

**Environmental
Geotechnical
Specialists**



REPORT

job number J3408/16/EDS	site address 29 Berry Brow, Manchester, M40 1GR.
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GEO TECHNICAL
ENVIRONMENTAL

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REPORT ON A PHASE ONE DESK STUDY

at

29 BERRY BROW, MANCHESTER, M40 1GR

for

GS CONSTRUCTION JOINERY AND BUILDING CONTRACTORS LTD

Report No J3408/16/EDS

February 2016

1. INTRODUCTION

The site is that of a vacant plot at 29 Berry Brow, Manchester, M40 1GR. The site is located in a largely residential area and it is approximately 0.08 hectares in size and its National Grid reference is 4389026, 399553.

The site is proposed to be developed by the construction of a residential dwelling with an associated driveway and garden. In order to assist with planning and construction aspects of the development, a phase one environmental desk study has been commissioned by the client and is the subject of this report.

In accordance with issued guidance, a site walkover was conducted on the 17th February 2016 and the following observations were made:

- The site is accessed via a part cobbled/partly paved road (Berry Brow) from the main road, also called Berry Brow. A number of manhole covers can be seen on this road. A metal fence with a padlocked gate is present which serves as the entrance.
- A live railway line is present immediately to the north of the site, which crosses Berry Brow via a level crossing.
- The site itself was noted to be generally sloping towards the south, with the slope being relatively shallow at the entrance and steepening towards the rear. A mound of rubble can also be seen on the site.

- A small dilapidated shed is present on the rear boundary.
- Much demolition debris was noted on the site, including bricks and concrete. Evidence of previous footings can also be seen.
- It is understood that a basement was present as part of the previous structure. The client indicated that these are only present on part of the original footprint and have been backfilled with demolition rubble.
- A number of trees were observed on the site boundary. The rear of the site of the site was grassed and plant growth was noted. Whilst the types of plants have not been identified, their presence suggests relatively wet ground conditions in this part of the site.
- No water sources/courses were observed on the site itself.
- The status of any underground services is unknown.

In order to ensure that the site is fully characterised and to comply with the Environment Act 1995¹, a Phase One Desk Study has been commissioned by GS Construction Joinery and Building Contractors Ltd. The desk study is intended to assess the environmental impact of historical, current and future factors on the development. This report will present the data obtained and provide a conceptual ground model and preliminary risk assessment as well as discussing the scope of any intrusive investigation that may be required. This report does not consider ecological impacts (e.g. bats) or botanical risks (e.g. Japanese Knotweed).

2. **REVIEW AND SUMMARY OF PUBLISHED DATA**

As a part of this desk study the following data has been considered.

- | | |
|----------------------|--------------|
| • Groundsure Reports | - Appendix 1 |
| • Historical maps | - Appendix 2 |
| • Site Plan | - Appendix 3 |
| • Photographs | - Appendix 4 |

¹S57 of the Environment Act 1995 inserted the contaminated land regime into the Environmental Protection Act 1990 (Part 2A). The regime '**provides a risk based approach to the identification and remediation of land where contamination poses an unacceptable risk to human health or the environment**' See <http://www.environment-agency.gov.uk/research/planning/40405.aspx>. This places a duty on local authorities to inspect their areas for contaminated land and require its remediation using the 'suitable for use' approach. Much of this duty is discharged via the planning regime under the Town and Country Planning Act 1990 as historical land contamination is a 'material planning consideration.' The local authorities are required to secure the removal of unacceptable risks via remediation of the land, to therefore ensure the site is suitable for its new use. This is fulfilled via completion of a Phase One Environmental Desk Study, Phase Two Intrusive Investigation, Phase Three Remediation Strategy and Phase Four Validation Report. Therefore, as a minimum, once a site has been developed it should not be capable of being designated as 'contaminated land' under Part 2A of the Environmental Protection Act 1990, as inserted by the Environment Act 1995 (see also PPS 23 Planning and Pollution Control Section 8)

- Coal Mining Report

- Appendix 5

The data obtained from the above mentioned sources has been summarised below².

2.1 Historical Land Use

Table 1: *Historical Land Use*³

1848 - 1894	The site is adjacent to Berry Brow and is undeveloped. By 1890 a small residential dwelling is present on the northern end of the site. By 1894 some residential development has occurred approximately 200m to the south and north. Within 250m there are the following notable businesses/industries/features: - Railway line and associated cutting – Immediately N. - Smithy – 90m S. No longer present by 1890. - Old Sand Pits – 90m N, 200m N. - Cutting – 100m N. Running towards North. - Culvert – 100m W. No longer present by 1890 - River Medlock – 100m S. - Culceth Bleach Works – 150m W. - Viaduct – 240m E. - Reservoir – 250m NE, 150m W.
1908 – 1923	The site remains unchanged. The old sand pits to the north appear to have been in filled and the Culceth Bleach Works are no longer present. Within 250m there are the following notable businesses/industries/features: - Railway line and associated cutting – Immediately N. - Cutting – 100m N. Running towards North. - River Medlock – 100m S. - Viaduct – 240m E. - Reservoir – 250m NE, 150m W.

² This report is a summary only and reference must be made in full to the information provided in the Groundsure Reports.

³ See Appendix 2

1931 – 1956	The site remains unchanged. The surrounding area, particularly to the north of the site is now well developed. By 1950, some residential development to the south of the site can be seen. Within 250m there are the following notable businesses/industries/features: - Railway line and associated cutting (renamed London Midland and Scottish Railway) – Immediately N. - Sinks – 90m W. - Cutting – 100m N. Running towards North. Partly in-filled by 1950. - River Medlock – 100m S. - Allotments – 110m W. No longer present by 1950. - Allotments – 105m NE. - Quarry – 220m E. By 1950, listed as Old Quarry and is also shown as a pond. - Viaduct – 240m E. - Reservoir – 250m NE, 150m W.
1959 – 1975	The site remains unchanged. By 1959, the reservoir present 150m W of the site is labelled as a refuse tip. In addition, flood defences have been constructed along the banks of the River Medlock and the course of the river has been straightened. Within 250m there are the following notable businesses/industries/features: - Railway line and associated cutting – Immediately N. - Sinks – 90m W. - Partly in-filled Cutting – 100m N. Running towards North. - River Medlock – 100m S. - Allotments – 105m NE. No longer present by 1968. - Refuse tip – 150m W. - Quarry – 220m E. By 1965, the quarry has been in-filled. - Viaduct – 240m E. - Reservoir – 250m NE (now labelled as water).
1975 – 1992	The site remains unchanged. Within 250m there are the following notable businesses/industries/features: - Railway line and associated cutting – Immediately N. - Sinks – 90m W. - River Medlock – 100m S. - Disused Refuse tip – 150m Raised as a mound by 1985. - In-filled Quarry – 220m E. - Unspecified Shaft – 160m W. By 1985, the historical maps show a manhole in approximately the same location. - Electricity Sub-Station – 100m S. Appears between 1982 and 1985. It is situated downslope of the site and south of the River Medlock. - Viaduct – 240m E. - Water – 250m NE.

2002 – 2014	The site remains unchanged. Within 250m there are the following notable businesses/industries/features: - Railway line and associated cutting – Immediately N. - Sinks – 90m W. - River Medlock – 100m S. - Pipeline – 120m SE. - Viaduct – 240m E. - Water – 250m NE.
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NB. All distances given are approximate only.

2.2 Published Geology and Geological Hazards

Table 2: Geological Data for the Site

Strata Type	Strata Name ⁴	Previous Name ²	Description ⁵
Superficial Geology	Devensian Till	-	Variable lithology, usually sandy, silty clay with pebbles, but can contain gravel-rich or laminated sand layers. Varied colour and consistency. [Generic description].
Solid Geology	Collyhurst Sandstone Formation	Permian Sandstone Lower Permian Sandstone	A soft red sandstone with abundant beds of 'millet seed' sand grains alternating with beds of fine-grained sharp sand. Some Interbedded grey sandstone locally present.

- Potential for collapsible ground stability hazards – Very Low.
- Potential for compressible ground stability – Very Low.
- Potential for ground dissolution stability – Negligible.
- Potential for landslide ground stability – Very Low.
- Potential for running sand ground stability – Very Low.
- Potential for shrinking or swelling clay ground stability – Very Low.

It should be appreciated that whilst the site itself is present on Devensian Till, deposits of alluvium associated with the River Medlock are present a short distance to the south. Such deposits may comprise soft to firm clay which can contain layers of silty, sand, peat and gravel. In addition, the geological mapping indicates that the site is present within an area of artificial ground. Also, a nearby dip marker indicates the geology to be dipping by 10° to the south east.

Furthermore, the site is present within a large faulted sandstone block and the nearest coal outcrops are present at distances in excess in 900m. The Collyhurst Sandstone is shown to be unconformable over the Pennine Upper Coal Measures Formation. Consequently, the shallowest coal seam is likely to be present far in excess of 30m below ground level.

⁴ Sources: British Geological Survey (NERC) Map Sheets 85; Manchester; Bedrock and Superficial Edition, Geology of Britain Viewer [online resource from www.bgs.ac.uk]

⁵ Sources: British Geological Survey (NERC) Lexicon of Named Rock Units [online resource from www.bgs.ac.uk]

The Groundsure Report states that the property is in an area where between 1% and 3% of properties are above the Action Level. The BRE publication BR211 states that no protection measures are necessary in the construction of new dwellings or extensions.

2.3 Construction Issues

2.3.1 Foundation Construction

It is known that cellars were present as part of the previous property and are understood to have been backfilled with demolition debris. In addition, during the walkover survey, footings in the area of the previous building could be seen. Therefore, it is possible that significant made ground could be present and thus shallow strip or spread foundations may not be suitable. In view of this, it is possible that a piled solution may be required. It should be appreciated however, that an intrusive investigation will be required to validate this opinion.

2.3.2 Site Won Materials

The re-use of site won material will be largely dependent upon the composition of the till. If, for example it is granular in nature it would be possible to re-use the material in areas where fill is required. However, this could prove more difficult if cohesive till is revealed. In this case, and depending on the results of laboratory testing, it may be possible to modify/stabilise any cohesive soils using lime and/or cement to form a suitable sub-base replacement for pavements and hard standings.

Where sandstone outcrops it is possible that the resulting soil may provide a suitable bulk fill and may prove suitable for re-compaction.

2.3.3 Disposal of Site Materials

If made ground is present then contamination/WAC testing will be required to establish the nature of the underlying soil before disposal to a licensed landfill site.

2.4 Mining

It should be appreciated that the site lies within an area where Johnson Poole and Bloomer hold information related to mining. However, as no shallow coal seams (>30m depth), expected beneath the site, it is considered that this information would not supplement the findings of this desk study.

Nonetheless, according to the Groundsure report the site is within a coal mining area. In view of this, a coal mining report has been obtained and is summarised as below:

Underground Coal Mining

Past

The property is in the likely zone of influence from workings in 3 seams of coal at 780m to 1030m depth, and last worked in 1968.

Present

The property is not in the likely zone of influence of any present underground coal workings.

Future

The property is not in an area for which the Coal Authority is determining whether to grant a licence to remove coal using underground methods. The property is not in an area for which a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area that is likely to be affected at the surface from any planned future workings. However, reserves of coal exist in the local area which could be worked at some time in the future.

No notice of the risk of the land being affected by subsidence has been given under section 46 of the Coal Mining Subsidence Act 1991.

Mine Entries

There are no known coal mine entries within, or within 20m of the boundary of the property.

Coal Mining Geology

The Authority is not aware of any evidence of damage arising due to geological faults or other lines of weakness that have been affected by coal mining.

Opencast Coal Mining

Past

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

Present

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

Future

The property is not within 800 metres of the boundary of an opencast site for which the Coal Authority is determining whether to grant a licence to remove coal by opencast methods. The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

Coal Mining Subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres, since 31st October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine Gas

There is no record of a mine gas emission requiring action by the Coal Authority within the boundary of the property.

Hazards Related To Coal Mining

The property has not been subject to remedial works, by or on behalf of the Authority, under its Emergency Surface Hazard Call Out procedures.

Withdrawal of Support

The property is in an area for which a notice of entitlement to withdraw support was published in 1955. The property is not in an area for which a notice has been given under section 41 of the Coal Industry Act 1994, revoking the entitlement to withdraw support.

2.5 Waste Management and Gas Monitoring

The Groundsure report indicates that there are four historic landfill sites with 250m of the site, including one 17m SW of the site. In addition, a cutting, sand pit, quarry and a refuse tip have been historically present within 250m of the site. On this basis, it is considered that gas monitoring it is recommended that gas monitoring is conducted at this site.

2.6 Hydrogeology, Hydrology

The Groundsure Report and groundwater vulnerability map⁶ suggests there is a Secondary A Aquifer within the superficial geology beneath the site. This is defined as permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flows to rivers. In addition, the solid geology beneath the site is classified as a principal aquifer. This is described as geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale.

⁶ See Appendix 1

The Groundsure Report and groundwater vulnerability map⁷ states there is one groundwater abstraction licence listed within 250m of the site. This is related to a historical abattoir 69m E of the site.

There are six river network entries listed within 250m of the site, listed as culverts, the River Medlock, a lake/reservoir and an unnamed secondary river.

Whilst the Environment Agency flood map⁸ shows that the site is within 250m of both a zone 2 and zone 3 floodplain, the flood map indicates a very low risk from flooding on site.

2.7 Pollution Incidents to Controlled Waters

The Groundsure Report reveals that there have been four pollution incidents recorded within 250m of the site. Two of these relate to commercial waste, one incident relates to household waste and the other relates to storm sewage. All of these have been categorised as having no impact to minor impact.

There are eleven licensed discharge consents listed within 250m of the site. Nine of these relate to discharge of sewer storm overflow, and the licenses for six of these have been revoked between 1991 and 2010. The other consents refer to the discharge of treated effluent, one of which the license for was revoked in 1992. No information is given on the receiving water.

2.8 Sensitive Land Use

According to the sensitive land uses map⁹ there are two sensitive land uses within 250m. There is both a local nature reserve and there are two records of green belt within 250m of the site.

Further mapping indicates that the site is not within a Source Protection Zone. Groundwater provides a third of our drinking water in England and Wales, and it also maintains the flow in many of our rivers. In some areas of Southern England, groundwater supplies up to 80% of the drinking water that we get through our taps. It is crucial that these sources are protected to ensure that the water is completely safe to drink.

Source Protection Zones (SPZs) for 2000 groundwater sources such as wells, boreholes and springs used for public drinking water supply have been defined by the Environment Agency. These zones show the risk of contamination from any activities that might cause pollution in the area and the closer the activity the greater the risk. When present, mapping will show three main zones; inner (SPZ 1), outer

⁷ See Appendix 1

⁸ See Appendix 1

⁹ See Appendix 1

(SPZ 2) and total catchment (SPZ 3) and a fourth zone of special interest, which is occasionally applied, to a groundwater source.

2.9 **Industrial Land Use and Potential Sources of Contamination**

In order for a conceptual site model and preliminary risk assessment to be completed the historical maps and Groundsure data requires analysis to identify any past or present activities on the site and in the area that may have the potential to cause contamination on the site. Guidance has been issued by the Environment Agency, NHBC and Chartered Institute of Environmental Health.¹⁰ Within this document, annex 3 provides examples of important contaminants that are associated with individual uses of land. This data assists in the formulation of any chemical testing regime.

Those that we consider potentially contaminative according to the guidance are given below:

Table 3: *Potentially Contaminative Sources*

Details	Classification	Location relative to site
Artificial ground/historical construction	Made ground/fill	On site
Railway Line and associated cutting	Railway land	Immediately N
Smithy (hist')	Metal Working	90m S
Cutting (hist')	Groundworks – cut and fill operations	100m N
Electricity Sub-Station	Electrical Features	101m S
Culceth Bleach Works	Chemical Works	150m W
Refuse Tip (hist')	Refuse Disposal Facilities	150m W
Unspecified Shaft	Unspecified works, factories or features	160m W
Clayton Bridge Garage Saville Products	Service and repair – garages, vehicle parts and accessories	198m E 248m E
Old Sand Pits (hist') Quarry (hist')	Quarrying Activities	90m N, 200m N 220m E

¹⁰ Guidance for the Safe Development of Housing on Land Affected by Contamination, R&D Publication 66: 2008 Volume 1 and 2.

3. **PRELIMINARY RISK ASSESSMENT**

The potential of contamination hazards on the land has been identified and the risks associated with them are assessed in the following preliminary risk assessment in accordance with industry practice and the 'suitable for use' approach. This has been conducted using the source-pathway-receptor approach. This method dictates that there must be a risk contaminant produced at a 'source' in sufficient concentration to cause harm and there must be a 'pathway' for the contaminant to reach an identifiable 'receptor' for the linkage to be proved and a contamination hazard to be considered present. Not all substances are contaminants and not all contaminants are considered to be a risk. Indeed DEFRA and The Environment Agency state that **'a contaminant is a substance which has the potential to cause harm, while a risk itself is considered to exist if such a substance is present in sufficient concentration to cause harm and a pathway exists for a receptor to be exposed to the substance.'**

R&D Publication 66: 2008 states that the groups at risk of harm (receptors) can be identified by the following categorisation:

1. Humans: site personnel, end users, visitors and adjacent land users.
2. The water environment – receptors: groundwater, surface water, coastal waters and artificial drainage.
3. Ecosystems: plants and animals.
4. Construction/building materials/services

In order to complete a conceptual site model and therefore a preliminary risk assessment, an appraisal of the sources of contamination, potential and actual, on and in the area of the site has therefore been completed with reference to this pollution linkage.¹¹

3.1 **Conceptual Ground Model**

Although plans have not been finalised, it is anticipated that the site will be developed by the construction of a residential dwelling with a garden and driveway. In view of the sensitivity of the end users it is considered that the soil screening values (SSVs) for residential with plant uptake should be employed.

Unless otherwise stated, potential sources of contamination include the following:

On site – artificial/made ground.

¹¹ This assessment has been based on the information as to the proposed development that has been provided by the client. If the plans should change, the assessment should be re-evaluated.

Off site – Unspecified works, factories or features; railway land; metal working; groundworks – cut and fill operations; electrical features; chemical works; refuse disposal facilities; service and repair – garages, vehicle parts and accessories; quarrying activities.

Table 4: Potential Harm to Humans and Animals (fauna)

SOURCES: ON-SITE AND OFF-SITE		
Pathways	Receptor	Linkage Present?
Direct contact/dermal absorption/soil ingestion	Operative	Yes – contact with soil likely during works.
	End User	Yes – site to be developed into residential housing with garden areas.
	Neighbours	Yes – possible source on site and populated residential area surrounds the site.
Inhalation of Dust/Vapours	Operative	Yes – contact with soil likely during works and vapours may accumulate in enclosed spaces.
	End User	Yes – source on and off site, residential end use and vapours may accumulate in enclosed spaces.
	Neighbours	Yes – residential properties located within 250m radius of the site and possible inhalation of dust during the works.
Ingestion of fruit/vegetables and/or waters	Operative	No – no edible plants or water sources in the area of the proposed new works.
	End User	Yes – site to be developed into residential dwelling with garden areas.
	Neighbours	Yes – possible source on site and densely populated residential area surrounds the site.
Migration of hazardous gases via permeable strata or shallow mining activity	Operative	Yes – possible source on site due to historical construction.
	End User	Yes – possible source on site due to historical construction.
	Neighbours	Yes – possible source on site due to historical construction.

Table 5: Potential Harm to Controlled Waters and Groundwater

SOURCES: ON-SITE AND OFF-SITE		
Pathways	Receptor	Linkage Present?
Spillage/loss/run off direct to receiving water	Controlled Waters	Yes – possible source on site and controlled waters within 250m. River Medlock present downslope of site.
Migration via permeable unsaturated strata	Controlled Waters	Yes – possible source on site and both secondary A aquifer (superficial) and principal aquifer (solid) beneath the site.
Run off via drainage/sewers etc	Controlled Waters	Yes – possible source on site, and controlled waters within 250m including River Medlock downslope of site. .

Table 6: Potential Harm to Plants (flora)

SOURCES: ON-SITE AND OFF-SITE		
Pathways	Receptor	Linkage Present?
Direct contact with contaminated soils	Plants	Yes – site to be developed into residential dwelling with garden areas.
Uptake via root system	Plants	Yes – site to be developed into residential dwelling with garden areas.

Table 7: Potential Harm to Buildings/Structures

SOURCES: ON-SITE AND OFF-SITE		
Pathways	Receptor	Linkage Present?
Direct contact with contaminated soils	Building Materials	Yes – possible source on and off site and foundation and service installation materials may be affected by the site soil.
Direct contact with contaminated groundwater	Building Materials	Yes – possible source on and off site and foundation and service installation materials may be affected by the site soil.

3.2 **Preliminary Risk Assessment**

The preliminary risk assessment has been evaluated with reference to the following ratings and definitions:

- Low -** A pollution linkage is unlikely and/or the likelihood of harm occurring is low and of minor consequence.
- Moderate -** The linkage exists but further field or laboratory data is required to confirm that the contaminant has reached the receptor and the levels of contaminant are harmful.
- High -** The linkage exists and the available data indicates that significant harm may be caused and remedial action could be necessary.

Table 8: Preliminary Risk Assessment

SOURCES: ON-SITE AND OFF-SITE			
Pathways	Receptor	Risk Rating	Notes
Direct contact/dermal absorption/soil ingestion	Operative	Moderate	There are potential on and off site sources of contamination that may have caused contamination of the site.
	End User		Any on site sources of contamination could migrate to neighbouring properties.
	Neighbours		Underlying geology is indicated to be of possible high permeability. Further testing required to reach a firm conclusion.
Inhalation of Dust/Vapours	Operative	Moderate	There are potential on and off site sources of contamination that may have caused contamination of the site.
	End User		Any on site sources of contamination could migrate to neighbouring properties.
	Neighbours		Construction activities may create dust on and off site, which, if contaminated, could adversely affect operatives, end users and neighbours. In the event that harmful vapours are present they may accumulate in enclosed spaces, affecting operatives, end users and neighbours. Further testing required to reach a firm conclusion
Ingestion of fruit/vegetables and/or waters	End User	Moderate	There are potential on and off site sources of contamination that may have caused contamination of the site.
	Neighbours		Any on site sources of contamination could migrate to neighbouring properties. Underlying geology is indicated to be of possible high permeability. Further testing required to reach a firm conclusion.
Migration of hazardous gases via permeable strata	Operative	Moderate	The Groundsure data indicates four historic landfills within 250m of the site. Furthermore, a quarry, sand pits and a refuse tip are shown to have been present historically within a radius of 250m.
	End User		Therefore, it is recommended that gas monitoring be undertaken at this site in order to quantify the risks from gas migration into the future properties.
	Neighbours		

Spillage/loss/run off direct to receiving water	Controlled Waters	Moderate	There are potential on and off site sources of contamination that may have caused contamination of the site.
Migration via permeable unsaturated strata	Controlled Waters		Controlled waters within 250m, including River Medlock downslope of site.
Run off via drainage/sewers etc	Controlled Waters		Underlying geology of possible high permeability and secondary A aquifer underlies the site. Further testing required to reach a firm conclusion
Direct contact with contaminated soil	Plants	Moderate	There are potential on and off site sources of contamination that may have caused contamination of the site.
Uptake via root system	Plants		Any on site sources of contamination could migrate to neighbouring properties. Underlying geology is indicated to be of possible high permeability. Further testing required to reach a firm conclusion.
Direct contact with contaminated soils	Building Materials	Moderate	There are potential on and off site sources of contamination that may have caused contamination of the site.
Direct contact with contaminated groundwater	Building Materials		Underlying geology is indicated to be of possible high permeability. Further testing required to reach a firm conclusion.
Migration of mine gas via permeable strata	Operative	Low	Whilst the Coal Authority report mentions, workings within three seams of coal, these are between 780m and 1030m depth. Thus, given the depth of the seams, it is considered that the site will not be affected by migration of mine gas via permeable strata.
	End User		
Exposure to Radon	Operative	Low	Between 1% and 3% of homes are above the action level for radon. BR211 states that no radon protection measures are necessary in the construction of new dwellings or extensions.
	End User		

4. **INTRUSIVE INVESTIGATION**

4.1 **Site Investigation Philosophy**

The information from the Phase 1 Desk Study shows there are potential sources of contamination on the site and in the surrounding area. In view of the above, any intrusive investigation should be undertaken in accordance with the sampling strategies given in BS10175: 2011 and CLR4:1994. These two sampling strategies may be classified as:

- Non Targeted – using a defined sampling pattern (BS10175)
- Targeted – based on prior knowledge and professional judgement (CLR4)

These sampling strategies are considered in more detail below. However, it is emphasised that they can be used individually or in combination depending on the depth of site knowledge.

Non Targeted Sampling.

If no obvious 'hot spots' of contamination have been identified on a site, it would be recommended that a stratified random pattern of sampling points be considered. This work should be undertaken with reference to BS10175: 2011: *Investigation of potentially contaminated sites – Code of practice: 7.6*, and BS5930, *Code of practice for site investigations, as amended in 2010*.

Targeted Sampling.

If a possible 'hot spot' of contamination has been identified on a site, it is recommended that a herringbone pattern of sampling points be considered in the immediate vicinity. If strong evidence of contamination has then been identified, it is recommended that sampling be highly focused to reflect that evidence and the investigator's experience. This work should be undertaken with reference to CLR4, *Sampling Strategies for Contaminated Land, 1994*.

The density of sampling required is defined in BS10175: 2011: 7.7.2.2.3, which indicates that an *exploratory* investigation usually requires a lower density sample spacing than does a *main* investigation. The BS goes on to state that *the actual density should depend upon the confidence and robustness required of decisions that will be based on the information obtained. Thus the area and depth of interest will be related to the contaminants present, the pathways and the receptors. Typical densities of sampling grids can vary from 25m to 50m centres for exploratory investigations, and 10m to 25m centres for main investigations.*

4.2 Site Specific Investigation

In view of the information provided above it is considered that an investigation should include the following main elements.

- A regime of boreholes should be undertaken to obtain geotechnical as well as environmental and chemical data. This could comprise the following:
 - 4 windowless sample boreholes with adjacent dynamic probes for profiling of the made ground and obtaining soil samples.
 - Trial pits in the area of the basement to determine composition of fill material.
 - Installation of 3 No gas monitoring standpipes.

- It is considered that the sampling strategy should be based on BS 10175, Para 7.7.2.2.3 Therefore, for this 0.08 hectare site a total of 4 sampling points, including 1 within the basement area would be required.
- Chemical testing should be undertaken on the above grid spacing and the following standard testing regime should be undertaken
 - o **Metals** – Cd, Cr, Cu, Hg, Ni, Pb, Zn, V.
 - o **Semi Metals and Non Metals** – As, Se, Free Cyanide and Phenols.
 - o **Hydrocarbons** – Polycyclic aromatic hydrocarbons (PAH's) 16 EPA, Total petroleum hydrocarbons (TPH CWG)
 - o **Others** – pH, Organic Content.
- Given the age of the previous building on the site, it is suggested that asbestos screening be undertaken on selected samples.
- Gas monitoring should be undertaken in accordance with Table 4.2 of CIRIA C665: 2007: *Assessing risks posed by hazardous ground gasses to buildings*. In that document guidance for the frequency of monitoring is provided on tables 5.5a and 5.5b *Typical/idealised frequency and period of monitoring* on page 60. For convenience, these tables have been combined and reproduced below.

Table 9: Typical/idealised frequency and period of monitoring.

Sensitivity of development	Generation potential of source				
	Very low	Low	Moderate	High	Very High
Low (commercial)	4/1	6/2	6/3	12/6	12/12
Moderate (flats)	6/2	6/3	9/6	12/12	24/24
High (residential + gardens)	6/3	9/6	12/6	24/12	24/24

Notes:

- a) The first number is the minimum number of readings and the second number is the minimum period in months, for example 4/1 – Four sets of readings over 1 month.
- b) At least two sets of readings must be at low and falling atmospheric pressure (but not restricted to periods below 1000mb) known as worst case conditions.
- c) The frequency and period stated are considered to represent typical minimum requirements. Depending on specific circumstances fewer or additional readings may be required (e.g. any such variation subject to site specific justification). The NHBC guidance is also recommending these periods/frequencies of monitoring.
- d) Historical data can be used as part of the data set.

- e) Not all sites will require gas monitoring. However this would need to be confirmed with demonstrable evidence.
- f) Placing high sensitivity end use on a high hazard site is not normally acceptable unless the source is removed or treated to reduce its gassing potential. Under such circumstances long-term monitoring may not be appropriate or required.
- g) This guidance should be read in conjunction with BS 8576:2013 figure 6 which may justify fewer readings in the first instance, where the generation potential is considered to be very low to low. However, this should be undertaken pragmatically, and further readings obtained according to the above table, where a potentially significant source is identified and initial readings suggest that remedial measures are not necessary.

5. **REFERENCES**

- British Standards Institution (1999), BS5930: *Code of practice for site investigations*, B.S.I., London.
- British Standards Institution (2007), Amendment No 1 to BS5930: *Code of practice for site investigations*, B.S.I., London.
- British Standards Institution (2011), BS 10175: *Investigation of potentially contaminated sites – Code of Practice*, British Standards Institute.
- British Standards Institution (2013), BS 8576 *Guidance on Investigations for Ground Gas – Permanent Gases and Volatile Organic Compounds*.
- Department for Environment, Food and Rural Affairs and the Environment Agency, DEFRA R&D Publications, Environment Agency, Bristol.
 - CLR 2, 1994, *Guidance on preliminary site inspection of contaminated land*, Volume 1.
 - CLR 4, 1994, *Sampling Strategies for contaminated land*.
- R&D Publication 66: 2008 *Guidance for the Safe Development of Housing on Land Affected by Contamination*.

- CIRIA Report C665 (2007), Assessing risks posed by ground gasses in buildings.
- The Environment Agency: Groundwater source protection.

For and on behalf of
Rogers Geotechnical Services Ltd,

I. Sakoor BEng
Geotechnical Engineer

Emma Lewis LLB
Managing Director

APPENDIX 1

GROUNDSURE REPORTS



Rogers Geotechnical Services
Barnkcliffe Mills, NEAR BANK,
HUDDERSFIELD, HD8 8LU

Groundsure Reference: GS-2751754
Your Reference: J3408_16_EDS
Report Date 16 Feb 2016
Report Delivery Method: Email - pdf

Groundsure Enviroinsight

Address: 29, BERRY BROW, MANCHESTER, M40 1GR

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviroinsight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,

Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Groundsure Enviroinsight

Address: 29, BERRY BROW, MANCHESTER, M40 1GR
Date: 16 Feb 2016
Reference: GS-2751754
Client: Rogers Geotechnical Services

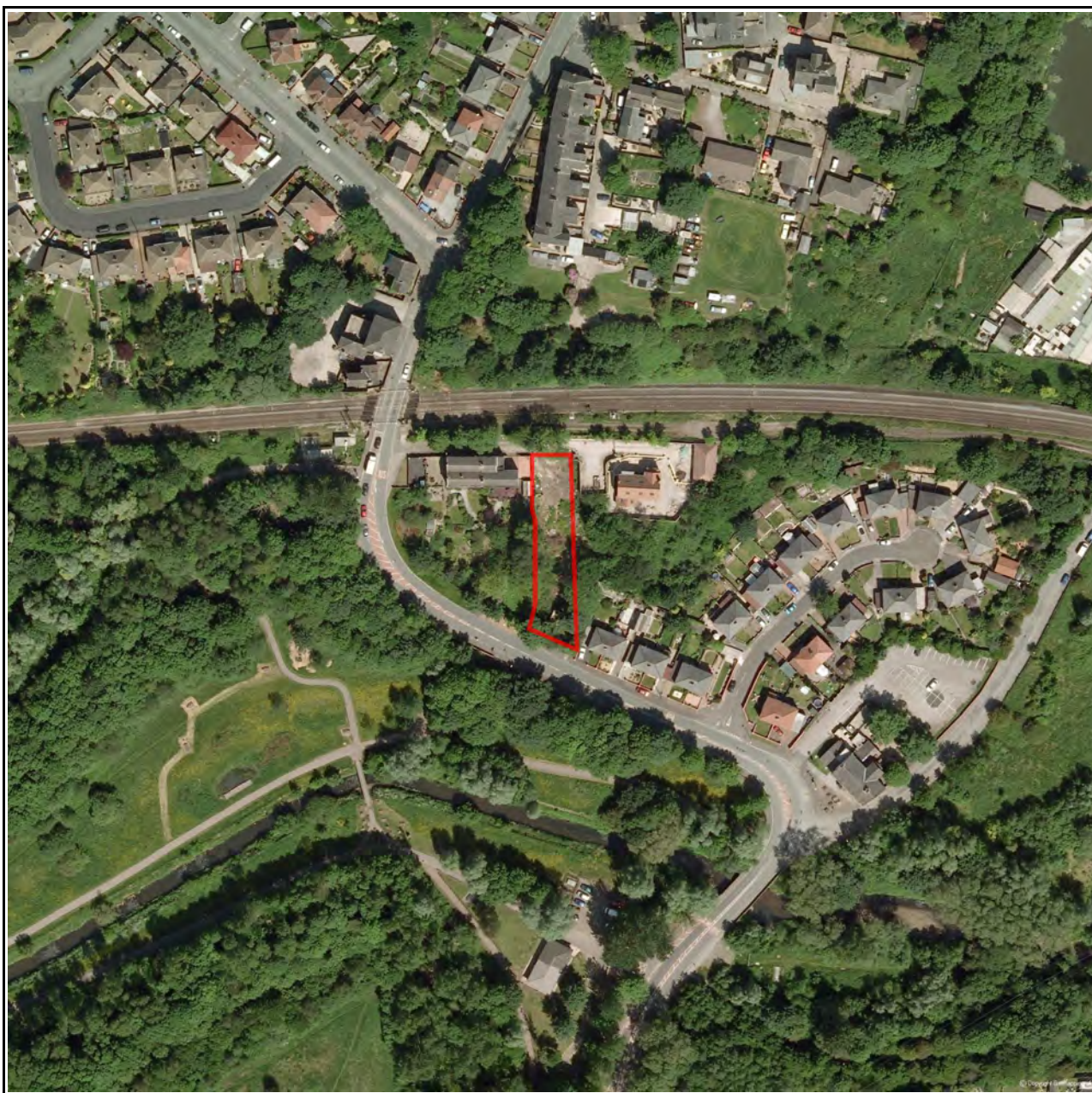
NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 02-Jun-2009
Grid Reference: 389026,399553
Site Size: 0.08ha

Report Reference: GS-2751754
Client Reference: J3408_16_EDS

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Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	7	63	94
1.2 Additional Information – Historical Tank Database	0	0	1	17
1.3 Additional Information – Historical Energy Features Database	0	0	3	11
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	0	1
1.6 Potentially Infilled Land	0	6	71	125
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	1
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	11	15
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	4	7
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
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3.1 Landfill Sites						
3.1.1 Environment Agency Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency Historic Landfill Sites	0	1	3	1	1	8
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	2
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	19	26	0	2
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency Licensed Waste Sites	0	0	0	3	2	17

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	0	6	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	0
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Are there any records of Artificial Ground and Made Ground present beneath the study site?	Yes
5.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site?	Yes
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology	0-500m
---------------------------------------	--------

6.1 Are there any records of Strata Classification in the Superficial Geology within 500m of the study site?				Yes		
6.2 Are there any records of Strata Classification in the Bedrock Geology within 500m of the study site?				Yes		
	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	1	0	0	16
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	6
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	0	1	Not searched	Not searched
	On-site	0-50m	51-250	251-500	501-1000	1000-1500

Section 6: Hydrogeology and Hydrology

0-500m

6.9 Is there any Environment Agency information on river quality within 1500m of the study site?	No	No	No	No	Yes	Yes
6.10 Detailed River Network entries within 500m of the site	0	0	6	5	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Are there any Environment Agency Zone 2 floodplains within 250m of the study site?	Yes
7.2 Are there any Environment Agency Zone 3 floodplains within 250m of the study site	Yes
7.3 What is the Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site?	Very Low
7.4 Are there any Flood Defences within 250m of the study site?	No
7.5 Are there any areas benefiting from Flood Defences within 250m of the study site?	No
7.6 Are there any areas used for Flood Storage within 250m of the study site?	No
7.7 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	Potential at Surface
7.8 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?	Low

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	2
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	2
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	0
8.7 Records of Local Nature Reserves (LNR)	0	1	0	0	0	0
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	0	0	0	1
8.14 Records of Green Belt land	0	1	1	1	0	0

Section 9: Natural Hazards	
9.1 What is the maximum risk of natural ground subsidence?	Very Low
9.1.1 What is the maximum Shrink-Swell hazard rating identified on the study site?	Very Low
9.1.2 What is the maximum Landslides hazard rating identified on the study site?	Very Low
9.1.3 What is the maximum Soluble Rocks hazard rating identified on the study site?	Negligible
9.1.4 What is the maximum Compressible Ground hazard rating identified on the study site?	Very Low
9.1.5 What is the maximum Collapsible Rocks hazard rating identified on the study site?	Very Low
9.1.6 What is the maximum Running Sand hazard rating identified on the study site?	Very Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining	
10.1 Are there any coal mining areas within 75m of the study site?	Yes
10.2 Are there any Non-Coal Mining areas within 50m of the study site boundary?	No
10.3 Are there any brine affected areas within 75m of the study site?	No

Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licenses, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

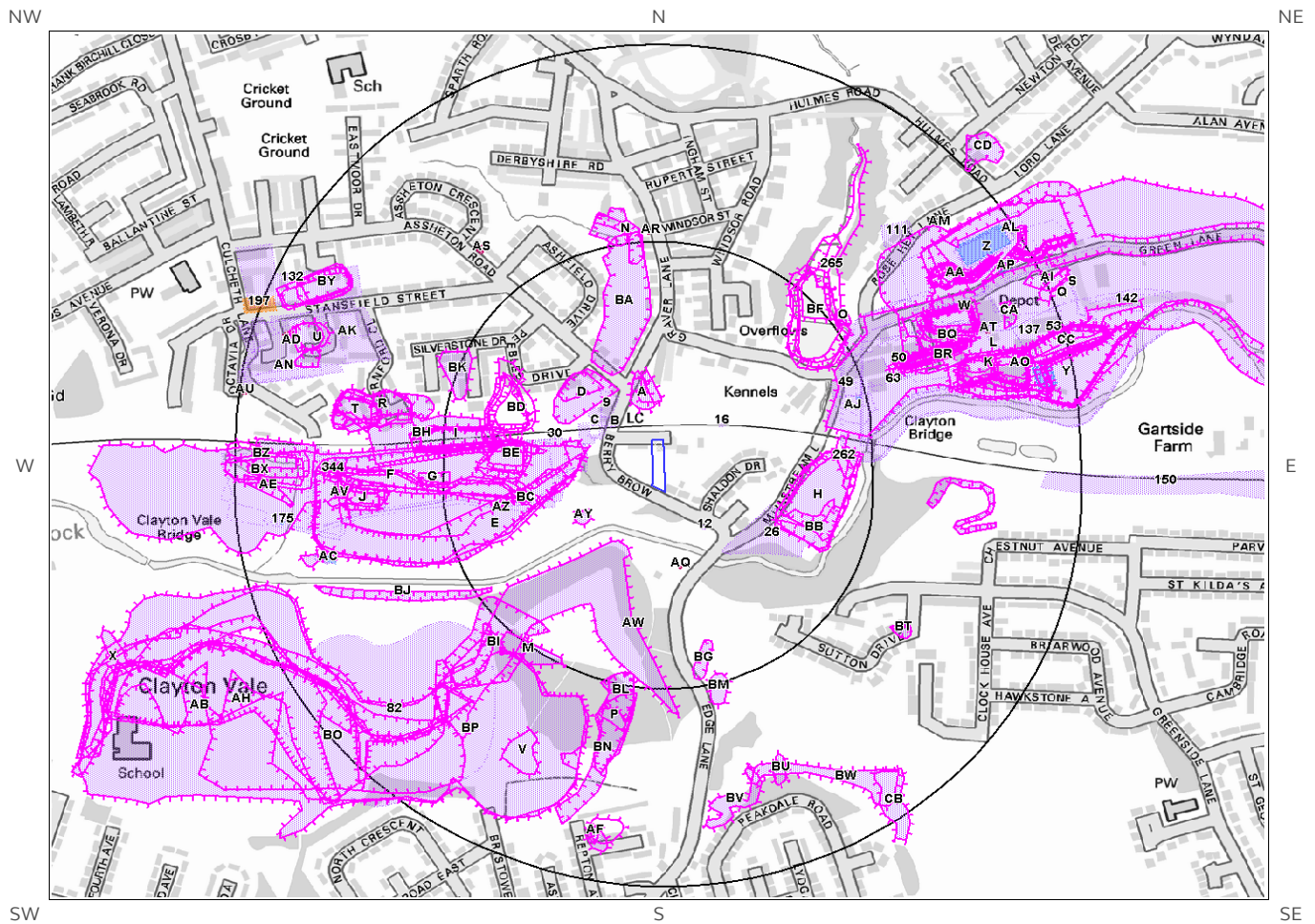
Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

1. Historical Land Use



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1. Historical Industrial Sites

1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 164

ID	Distance [m]	Direction	Use	Date
1A	38	N	Unspecified Heap	1933
2A	38	N	Unspecified Heap	1921
3A	38	N	Unspecified Heap	1938
4A	38	N	Unspecified Heap	1906
5A	38	N	Unspecified Ground Workings	1923
6B	44	W	Railway Building	1923
7A	48	N	Unspecified Heap	1956
8B	54	W	Railway Station	1851
9	56	NW	Railway Station	1956
10B	58	W	Railway Station	1891
11A	62	N	Unspecified Pit	1891
12	63	SE	Smithy	1851
13C	67	W	Railway Building	1923
14C	68	W	Railway Station	1923
15C	69	NW	Railway Station	1968
16	69	E	Railway Building	1923
17D	75	NW	Unspecified Pit	1891
18AV	77	W	Refuse Heap	1968
19F	78	W	Dye and Bleach Works	1851
20AW	79	SW	Unspecified Heap	1956
21AX	82	W	Unspecified Pit	1956
22AY	82	SW	Refuse Heap	1851
23AZ	84	W	Unspecified Disused Tip	1978
24D	88	NW	Unspecified Ground Workings	1923
25BA	94	NW	Unspecified Pit	1923
26	101	SE	Unspecified Mill	1956
27E	102	W	Unspecified Heap	1985
28E	102	W	Unspecified Heap	1991
29G	103	W	Dye Works	1923
30	111	W	Railway Station	1891
31F	117	W	Dye Works	1891
32G	117	W	Dyeing and Finishing Works	1938

33H	136	E	Unspecified Heap	1933
34BB	137	E	Unspecified Ground Workings	1938
35H	141	E	Unspecified Quarry	1938
36BC	148	W	Unspecified Shaft	1978
37I	176	W	Cuttings	1891
38I	188	W	Cuttings	1921
39I	189	W	Cuttings	1933
40I	189	W	Cuttings	1938
41BG	194	S	Refuse Heap	1933
42Q	195	E	Sewage Works	1956
43I	195	W	Cuttings	1923
44AJ	197	E	Unspecified Works	1991
45BH	202	W	Cuttings	1985
46J	205	W	Dyeing and Finishing Works	1933
47J	205	W	Dye Works	1906
48J	205	W	Dye Works	1921
49	210	E	Unspecified Commercial/Industrial	1923
50	212	E	Unspecified Works	1985
51K	213	E	Dyeing and Finishing Works	1906
52K	213	E	Dyeing and Finishing Works	1933
53	215	E	Dyeing and Finishing Works	1923
54BI	217	SW	Unspecified Ground Workings	1906
55N	224	N	Refuse Heap	1956
56BR	226	E	Unspecified Depot	1978
57BJ	231	SW	Refuse Heap	1968
58BK	231	W	Unspecified Pit	1956
59P	233	S	Unspecified Pit	1921
60BL	233	S	Unspecified Pit	1933
61K	237	E	Dyeing Works	1892
62L	237	E	Dyeing and Finishing Works	1938
63	237	E	Dyeing and Finishing Works	1938
64BM	239	S	Unspecified Heap	1956
65L	239	E	Dyeing and Finishing Works	1938
66L	239	E	Dyeing and Finishing Works	1916
67M	244	SW	Unspecified Pit	1985
68M	244	SW	Unspecified Pit	1991
69AO	245	E	Print Works	1845
70N	248	N	Unspecified Pit	1991
71O	254	NE	Unspecified Pit	1938

72O	254	NE	Unspecified Pit	1933
73O	254	NE	Unspecified Pit	1906
74O	254	NE	Unspecified Pit	1921
75O	254	NE	Unspecified Pit	1923
76BN	258	S	Unspecified Pit	1906
77AB	260	SW	Unspecified Ground Workings	1923
78BO	265	SW	Unspecified Heap	1938
79BP	266	SW	Unspecified Ground Workings	1933
80R	266	W	Unspecified Pit	1956
81P	281	S	Refuse Heap	1933
82	283	SW	Unspecified Factory	1906
83Q	285	E	Sewage Works	1938
84R	289	W	Unspecified Pit	1968
85R	291	W	Unspecified Ground Workings	1978
86S	308	E	Sewage Works	1906
87S	308	E	Sewage Works	1933
88BS	315	E	Unspecified Ground Workings	1956
89J	316	W	Unspecified Pit	1956
90BT	320	SE	Unspecified Pit	1892
91T	325	W	Unspecified Pit	1933
92T	325	W	Sand Pit	1921
93T	327	W	Refuse Heap	1891
94T	329	W	Unspecified Pit	1938
95T	329	W	Old Sand Pit	1923
96T	329	W	Old Sand Pit	1906
97U	329	W	Unspecified Works	1968
98U	329	W	Rubber Works	1956
99BQ	338	E	Unspecified Ground Workings	1906
100V	340	SW	Unspecified Pit	1921
101V	340	SW	Unspecified Pit	1906
102V	340	SW	Unspecified Pit	1923
103Z	343	NE	Unspecified Commercial/Industrial	1923
104W	347	NE	Unspecified Depot	1991
105W	347	NE	Unspecified Depot	1985
106X	347	SW	Unspecified Disused Tip	1978
107X	350	SW	Refuse Heap	1968
108Y	357	E	Refuse Heap	1906
109Y	357	E	Refuse Heap	1933
110BU	359	S	Sand Pit	1851
111	360	NE	Unspecified Depot	1968
112BV	363	S	Unspecified Ground Workings	1938

113BW	364	S	Refuse Heap	1968
114U	364	W	Rubber Works	1891
115U	364	W	Rubber Works	1933
116U	364	W	Rubber Works	1921
117U	364	W	Rubber Works	1938
118Z	367	NE	Sewage Works	1938
119AA	375	NE	Unspecified Ground Workings	1906
120AA	379	NE	Unspecified Ground Workings	1923
121AA	379	NE	Filter Bed	1916
122AD	380	W	Rubber Works	1923
123AA	381	NE	Unspecified Ground Workings	1938
124AA	382	NE	Unspecified Ground Workings	1933
125AB	384	SW	Unspecified Ground Workings	1956
126AA	390	NE	Filter Bed	1923
127Z	391	NE	Unspecified Works	1968
128AC	391	W	Unspecified Tanks	1921
129AC	391	W	Unspecified Disused Tanks	1906
130AC	391	W	Unspecified Disused Tanks	1938
131AC	391	W	Unspecified Disused Tanks	1933
132	394	NW	Unspecified Works	1968
133AC	397	W	Unspecified Tanks	1923
134AD	405	W	Rubber Works	1906
135AD	405	W	Bleach Works	1851
136AC	410	W	Refuse Heap	1906
137	410	E	Unspecified Works	1991
138AA	411	NE	Unspecified Heap	1956
139Z	421	NE	Unspecified Tanks	1906
140Z	423	NE	Unspecified Tanks	1916
141Z	425	NE	Unspecified Tanks	1923
142	427	NE	Unspecified Works	1968
143AG	430	NE	Unspecified Ground Workings	1906
144AE	431	W	Unspecified Pit	1991
145AE	431	W	Unspecified Pit	1985
146AF	431	S	Unspecified Pit	1891
147AF	432	S	Unspecified Pit	1906
148CA	433	E	Sand Pit	1933
149CB	436	SE	Refuse Heap	1956
150	451	E	Cuttings	1845
151AP	451	NE	Unspecified Tanks	1916

152AG	454	NE	Unspecified Ground Workings	1923
153AH	460	SW	Unspecified Ground Workings	1921
154AG	460	NE	Unspecified Tanks	1916
155Y	463	E	Refuse Heap	1916
156BX	467	W	Unspecified Shaft	1978
157Y	469	E	Refuse Heap	1923
158AH	474	SW	Unspecified Ground Workings	1906
159AI	476	NE	Refuse Heap	1933
160AG	478	NE	Unspecified Ground Workings	1938
161AG	478	NE	Unspecified Ground Workings	1933
162AI	487	E	Refuse Heap	1938
163AL	487	NE	Unspecified Tanks	1923
164CD	498	NE	Unspecified Pit	1892

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

18

ID	Distance (m)	Direction	Use	Date
165AJ	238	E	Unspecified Tank	1908
166AK	389	W	Unspecified Tank	1950
167AC	389	W	Tanks	1908
168AC	389	W	Disused Tanks	1932
169AC	389	W	Tanks	1922
170AK	389	W	Unspecified Tank	1950
171AL	425	NE	Tanks	1951
172Z	426	NE	Tanks	1950
173AM	428	NE	Unspecified Tank	1951
174AM	428	NE	Unspecified Tank	1950
175	444	W	Unspecified Tank	1893
176AN	451	W	Unspecified Tank	1950
177AN	451	W	Unspecified Tank	1950
178AO	451	E	Disused Tanks	1951
179Y	453	E	Disused Tanks	1950
180AP	456	NE	Unspecified Tank	1951
181AP	456	NE	Unspecified Tank	1950
182Y	473	E	Tanks	1950

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

14

ID	Distance (m)	Direction	Use	Date
183AQ	93	S	Electricity Substation	1982
184AQ	93	S	Electricity Substation	1985
185AQ	94	S	Electricity Substation	1968
186AR	260	N	Electricity Substation	1985
187AR	260	N	Electricity Substation	1991
188AR	260	N	Electricity Substation	1980
189AS	312	NW	Electricity Substation	1992
190AS	313	NW	Electricity Substation	1975
191AS	313	NW	Electricity Substation	1984
192AT	411	E	Electricity Substation	1985
193AT	411	E	Electricity Substation	1991
194AD	451	W	Electricity Substation	1975
195AU	490	W	Electricity Substation	1992
196AU	491	W	Electricity Substation	1984

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary:

0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary:

1

ID	Distance (m)	Direction	Use	Date
197	480	W	Motor Works	1932

1.6 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 202

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

ID	Distance(m)	Direction	Use	Date
198A	38	N	Unspecified Ground Workings	1923
199A	38	N	Unspecified Heap	1921
200A	38	N	Unspecified Heap	1938
201A	38	N	Unspecified Heap	1933
202A	38	N	Unspecified Heap	1906
203A	48	N	Unspecified Heap	1956
204A	62	N	Unspecified Pit	1891
205D	75	NW	Unspecified Pit	1891
206AV	77	W	Refuse Heap	1968
207AW	79	SW	Unspecified Heap	1956
208AX	82	W	Unspecified Pit	1956
209AY	82	SW	Refuse Heap	1851
210AZ	84	W	Unspecified Disused Tip	1978
211D	88	NW	Unspecified Ground Workings	1923
212BA	94	NW	Unspecified Pit	1923
213E	102	W	Unspecified Heap	1991
214E	102	W	Unspecified Heap	1985
215H	136	E	Unspecified Heap	1933
216BB	137	E	Unspecified Ground Workings	1938
217H	141	E	Unspecified Quarry	1938
218H	141	E	Pond	1956
219BD	143	W	Pond	1851
220BE	145	W	Pond	1851
221BC	148	W	Unspecified Shaft	1978
222BD	149	W	Pond	1891
223BD	150	W	Reservoir	1956
224BE	150	W	Reservoir	1956
225BD	152	W	Pond	1923
226BD	152	W	Reservoir	1933
227BD	152	W	Reservoir	1938
228BD	152	W	Pond	1906
229BD	152	W	Pond	1921
230BE	154	W	Pond	1891
231BE	155	W	Pond	1923
232BE	155	W	Reservoirs	1921
233BE	155	W	Reservoirs	1933

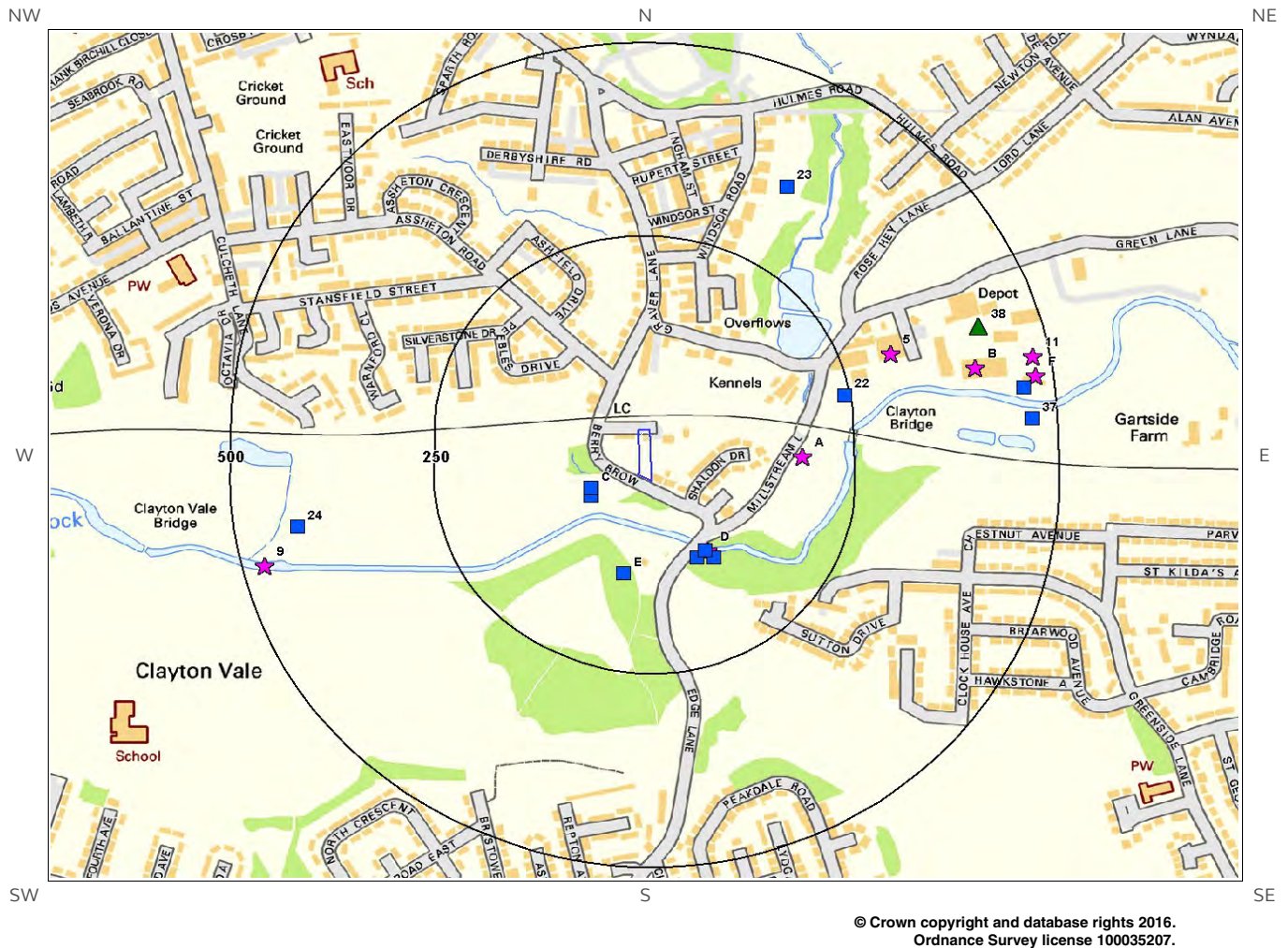
234BE	155	W	Reservoirs	1938
235BE	155	W	Reservoirs	1906
236G	156	W	Pond	1891
237G	157	W	Ponds	1851
238G	161	W	Reservoirs	1923
239G	161	W	Reservoirs	1921
240G	161	W	Reservoirs	1938
241G	161	W	Reservoirs	1906
242G	161	W	Reservoirs	1933
243I	176	W	Cuttings	1891
244BF	185	NE	Reservoirs	1923
245BF	185	NE	Reservoirs	1933
246BF	185	NE	Reservoirs	1921
247BF	185	NE	Reservoirs	1891
248BF	185	NE	Reservoirs	1906
249BF	185	NE	Reservoirs	1938
250I	188	W	Cuttings	1921
251I	189	W	Cuttings	1933
252BF	189	NE	Ponds	1985
253BF	189	NE	Ponds	1991
254I	189	W	Cuttings	1938
255BG	194	S	Refuse Heap	1933
256BF	195	NE	Ponds	1978
257BF	195	NE	Reservoirs	1956
258S	195	E	Sewage Works	1956
259BF	195	NE	Ponds	1968
260I	195	W	Cuttings	1923
261BH	202	W	Cuttings	1985
262	206	E	Pond	1851
263BI	217	SW	Unspecified Ground Workings	1906
264AR	224	N	Refuse Heap	1956
265	229	NE	Pond	1851
266BJ	231	SW	Refuse Heap	1968
267BK	231	W	Unspecified Pit	1956
268P	233	S	Unspecified Pit	1921
269BL	233	S	Unspecified Pit	1933
270BM	239	S	Unspecified Heap	1956
271G	243	W	Reservoirs	1938
272M	244	SW	Unspecified Pit	1991
273M	244	SW	Unspecified Pit	1985
274N	248	N	Unspecified Pit	1991
275O	254	NE	Unspecified Pit	1923
276O	254	NE	Unspecified Pit	1906
277O	254	NE	Unspecified Pit	1921
278O	254	NE	Unspecified Pit	1933

279O	254	NE	Unspecified Pit	1938
280BN	258	S	Unspecified Pit	1906
281AB	260	SW	Unspecified Ground Workings	1923
282BO	265	SW	Unspecified Heap	1938
283BP	266	SW	Unspecified Ground Workings	1933
284R	266	W	Unspecified Pit	1956
285P	281	S	Refuse Heap	1933
286Q	285	E	Sewage Works	1938
287R	289	W	Unspecified Pit	1968
288BQ	289	E	Ponds	1892
289R	291	W	Unspecified Ground Workings	1978
290BR	293	E	Pond	1938
291BR	293	E	Pond	1938
292BR	296	E	Pond	1933
293BR	296	E	Pond	1906
294BR	296	E	Pond	1916
295BR	296	E	Pond	1938
296BR	300	E	Pond	1923
297BQ	301	E	Pond	1956
298S	308	E	Sewage Works	1906
299S	308	E	Sewage Works	1933
300BS	315	E	Unspecified Ground Workings	1956
301J	316	W	Unspecified Pit	1956
302BT	320	SE	Unspecified Pit	1892
303J	320	W	Ponds	1851
304T	325	W	Sand Pit	1921
305T	325	W	Unspecified Pit	1933
306T	327	W	Refuse Heap	1891
307J	327	W	Reservoirs	1923
308J	327	W	Pond	1906
309J	327	W	Pond	1933
310J	327	W	Pond	1921
311J	327	W	Reservoirs	1938
312T	329	W	Old Sand Pit	1923
313T	329	W	Unspecified Pit	1938
314T	329	W	Old Sand Pit	1906
315BQ	338	E	Unspecified Ground Workings	1906
316BQ	338	NE	Pond	1938
317V	340	SW	Unspecified Pit	1923
318V	340	SW	Unspecified Pit	1921
319V	340	SW	Unspecified Pit	1906
320W	346	NE	Pond	1938

321X	347	SW	Unspecified Disused Tip	1978
322W	348	NE	Pond	1933
323W	348	NE	Pond	1906
324W	349	NE	Pond	1916
325W	349	NE	Pond	1938
326X	350	SW	Refuse Heap	1968
327W	351	NE	Pond	1923
328W	354	NE	Reservoir	1956
329Y	357	E	Refuse Heap	1933
330Y	357	E	Refuse Heap	1906
331BU	359	S	Sand Pit	1851
332AO	360	E	Ponds	1892
333BV	363	S	Unspecified Ground Workings	1938
334AO	363	E	Reservoirs	1938
335BW	364	S	Refuse Heap	1968
336AO	364	E	Reservoirs	1938
337AO	364	E	Reservoirs	1916
338AO	364	E	Reservoirs	1938
339K	365	E	Reservoirs	1933
340AO	365	E	Reservoirs	1906
341Z	367	NE	Sewage Works	1938
342K	368	E	Reservoirs	1923
343AO	371	E	Reservoirs	1956
344	373	W	Reservoir	1956
345AA	375	NE	Unspecified Ground Workings	1906
346AA	379	NE	Unspecified Ground Workings	1923
347AA	379	NE	Filter Bed	1916
348AA	381	NE	Unspecified Ground Workings	1938
349AA	382	NE	Unspecified Ground Workings	1933
350AB	384	SW	Unspecified Ground Workings	1956
351AA	390	NE	Filter Bed	1923
352BX	405	W	Pond	1851
353AO	408	E	Reservoirs	1933
354BY	409	NW	Reservoir	1938
355BY	409	NW	Pond	1923
356BY	409	NW	Reservoir	1933
357BY	409	NW	Pond	1921
358BY	409	NW	Pond	1906
359AD	410	W	Pond	1851
360AC	410	W	Refuse Heap	1906
361AA	411	NE	Unspecified Heap	1956
362AO	411	E	Reservoirs	1923

363AN	411	W	Pond	1891
364BY	412	NW	Pond	1891
365BX	412	W	Reservoir	1956
366BY	414	NW	Pond	1851
367AD	415	W	Pond	1891
368BX	417	W	Pond	1923
369BX	417	W	Reservoirs	1891
370BX	417	W	Reservoirs	1938
371BX	417	W	Pond	1921
372BX	417	W	Pond	1906
373BX	417	W	Pond	1933
374AF	420	S	Pond	1851
375BZ	427	W	Pond	1991
376BZ	427	W	Pond	1985
377AG	430	NE	Unspecified Ground Workings	1906
378AE	431	W	Unspecified Pit	1985
379AE	431	W	Unspecified Pit	1991
380AF	431	S	Unspecified Pit	1891
381AF	432	S	Unspecified Pit	1906
382CA	433	E	Sand Pit	1933
383CB	436	SE	Refuse Heap	1956
384CC	451	E	Reservoirs	1933
385CC	452	E	Reservoirs	1923
386AG	454	NE	Unspecified Ground Workings	1923
387AO	454	E	Reservoirs	1923
388AH	460	SW	Unspecified Ground Workings	1921
389CC	460	E	Ponds	1956
390CC	460	E	Ponds	1968
391Y	463	E	Refuse Heap	1916
392BX	467	W	Unspecified Shaft	1978
393Y	469	E	Refuse Heap	1923
394AH	474	SW	Unspecified Ground Workings	1906
395AI	476	NE	Refuse Heap	1933
396AG	478	NE	Unspecified Ground Workings	1938
397AG	478	NE	Unspecified Ground Workings	1933
398AI	487	E	Refuse Heap	1938
399CD	498	NE	Unspecified Pit	1892

2. Environmental Permits, Incidents and Registers Map



2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

0

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

0

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

1

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
38	423	E	389434 399717	Address: Kenny Bros, Ledbury Rd, Failsworth Process: Waste oil Burner Status: Current Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

26

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
12C	60	W	388960 399510	Address: ASHETTON ROAD, MANCHESTER, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0108 Permit Version: 2 Receiving Water: Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03-Sep-2010 Revocation Date: -
13C	60	W	388960 399510	Address: ASHETTON ROAD, MANCHESTER, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0108 Permit Version: 1 Receiving Water: Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01-Jan-1995 Revocation Date: 02/09/2010
14C	64	SW	388960 399500	Address: GRAVER LANE/ELSMA RD, MANCHESTER, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0104 Permit Version: 2 Receiving Water: Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03-Sep-2010 Revocation Date: -

ID	Distance (m)	Direction	NGR	Details	
15C	64	SW	388960 399500	Address: GRAVER LANE/ELSMA RD, MANCHESTER, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0104 Permit Version: 1	Receiving Water: Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01-Jan-1995 Revocation Date: 02/09/2010
16D	112	SE	389100 399430	Address: BERRY BROW/EDGE LANE, MANCHESTER, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0131 Permit Version: 1	Receiving Water: Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01-Jan-1995 Revocation Date: 12/09/1999
17D	115	SE	389090 399420	Address: CLAYTON BRIDGE, FAILSWORTH, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01TAM0004 Permit Version: 1	Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01-Apr-1991 Revocation Date: 31/12/1994
18D	115	SE	389090 399420	Address: CLAYTON BRIDGE, FAILSWORTH, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01TAM0004 Permit Version: 2	Receiving Water: Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01-Jan-1995 Revocation Date: -
19E	125	S	389000 399400	Address: CLAYTON VALE VISITORS CENTRE, EDGE LANE, DROYLSDEN, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 016991051 Permit Version: 2	Receiving Water: Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 07-Oct-1992 Revocation Date: -
20E	125	S	389000 399400	Address: CLAYTON VALE VISITORS CENTRE, EDGE LANE, DROYLSDEN, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 016991051 Permit Version: 1	Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 23-Oct-1985 Revocation Date: 06/10/1992
21D	126	SE	389110 399420	Address: CLAYTON BRIDGE CSO, CLAYTON BRIDGE, TAMESIDE, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016983274 Permit Version: 1	Receiving Water: Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 02/12/1998 Effective Date: 31-Aug-1999 Revocation Date: -
22	242	E	389270 399630	Address: MANCHESTER TOOL SERVE CO, MILLSTREAM LANE, CLAYTON BRIDGE, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 016990474 Permit Version: 1	Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 23-Mar-1984 Revocation Date: 25/01/1991

ID	Distance (m)	Direction	NGR	Details	
23	356	NE	389200 399900	Address: 41/43 HULMES RD, NEWTON HEATH, MANCHESTER, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 016992018 Permit Version: 1	Receiving Water: Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: - Effective Date: 19-Jun-1986 Revocation Date: 20/02/1995
24	423	W	388600 399460	Address: CULCHETH LANE, MANCHESTER, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0306 Permit Version: 1	Receiving Water: Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01-Jan-1995 Revocation Date: -
25F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 5	Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01-Oct-1992 Revocation Date: 12/05/1999
26F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 5	Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01-Oct-1992 Revocation Date: 12/05/1999
27F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 3	Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 13-Oct-1989 Revocation Date: 01/11/1989
28F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 6	Receiving Water: Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: - Effective Date: 13-May-1999 Revocation Date: 20/05/2000
29F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 4	Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 02-Nov-1989 Revocation Date: 30/09/1992
30F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 1	Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 12-Jan-1980 Revocation Date: 30/01/1985
31F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 2	Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 31-Jan-1985 Revocation Date: 12/10/1989

ID	Distance (m)	Direction	NGR	Details
32F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 2 Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 31-Jan-1985 Revocation Date: 12/10/1989
33F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 1 Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 12-Jan-1980 Revocation Date: 30/01/1985
34F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 6 Receiving Water: Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: - Effective Date: 13-May-1999 Revocation Date: 20/05/2000
35F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 4 Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 02-Nov-1989 Revocation Date: 30/09/1992
36F	461	E	389490 399640	Address: FAILSWORTH STW, GREEN LANE, FAILSWORTH, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016950036 Permit Version: 3 Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 13-Oct-1989 Revocation Date: 01/11/1989
37	468	E	389500 399600	Address: WALKERS PAPER RECLAMATION SWO, MILLSTREAM LANE IND ESTATE, GREEN LANE, CLAYTON BRIDGE, FAILSWORTH, GREATER MANCHESTER Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 016991453 Permit Version: 1 Receiving Water: Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01-Jul-1991 Revocation Date: 01/07/1991

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

0

Database searched and no data found.

2.3 Environment Agency Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

11

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
1D	114	SE	389102 399429	Incident Date: 12-Jul-2001 Incident Identification: 15941 Pollutant: Sewage Materials Pollutant Description: Storm Sewage Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
2A	185	E	389218 399551	Incident Date: 06-Sep-2002 Incident Identification: 106034 Pollutant: Specific Waste Materials Materials: Specific Waste Materials Pollutant Description: Commercial Waste: Household Waste Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
3A	185	E	389218 399551	Incident Date: 06-Sep-2002 Incident Identification: 106034 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
4A	185	E	389218 399551	Incident Date: 06-Sep-2002 Incident Identification: 106034 Pollutant: Specific Waste Materials Pollutant Description: Household Waste Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
5	310	E	389326 399684	Incident Date: 04-Feb-2002 Incident Identification: 56240 Pollutant: Specific Waste Materials Pollutant Description: Metal Wastes Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
6B	406	E	389430 399666	Incident Date: 31-Jul-2002 Incident Identification: 96026 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
7B	406	E	389430 399666	Incident Date: 31-Jul-2002 Incident Identification: 96026 Pollutant: Specific Waste Materials Pollutant Description: Household Waste Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)

ID	Distance (m)	Direction	NGR	Details	
8B	406	E	389430 399666	Incident Date: 31-Jul-2002 Incident Identification: 96026 Pollutant: Specific Waste Materials: Specific Waste Materials Pollutant Description: Commercial Waste: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
9	474	W	388559 399410	Incident Date: 04-Mar-2002 Incident Identification: 61783 Pollutant: Sewage Materials Pollutant Description: Storm Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
10F	477	E	389504 399656	Incident Date: 14-Feb-2002 Incident Identification: 58304 Pollutant: Specific Waste Materials Pollutant Description: Other Specific Waste Material	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
11	477	E	389500 399680	Incident Date: 09-Jul-2003 Incident Identification: 172182 Pollutant: Inert Materials and Wastes Pollutant Description: Other Inert Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

Database searched and no data found.

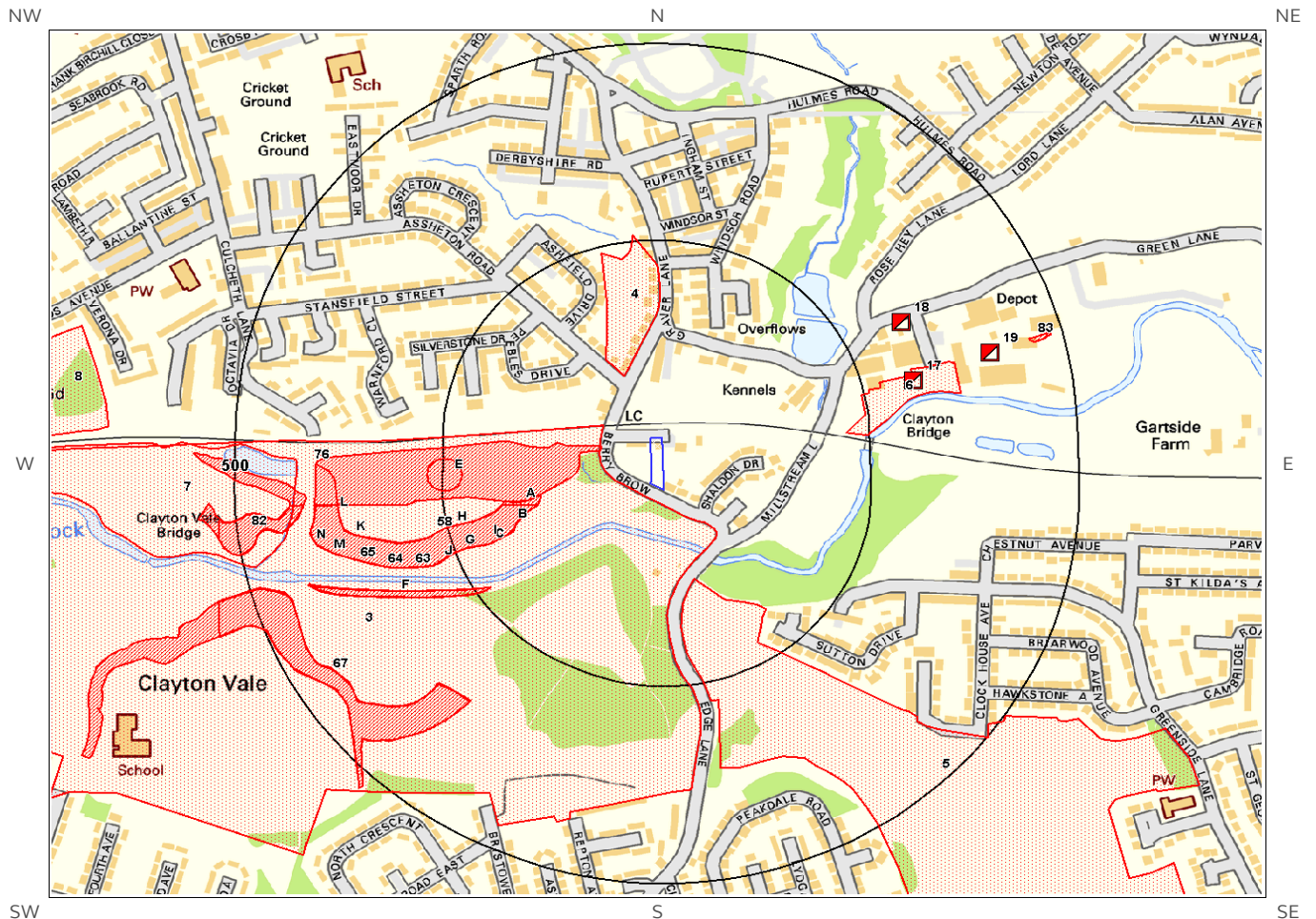
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

How many records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site?

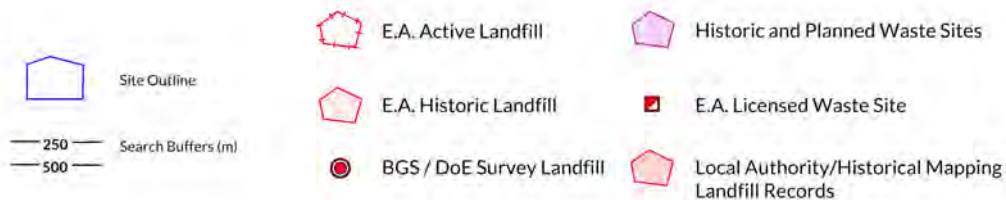
0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



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3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency historic landfill sites within 1500m of the study site:

14

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
3	17	SW	388400 399300	Site Address: Clayton Vale Power Station, Bank Bridge Road, Manchester Waste Licence: Yes Site Reference: RD/LIC/045/76,GDO F001 Waste Type: Inert, Industrial, Commercial, Household, Special, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01-Jan-1974 Licence Surrendered: Licence Hold Address: Europa House, Birdhall Lane, Cheadle Heath, Stockport Operator: - First Recorded: 31-Dec-1965 Last Recorded: 31-Dec-1968
4	85	N	388900 399700	Site Address: Graver Lane, Newton Heath, Greater Manchester Waste Licence: - Site Reference: F022 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: - Last Recorded: -
5	119	S	389400 399000	Site Address: Ash Road, Greater Manchester Waste Licence: Yes Site Reference: K047 Waste Type: Inert, Industrial, Commercial, Household, Special, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01-Jan-1974 Licence Surrendered: Licence Hold Address: - Operator: Droylsden Urban District Council First Recorded: 31-Dec-1935 Last Recorded: 31-Dec-1978
6	222	E	389300 399600	Site Address: Clayton Bridge Industrial Estate, Off Millstream Lane, Failsworth, Oldham Waste Licence: Yes Site Reference: RD/LIC/517/88, G110 Waste Type: Inert, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 04-Jan-1989 Licence Surrendered: Licence Hold Address: Collyhurst Road, Collyhurst, Manchester Operator: - First Recorded: 04-Jan-1989 Last Recorded: 31-May-1989

ID	Distance (m)	Direction	NGR	Details	
7	426	W	388100 399500	Site Address: Clayton Vale, Clayton, Manchester, Greater Manchester Waste Licence: - Site Reference: - Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: Central Electricity Generating Board First Recorded: 31-Dec-1901 Last Recorded: -
8	653	W	388000 399600	Site Address: Clayton Vale Power Station, Bank Bridge Road, Manchester Waste Licence: Yes Site Reference: GDO F001,RD/LIC/045/76 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 12-Mar-1979 Licence Surrendered: 21-Jul-1983 Licence Hold Address: Europa House, Birdhall Lane, Cheadle Heath, Stockport Operator: - First Recorded: 31-Dec-1901 Last Recorded: 31-Dec-1980
Not shown	1044	NE	389900 400100	Site Address: Land Off Willows Drive, Willows Drive, Failsworth, Greater Manchester Waste Licence: - Site Reference: G406 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: - Last Recorded: -
Not shown	1065	NE	389900 400100	Site Address: Land Off Ely Crescent, Failsworth, Greater Manchester Waste Licence: - Site Reference: G396 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: - Last Recorded: -
Not shown	1118	E	390100 399900	Site Address: Jerico Lodge, Medlock Road, Failsworth, Greater Manchester Waste Licence: - Site Reference: G082 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: - Last Recorded: -
Not shown	1306	NW	387600 400200	Site Address: Land Adjacent To Mitchell Street, Mitchell Street, Newton Heath, Manchester, Greater Manchester Waste Licence: Yes Site Reference: F008, RD/LIC/013/76 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 10-Jul-1978 Licence Surrendered: 14-Oct-1985 Licence Hold Address: Taylor Road, Urmston, Manchester Operator: - First Recorded: 01-May-1973 Last Recorded: 31-Dec-1984
Not shown	1317	E	390378 399714	Site Address: Medlock Vale Farm Inert Landfill Site, Vale Lane, Manchester, Failsworth Waste Licence: Yes Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 20-Aug-1991 Licence Surrendered: Licence Hold Address: Mill Lane, Oldham, Werneth, Lancashire Operator: T O B Contractors Ltd First Recorded: - Last Recorded: -
Not shown	1405	E	390300 400000	Site Address: Vales Lane, Woodhouses, Greater Manchester Waste Licence: - Site Reference: G407 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: - Last Recorded: -

ID	Distance (m)	Direction	NGR	Details
Not shown	1494	S	388800 397900	Site Address: Crabtree Forge, Crabtree Lane, Forge Lane, Clayton, Manchester Waste Licence: Yes Site Reference: RD/LIC/216/81, GDO F049 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 28-Apr-1982 Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: 31-Dec-1942 Last Recorded: 31-Dec-1992
Not shown	1497	SE	390300 398600	Site Address: Former Gas Works, Greenside Lane, Droylsden Waste Licence: Yes Site Reference: WML/1050, K090 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 03-Oct-1994 Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: - Last Recorded: -

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

2

The following landfill records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
Not shown	1018	W	388000.0 399500.0	Address: Clayton Vale, Clayton, Manchester 11 BGS Number: 2777.0 Risk: No risk to aquifer Waste Type: N/A
Not shown	1031	SE	389500.0 398600.0	Address: Ash Road, Droylsden, Manchester BGS Number: 3030.0 Risk: Risk to minor aquifer Waste Type: N/A

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

47

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
39E	59	W	388788 399541	Refuse Tip	1963 mapping	Polygon
40A	133	W	388847 399505	Refuse Tip	1965 mapping	Polygon
41I	140	W	388640 399460	Refuse Tip	1965 mapping	Polygon
42A	144	W	388875 399495	Refuse Tip	1965 mapping	Polygon
43A	149	W	388867 399488	Refuse Tip	1965 mapping	Polygon
44B	163	W	388858 399478	Refuse Tip	1965 mapping	Polygon

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
45B	170	W	388853 399469	Refuse Tip	1965 mapping	Polygon
46D	181	W	388829 399491	Refuse Tip	1965 mapping	Polygon
47B	181	W	388842 399460	Refuse Tip	1965 mapping	Polygon
48C	196	W	388831 399454	Refuse Tip	1965 mapping	Polygon
49C	207	W	388811 399449	Refuse Tip	1965 mapping	Polygon
50D	212	W	388807 399480	Refuse Tip	1965 mapping	Polygon
51H	223	W	388787 399475	Refuse Tip	1965 mapping	Polygon
52E	226	W	388771 399539	Refuse Tip	1965 mapping	Polygon
53F	232	SW	388717 399391	Refuse Tip	1965 mapping	Polygon
54F	232	SW	388717 399391	Refuse Tip	1965 mapping	Polygon
55G	236	W	388794 399445	Refuse Tip	1965 mapping	Polygon
56G	241	W	388784 399440	Refuse Tip	1965 mapping	Polygon
57H	250	W	388771 399470	Refuse Tip	1965 mapping	Polygon
58	257	W	388764 399467	Refuse Tip	1965 mapping	Polygon
59J	257	W	388769 399431	Refuse Tip	1965 mapping	Polygon
60I	266	W	388683 399458	Refuse Tip	1965 mapping	Polygon
61J	276	W	388760 399425	Refuse Tip	1965 mapping	Polygon
62J	280	W	388756 399423	Refuse Tip	1965 mapping	Polygon
63	285	W	388741 399422	Refuse Tip	1965 mapping	Polygon
64	324	W	388705 399422	Refuse Tip	1965 mapping	Polygon
65	338	W	388667 399431	Refuse Tip	1965 mapping	Polygon
66	350	SW	388351 399268	Refuse Tip	1965 mapping	Polygon
67	351	SW	388650 399268	Refuse Tip	1965 mapping	Polygon
68K	358	W	388663 399462	Refuse Tip	1965 mapping	Polygon
69K	363	W	388654 399466	Refuse Tip	1965 mapping	Polygon
70K	372	W	388648 399472	Refuse Tip	1965 mapping	Polygon
71K	375	W	388646 399481	Refuse Tip	1965 mapping	Polygon

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
72L	376	W	388643 399493	Refuse Tip	1965 mapping	Polygon
73L	377	W	388614 399486	Refuse Tip	1965 mapping	Polygon
74M	387	W	388636 399440	Refuse Tip	1965 mapping	Polygon
75M	396	W	388624 399446	Refuse Tip	1965 mapping	Polygon
76	403	W	388616 399552	Refuse Tip	1965 mapping	Polygon
77N	408	W	388615 399453	Refuse Tip	1965 mapping	Polygon
78N	411	W	388610 399470	Refuse Tip	1965 mapping	Polygon
79N	411	W	388612 399457	Refuse Tip	1965 mapping	Polygon
80N	412	W	388609 399463	Refuse Tip	1965 mapping	Polygon
81	414	W	388487 399501	Refuse Tip	1965 mapping	Polygon
82	418	W	388551 399468	Refuse Tip	1965 mapping	Polygon
83	459	E	389487 399714	Refuse Tip	1963 mapping	Polygon
Not shown	1281	NE	390198 400128	Refuse Tip	1969 mapping	Polygon
Not shown	1306	NW	387624 400249	Briscoe Lane Lanfill	Manchester City Council	Polygon

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

Database searched and no data found.

3.2.2 Records of Environment Agency licensed waste sites within 1500m of the study site:

22

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
17	311	E	389334 399659	Site Address: Banbury Road, Failsworth, Manchester, M35 0PB Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIE015 EPR reference: EA/EPR/JP3398CQ/A001 Operator: Britannia Import Export Ltd Waste Management licence No: 50142 Annual Tonnage: 4999.0 Issue Date: 10/03/2003 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Britannia Import Export Ltd Correspondence Address: -, -
18	322	NE	389319 399733	Site Address: Cooking Oil Processing Facility, Green Lane, Failsworth, Oldham, M35 0HQ Type: Physical Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: KSO001 EPR reference: EA/EPR/BB3303UH/A001 Operator: Enviroil Limited Waste Management licence No: 401217 Annual Tonnage: 0.0 Issue Date: 04/09/2014 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Cooking Oil Processing Facility Correspondence Address: -, -
19	409	E	389426 399694	Site Address: Land/premises At, Ledbury Lane, Banbury Road, Oldham, Lancashire, M35 0PB Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHO001 EPR reference: EA/EPR/YP3394CX/S003 Operator: Shore Recycling Ltd Waste Management licence No: 50458 Annual Tonnage: 0.0 Issue Date: 31/07/2006 Effective Date: - Modified: - Surrendered Date: 03/11/2010 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Shore Recycling (ozone) Ltd Correspondence Address: -, -
Not shown	836	NE	389600 400200	Site Address: Britannia Works, Ledbury Road, Off Green Lane, Failsworth, Manchester, M35 0PB Type: Material Recycling Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIE002 EPR reference: EA/EPR/DP3998CU/V002 Operator: Britannia Import Export Ltd Waste Management licence No: 50119 Annual Tonnage: 24999.0 Issue Date: 07/11/2002 Effective Date: - Modified: 04/08/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Britannia Import Export Ltd Correspondence Address: -, -
Not shown	836	NE	389600 400200	Site Address: Britannia Works, Ledbury Road, Off Green Lane, Failsworth, Manchester, M35 0PB Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIE002 EPR reference: - Operator: Britannia Import Export Ltd Waste Management licence No: 50119 Annual Tonnage: 5000.0 Issue Date: 07/11/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Britannia Import Export Ltd Correspondence Address: -, Unit 3, Gould Street, Oldham, Lancashire, OL1 3LL

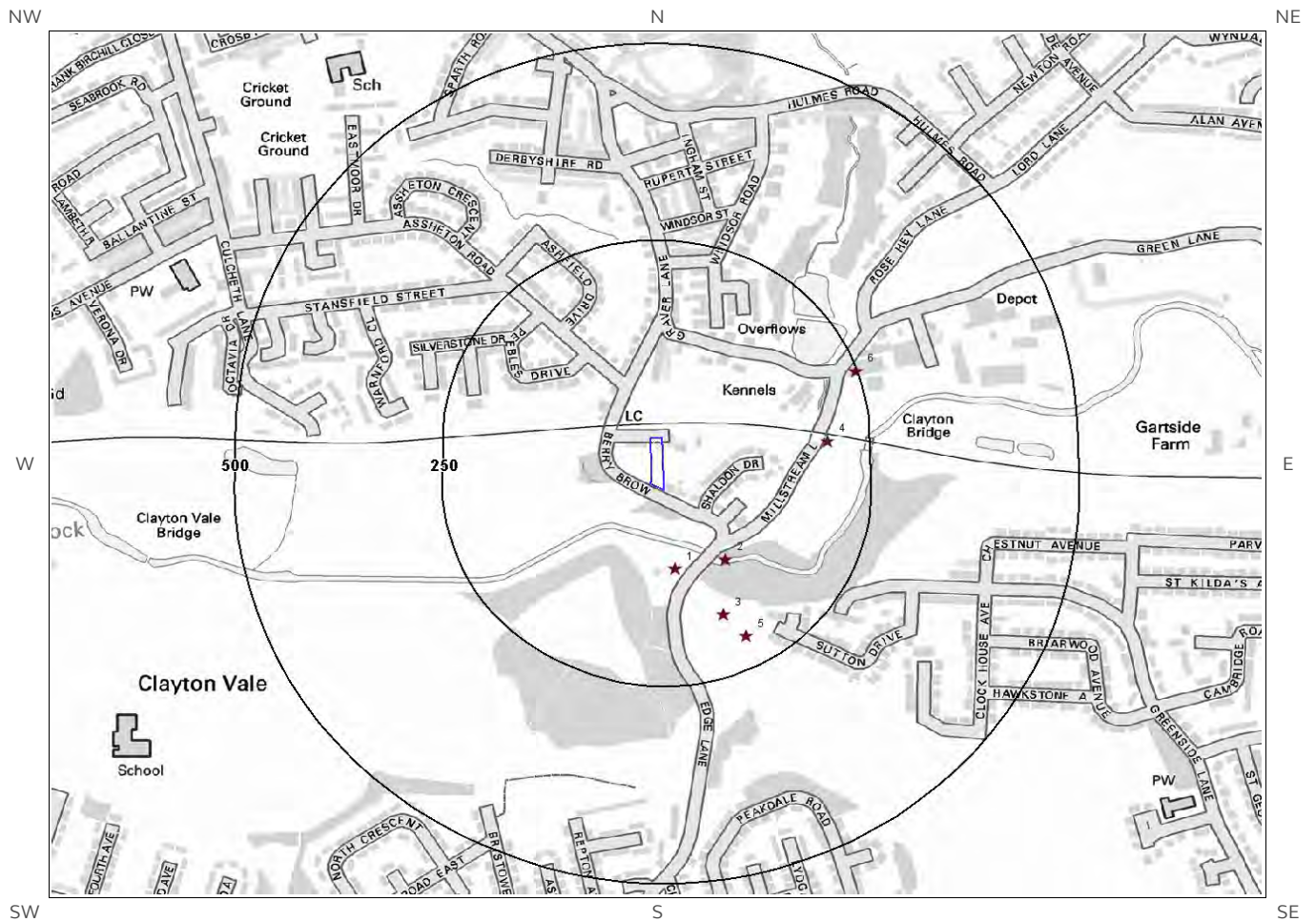
ID	Distance (m)	Direction	NGR	Details	
Not shown	1031	SE	389609 398664	Site Address: Waste Disposal Unit, Ash Road, Droylsden, Tameside, Gtr Manchester, M43 6QU Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GRE087 EPR reference: EA/EPR/JP3995EG/V002 Operator: Viridor Waste (Greater Manchester) Ltd Waste Management licence No: 100193 Annual Tonnage: 24999.0	Issue Date: 27/03/2008 Effective Date: - Modified: 15/05/2009 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Ash Road Household Waste Recycling Centre Correspondence Address: -, -
Not shown	1031	SE	389609 398664	Site Address: Waste Disposal Unit, Ash Road, Droylsden, Tameside, Gtr Manchester, M43 6QU Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GRE087 EPR reference: EA/EPR/JP3995EG/V002 Operator: Viridor Waste (Greater Manchester) Ltd Waste Management licence No: 100193 Annual Tonnage: 24999.0	Issue Date: 27/03/2008 Effective Date: - Modified: 15/05/2009 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Ash Road Household Waste Recycling Centre Correspondence Address: -, -
Not shown	1034	SE	389611 398662	Site Address: Ash Road, Droylsden, Manchester, M43 6QU Type: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMW007 EPR reference: - Operator: G M Waste Ltd Waste Management licence No: 53686 Annual Tonnage: 2730.0	Issue Date: 01/02/1995 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Ash Road Civic Amenity Site Correspondence Address: -
Not shown	1034	SE	389611 398662	Site Address: Ash Road, Droylsden, Manchester, M43 6QU Type: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMW007 EPR reference: LP3696CL/V Operator: Viridor Waste (Greater Manchester) Ltd Waste Management licence No: 53686 Annual Tonnage: 2730.0	Issue Date: 01/02/1995 Effective Date: - Modified: 18/05/2009 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Ash Road Civic Amenity Site Correspondence Address: -, -
Not shown	1034	SE	389611 398662	Site Address: Land/premises At, Ash Road, Droylsden, Manchester, M43 6QU Type: Household Waste Amenity Site Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMW007 EPR reference: EA/EPR/LP3696CL/V002 Operator: Viridor Waste (Greater Manchester) Ltd Waste Management licence No: 53686 Annual Tonnage: 2730.0	Issue Date: 01/02/1995 Effective Date: - Modified: 18/05/2009 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Ash Road Civic Amenity Site Correspondence Address: -, -

ID	Distance (m)	Direction	NGR	Details
Not shown	1034	SE	389611 398662	Site Address: Land/premises At, Ash Road, Droylsden, Manchester, M43 6QU Type: Household Waste Amenity Site Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMW007 EPR reference: EA/EPR/LP3696CL/V002 Operator: Viridor Waste (Greater Manchester) Ltd Waste Management licence No: 53686 Annual Tonnage: 2730.0 Issue Date: 01/02/1995 Effective Date: - Modified: 18/05/2009 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: Ash Road Civic Amenity Site Correspondence Address: -, -
Not shown	1319	NW	388292 400687	Site Address: Hygrade Motor Spares, Rothwell Street, Newton Heath, Manchester, M40 1EL Type: Vehicle depollution facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MOH008 EPR reference: EA/EPR/LB3936RN/A001 Operator: Mr Mohammed Qadeer & Mr Shafqut Ali Waste Management licence No: 104837 Annual Tonnage: 74999.0 Issue Date: 25/03/2013 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Hygrade Motor Spares Correspondence Address: -, -
Not shown	1319	NW	388292 400687	Site Address: Hygrade Motor Spares, Rothwell Street, Newton Heath, Manchester, M40 1EL Type: Vehicle Depollution Facility <5000 tps Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MOH008 EPR reference: EA/EPR/LB3936RN/V002 Operator: Mr Mohammed Qadeer & Mr Shafqut Ali Waste Management licence No: 104837 Annual Tonnage: 4999.0 Issue Date: 25/03/2013 Effective Date: - Modified: 11/07/2013 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Hygrade Motor Spares Correspondence Address: -, -
Not shown	1335	N	388572 400844	Site Address: Manchester Auto Spares, Hobson Street, Failsworth, Manchester, M35 0JH Type: ELV Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: RGV001 EPR reference: EA/EPR/RP3094CW/V002 Operator: Mr Graham Sykes & Mr Robert Lewtas Waste Management licence No: 50439 Annual Tonnage: 2500.0 Issue Date: 24/02/2006 Effective Date: - Modified: 24/07/2012 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Manchester Auto Spares Correspondence Address: -, -
Not shown	1352	E	390378 399714	Site Address: Vale Lane, Failsworth, Manchester, M35 9WG Type: Landfill taking Non-Biodegradable Wastes Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TOB001 EPR reference: EA/EPR/JP3896CU/A001 Operator: T O B Contractors Ltd Waste Management licence No: 53889 Annual Tonnage: 6250.0 Issue Date: 20/08/1991 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Part revoke Site Name: Medlock Vale Farm Inert Landfill Site Correspondence Address: -, -

ID	Distance (m)	Direction	NGR	Details
Not shown	1356	NW	388257 400708	Site Address: Land/premises At, Rothwell Street, Newton Heath, Manchester, M40 1EL Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MWQ001 EPR reference: EA/EPR/WP3998CP/T002 Operator: Hygrade Motor Spares Limited Waste Management licence No: 50081 Annual Tonnage: 5000.0 Issue Date: 03/07/2001 Effective Date: 27/06/2003 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Hygrade Motor Spares Ltd Correspondence Address: -, -
Not shown	1356	NW	388257 400708	Site Address: Rothwell Street, Newton Heath, Manchester, M40 1EL Type: Metal Recycling Site (Vehicle Dismantler) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: HAF001 EPR reference: - Operator: Hafiz Mohammed Waste Management licence No: 50081 Annual Tonnage: 5000.0 Issue Date: 03/07/2001 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Highgrade - Rothwell Street Site Correspondence Address: -, 3, Morris Street, Oldham, Lancs, OL4 1EL
Not shown	1356	NW	388257 400708	Site Address: Land/premises At, Rothwell Street, Newton Heath, Manchester, M40 1EL Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MWQ001 EPR reference: WP3998CP/T002 Operator: "Liquat, Waheed And Qadir, Mohammed Wasim" Waste Management licence No: 50081 Annual Tonnage: 5000.0 Issue Date: 03/07/2001 Effective Date: 27/06/2003 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Hygrade Motor Spares Ltd Correspondence Address: -, -
Not shown	1356	NW	388257 400708	Site Address: Land/premises At, Rothwell Street, Newton Heath, Manchester, M40 1EL Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MWQ001 EPR reference: EA/EPR/WP3998CP/T002 Operator: Hygrade Motor Spares Ltd Waste Management licence No: 50081 Annual Tonnage: 5000.0 Issue Date: 03/07/2001 Effective Date: 27/06/2003 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Hygrade Motor Spares Ltd Correspondence Address: -, -
Not shown	1356	NW	388257 400708	Site Address: Land/premises At, Rothwell Street, Newton Heath, Manchester, M40 1EL Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MWQ001 EPR reference: WP3998CP/T002 Operator: Liquat, Waheed And Qadir, Mohammed Wasim Waste Management licence No: 50081 Annual Tonnage: 5000.0 Issue Date: 03/07/2001 Effective Date: 27/06/2003 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Hygrade Motor Spares Ltd Correspondence Address: -, -

ID	Distance (m)	Direction	NGR	Details
Not shown	1460	NW	388392 400904	Site Address: Sandfield House, Morton Street, Failsworth, Manchester, M35 0BN Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FAU002 EPR reference: EA/EPR/DP3992CW/A001 Operator: Breakdown Services Manchester Ltd Waste Management licence No: 53606 Annual Tonnage: 416.667 Issue Date: 29/03/1996 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Failsworth Autospares Correspondence Address: -, -
Not shown	1475	NW	388391 400921	Site Address: Unit 26 Failsworth Ind Est, Morton Street, Failsworth, Oldham, Gtr Manchester, M35 0BN Type: Vehicle Depollution Facility <5000 tps Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BLA167 EPR reference: EA/EPR/AB3707SQ/A001 Operator: Blackstone Breakers Limited Waste Management licence No: 400829 Annual Tonnage: 4999.0 Issue Date: 01/11/2013 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Blackstone Breakers Correspondence Address: -, -

4. Current Land Use Map



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4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

6

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	101	S	Electricity Sub Station	389048 399420	M43	Electrical Features	Infrastructure and Facilities
2	115	SE	Pipeline	389108 399432	M43	Pipelines	Industrial Features
3	174	SE	Pylon	389106 399362	M43	Electrical Features	Infrastructure and Facilities
4	198	E	Clayton Bridge Garage	389230 399582	Millstream Lane, Manchester, M40 1GT	Vehicle Repair, Testing and Servicing	Repair and Servicing
5	210	SE	Pylon	389133 399335	M43	Electrical Features	Infrastructure and Facilities
6	248	E	Saville Products	389265 399671	Millstream Lane, Manchester, M40 1QT	Vehicle Parts and Accessories	Motoring

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

0

Database searched and no data found.

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site: 0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
MGR-MGRD	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
TILLD	TILL, DEVENSIAN	DIAMICTON
ALV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
TILLD	TILL, DEVENSIAN	DIAMICTON
ALV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]

5.3 Bedrock and Solid Geology

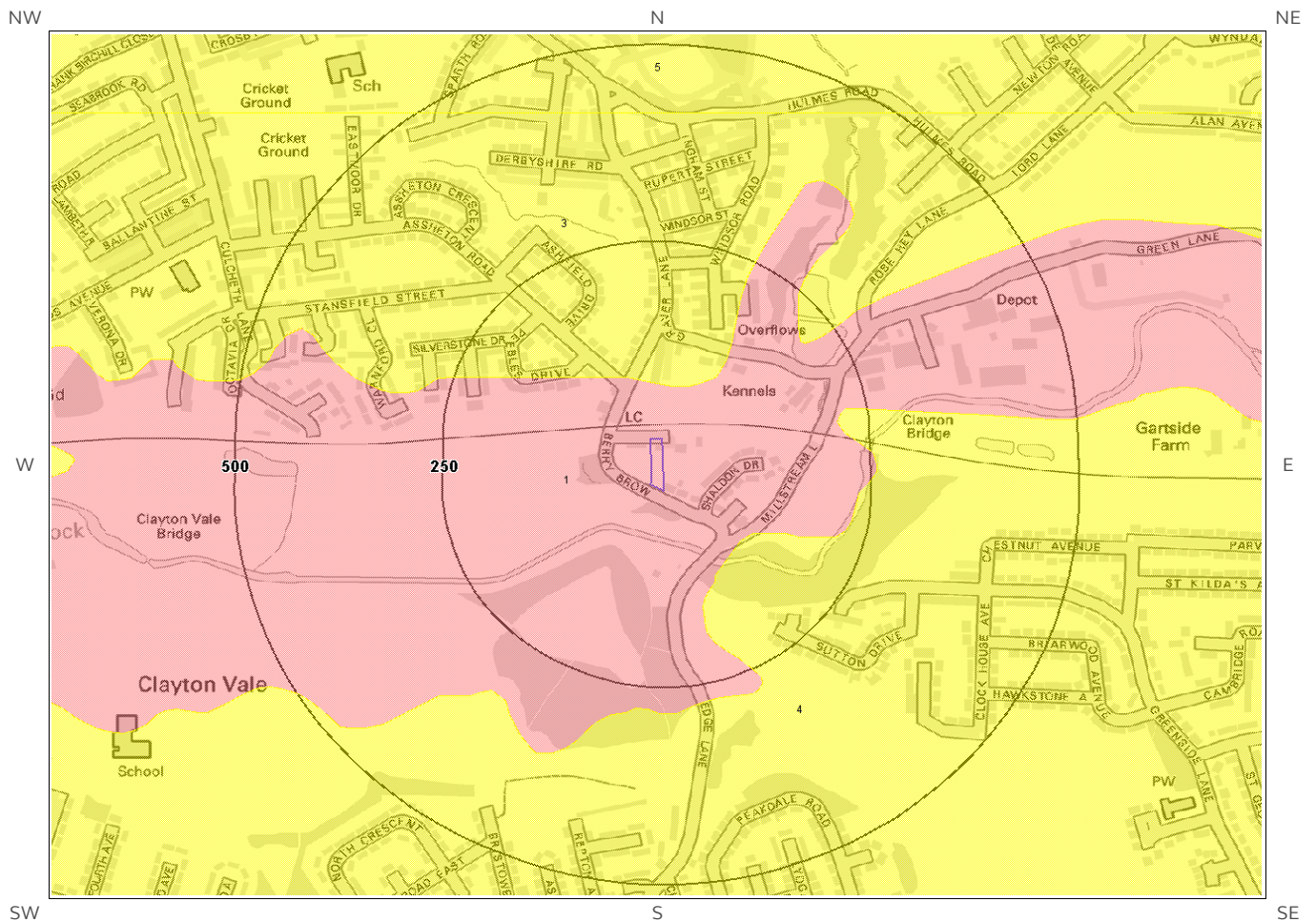
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
CS-SDST	COLLYHURST SANDSTONE FORMATION	SANDSTONE

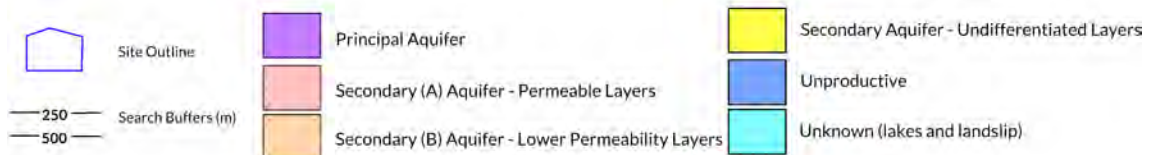
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

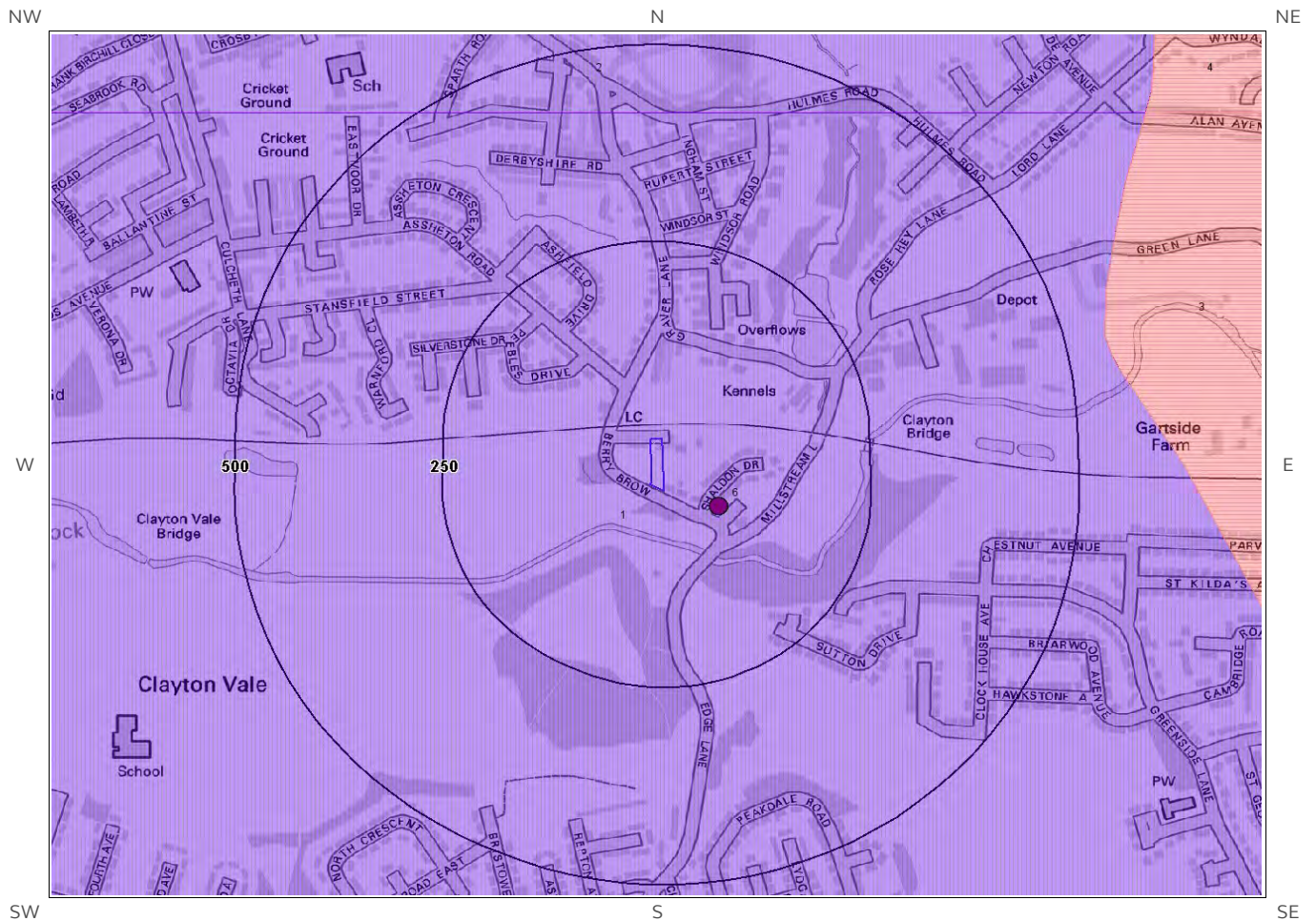
6a. Aquifer Within Superficial Geology



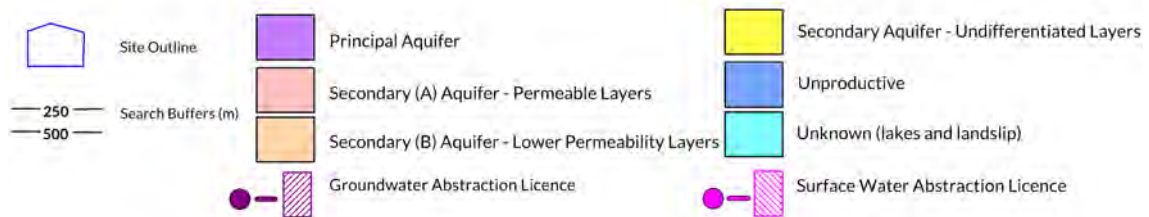
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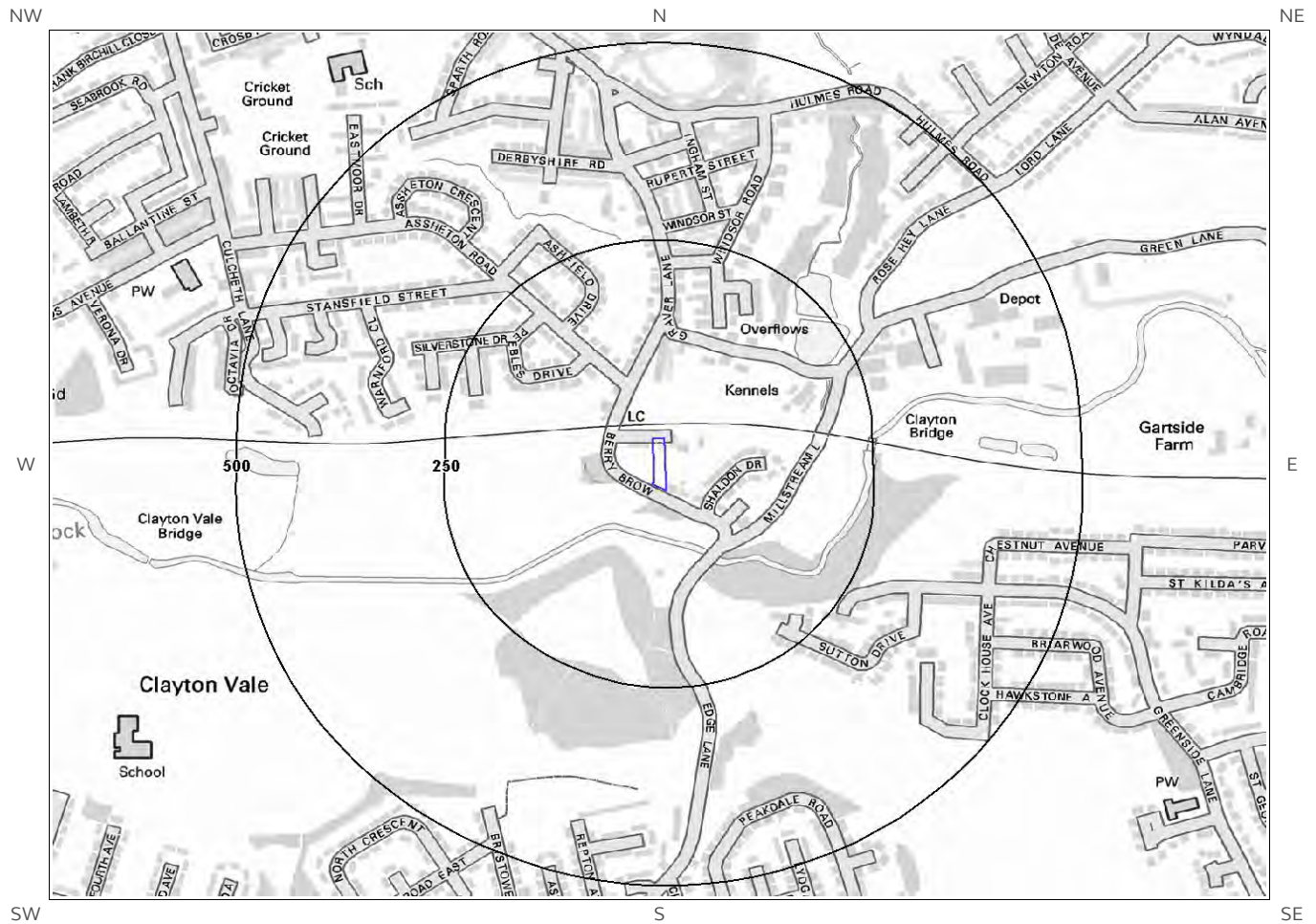
6b. Aquifer Within Bedrock Geology and Abstraction Licenses



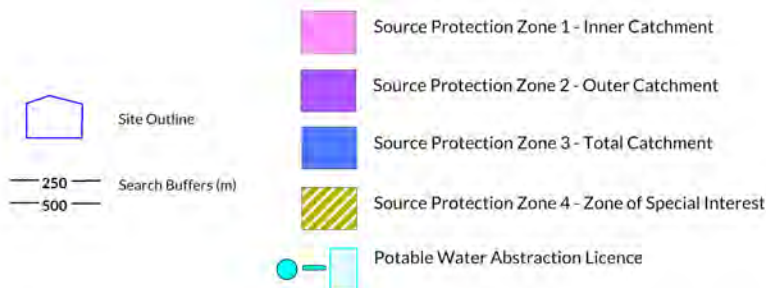
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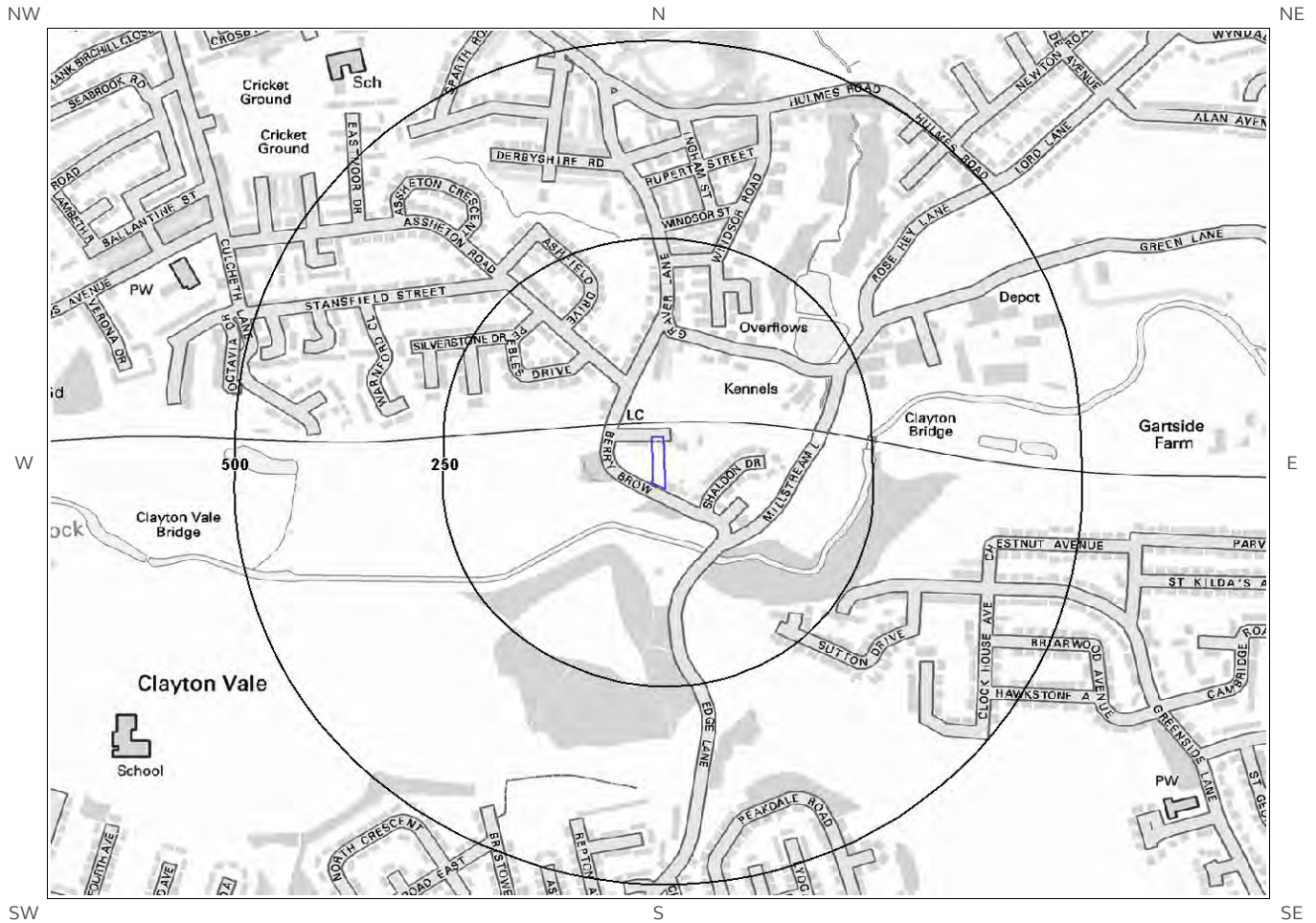
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses



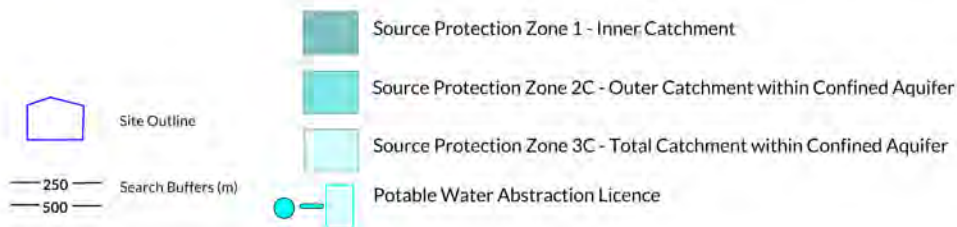
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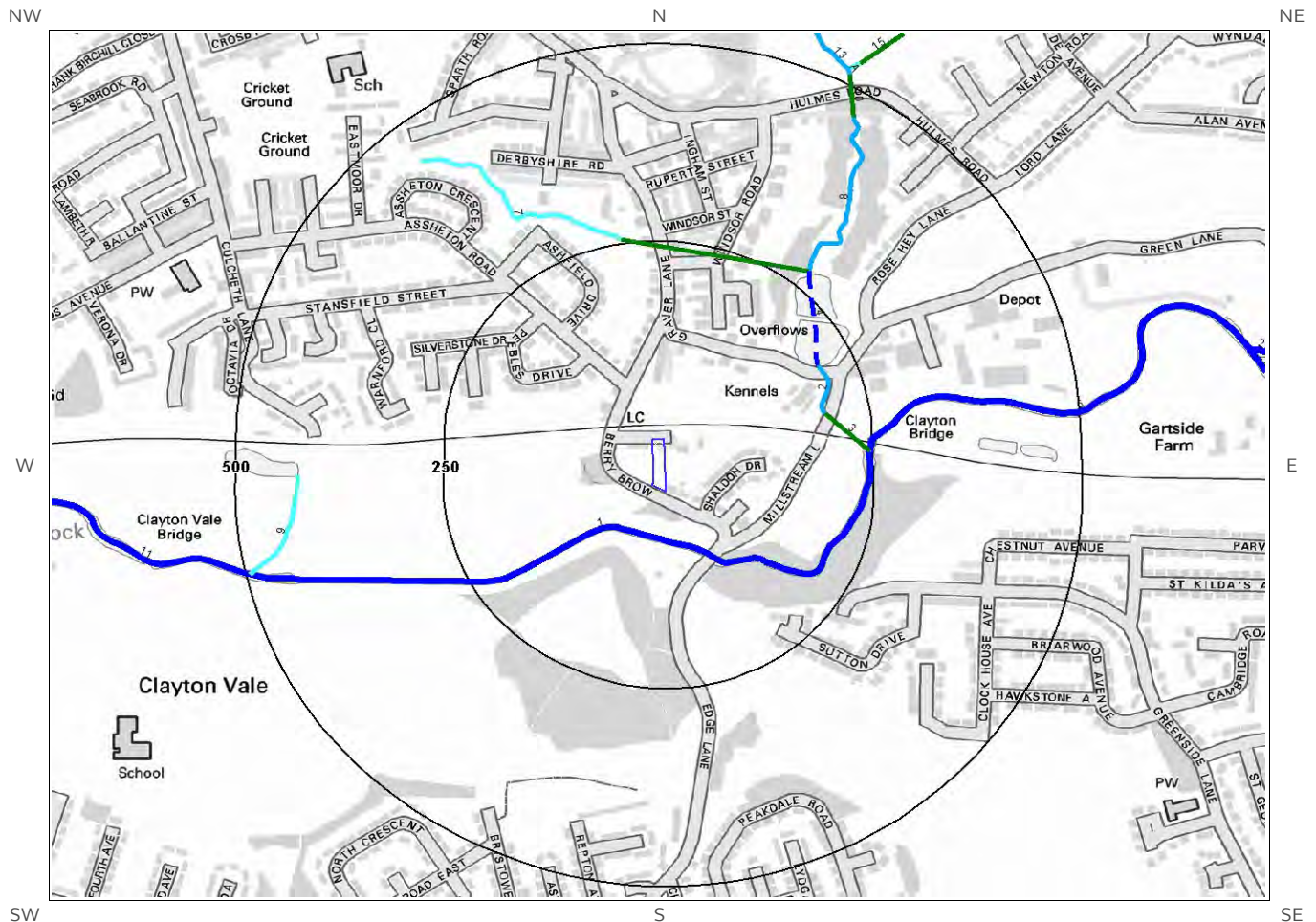
6d. Hydrogeology – Source Protection Zones within confined aquifer



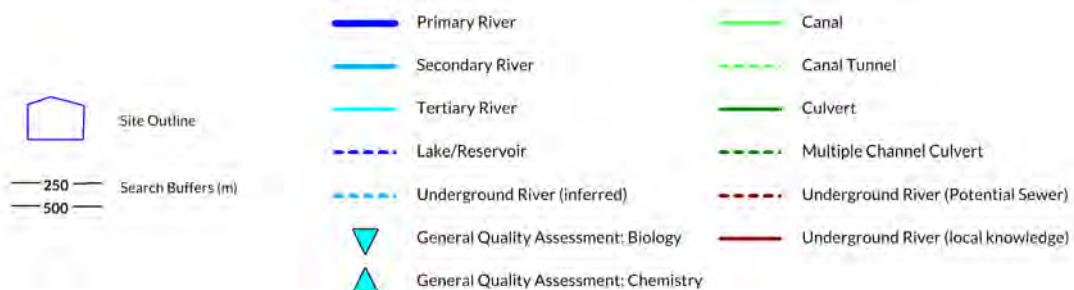
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6e. Hydrology – Detailed River Network and River Quality



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6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Are there records of strata classification within the superficial geology at or in proximity to the property? **Yes**

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviroinsight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
3	68	N	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	112	SE	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	414	N	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

6.2 Aquifer within Bedrock Deposits

Are there records of strata classification within the bedrock geology at or in proximity to the property? **Yes**

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviroinsight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	414	N	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

6.3 Groundwater Abstraction Licences

Are there any Groundwater Abstraction Licences within 2000m of the study site?

Yes

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
6	69	E	389100 399500	Status: Historical Licence No: 2569006021 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: Borehole At Clayton Mill Bridge, Manchester Data Type: Point Name: MANCHESTER ABATTOIR Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 701 Original Start Date: 15/2/1966 Expiry Date: - Issue No: 100 Version Start Date: 22/5/1998 Version End Date:
Not shown	1587	SW	387900 398400	Status: Historical Licence No: 2569006037 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "boreholes (2) On Premises At Croft St, Clayton, Manchester" Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 100 Version Start Date: 1/7/1996 Version End Date:
Not shown	1587	SW	387900 398400	Status: Historical Licence No: 2569006037 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: Boreholes (2) On Premises At Croft St, Clayton, Manchester Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 100 Version Start Date: 1/7/1996 Version End Date:
Not shown	1587	SW	387900 398400	Status: Historical Licence No: 2569006037 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: Boreholes X 2 On Premises At Croft Street Clayton Manchester Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Annual Volume (m³): 111831.6 Max Daily Volume (m³): 654.62 Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 100 Version Start Date: 1/7/1996 Version End Date:
Not shown	1595	SW	388027 398277	Status: Active Licence No: 2569006036 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: Borehole On Premises At Clayton, Manchester Data Type: Point Name: Air Products (Chemicals) PLC Annual Volume (m³): 372772 Max Daily Volume (m³): 3600.5 Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 101 Version Start Date: 10/9/2007 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1631	SW	387860 398379	Status: Active Licence No: 2569006037 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: Borehole 1 On Premises At Croft Street, Clayton, Manchester Data Type: Point Name: Air Products (Chemicals) PLC	Annual Volume (m³): 111831.6 Max Daily Volume (m³): 654.62 Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 101 Version Start Date: 10/9/2007 Version End Date:
Not shown	1634	SW	387859 398375	Status: Active Licence No: 2569006037 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: Borehole 2 On Premises At Croft Street, Clayton, Manchester Data Type: Point Name: Air Products (Chemicals) PLC	Annual Volume (m³): 111831.6 Max Daily Volume (m³): 654.62 Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 101 Version Start Date: 10/9/2007 Version End Date:
Not shown	1673	SW	388000 398200	Status: Historical Licence No: 2569006036 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "borehole On Premises At Clayton, Manchester" Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 100 Version Start Date: 1/7/1996 Version End Date:
Not shown	1673	SW	388000 398200	Status: Historical Licence No: 2569006036 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: Borehole On Premises At Clayton, Manchester Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 100 Version Start Date: 1/7/1996 Version End Date:
Not shown	1673	SW	388000 398200	Status: Historical Licence No: 2569006036 Details: Process water Direct Source: Ground Water - North West Region Point: "borehole On Premises At Clayton, Manchester" Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 100 Version Start Date: 1/7/1996 Version End Date:
Not shown	1673	SW	388000 398200	Status: Historical Licence No: 2569006036 Details: Process water Direct Source: Ground Water - North West Region Point: Borehole On Premises At Clayton, Manchester Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 100 Version Start Date: 1/7/1996 Version End Date:
Not shown	1673	SW	388000 398200	Status: Historical Licence No: 2569006036 Details: Process Water Direct Source: Ground Water - North West Region Point: Borehole On Premises At Clayton Manchester Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD	Annual Volume (m³): 372772 Max Daily Volume (m³): 3600.5 Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 100 Version Start Date: 1/7/1996 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1673	SW	388000 398200	Status: Historical Licence No: 2569006036 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: Borehole On Premises At Clayton Manchester Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD	Annual Volume (m³): 372772 Max Daily Volume (m³): 3600.5 Original Application No: 2681 Original Start Date: 21/5/1985 Expiry Date: - Issue No: 100 Version Start Date: 1/7/1996 Version End Date:
Not shown	1943	SW	387700 398100	Status: Historical Licence No: 2569006026 Details: Process water Direct Source: Ground Water - North West Region Point: "borehole At Premises, Clayton, Manchester" Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: CW 0152 Original Start Date: 24/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/7/2000 Version End Date:
Not shown	1943	SW	387700 398100	Status: Historical Licence No: 2569006026 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "borehole At Premises, Clayton, Manchester" Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: CW 0152 Original Start Date: 24/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/7/2000 Version End Date:
Not shown	1943	SW	387700 398100	Status: Historical Licence No: 2569006026 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: Borehole At Premises, Clayton, Manchester Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC	Annual Volume (m³): 633962 Max Daily Volume (m³): 2837 Original Application No: CW 0152 Original Start Date: 24/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/7/2000 Version End Date:
Not shown	1943	SW	387700 398100	Status: Historical Licence No: 2569006026 Details: Process water Direct Source: Ground Water - North West Region Point: Borehole At Premises, Clayton, Manchester Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC	Annual Volume (m³): 633962 Max Daily Volume (m³): 2837 Original Application No: CW 0152 Original Start Date: 24/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/7/2000 Version End Date:

6.4 Surface Water Abstraction Licences

Are there any Surface Water Abstraction Licences within 2000m of the study site?

Yes

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
Not shown	1532	SW	388100 398300	Status: Historical Licence No: 2569006995 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "surface, Non-tidal - North West Region" Point: "ashton Canal, Manchester" Data Type: Point Name: BRITISH WATERWAYS Annual Volume (m³): - Max Daily Volume (m³): - Application No: 1475 Original Start Date: 1/4/1969 Expiry Date: - Issue No: 100 Version Start Date: 1/4/1969 Version End Date:
Not shown	1532	SW	388100 398300	Status: Active Licence No: 2569006995 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-tidal - North West Region Point: Ashton Canal, Manchester Data Type: Point Name: Canal and River Trust Annual Volume (m³): 68190 Max Daily Volume (m³): 68190 Application No: 1475 Original Start Date: 1/4/1969 Expiry Date: - Issue No: 100 Version Start Date: 1/4/1969 Version End Date:
Not shown	1659	SW	387800 398400	Status: Historical Licence No: 2569006997 Details: Process water Direct Source: "surface, Non-tidal - North West Region" Point: "ashton Canal, Manchester [clayton Analine]" Data Type: Point Name: BRITISH WATERWAYS Annual Volume (m³): - Max Daily Volume (m³): - Application No: 1470 Original Start Date: 1/4/1969 Expiry Date: - Issue No: 100 Version Start Date: 1/4/1969 Version End Date:
Not shown	1659	SW	387800 398400	Status: Historical Licence No: 2569006997 Details: Process water Direct Source: Surface, Non-tidal - North West Region Point: Ashton Canal, Manchester [clayton Analine] Data Type: Point Name: BRITISH WATERWAYS BOARD Annual Volume (m³): - Max Daily Volume (m³): - Application No: 1470 Original Start Date: 1/4/1969 Expiry Date: - Issue No: 100 Version Start Date: 1/4/1969 Version End Date:
Not shown	1659	SW	387800 398400	Status: Active Licence No: 2569006997 Details: Process Water Direct Source: Surface, Non-tidal - North West Region Point: Ashton Canal Manchester Clayton Analine Data Type: Point Name: Canal and River Trust Annual Volume (m³): 3500420 Max Daily Volume (m³): 0 Application No: 1470 Original Start Date: 1/4/1969 Expiry Date: - Issue No: 100 Version Start Date: 1/4/1969 Version End Date:
Not shown	1811	SW	387600 398400	Status: Historical Licence No: 2569006996 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-tidal - North West Region Point: Ashton Canal, Manchester [vitacom] Data Type: Point Name: BRITISH WATERWAYS Annual Volume (m³): - Max Daily Volume (m³): - Application No: 1471 Original Start Date: 1/4/1969 Expiry Date: - Issue No: 100 Version Start Date: 1/4/1969 Version End Date:

6.5 Potable Water Abstraction Licences

Are there any Potable Water Abstraction Licences within 2000m of the study site?

No

Database searched and no data found.

6.6 Source Protection Zones

Are there any Source Protection Zones within 500m of the study site?

No

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Are there any Source Protection Zones within the Confined Aquifer within 500m of the study site?

No

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Is there any Environment Agency information on groundwater vulnerability and soil leaching potential within 500m of the study site?

Yes

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Major Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
414	N	Major Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.

6.9 River Quality

Is there any Environment Agency information on river quality within 1500m of the study site? Yes

6.9.1 Biological Quality:

Biological Quality data describes water quality in terms of 83 groups of macroinvertebrates, some of which are pollution sensitive. The results are graded from A ('Very Good') to F ('Bad').

The following Biological Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
Not shown	1369	E	390400 399640	River Name: Lumb Bk Reach: Qsl At Railway To Medlock End/Start of Stretch: End of Stretch NGR	C	D	D	F	F

6.9.2 Chemical Quality:

Chemical quality data is based on the General Quality Assessment Headline Indicators scheme (GQAH). In England, each chemical sample is measured for ammonia and dissolved oxygen. In Wales, the samples are measured for biological oxygen demand (BOD), ammonia and dissolved oxygen. The results are graded from A ('Very Good') to F ('Bad').

The following Chemical Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Chemical Quality Grade				
					2005	2006	2007	2008	2009
Not shown	776	E	389800 399700	River Name: Medlock Reach: Lords Bk. To Irwell End/Start of Stretch: Start of Stretch NGR	B	B	B	C	C

6.10 Detailed River Network

Are there any Detailed River Network entries within 500m of the study site? Yes

The following Detailed River Network records are represented on the Hydrology Map (6e):

ID	Distance (m)	Direction	Details	
1	60	S	River Name: River Medlock Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
2	194	E	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
3	197	E	River Name: - Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined

ID	Distance (m)	Direction	Details	
4	206	NE	River Name: - Welsh River Name: - Alternative Name: -	River Type: Lake/Reservoir Main River Status: Currently Undefined
5	240	N	River Name: - Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined
6	246	E	River Name: River Medlock Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
7	256	N	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
8	274	NE	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
9	425	W	River Name: Drain Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
10	467	NE	River Name: - Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined
11	495	W	River Name: River Medlock Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined

6.11 Surface Water Features

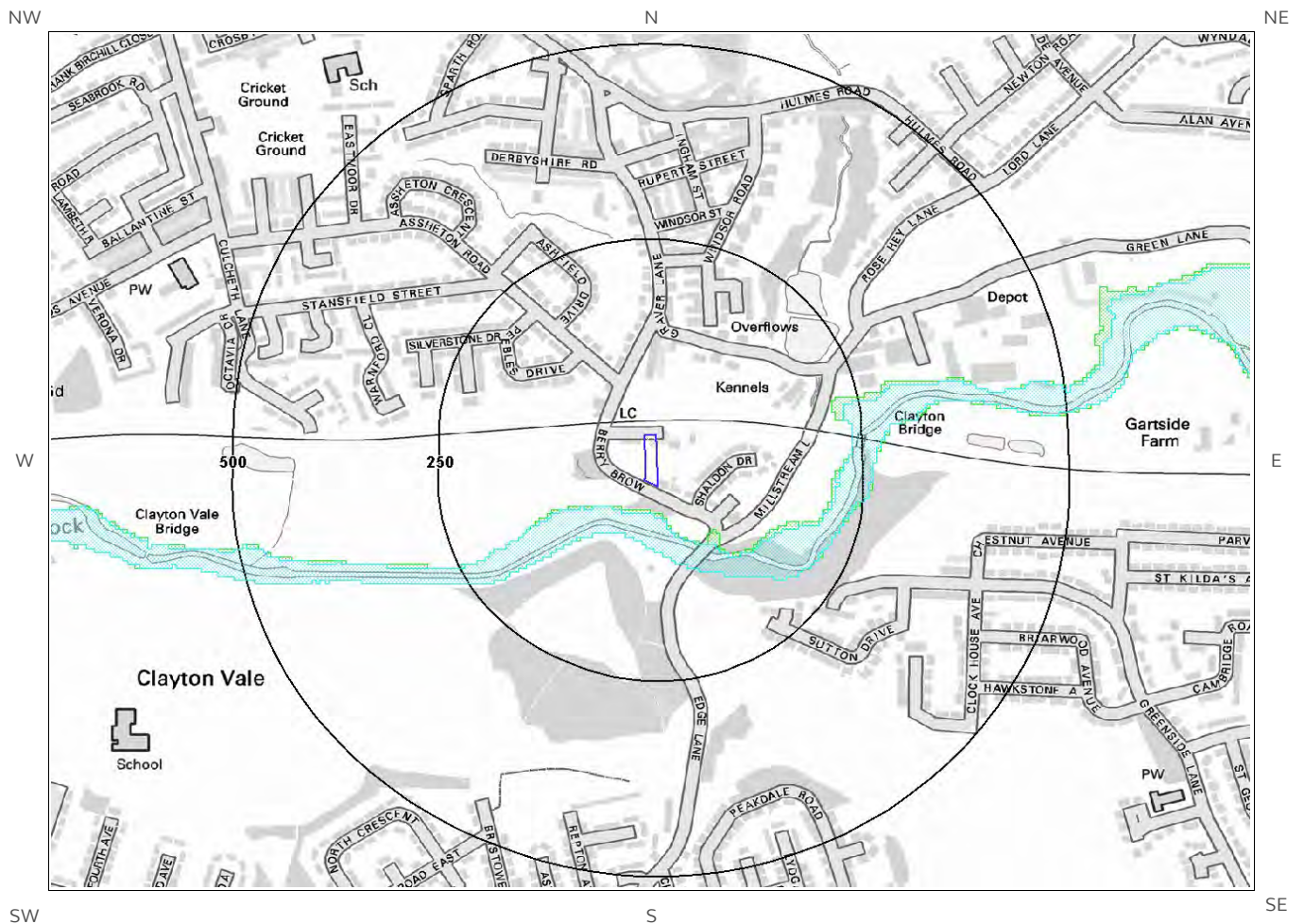
Are there any surface water features within 250m of the study site?

Yes

The following surface water records are not represented on mapping:

Distance (m)	Direction
57	S
60	W
103	SE
191	NE
193	E
225	NE
246	E

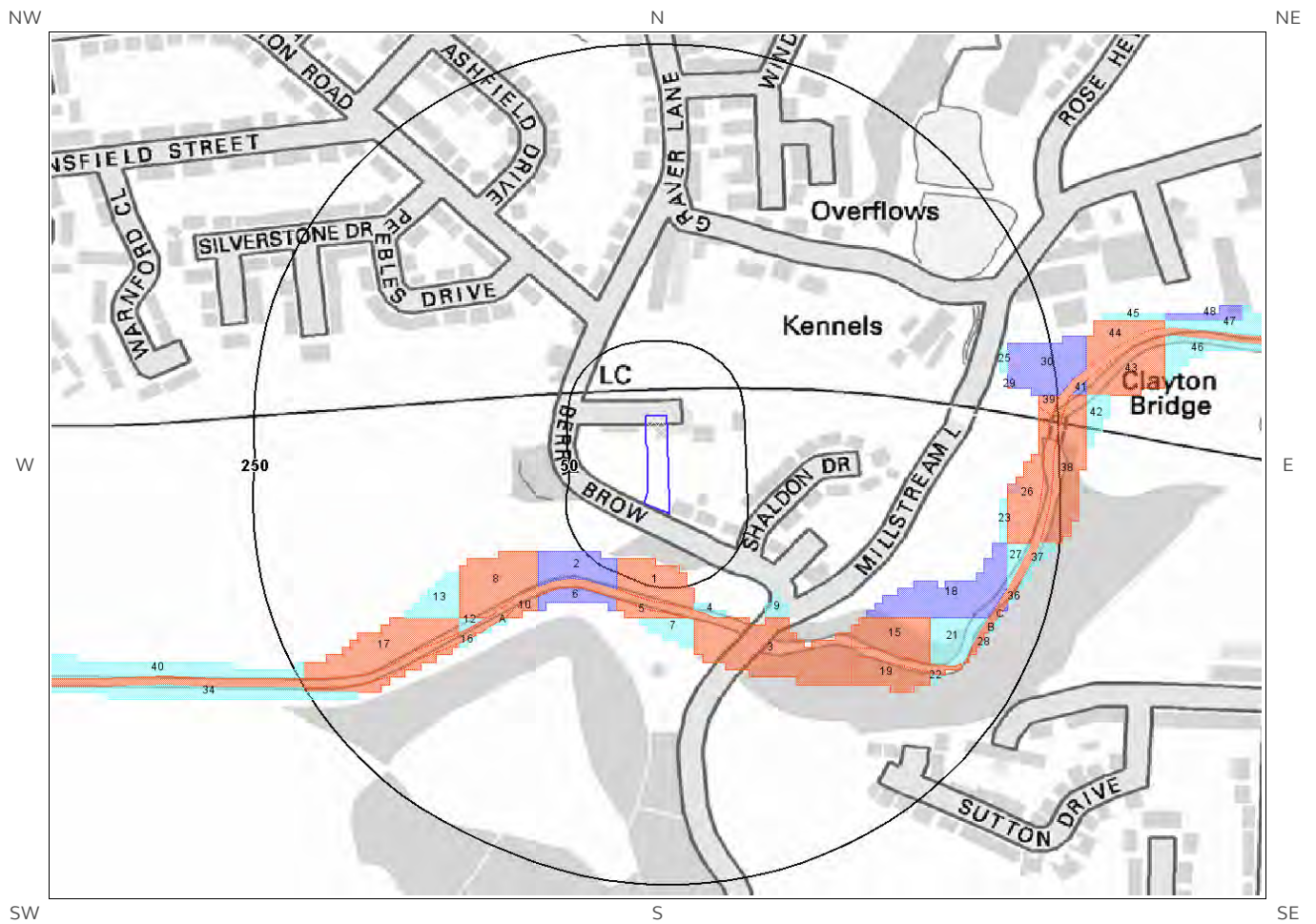
7a. Environment Agency Flood Map for Planning (from rivers and the sea)



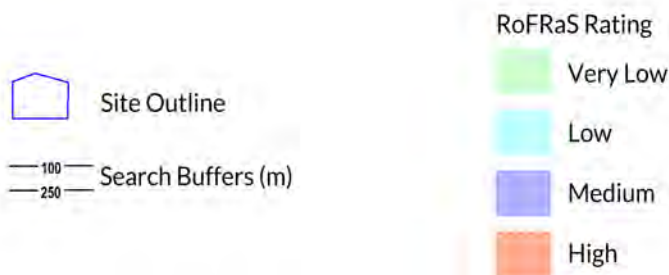
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7b. Environment Agency Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Is the site within 250m of an Environment Agency Zone 2 floodplain? Yes

Environment Agency Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

ID	Distance (m)	Direction	Update	Type
1	31	S	18-Nov-2015	Zone 2 - (Fluvial /Tidal Models)

7.2 River and Coastal Zone 3 Flooding

Is the site within 250m of an Environment Agency Zone 3 floodplain? Yes

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

ID	Distance (m)	Direction	Update	Type
1	35	S	18-Nov-2015	Zone 3 - (Fluvial Models)

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

What is the highest risk of flooding onsite? Very Low

The Environment Agency RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

Any relevant data within 250m is represented on the RoFRaS Flood map. Data to 50m is reported in the table below.

ID	Distance (m)	Direction	RoFRaS flood Risk
1	31.0	S	High
2	41.0	SW	Medium

7.4 Flood Defences

Are there any Flood Defences within 250m of the study site? No
Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site? No

7.6 Areas benefiting from Flood Storage

Are there any areas used for Flood Storage within 250m of the study site? No

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 Are there any British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site? Yes

Does this relate to Clearwater Flooding or Superficial Deposits Flooding? Clearwater Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions?

Potential at Surface

Where potential for groundwater flooding to occur at surface is indicated, this means that given the geological conditions in the area groundwater flooding hazard should be considered in all land-use planning decisions. It is recommended that other relevant information e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

7.8 Groundwater Flooding Confidence Areas

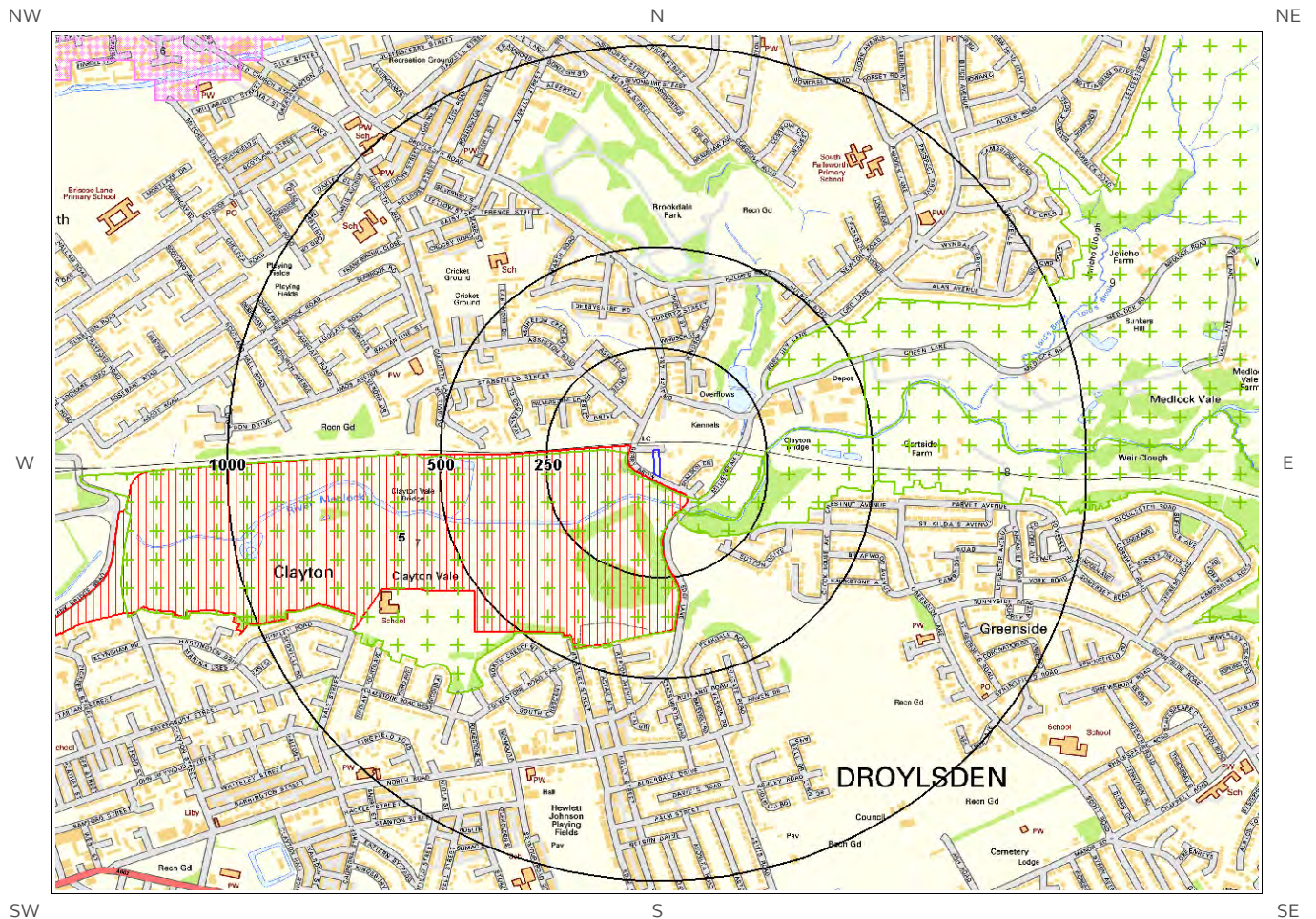
What is the British Geological Survey confidence rating in this result?

Low

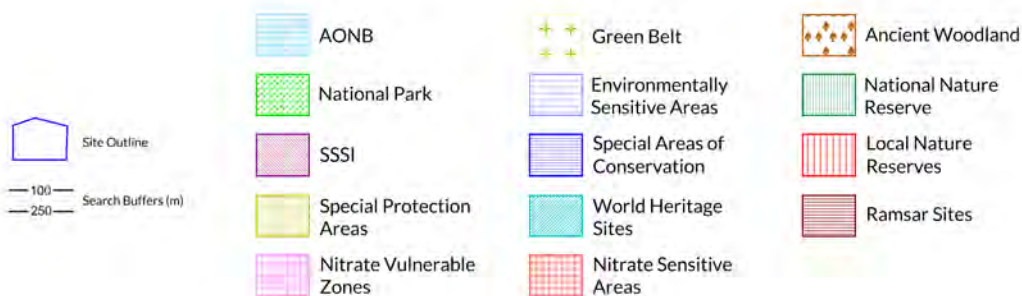
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map



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8. Designated Environmentally Sensitive Sites

Presence of Designated Environmentally Sensitive Sites within 2000m of the study site? Yes

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

2

The following Site of Special Scientific Interest (SSSI) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SSSI Name	Data Source
Not shown	1346	N	Rochdale Canal	Natural England
Not shown	1648	N	Rochdale Canal	Natural England

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

2

The following Special Area of Conservation (SAC) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SAC Name	Data Source
Not shown	1346	N	Rochdale Canal	Natural England
Not shown	1648	N	Rochdale Canal	Natural England

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

0

Database searched and no data found.

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

1

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
5	14	SW	Clayton Vale	Natural England

8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

1

The following Nitrate Vulnerable Zone records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	NVZ Name	Data Source
6	1114	N	Existing	DEFRA

8.14 Records of Green Belt land within 2000m of the study site:

3

Green Belt data contains Ordnance Survey data © Crown copyright and database right [2015].

ID	Distance	Direction	Green Belt Name	Local Authority Name
7	20	SW	Liverpool, Manchester and West Yorks Greenbelt	Manchester District (B)
8	99	SE	Liverpool, Manchester and West Yorks Greenbelt	Tameside District (B)
9	293	NE	Liverpool, Manchester and West Yorks Greenbelt	Oldham District (B)

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a **Groundsure GeoInsight**, available from our [website](#). The following information has been found:

9.1.1 Shrink Swell

What is the maximum Shrink-Swell* hazard rating identified on the study site? Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

9.1.2 Landslides

What is the maximum Landslide* hazard rating identified on the study site? Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

9.1.3 Soluble Rocks

What is the maximum Soluble Rocks* hazard rating identified on the study site? Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This indicates an automatically generated 50m buffer and site.

9.1.4 Compressible Ground

What is the maximum Compressible Ground* hazard rating identified on the study site?

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Very low potential for compressible deposits to be present. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

9.1.5 Collapsible Rocks

What is the maximum Collapsible Rocks* hazard rating identified on the study site?

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

9.1.6 Running Sand

What is the maximum Running Sand** hazard rating identified on the study site?

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level.

* This indicates an automatically generated 50m buffer and site.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing

ones as described in publication BR211 by the Building Research Establishment?

No radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Are there any coal mining areas within 75m of the study site?

Yes

The following coal mining information provided by the Coal Authority is not represented on Mapping:

Distance (m)	Direction	Details
0	On Site	The study site is located within the specified search distance of an identified mining area. Further details concerning this can be obtained from the Coal Authority Helpline on 0845 762 6848.

10.2 Non-Coal Mining

Are there any Non-Coal Mining areas within 50m of the study site boundary?

No

Database searched and no data found.

10.3 Brine Affected Areas

Are there any brine affected areas within 75m of the study site?

No

Guidance: No Guidance Required.

Contact Details

Groundsure Helpline
Telephone: 08444 159 000
info@groundsure.com

British Geological Survey Enquiries
Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:
Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk

Environment Agency
National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 08708 506 506
Web: www.environment-agency.gov.uk
Email: enquiries@environment-agency.gov.uk

Public Health England
Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
www.gov.uk/phe
Email: enquiries@phe.gov.uk
Main switchboard: 020 7654 8000

The Coal Authority
200 Lichfield Lane
Mansfield
Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk

Ordnance Survey
Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505

Local Authority
Authority: Manchester City Council
Phone: 0161 234 5000
Web: <http://www.manchester.gov.uk/>
Address: Town Hall, Albert Square, Manchester, M60 2LA

Gemapping PLC
Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444



Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England who retain the Copyright and Intellectual Property Rights for the data.

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This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.

Standard Terms and Conditions

1 Definitions

In these terms and conditions unless the context otherwise requires:

“Beneficiary” means the person or entity for whose benefit the Client has obtained the Services.

“Client” means the party or parties entering into a Contract with Groundsure.

“Commercial” means any building or property which is not Residential.

“Confidential Information” means the contents of this Contract and all information received from the Client as a result of, or in connection with, this Contract other than

(i) information which the Client can prove was rightfully in its possession prior to disclosure by Groundsure and

(ii) any information which is in the public domain (other than by virtue of a breach of this Contract).

“Support Services” means Support Services provided by Groundsure including, without limitation, interpreting third party and in-house environmental data, providing environmental support advice, undertaking environmental audits and assessments, Site investigation, Site monitoring and related items.

“Contract” means the contract between Groundsure and the Client for the provision of the Services, and which shall incorporate these terms and conditions, the Order, and the relevant User Guide.

“Third Party Data Provider” means any third party providing Third Party Content to Groundsure.

“Data Reports” means reports comprising factual data with no accompanying interpretation.

“Fees” has the meaning set out in clause 5.1.

“Groundsure” means Groundsure Limited, a company registered in England and Wales under number 03421028.

“Groundsure Materials” means all materials prepared by Groundsure and provided as part of the Services, including but not limited to Third Party Content, Data Reports, Mapping, and Risk Screening Reports.

“Intellectual Property” means any patent, copyright, design rights, trade or service mark, moral rights, data protection rights, know-how or trade mark in each case whether registered or not and including applications for the same or any other rights of a similar nature anywhere in the world.

“Mapping” means a map, map data or a combination of historical maps of various ages, time periods and scales.

“Order” means an electronic, written or other order form submitted by the Client requesting Services from Groundsure in respect of a specified Site.

“Ordnance Survey” means the Secretary of State for Business, Innovation and Skills, acting through Ordnance Survey, Adanac Drive, Southampton, SO16 0AS, UK.

“Order Website” means the online platform through which Orders may be placed by the Client and accepted by Groundsure.

“Report” means a Risk Screening Report or Data Report for Commercial or Residential property.

“Residential” means any building or property used as or intended to be used as a single dwelling.

“Risk Screening Report” means a risk screening report comprising factual data with an accompanying interpretation by Groundsure.

“Services” means any Report, Mapping and/or Support Services which Groundsure has agreed to provide by accepting an Order pursuant to clause 2.6.

“Site” means the area of land in respect of which the Client has requested Groundsure to provide the Services.

“Third Party Content” means data, database information or other information which is provided to Groundsure by a Third Party Data Provider.

“User Guide” means the user guide, as amended from time to time, available upon request from Groundsure and on the website (www.Groundsure.com) and forming part of this Contract.

2 Scope of Services, terms and conditions, requests for insurance and quotations

2.1 Groundsure agrees to provide the Services in accordance with the Contract.

2.2 Groundsure shall exercise reasonable skill and care in the provision of the Services.

2.3 Subject to clause 7.3 the Client acknowledges that it has not relied on any statement or representation made by or on behalf of Groundsure which is not set out and expressly agreed in writing in the Contract and all such statements and representations are hereby excluded to the fullest extent permitted by law.

2.4 The Client acknowledges that terms and conditions appearing on a Client’s order form, printed stationery or other communication, or any terms or conditions implied by custom, practice or course of dealing shall be of no effect, and that this Contract shall prevail over all others in relation to the Order.

2.5 If the Client or Beneficiary requests insurance in conjunction with or as a result of the Services, Groundsure shall use reasonable endeavours to recommend such insurance, but makes no warranty that such insurance shall be available from insurers or that it will be offered on reasonable terms. Any insurance purchased by the Client or Beneficiary shall be subject solely to the terms of the policy issued by insurers and Groundsure will have no liability therefor. In addition you acknowledge and agree that Groundsure does not act as an agent or broker for any insurance providers. The Client should take (and ensure that the Beneficiary takes) independent advice to ensure that the insurance policy requested or offered is suitable for its requirements.

2.6 Groundsure's quotations or proposals are valid for a period of 30 days only unless an alternative period of time is explicitly stipulated by Groundsure. Groundsure reserves the right to withdraw any quotation or proposal at any time before an Order is accepted by Groundsure. Groundsure's acceptance of an Order shall be binding only when made in writing and signed by Groundsure's authorised representative or when accepted through the Order Website.

3 The Client’s obligations

3.1 The Client shall comply with the terms of this Contract and

(i) procure that the Beneficiary or any third party relying on the Services complies with and acts as if it is bound by the Contract and

(ii) be liable to Groundsure for the acts and omissions of the Beneficiary or any third party relying on the Services as if such acts and omissions were those of the Client.

3.2 The Client shall be solely responsible for ensuring that the Services are appropriate and suitable for its and/or the Beneficiary’s needs.

3.3 The Client shall supply to Groundsure as soon as practicable and without charge all requisite information (and the Client warrants that such information is accurate, complete and appropriate), including without limitation any environmental information relating to the Site and shall give such assistance as Groundsure shall reasonably require in the provision of the Services including, without limitation, access to the Site, facilities and equipment.

3.4 Where the Client’s approval or decision is required to enable Groundsure to carry out work in order to provide the Services, such approval or decision shall be given or procured in reasonable time and so as not to delay or disrupt the performance of the Services.

3.5 Save as expressly permitted by this Contract the Client shall not, and shall procure that the Beneficiary shall not, re-sell, alter, add to, or amend the Groundsure Materials, or use the Groundsure Materials in a manner for which they were not intended. The Client may make the Groundsure Materials available to a third party who is considering acquiring some or all of, or providing funding in relation to, the Site, but such third party cannot rely on the same unless expressly permitted under clause 4.

3.6 The Client is responsible for maintaining the confidentiality of its user name and password if using the Order Website and the Client acknowledges that Groundsure accepts no liability of any kind for any loss or damage suffered by the Client as a consequence of using the Order Website.

4 Reliance

4.1 The Client acknowledges that the Services provided by Groundsure consist of the presentation and analysis of Third Party Content and other content and that information obtained from a Third Party Data Provider cannot be guaranteed or warranted by Groundsure to be reliable.

4.2 In respect of Data Reports, Mapping and Risk Screening Reports, the following classes of person and no other are entitled to rely on their contents;

- (i) the Beneficiary,
- (ii) the Beneficiary's professional advisers, (iii) any person providing funding to the Beneficiary in relation to the Site (whether directly or as part of a lending syndicate),
- (iv) the first purchaser or first tenant of the Site, and
- (v) the professional advisers and lenders of the first purchaser or tenant of the Site.

4.3 In respect of Support Services, only the Client, Beneficiary and parties expressly named in a Report and no other parties are entitled to rely on its contents.

4.4 Save as set out in clauses 4.2 and 4.3 and unless otherwise expressly agreed in writing, no other person or entity of any kind is entitled to rely on any Services or Report issued or provided by Groundsure. Any party considering such Reports and Services does so at their own risk.

5 Fees and Disbursements

5.1 Groundsure shall charge and the Client shall pay fees at the rate and

frequency specified in the written proposal, Order Website or Order acknowledgement form, plus (in the case of Support Services) all proper disbursements incurred by Groundsure. The Client shall in addition pay all value added tax or other tax payable on such fees and disbursements in relation to the provision of the Services (together "Fees").

5.2 The Client shall pay all outstanding Fees to Groundsure in full without deduction, counterclaim or set off within 30 days of the date of Groundsure's invoice or such other period as may be agreed in writing between Groundsure and the Client ("Payment Date"). Interest on late payments will accrue on a daily basis from the Payment Date until the date of payment (whether before or after judgment) at the rate of 8% per annum.

5.3 The Client shall be deemed to have agreed the amount of any invoice unless an objection is made in writing within 28 days of the date of the invoice. As soon as reasonably practicable after being notified of an objection, without prejudice to clause 5.2 a member of Groundsure's management team will contact the Client and the parties shall then use all reasonable endeavours to resolve the dispute within 15 days.

6 Intellectual Property and Confidentiality

6.1 Subject to

- (i) full payment of all relevant Fees and
- (ii) compliance with this Contract, the Client is granted (and is permitted to sub-licence to the Beneficiary) a royalty-free, worldwide, non-assignable and (save to the extent set out in this Contract) non-transferable licence to make use of the Groundsure Materials.

6.2 All Intellectual Property in the Groundsure Materials are and shall remain owned by Groundsure or Groundsure's licensors (including without limitation the Third Party Data Providers) the Client acknowledges, and shall procure acknowledgement by the Beneficiary of, such ownership. Nothing in this Contract purports to transfer or assign any rights to the Client or the Beneficiary in respect of such Intellectual Property.

6.3 Third Party Data Providers may enforce any breach of clauses 6.1 and 6.2 against the Client or Beneficiary.

6.4 The Client shall, and shall procure that any recipients of the Groundsure Materials shall:

- (i) not remove, suppress or modify any trade mark, copyright or other proprietary marking belonging to Groundsure or any third party from the Services;
- (ii) use the information obtained as part of the Services in respect of the subject Site only, and shall not store or reuse any information obtained as part of the Services provided in respect of adjacent or nearby sites;
- (iii) not create any product or report which is derived directly or indirectly from the Services (save that those acting in a professional capacity to the Beneficiary may provide advice based upon the Services);
- (iv) not combine the Services with or incorporate such Services into any other information data or service;
- (v) not reformat or otherwise change (whether by modification, addition or enhancement), the Services (save that those acting for the Beneficiary in a professional capacity shall not be in breach of this clause 6.4(v) where such reformatting is in the normal course of providing advice based upon the Services);
- (vi) where a Report and/or Mapping contains material belonging to Ordnance Survey, acknowledge and agree that such content is protected by Crown Copyright and shall not use such content for any purpose outside of receiving the Services; and
- (vii) not copy in whole or in part by any means any map prints or run-on copies containing content belonging to Ordnance Survey (other than that contained within Ordnance Survey's OS Street Map) without first being in possession of a valid Paper Map Copying Licence from Ordnance Survey,

6.5 Notwithstanding clause 6.4, the Client may make reasonable use of the Groundsure Materials in order to advise the Beneficiary in a professional capacity. However, Groundsure shall have no liability in respect of any advice, opinion or report given or provided to Beneficiaries by the Client.

6.6 The Client shall procure that any person to whom the Services are made available shall notify Groundsure of any request or requirement to disclose, publish or disseminate any information contained in the Services in accordance with the Freedom of Information Act 2000, the Environmental Information Regulations 2004 or any associated legislation or regulations in force from time to time.

7.Liability: Particular Attention Should Be Paid To This Clause

7.1 This Clause 7 sets out the entire liability of Groundsure, including any liability for the acts or omissions of its employees, agents, consultants, subcontractors and Third Party Content, in respect of:

- (i) any breach of contract, including any deliberate breach of the Contract by Groundsure or its employees, agents or

subcontractors;

- (ii) any use made of the Reports, Services, Materials or any part of them; and
- (iii) any representation, statement or tortious act or omission (including negligence) arising under or in connection with the Contract.

7.2 All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from the Contract.

7.3 Nothing in the Contract limits or excludes the liability of the Supplier for death or personal injury resulting from negligence, or for any damage or liability incurred by the Client or Beneficiary as a result of fraud or fraudulent misrepresentation.

7.4 Groundsure shall not be liable for

- (i) loss of profits;
- (ii) loss of business;
- (iii) depletion of goodwill and/or similar losses;
- (iv) loss of anticipated savings;
- (v) loss of goods;
- (vi) loss of contract;
- (vii) loss of use;
- (viii) loss or corruption of data or information;
- (ix) business interruption;
- (x) any kind of special, indirect, consequential or pure economic loss, costs, damages, charges or expenses;
- (xi) loss or damage that arise as a result of the use of all or part of the Groundsure Materials in breach of the Contract;
- (xii) loss or damage arising as a result of any error, omission or inaccuracy in any part of the Groundsure Materials where such error, omission or inaccuracy is caused by any Third Party Content or any reasonable interpretation of Third Party Content;
- (xiii) loss or damage to a computer, software, modem, telephone or other property; and
- (xiv) loss or damage caused by a delay or loss of use of Groundsure's internet ordering service.

7.5 Groundsure's total liability in relation to or under the Contract shall be limited to £10 million for any claim or claims.

7.6 Groundsure shall procure that the Beneficiary shall be bound by limitations and exclusions of liability in favour of Groundsure which accord with those detailed in clauses 7.4 and 7.5 (subject to clause 7.3) in respect of all claims which the Beneficiary may bring against Groundsure in relation to the Services or other matters arising pursuant to the Contract.

8 Groundsure's right to suspend or terminate

8.1 If Groundsure reasonably believes that the Client or Beneficiary has not provided the information or assistance required to enable the proper provision of the Services, Groundsure shall be entitled to suspend all further performance of the Services until such time as any such deficiency has been made good.

8.2 Groundsure shall be entitled to terminate the Contract immediately on written notice in the event that:

- (i) the Client fails to pay any sum due to Groundsure within 30 days of the Payment Date; or
- (ii) the Client (being an individual) has a bankruptcy order made against him or (being a company) shall enter into liquidation whether compulsory or voluntary or have an administration order made against it or if a receiver shall be appointed over the whole or any part of its property assets or undertaking or if the Client is struck off the Register of Companies or dissolved; or
- (iii) the Client being a company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 or being an individual appears unable to pay his debts within the meaning of Section 268 of the Insolvency Act 1986 or if the Client shall enter into a composition or arrangement with the Client's creditors or shall suffer distress or execution to be levied on his goods; or
- (iv) the Client or the Beneficiary breaches any term of the Contract (including, but not limited to, the obligations in clause 4) which is incapable of remedy or if remediable, is not remedied within five days of notice of the breach.

9. Client's Right to Terminate and Suspend

9.1 Subject to clause 10.1, the Client may at any time upon written notice terminate or suspend the provision of all or any of the Services.

9.2 In any event, where the Client is a consumer (and not a business) he/she hereby expressly acknowledges and agrees that:

(i) the supply of Services under this Contract (and therefore the performance of this Contract) commences immediately upon Groundsure's acceptance of the Order; and

(ii) the Reports and/or Mapping provided under this Contract are

- (a) supplied to the Client's specification(s) and in any event
- (b) by their nature cannot be returned.

10 Consequences of Withdrawal, Termination or Suspension

10.1 Upon termination of the Contract:

(i) Groundsure shall take steps to bring to an end the Services in an orderly manner, vacate any Site with all reasonable speed and shall deliver to the Client and/or Beneficiary any property of the Client and/or Beneficiary in Groundsure's possession or control; and

(ii) the Client shall pay to Groundsure all and any Fees payable in respect of the performance of the Services up to the date of termination or suspension. In respect of any Support Services provided, the Client shall also pay Groundsure any additional costs incurred in relation to the termination or suspension of the Contract.

11 Anti-Bribery

11.1 The Client warrants that it shall:

(i) comply with all applicable laws, statutes and regulations relating to anti-bribery and anti-corruption including but not limited to the Bribery Act 2010;

(ii) comply with such of Groundsure's anti-bribery and anti-corruption policies as are notified to the Client from time to time; and

(iii) promptly report to Groundsure any request or demand for any undue financial or other advantage of any kind received by or on behalf of the Client in connection with the performance of this Contract.

11.2 Breach of this Clause 11 shall be deemed a material breach of this Contract.

12 General

12.1 The Mapping contained in the Services is protected by Crown copyright and must not be used for any purpose other than as part of the Services or as specifically provided in the Contract.

12.2 The Client shall be permitted to make one copy only of each Report or Mapping Order. Thereafter the Client shall be entitled to make unlimited copies of the Report or Mapping Order only in accordance with an Ordnance Survey paper map copy license available through Groundsure.

12.3 Groundsure reserves the right to amend or vary this Contract. No amendment or variation to this Contract shall be valid unless signed by an authorised representative of Groundsure.

12.4 No failure on the part of Groundsure to exercise, and no delay in exercising, any right, power or provision under this Contract shall operate as a waiver thereof.

12.5 Save as expressly provided in this Contract, no person other than the persons set out therein shall have any right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Contract.

12.6 The Secretary of State for Business, Innovation and Skills ("BIS") or BIS' successor body, as the case may be, acting through Ordnance Survey may enforce a breach of clause 6.4(vi) and clause 6.4(vii) of these terms and conditions against the Client in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999.

12.7 Groundsure shall not be liable to the Client if the provision of the Services is delayed or prevented by one or more of the following circumstances:

(i) the Client or Beneficiary's failure to provide facilities, access or information;

(ii) fire, storm, flood, tempest or epidemic;

(iii) Acts of God or the public enemy;

(iv) riot, civil commotion or war;

(v) strikes, labour disputes or industrial action;

(vi) acts or regulations of any governmental or other agency;

(vii) suspension or delay of services at public registries by Third Party Data Providers;

(viii) changes in law; or

(ix) any other reason beyond Groundsure's reasonable control.

In the event that Groundsure is prevented from performing the Services (or any part thereof) in accordance with this clause 12.6 for a period of not less than 30 days then Groundsure shall be entitled to terminate this Contract immediately on written notice to the Client.

12.8 Any notice provided shall be in writing and shall be deemed to be properly given if delivered by hand or sent by first class post, facsimile or by email to the address, facsimile number or email address of the relevant party as may have been notified by each party to the other for such purpose or in the absence of such notification the last known address.

12.9 Such notice shall be deemed to have been received on the day of delivery if delivered by hand, facsimile or email (save to the extent such day is not a working day where it shall be deemed to have been delivered on the next working day) and on the second working day after the day of posting if sent by first class post.

12.10 The Contract constitutes the entire agreement between the parties and shall supersede all previous arrangements between the parties relating to the subject matter hereof.

12.11 Each of the provisions of the Contract is severable and distinct from the others and if one or more provisions is or should become invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions shall not in any way be tainted or impaired.

12.12 This Contract shall be governed by and construed in accordance with English law and any proceedings arising out of or connected with this Contract shall be subject to the exclusive jurisdiction of the English courts.

12.13 Groundsure is an executive member of the Council of Property Search Organisation (CoPSO) and has signed up to the Search Code administered by the Property Codes Compliance Board (PCCB). All Risk Screening Reports shall be supplied in accordance with the provisions of the Search Code.

12.14 If the Client or Beneficiary has a complaint about the Services, written notice should be given to the Compliance Officer at Groundsure who will respond in a timely manner. In the event you are not satisfied with Groundsure's complaints handling process or you are unable to resolve the complaint, at your discretion you may refer the complaint to The Property Ombudsman Scheme at the following URL/email: website www.tpos.co.uk or email: admin@tpos.co.uk

12.15 The Client agrees that it shall, and shall procure that each Beneficiary shall, treat in confidence all Confidential Information and shall not, and shall procure that each Beneficiary shall not (i) disclose any Confidential Information to any third party other than in accordance with the terms of this Contract; and (ii) use Confidential Information for a purpose other than the exercise of its rights and obligations under this Contract. Subject to clause 6.6, nothing shall prevent the Client or any Beneficiary from disclosing Confidential Information to the extent required by law. © Groundsure Limited June 2013



Rogers Geotechnical Services

Barnkcliffe Mills, NEAR BANK,
HUDDERSFIELD, HD8 8LU

Groundsure
Reference:

GS-2751755

Your Reference: J3408_16_EDS

Report Date

16 Feb 2016

Report Delivery
Method:

Email - pdf

Groundsure Geoinsight

Address: 29, BERRY BROW, MANCHESTER, M40 1GR

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Geoinsight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

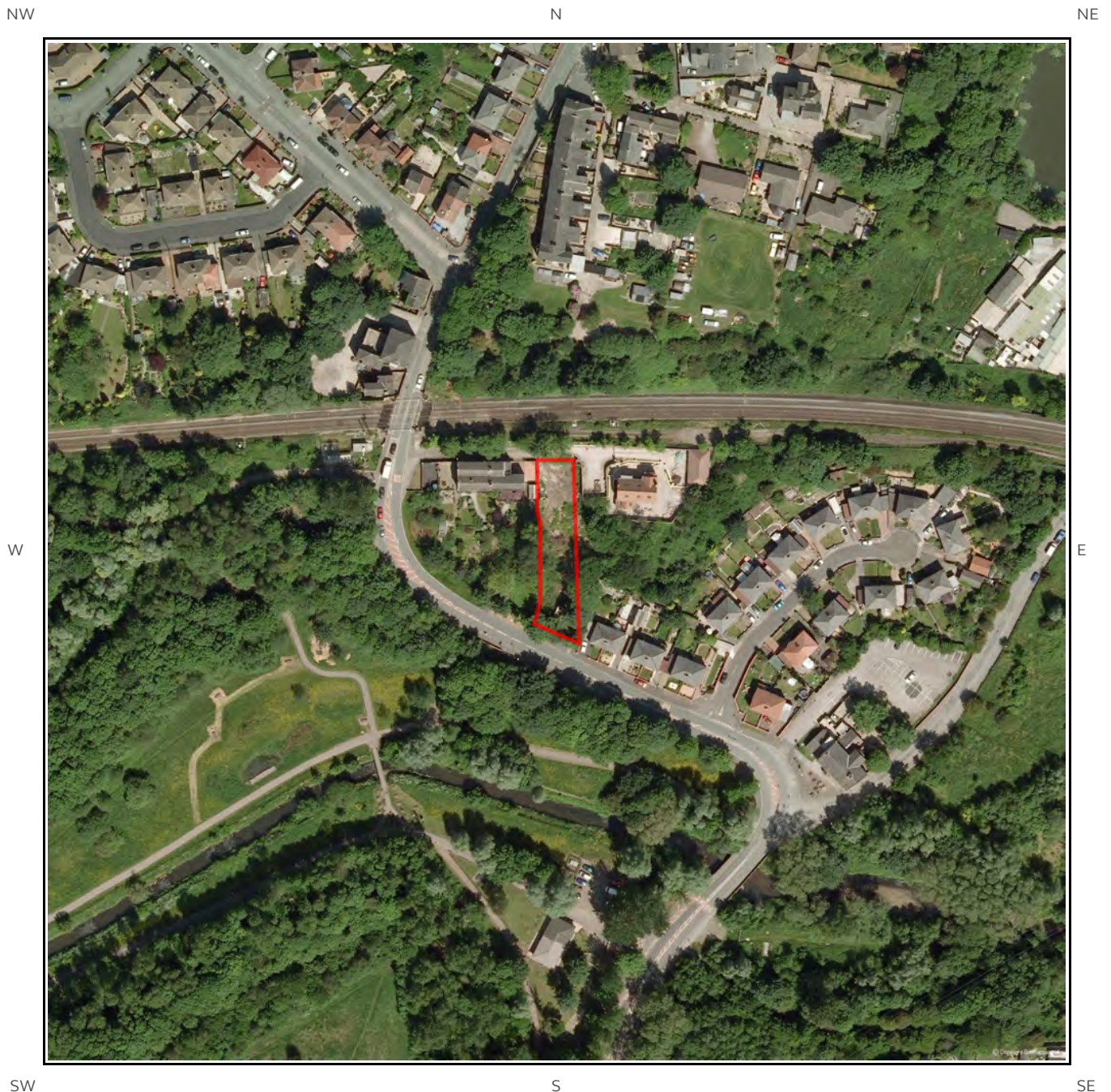
Yours faithfully,

Managing Director
Groundsure Limited

Enc.
Groundsure Geoinsight

Groundsure Geoinsight

Address: 29, BERRY BROW, MANCHESTER, M40 1GR
Date: 16 Feb 2016
Reference: GS-2751755
Client: Rogers Geotechnical Services



Aerial Photograph Capture date: 02-Jun-2009
Grid Reference: 389026,399553
Site Size: 0.08ha

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Overview of Findings

The Groundsure Geosight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Shallow Mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1:Geology

1.1 Artificial Ground	1.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	Yes
	1.1.2 Are there any records relating to permeability of artificial ground within the study site* boundary?	Yes
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?	Yes
	1.2.2 Are there any records relating to permeability of superficial geology within the study site boundary?	Yes
	1.2.3 Are there any records of landslip within 500m of the study site boundary?	No
	1.2.4 Are there any records relating to permeability of landslips within the study site boundary?	No
1.3 Bedrock, Solid Geology & Faults	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records relating to permeability of bedrock within the study site boundary?	Yes
	1.3.3 Are there any records of faults within 500m of the study site boundary?	No
1.4 Radon data	1.4.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level
	1.4.2 Is the property in an area where Radon Protection Measures are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary

Section 2:Ground Workings	On-site	0-50m	51-250	251-500	501-1000
2.1 Historical Surface Ground Working Features from Small Scale Mapping	0	6	64	Not Searched	Not Searched
2.2 Historical Underground Workings from Small Scale Mapping	0	0	1	1	1
2.3 Current Ground Workings	0	0	1	0	1

Section 3: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
3.1 Historical Mining	0	0	1	1	1
3.2 Coal Mining	1	0	0	0	0
3.3 Johnson Poole and Bloomer Mining Area	1	1	0	0	3
3.4 Non-Coal Mining	0	0	0	0	1
3.5 Non-Coal Mining Cavities	0	0	0	0	0
3.6 Natural Cavities	0	0	0	0	0
3.7 Brine Extraction	0	0	0	0	0
3.8 Gypsum Extraction	0	0	0	0	0
3.9 Tin Mining	0	0	0	0	0
3.10 Clay Mining	0	0	0	0	0

Section 4: Natural Ground Subsidence	On-site
4.1 Shrink Swell Clay	Very Low
4.2 Landslides	Very Low
4.3 Ground Dissolution of Soluble Rocks	Negligible
4.4 Compressible Deposits	Very Low
4.5 Collapsible Deposits	Very Low
4.6 Running Sand	Very Low

Section 5: Borehole Records	On-site	0-50m	51-250
5 BGS Recorded Boreholes	0	0	13

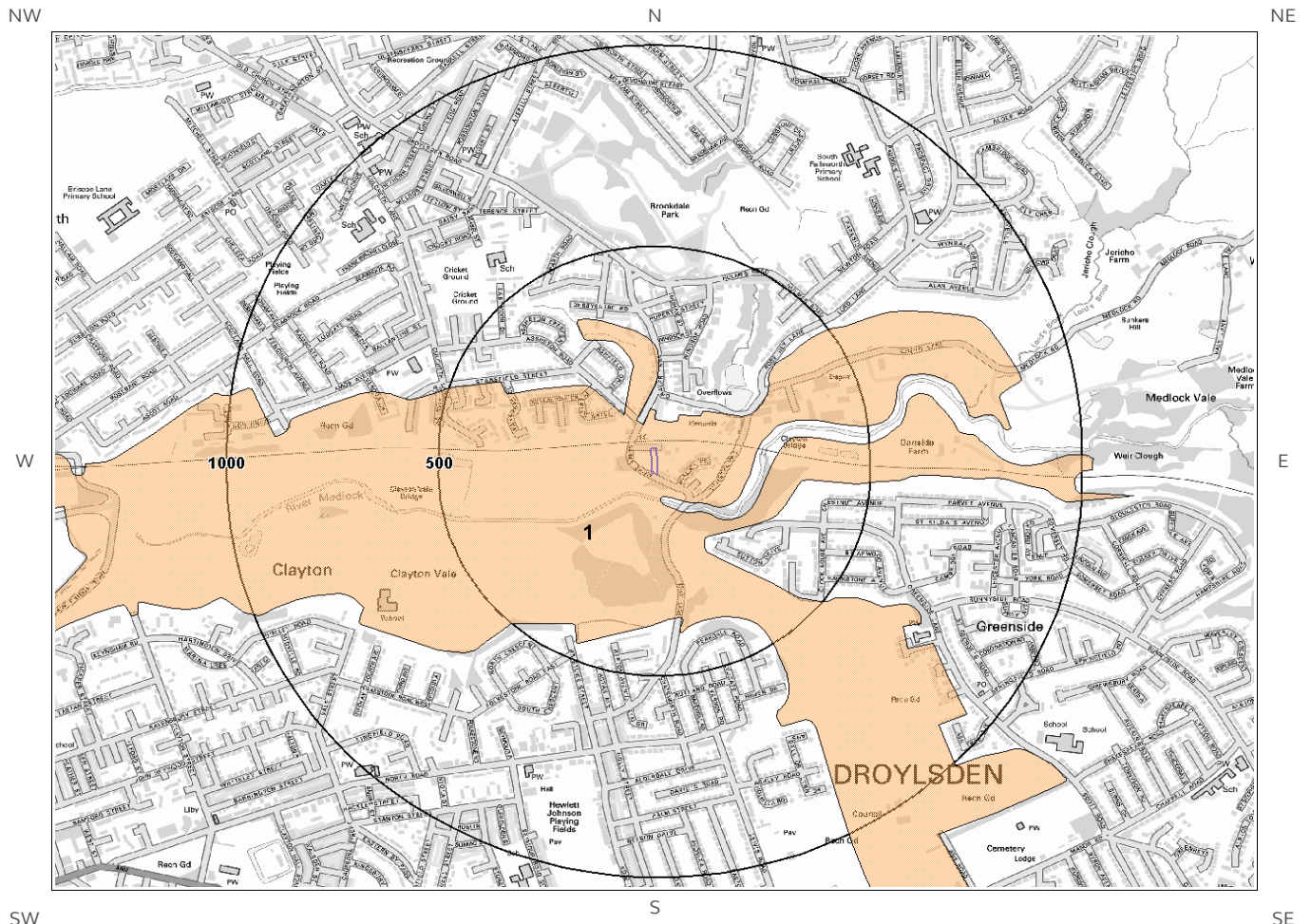
Section 6: Estimated Background Soil Chemistry	On-site	0-50m	51-250
6 Records of Background Soil Chemistry	1	9	10

Section 7: Railways and Tunnels	On-site	0-50m	51-250	251-500
7.1 Tunnels	0	0	0	Not Searched
7.2 Historical Railway and Tunnel Features	1	2	1	Not Searched
7.3 Historical Railways	0	0	0	Not Searched
7.4 Active Railways	0	3	2	Not Searched

Section 7:Railways and Tunnels	On-site	0-50m	51-250	251-500
7.5 Railway Projects	0	0	0	0

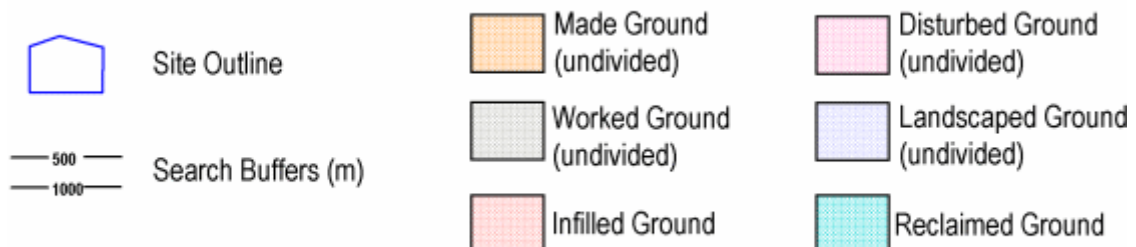
1 Geology

1.1 Artificial Ground Map



Artificial Ground Legend

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1 Geology

1.1 Artificial Ground

1.1.1 Artificial/ Made Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:085

Are there any records of Artificial/Made Ground within 500m of the study site boundary? Yes

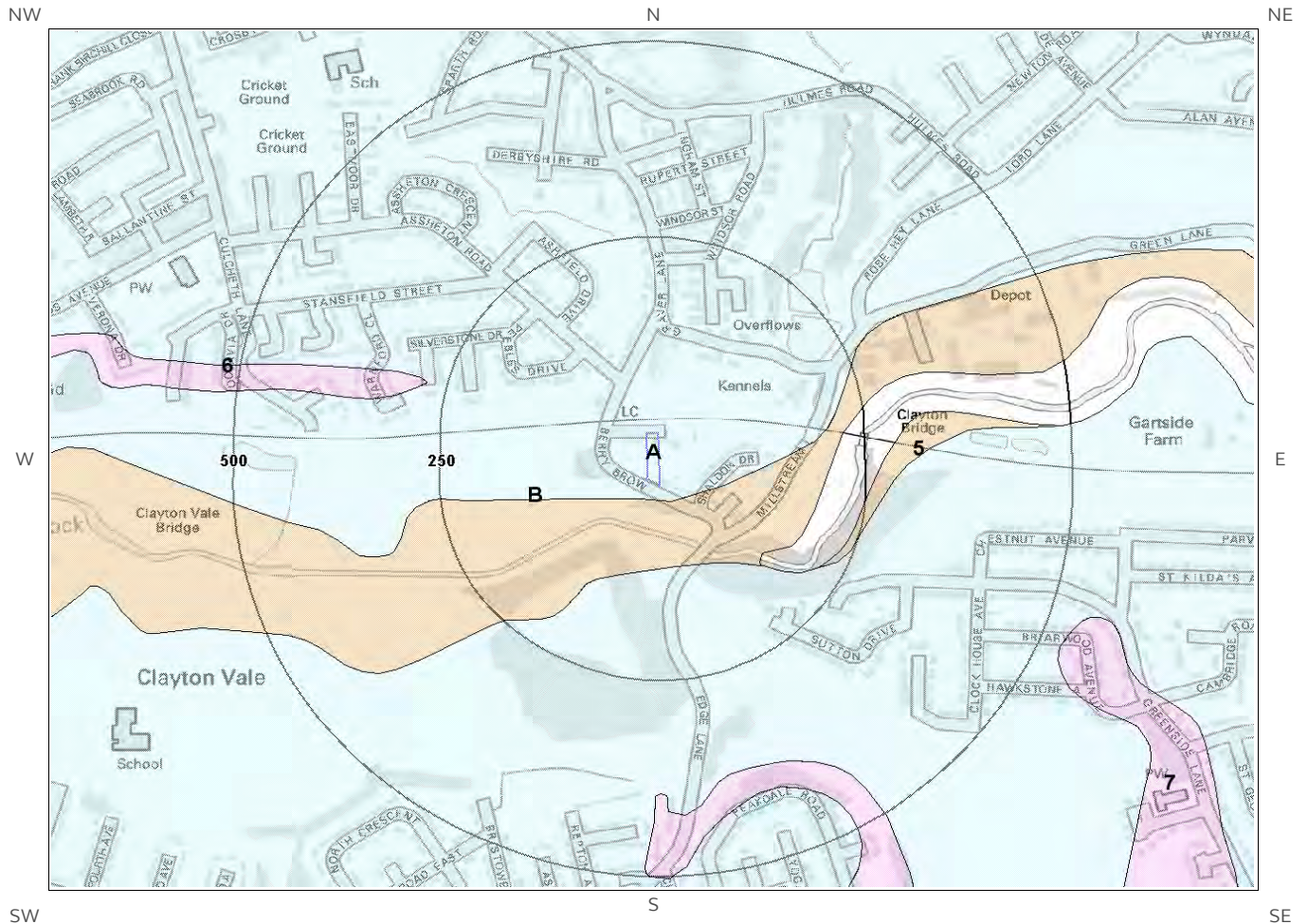
ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	MGR-MGRD	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

1.1.2 Permeability of Artificial Ground

Are there any records relating to permeability of artificial ground within the study site boundary? Yes

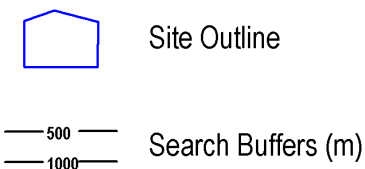
Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	Very High	Low

1.2 Superficial Deposits and Landslips Map



Superficial Deposits and Landslips Legend

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1.2 Superficial Deposits and Landslips

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1A	0.0	On Site	TILLD	TILL, DEVENSIAN	DIAMICTON
3A	0.0	On Site	TILLD	TILL, DEVENSIAN	DIAMICTON
2B	20.0	S	ALV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
4B	20.0	S	ALV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
5	220.0	SE	ALV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
6	275.0	W	GFDUD	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
7	377.0	S	GFDUD	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]

1.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	High	Low
20.0	S	Intergranular	High	Very Low

1.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary?

No

Database searched and no data found.

This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

1.2.4 Landslip Permeability

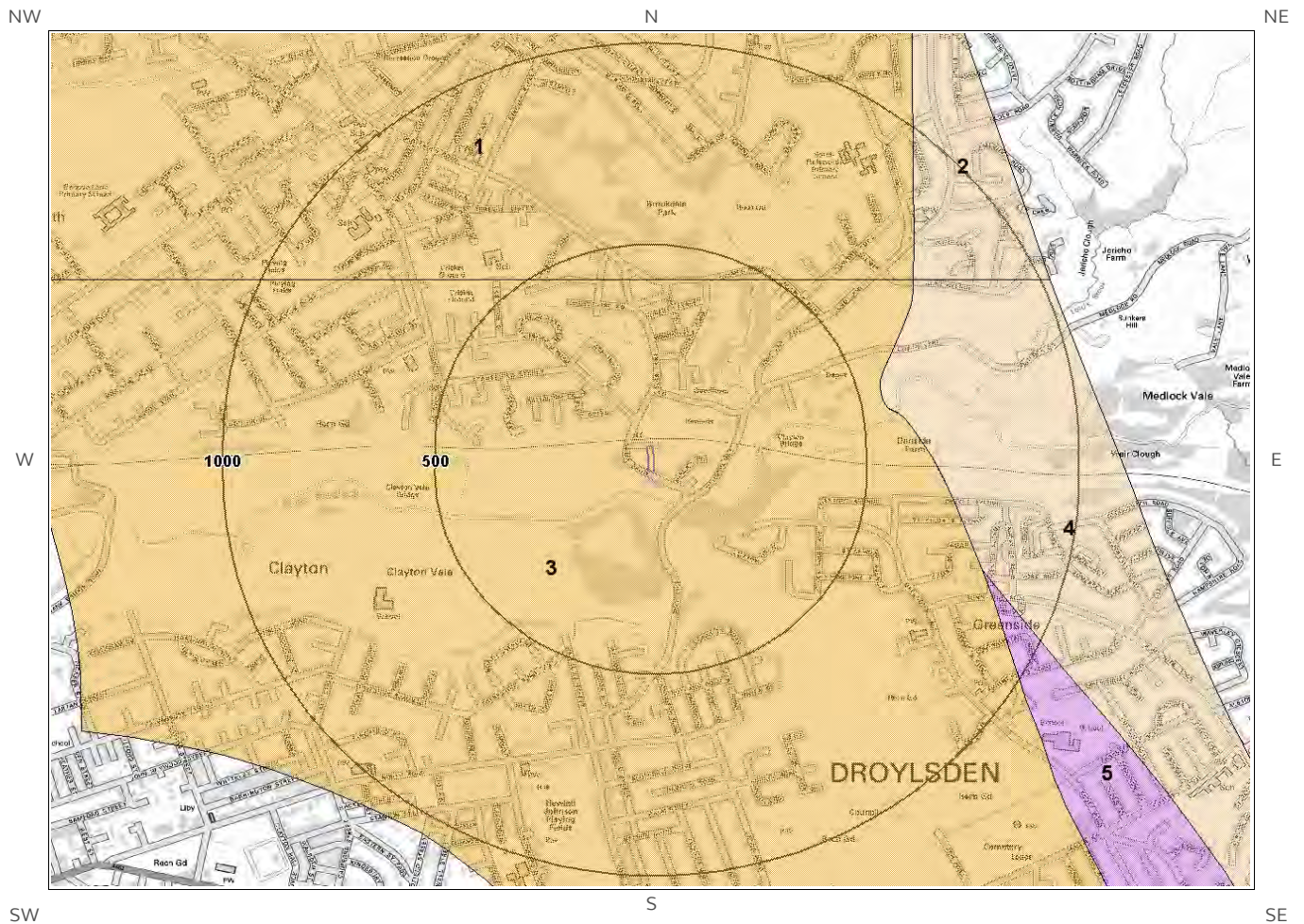
Are there any records relating to permeability of landslips within the study site** boundary?

No

Database searched and no data found.

* This includes an automatically generated 50m buffer zone around the site

1.3 Bedrock and Faults Map

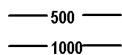


Bedrock and Faults Legend

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Site Outline



Search Buffers (m)

1.3 Bedrock, Solid Geology & Faults

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:085

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/ Solid Geology within 500m of the study site boundary:

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
3	0.0	On Site	CS-SDST	Collyhurst Sandstone Formation - Sandstone	No Details
1	414.0	N	CS-SDST	Collyhurst Sandstone Formation - Sandstone	No Details

1.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site* boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Intergranular	High	High

1.3.3 Faults

Are there any records of Faults within 500m of the study site boundary? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as Faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

* This includes an automatically generated 50m buffer zone around the site

1.4 Radon Data

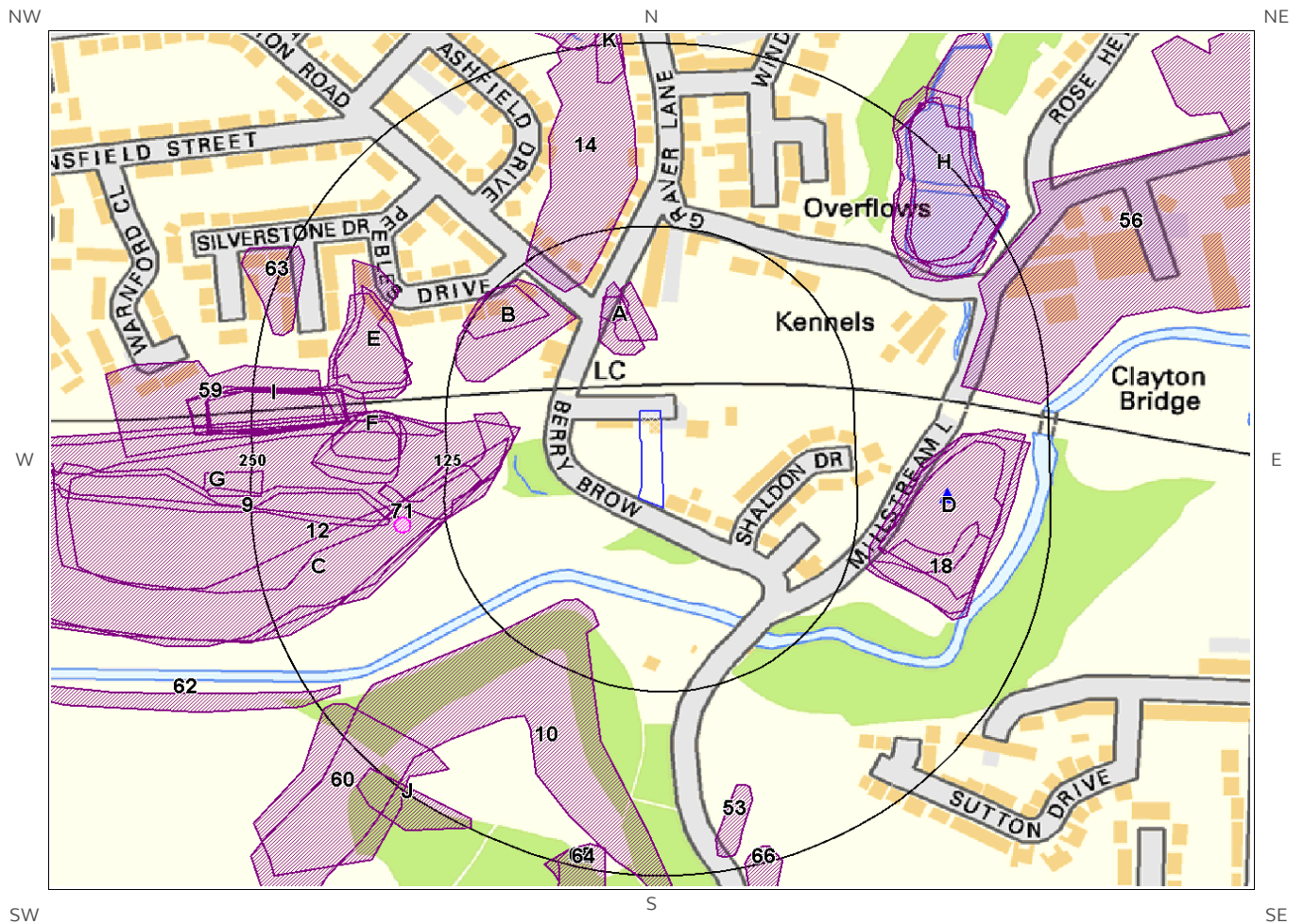
1.4.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level

1.4.2 Radon Protection

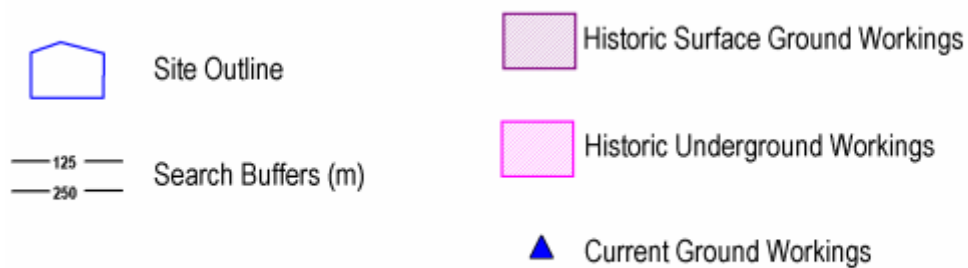
Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary

2 Ground Workings Map



Ground Workings Legend

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2 Ground Workings

2.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping.

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? Yes

The following Historical Surface Ground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
1A	38.0	N	389007 399636	Unspecified Heap	1933
2A	38.0	N	389007 399636	Unspecified Heap	1906
3A	38.0	N	389007 399636	Unspecified Heap	1921
4A	38.0	N	389007 399636	Unspecified Ground Workings	1923
5A	38.0	N	389007 399636	Unspecified Heap	1938
6A	48.0	N	389016 399654	Unspecified Heap	1956
7A	62.0	N	389003 399659	Unspecified Pit	1891
8B	75.0	NW	388939 399641	Unspecified Pit	1891
9	77.0	W	388642 399507	Refuse Heap	1968
10	79.0	SW	388838 399333	Unspecified Heap	1956
11	82.0	W	388920 399549	Unspecified Pit	1956
12	84.0	W	388634 399504	Unspecified Disused Tip	1978
13B	88.0	NW	388933 399653	Unspecified Ground Workings	1923
14	94.0	NW	388981 399758	Unspecified Pit	1923
15C	102.0	W	388629 399490	Unspecified Heap	1991
16C	102.0	W	388629 399490	Unspecified Heap	1985
17D	136.0	E	389217 399511	Unspecified Heap	1933
18	137.0	E	389205 399473	Unspecified Ground Workings	1938
19D	141.0	E	389213 399527	Unspecified Quarry	1938
20D	141.0	E	389222 399514	Pond	1956

ID	Distance (m)	Direction	NGR	Use	Date
21E	149.0	W	388847 399634	Pond	1891
22E	150.0	W	388847 399629	Reservoir	1956
23F	150.0	W	388844 399569	Reservoir	1956
24E	152.0	W	388844 399630	Reservoir	1933
25E	152.0	W	388844 399630	Pond	1921
26E	152.0	W	388844 399630	Pond	1906
27E	152.0	W	388844 399630	Pond	1923
28E	152.0	W	388844 399630	Reservoir	1938
29F	154.0	W	388836 399560	Pond	1891
30F	155.0	W	388837 399561	Reservoirs	1933
31F	155.0	W	388837 399561	Reservoirs	1921
32F	155.0	W	388837 399561	Reservoirs	1938
33F	155.0	W	388837 399561	Reservoirs	1906
34F	155.0	W	388837 399561	Pond	1923
35G	156.0	W	388743 399532	Pond	1891
36G	161.0	W	388705 399525	Reservoirs	1906
37G	161.0	W	388705 399525	Reservoirs	1938
38G	161.0	W	388705 399525	Reservoirs	1921
39G	161.0	W	388705 399525	Reservoirs	1933
40G	161.0	W	388705 399525	Reservoirs	1923
41I	176.0	W	388785 399588	Cuttings	1891
42H	185.0	NE	389218 399760	Reservoirs	1906
43H	185.0	NE	389218 399760	Reservoirs	1933
44H	185.0	NE	389218 399760	Reservoirs	1891
45H	185.0	NE	389218 399760	Reservoirs	1921
46H	185.0	NE	389218 399760	Reservoirs	1938
47H	185.0	NE	389218 399760	Reservoirs	1923
48I	188.0	W	388786 399587	Cuttings	1921

ID	Distance (m)	Direction	NGR	Use	Date
49I	189.0	W	388785 399586	Cuttings	1933
50H	189.0	NE	389214 399747	Ponds	1985
51H	189.0	NE	389214 399747	Ponds	1991
52I	189.0	W	388784 399585	Cuttings	1938
53	194.0	S	389080 399307	Refuse Heap	1933
54H	195.0	NE	389224 399738	Ponds	1978
55H	195.0	NE	389224 399738	Reservoirs	1956
56	195.0	E	389527 399740	Sewage Works	1956
57H	195.0	NE	389224 399740	Ponds	1968
58I	195.0	W	388775 399584	Cuttings	1923
59	202.0	W	388746 399587	Cuttings	1985
60	217.0	SW	388833 399328	Unspecified Ground Workings	1906
61K	224.0	N	388998 399844	Refuse Heap	1956
62	231.0	SW	388720 399391	Refuse Heap	1968
63	231.0	W	388783 399667	Unspecified Pit	1956
64	233.0	S	388971 399254	Unspecified Pit	1921
65	233.0	S	388977 399261	Unspecified Pit	1933
66	239.0	S	389099 399270	Unspecified Heap	1956
67G	243.0	W	388757 399536	Reservoirs	1938
68J	244.0	SW	388873 399322	Unspecified Pit	1991
69J	244.0	SW	388873 399322	Unspecified Pit	1985
70K	248.0	N	388969 399852	Unspecified Pit	1991

2.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary? Yes

The following Historical Underground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
71	148.0	W	388866 399508	Unspecified Shaft	1978
Not shown	467.0	W	388547 399544	Unspecified Shaft	1978
Not shown	504.0	W	388512 399559	Unspecified Shaft	1978

2.3 Current Ground Workings

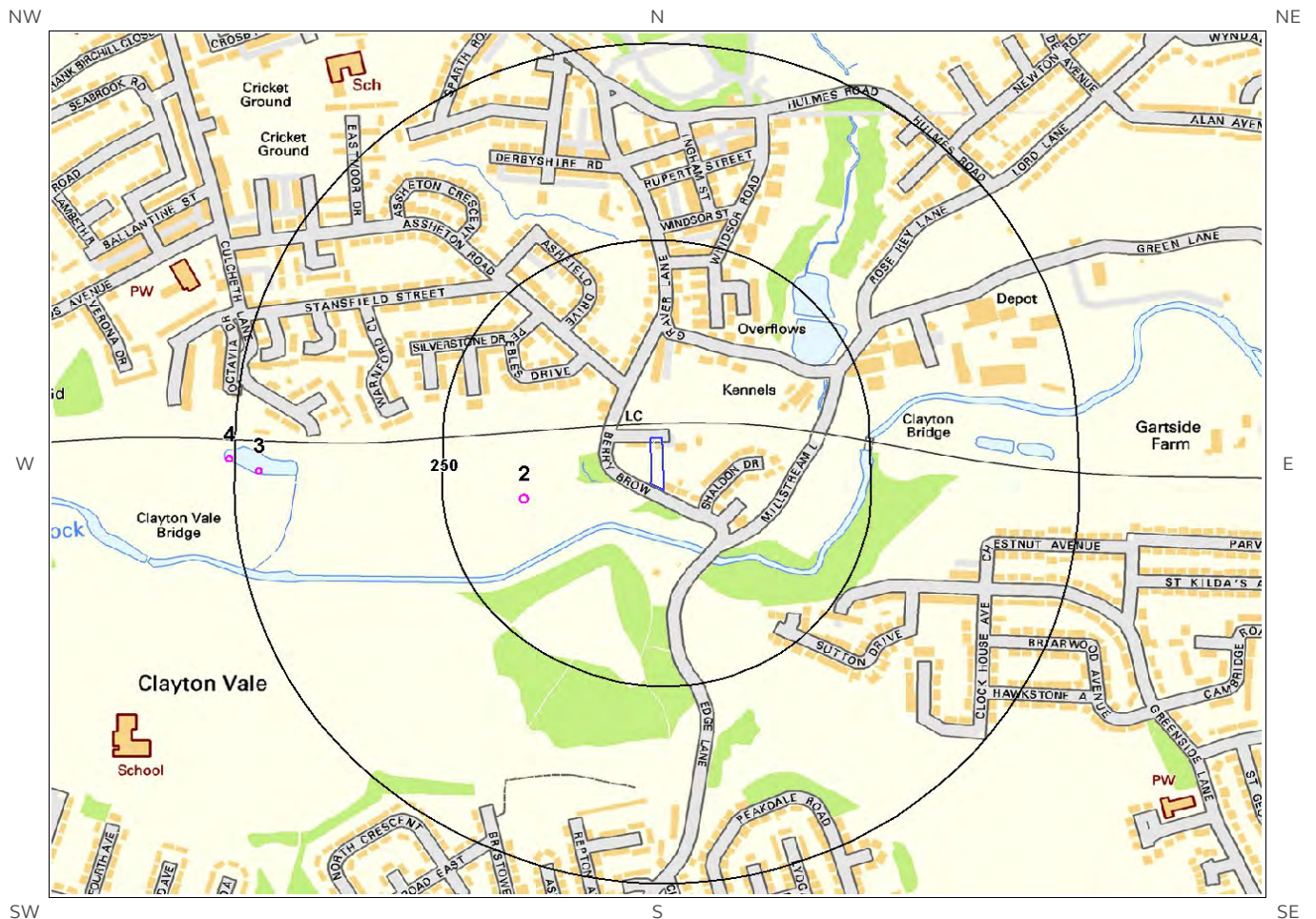
This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary? Yes

The following Current Ground Workings information is provided by British Geological Survey:

ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
74D	183.0	E	389217 399528	Silica Sand	Red Sand Quarry	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	918.0	NW	388174 399945	Clay & Shale	Cheetham Fold Clay Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased

3 Mining, Extraction & Natural Cavities Map



Mining, Extraction and Natural Cavities Legend

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3 Mining, Extraction & Natural Cavities

3.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary? Yes

The following Historical Mining information is provided by Groundsure:

ID	Distance (m)	Direction	NGR	Details	Date
2	148.0	W	388866 399508	Unspecified Shaft	1978
3	467.0	W	388547 399544	Unspecified Shaft	1978
4	504.0	W	388512 399559	Unspecified Shaft	1978

3.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary? Yes

The following Coal Mining information provided by the Coal Authority is not represented on Mapping:

Distance (m)	Direction	Details
0.0	On Site	The study site is located within the specified search distance of an identified mining area. Further details concerning this can be obtained from the Coal Authority Helpline on 0845 762 6848.

3.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary? Yes

The following information provided by JPB is not represented on mapping: In addition to being located inside an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) have information such as mining plans and maps held within their archive of mining activities that have occurred within 1km of this property which may supplement this information. Further details and a quote for services can be obtained by emailing this report to enquiries.gs@jpb.co.uk.

3.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary? Yes

The following non-coal mining information is provided by the BGS:

ID	Distance (m)	Direction	Name	Commodity	Assessment of likelihood
Not shown	828.0	E	Not available	Vein Mineral	Occasional minor mining may have occurred but of restricted extent.

3.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled "Review of mining instability in Great Britain, 1990" PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? No

Database searched and no data found.

3.6 Natural Cavities

This dataset provides information based on Peter Brett Associates natural cavities database.

Are there any Natural Cavities within 1000m of the study site boundary? No

Database searched and no data found.

3.7 Brine Extraction

This data provides information from the Coal Authority issued on behalf of the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

3.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

3.9 Tin Mining

This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level.

Are there any Tin Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

3.10 Clay Mining

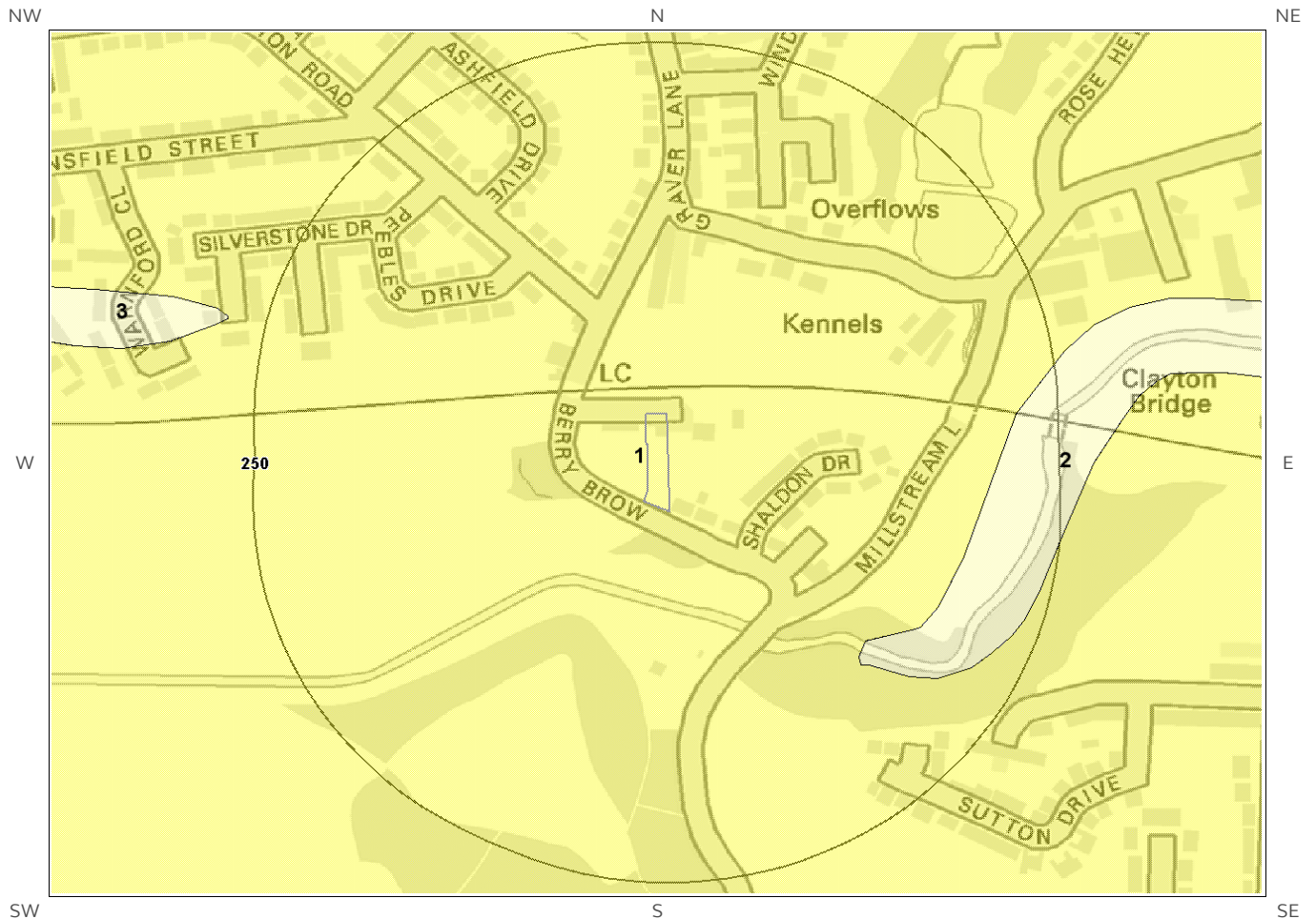
This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

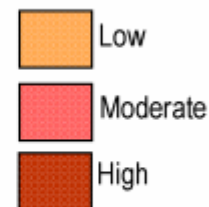
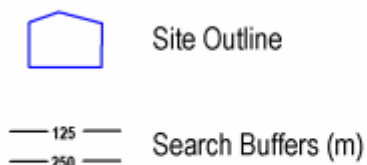
4 Natural Ground Subsidence

4.1 Shrink-Swell Clay Map

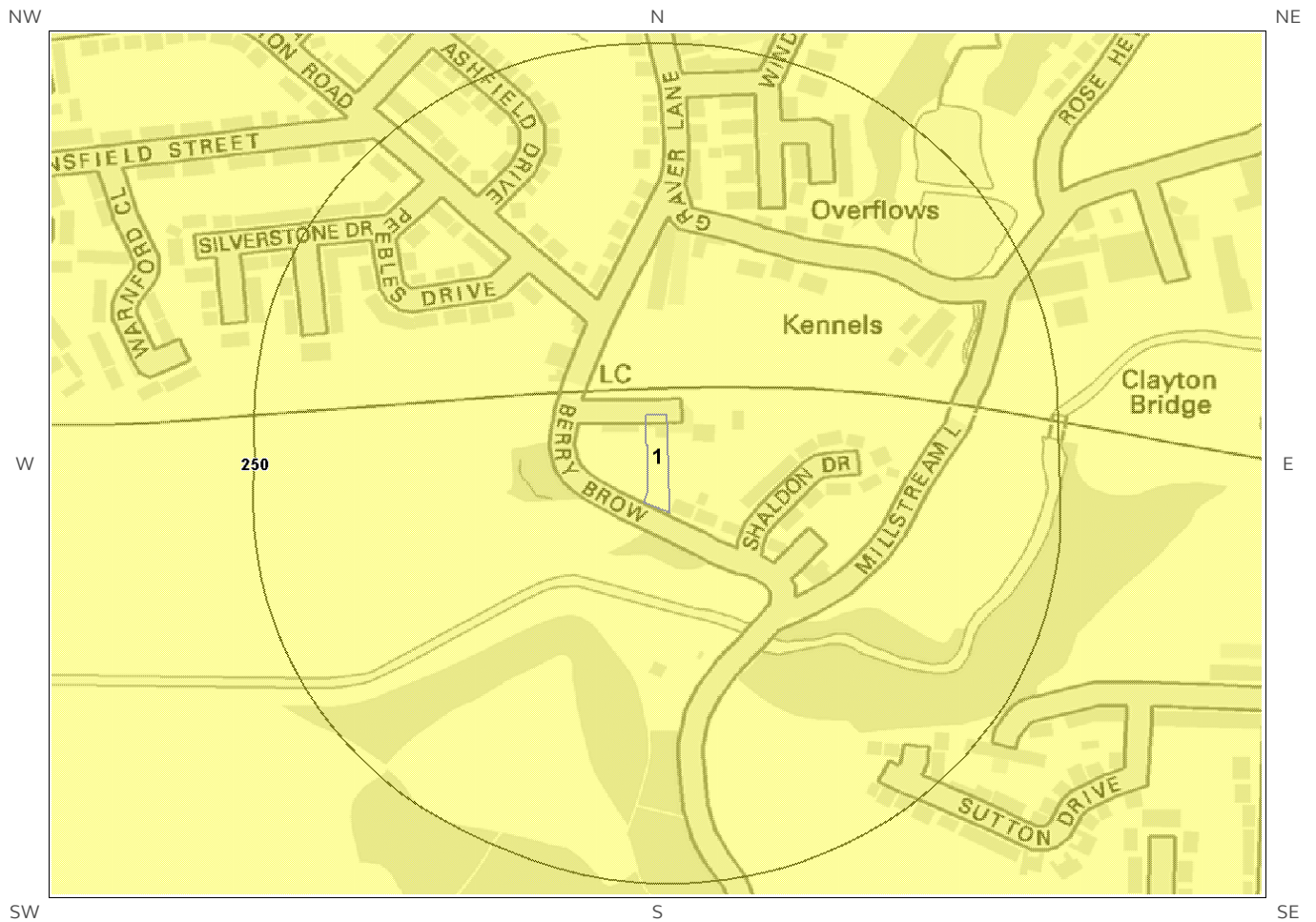


Shrink Swell Clay Legend

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4.2 Landslides Map

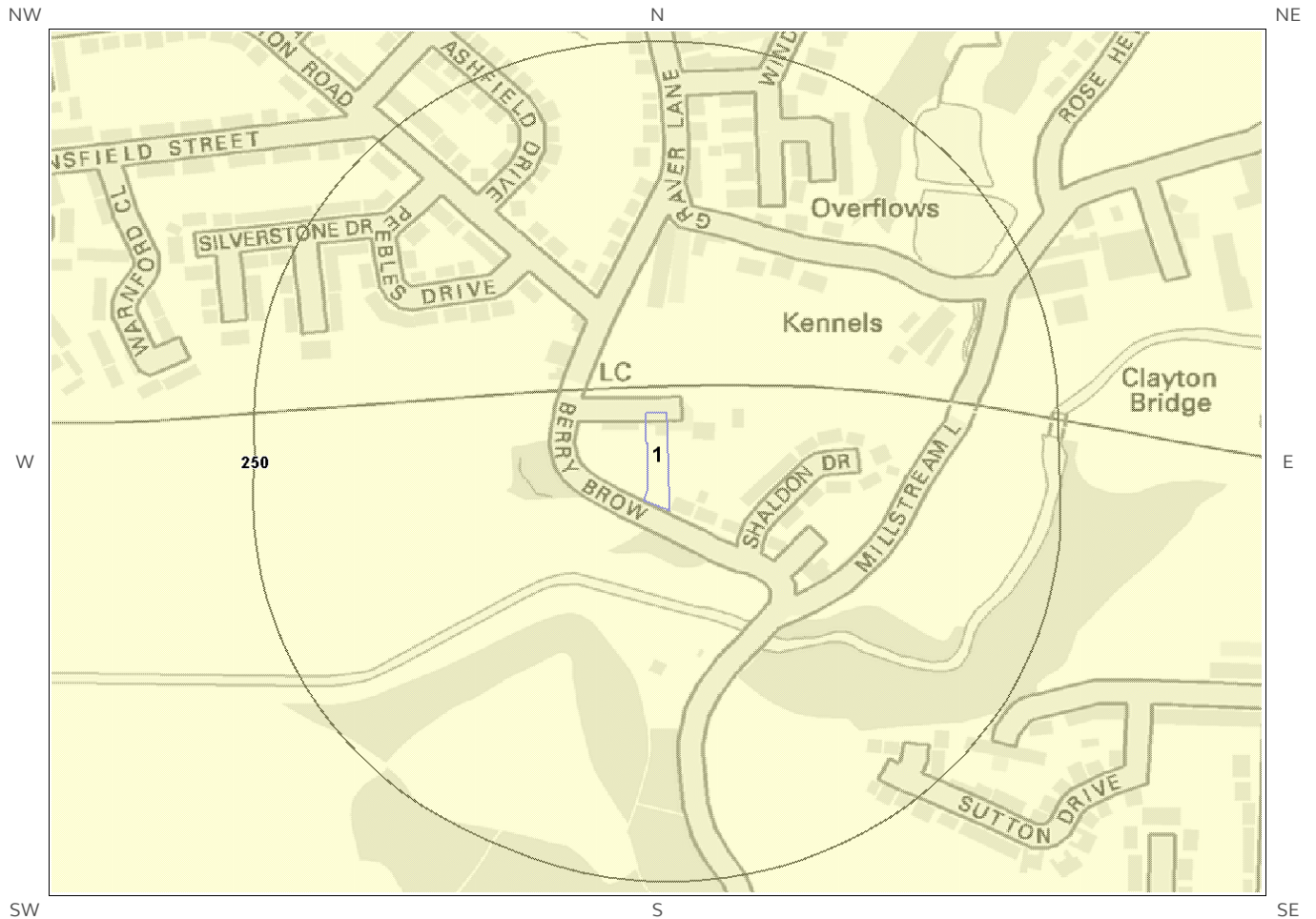


Landslides Legend

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4.3 Ground Dissolution Soluble Rocks Map

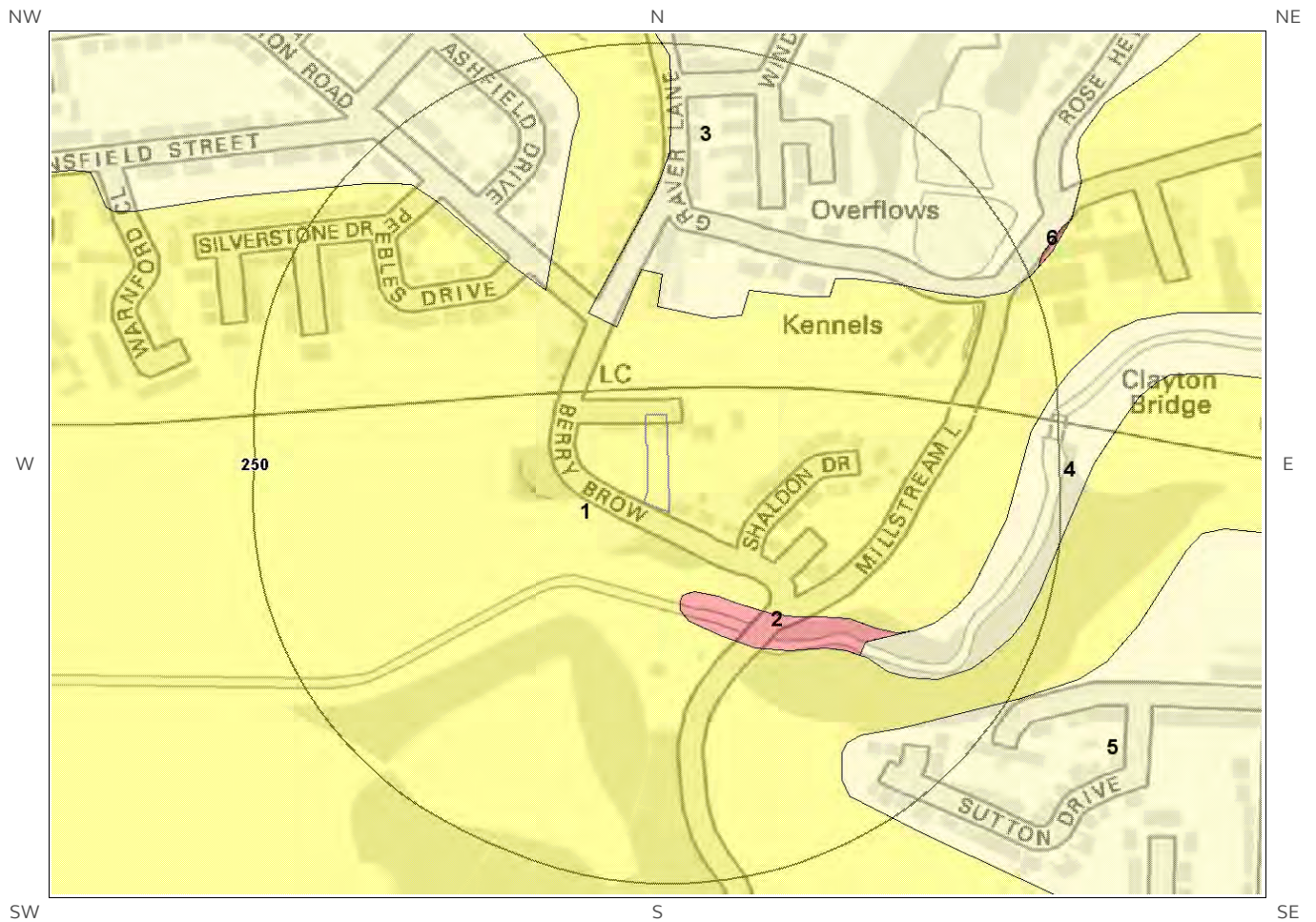


Ground Dissolution
Soluble Rocks Legend

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4.4 Compressible Deposits Map

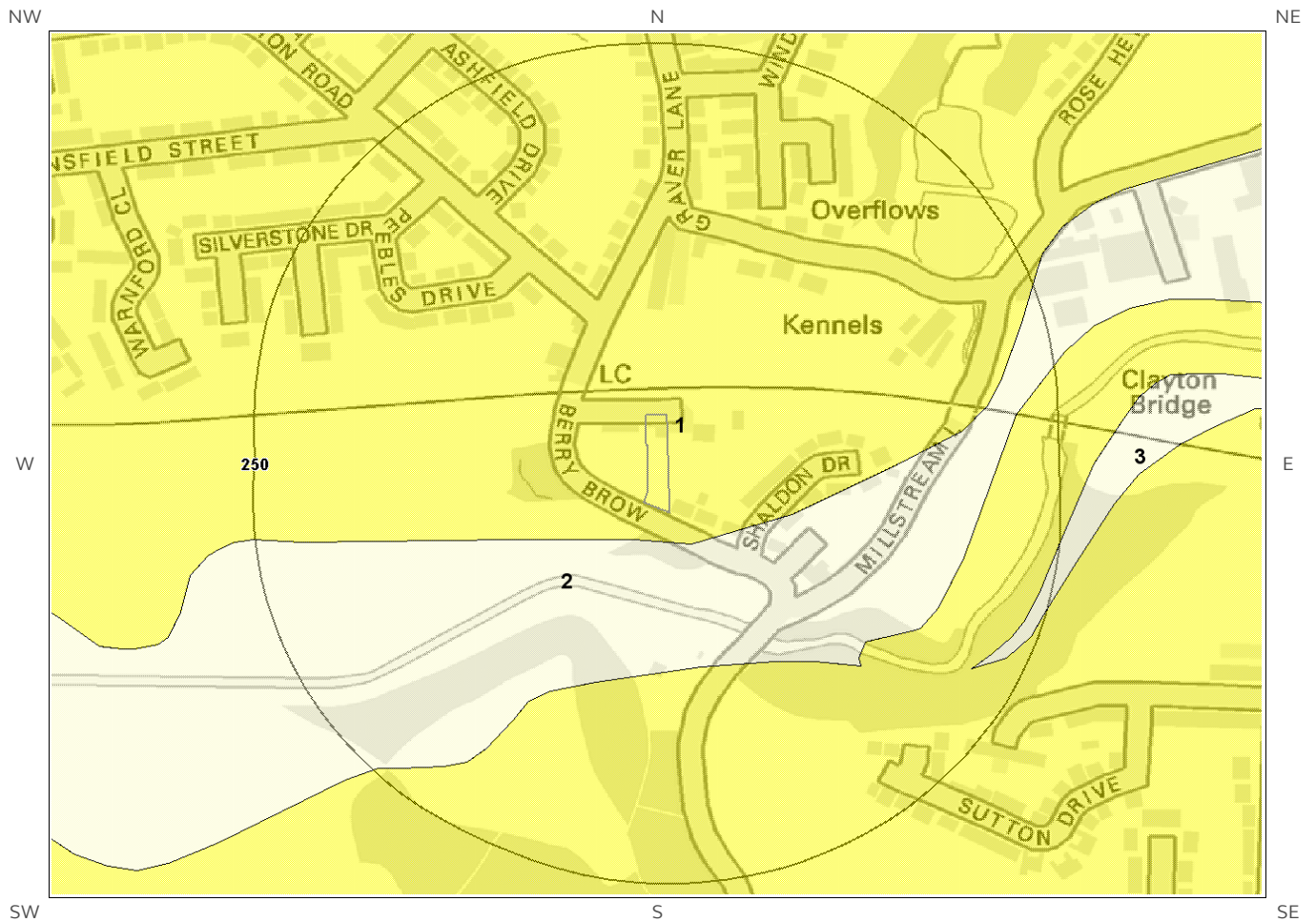


Compressible Deposits Legend

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4.5 Collapsible Deposits Map

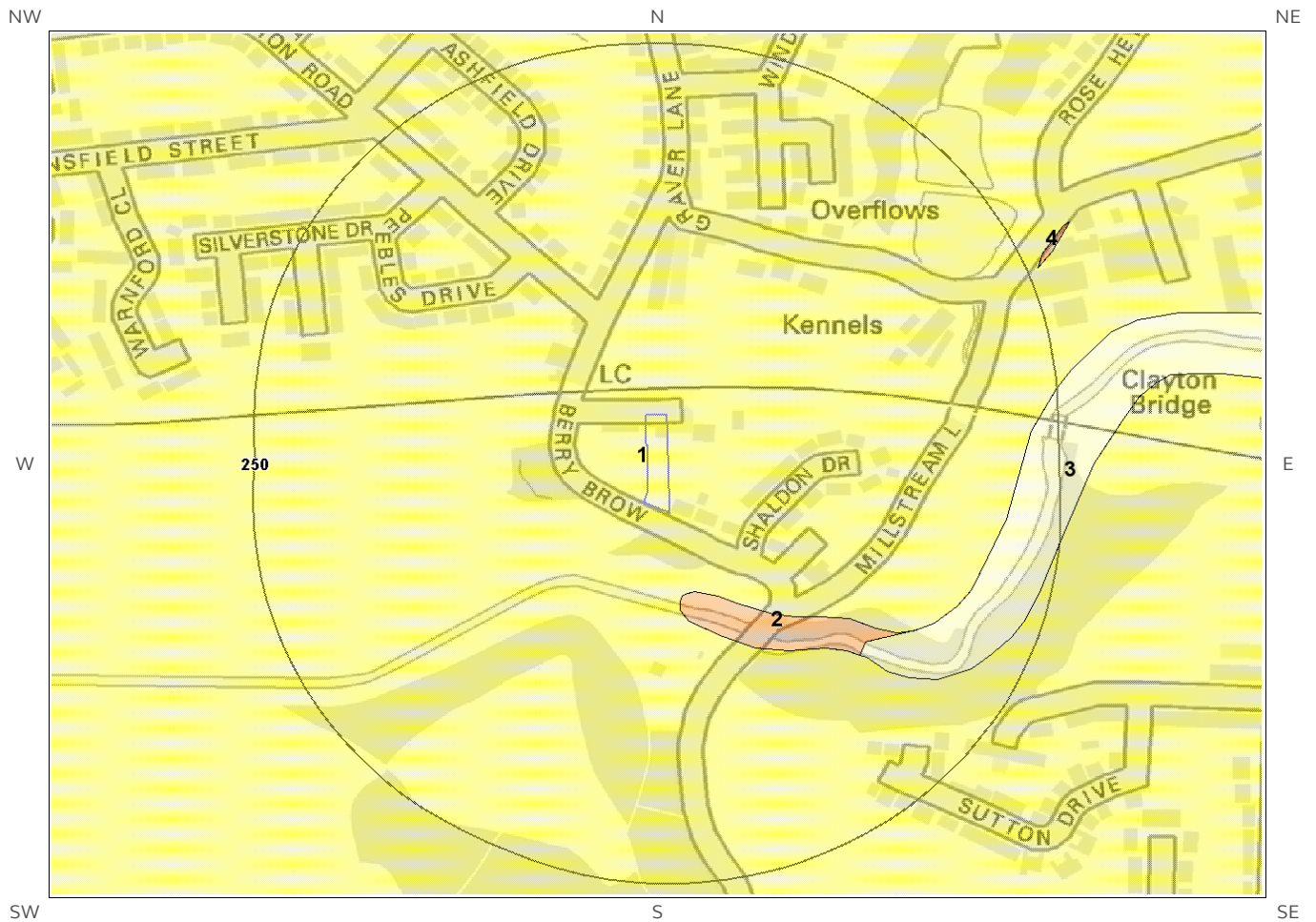


Collapsible Deposits Legend

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4.6 Running Sand Map



Running Sand Legend

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4 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site** boundary? Very Low

4.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

4.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

4.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This includes an automatically generated 50m buffer zone around the site

4.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Very low potential for compressible ground to be present. No special actions required to avoid problems due to compressible ground. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible ground.

4.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

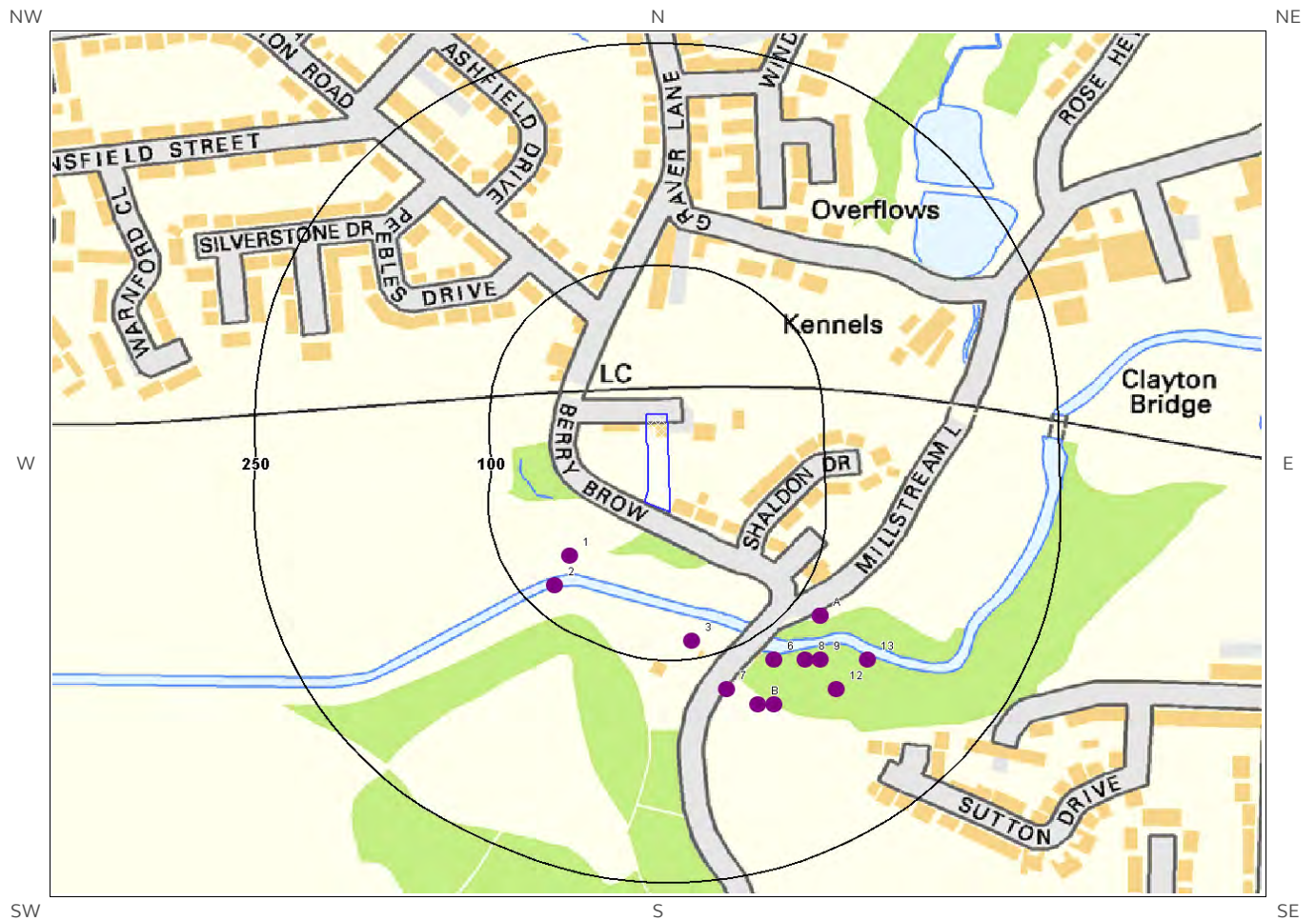
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.
2	20.0	S	Negligible	No indicators for collapsible deposits identified. No actions required to avoid problems due to collapsible deposits. No special ground investigation required, or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

4.6 Running Sands

The following Running Sands information provided by the British Geological Survey:

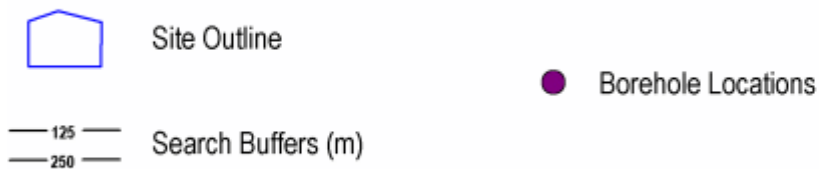
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

5 Borehole Records Map



Borehole Records Legend

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5 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary:

13

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	61.0	SW	388970 399490	SJ89NE447	-1.0	RIVER MEDLOCK CLAYTON VALE TP 6
2	81.0	SW	388960 399470	SJ89NE446	-1.0	RIVER MEDLOCK CLAYTON VALE TP 5
3	88.0	S	389048 399433	SJ89NE159	91.44	MANCHESTER CORP. PHILLIP PARK CLAYTON BRIDGE
4A	119.0	SE	389130 399450	SJ89NE604	12.24	LOWER MEDLOCK UCSO D13
5A	119.0	SE	389130 399450	SJ89NE603	10.37	LOWER MEDLOCK UCSO D12
6	120.0	SE	389100 399420	SJ89NE601	12.0	LOWER MEDLOCK UCSO D11B
7	125.0	S	389070 399400	SJ89NE596	6.0	LOWER MEDLOCK UCSO D8
8	132.0	SE	389120 399420	SJ89NE602	10.0	LOWER MEDLOCK UCSO D11C
9	139.0	SE	389130 399420	SJ89NE599	12.0	LOWER MEDLOCK UCSO D11
10B	142.0	SE	389090 399390	SJ89NE605	3.2	LOWER MEDLOCK UCSO TPD6
11B	146.0	SE	389100 399390	SJ89NE597	21.0	LOWER MEDLOCK UCSO D9
12	160.0	SE	389140 399400	SJ89NE598	20.85	LOWER MEDLOCK UCSO D10
13	161.0	SE	389160 399420	SJ89NE600	11.8	LOWER MEDLOCK UCSO D11A

The borehole records are available using the hyperlinks below: Please note that if the donor of the borehole record has requested the information be held as commercial-in-confidence, the additional data will be held separately by the BGS and a formal request must be made for its release.

#3: scans.bgs.ac.uk/sobi_scans/boreholes/936564

#4A: scans.bgs.ac.uk/sobi_scans/boreholes/937021

#5A: scans.bgs.ac.uk/sobi_scans/boreholes/937020

#6: scans.bgs.ac.uk/sobi_scans/boreholes/937018

#7: scans.bgs.ac.uk/sobi_scans/boreholes/937013

#8: scans.bgs.ac.uk/sobi_scans/boreholes/937019

#9: scans.bgs.ac.uk/sobi_scans/boreholes/937016

#10B: scans.bgs.ac.uk/sobi_scans/boreholes/937022

#11B: scans.bgs.ac.uk/sobi_scans/boreholes/937014

#12: scans.bgs.ac.uk/sobi_scans/boreholes/937015

#13: scans.bgs.ac.uk/sobi_scans/boreholes/937017

6 Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary:

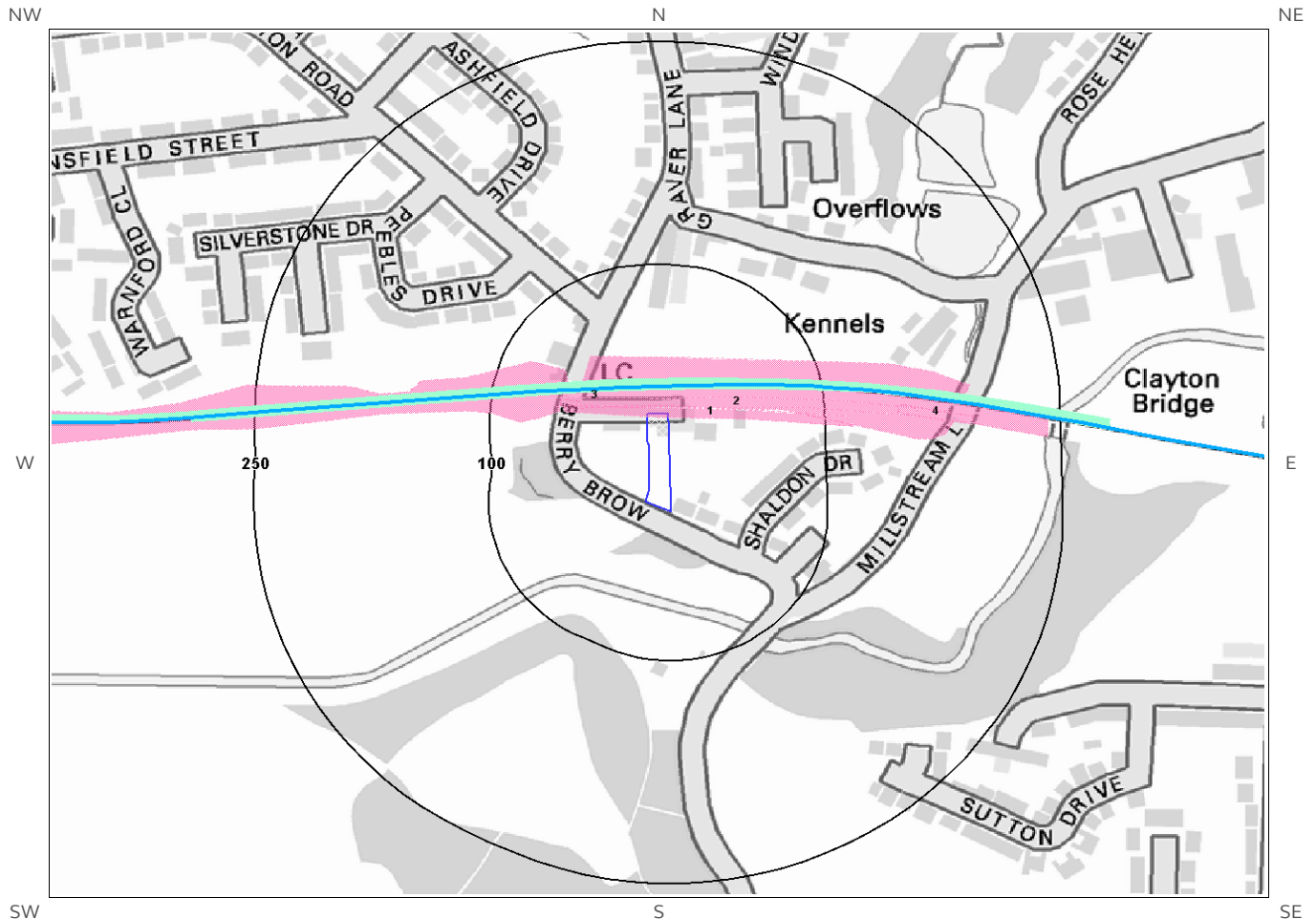
20

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geosight User Guide, available on request.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
3.0	S	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
18.0	W	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
18.0	W	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	100 - 200 mg/kg
18.0	W	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
18.0	W	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	100 - 200 mg/kg
20.0	S	RuralSoil	15 - 25 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
32.0	SW	RuralSoil	15 - 25 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
32.0	SW	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
48.0	SE	RuralSoil	15 - 25 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
68.0	N	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
73.0	E	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
78.0	N	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
78.0	N	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	100 - 200 mg/kg
82.0	S	RuralSoil	15 - 25 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
88.0	SW	RuralSoil	15 - 25 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
88.0	SW	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
112.0	SE	RuralSoil	25 - 35 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
128.0	W	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
212.0	E	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg

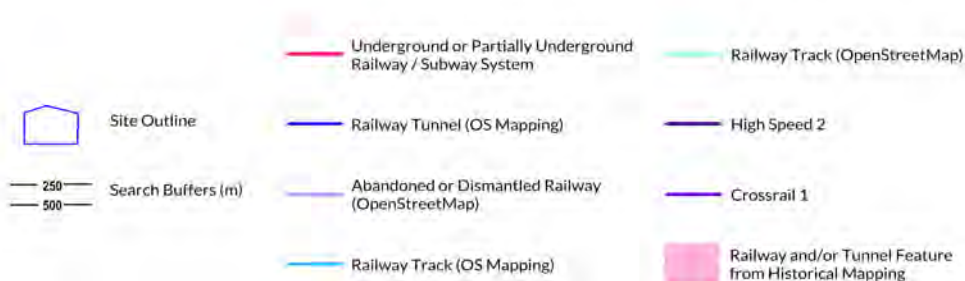
*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.

7 Railways and Tunnels Map



Railways and Tunnels Legend

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7 Railways and Tunnels

7.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railway lines been identified within the study site boundary? No

Have any underground railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary? No

Have any other railway tunnels been identified within 250m of the site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

7.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary? Yes

Have any historical railway or tunnel features been identified within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Details	Date
1	0	On Site	389058 399585	Railway Sidings	1893
2	4	N	389075 399591	Railway Sidings	1908
3	5	N	n/a	Railways	1922
4	147	E	389203 399585	Railway Sidings	1932

Any records that have been identified are represented on the Railways and Tunnels Map.

7.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary? No

Have any historical railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Note: multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels Map.

7.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary? No

Have any active railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Name	Type
17	N	Not given	Rail
18	N	Not given	Multi Track
21	N	Not given	Rail
171	E	Not given	Rail
172	E	Not given	Rail

Note: multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels Map.

7.5 Railway Projects

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1 .

Is the study site within 5km of the route of the High Speed 2 rail project? Yes

Is the study site within 500m of the route of the Crossrail 1 rail project? No

Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a Groundsure HS2 and Crossrail 1 Report.

The route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

Contact Details

Groundsure Helpline
Telephone: 08444 159 000
info@groundsure.com



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Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email: enquiries@bgs.ac.uk
Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries



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Standard Terms and Conditions

1 Definitions

In these terms and conditions unless the context otherwise requires:

“Beneficiary” means the person or entity for whose benefit the Client has obtained the Services.

“Client” means the party or parties entering into a Contract with Groundsure.

“Commercial” means any building or property which is not Residential.

“Confidential Information” means the contents of this Contract and all information received from the Client as a result of, or in connection with, this Contract other than

(i) information which the Client can prove was rightfully in its possession prior to disclosure by Groundsure and

(ii) any information which is in the public domain (other than by virtue of a breach of this Contract).

“Support Services” means Support Services provided by Groundsure including, without limitation, interpreting third party and in-house environmental data, providing environmental support advice, undertaking environmental audits and assessments, Site investigation, Site monitoring and related items.

“Contract” means the contract between Groundsure and the Client for the provision of the Services, and which shall incorporate these terms and conditions, the Order, and the relevant User Guide.

“Third Party Data Provider” means any third party providing Third Party Content to Groundsure.

“Data Reports” means reports comprising factual data with no accompanying interpretation.

“Fees” has the meaning set out in clause 5.1.

“Groundsure” means Groundsure Limited, a company registered in England and Wales under number 03421028.

“Groundsure Materials” means all materials prepared by Groundsure and provided as part of the Services, including but not limited to Third Party Content, Data Reports, Mapping, and Risk Screening Reports.

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“Mapping” means a map, map data or a combination of historical maps of various ages, time periods and scales.

“Order” means an electronic, written or other order form submitted by the Client requesting Services from Groundsure in respect of a specified Site.

“Ordnance Survey” means the Secretary of State for Business, Innovation and Skills, acting through Ordnance Survey, Adanac Drive, Southampton, SO16 0AS, UK.

“Order Website” means the online platform through which Orders may be placed by the Client and accepted by Groundsure.

“Report” means a Risk Screening Report or Data Report for Commercial or Residential property.

“Residential” means any building or property used as or intended to be used as a single dwelling.

“Risk Screening Report” means a risk screening report comprising factual data with an accompanying interpretation by Groundsure.

“Services” means any Report, Mapping and/or Support Services which Groundsure has agreed to provide by accepting an Order pursuant to clause 2.6.

“Site” means the area of land in respect of which the Client has requested Groundsure to provide the Services.

“Third Party Content” means data, database information or other information which is provided to Groundsure by a Third Party Data Provider.

“User Guide” means the user guide, as amended from time to time, available upon request from Groundsure and on the website (www.Groundsure.com) and forming part of this Contract.

2 Scope of Services, terms and conditions, requests for insurance and quotations

2.1 Groundsure agrees to provide the Services in accordance with the Contract.

2.2 Groundsure shall exercise reasonable skill and care in the provision of the Services.

2.3 Subject to clause 7.3 the Client acknowledges that it has not relied on any statement or representation made by or on behalf of Groundsure which is not set out and expressly agreed in writing in the Contract and all such statements and representations are hereby excluded to the fullest extent permitted by law.

2.4 The Client acknowledges that terms and conditions appearing on a Client's order form, printed stationery or other communication, or any terms or conditions implied by custom, practice or course of dealing shall be of no effect, and that this Contract shall prevail over all others in relation to the Order.

2.5 If the Client or Beneficiary requests insurance in conjunction with or as a result of the Services, Groundsure shall use reasonable endeavours to recommend such insurance, but makes no warranty that such insurance shall be available from insurers or that it will be offered on reasonable terms. Any insurance purchased by the Client or Beneficiary shall be subject solely to the terms of the policy issued by insurers and Groundsure will have no liability therefor. In addition you acknowledge and agree that Groundsure does not act as an agent or broker for any insurance providers. The Client should take (and ensure that the Beneficiary takes) independent advice to ensure that the insurance policy requested or offered is suitable for its requirements.

2.6 Groundsure's quotations or proposals are valid for a period of 30 days only unless an alternative period of time is explicitly stipulated by Groundsure.

Groundsure reserves the right to withdraw any quotation or proposal at any time before an Order is accepted by Groundsure. Groundsure's acceptance of an Order shall be binding only when made in writing and signed by Groundsure's authorised representative or when accepted through the Order Website.

3 The Client's obligations

3.1 The Client shall comply with the terms of this Contract and

(i) procure that the Beneficiary or any third party relying on the Services complies with and acts as if it is bound by the Contract and

(ii) be liable to Groundsure for the acts and omissions of the Beneficiary or any third party relying on the Services as if such acts and omissions were those of the Client.

3.2 The Client shall be solely responsible for ensuring that the Services are appropriate and suitable for its and/or the Beneficiary's needs.

3.3 The Client shall supply to Groundsure as soon as practicable and without charge all requisite information (and the Client warrants that such information is accurate, complete and appropriate), including without limitation any environmental information relating to the Site and shall give such assistance as Groundsure shall reasonably require in the provision of the Services including, without limitation, access to the Site, facilities and equipment.

3.4 Where the Client's approval or decision is required to enable Groundsure to carry out work in order to provide the Services, such approval or decision shall be given or procured in reasonable time and so as not to delay or disrupt the performance of the Services.

3.5 Save as expressly permitted by this Contract the Client shall not, and shall procure that the Beneficiary shall not, re-sell, alter, add to, or amend the Groundsure Materials, or use the Groundsure Materials in a manner for which they were not intended. The Client may make the Groundsure Materials available to a third party who is considering acquiring some or all of, or providing funding in relation to, the Site, but such third party cannot rely on the same unless expressly permitted under clause 4.

3.6 The Client is responsible for maintaining the confidentiality of its user name and password if using the Order Website and the Client acknowledges that Groundsure accepts no liability of any kind for any loss or damage suffered by the Client as a consequence of using the Order Website.

4 Reliance

4.1 The Client acknowledges that the Services provided by Groundsure consist of the presentation and analysis of Third Party Content and other content and that information obtained from a Third Party Data Provider cannot be guaranteed or warranted by Groundsure to be reliable.

4.2 In respect of Data Reports, Mapping and Risk Screening Reports, the following classes of person and no other are entitled to rely on their contents;

(i) the Beneficiary,
(ii) the Beneficiary's professional advisers, (iii) any person providing funding to the Beneficiary in relation to the Site (whether directly or as part of a lending syndicate),
(iv) the first purchaser or first tenant of the Site, and
(v) the professional advisers and lenders of the first purchaser or tenant of the Site.

4.3 In respect of Support Services, only the Client, Beneficiary and parties expressly named in a Report and no other parties are entitled to rely on its contents.

4.4 Save as set out in clauses 4.2 and 4.3 and unless otherwise expressly agreed in writing, no other person or entity of any kind is entitled to rely on any Services or Report issued or provided by Groundsure. Any party considering such Reports and Services does so at their own risk.

5 Fees and Disbursements

5.1 Groundsure shall charge and the Client shall pay fees at the rate and frequency specified in the written proposal, Order Website or Order acknowledgement form, plus (in the case of Support Services) all proper disbursements incurred by Groundsure. The Client shall in addition pay all value added tax or other tax payable on such fees and disbursements in relation to the provision of the Services (together “Fees”).

5.2 The Client shall pay all outstanding Fees to Groundsure in full without deduction, counterclaim or set off within 30 days of the date of Groundsure's invoice or such other period as may be agreed in writing between Groundsure and the Client (“Payment Date”). Interest on late payments will accrue on a daily basis from the Payment Date until the date of payment (whether before or after judgment) at the rate of 8% per annum.

5.3 The Client shall be deemed to have agreed the amount of any invoice unless an objection is made in writing within 28 days of the date of the invoice. As soon as reasonably practicable after being notified of an objection, without prejudice to clause 5.2 a member of Groundsure's management team will contact the Client and the parties shall then use all reasonable endeavours to resolve the dispute within 15 days.

6 Intellectual Property and Confidentiality

6.1 Subject to

(i) full payment of all relevant Fees and
(ii) compliance with this Contract, the Client is granted (and is permitted to sub-licence to the Beneficiary) a royalty-free, worldwide, non-assignable and (save to the extent set out in this Contract) non-transferable licence to make use of the Groundsure Materials.

6.2 All Intellectual Property in the Groundsure Materials are and shall remain owned by Groundsure or Groundsure's licensors (including without limitation the Third Party Data Providers) the Client acknowledges, and shall procure

acknowledgement by the Beneficiary of, such ownership. Nothing in this Contract purports to transfer or assign any rights to the Client or the Beneficiary in respect of such Intellectual Property.

6.3 Third Party Data Providers may enforce any breach of clauses 6.1 and 6.2 against the Client or Beneficiary.

6.4 The Client shall, and shall procure that any recipients of the Groundsure Materials shall:

(i) not remove, suppress or modify any trade mark, copyright or other proprietary marking belonging to Groundsure or any third party from the Services;

(ii) use the information obtained as part of the Services in respect of the subject Site only, and shall not store or reuse any information obtained as part of the Services provided in respect of adjacent or nearby sites;

(iii) not create any product or report which is derived directly or indirectly from the Services (save that those acting in a professional capacity to the Beneficiary may provide advice based upon the Services);

(iv) not combine the Services with or incorporate such Services into any other information data or service;

(v) not reformat or otherwise change (whether by modification, addition or enhancement), the Services (save that those acting for the Beneficiary in a professional capacity shall not be in breach of this clause 6.4(v) where such reformatting is in the normal course of providing advice based upon the Services);

(vi) where a Report and/or Mapping contains material belonging to Ordnance Survey, acknowledge and agree that such content is protected by Crown Copyright and shall not use such content for any purpose outside of receiving the Services; and

(vii) not copy in whole or in part by any means any map prints or run-on copies containing content belonging to Ordnance Survey (other than that contained within Ordnance Survey's OS Street Map) without first being in possession of a valid Paper Map Copying Licence from Ordnance Survey,

6.5 Notwithstanding clause 6.4, the Client may make reasonable use of the Groundsure Materials in order to advise the Beneficiary in a professional capacity. However, Groundsure shall have no liability in respect of any advice, opinion or report given or provided to Beneficiaries by the Client.

6.6 The Client shall procure that any person to whom the Services are made available shall notify Groundsure of any request or requirement to disclose, publish or disseminate any information contained in the Services in accordance with the Freedom of Information Act 2000, the Environmental Information Regulations 2004 or any associated legislation or regulations in force from time to time.

7.Liability: Particular Attention Should Be Paid To This Clause

7.1 This Clause 7 sets out the entire liability of Groundsure, including any liability for the acts or omissions of its employees, agents, consultants, subcontractors and Third Party Content, in respect of:

(i) any breach of contract, including any deliberate breach of the Contract by Groundsure or its employees, agents or subcontractors;

(ii) any use made of the Reports, Services, Materials or any part of them; and

(iii) any representation, statement or tortious act or omission (including negligence) arising under or in connection with the Contract.

7.2 All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from the Contract.

7.3 Nothing in the Contract limits or excludes the liability of the Supplier for death or personal injury resulting from negligence, or for any damage or liability incurred by the Client or Beneficiary as a result of fraud or fraudulent misrepresentation.

7.4 Groundsure shall not be liable for

(i) loss of profits;

(ii) loss of business;

(iii) depletion of goodwill and/or similar losses;

(iv) loss of anticipated savings;

(v) loss of goods;

(vi) loss of contract;

(vii) loss of use;

(viii) loss or corruption of data or information;

(ix) business interruption;

(x) any kind of special, indirect, consequential or pure economic loss, costs, damages, charges or expenses;

(xi) loss or damage that arise as a result of the use of all or part of the Groundsure Materials in breach of the Contract;

(xii) loss or damage arising as a result of any error, omission or inaccuracy in any part of the Groundsure Materials where such error, omission or inaccuracy is caused by any Third Party Content or any reasonable interpretation of Third Party Content;

(xiii) loss or damage to a computer, software, modem, telephone or other property; and

(xiv) loss or damage caused by a delay or loss of use of Groundsure's internet ordering service.

7.5 Groundsure's total liability in relation to or under the Contract shall be limited to £10 million for any claim or claims.

7.6 Groundsure shall procure that the Beneficiary shall be bound by limitations and exclusions of liability in favour of Groundsure which accord with those detailed in clauses 7.4 and 7.5 (subject to clause 7.3) in respect of all claims which the Beneficiary may bring against Groundsure in relation to the Services or other matters arising pursuant to the Contract.

8 Groundsure's right to suspend or terminate

8.1 If Groundsure reasonably believes that the Client or Beneficiary has not provided the information or assistance required to enable the proper provision of the Services, Groundsure shall be entitled to suspend all further performance of the Services until such time as any such deficiency has been made good.

8.2 Groundsure shall be entitled to terminate the Contract immediately on written notice in the event that:

(i) the Client fails to pay any sum due to Groundsure within 30 days of the Payment Date; or

(ii) the Client (being an individual) has a bankruptcy order made against him or (being a company) shall enter into liquidation whether compulsory or voluntary or have an administration order made against it or if a receiver shall be appointed over the whole or any part of its property assets or undertaking or if the Client is struck off the Register of Companies or dissolved; or

(iii) the Client being a company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 or being an individual appears unable to pay his debts within the meaning of Section 268 of the Insolvency Act 1986 or if the Client shall enter into a composition or arrangement with the Client's creditors or shall suffer distress or execution to be levied on his goods; or

(iv) the Client or the Beneficiary breaches any term of the Contract (including, but not limited to, the obligations in clause 4) which is incapable of remedy or if remediable, is not remedied within five days of notice of the breach.

9. Client's Right to Terminate and Suspend

9.1 Subject to clause 10.1, the Client may at any time upon written notice terminate or suspend the provision of all or any of the Services.

9.2 In any event, where the Client is a consumer (and not a business) he/she hereby expressly acknowledges and agrees that:

(i) the supply of Services under this Contract (and therefore the performance of this Contract) commences immediately upon Groundsure's acceptance of the Order; and

(ii) the Reports and/or Mapping provided under this Contract are

(a) supplied to the Client's specification(s) and in any event
(b) by their nature cannot be returned.

10 Consequences of Withdrawal, Termination or Suspension

10.1 Upon termination of the Contract:

(i) Groundsure shall take steps to bring to an end the Services in an orderly manner, vacate any Site with all reasonable speed and shall deliver to the Client and/or Beneficiary any property of the Client and/or Beneficiary in Groundsure's possession or control; and

(ii) the Client shall pay to Groundsure all and any Fees payable in respect of the performance of the Services up to the date of termination or suspension. In respect of any Support Services provided, the Client shall also pay Groundsure any additional costs incurred in relation to the termination or suspension of the Contract.

11 Anti-Bribery

11.1 The Client warrants that it shall:

(i) comply with all applicable laws, statutes and regulations relating to anti-bribery and anti-corruption including but not limited to the Bribery Act 2010;

(ii) comply with such of Groundsure's anti-bribery and anti-corruption policies as are notified to the Client from time to time; and

(iii) promptly report to Groundsure any request or demand for any undue financial or other advantage of any kind received by or on behalf of the Client in connection with the performance of this Contract.

11.2 Breach of this Clause 11 shall be deemed a material breach of this Contract.

12 General

12.1 The Mapping contained in the Services is protected by Crown copyright and must not be used for any purpose other than as part of the Services or as specifically provided in the Contract.

12.2 The Client shall be permitted to make one copy only of each Report or Mapping Order. Thereafter the Client shall be entitled to make unlimited copies of the Report or Mapping Order only in accordance with an Ordnance Survey paper map copy license available through Groundsure.

12.3 Groundsure reserves the right to amend or vary this Contract. No amendment or variation to this Contract shall be valid unless signed by an authorised representative of Groundsure.

12.4 No failure on the part of Groundsure to exercise, and no delay in exercising, any right, power or provision under this Contract shall operate as a waiver thereof.

12.5 Save as expressly provided in this Contract, no person other than the persons set out therein shall have any right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Contract.

12.6 The Secretary of State for Business, Innovation and Skills ("BIS") or BIS' successor body, as the case may be, acting through Ordnance Survey may enforce a breach of clause 6.4(vi) and clause 6.4(vii) of these terms and conditions against the Client in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999.

12.7 Groundsure shall not be liable to the Client if the provision of the Services is delayed or prevented by one or more of the following circumstances:

- (i) the Client or Beneficiary's failure to provide facilities, access or information;
- (ii) fire, storm, flood, tempest or epidemic;
- (iii) Acts of God or the public enemy;
- (iv) riot, civil commotion or war;
- (v) strikes, labour disputes or industrial action;
- (vi) acts or regulations of any governmental or other agency;
- (vii) suspension or delay of services at public registries by Third Party Data Providers;
- (viii) changes in law; or
- (ix) any other reason beyond Groundsure's reasonable control.

In the event that Groundsure is prevented from performing the Services (or any part thereof) in accordance with this clause 12.6 for a period of not less than 30 days then Groundsure shall be entitled to terminate this Contract immediately on written notice to the Client.

12.8 Any notice provided shall be in writing and shall be deemed to be properly given if delivered by hand or sent by first class post, facsimile or by email to the address, facsimile number or email address of the relevant party as may have been notified by each party to the other for such purpose or in the absence of such notification the last known address.

12.9 Such notice shall be deemed to have been received on the day of delivery if delivered by hand, facsimile or email (save to the extent such day is not a working day where it shall be deemed to have been delivered on the next working day) and on the second working day after the day of posting if sent by first class post.

12.10 The Contract constitutes the entire agreement between the parties and shall supersede all previous arrangements between the parties relating to the subject matter hereof.

12.11 Each of the provisions of the Contract is severable and distinct from the others and if one or more provisions is or should become invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions shall not in any way be tainted or impaired.

12.12 This Contract shall be governed by and construed in accordance with English law and any proceedings arising out of or connected with this Contract shall be subject to the exclusive jurisdiction of the English courts.

12.13 Groundsure is an executive member of the Council of Property Search Organisation (CoPSO) and has signed up to the Search Code administered by the Property Codes Compliance Board (PCCB). All Risk Screening Reports shall be supplied in accordance with the provisions of the Search Code.

12.14 If the Client or Beneficiary has a complaint about the Services, written notice should be given to the Compliance Officer at Groundsure who will respond in a timely manner. In the event you are not satisfied with Groundsure's complaints handling process or you are unable to resolve the complaint, at your discretion you may refer the complaint to The Property Ombudsman Scheme at the following URL/email: website www.tpos.co.uk or email: admin@tpos.co.uk

12.15 The Client agrees that it shall, and shall procure that each Beneficiary shall, treat in confidence all Confidential Information and shall not, and shall procure that each Beneficiary shall not (i) disclose any Confidential Information to any third party other than in accordance with the terms of this Contract; and (ii) use Confidential Information for a purpose other than the exercise of its rights and obligations under this Contract. Subject to clause 6.6, nothing shall prevent the Client or any Beneficiary from disclosing Confidential Information to the extent required by law

APPENDIX 2

HISTORICAL MAPS

Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: County Series

Map date: 1848

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1845
Revised N/A
Edition 1848
Copyright N/A
Levelled N/A

Surveyed 1845
Revised N/A
Edition 1848
Copyright N/A
Levelled N/A

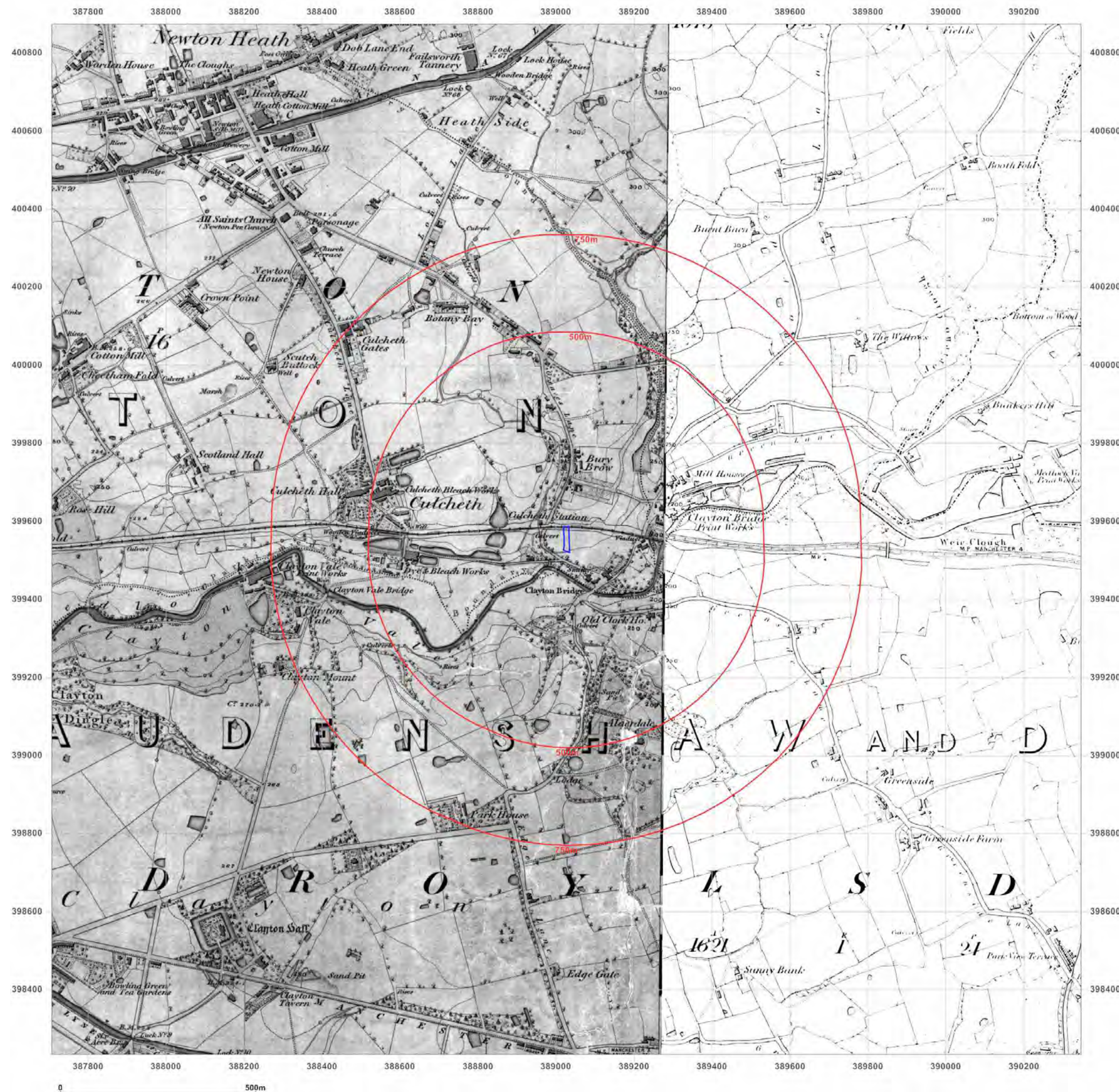


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Production date: 16 February 2016

To view map legend click here [Legend](#)



Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: County Series

Map date: 1890-1892

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1891
Revised 1891
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1890
Revised 1890
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1892
Revised 1892
Edition N/A
Copyright N/A
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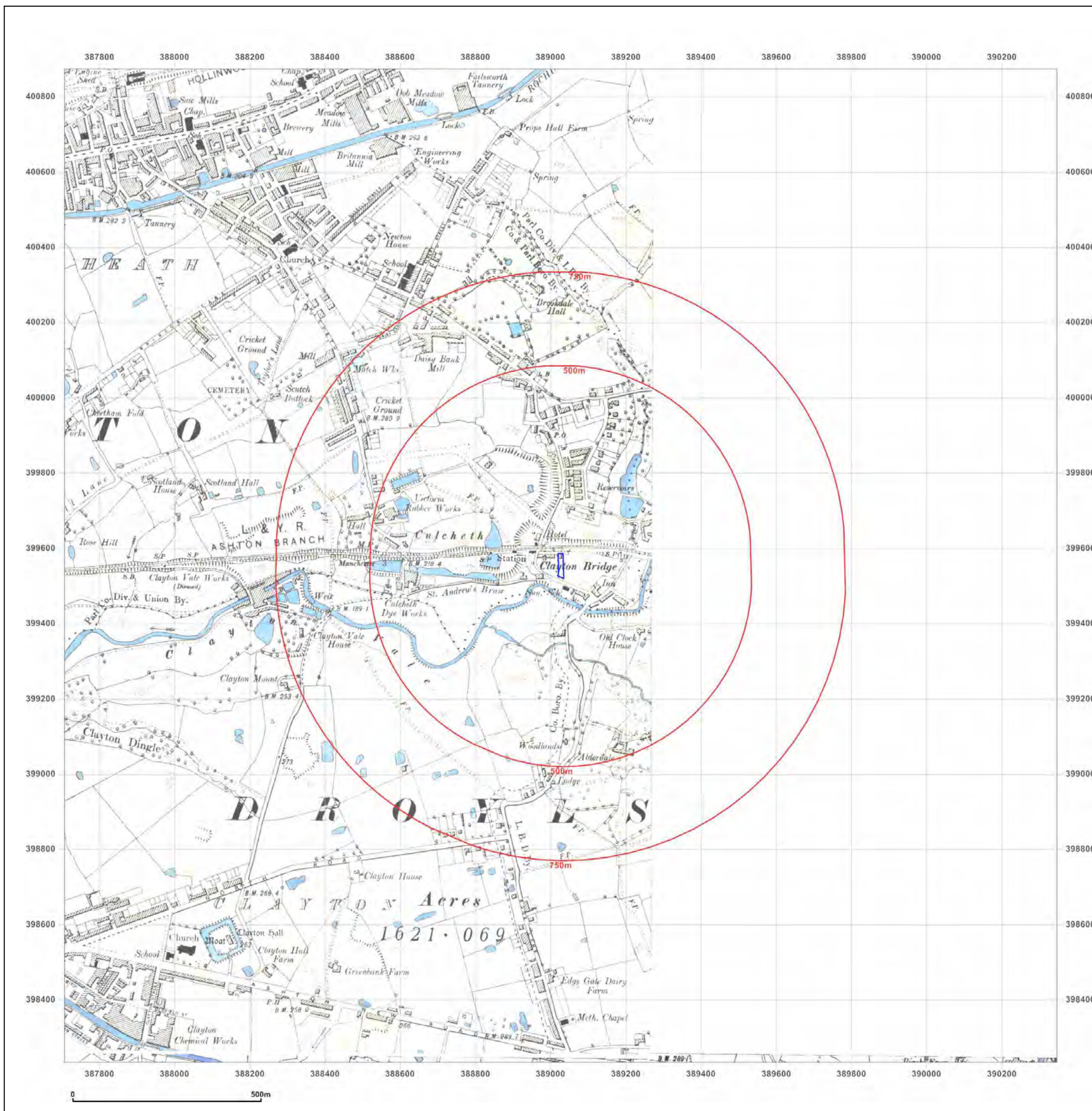


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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: County Series

Map date: 1905-1906

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1906
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1906
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1905
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Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1906
Edition N/A
Copyright N/A
Levelled N/A

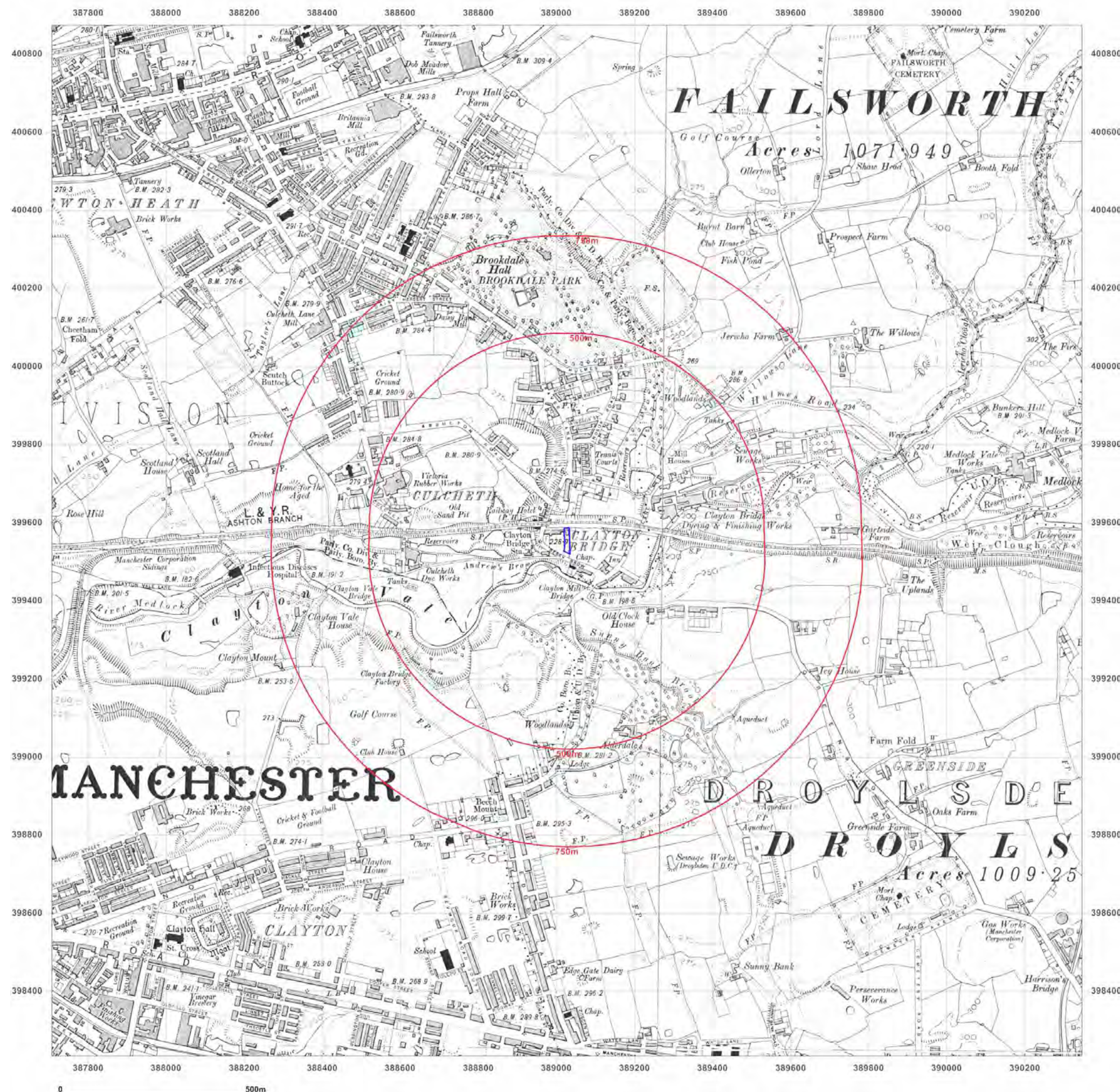


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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: County Series

Map date: 1915-1918

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844 Revised 1916 Edition N/A Copyright N/A Levelled N/A		Surveyed 1844 Revised 1918 Edition N/A Copyright N/A Levelled N/A
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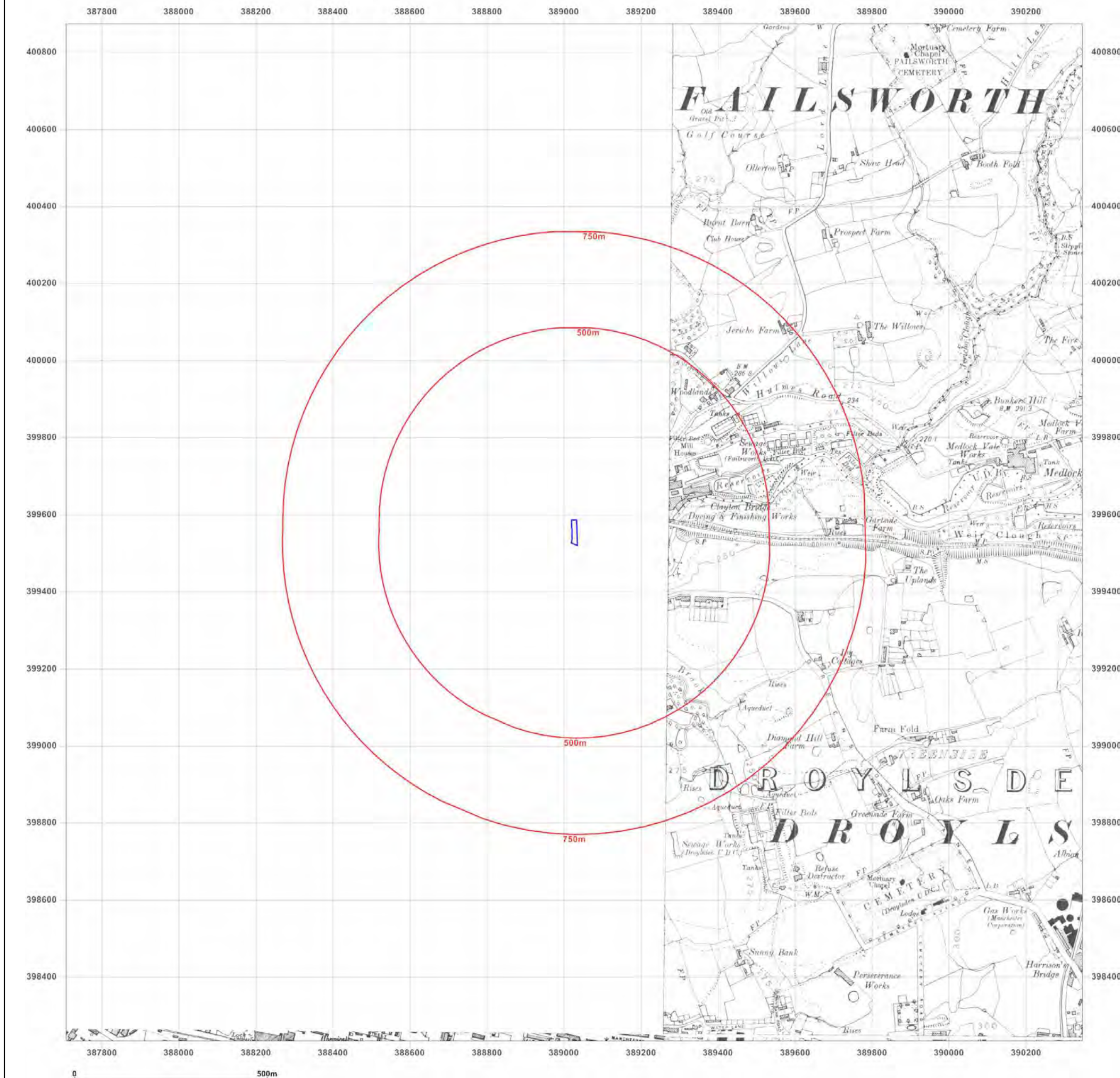


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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: County Series

Map date: 1921-1923

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1923
Edition N/A
Copyright N/A
Levelled N/A

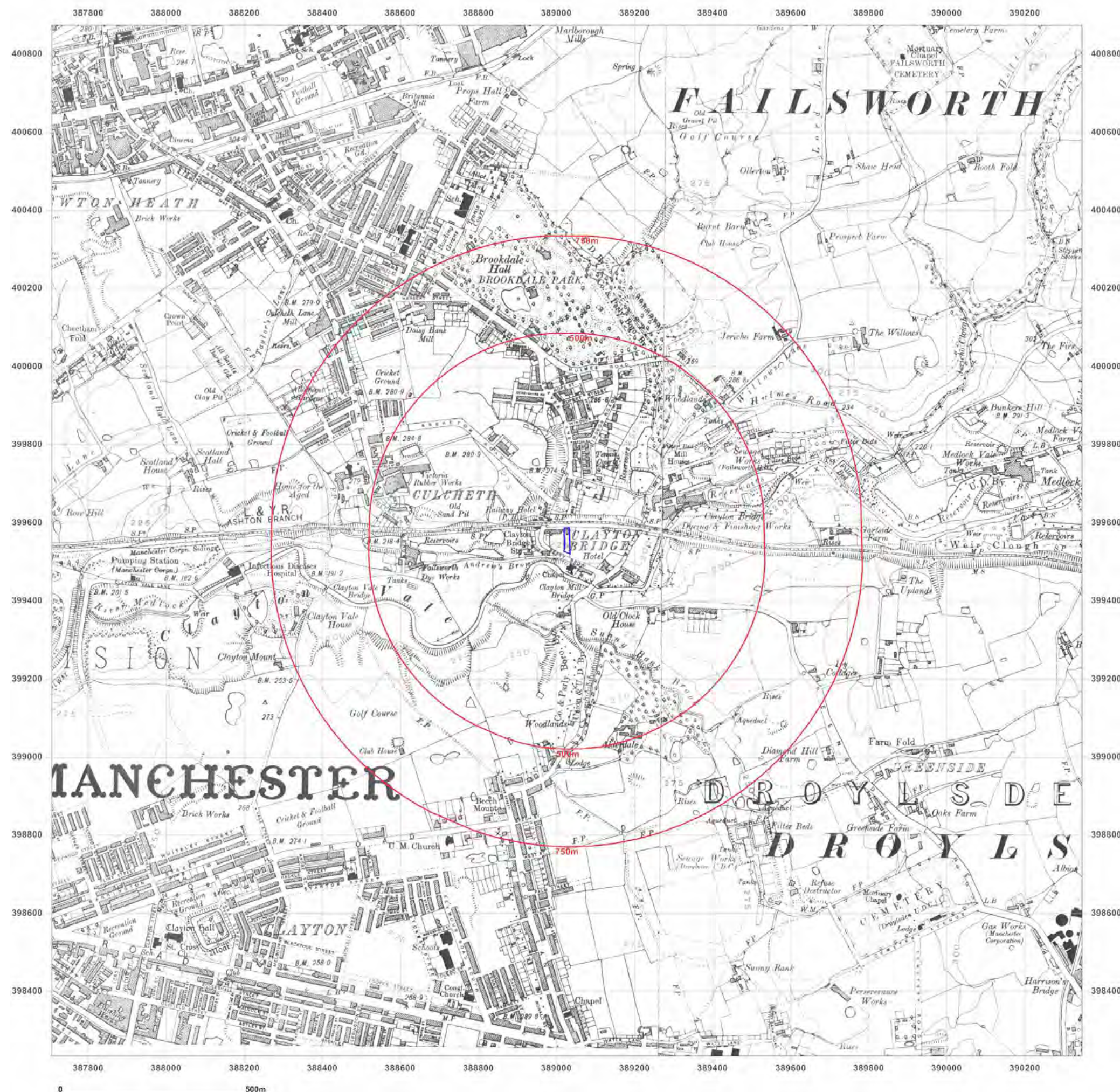


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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: County Series

Map date: 1933-1934

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1933
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1933
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1934
Edition N/A
Copyright N/A
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Surveyed 1844
Revised 1934
Edition N/A
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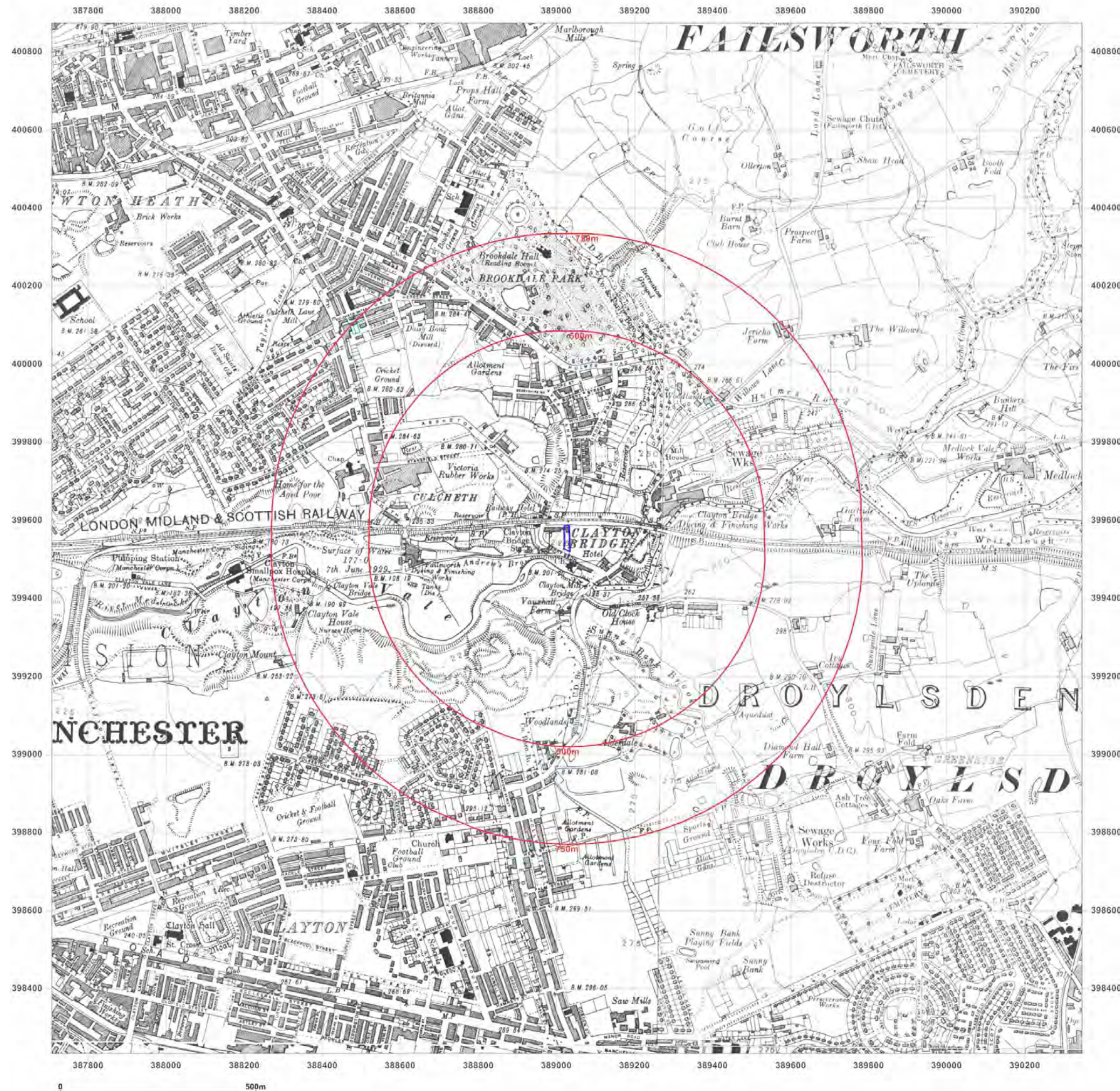


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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: County Series

Map date: 1934-1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1938
Edition N/A
Copyright N/A
Levelled 1929

Surveyed 1844
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1934
Edition N/A
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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: Provisional

Map date: 1954-1956

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1956
Revised 1956
Edition N/A
Copyright N/A
Levelled N/A

Surveyed N/A
Revised 1955
Edition 1956
Copyright N/A
Levelled N/A

Surveyed 1956
Revised 1956
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Copyright N/A
Levelled N/A

Surveyed N/A
Revised 1954
Edition N/A
Copyright 1954
Levelled N/A

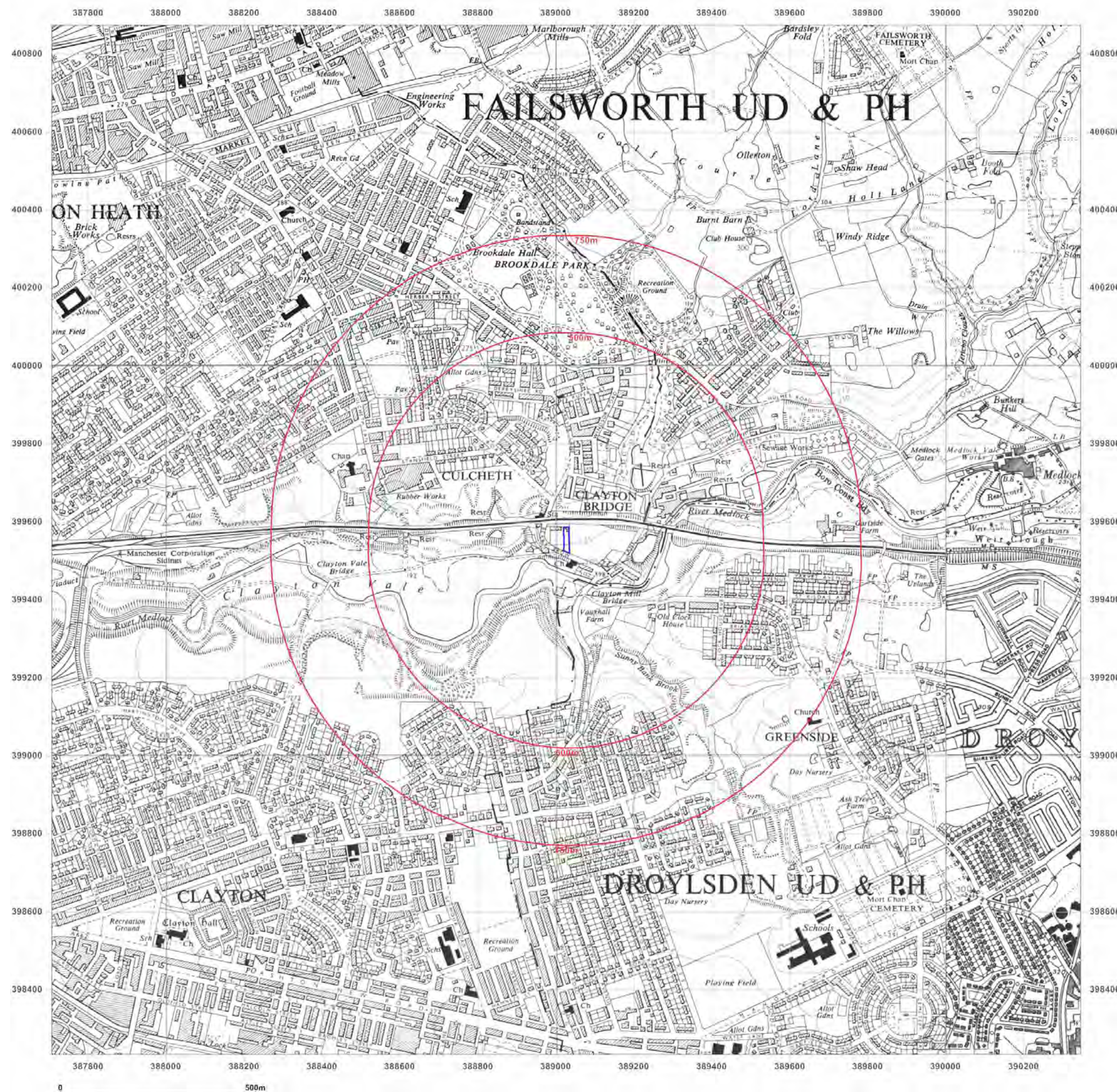


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Production date: 16 February 2016

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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: Provisional

Map date: 1965-1968

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1966
Revised 1966
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1967
Revised 1967
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1968
Revised 1968
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1960
Revised 1965
Edition N/A
Copyright N/A
Levelled N/A

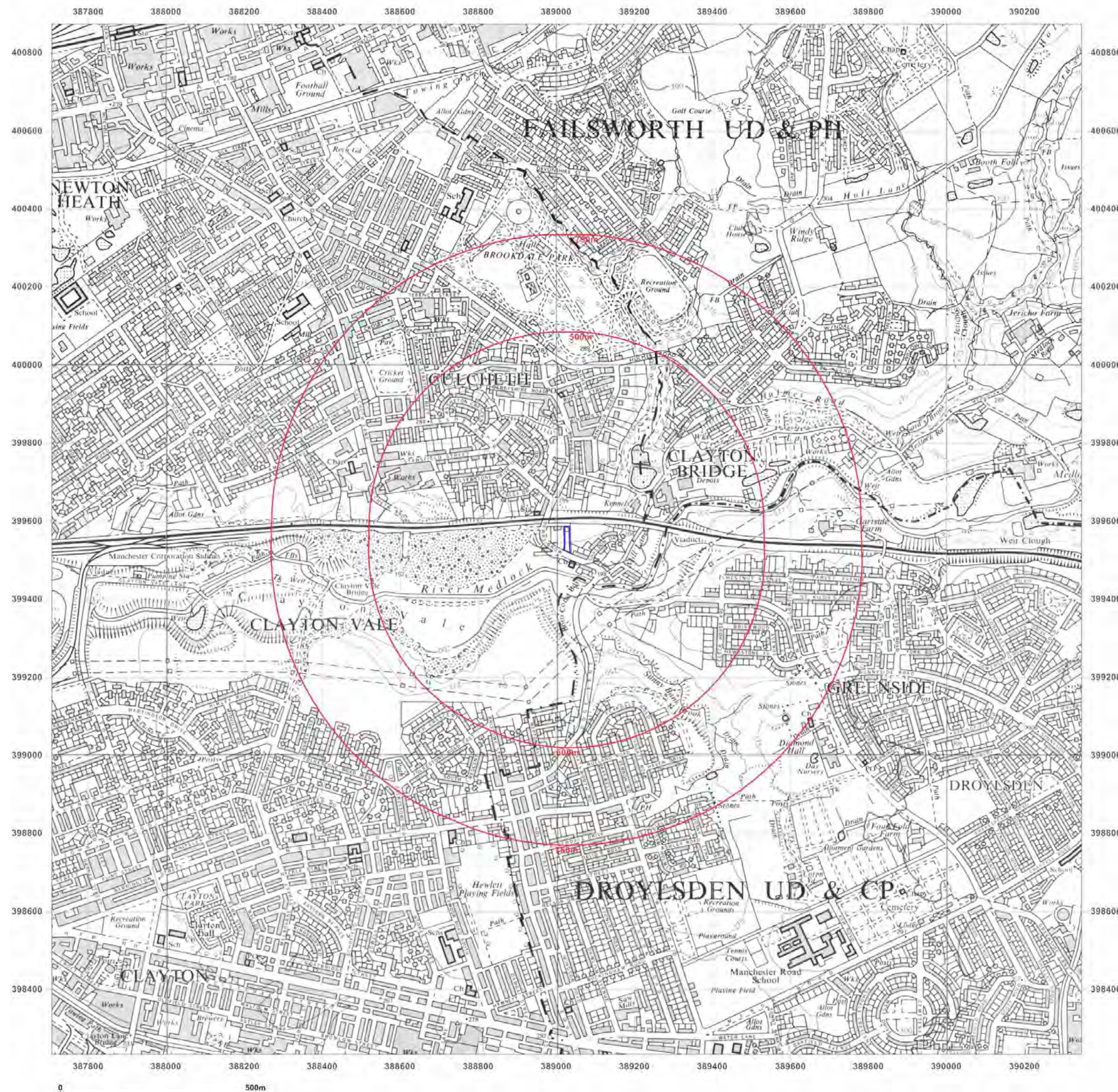


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Site Details:

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MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 1973-1975

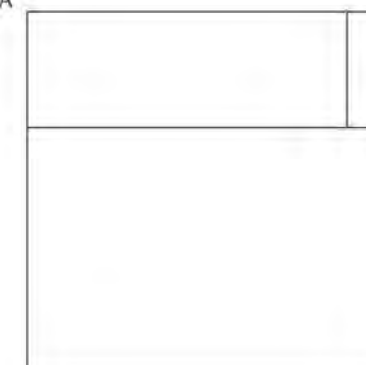
Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1975
Revised 1975
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1973
Revised 1973
Edition N/A
Copyright N/A
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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 1980-1982

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1980
Revised 1980
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1980
Revised 1981
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1978
Revised 1980
Edition N/A
Copyright 1981
Levelled 1976

Surveyed 1979
Revised 1982
Edition N/A
Copyright 1982
Levelled 1977

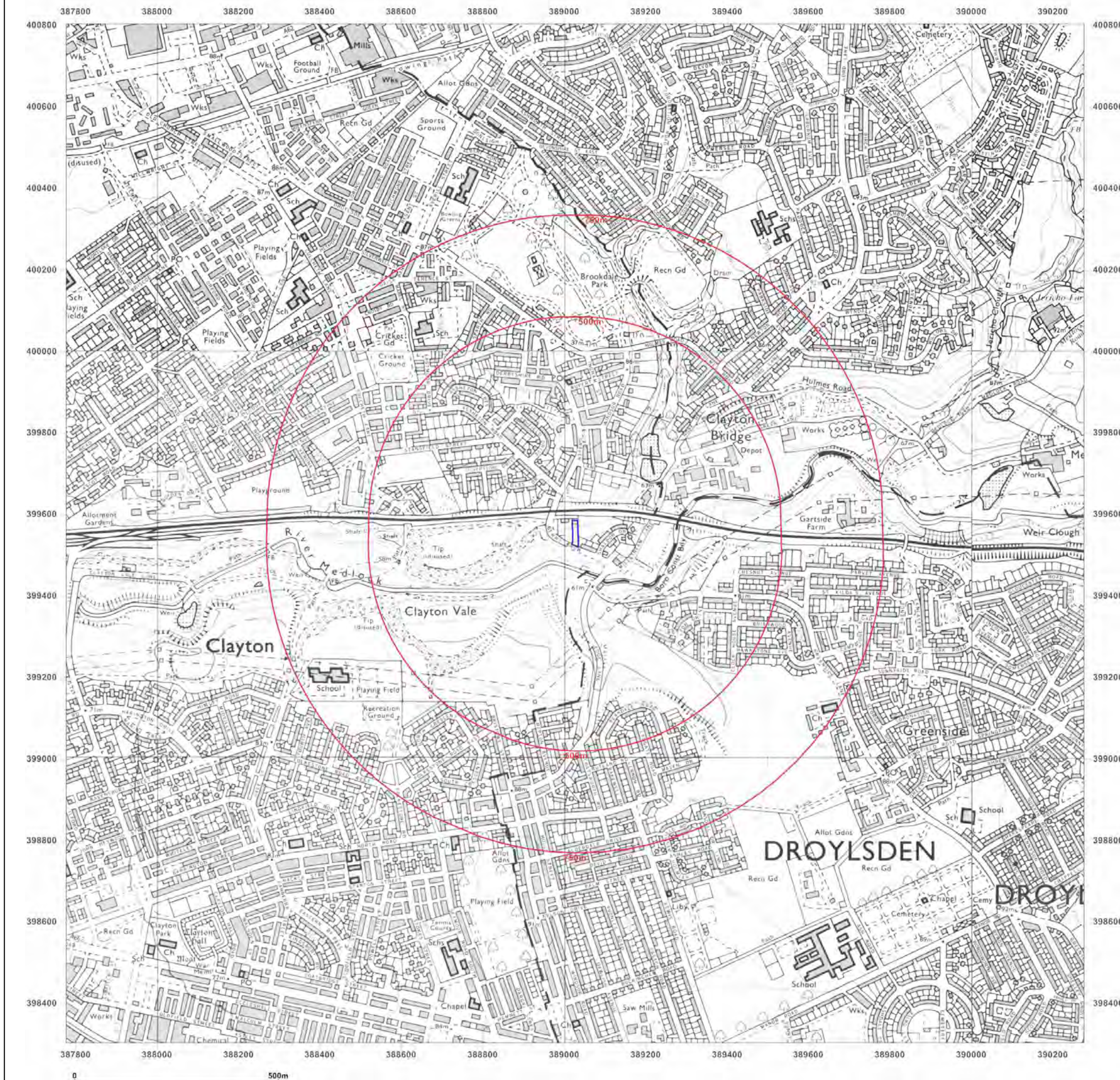


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Site Details:

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Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 1991

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1985
Revised 1991
Edition N/A
Copyright N/A
Levelled N/A

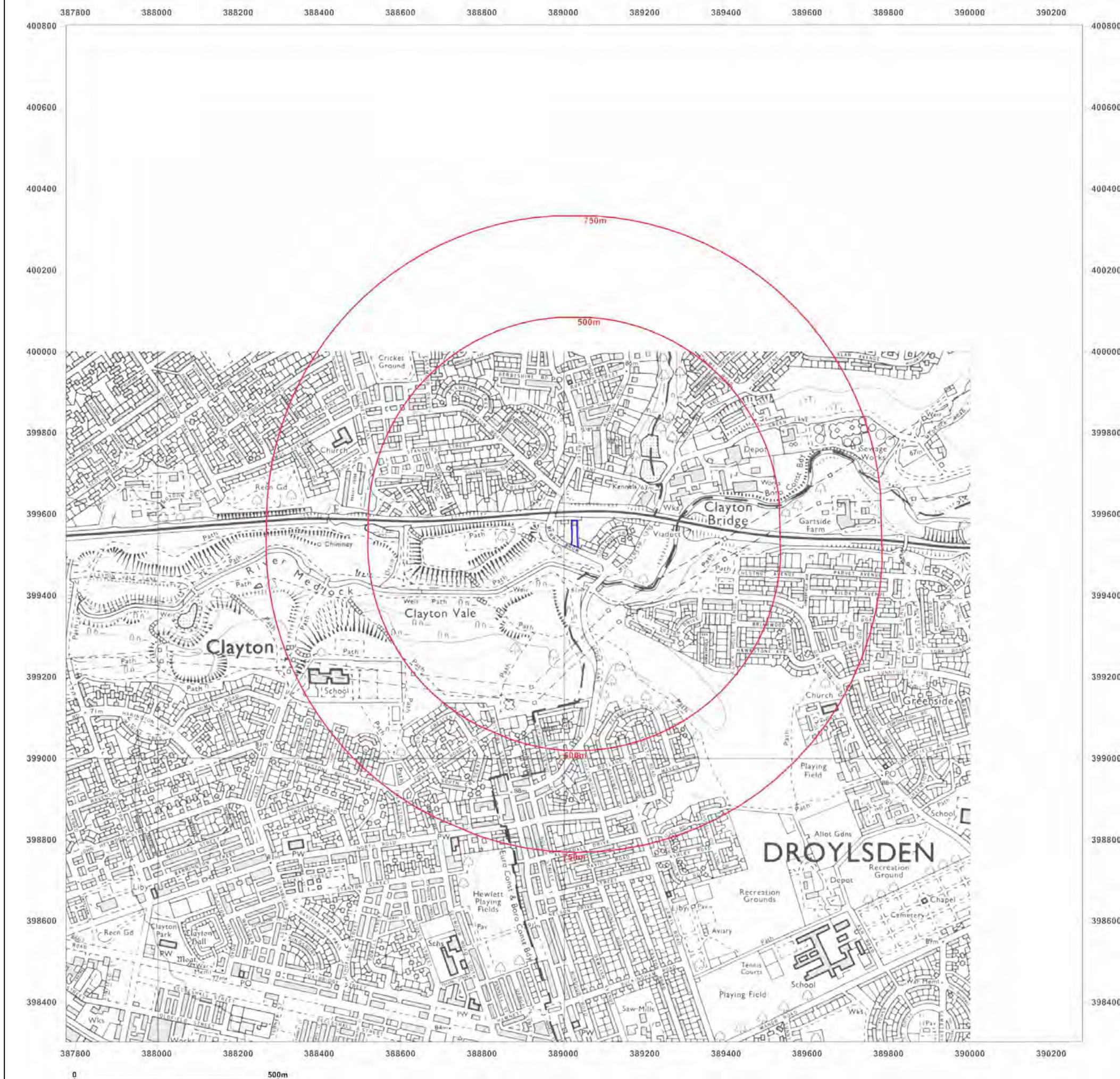


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Production date: 16 February 2016

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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000



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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

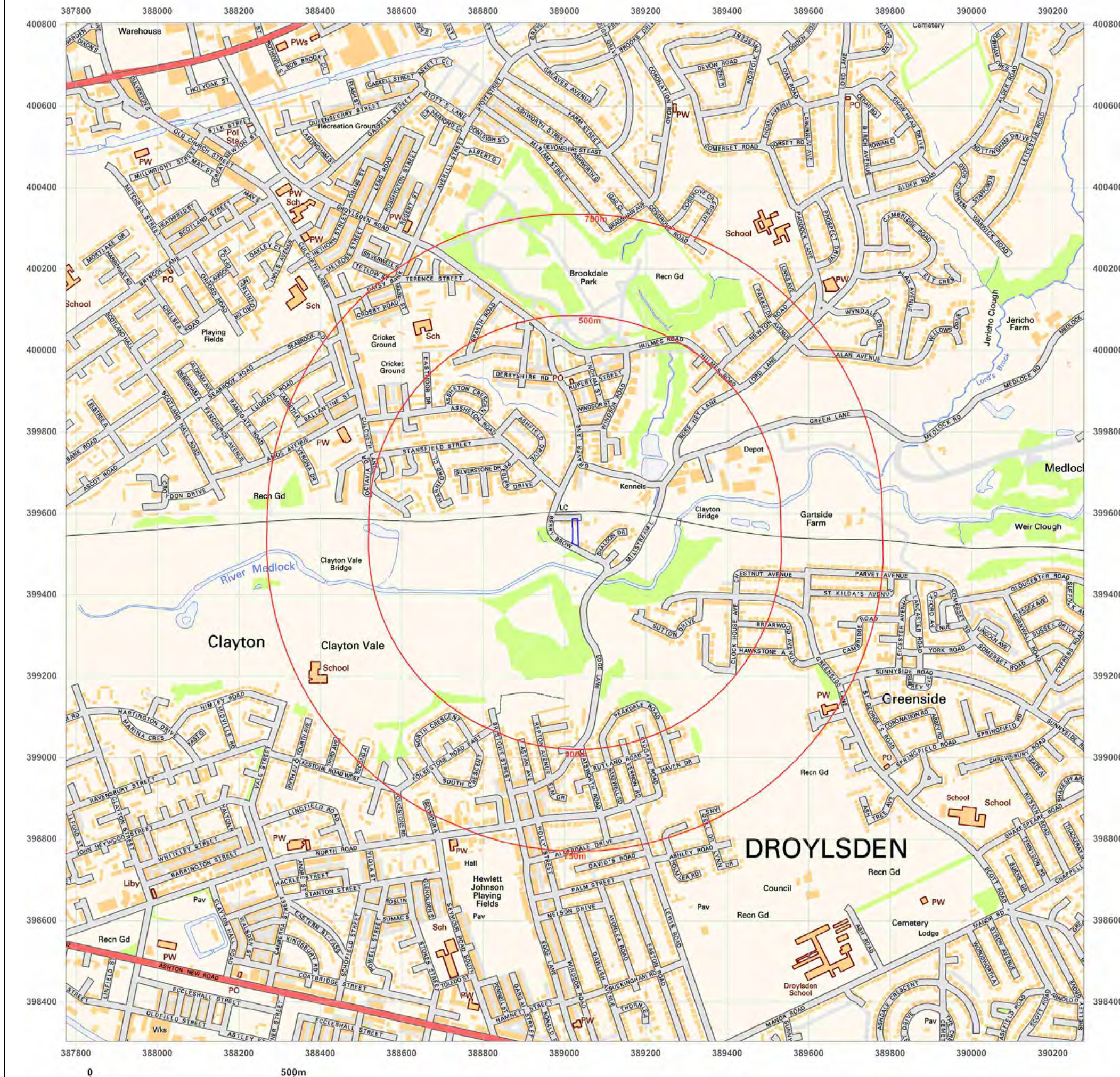


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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 2014

Scale: 1:10,000

Printed at: 1:10,000

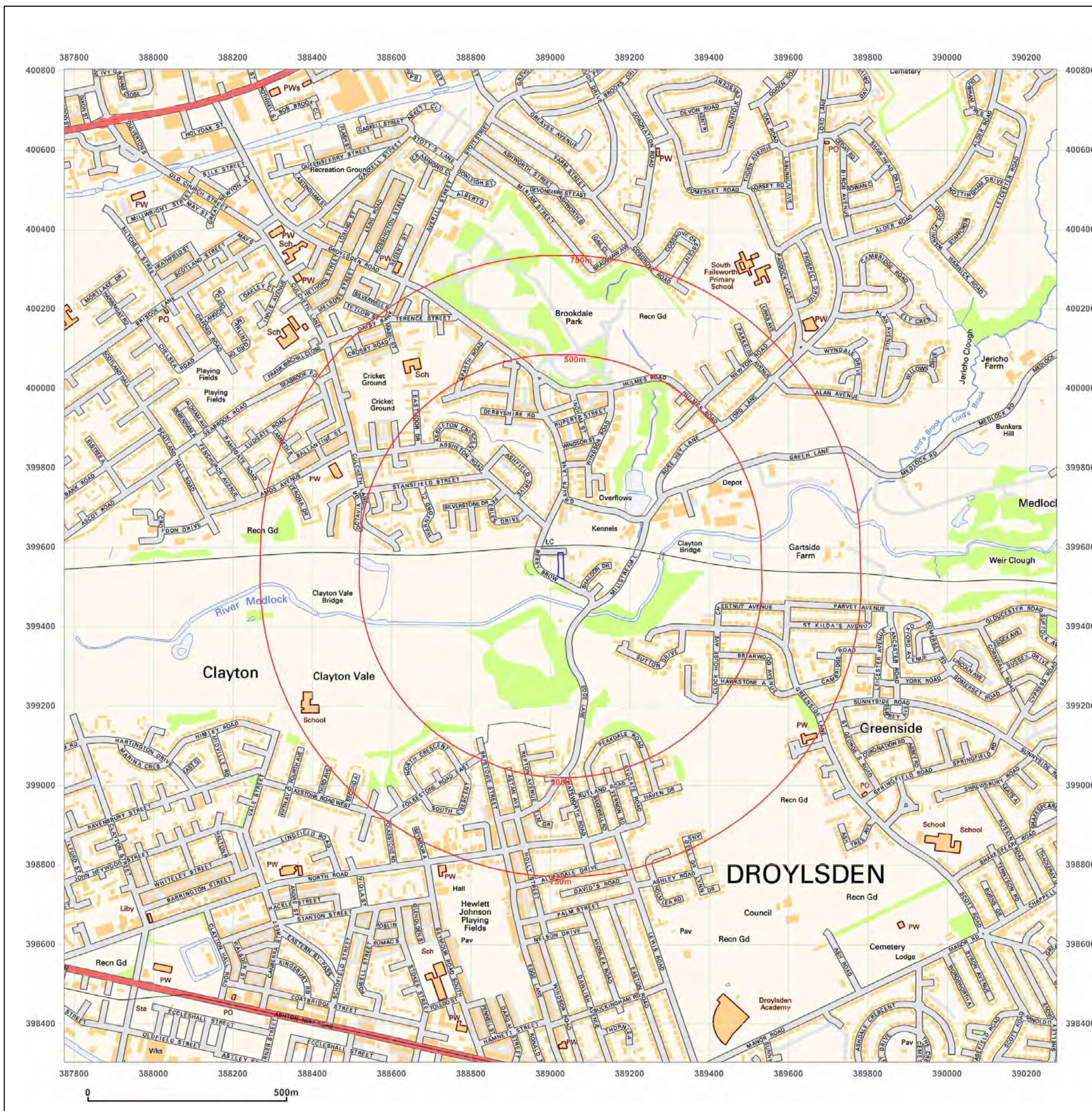


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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: County Series

Map date: 1893-1894

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1893
Revised 1893
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1894
Revised 1894
Edition N/A
Copyright N/A
Levelled N/A

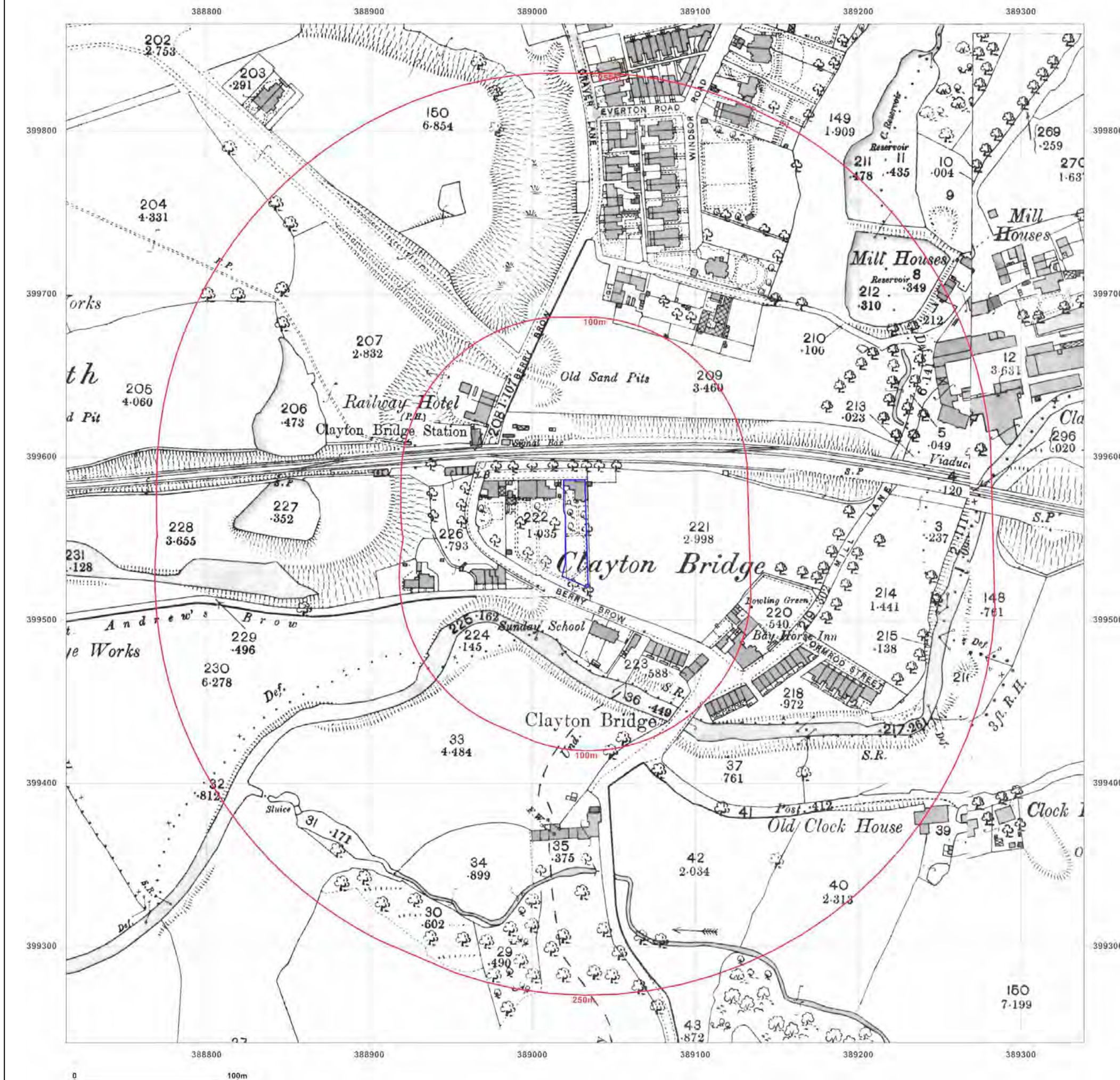


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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: County Series

Map date: 1908

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1908
Revised 1908
Edition N/A
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Site Details:

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Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: County Series

Map date: 1922

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1922
Revised 1922
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1922
Revised 1922
Edition N/A
Copyright N/A
Levelled N/A

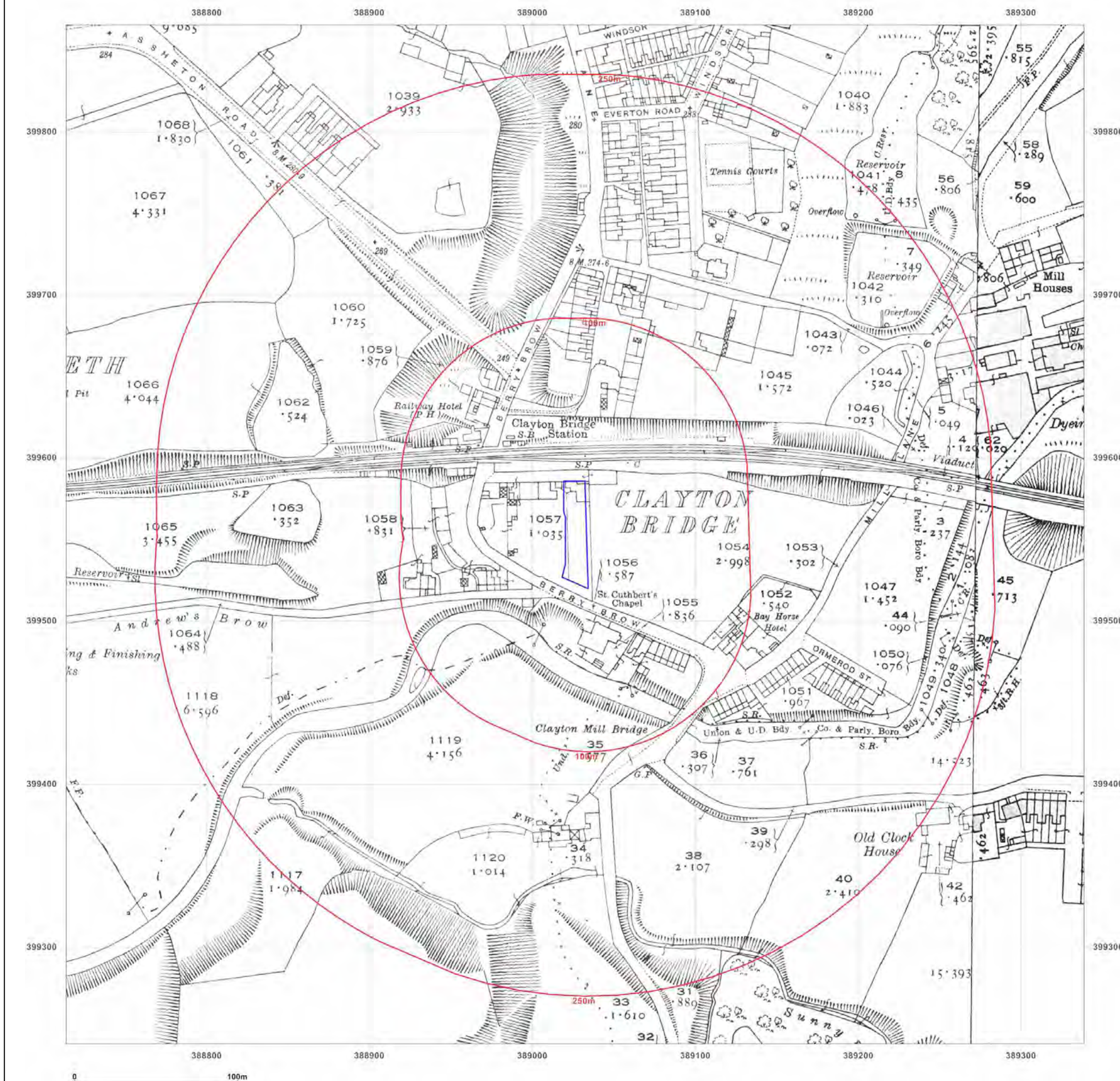


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Production date: 16 February 2016

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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: County Series

Map date: 1931-1932

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1931
Revised 1931
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1932
Revised 1932
Edition N/A
Copyright N/A
Levelled N/A

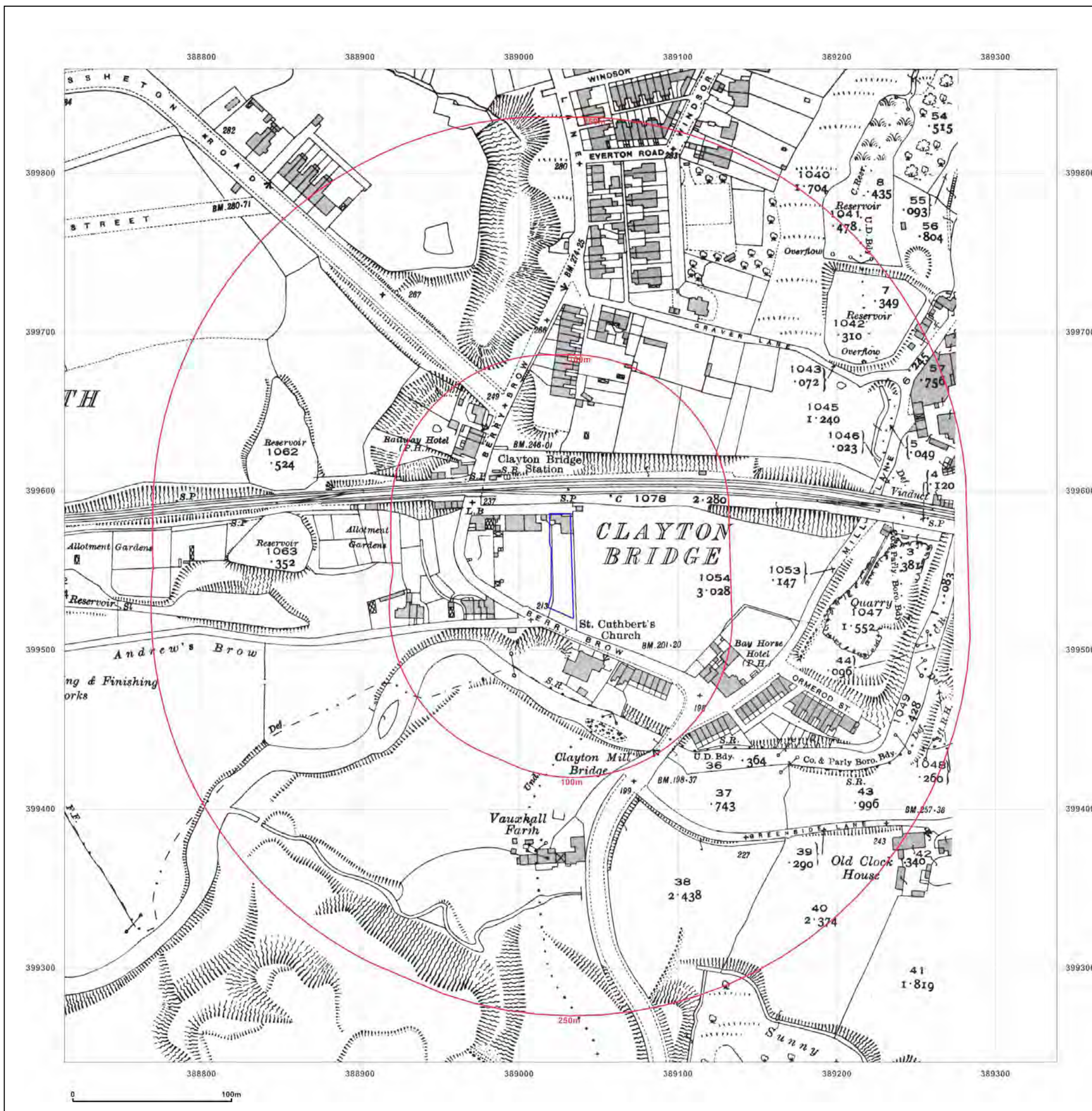


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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 1950

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1950
Revised 1950
Edition N/A
Copyright N/A
Levelled 1929

Surveyed 1950
Revised 1950
Edition N/A
Copyright N/A
Levelled 1948

Surveyed 1950
Revised N/A
Edition N/A
Copyright N/A
Levelled 1958

Surveyed 1950
Revised 1950
Edition N/A
Copyright N/A
Levelled 1948

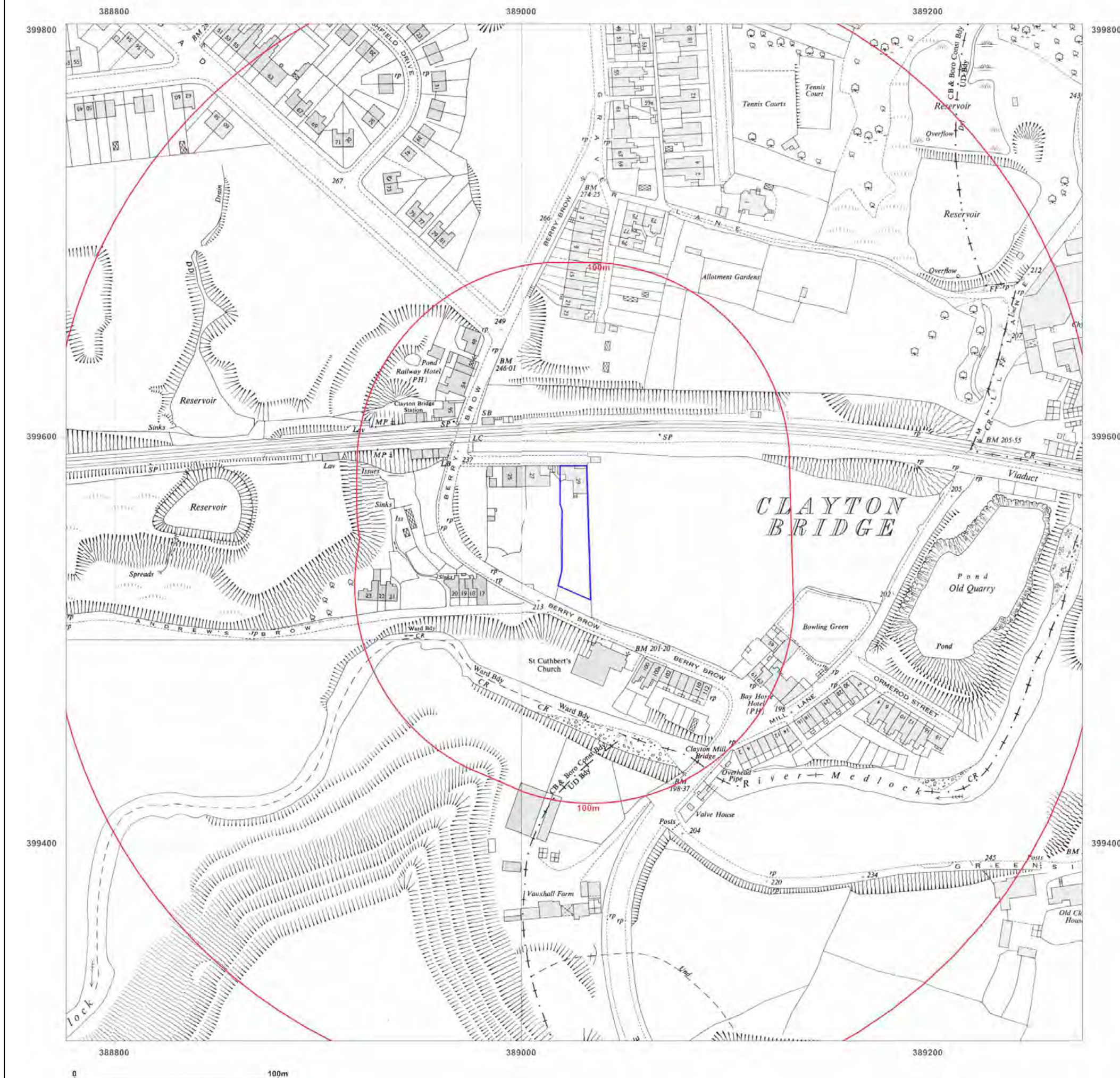


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Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 1950-1951

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1950
Revised 1950
Edition N/A
Copyright N/A
Levelled 1948

Surveyed 1951
Revised 1951
Edition N/A
Copyright N/A
Levelled 1948

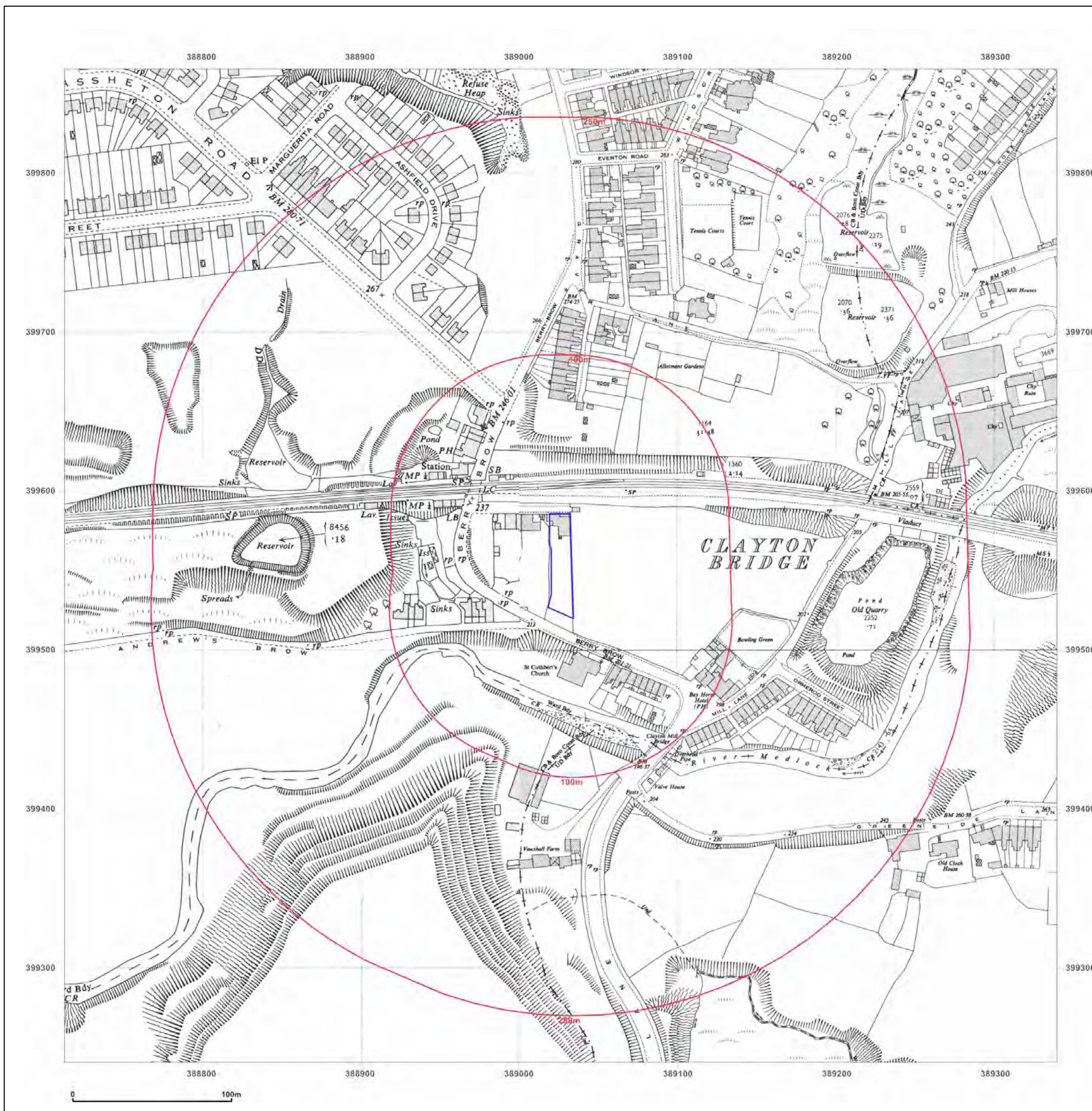


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Site Details:

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Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 1959

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1959
Revised 1959
Edition 1961
Copyright 1961
Levelled 1948



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Site Details:

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Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 1965

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1985
Revised 1965
Edition N/A
Copyright 1967
Levelled 1964

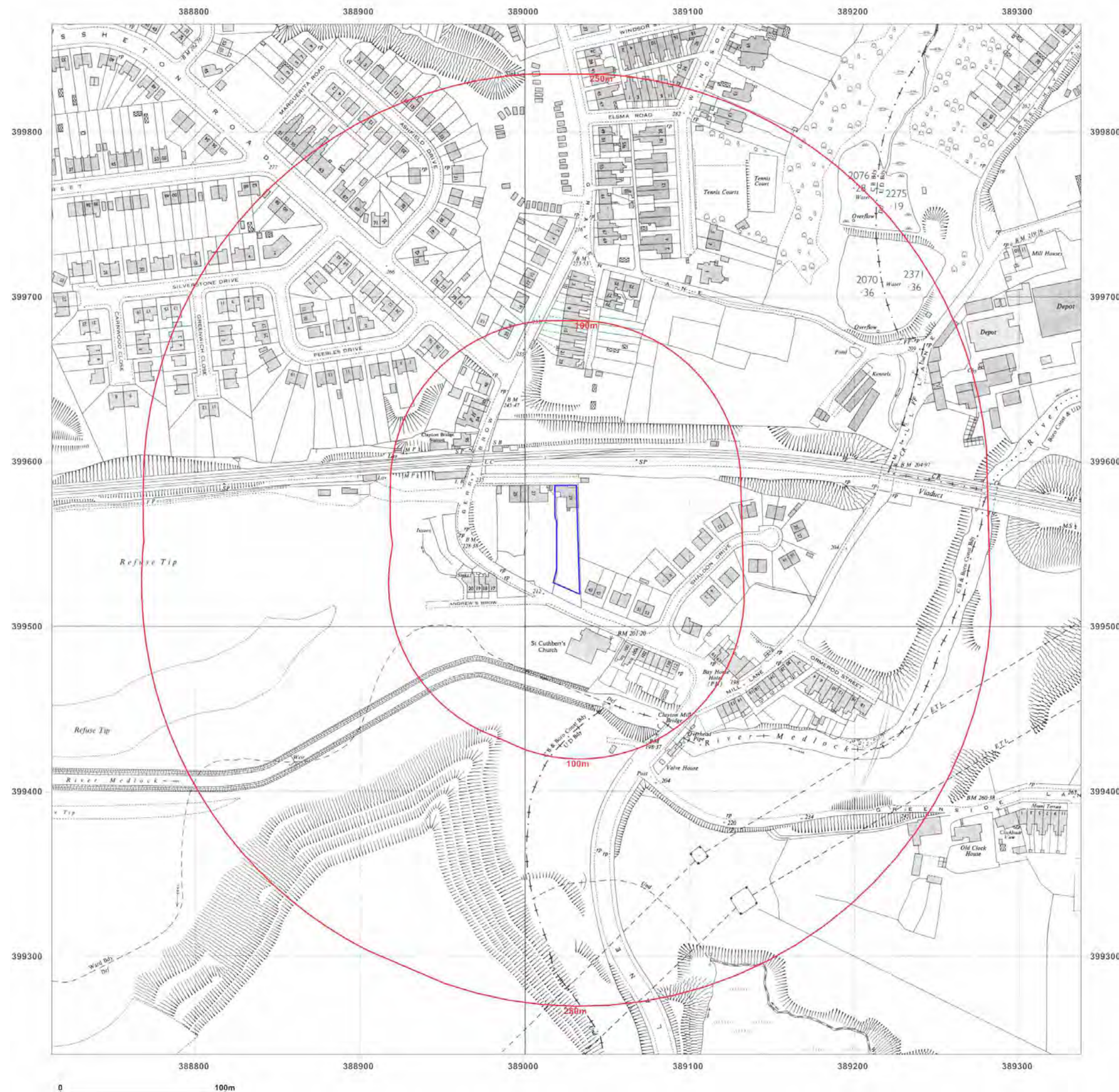


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Site Details:

29, BERRY BROW,
MANCHESTER, M40 1GR

Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 1963-1968

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1963
Revised 1963
Edition N/A
Copyright 1963
Levelled 1959

Surveyed 1950
Revised 1963
Edition N/A
Copyright 1964
Levelled 1959

Surveyed 1950
Revised 1965
Edition N/A
Copyright 1966
Levelled 1964

Surveyed 1950
Revised 1968
Edition N/A
Copyright 1968
Levelled 1964

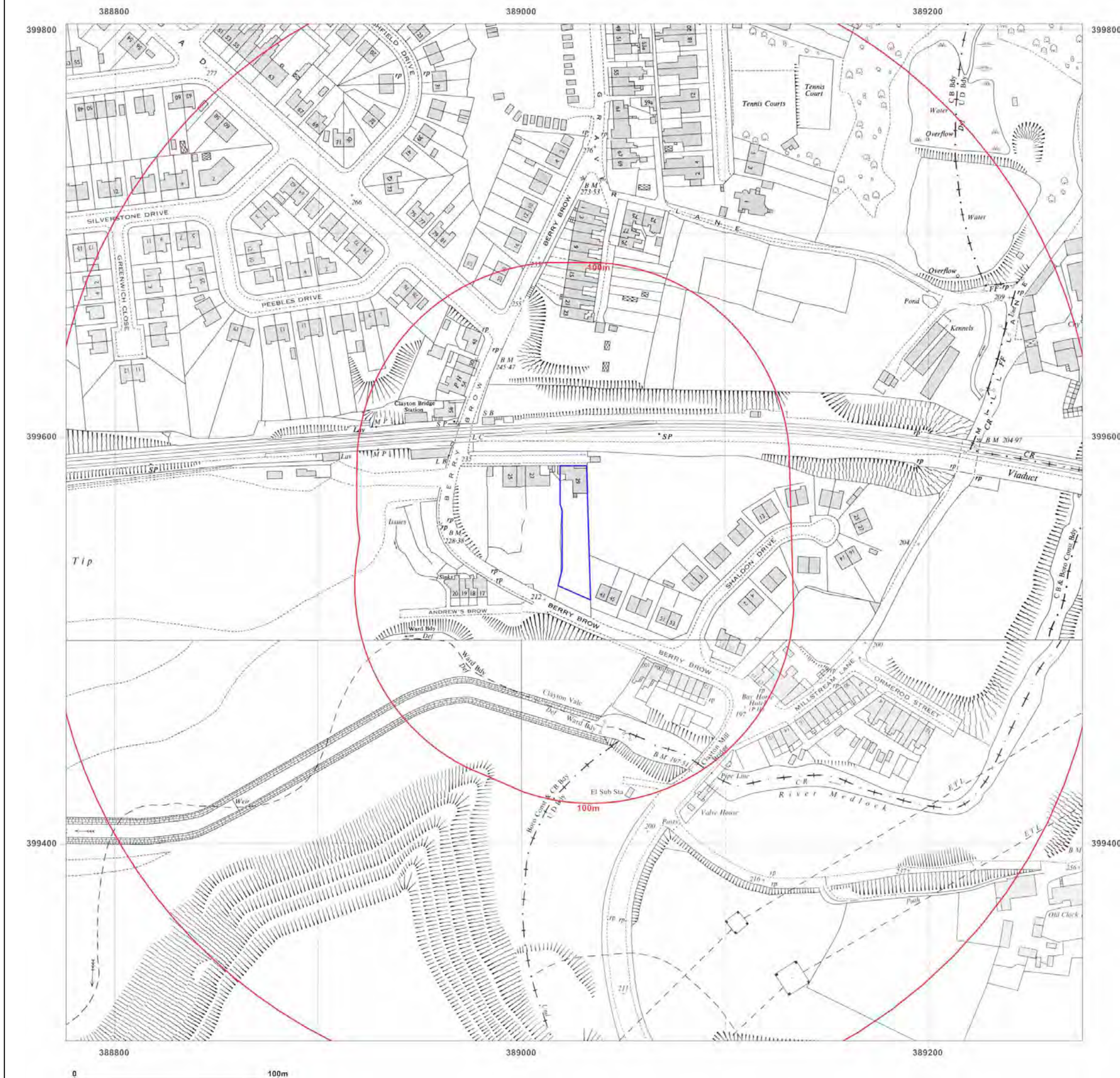


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Site Details:

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Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 1975-1980

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1950
Revised 1975
Edition N/A
Copyright 1975
Levelled 1964

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1980
Levelled 1964

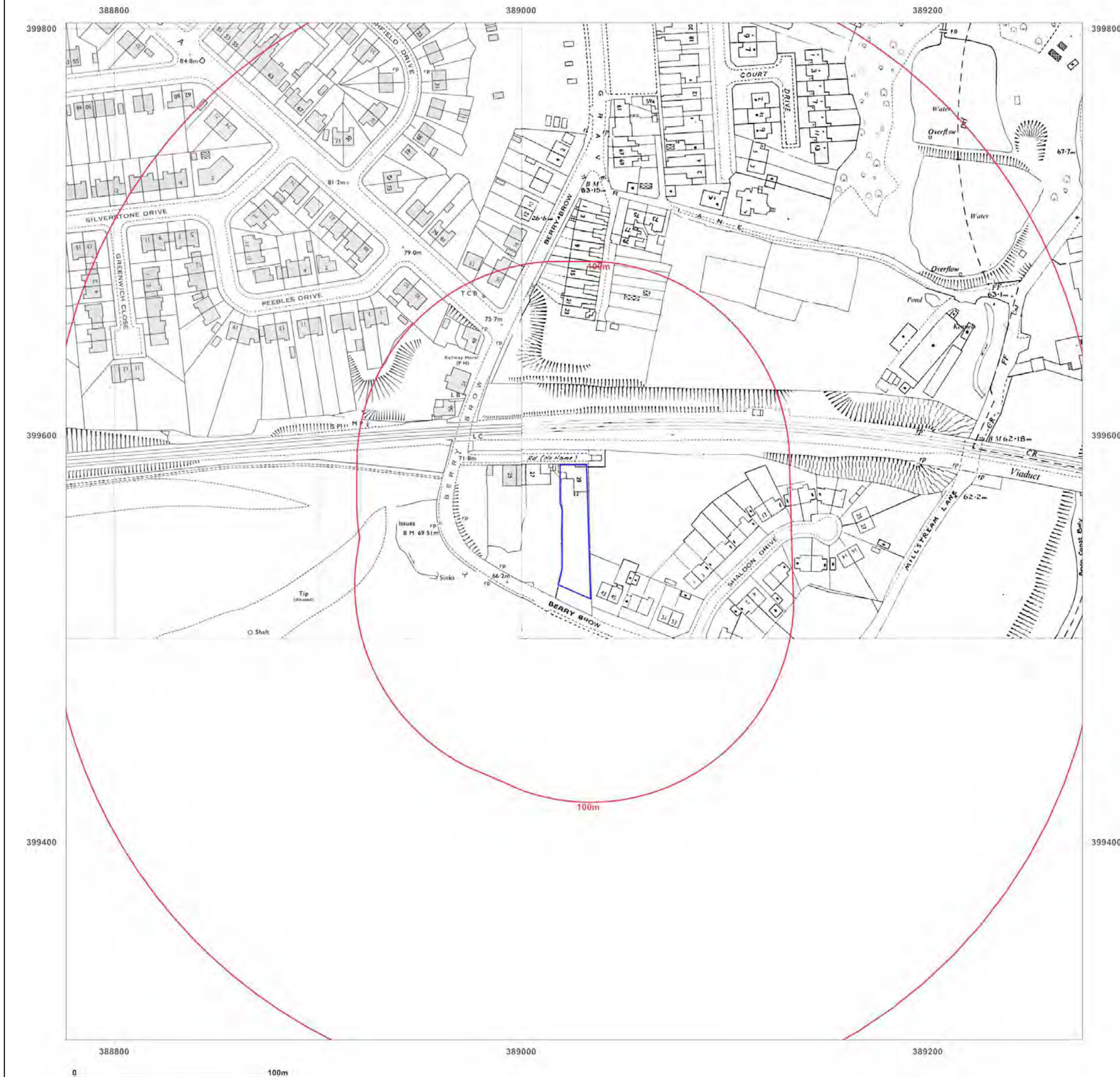


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Site Details:

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Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 1982-1985

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1964
Revised 1984
Edition N/A
Copyright 1984
Levelled 1964

Surveyed 1964
Revised 1985
Edition N/A
Copyright 1985
Levelled 1964

Surveyed 1964
Revised 1984
Edition N/A
Copyright 1984
Levelled 1964

Surveyed 1964
Revised 1982
Edition N/A
Copyright 1982
Levelled 1964

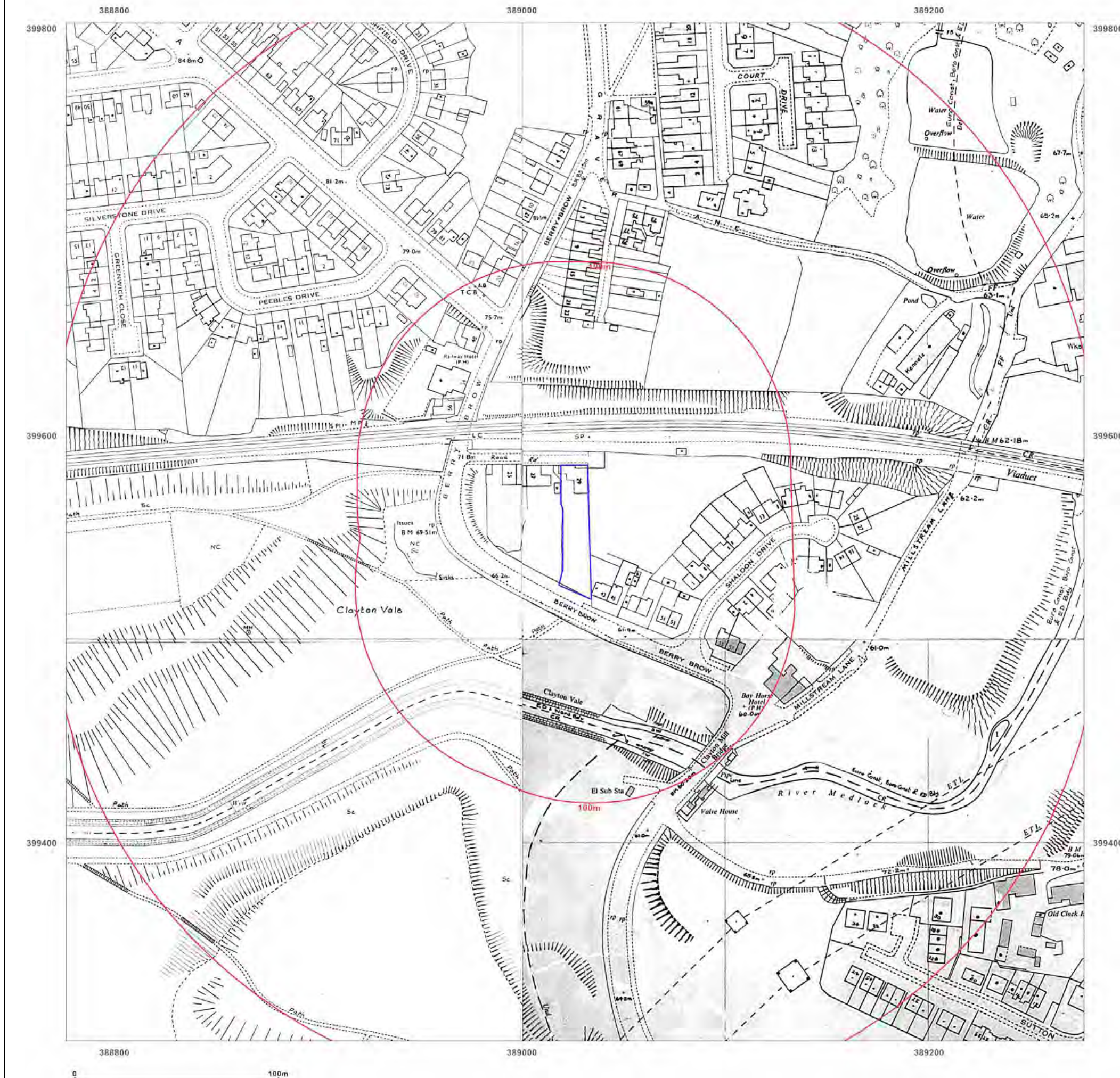


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Site Details:

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Client Ref: J3408_16_EDS
Report Ref: GS-2751756
Grid Ref: 389026, 399553

Map Name: National Grid

Map date: 1991-1992

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1992
Revised 1992
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1950
Revised 1963
Edition N/A
Copyright 1991
Levelled N/A

Surveyed 1992
Revised 1992
Edition N/A
Copyright N/A
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1992
Levelled N/A



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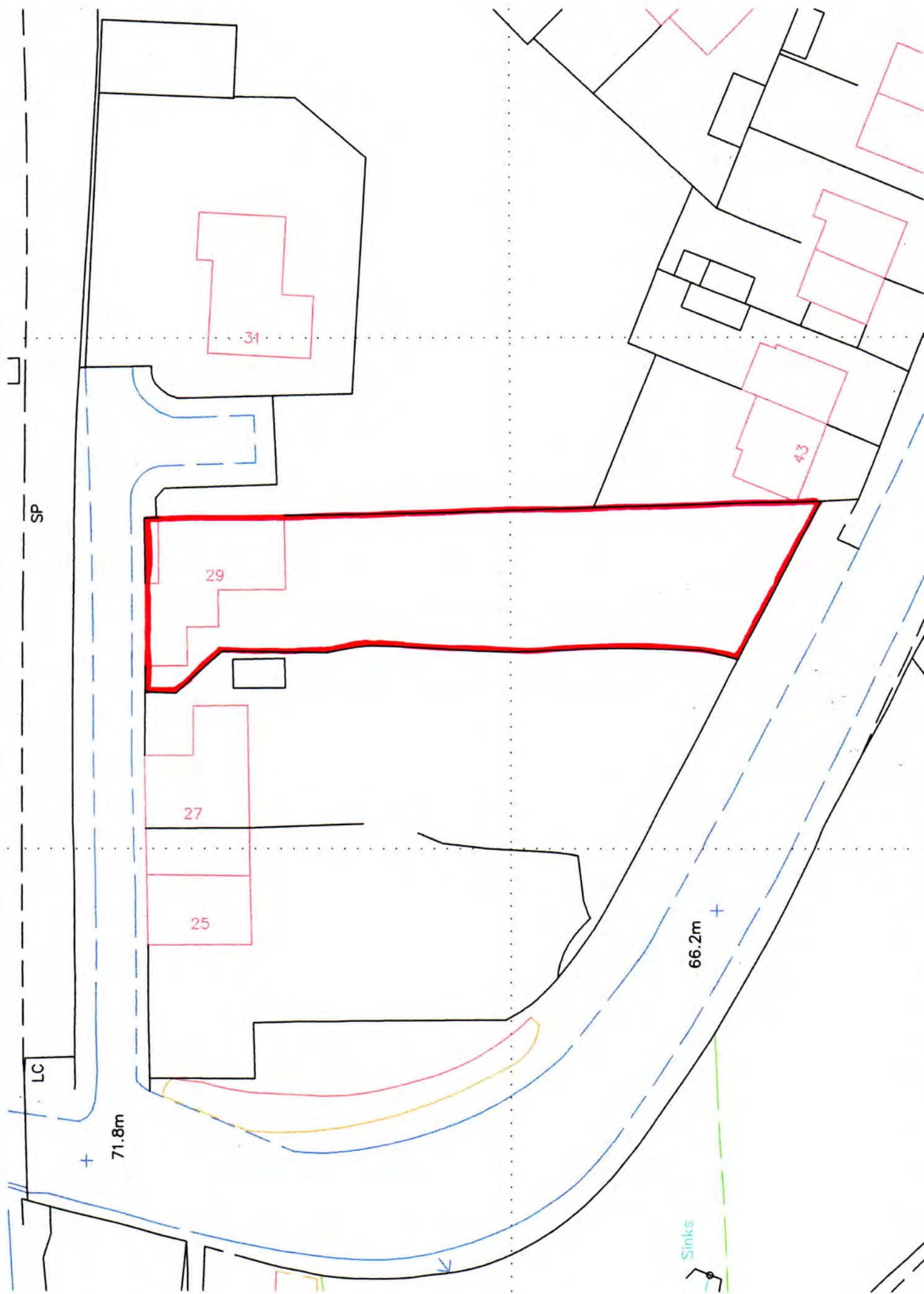
Production date: 16 February 2016

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APPENDIX 3

SITE PLANS



APPENDIX 4

PHOTOGRAPHS



Rogers
Geotechnical
Services Ltd

Project Name:

29 Berry Brow, Manchester

Project Number:

J3408/16/EDS



Rogers
Geotechnical
Services Ltd

Project Name:
29 Berry Brow, Manchester

Project Number:
J3408/16/EDS



Rogers
Geotechnical
Services Ltd

Project Name:
29 Berry Brow, Manchester

Project Number:
J3408/16/EDS



Rogers
Geotechnical
Services Ltd

Project Name:
29 Berry Brow, Manchester

Project Number:
J3408/16/EDS

APPENDIX 5

COAL MINING REPORT

Issued by:

The Coal Authority, Property Search Services, 200 Lichfield Lane, Berry Hill, Mansfield, Nottinghamshire, NG18 4RG
Website: www.groundstability.com Phone: 0345 762 6848

EMMA SUZANNE LEWIS
BARNCLIFFE MILLS
NEAR BANK
HUDDERSFIELD
HD8 8LU

Our reference: **51001104441001**
Your reference: **J3408/16/EDS**
Date of your enquiry: **18 February 2016**
Date we received your enquiry: **18 February 2016**
Date of issue: **18 February 2016**

This report is for the property described in the address below and the attached plan.

Non-Residential Coal Authority Mining Report

29 BERRY BROW, MANCHESTER, M40 1GR

This report is based on and limited to the records held by, the Coal Authority, and the Cheshire Brine Subsidence Compensation Board's records, at the time we answer the search.

Coal mining	See comments below
Brine Compensation District	No

Information from the Coal Authority

Underground coal mining

Past

The property is in the likely zone of influence from workings in 3 seams of coal at 780m to 1030m depth, and last worked in 1968.

Any ground movement from these coal workings should have stopped by now.

Present

The property is not in the likely zone of influence of any present underground coal workings.

Future

The property is not in an area for which the Coal Authority is determining whether to grant a licence to remove coal using underground methods.

The property is not in an area for which a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area that is likely to be affected at the surface from any planned future workings.

However, reserves of coal exist in the local area which could be worked at some time in the future.

No notice of the risk of the land being affected by subsidence has been given under section 46 of the Coal Mining Subsidence Act 1991.

Mine entries

There are no known coal mine entries within, or within 20 metres of, the boundary of the property.

Coal mining geology

The Authority is not aware of any evidence of damage arising due to geological faults or other lines of weakness that have been affected by coal mining.

Opencast coal mining**Past**

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

Present

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

Future

The property is not within 800 metres of the boundary of an opencast site for which the Coal Authority is determining whether to grant a licence to remove coal by opencast methods.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres, since 31st October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

There is no record of a mine gas emission requiring action by the Coal Authority within the boundary of the property.

Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Authority, under its Emergency Surface Hazard Call Out procedures.

Withdrawal of support

The property is in an area for which a notice of entitlement to withdraw support was published in 1955.

The property is not in an area for which a notice has been given under section 41 of the Coal Industry Act 1994, revoking the entitlement to withdraw support.

Working facilities orders

The property is not in an area for which an Order has been made under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

Payments to owners of former copyhold land

The property is not in an area for which a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

Additional Remarks

Information provided by the Coal Authority in this report is compiled in response to the Law Society's Con29M Coal Mining and Brine Subsidence Claim enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL. Please note that Brine Subsidence Claim enquiries are only relevant for England and Wales. This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority and Cheshire Brine Board's Terms and Conditions applicable at the time the report was produced.

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Issued by:	The Coal Authority, 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG
Tax Point Date:	18 February 2016
Issued to:	EMMA SUZANNE LEWIS BARNCLIFFE MILLS NEAR BANK HUDDERSFIELD HD8 8LU
Property Search for:	29 BERRY BROW, MANCHESTER, M40 1GR
Reference Number:	51001104441001
Date of Issue:	18 February 2016
Cost:	£59.00
VAT @ 20%:	£11.80
Total Received:	£70.80
VAT Registration	598 5850 68

Location map



Approximate position of property



Enquiry boundary

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Key

Approximate position of enquiry boundary shown

