) identified off site within 2000 metres

FID	NGR_EAST	NGR_NORTH	Address	Premises	Grid Ref.
On Site					
None					
Identified Off-site - Within 0-2000m					
4	383715	396746	Birley Fields Campus, George Parr Road, Manchester	MMU Birley Fields	383712, 396740

Details of most abstractions, of which the Local Authority need not be notified, are held by the Environment Agency.

15. Radioactive Substances Registrations

Radioactive Substances Act 1993, current registrations at or adjacent to the site:

No records were identified within 25m

End of Report.

APPENDIX E
Risk Evaluation

Risk Evaluation

The qualitative assessment methodology presented in Ciria publication C552 (2001) titled '*Contaminated Land Risk Assessment: A Guide to Good Practice*' has been used by TEC for the basis of evaluating potential risk.

The method requires an assessment of the:

- magnitude of the probability or likelihood of the risk occurring (Table 1); and
- magnitude of the potential consequence or severity of the risk occurring (Table 2)

Table 1. Classification of Probability

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

Table 2. Classification of Consequence

Classification	Definition	Examples
Severe	Short-term (acute) risk to human health likely to result in "significant harm" as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resource. (Note: Water Resources Act contains no scope for considering significance of pollution). Catastrophic damage to buildings/property. A short-term risk to a particular ecosystem, or organisation forming part of such ecosystem (note: the definitions of ecological systems within the draft circular on Contaminated Land, DETR, 2000).	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Explosion, causing building collapse (can also equate to a short-term human health risk if buildings are occupied).
Medium	Chronic damage to human health ("significant harm" as defined in DETR, 2000). Pollution of sensitive water resources. (Note: Water Resources Act contains no scope for considering significance of pollution). A significant change in a particular ecosystem, or organism forming part of such ecosystem, (note: the definitions of ecological systems within draft circular on Contaminated Land, DETR, 2000).	Concentration of a contaminant from site exceeding the generic or site-specific assessment criteria. Leaching of contaminants from a site to a major or minor aquifer. Death of a species within a designated nature reserve.
Mild	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ("significant harm" as defined in the draft circular on Contaminated Land, DETR, 2000). Damage to sensitive buildings/structures/services or the environment.	Pollution of non-classified groundwater. Damage to building rendering it unsafe to occupy (for example foundation damage resulting in instability).
Minor	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc), easily repairable effects of damage to buildings, structures and services.	The presence of contaminants at such concentrations that protective equipment is required during site works. The loss of plants in a landscaping scheme. Discolouration of concrete.

The combination of the two factors is determined using Table 3 and the resulting level of risk is described in Table 4. The evaluation can be applied to each of the scenarios identified in the risk model and the overall risk assessed.

Table 3. Combination of Consequence with Probability

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

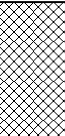
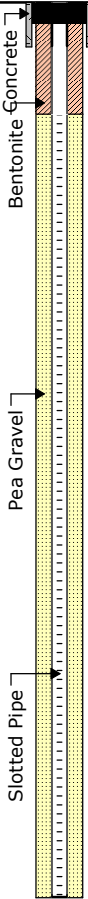
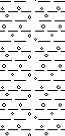
Table 4. Description of risks and likely action required

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

Using the risk model the pollutant linkages are identified and a preliminary estimate of risk undertaken. If there is no pollutant linkage identified, then there is no risk. If the estimate of risk for all the linkages and exposure scenarios is very low at this stage then it is likely that no further assessment will be required.

APPENDIX F
Exploratory Hole Logs

DYNAMIC SAMPLING RECORD		 TWEEDIE EVANS CONSULTING www.tecon.co.uk info@tecon.co.uk
Project Title: Booth Street West, Manchester	Borehole: WS1	
Project No: 1909009.001	Dates: 17th September 2019	
Client: Curlew Opportunities		

Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
	Ground Surface							
0.70	MADE GROUND Tarmacadam over brown sandy gravel and cobbles of brick and mixed lithology. Rare fragments of plastic and slate noted.		A	0.0				
2.00	MADE GROUND Sandy gravel and cobbles of brick and rare sandstone. Localised pockets of light brown sand noted.			1.0				
2.40	MADE GROUND Dark brown locally sandy gravelly cobbly clay. Gravel and cobble of brick, sandstone and clay pipe. Rare organic plant remains and wood fragments noted.		A	2.0				
2.85	Firm orange-brown sandy gravelly CLAY. Gravel of fine to coarse sub-angular to rounded chert and sandstone.			3.0				
4.40	(Loose to medium dense) grey clayey sandy GRAVEL of sub-angular to rounded chert and sandstone with rare black organic fragments (wood).			4.0				
4.85	Stiff brown slightly gravelly slightly sandy slightly silty CLAY. Gravel of mudstone and sandstone.			5.0				
5.00	(Dense) red-brown slightly gravelly slightly clayey fine SAND. Gravel of medium sub-angular sandstone.							
	Borehole Terminated							

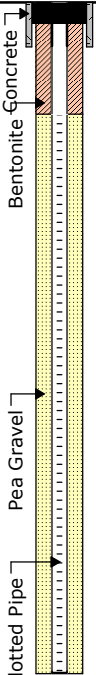
Notes: A: 250ml and 60ml Amber Glass Jars T: Plastic Tub (1Kg) B: Bulk Sample C: Core Sample SPT: Standard Penetration Test HSV: Hand Shear Vane (kPa) PP: Pocket Penetrometer (kg/cm²) PID: Photo-Ionisation Detector (ppm)	Plant: Dando Terrier		
	Water observations: Water entry at approx. 3.0mbgl, rising to 2.67mbgl.		
	General remarks: Hand dug to 1.2mbgl.		
	Logged by: ML	Checked by: ET	Approved by: RE

DYNAMIC SAMPLING RECORD		 TWEEDIE EVANS CONSULTING www.tecon.co.uk info@tecon.co.uk
Project Title: Booth Street West, Manchester	Borehole: WS2	
Project No: 1909009.001	Dates: 17th September 2019	
Client: Curlew Opportunities		

Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
	Ground Surface							
0.30	MADE GROUND Tarmacadam over grey and brown sandy gravel of mixed lithology.		A	0.0				
0.70	MADE GROUND Dark brown slightly clayey gravelly sand. Gravel of brick, concrete, slate, glass and mixed lithology.							
1.20	Firm orange-brown and grey slightly sandy gravelly silty CLAY. Gravel of sandstone and chert.			1.0				
1.40	...Becoming orange-brown sandy and slightly gravelly at 1.0mbgl.							
	(Medium dense) orange-brown slightly clayey slightly gravelly medium to coarse SAND. Gravel of chert and sandstone.			2.0				
	(Loose to medium dense) light grey with orange-brown mottling slightly clayey gravelly SAND. Gravel of sub-rounded to rounded chert and sub-angular sandstone.							
	...Becoming orange-brown with localised light grey and red-brown mottling below 2.0mbgl.			3.0				
3.20	...Clay content noted to decrease with depth.							
	...Much cobbles of sub-rounded to rounded chert noted below 2.6mbgl.			4.0				
4.00	Very stiff brown slightly gravelly slightly silty CLAY. Gravel of fine to medium sub-angular mudstone.							
	Borehole Terminated			5.0				

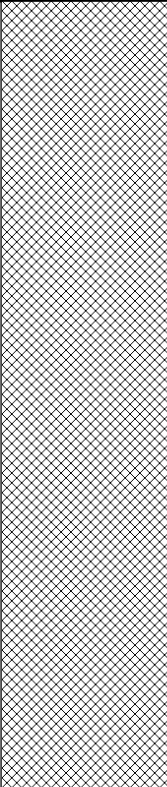
Notes: A: 250ml and 60ml Amber Glass Jars T: Plastic Tub (1Kg) B: Bulk Sample C: Core Sample SPT: Standard Penetration Test HSV: Hand Shear Vane (kPa) PP: Pocket Penetrometer (kg/cm²) PID: Photo-Ionisation Detector (ppm)	Plant: Dando Terrier		
	Water observations: Water entry at approx. 2.8mbgl. Water level at 2.78mbgl upon completion.		
	General remarks: Hand dug to 1.2mbgl.		
	Logged by: ML	Checked by: ET	Approved by: RE

DYNAMIC SAMPLING RECORD		 TWEEDIE EVANS CONSULTING www.tecon.co.uk info@tecon.co.uk
Project Title: Booth Street West, Manchester	Borehole: WS3	
Project No: 1909009.001	Dates: 17th September 2019	
Client: Curlew Opportunities		

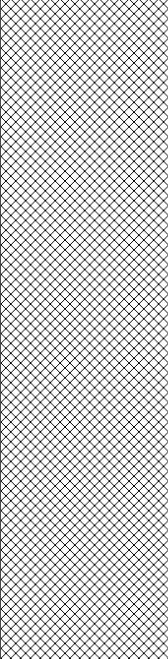
Depth (m)	Description	Legend	Sample Details	Depth (m)	SPT Results		Remarks/ Data	Installation
					Blow Count	N Value		
	Ground Surface							
0.40	MADE GROUND Tarmacadam over light brown slightly gravelly sand. Gravel of mixed lithology.			0.0				
	MADE GROUND Dark brown slightly clayey gravelly sand with low cobble content. Gravel of brick, chert, slate, glass, plastic and wood. Cobble of sandstone. ...Sand becoming orange-brown at 1.5mbgl. Low recovery between 2.0-2.8mbgl.		A	1.0				
			A	2.0				
2.80				3.0				
3.05	Low recovery. (Medium dense) brown sandy GRAVEL of rounded to sub-rounded chert and sub-angular sandstone.			3.0				
	Stiff brown slightly gravelly slightly sandy slightly silty CLAY. Gravel of fine siltstone/mudstone/sandstone.			4.0				
4.00				5.0				
	Borehole Terminated							

Notes: A: 250ml and 60ml Amber Glass Jars T: Plastic Tub (1Kg) B: Bulk Sample C: Core Sample SPT: Standard Penetration Test HSV: Hand Shear Vane (kPa) PP: Pocket Penetrometer (kg/cm²) PID: Photo-Ionisation Detector (ppm)	Plant: Dando Terrier		
	Water observations: No groundwater encountered.		
	General remarks: Hand dug to 1.2mbgl.		
	Logged by: ML	Checked by: ET	Approved by: RE

HAND DUG PIT RECORD		 TWEEDIE EVANS CONSULTING www.tecon.co.uk info@tecon.co.uk
Project Title: Booth Street West, Manchester	Location: HDP1	
Project No: 1909009.001	Dates: 17th September 2019	
Client: Curlew Opportunities		

Depth (m)	Description	Legend	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
	MADE GROUND Dark brown slightly sandy slightly gravelly clay. Gravel of brick, chert, cinder, conglomerate and wood fragments. Rare roots and rootlets noted. Brick cobbles encountered at 0.6mbgl.			A	
0.60	Hand Dug Pit Terminated				
Notes and Remarks: A - 250ml and 60ml Glass Jars T - 1kg Plastic Tub B - Bulk Sample HSV - Hand Shear Vane (kPa) PP - Pocket Penetrometer (kg/cm ²)		Water Observation: No groundwater/perched water encountered.			
		Logged by: ML		Checked by: ET	Approved by: RE

HAND DUG PIT RECORD		 TWEEDIE EVANS CONSULTING www.tecon.co.uk info@tecon.co.uk
Project Title: Booth Street West, Manchester	Location: HDP2	
Project No: 1909009.001	Dates: 17th September 2019	
Client: Curlew Opportunities		

Depth (m)	Description	Legend	Depth (m)	Sample Details	Remarks
0.00	Ground Surface		0.00		
	MADE GROUND Dark brown slightly sandy slightly gravelly clay. Gravel of brick, chert, plastic, chert and wood fragments. Rare roots and rootlets noted. Brick cobbles encountered at 0.5mbgl.			A	
0.50	Hand Dug Pit Terminated				
Notes and Remarks:		Water Observation: No groundwater/perched water encountered.			
A - 250ml and 60ml Glass Jars T - 1kg Plastic Tub B - Bulk Sample HSV - Hand Shear Vane (kPa) PP - Pocket Penetrometer (kg/cm²)		<div> <div>Logged by: ML</div> <div>Checked by: ET</div> <div>Approved by: RE</div> </div>			

APPENDIX G

Geochemical Certificates of Analysis



Mari Langreiter

Tweedie Evans Consulting Ltd
The Old Chapel
35a Southover
Wells
Somerset
BA5 1UH

t: 01749 677 760
f: 01749 679 345
e: Mari.Langreiter@tecon.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 19-60328

Project / Site name:	Booth Street West, Manchester	Samples received on:	19/09/2019
Your job number:	1909009.001	Samples instructed on:	19/09/2019
Your order number:		Analysis completed by:	24/09/2019
Report Issue Number:	1	Report issued on:	24/09/2019
Samples Analysed:	1 leachate sample - 5 soil samples - 1 water sample		

Signed:

Karolina Marek
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 19-60328

Project / Site name: Booth Street West, Manchester

Lab Sample Number				1319523	1319524	1319525	1319526	1319527
Sample Reference				WS1	WS2	WS3	HDP1	HDP2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.40	0.30-0.70	0.40-0.70	0.10-0.50	0.10-0.30
Date Sampled				17/09/2019	17/09/2019	17/09/2019	17/09/2019	17/09/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	39	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	3.6	9.2	10	20	19
Total mass of sample received	kg	0.001	NONE	0.46	0.46	0.46	0.43	0.44

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
------------------	------	-----	-----------	--------------	--------------	--------------	--------------	--------------

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.0	8.7	8.7	8.2	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO ₄	mg/kg	50	MCERTS	410	1000	560	550	560
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.016	0.022	0.019	0.016	0.030
Sulphide	mg/kg	1	MCERTS	24	< 1.0	5.0	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.2	0.7	1.0	2.3	2.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
----------------------------	-------	---	--------	-------	-------	-------	-------	-------

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.35	1.9	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.0	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.22	0.69	1.8	< 0.05	0.59
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.61	2.9	< 0.05	0.36
Phenanthrene	mg/kg	0.05	MCERTS	0.82	4.3	18	1.2	4.0
Anthracene	mg/kg	0.05	MCERTS	0.21	0.91	3.7	0.21	0.86
Fluoranthene	mg/kg	0.05	MCERTS	2.0	4.5	20	2.0	6.4
Pyrene	mg/kg	0.05	MCERTS	2.2	4.2	19	1.8	6.2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.2	2.1	12	1.1	3.5
Chrysene	mg/kg	0.05	MCERTS	1.3	2.0	8.0	1.1	2.9
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	2.1	1.8	9.4	1.2	2.9
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.97	0.79	3.8	0.57	1.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.2	1.8	8.6	0.93	3.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.1	0.80	4.1	0.74	1.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.29	0.28	1.3	0.22	0.45
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.3	1.1	5.4	0.79	2.1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	15.9	26.1	121	11.8	37.0
-----------------------------	-------	-----	--------	------	------	-----	------	------

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.9	< 1.0	4.3	18	12
Barium (aqua regia extractable)	mg/kg	1	MCERTS	140	420	300	98	120
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.19	0.48	0.58	0.91	0.75
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	0.3	0.2	0.6	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.0	0.5	0.5	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12	17	19	33	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19	43	34	60	32
Lead (aqua regia extractable)	mg/kg	1	MCERTS	70	480	120	86	74
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	9.1	1.9
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	10	11	15	19	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	11	21	18	28	29
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	70	87	85	65	70

Analytical Report Number: 19-60328

Project / Site name: Booth Street West, Manchester

Lab Sample Number	1319523	1319524	1319525	1319526	1319527
Sample Reference	WS1	WS2	WS3	HDP1	HDP2
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.30-0.40	0.30-0.70	0.40-0.70	0.10-0.50	0.10-0.30
Date Sampled	17/09/2019	17/09/2019	17/09/2019	17/09/2019	17/09/2019
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH C10 - C40	mg/kg	10	MCERTS	400	55	630	12	64
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	5.8	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	12	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	86	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	100	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	1.2	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	2.2	5.9	26	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	35	18	160	< 10	20
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	200	31	260	< 10	32
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	240	55	440	12	53



Analytical Report Number: 19-60328

Project / Site name: Booth Street West, Manchester

Lab Sample Number				1319529				
Sample Reference				WS1				
Sample Number				None Supplied				
Depth (m)				None Supplied				
Date Sampled				17/09/2019				
Time Taken				None Supplied				
Analytical Parameter (Water Analysis)				Units	Limit of detection	Accreditation Status		

General Inorganics

pH	pH Units	N/A	ISO 17025	7.3				
Total Cyanide	µg/l	10	ISO 17025	< 10				
Sulphate as SO ₄	mg/l	0.045	ISO 17025	179				
Sulphide	µg/l	5	NONE	< 5.0				
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	7.66				

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10				
----------------------------	------	----	-----------	------	--	--	--	--

Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01				
Fluorene	µg/l	0.01	ISO 17025	< 0.01				
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01				
Anthracene	µg/l	0.01	ISO 17025	< 0.01				
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Pyrene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Chrysene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01				

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16				
-------------------	------	------	-----------	--------	--	--	--	--

Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.74				
Barium (dissolved)	µg/l	0.06	ISO 17025	78				
Beryllium (dissolved)	µg/l	0.1	ISO 17025	< 0.1				
Boron (dissolved)	µg/l	10	ISO 17025	220				
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02				
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0				
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2				
Copper (dissolved)	µg/l	0.5	ISO 17025	< 0.5				
Lead (dissolved)	µg/l	0.2	ISO 17025	0.4				
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05				
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.9				
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.4				
Vanadium (dissolved)	µg/l	0.2	ISO 17025	< 0.2				
Zinc (dissolved)	µg/l	0.5	ISO 17025	1.4				



Analytical Report Number: 19-60328

Project / Site name: Booth Street West, Manchester

Lab Sample Number				1319529				
Sample Reference				WS1				
Sample Number				None Supplied				
Depth (m)				None Supplied				
Date Sampled				17/09/2019				
Time Taken				None Supplied				
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

Benzene	µg/l	1	ISO 17025	< 1.0				
Toluene	µg/l	1	ISO 17025	< 1.0				
Ethylbenzene	µg/l	1	ISO 17025	< 1.0				
p & m-xylene	µg/l	1	ISO 17025	< 1.0				
o-xylene	µg/l	1	ISO 17025	< 1.0				
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0				

Petroleum Hydrocarbons

TPH1 (C10 - C40)	µg/l	10	ISO 17025	< 10				
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10				

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 19-60328
Project / Site name: Booth Street West, Manchester

Lab Sample Number				1319528				
Sample Reference				WS3				
Sample Number				None Supplied				
Depth (m)				0.40-0.70				
Date Sampled				17/09/2019				
Time Taken				None Supplied				
Analytical Parameter (Leachate Analysis)	Units	Limit of detection	Accreditation Status					

General Inorganics

pH	pH Units	N/A	ISO 17025	7.8				
Total Cyanide	µg/l	10	ISO 17025	< 10				
Sulphate as SO ₄	mg/l	0.1	ISO 17025	2.9				
Sulphide	µg/l	5	NONE	< 5.0				
Total Organic Carbon (TOC)	mg/l	0.1	NONE	4.26				

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10				
----------------------------	------	----	-----------	------	--	--	--	--

Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthene	µg/l	0.01	ISO 17025	3.4				
Fluorene	µg/l	0.01	ISO 17025	1.5				
Phenanthrene	µg/l	0.01	ISO 17025	1.0				
Anthracene	µg/l	0.01	ISO 17025	< 0.01				
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Pyrene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Chrysene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01				
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01				
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01				

Total PAH

Total EPA-16 PAHs	µg/l	0.2	NONE	5.9				
-------------------	------	-----	------	-----	--	--	--	--

Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	1.1	ISO 17025	12				
Barium (dissolved)	µg/l	0.05	ISO 17025	72				
Beryllium (dissolved)	µg/l	0.2	ISO 17025	< 0.2				
Boron (dissolved)	µg/l	10	ISO 17025	< 10				
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08				
Chromium (dissolved)	µg/l	0.4	ISO 17025	2.5				
Copper (dissolved)	µg/l	0.7	ISO 17025	8.9				
Lead (dissolved)	µg/l	1	ISO 17025	13				
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5				
Nickel (dissolved)	µg/l	0.3	ISO 17025	1.2				
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0				
Vanadium (dissolved)	µg/l	1.7	ISO 17025	9.1				
Zinc (dissolved)	µg/l	0.4	ISO 17025	8.6				



Analytical Report Number : 19-60328

Project / Site name: Booth Street West, Manchester

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1319523	WS1	None Supplied	0.30-0.40	Grey clay and sand with gravel and stones.
1319524	WS2	None Supplied	0.30-0.70	Brown clay and sand with gravel.
1319525	WS3	None Supplied	0.40-0.70	Brown clay and sand with gravel.
1319526	HDP1	None Supplied	0.10-0.50	Brown clay and loam with vegetation.
1319527	HDP2	None Supplied	0.10-0.30	Brown clay and loam with vegetation.

Analytical Report Number : 19-60328

Project / Site name: Booth Street West, Manchester

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron in leachate	Determination of boron in leachate. Sample acidified and followed by ICP-OES.	In-house method based on MEWAM	L039-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L0738-PL	W	MCERTS
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L0738-PL	W	ISO 17025
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 *for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Monohydric phenols in leachate	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
NRA Leachate Prep	10:1 extract with de-ionised water shaken for 24 hours then filtered.	In-house method based on National Rivers Authority	L020-PL	W	NONE
pH at 20oC in leachate	Determination of pH in leachate by electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L005-PL	W	ISO 17025

Iss No 19-60328-1 Booth Street West, Manchester 1909009.001

This certificate should not be reproduced, except in full, without the express permission of the laboratory.

The results included within the report are representative of the samples submitted for analysis.

Page 8 of 10

Analytical Report Number : 19-60328

Project / Site name: Booth Street West, Manchester

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH at 20°C in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	W	ISO 17025
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate in leachates	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil	L039-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW, PrW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES.	L038-PL	D	MCERTS
Sulphide in leachate	Determination of sulphide in leachate by ion selective electrode.	In-house method	L010-PL	W	NONE
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Sulphide in water	Determination of sulphide in water by ion selective electrode.	In-house method	L029-PL	W	NONE
Total cyanide in leachate	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L009-PL	D	MCERTS
Total organic carbon in leachate	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE
Total organic carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR analyser. Accredited matrices: SW PW GW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025

Iss No 19-60328-1 Booth Street West, Manchester 1909009.001

This certificate should not be reproduced, except in full, without the express permission of the laboratory.

The results included within the report are representative of the samples submitted for analysis.

Page 9 of 10



Analytical Report Number : 19-60328

Project / Site name: Booth Street West, Manchester

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total sulphate (as SO ₄ in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L038-PL	D	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	W	MCERTS
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/cleanup.	L088/76-PL	W	MCERTS
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

APPENDIX H
Ground Gas Monitoring Results

Ground Gas Monitoring Data Sheet



Name of Site: Booth Street West, Manchester

Project Code: 1909009

Date: 17th September 2019

Completed by: ML

Authorised by: ET

Equipment

Gas Analyser: GFM 430

Condition: Good

Dipmeter: Red (30m)

Condition: Good

Last Three Days

Atmospheric Trend: Rising (1022-1036mbar)

Temperature Range: 11-20°C

Rainfall: 2.9mm

On-site Weather Conditions: Cold, sunny**General Site Conditions / Ground Conditions / On site Activities:** Dry ground, no activities.**GAS MONITORING TO BE UNDERTAKEN IN ACCORDANCE WITH TEC METHOD STATEMENT**

Borehole Information	Time (seconds)	Borehole Flow Rate (l/hr)	DP (Pa)	Gas Concentrations						Groundwater Level	Borehole Depth	Comments
				CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂ (%v/v)	LEL (%)	H ₂ S (ppm)	CO (ppm)			
BH ref: WS1	0	0.0	0.0	0.0	0.1	20.4	0.0	-	-			
Time: 16:35	15	0.0	0.0	0.0	0.2	20.4	0.0	0.0	0.0			
<u>Atmospheric Pressure (mb)</u>	30	0.0	0.0	0.0	0.2	20.2	0.0	0.0	0.0			
Before: 1021	45	0.0	0.0	0.0	0.2	20.1	0.0	0.0	0.0			
After: 1021	60	0.0	0.0	0.0	0.3	20.0	0.0	0.0	0.0			
Well Condition: Good	120	0.0	0.0	0.0	0.4	19.8	0.0	0.0	0.0			
Well Diameter: 50mm	180	0.0	0.0	0.0	0.4	19.7	0.0	0.0	0.0	2.67	4.21	
	240			0.0	0.4	19.7	0.0	0.0	0.0			
	300											

Borehole Information	Time (seconds)	Borehole Flow Rate (l/hr)	DP (Pa)	Gas Concentrations						Groundwater Level	Borehole Depth	Comments
				CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂ (%v/v)	LEL (%)	H ₂ S (ppm)	CO (ppm)			
BH ref: WS3	0	0.0	0.0	0.0	0.0	20.2	0	-	-			
Time: 16:20	15	0.0	0.0	0.0	0.0	20.6	0	0	0			
<u>Atmospheric Pressure (mb)</u>	30	0.0	0.0	0.0	0.0	20.4	0	0	0			
Before: 1021	45	0.0	0.0	0.0	0.0	20.4	0	0	0			
After: 1021	60	0.0	0.0	0.0	0.0	20.4	0	0	0			
Well Condition: Good	120	0.0	0.0	0.0	0.1	20.3	0	0	0			
Well Diameter: 50mm	180	0.0	0.0	0.0	0.4	20.1	0	0	0	Dry	3.22	
	240			0.0	0.7	19.8	0	0	0			
	300			0.0	1.2	19.4	0	0	0			
	360			0.0	1.4	19.1	0	0	0			
	620			0.0	1.4	19.1	0	0	0			

Borehole Information	Time (seconds)	Borehole Flow Rate (l/hr)	DP (Pa)	Gas Concentrations						Groundwater Level	Borehole Depth	Comments
				CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂ (%v/v)	LEL (%)	H ₂ S (ppm)	CO (ppm)			
BH ref:	0											
Time:	15											
<u>Atmospheric Pressure (mb)</u>	30											
Before:	45											
After:	60											
Well Condition: Good	120											
Well Diameter: 50mm	180											
	240											
	300											