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## **DESK STUDY WITH WALKOVER SURVEY**

**AT  
NORMAN ROAD,  
ROCHDALE,  
GREATER MANCHESTER**

**PREPARED FOR  
SHEHZAD SULEMAN**

**REPORT NO. 7569  
SEPTEMBER 2022**

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## EXECUTIVE SUMMARY

This executive summary is a brief summary only and should be read in conjunction with the full report.

| Section                                                                                                           | Subject                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Site Details</b>                                                                                               | Site Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Norman Road, Rochdale, Greater Manchester                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                   | Grid Reference                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 388720E, 412719N                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                   | Current Land Use                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Scrap yard with MOT/repair garage in the north east.                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                                   | Proposed Development                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Remove existing infrastructure and redevelop with seven industrial units with car parking and landscaping.                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Site History</b>                                                                                               | On Site                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Collieries on/ adjacent to the site circa 1850. Cotton mill developed in the north by 1890. Works extended by 1957. Most pre-existing buildings demolished from 2010 to 2020.                                                                                                                                                                                                                                                                                              |
|                                                                                                                   | Beyond Site Boundary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Colliery/ coal pits, smithy and saw mill in adjacent areas circa 1850 (nearest coal pit 24m to the south west). By 1890 Cotton mills adjacent and 60m to the north, brick field 155m to the north. By 1957 adjacent mill redeveloped as general works, warehouses. By 1984 an electricity substation is located adjacent to the site and a reuse tip 180m to the south east. By 1990 a builders yard was developed 14m to the west, redeveloped with a scrap yard by 2003. |
| <b>Geological and Mining Appraisal</b>                                                                            | Made Ground                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Colliery spoil anticipated on site, depth unrecorded.                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                                                                   | Superficial Geology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Alluvium potentially overlying Glaciofluvial or Glacial Till deposits in buried channel – depth unrecorded potentially up to 20m.                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                   | Bedrock Geology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Carboniferous Pennine Lower Coal Measures strata.                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                   | Radon                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No radon protection measures are required                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                   | Mining                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Negligible risk from historical coal mine workings at 89m depth.                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                   | Subsidence Hazards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Moderate risk of compressible deposits. Low risk of running sands.                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Environmental Appraisal</b>                                                                                    | Landfill Sites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Historical landfill identified 33m to SW, 115m and 217m to S, 167m and 216m to SE.                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                   | Hydrogeology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Superficial and bedrock strata identified as Secondary A Aquifers. Nearest groundwater abstraction 0.72km to the N, nearest surface water abstraction 1.29km to the NE. No potable abstraction within 2km. No Source Protection Zone within 500m.                                                                                                                                                                                                                          |
|                                                                                                                   | Hydrology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Nearest watercourse is River Roch 86m to the NW.                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                   | Flood Risk                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Site is within Flood Zones 2 and 3 with a 'medium' risk of flooding. A Flood Risk Assessment is required.                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                   | Industrial Land Uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Scrap yard, MOT/repair garage and electricity substation located on/adjacent to the site.                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                   | Other Relevant Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Recommendations</b>                                                                                            | <p>The conceptual ground model indicates that an intrusive ground investigation is required to assess the ground conditions. The ground investigation should obtain soil samples for contamination analysis and asbestos detection and, where possible, groundwater and surface water samples for contamination analysis.</p> <p>Gas Standpipes should also be installed and monitored over an extended period of time to assess the risk from ground gases.</p> <p>Given the findings of the detailed geological and mining risk assessment a rotary borehole investigation is recommended to 30m depth followed by a ground stability assessment in order to determine whether remedial measures are required for the proposed development</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Other Considerations</b><br>(for Warranty Providers, Building Control, Structural Engineers, Developers, etc.) | <p>Listed below are various items that are likely to be required at some point during the development and it would be cost effective to have them carried out simultaneously. This is not an exhaustive list.</p> <ul style="list-style-type: none"> <li>• Boreholes and laboratory testing to assess the ground conditions for foundation design.</li> <li>• Waste Classification and WAC testing for removal of waste to landfill.</li> <li>• CBR Testing for road design and construction.</li> <li>• Water Pipeline Risk Assessment.</li> </ul>                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**DESK STUDY WITH WALKOVER SURVEY FOR NORMAN ROAD, ROCHDALE****CLIENT: SHEHZAD SULEMAN****ARCHITECTS: 1618 ARCHITECTS**

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**1. INTRODUCTION**

This report has been prepared in accordance with an email, dated 9<sup>th</sup> August 2022, from the Engineer on behalf of the Client.

The brief was set out in our estimate, ref. E5899B dated 2<sup>nd</sup> August 2022, and comprises a walkover survey and a desk study report including a historical, geological, mining and environmental appraisal together with a conceptual ground model.

The brief for a coal mining risk assessment was set out in our estimate, ref. 7569A dated 9<sup>th</sup> August, and comprises a geological and mining appraisal together with our conclusions and recommendations.

**1.1 Site Location and Description**

The site is located on Norman Road, Rochdale, Greater Manchester, as indicated on Figure 1. The approximate National Grid Reference of the centre of the site is 388720E, 412719N.

As shown on Figure 2, the about 0.44 hectare irregular shaped site is bounded to the northwest by Dickinson's Skip Hire (no boundary), to the northeast by Van Breakers Rochdale and Sabre Materials (no boundary), to the east by a palisade fence to Norman Road, to the southeast by a palisade fence to footpath, and to the southwest by a brick wall to overgrown wasted area.

**1.2 Proposed Development and Purpose of the Desk Study**

We understand that it is proposed to remove the MOT Centre and Scrap Yard that are currently on site, and build seven industrial units with car parking spaces and landscaped areas, as shown on Figure 3.

The purpose of the desk study is to obtain information regarding the sites historical, geological and environmental setting in order to produce a conceptual ground model, to assess the ground conditions, to undertake a preliminary assessment of contamination sources, pathways and receptors relating to potential hazards that exist or will potentially exist on the site and to assess the need for ground investigation.

In addition, a geological and mining appraisal was required to determine the geological structure, including the depth and thickness of coal and other mineral seam horizons, to determine the potential for mineworkings in these horizons based upon the available information and to provide our conclusions and recommendations.

**1.3 Walkover Survey**

The walkover survey was undertaken on 16<sup>th</sup> August 2022. Surface features observed were recorded on a plan of the site together with the positions and directions of photographs taken. The resulting Walkover Survey Plan and site photographs are appended.

At the time of the walkover, the site comprised of an MOT and repair Garage (Photo 1, 5, 6, 10-19) in the northeast of the site and a Scrap Yard over most of the site. Containers and disused demountable offices were noted in the south of the site (Photo 22-28), a caravan (Photo 20) centrally placed, and an office (Photo 8) in the east were also noted. The ground surface was predominantly flat and comprised a concrete surfacing, broken in places. The site could be accessed from Norman Road (photo 4, 5, 6), although there is access from Corporation Street to the building in the northwest of the site (Photo 70). A basement (Photo 44, 45) was noted in the northwest and inferred to extend throughout the area highlighted in Fig 2. The previous building on site was destroyed in a fire and the remaining walls on site show fire damage, cracks, and are possibly unstable (Photo 38, 41, 52). There are various tanks and drums across the site, mainly within the Garage. Static machinery was noted within the MOT and repair Garage (Photo 11-14). A forklift truck was noted and vehicles are parked/stored throughout the site in various stages of dismantling. Stockpiles of car parts, building and waste materials are seen throughout the site (Photo 19, 20, 22, 26, 27, 33, 37, 47). An electricity substation was noted off site, adjacent to the northwest of the site (Photo 70).

Some visual contamination was noted during the walkover survey, oil can be seen spilt on the floor (photo 29).

## 2. DESK STUDY

### 2.1 Historical Appraisal

The past history of the site has been interpreted from the study of old Ordnance Survey plans supplied by GroundSure, as follows:

TABLE 1 SMALL SCALE SURVEYS

| Date      | Scale    |
|-----------|----------|
| 1851      | 1:10,560 |
| 1890-1891 | 1:10,560 |
| 1908      | 1:10,560 |
| 1928      | 1:10,560 |
| 1938      | 1:10,560 |
| 1954-1956 | 1:10,560 |
| 1967-1968 | 1:10,560 |
| 1975      | 1:10,000 |
| 1987      | 1:10,000 |
| 1992      | 1:10,000 |
| 2001      | 1:10,000 |
| 2010      | 1:10,000 |
| 2022      | 1:10,000 |

TABLE 2 LARGE SCALE SURVEYS

| Date       | Scale     |
|------------|-----------|
| 1851       | 1:1,056   |
| 1890-1891  | 1:2,500   |
| 1910       | 1:2,500   |
| 1930       | 1:2,500   |
| 1957       | 1:1,250** |
| 1958-1959  | 1:2,500   |
| 1972-1975* | 1:1,250** |
| 1984       | 1:1,250** |
| 1990       | 1:1,250** |
| 1992-1993  | 1:1,250** |
| 2003       | 1:1,250   |

\* Site not covered by the survey, \*\* Printed at 1:2,000.  
Extracts of the above surveys are appended.

TABLE 3 HISTORICAL APPRAISAL

| Date      | On site                                                                                                                                                                                                                                                                                                                                                                                                    | Beyond site boundary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1851      | At the time of the earliest survey, the proposed site is situated across fields with an unnamed track running northeast to southwest. Pinfold Colliery is depicted on the small scale map encroaching into the north east of the site with a building straddling the site boundary. The large scale map details a pump in the east, a Saw Pit in the northeast, and drainage channels run across the site. | A Smithy is depicted 6m to the northeast adjoining the Pinfold Colliery building. Sparth Bottoms Colliery to the southwest with the nearest feature being a coal pit 24m to the south east. A building is shown 75m to the east-south-east.<br>There is an unnamed road adjacent to the northwest, the River Roch 50m to the west, a shed 17m to the north.                                                                                                                                                                                                                                         |
| 1890-1891 | All previous features are no longer depicted. Brimrod Mill (cotton) is situated in the north of the proposed site, there is a track running north to south and drainage channels in the south.                                                                                                                                                                                                             | The previous Colliery, Saw Pit, and smithy are no longer depicted. Possibly a large mound of colliery spoil is shown some 60m south of the site.<br>Brimrod Mill (cotton) extends 150m to the north, Standard Mill (cotton) is shown 60m to the north, a Brick Field 155m to the north, residential development (terraced housing) to the east with the nearest being 45m to the northeast on Sparth Bottom Road, Castleton Cricket Ground 50m to the east, a tank 212m to the southeast, a Gravel Pit 60m to the south, Spring Mount 175m to the northwest and a Pond 215m to the west-north-west. |
| 1910      | No significant changes are noted during this time.                                                                                                                                                                                                                                                                                                                                                         | Minor changes to Brimrod Mill, Standard Mill, the Brick Field is now a Brick Works, Sparth Mill is shown 30m to the west, a Recreation Ground 90m to the south. Four chimneys are labelled 180m to the north, 175m to the north-north-east, 14m to the northeast, and 55m to the west.<br>Some residential development has taken place in the northeast.<br>The land to the west of the River Roch is crossed with channels and sluice gates.                                                                                                                                                       |
| 1930      | No significant changes are noted during this time except a slope along the western boundary.                                                                                                                                                                                                                                                                                                               | New road layout depicted with Corporation Street adjacent to the northwest and Norman Road adjacent to the northeast. A tramway and quarry are now depicted at the Brick Works (formally a Brick Field), a Laundry 92m to the northeast, a Works 10m to the west, residential development in the northeast, Tennis Grounds 80m to the east, and Allotment Gardens 70m to the northwest.                                                                                                                                                                                                             |
| 1957      | Works building has been extended over the site.                                                                                                                                                                                                                                                                                                                                                            | Brimrod Mill is now split into Works, Warehouse, and Mill (disused). Several buildings at the Brick Works have been demolished and several more built.<br>More drainage channels have been added to the west of the River as part of a Sewage Farm.                                                                                                                                                                                                                                                                                                                                                 |
| 1958-1959 | No significant changes are noted during this time.                                                                                                                                                                                                                                                                                                                                                         | The quarry at the previous Brick Works is now a pond 190m to the north-north-east.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|           |                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1972-1975 | No significant changes are noted during this time.                | No significant changes are noted during this time.                                                                                                                                                                                                                                                                                                                                                                                                           |
| 1984      | No significant changes are noted during this time.                | The River Roch has been diverted towards the west, the Mill 30m to the southwest has been demolished, The Mill (disused) and Warehouse adjacent to the north of the site have been partly demolished and several new buildings are shown as part of an industrial estate. The Pond 190m to the north-north-east has been infilled.<br>There is an Electricity Substation depicted adjacent to the northwest of the site, a Refuse Tip 180m to the southeast. |
| 1990      | No significant changes are noted during this time.                | Mandale Park is depicted where the previous Refuse Tip was situated, along with a pond 128m to the southeast, a new building labelled Works is depicted 15m to the west with an Electrical Substation 64m to the east of the site, another Electricity Substation is shown 130m to the northeast. A depot is labelled 58m to the north, a Builders Yard 14m to the west.                                                                                     |
| 1992-1993 | No significant changes are noted during this time.                | No significant changes are noted during this time.                                                                                                                                                                                                                                                                                                                                                                                                           |
| 2003      | No significant changes are noted during this time.                | The Builders Yard is no longer shown and is now a Scrap Yard                                                                                                                                                                                                                                                                                                                                                                                                 |
| 2010      | The buildings in the north of the site have been partial removed. | Some of the buildings adjacent to the north of the site have been demolished.                                                                                                                                                                                                                                                                                                                                                                                |
| 2022      | More of the buildings in the north of the site have been removed. | New buildings are depicted 100m to the southwest.                                                                                                                                                                                                                                                                                                                                                                                                            |

A fire on 13<sup>th</sup> June 2003 destroyed the building on site, it was attended by the Fire Brigade.

## 2.2 Detailed Geological Appraisal

The British Geological Survey (BGS) have published Sheet SD 81 SE, solid and drift edition at 1:10,000 scale dated 2007, and Sheet 85, solid edition at 1:50,000 scale dated 1973, extracts of which is given as Figures 4 and 5.

The geological survey indicates that the site is underlain by Made Ground, likely to be spoil associated with the former adjacent colliery. The depth of made ground is unrecorded in the area of the site, however nearby borehole records show a depth of around 2.0m.

Superficial deposits underlying the site are indicated to be alluvium comprised of clay and silt with a gravel lag. The map also indicates the site and surrounding area is underlain by a buried channel running from north to south, which is likely to be associated with glacial erosion and deposition, and infilled with Glaciofluvial sands and gravels and/or Glacial Till. The thickness of drift deposits is unrecorded in the immediate vicinity of the site, however is recorded to approximately 20m depth in old boreholes records some 35m to the west of the site and to around 4.50m depth in boreholes some 20m to the east, indicating it is potentially highly variable.

Underlying the superficial deposits the bedrock is indicated to be the Carboniferous Pennine Lower Coal Measures. Coal Measures strata in this area normally comprise interbedded mudstones, siltstones and subordinate sandstones with occasional economically important mineral seams of coal, ironstone, and fireclay.

The site is shown to be within a fault bounded block, with no record of the dip of the bedded strata. In addition there is insufficient information to accurately estimate direction or angle of dip. However, the general topography and pattern of outcropping strata in the wider area, with older strata outcropping to the north and north east, indicate the strata generally dips down to the south and south west.

The bedded rock strata are shown to be displaced by a geological fault which trends from north west to south east bounding the site to the north east. It should be noted that the rock strata in the vicinity of the site might be affected by minor parallel sympathetic geological faults.

The outcropping strata within the faulted block includes the Arley Coal seam and underlying Riddle Scout Rock sandstone, approximately 850m to the north west, and assuming the strata dips to the south to south west is expected to underlie the site. Although the depth cannot be accurately calculated from the information on the map, the appended Coal Authority Consultants Mining Report identifies the site is underlain at 89m depth by the Arley Coal with a recorded dip of 15 degrees and an extraction thickness of 1.20m.

In addition the Consultants Mining Report indicates that the Half Yard coal seam crops out 3.4m to the north of the site boundary, as shown on the Coal Authority Plan to the Report, although this coal seam is not shown on the geological maps or the Generalized Vertical Section for the 1:10,000 BGS map (ref. SD 81 SE). However, the Generalized Vertical Section for the 1:50,000 BGS map (ref. 85) indicates that in western areas of the map, the Arley Mine is overlain at approximately 80m by the laterally variable Half Yard Mine coal seam. In central and eastern areas the Half Yard is not identified, however the Arley Mine is overlain at depths of approximately 100m by the New (Top Neddy) Mine coal seam. The online BGS TextViewer, that accompanies Sheet 85, identifies the Half Yard, Top Neddy and New Mine as the same mined coal seam indicated as 0.60m to 1.20m thick. A BGS borehole record from the Sparth Bottoms Colliery for a mineshaft located 66m to the south west of the site identifies the Neddy Mine close to rockhead at 18.3m depth and the Arley Mine at 97.5m depth.

Given the above the Half Yard (Top Neddy) Mine coal seam is anticipated to be at around 10m depth underlain at 89m below ground level by the Arley Mine Coal seam. It should be noted that drift deposits are anticipated to be of variable depth, and consequently may be encountered to depths of up to 20m. It is likely that the upper Coal Measures strata including the Half Yard coal seam will have been eroded prior to deposition in such areas and consequently may be absent.

### **2.3 Detailed Mining Appraisal**

The presence of mineral seams, including coal, which might have been mined beneath the site has been determined from the published geological sheet and the Coal Authorities Consultants Coal Mining Report, ref. 51003310377001 and dated September 2022, a copy of which is appended.

The Coal Authority indicates that they have record of mineworkings from colliery abandonment plans in the 1.20 metre thick Arley Coal seam, at 89 and 92 metres depth beneath the site and at 71m depth to the north east of the site. The above coal seam is indicated to down dip at 15 degrees to the south west. The locations of the above collieries are not given and the collieries are unnamed. The coal seam was last mined in 1849.

It should be noted that it did not become a statutory requirement to maintain and preserve plans of abandoned mines until the Mines (Coal) Regulations Act of 1872, by which date much unrecorded mining had taken place and of those plans which were made it is likely that not all will have survived.

The Coal Authority Plan to the Report indicates that there are four abandoned mineshafts within 100 metres of the site and situated approximately 35 and 85 metres to the south west, and 35 and 40 metres to the north east of the site boundary respectively. It should be noted that the Coal Authority records may be incomplete and hence mine entries may be present for which the Coal Authority has no knowledge.

Of the mineshafts recorded we have the following information:

Shaft 388412-003 situated E388802m, N412770m was located in 1989 and found to have been filled to an unknown specification.

The Coal Authority indicate that they have five mine abandonment plans which are for all or part of the site area.

Coal Authority records indicate that the Half Yard Coal seam crops out 3.4 metres to the north (268 degree bearing) of the site boundary, as shown on the Coal Authority Plan to the Report. The Coal Authority indicate that the Half Yard Coal seam is of a workable thickness.

The Coal Authority indicate that they are not aware of any geological faults, fissures or break lines affecting the site.

The Coal Authority have no records of opencast mines within 500 metres of the site boundary.

The Coal Authority have no records of managed tips, mine gas, and mine water treatment schemes within 500 metres of the site boundary.

The Coal Authority have no records of site investigations, remediated sites, and property damage claims since 31 October 1994 within 50 metres of the site boundary.

The Coal Authority indicate that they have no plans to mine coal beneath the site and there are no coal mining licences within 200 metres of the site.

In any old mining area such as this, where records are generally incomplete, the existence of unrecorded mine entries should not be discounted and appropriate precautions should be taken during all earthworks. Should a mine entry be suspected appropriate action would need to be taken in the light of the established condition and location as determined by inspection and investigation.

## Conclusions and Recommendations

The detailed geological and mining appraisals indicates that the site is potentially underlain at shallow depths of around 10m by the Half Yard (Top Neddy) Mine coal seam. The thickness of drift deposits is unknown but was found to be highly variable in adjacent areas ranging from 4.5m in the east to 20m in the west.

Surface instability arises when the collapse of mineworkings migrates upwards through the roof strata and back to the surface or near surface level. There is considered to be a potential for this if there is less than ten times the unworked thickness of the coal seam in intact rock strata above the mined coal seam. In addition residual settlement of abandoned mineworkings is not possible to predict, and although the risk may be increased by the stresses imposed by a surface load, settlement can and does occur irrespective of ground surface loads.

Given the findings of the geological and mining appraisal a rotary borehole investigation is recommended to 30m depth followed by a ground stability assessment in order to determine whether remedial measures are required for the proposed development.

### **2.4 Additional Geological and Non-Coal Mining Appraisal**

This following appraisal is based upon the appended Groundsure Enviro+Geo Insight Report (Sections 18 to 21).

#### **2.4.1 Potential Hazards in Natural Ground**

The hazard rating for shrinking/ swelling clays and landslides is very low, the rating for running sands is low, the rating for compressible deposits/ strata is moderate, and the rating for collapsible deposits/ strata and dissolution of soluble rocks is negligible.

#### **2.4.2 Ground Workings and Non-Coal Mining**

The British Geological Surveys "BritPits" database contains details of currently active and closed surface and underground mineral workings. There are eight records of BritPits within 500 metres of the site boundary, the nearest being a Gravel Pit about 51 metres to the south of the site boundary.

Ordnance Survey mapping identifies surface excavations which may, or may not, have been subsequently backfilled with unknown material. The Ordnance Survey indicates that there are forty historical surface excavations within 250 metres of the site boundary, the nearest being a Colliery and Gravel Pit on site.

In addition, the Ordnance Survey mapping identifies underground workings in the form of tunnels, shafts and similar features. The Ordnance Survey indicates that there are two historical underground workings within 1,000 metres of the site boundary; the nearest being an Unspecified Shaft about 553 metres to the south of the site boundary.

The British Geological Survey maintain records of mining of minerals other than coal and indicates that there is no potential for non-coal mining beneath the site or within 1,000 metres of the site boundary.

According to the report the site is not in an area affected by significant natural cavities, non-coal mining, historical mineral planning areas, brine extraction, gypsum extraction, tin mining or clay mining.

### 2.4.3 Radon

The British Geological Survey and Public Health England have estimated the percentage of dwellings exceeding the “Radon Action Level” of 200 Becquerels/ m<sup>3</sup> for the UK based on geological assessments and long-term measurements of radon in more than 479,000 households.

The site is unlikely to be affected by radon gas as < 1% of surrounding properties are above the Radon Action Level. No radon protection measures are required.

### 2.4.4 Soil Chemistry

The British Geological Survey have estimated likely background concentrations of potentially harmful arsenic, cadmium, chromium, lead and nickel in the topsoil. Data for on-site topsoil is given. In addition, data for the land within 50 metres of the site boundary is given.

### 2.4.5 Railway Infrastructure

There are no active or inactive underground or overground railways and no railway tunnels within 250 metres of the site boundary.

There are six historical railways within 250 metres of the site boundary, all of which are Railway Sidings, the nearest being about 184m to the northeast of the site boundary.

The site is not within 500 metres of Crossrail 1, Crossrail 2, or the High Speed 2 (HS2) rail project.

## 2.5 **Environmental Appraisal**

This following appraisal is based upon the appended Groundsure Enviro+Geo Insight Report (Sections 1 to 13).

### 2.5.1 Historical Industrial Land Use

Historical potentially contaminative industrial land uses are recorded by the Ordnance Survey. Within the site there are potentially contaminative industrial land uses identified including a Colliery, Unspecified Works, Unspecified Mills, Unspecified Commercial/industrial, Industrial estate, and a Gravel Pit. The Mill on site was destroyed by a fire in 2003, causing extensive damage. In addition, within 250 metres of the site boundary, there are fifty potentially contaminative industrial land uses identified. Those that represent the most significant risk to the site are a Colliery 6m to the southwest, Unspecified Mills 11m to the west, Unspecified Works 14m to the west, a Sewage Farm 46m to the west, and Unspecified Tanks 58m to the southwest, a Laundry 77m to the northeast, a Refuse Heap 124m to the southeast, Brick Works 152m to the northeast, and Gas Works 202m to the northeast.

There are eighteen historical tanks within 250m of the site boundary, with the nearest being 14m to the northeast.

There are four historical energy features within 250m of the site boundary, with the nearest being an electricity substation on site/ adjacent to the southwest boundary.

There are no historical petrol stations, garages, or military land within 250m of the site boundary.

#### 2.5.2 Landfill

According to the report there are no active or recently closed landfill sites within 250 metres of the site boundary.

The British Geological Survey undertook a survey for the Department of the Environment (DoE) of operational and closed landfill sites in 1973. The survey indicated that there was one landfill site within 250 metres of the site boundary, being about 167 metres to the southeast.

Local Authority records and detailed Ordnance Surveys indicate one landfill sites within 250 metres of the site boundary being about 216 metres to the southeast.

The Environment Agency and Natural Resources Wales have three records of known historical (closed) landfill sites, where there is no PPC permit or current waste management licence, within 250 metres of the site boundary, with the nearest being about 33 metres to the southwest of the site boundary.

Our historical appraisal has identified two potential unregistered landfills in the form of quarries and ponds infilled with unknown material, which may be a source of ground gas, within 250 metres of the site boundary which are, two infilled ponds 220m to the northwest and 190m to the north.

#### 2.5.3 Waste

Local Authority records and detailed Ordnance Surveys indicate four waste sites within 250 metres of the site, the nearest being about 7 metres to the northwest .

According to the Environment Agency and Natural Resources Wales there are fourteen active or recently closed waste sites within 250 metres of the site boundary, the nearest being about 24 metres to the north.

The Environment Agency and Natural Resources Wales have one record of activities involving the storage, treatment, use or disposal of wastes that are exempt from needing a permit (within specific limits and conditions) within 250 metres of the site boundary, the nearest being the storage of waste in a secure place, about 1 metre to the northeast.

#### 2.5.4 Current Industrial Land Use

Current potentially contaminative industrial land uses are recorded by the Ordnance Survey and Experian. Within the site there are two potentially contaminative industrial land uses including a Car & Van Dismantlers (Scrap Metal Merchants), and an Electricity Substation (Electrical Feature). In addition, within 250 metres of the site boundary, there are thirty-three potentially contaminative industrial land uses. Those that represent the most significant risk to the site are Global Parts Specialist Ltd (Scrap Metal Merchants) 1m to the northwest, M A MOT Centre (Vehicle repair, testing, and servicing) 2m to the northeast, a Chimney (Chimneys) 23m to the northeast, and W & S Allely Ltd (Metals Manufacturers, Fabricators, and Stockholders) 36m to the northeast.

National Grid data indicates that there are currently no high voltage underground electricity transmission cables or high-pressure underground gas transmission pipelines within 250 metres of the site boundary.

#### 2.5.5 Sites Determined as Contaminated Land

There are no sites determined as contaminated under Section 78R of the Environmental Protection Act (1990) within 250 metres of the site boundary.

#### 2.5.6 Control of Major Accident Hazards (COMAH)

Records of Control of Major Accident Hazards (COMAH), including Notification of Installations Handling Hazardous Substances (NIHHS) and other historical data, indicate that there is one dangerous or hazardous sites within 250 metres of the site boundary, the nearest being about 242 metres to the northeast.

#### 2.5.7 Regulated Explosives Sites

Up to April 2015 there were no sites within 250 metres of the site boundary registered and licensed by the Health and Safety Executive under the 2005 Manufacture and Storage of Explosives Regulations.

#### 2.5.8 Hazardous Substance Storage and Usage

There are no Local Authority records of consents granted for sites to hold certain quantities of hazardous substances at or above defined limits in accordance with the 2015 Planning (Hazardous Substances) Regulations within 250 metres of the site boundary.

#### 2.5.9 Historical Licenced Industrial Activities (IPC)

There are no historical Integrated Pollution Control (IPC) records of substances released to the air, land and water according to the Environment Agency and Natural Resources Wales within 250 metres of the site boundary.

#### 2.5.10 Licenced Industrial Activities (Part 1(A))

The Environment Agency and Natural Resources Wales indicate that there are no records of Part 1(A) installations regulated under the 2016 Environmental Permitting (England and Wales) Regulations for release to the environment within 250 metres of the site boundary.

#### 2.5.11 Part A(2) and Part B Authorisations

Local Authority records indicate there are three Part A(2) and Part B installations regulated under the 2016 Environmental Permitting (England and Wales) Regulations for the release of substances to the environment within 250 metres of the site boundary, the nearest being the use of bulk cement about 144 metres to the northeast.

#### 2.5.12 Radioactive Substance Authorisations

The Environment Agency and Natural Resources Wales indicate that there are no records of storage, use, accumulation and disposal of radioactive substances regulated under the 1993 Radioactive Substances Act within 250 metres of the site boundary.

#### 2.5.13 Licensed Discharges to Controlled Waters

According to Environment Agency and Natural Resources Wales records there has been one discharge of treated or untreated effluent to controlled water under the 1991 Water Resources Act within 250 metres of the site boundary, the nearest being the discharge of sewage about 203 metres to the north between 1993 and 1995.

#### 2.5.14 Pollutant Release to Surface Waters (Red List)

The Environment Agency and Natural Resources Wales records indicate that there have been no discharges of specified substances under the 1991 Environmental Protection (Prescribed Processes and Substances) Regulations within 250 metres of the site boundary.

#### 2.5.15 Pollutant Release to Public Sewers

According to Environment Agency and Natural Resources Wales records there have been two discharges of special category effluents to public sewers within 250 metres of the site boundary the nearest being 41m to the east.

#### 2.5.16 List I and List II Dangerous Substances

The Environment Agency and Natural Resources Wales records indicate that there have been no discharges of substances on List I and List II of the European Directive E2006/11/EC respectively, regulated under the 2015 Environmental Damage (Prevention and Remediation) Regulations, within 250 metres of the site boundary.

#### 2.5.17 Pollution Incidents

According to the Environment Agency and Natural Resources Wales there are ten records of substantiated pollution incidents within 250 metres of the site boundary, the nearest being in 2003 with Smoke Tyres about 3 metres to the northeast with a Category 2 (Significant) Land Impact and Category 3 (Minor) Air Impact.

#### 2.5.18 Pollution Inventory Substances

The Environment Agency and the Scottish Environment Protection Agency indicate that there have been no reports on annual emissions of certain regulated substances to air, controlled waters and land within 250 metres of the site boundary.

#### 2.5.19 Pollution Inventory Waste Transfers

According to the Environment Agency and the Scottish Environment Protection Agency there have been no reports on annual transfers and recovery/ disposal of controlled wastes within 250 metres of the site boundary.

#### 2.5.20 Pollution Inventory Radioactive Waste

The Environment Agency and the Scottish Environment Protection Agency indicate that there have been no reports on annual releases of radioactive substances within 250 metres of the site boundary.

### 2.5.21 Hydrogeology

The following designation of aquifers is in accordance with the Environment Agency's April 2010 Groundwater Protection Policy.

Superficial/ drift deposits are anticipated to be present and comprise Alluvium, generally comprising clays, silts, sands, and gravel, which are indicated to be a Secondary A aquifer comprising permeable layers capable of supporting water supplies at a local scale and in some cases forming an important source of base flow to rivers.

The bedrock is anticipated to be Pennine Lower Coal Measures Formation, generally comprising mudstone, siltstone, and sandstones, which are indicated to be a Secondary A aquifer comprising permeable layers capable of supporting water supplies at a local scale and in some cases forming an important source of base flow to rivers.

The vulnerability of groundwater in the superficial geology to a pollutant found within the site and its immediate surrounding area has been assessed as "High" – an area able to easily transmit pollution to groundwater.

The vulnerability of groundwater in the bedrock geology to a pollutant found within the site and its immediate surrounding area has been assessed as "Low", an area able to provide protection from pollution.

British Geological Survey and Environment Agency data indicates that the site is not within a 1km grid where solution features are present that will enable rapid movement of a pollutant to groundwater.

Environment Agency data indicates that the site is not in an area where additional local information indicates that groundwater is vulnerable to pollution.

According to data provided by the Environment Agency and Natural Resources Wales there are three groundwater abstraction licences, twelve surface water abstraction licences, and no potable water abstraction licences within 2000 metres of the site boundary. The nearest being 723m to the north and 1286m to the northeast respectively.

There are no Source Protection Zones, set up to protect a water source within 500 metres of the site of boundary, present according to the environmental data report.

### 2.5.22 Hydrology

The Ordnance Survey indicate that there are three watercourses (river, stream or canal) within 250 metres of the site boundary, the nearest watercourse (inland river not influenced by normal tidal action) being about 86 metres to the northwest.

There are four surface water features (ponds or lakes) within 250 metres of the site boundary according to the Ordnance Survey, the nearest water feature (inland river not influenced by normal tidal action) being about 86 metres to the northwest.

The Water Framework Directive (WFD) indicates that the site is within the catchment of the River Roch (Spodden to Irwell), this watercourse being about 90 metres to the northwest of the site boundary and the groundwater body is known as the Northern Manchester Carboniferous Aquifers.

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### 2.5.23 Flooding

Flooding data is maintained by the Environment Agency and Natural Resources Wales. The Risk of Flooding from Rivers and Sea (RoFRaS) database indicates that within 50 metres of the site boundary the highest risk of flooding is “Medium”.

In the period since records began in 1946, there are no records of historical floods within 250 metres of the site boundary.

There are no flood defences, one area benefitting from flood defences, about 10m to the northwest, and no flood storage areas present within 250 metres of the site boundary.

The site is within a Flood Zone 2 (Fluvial/ Tidal Models) and Flood Zone 3 (Fluvial Models).

According to Ambiantal Risk Analytics surface water “FloodMap” there is a 1 in 100 year, 0.3m – 1.0m risk of surface water flooding on the site and a 1 in 30 year, 0.3m – 1.0m risk of surface water flooding within 50 metres of the site boundary.

Groundwater flooding is caused when the water table rises in areas where this is usually at shallow depth. Ambiantal Risk Analytics indicate that there is a low risk of groundwater flooding on the site and a moderate risk of groundwater flooding within 50 metres of the site boundary.

Given the above we anticipate that a Flood Risk Assessment will be required.

### 2.5.24 Environmental Designations

Natural England, Natural Resources Wales and Scottish Natural Heritage indicate that there are environmental sensitive sites within 2000 metres of the site boundary.

The site is within an SSSI Impact Risk Zone, there are four Sites of Special Scientific Interest (SSSI), with the nearest being 1222m to the southeast, four Special Areas of Conservation (SAC), with the nearest being 1222m to the southeast, three areas of Designated Ancient Woodland, with the nearest being 1240m to the west, and one area of Green Belt Land, which is 1465m to the southwest.

### 2.5.25 Visual and Cultural, Agricultural and Habitat Designations

Natural England indicate that there are thirteen priority habitats within 250 metres of the site boundary.

## 2.6 Conceptual Ground Model

A conceptual ground model of a site and its environs uses available information to form a preliminary assessment of contamination sources, pathways and receptors, and the significance of hazards that exist or will potentially exist on the site. Its purpose is to identify the relationships between sources of contamination, pathways and receptors to allow exposure scenarios to be determined and thereby aid in the design of any intrusive investigation. It also forms the basis of the risk assessment.

### 2.6.1 Sources

Potential sources of contamination identified in the desk study are:

- General contaminants associated with Made Ground (if present) and past and present contaminative processes undertaken on and adjacent to the site including a scrap yard, MOT/repair garage, colliery, cotton mill and unspecified works, earthworks, construction, demolition, and mining.
- On-site spillage and leakage of hydrocarbons (oils and fuels) from vehicles and industrial processes.
- Migrating leachate (contaminated surface and/ or groundwater) from Sewage Works, registered and/ or unregistered landfills.
- Migrating ground gases from registered and/ or unregistered landfills.
- Fire retarding chemicals.

### 2.6.2 Pathways

Potential pathways from source and receptor for the proposed development are:

- Direct skin contact with and/ or ingestion of contaminated soils and/ or water.
- Inhalation of dust, vapours and/ or gases.
- Dissolved contaminants via infiltrating surface water/ migrating groundwater.
- Dissolved ground gases via infiltrating surface water/ migrating groundwater.
- Volatile contaminants via permeable soils and rocks.
- Ground gases via permeable soils and rocks.

### 2.6.3 Receptors

Potential receptors for the proposed development are:

- Site operatives during demolition, earthworks and/ or construction.
- The end users of the development.
- Vegetation, bushes and trees planted as part of the development of the site.
- Controlled waters including surface water and groundwater, including aquifers.

### 2.6.4 Conclusions

An appraisal of the sources, pathways and receptors has been considered and we have produced a conceptual ground model based upon the available information, as follows:

TABLE 4 CONCEPTUAL GROUND MODEL

| Potential Source                                                              | Nature of Hazard                                                                 | Contaminants Associated with the Source                                                                                                                                                                                                                                           | Pathway                                                                               | Receptor                | Preliminary Risk Rating |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------|-------------------------|
| Made Ground<br><br>Past industrial use and associated contaminative processes | Contaminants in Made Ground                                                      | <u>Gen. Contaminants</u><br>Arsenic<br>Cadmium<br>Chromium<br>Lead<br>Mercury<br>Molybdenum<br>Nickel<br>Selenium<br>Boron<br>Copper<br>Zinc<br>Cyanide<br>Sulphide<br>Sulphate<br>pH<br>Phenols<br>Polynuclear Aromatic Hydrocarbons (PAH)<br>Total Petroleum Hydrocarbons (TPH) | Ingestion of soil                                                                     | Site Operatives         | Moderate                |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Ingestion of dust                                                                     | End Users               |                         |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Dermal contact                                                                        |                         |                         |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Inhalation of dust                                                                    |                         |                         |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Inhalation of vapours                                                                 |                         |                         |
| Tanks/ Machinery/ Vehicles<br><br><br><br><br><br><br><br><br><br>Machinery   | Fuel/ oil spillage and/or leakage from machinery, fuel/oil tanks and/or vehicles | Total Petroleum Hydrocarbons (TPH)<br><br>and/ or<br><br>Benzene/ Toluene/ Ethylbenzene/ Xylene (BTEX)                                                                                                                                                                            | Uptake via contaminated groundwater                                                   | Vegetation              | Moderate                |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Vertical and lateral movement of mobile contaminants to surface water and groundwater | Controlled Waters       | Moderate                |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Direct contact                                                                        | Structures and Services | Moderate                |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Ingestion of soil                                                                     | Site Operatives         | Moderate                |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Ingestion of dust                                                                     | End Users               |                         |
| Electricity Sub Station                                                       | Spillage/ leakage of transformer coolants                                        | Poly Chlorinated Biphenyls (PCB)                                                                                                                                                                                                                                                  | Dermal contact                                                                        |                         |                         |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Inhalation of dust                                                                    |                         |                         |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Inhalation of vapours                                                                 |                         |                         |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Uptake via contaminated groundwater                                                   | Vegetation              | Low                     |
|                                                                               |                                                                                  |                                                                                                                                                                                                                                                                                   | Vertical and lateral movement of mobile contaminants to surface water and groundwater | Controlled Waters       | Low                     |

|                                                                 |                                                                           |                                                        |                                                                                            |                                  |                 |
|-----------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------|-----------------|
| Asbestos on/ in ground                                          | Asbestos fibres                                                           | Asbestos fibres                                        | Inhalation of fibres                                                                       | Site Operatives<br>End Users     | Low             |
| Landfill (registered/ unregistered)<br><br>Made Ground on Site. | Ground Gas (Asphyxiation, fire and explosion)                             | Methane<br>Carbon Dioxide                              | Inhalation of gas<br>Ignition of gas                                                       | Site Operatives<br>End Users     | Low to Moderate |
| Building fire on site circa 1998                                | Contaminants derived from burning materials and use of firefighting foams | per- and polyfluoroalkyl substances (PFAS)<br><br>PAHs | Ingestion of soil<br><br>Ingestion of dust<br><br>Dermal contact<br><br>Inhalation of dust | Site Operatives<br><br>End Users | Moderate        |
|                                                                 |                                                                           |                                                        | Uptake via contaminated groundwater                                                        | Vegetation                       | Moderate        |
|                                                                 |                                                                           |                                                        | Vertical and lateral movement of mobile contaminants to surface water and groundwater      | Controlled Waters                | Moderate        |
|                                                                 |                                                                           |                                                        | Direct contact                                                                             | Structures and Services          | Moderate        |
| Mining (1)                                                      | Ground Gas (Asphyxiation, fire and explosion)                             | Methane<br>Carbon Dioxide                              | Inhalation of gas<br>Ignition of gas                                                       | Site Operatives<br>End Users     | Low             |
| Mining (2)                                                      | Subsidence                                                                | -                                                      | -                                                                                          | Structures and services          | Moderate        |

The conceptual ground model indicates that an intrusive ground investigation is required to assess the ground conditions. The ground investigation should obtain soil samples for contamination analysis and asbestos detection and, where possible, groundwater and surface water samples for contamination analysis.

In addition the conceptual ground model indicates that ground gases might be present and hence gas standpipes should be installed and monitored over an extended period of time to allow for an assessment to be made.

Given the findings of the detailed geological and mining risk assessment a rotary borehole investigation is recommended followed by a ground stability assessment in order to determine whether remedial measures are required for the proposed development.

## 2.7 General

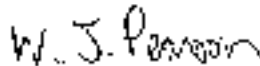
No consideration has been given to flora and fauna as this was outside our brief.

This Phase I walkover survey and desk study should be followed by a Phase II ground investigation. It should be noted that dependent upon the findings of the ground investigation a Phase III remediation statement and Phase IV validation with report may be required.

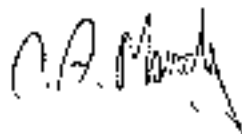
We recommend that consultation should be undertaken with and written approval obtained from the Local Authority Environmental Health Officer, the Local Authority Building Control Officer and the Coal Authority prior to commencing development.

We trust that this report fulfils your present requirements but if you have any queries or we can be of further assistance please contact the undersigned or Ms Anna Marsden at our Preston office.

SUB SURFACE CONSULTANTS LIMITED  
REPORT No. 7569  
SEPTEMBER 2022



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Geotechnical Engineer  
For and on behalf of  
Sub Surface Consultants Limited



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Director  
For and on behalf of  
Sub Surface Consultants Limited.

## **PRELIMINARY RISK RATING GUIDANCE**

## PRELIMINARY RISK RATING GUIDANCE

The following table based on CIRIA C552 'Contaminated Land Risk Assessment. A Guide to Good Practice' has been used when developing the Conceptual Ground Model and the preliminary risk ratings. The method requires an assessment of the magnitude of the probability or likelihood of the risk occurring and the magnitude of the potential consequence or severity of the risk occurring to formulate a preliminary risk rating (Table A).

**Table A DESCRIPTION OF RISK AND LIKELY ACTION REQUIRED**

| <b>Preliminary Risk Rating</b> | <b>Action Required</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Very High Risk</b>          | <p>Extensive Ground Investigation Required.</p> <p>There is a high probability that severe harm could arise to a designated receptor from an identified hazard, or there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.</p>                                                                |
| <b>High Risk</b>               | <p>Extensive Ground Investigation Required.</p> <p>Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short-term and are likely over the longer-term.</p>                                                                                                                              |
| <b>Moderate</b>                | <p>Ground Investigation Required.</p> <p>It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the long-term.</p> |
| <b>Low Risk</b>                | <p>Nominal Ground Investigation Required.</p> <p>It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.</p>                                                                                                                                                                                                                                                                  |
| <b>Very Low Risk</b>           | <p>No Ground Investigation Required.*</p> <p>There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.</p>                                                                                                                                                                                                                                                                                                      |
| <b>Negligible Risk</b>         | <p>No Ground Investigation Required.*</p> <p>There is a very low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.</p>                                                                                                                                                                                                                                                                                                 |

\* No further action is required unless unforeseen contaminated ground conditions are encountered.

## PHOTOGRAPHS

Site: NORMAN ROAD, ROCHDALE

Client: SHEHZAD SULEMAN

Architect: 1618 ARCHITECTS

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**WALKOVER SURVEY PHOTOGRAPHS**

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## SUB SURFACE

SITE INVESTIGATION SPECIALISTS, GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS

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## Photographs

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### WALKOVER SURVEY PHOTOGRAPHS

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## ENVIRO+GEO INSIGHT REPORT

## Norman Road, Rochdale

### Order Details

**Date:** 12/08/2022  
**Your ref:** CMAPS-CM-1055535-4199-120822  
**Our Ref:** CMAPS-CM-1055535-4199-120822EDRGeo

### Site Details

**Location:** 388720 412719  
**Area:** 0.44 ha  
**Authority:** [Rochdale Metropolitan Borough Council](#)



**Summary of findings**

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**Aerial image**

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**OS MasterMap site plan**

p.12

[groundsure.com/insightuserguide](https://groundsure.com/insightuserguide)

## Summary of findings

| Page               | Section             | Past land use                                            | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|--------------------|---------------------|----------------------------------------------------------|---------|-------|---------|----------|-----------|
| <a href="#">13</a> | <a href="#">1.1</a> | <a href="#">Historical industrial land uses</a>          | 9       | 12    | 38      | 94       | -         |
| <a href="#">19</a> | <a href="#">1.2</a> | <a href="#">Historical tanks</a>                         | 0       | 1     | 17      | 69       | -         |
| <a href="#">23</a> | <a href="#">1.3</a> | <a href="#">Historical energy features</a>               | 0       | 1     | 3       | 25       | -         |
| 24                 | 1.4                 | Historical petrol stations                               | 0       | 0     | 0       | 0        | -         |
| <a href="#">24</a> | <a href="#">1.5</a> | <a href="#">Historical garages</a>                       | 0       | 0     | 0       | 7        | -         |
| 25                 | 1.6                 | Historical military land                                 | 0       | 0     | 0       | 0        | -         |
| Page               | Section             | Past land use - un-grouped                               | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| <a href="#">26</a> | <a href="#">2.1</a> | <a href="#">Historical industrial land uses</a>          | 12      | 16    | 60      | 139      | -         |
| <a href="#">35</a> | <a href="#">2.2</a> | <a href="#">Historical tanks</a>                         | 0       | 1     | 20      | 107      | -         |
| <a href="#">39</a> | <a href="#">2.3</a> | <a href="#">Historical energy features</a>               | 0       | 2     | 3       | 47       | -         |
| 42                 | 2.4                 | Historical petrol stations                               | 0       | 0     | 0       | 0        | -         |
| <a href="#">42</a> | <a href="#">2.5</a> | <a href="#">Historical garages</a>                       | 0       | 0     | 0       | 11       | -         |
| Page               | Section             | Waste and landfill                                       | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 43                 | 3.1                 | Active or recent landfill                                | 0       | 0     | 0       | 0        | -         |
| <a href="#">43</a> | <a href="#">3.2</a> | <a href="#">Historical landfill (BGS records)</a>        | 0       | 0     | 1       | 0        | -         |
| <a href="#">44</a> | <a href="#">3.3</a> | <a href="#">Historical landfill (LA/mapping records)</a> | 0       | 0     | 1       | 2        | -         |
| <a href="#">44</a> | <a href="#">3.4</a> | <a href="#">Historical landfill (EA/NRW records)</a>     | 0       | 1     | 2       | 1        | -         |
| <a href="#">45</a> | <a href="#">3.5</a> | <a href="#">Historical waste sites</a>                   | 0       | 1     | 3       | 2        | -         |
| <a href="#">46</a> | <a href="#">3.6</a> | <a href="#">Licensed waste sites</a>                     | 0       | 1     | 13      | 0        | -         |
| <a href="#">51</a> | <a href="#">3.7</a> | <a href="#">Waste exemptions</a>                         | 0       | 1     | 0       | 31       | -         |
| Page               | Section             | Current industrial land use                              | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| <a href="#">54</a> | <a href="#">4.1</a> | <a href="#">Recent industrial land uses</a>              | 2       | 7     | 26      | -        | -         |
| <a href="#">57</a> | <a href="#">4.2</a> | <a href="#">Current or recent petrol stations</a>        | 0       | 0     | 0       | 1        | -         |
| 57                 | 4.3                 | Electricity cables                                       | 0       | 0     | 0       | 0        | -         |
| 57                 | 4.4                 | Gas pipelines                                            | 0       | 0     | 0       | 0        | -         |
| <a href="#">57</a> | <a href="#">4.5</a> | <a href="#">Sites determined as Contaminated Land</a>    | 0       | 0     | 0       | 1        | -         |



| <b>58</b> | <b>4.6</b>  | <b><u>Control of Major Accident Hazards (COMAH)</u></b>  | 0                        | 0     | 1       | 1        | -         |
|-----------|-------------|----------------------------------------------------------|--------------------------|-------|---------|----------|-----------|
| 58        | 4.7         | Regulated explosive sites                                | 0                        | 0     | 0       | 0        | -         |
| <b>58</b> | <b>4.8</b>  | <b><u>Hazardous substance storage/usage</u></b>          | 0                        | 0     | 0       | 2        | -         |
| 59        | 4.9         | Historical licensed industrial activities (IPC)          | 0                        | 0     | 0       | 0        | -         |
| <b>59</b> | <b>4.10</b> | <b><u>Licensed industrial activities (Part A(1))</u></b> | 0                        | 0     | 0       | 1        | -         |
| <b>60</b> | <b>4.11</b> | <b><u>Licensed pollutant release (Part A(2)/B)</u></b>   | 0                        | 0     | 3       | 0        | -         |
| 60        | 4.12        | Radioactive Substance Authorisations                     | 0                        | 0     | 0       | 0        | -         |
| <b>60</b> | <b>4.13</b> | <b><u>Licensed Discharges to controlled waters</u></b>   | 0                        | 0     | 1       | 11       | -         |
| 62        | 4.14        | Pollutant release to surface waters (Red List)           | 0                        | 0     | 0       | 0        | -         |
| <b>63</b> | <b>4.15</b> | <b><u>Pollutant release to public sewer</u></b>          | 0                        | 2     | 0       | 0        | -         |
| 63        | 4.16        | List 1 Dangerous Substances                              | 0                        | 0     | 0       | 0        | -         |
| 63        | 4.17        | List 2 Dangerous Substances                              | 0                        | 0     | 0       | 0        | -         |
| <b>63</b> | <b>4.18</b> | <b><u>Pollution Incidents (EA/NRW)</u></b>               | 0                        | 9     | 1       | 5        | -         |
| 65        | 4.19        | Pollution inventory substances                           | 0                        | 0     | 0       | 0        | -         |
| 65        | 4.20        | Pollution inventory waste transfers                      | 0                        | 0     | 0       | 0        | -         |
| 66        | 4.21        | Pollution inventory radioactive waste                    | 0                        | 0     | 0       | 0        | -         |
| Page      | Section     | Hydrogeology                                             | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <b>67</b> | <b>5.1</b>  | <b><u>Superficial aquifer</u></b>                        | Identified (within 500m) |       |         |          |           |
| <b>68</b> | <b>5.2</b>  | <b><u>Bedrock aquifer</u></b>                            | Identified (within 500m) |       |         |          |           |
| <b>69</b> | <b>5.3</b>  | <b><u>Groundwater vulnerability</u></b>                  | Identified (within 50m)  |       |         |          |           |
| 70        | 5.4         | Groundwater vulnerability- soluble rock risk             | None (within 0m)         |       |         |          |           |
| 70        | 5.5         | Groundwater vulnerability- local information             | None (within 0m)         |       |         |          |           |
| <b>71</b> | <b>5.6</b>  | <b><u>Groundwater abstractions</u></b>                   | 0                        | 0     | 0       | 0        | 3         |
| <b>72</b> | <b>5.7</b>  | <b><u>Surface water abstractions</u></b>                 | 0                        | 0     | 0       | 0        | 12        |
| 76        | 5.8         | Potable abstractions                                     | 0                        | 0     | 0       | 0        | 0         |
| 76        | 5.9         | Source Protection Zones                                  | 0                        | 0     | 0       | 0        | -         |
| 76        | 5.10        | Source Protection Zones (confined aquifer)               | 0                        | 0     | 0       | 0        | -         |
| Page      | Section     | Hydrology                                                | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <b>77</b> | <b>6.1</b>  | <b><u>Water Network (OS MasterMap)</u></b>               | 0                        | 0     | 3       | -        | -         |



| <b>78</b> | <b>6.2</b>   | <b><u>Surface water features</u></b>                      | 0                                      | 0     | 4       | -        | -         |
|-----------|--------------|-----------------------------------------------------------|----------------------------------------|-------|---------|----------|-----------|
| <b>78</b> | <b>6.3</b>   | <b><u>WFD Surface water body catchments</u></b>           | 1                                      | -     | -       | -        | -         |
| <b>79</b> | <b>6.4</b>   | <b><u>WFD Surface water bodies</u></b>                    | 0                                      | 0     | 1       | -        | -         |
| <b>79</b> | <b>6.5</b>   | <b><u>WFD Groundwater bodies</u></b>                      | 1                                      | -     | -       | -        | -         |
| Page      | Section      | River and coastal flooding                                | On site                                | 0-50m | 50-250m | 250-500m | 500-2000m |
| <b>80</b> | <b>7.1</b>   | <b><u>Risk of flooding from rivers and the sea</u></b>    | Medium (within 50m)                    |       |         |          |           |
| 81        | 7.2          | Historical Flood Events                                   | 0                                      | 0     | 0       | -        | -         |
| 81        | 7.3          | Flood Defences                                            | 0                                      | 0     | 0       | -        | -         |
| <b>81</b> | <b>7.4</b>   | <b><u>Areas Benefiting from Flood Defences</u></b>        | 0                                      | 1     | 0       | -        | -         |
| 82        | 7.5          | Flood Storage Areas                                       | 0                                      | 0     | 0       | -        | -         |
| <b>83</b> | <b>7.6</b>   | <b><u>Flood Zone 2</u></b>                                | Identified (within 50m)                |       |         |          |           |
| <b>84</b> | <b>7.7</b>   | <b><u>Flood Zone 3</u></b>                                | Identified (within 50m)                |       |         |          |           |
| Page      | Section      | Surface water flooding                                    |                                        |       |         |          |           |
| <b>85</b> | <b>8.1</b>   | <b><u>Surface water flooding</u></b>                      | 1 in 30 year, 0.3m - 1.0m (within 50m) |       |         |          |           |
| Page      | Section      | Groundwater flooding                                      |                                        |       |         |          |           |
| <b>87</b> | <b>9.1</b>   | <b><u>Groundwater flooding</u></b>                        | Moderate (within 50m)                  |       |         |          |           |
| Page      | Section      | Environmental designations                                | On site                                | 0-50m | 50-250m | 250-500m | 500-2000m |
| <b>88</b> | <b>10.1</b>  | <b><u>Sites of Special Scientific Interest (SSSI)</u></b> | 0                                      | 0     | 0       | 0        | 4         |
| 89        | 10.2         | Conserved wetland sites (Ramsar sites)                    | 0                                      | 0     | 0       | 0        | 0         |
| <b>89</b> | <b>10.3</b>  | <b><u>Special Areas of Conservation (SAC)</u></b>         | 0                                      | 0     | 0       | 0        | 4         |
| 90        | 10.4         | Special Protection Areas (SPA)                            | 0                                      | 0     | 0       | 0        | 0         |
| 90        | 10.5         | National Nature Reserves (NNR)                            | 0                                      | 0     | 0       | 0        | 0         |
| 90        | 10.6         | Local Nature Reserves (LNR)                               | 0                                      | 0     | 0       | 0        | 0         |
| <b>90</b> | <b>10.7</b>  | <b><u>Designated Ancient Woodland</u></b>                 | 0                                      | 0     | 0       | 0        | 3         |
| 91        | 10.8         | Biosphere Reserves                                        | 0                                      | 0     | 0       | 0        | 0         |
| 91        | 10.9         | Forest Parks                                              | 0                                      | 0     | 0       | 0        | 0         |
| 91        | 10.10        | Marine Conservation Zones                                 | 0                                      | 0     | 0       | 0        | 0         |
| <b>91</b> | <b>10.11</b> | <b><u>Green Belt</u></b>                                  | 0                                      | 0     | 0       | 0        | 1         |
| 92        | 10.12        | Proposed Ramsar sites                                     | 0                                      | 0     | 0       | 0        | 0         |



| 92         | 10.13               | Possible Special Areas of Conservation (pSAC)  | 0                        | 0        | 0        | 0        | 0         |
|------------|---------------------|------------------------------------------------|--------------------------|----------|----------|----------|-----------|
| 92         | 10.14               | Potential Special Protection Areas (pSPA)      | 0                        | 0        | 0        | 0        | 0         |
| 92         | 10.15               | Nitrate Sensitive Areas                        | 0                        | 0        | 0        | 0        | 0         |
| 93         | 10.16               | Nitrate Vulnerable Zones                       | 0                        | 0        | 0        | 0        | 0         |
| <b>94</b>  | <b><u>10.17</u></b> | <b><u>SSSI Impact Risk Zones</u></b>           | <b>1</b>                 | -        | -        | -        | -         |
| <b>95</b>  | <b><u>10.18</u></b> | <b><u>SSSI Units</u></b>                       | <b>0</b>                 | <b>0</b> | <b>0</b> | <b>0</b> | <b>4</b>  |
| Page       | Section             | Visual and cultural designations               | On site                  | 0-50m    | 50-250m  | 250-500m | 500-2000m |
| 97         | 11.1                | World Heritage Sites                           | 0                        | 0        | 0        | -        | -         |
| 97         | 11.2                | Area of Outstanding Natural Beauty             | 0                        | 0        | 0        | -        | -         |
| 97         | 11.3                | National Parks                                 | 0                        | 0        | 0        | -        | -         |
| 97         | 11.4                | Listed Buildings                               | 0                        | 0        | 0        | -        | -         |
| 98         | 11.5                | Conservation Areas                             | 0                        | 0        | 0        | -        | -         |
| 98         | 11.6                | Scheduled Ancient Monuments                    | 0                        | 0        | 0        | -        | -         |
| 98         | 11.7                | Registered Parks and Gardens                   | 0                        | 0        | 0        | -        | -         |
| Page       | Section             | Agricultural designations                      | On site                  | 0-50m    | 50-250m  | 250-500m | 500-2000m |
| <b>99</b>  | <b><u>12.1</u></b>  | <b><u>Agricultural Land Classification</u></b> | Urban (within 250m)      |          |          |          |           |
| 100        | 12.2                | Open Access Land                               | 0                        | 0        | 0        | -        | -         |
| 100        | 12.3                | Tree Felling Licences                          | 0                        | 0        | 0        | -        | -         |
| 100        | 12.4                | Environmental Stewardship Schemes              | 0                        | 0        | 0        | -        | -         |
| 100        | 12.5                | Countryside Stewardship Schemes                | 0                        | 0        | 0        | -        | -         |
| Page       | Section             | Habitat designations                           | On site                  | 0-50m    | 50-250m  | 250-500m | 500-2000m |
| <b>101</b> | <b><u>13.1</u></b>  | <b><u>Priority Habitat Inventory</u></b>       | 0                        | 1        | 12       | -        | -         |
| 102        | 13.2                | Habitat Networks                               | 0                        | 0        | 0        | -        | -         |
| 102        | 13.3                | Open Mosaic Habitat                            | 0                        | 0        | 0        | -        | -         |
| 102        | 13.4                | Limestone Pavement Orders                      | 0                        | 0        | 0        | -        | -         |
| Page       | Section             | Geology 1:10,000 scale                         | On site                  | 0-50m    | 50-250m  | 250-500m | 500-2000m |
| <b>104</b> | <b><u>14.1</u></b>  | <b><u>10k Availability</u></b>                 | Identified (within 500m) |          |          |          |           |
| <b>105</b> | <b><u>14.2</u></b>  | <b><u>Artificial and made ground (10k)</u></b> | 1                        | 0        | 1        | 0        | -         |
| <b>106</b> | <b><u>14.3</u></b>  | <b><u>Superficial geology (10k)</u></b>        | 1                        | 1        | 1        | 0        | -         |

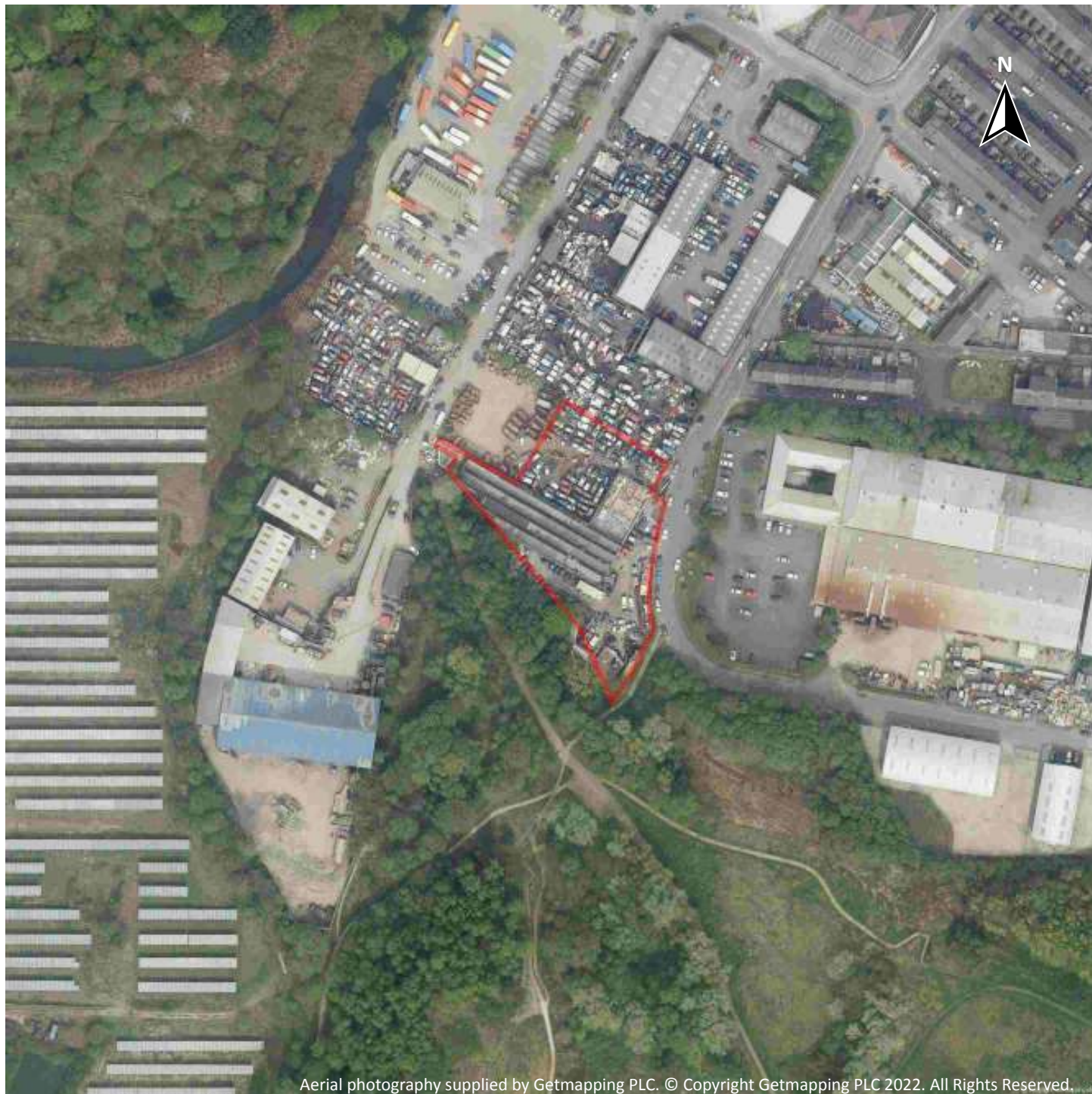


| <a href="#"><u>107</u></a> | <a href="#"><u>14.4</u></a>  | <a href="#"><u>Landslip (10k)</u></a>                                 | 0                        | 0     | 1       | 0        | -         |
|----------------------------|------------------------------|-----------------------------------------------------------------------|--------------------------|-------|---------|----------|-----------|
| <a href="#"><u>108</u></a> | <a href="#"><u>14.5</u></a>  | <a href="#"><u>Bedrock geology (10k)</u></a>                          | 1                        | 0     | 2       | 5        | -         |
| <a href="#"><u>109</u></a> | <a href="#"><u>14.6</u></a>  | <a href="#"><u>Bedrock faults and other linear features (10k)</u></a> | 1                        | 1     | 2       | 3        | -         |
| Page                       | Section                      | Geology 1:50,000 scale                                                | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <a href="#"><u>110</u></a> | <a href="#"><u>15.1</u></a>  | <a href="#"><u>50k Availability</u></a>                               | Identified (within 500m) |       |         |          |           |
| 111                        | 15.2                         | Artificial and made ground (50k)                                      | 0                        | 0     | 0       | 0        | -         |
| 111                        | 15.3                         | Artificial ground permeability (50k)                                  | 0                        | 0     | -       | -        | -         |
| <a href="#"><u>112</u></a> | <a href="#"><u>15.4</u></a>  | <a href="#"><u>Superficial geology (50k)</u></a>                      | 1                        | 1     | 1       | 2        | -         |
| <a href="#"><u>113</u></a> | <a href="#"><u>15.5</u></a>  | <a href="#"><u>Superficial permeability (50k)</u></a>                 | Identified (within 50m)  |       |         |          |           |
| <a href="#"><u>113</u></a> | <a href="#"><u>15.6</u></a>  | <a href="#"><u>Landslip (50k)</u></a>                                 | 0                        | 0     | 1       | 0        | -         |
| 113                        | 15.7                         | Landslip permeability (50k)                                           | None (within 50m)        |       |         |          |           |
| <a href="#"><u>114</u></a> | <a href="#"><u>15.8</u></a>  | <a href="#"><u>Bedrock geology (50k)</u></a>                          | 1                        | 0     | 2       | 5        | -         |
| <a href="#"><u>115</u></a> | <a href="#"><u>15.9</u></a>  | <a href="#"><u>Bedrock permeability (50k)</u></a>                     | Identified (within 50m)  |       |         |          |           |
| <a href="#"><u>115</u></a> | <a href="#"><u>15.10</u></a> | <a href="#"><u>Bedrock faults and other linear features (50k)</u></a> | 1                        | 0     | 2       | 2        | -         |
| Page                       | Section                      | Boreholes                                                             | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <a href="#"><u>117</u></a> | <a href="#"><u>16.1</u></a>  | <a href="#"><u>BGS Boreholes</u></a>                                  | 0                        | 2     | 17      | -        | -         |
| Page                       | Section                      | Natural ground subsidence                                             |                          |       |         |          |           |
| <a href="#"><u>119</u></a> | <a href="#"><u>17.1</u></a>  | <a href="#"><u>Shrink swell clays</u></a>                             | Very low (within 50m)    |       |         |          |           |
| <a href="#"><u>120</u></a> | <a href="#"><u>17.2</u></a>  | <a href="#"><u>Running sands</u></a>                                  | Low (within 50m)         |       |         |          |           |
| <a href="#"><u>122</u></a> | <a href="#"><u>17.3</u></a>  | <a href="#"><u>Compressible deposits</u></a>                          | Moderate (within 50m)    |       |         |          |           |
| <a href="#"><u>124</u></a> | <a href="#"><u>17.4</u></a>  | <a href="#"><u>Collapsible deposits</u></a>                           | Very low (within 50m)    |       |         |          |           |
| <a href="#"><u>125</u></a> | <a href="#"><u>17.5</u></a>  | <a href="#"><u>Landslides</u></a>                                     | Very low (within 50m)    |       |         |          |           |
| <a href="#"><u>126</u></a> | <a href="#"><u>17.6</u></a>  | <a href="#"><u>Ground dissolution of soluble rocks</u></a>            | Negligible (within 50m)  |       |         |          |           |
| Page                       | Section                      | Mining, ground workings and natural cavities                          | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| 128                        | 18.1                         | Natural cavities                                                      | 0                        | 0     | 0       | 0        | -         |
| <a href="#"><u>129</u></a> | <a href="#"><u>18.2</u></a>  | <a href="#"><u>BritPits</u></a>                                       | 0                        | 0     | 1       | 7        | -         |
| <a href="#"><u>130</u></a> | <a href="#"><u>18.3</u></a>  | <a href="#"><u>Surface ground workings</u></a>                        | 2                        | 3     | 35      | -        | -         |
| <a href="#"><u>132</u></a> | <a href="#"><u>18.4</u></a>  | <a href="#"><u>Underground workings</u></a>                           | 0                        | 0     | 0       | 0        | 2         |
| 132                        | 18.5                         | Historical Mineral Planning Areas                                     | 0                        | 0     | 0       | 0        | -         |



| 132        | 18.6        | Non-coal mining                                       | 0                        | 0     | 0       | 0        | 0         |
|------------|-------------|-------------------------------------------------------|--------------------------|-------|---------|----------|-----------|
| 133        | 18.7        | Mining cavities                                       | 0                        | 0     | 0       | 0        | 0         |
| 133        | 18.8        | JPB mining areas                                      | None (within 0m)         |       |         |          |           |
| <b>133</b> | <b>18.9</b> | <b><u>Coal mining</u></b>                             | Identified (within 0m)   |       |         |          |           |
| 133        | 18.10       | Brine areas                                           | None (within 0m)         |       |         |          |           |
| 134        | 18.11       | Gypsum areas                                          | None (within 0m)         |       |         |          |           |
| 134        | 18.12       | Tin mining                                            | None (within 0m)         |       |         |          |           |
| 134        | 18.13       | Clay mining                                           | None (within 0m)         |       |         |          |           |
| Page       | Section     | Radon                                                 |                          |       |         |          |           |
| <b>135</b> | <b>19.1</b> | <b><u>Radon</u></b>                                   | Less than 1% (within 0m) |       |         |          |           |
| Page       | Section     | Soil chemistry                                        | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <b>136</b> | <b>20.1</b> | <b><u>BGS Estimated Background Soil Chemistry</u></b> | 1                        | 1     | -       | -        | -         |
| 136        | 20.2        | BGS Estimated Urban Soil Chemistry                    | 0                        | 0     | -       | -        | -         |
| 136        | 20.3        | BGS Measured Urban Soil Chemistry                     | 0                        | 0     | -       | -        | -         |
| Page       | Section     | Railway infrastructure and projects                   | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| 137        | 21.1        | Underground railways (London)                         | 0                        | 0     | 0       | -        | -         |
| 137        | 21.2        | Underground railways (Non-London)                     | 0                        | 0     | 0       | -        | -         |
| 138        | 21.3        | Railway tunnels                                       | 0                        | 0     | 0       | -        | -         |
| <b>138</b> | <b>21.4</b> | <b><u>Historical railway and tunnel features</u></b>  | 0                        | 0     | 6       | -        | -         |
| 138        | 21.5        | Royal Mail tunnels                                    | 0                        | 0     | 0       | -        | -         |
| 139        | 21.6        | Historical railways                                   | 0                        | 0     | 0       | -        | -         |
| 139        | 21.7        | Railways                                              | 0                        | 0     | 0       | -        | -         |
| 139        | 21.8        | Crossrail 1                                           | 0                        | 0     | 0       | 0        | -         |
| 139        | 21.9        | Crossrail 2                                           | 0                        | 0     | 0       | 0        | -         |
| 139        | 21.10       | HS2                                                   | 0                        | 0     | 0       | 0        | -         |

## Recent aerial photograph



Capture Date: 23/05/2019

Site Area: 0.44ha



## Recent site history - 2012 aerial photograph



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Capture Date: 26/03/2012

Site Area: 0.44ha



## Recent site history - 2000 aerial photograph



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Capture Date: 19/06/2000

Site Area: 0.44ha



## Recent site history - 1999 aerial photograph



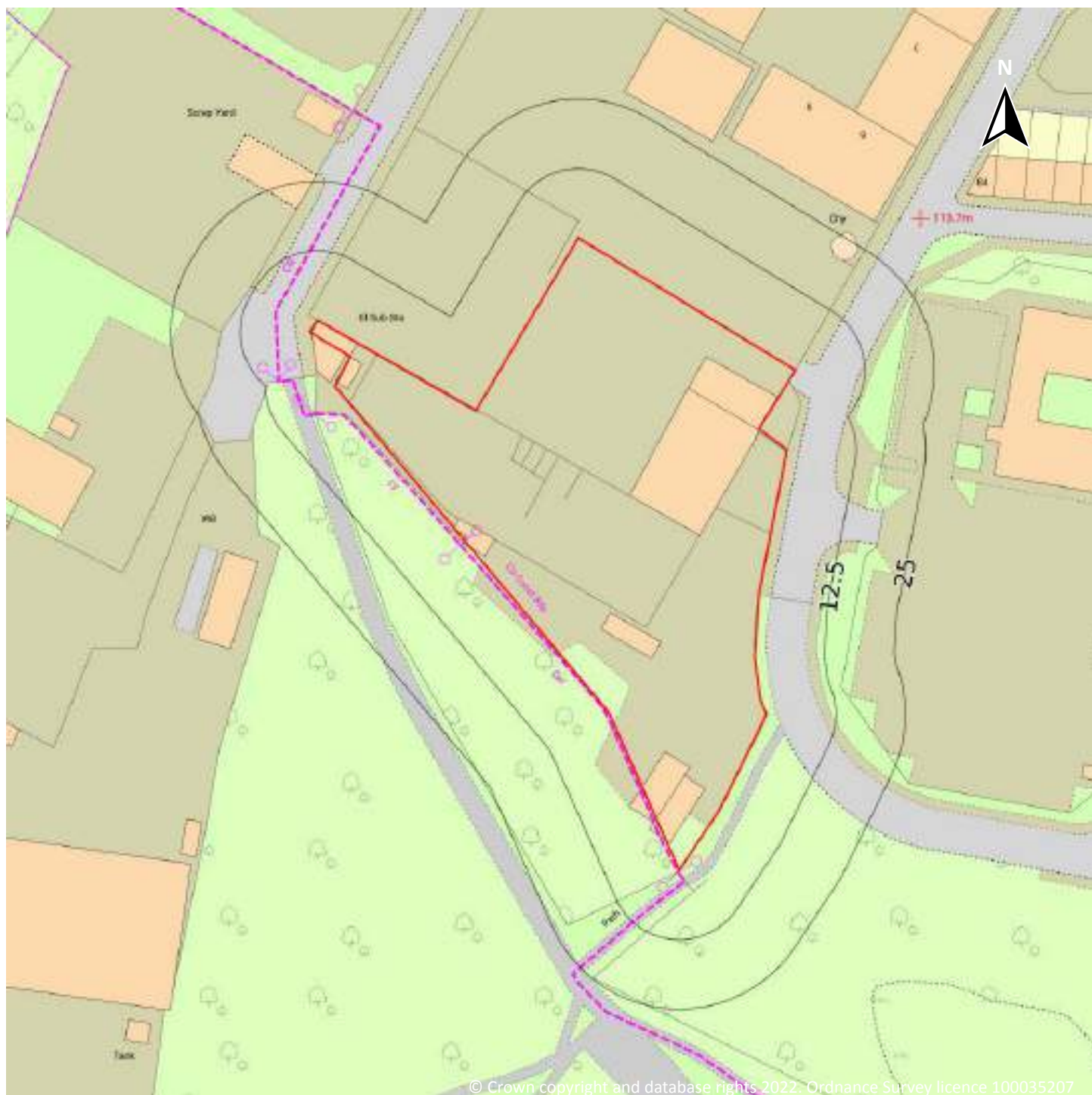
Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2022. All Rights Reserved.

Capture Date: 10/09/1999

Site Area: 0.44ha



## OS MasterMap site plan



Site Area: 0.44ha



## 1 Past land use



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

### 1.1 Historical industrial land uses

Records within 500m

153

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

Features are displayed on the Past land use map on **page 13**

| ID | Location | Land use | Dates present | Group ID |
|----|----------|----------|---------------|----------|
| A  | On site  | Colliery | 1851          | 645246   |



| ID | Location | Land use                          | Dates present | Group ID |
|----|----------|-----------------------------------|---------------|----------|
| A  | On site  | Unspecified Works                 | 1968          | 701380   |
| A  | On site  | Unspecified Mill                  | 1928 - 1938   | 702127   |
| A  | On site  | Unspecified Mill                  | 1949          | 707027   |
| A  | On site  | Unspecified Mill                  | 1908          | 723008   |
| A  | On site  | Unspecified Commercial/Industrial | 1968 - 1975   | 744042   |
| A  | On site  | Industrial Estate                 | 1987 - 1992   | 770430   |
| A  | On site  | Unspecified Mill                  | 1890          | 786193   |
| B  | On site  | Gravel Pit                        | 1890          | 652934   |
| 1  | 6m SW    | Colliery                          | 1851          | 645245   |
| C  | 11m W    | Unspecified Mills                 | 1968 - 1975   | 772761   |
| A  | 11m NW   | Shed                              | 1851          | 659583   |
| A  | 14m W    | Unspecified Works                 | 1987 - 1992   | 773433   |
| 2  | 15m E    | Unspecified Works                 | 1992          | 678966   |
| C  | 15m SW   | Unspecified Mills                 | 1949          | 759796   |
| A  | 15m NW   | Unspecified Commercial/Industrial | 1975          | 643270   |
| B  | 19m SW   | Unspecified Ground Workings       | 1908          | 648046   |
| C  | 20m W    | Unspecified Mill                  | 1908          | 657015   |
| C  | 21m W    | Unspecified Mills                 | 1928 - 1938   | 774238   |
| D  | 44m N    | Unspecified Mill                  | 1968 - 1975   | 762738   |
| E  | 46m W    | Sewage Farm                       | 1928          | 764863   |
| C  | 58m SW   | Unspecified Tank                  | 1908 - 1949   | 729033   |
| D  | 59m NW   | Unspecified Mill                  | 1890 - 1938   | 788874   |
| D  | 63m N    | Unspecified Mill                  | 1949          | 750483   |
| E  | 67m W    | Sewage Farm                       | 1949          | 788969   |
| 3  | 69m W    | Sewage Works                      | 1975 - 1992   | 725350   |
| 4  | 70m W    | Sludge Lagoons                    | 1975          | 762930   |
| 5  | 71m E    | Unspecified Heap                  | 1938          | 650756   |
| 6  | 72m W    | Sludge Lagoons                    | 1987 - 1992   | 723894   |



| ID | Location | Land use                          | Dates present | Group ID |
|----|----------|-----------------------------------|---------------|----------|
| F  | 77m NE   | Laundry                           | 1928 - 1938   | 746289   |
| H  | 124m SE  | Refuse Heap                       | 1987          | 734733   |
| I  | 144m SE  | Unspecified Heap                  | 1949          | 726687   |
| I  | 144m SE  | Unspecified Heap                  | 1968 - 1992   | 762394   |
| I  | 145m S   | Unspecified Heap                  | 1928 - 1938   | 787494   |
| I  | 150m S   | Unspecified Ground Workings       | 1908          | 648045   |
| J  | 152m NE  | Brick Works                       | 1908          | 749241   |
| J  | 153m NE  | Brick Works                       | 1928 - 1938   | 748954   |
| J  | 172m NE  | Unspecified Heap                  | 1890 - 1908   | 742696   |
| D  | 173m N   | Unspecified Tank                  | 1908          | 740259   |
| D  | 176m N   | Unspecified Tank                  | 1949          | 748211   |
| J  | 184m NE  | Railway Sidings                   | 1908          | 759045   |
| J  | 184m NE  | Railway Sidings                   | 1928 - 1938   | 782338   |
| J  | 184m NE  | Unspecified Pit                   | 1968 - 1975   | 749474   |
| 7  | 186m W   | Railway Sidings                   | 1949          | 641623   |
| K  | 191m NW  | Unspecified Heap                  | 1908          | 650754   |
| L  | 197m N   | Unspecified Mills                 | 1908          | 747111   |
| L  | 199m N   | Unspecified Mills                 | 1928 - 1938   | 707412   |
| 8  | 201m W   | Sludge Beds                       | 1987 - 1992   | 752789   |
| L  | 201m N   | Woollen Mill                      | 1851          | 670984   |
| M  | 202m NE  | Gas Works                         | 1908          | 721516   |
| I  | 203m S   | Refuse Heap                       | 1908          | 677420   |
| L  | 205m N   | Unspecified Mills                 | 1949          | 766909   |
| M  | 209m NE  | Unspecified Works                 | 1968          | 678967   |
| M  | 209m NE  | Unspecified Commercial/Industrial | 1949          | 711256   |
| K  | 211m N   | Refuse Heap                       | 1928 - 1938   | 724425   |
| 9  | 216m S   | Unspecified Disused Tip           | 1992          | 654671   |
| K  | 219m N   | Refuse Heap                       | 1949          | 734879   |

| ID | Location | Land use                          | Dates present | Group ID |
|----|----------|-----------------------------------|---------------|----------|
| J  | 227m NE  | Unspecified Quarry                | 1908          | 768102   |
| J  | 235m NE  | Unspecified Quarry                | 1928 - 1938   | 738831   |
| L  | 253m N   | Unspecified Mill                  | 1890          | 657014   |
| M  | 260m NE  | Gasometer                         | 1908          | 655110   |
| M  | 260m NE  | Unspecified Tank                  | 1928 - 1938   | 768365   |
| J  | 264m NE  | Unspecified Pit                   | 1968 - 1975   | 726278   |
| H  | 264m SE  | Refuse Heap                       | 1975          | 782818   |
| M  | 267m NE  | Unspecified Tank                  | 1949          | 729919   |
| M  | 267m NE  | Unspecified Tank                  | 1968 - 1992   | 737435   |
| H  | 269m E   | Refuse Heap                       | 1949          | 776854   |
| 11 | 276m E   | Cuttings                          | 1851          | 642618   |
| M  | 279m E   | Unspecified Commercial/Industrial | 1928 - 1938   | 713479   |
| M  | 289m E   | Unspecified Commercial/Industrial | 1975 - 1992   | 738979   |
| M  | 293m NE  | Gas Works                         | 1890          | 735188   |
| N  | 303m E   | Unspecified Ground Workings       | 1949          | 648020   |
| M  | 314m NE  | Gasometers                        | 1890 - 1908   | 706696   |
| M  | 315m NE  | Unspecified Tank                  | 1928 - 1938   | 780786   |
| M  | 317m NE  | Unspecified Tank                  | 1975 - 1992   | 756378   |
| M  | 321m NE  | Unspecified Tank                  | 1968          | 755852   |
| M  | 321m NE  | Unspecified Tank                  | 1949          | 773040   |
| O  | 325m W   | Unspecified Works                 | 1968          | 678965   |
| N  | 326m E   | Unspecified Pit                   | 1890          | 690685   |
| M  | 331m NE  | Unspecified Tanks                 | 1908          | 666406   |
| 13 | 333m E   | Unspecified Ground Workings       | 1890          | 648019   |
| 14 | 344m N   | Unspecified Mill                  | 1890 - 1908   | 754245   |
| M  | 346m NE  | Unspecified Tank                  | 1928 - 1938   | 705447   |
| M  | 351m NE  | Unspecified Tank                  | 1949          | 749036   |
| M  | 351m NE  | Unspecified Tank                  | 1968 - 1992   | 771526   |



| ID | Location | Land use                          | Dates present | Group ID |
|----|----------|-----------------------------------|---------------|----------|
| M  | 352m NE  | Unspecified Tanks                 | 1908          | 666407   |
| M  | 356m NE  | Unspecified Tank                  | 1949          | 674712   |
| Q  | 358m N   | Sand Pit                          | 1851          | 643846   |
| R  | 366m S   | Refuse Heap                       | 1949          | 780948   |
| R  | 366m S   | Refuse Heap                       | 1938          | 762926   |
| N  | 367m E   | Unspecified Pit                   | 1890          | 690687   |
| R  | 367m S   | Refuse Heap                       | 1928          | 697271   |
| S  | 373m NE  | Unspecified Works                 | 1975          | 678968   |
| P  | 373m SW  | Unspecified Mills                 | 1890          | 653215   |
| S  | 373m NE  | Unspecified Commercial/Industrial | 1987 - 1992   | 768228   |
| M  | 380m NE  | Unspecified Tank                  | 1928 - 1938   | 776653   |
| 15 | 382m E   | Sand Pit                          | 1851          | 643845   |
| M  | 385m NE  | Unspecified Tank                  | 1968          | 701522   |
| M  | 385m NE  | Unspecified Tank                  | 1949          | 736521   |
| Q  | 385m N   | Unspecified Works                 | 1908          | 700400   |
| Q  | 386m N   | Unspecified Works                 | 1928 - 1938   | 778348   |
| T  | 388m W   | Unspecified Tanks                 | 1987 - 1992   | 728221   |
| Q  | 389m N   | Unspecified Works                 | 1949          | 740262   |
| M  | 391m NE  | Unspecified Tanks                 | 1908          | 666405   |
| O  | 393m SW  | Sewage Farm                       | 1890          | 778690   |
| 19 | 394m SE  | Refuse Heap                       | 1908          | 739108   |
| P  | 398m SW  | Settling Tanks                    | 1908          | 681806   |
| M  | 407m NE  | Unspecified Tank                  | 1928 - 1938   | 787884   |
| Q  | 407m N   | Sand Pit                          | 1851          | 643847   |
| M  | 407m NE  | Gasometer                         | 1890 - 1908   | 790690   |
| M  | 410m NE  | Unspecified Depot                 | 1987 - 1992   | 743479   |
| U  | 412m NW  | Garage                            | 1987 - 1992   | 745291   |
| V  | 414m N   | Unspecified Pit                   | 1890          | 690684   |



| ID | Location | Land use                          | Dates present | Group ID |
|----|----------|-----------------------------------|---------------|----------|
| 20 | 416m S   | Refuse Heap                       | 1851          | 677419   |
| V  | 417m N   | Unspecified Heaps                 | 1987 - 1992   | 733057   |
| 21 | 418m NW  | Sand Pit                          | 1890          | 643844   |
| S  | 420m NE  | Unspecified Commercial/Industrial | 1987 - 1992   | 714400   |
| O  | 425m W   | Unspecified Heap                  | 1908          | 650753   |
| 22 | 427m N   | Unspecified Mill                  | 1987 - 1992   | 754845   |
| V  | 431m N   | Unspecified Quarry                | 1890          | 667799   |
| O  | 431m SW  | Unspecified Tanks                 | 1987 - 1992   | 748092   |
| W  | 431m NE  | Cotton Mill                       | 1851          | 644261   |
| M  | 434m E   | Unspecified Ground Workings       | 1968 - 1992   | 757649   |
| Q  | 434m N   | Unspecified Heap                  | 1975          | 717515   |
| V  | 435m N   | Mill Pond                         | 1928 - 1938   | 769736   |
| 23 | 437m SE  | Hospital                          | 1992          | 682599   |
| M  | 438m NE  | Gas Works                         | 1851          | 701538   |
| V  | 440m N   | Unspecified Pit                   | 1968 - 1975   | 775373   |
| U  | 441m NW  | Unspecified Ground Workings       | 1928          | 740857   |
| V  | 443m N   | Mill Pond                         | 1949          | 761387   |
| U  | 444m NW  | Unspecified Ground Workings       | 1968 - 1975   | 732129   |
| U  | 444m NW  | Unspecified Ground Workings       | 1949          | 734239   |
| Q  | 445m N   | Unspecified Heap                  | 1987 - 1992   | 713231   |
| M  | 448m E   | Unspecified Ground Workings       | 1890          | 700601   |
| P  | 449m SW  | Unspecified Heap                  | 1968 - 1975   | 757754   |
| Q  | 454m N   | Nursery                           | 1890 - 1908   | 696329   |
| 24 | 460m S   | Brick Field                       | 1851          | 668535   |
| O  | 464m W   | Filter Beds                       | 1987 - 1992   | 719807   |
| M  | 466m NE  | Gasometers                        | 1851          | 652228   |
| X  | 474m N   | Unspecified Works                 | 1987 - 1992   | 730963   |
| Y  | 479m NE  | Iron Works                        | 1928 - 1938   | 711428   |

| ID | Location | Land use                          | Dates present | Group ID |
|----|----------|-----------------------------------|---------------|----------|
| Y  | 484m NE  | Iron Works                        | 1949          | 776877   |
| 28 | 484m E   | Refuse Heap                       | 1851          | 677421   |
| Y  | 485m NE  | Unspecified Mills                 | 1975          | 724503   |
| Y  | 485m NE  | Unspecified Works                 | 1987 - 1992   | 737212   |
| Y  | 486m NE  | Unspecified Works                 | 1968          | 740403   |
| Y  | 486m NE  | Unspecified Commercial/Industrial | 1968          | 643263   |
| W  | 492m NE  | Unspecified Mills                 | 1949          | 653259   |
| X  | 493m N   | Unspecified Ground Workings       | 1975 - 1992   | 696220   |
| X  | 494m N   | Unspecified Quarry                | 1928 - 1938   | 782710   |
| 30 | 496m W   | Unspecified Disused Tip           | 1992          | 654670   |
| Z  | 497m N   | Woollen Mill                      | 1851          | 670986   |
| W  | 498m NE  | Unspecified Commercial/Industrial | 1968          | 643264   |

This data is sourced from Ordnance Survey / Groundsure.

## 1.2 Historical tanks

### Records within 500m

87

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

Features are displayed on the Past land use map on **page 13**

| ID | Location | Land use         | Dates present | Group ID |
|----|----------|------------------|---------------|----------|
| A  | 14m NE   | Unspecified Tank | 1890          | 84213    |
| C  | 59m SW   | Unspecified Tank | 1957          | 96780    |
| F  | 89m NE   | Unspecified Tank | 1957          | 103878   |
| F  | 89m NE   | Unspecified Tank | -             | 77904    |
| G  | 109m NW  | Unspecified Tank | 1957          | 102083   |
| G  | 109m NW  | Unspecified Tank | -             | 77930    |



| ID | Location | Land use           | Dates present | Group ID |
|----|----------|--------------------|---------------|----------|
| G  | 109m NW  | Unspecified Tank   | 1957          | 89624    |
| G  | 109m NW  | Unspecified Tank   | 1984          | 100022   |
| G  | 145m W   | Unspecified Tank   | 1957          | 91675    |
| G  | 145m W   | Unspecified Tank   | 1957          | 102249   |
| G  | 148m NW  | Unspecified Tank   | 1984          | 84210    |
| G  | 149m NW  | Unspecified Tank   | 1957          | 96678    |
| G  | 149m NW  | Unspecified Tank   | 1957          | 99854    |
| G  | 151m NW  | Unspecified Tank   | -             | 77879    |
| D  | 173m N   | Unspecified Tank   | 1890          | 84208    |
| D  | 178m N   | Unspecified Tank   | 1957          | 95963    |
| D  | 179m N   | Unspecified Tank   | -             | 77878    |
| 10 | 242m SE  | Unspecified Tank   | 1891          | 84317    |
| M  | 254m NE  | Gasholder Station  | 1990          | 85874    |
| M  | 259m NE  | Gasometer          | 1910          | 78080    |
| M  | 259m NE  | Unspecified Tank   | 1930          | 103497   |
| M  | 266m NE  | Gas Holder         | 1990          | 88188    |
| M  | 266m NE  | Unspecified Tank   | 1957 - 1984   | 96689    |
| M  | 266m NE  | Unspecified Tank   | -             | 77847    |
| M  | 268m NE  | Unspecified Tank   | 1957          | 92517    |
| M  | 272m NE  | Unspecified Tank   | 1973 - 1993   | 92553    |
| 12 | 279m NW  | Unspecified Tank   | 1910          | 84209    |
| M  | 284m E   | Gasholder Station  | 1973 - 1974   | 101994   |
| M  | 284m E   | Gas Holder Station | 1993          | 95263    |
| M  | 293m E   | Gasholder Station  | 1985 - 1990   | 88747    |
| L  | 300m N   | Unspecified Tank   | 1910 - 1930   | 97541    |
| M  | 311m NE  | Gasholder          | 1973          | 85852    |
| M  | 311m NE  | Unspecified Tank   | 1957          | 95823    |
| M  | 311m NE  | Gas Holder         | 1993          | 102245   |

| ID | Location | Land use           | Dates present | Group ID |
|----|----------|--------------------|---------------|----------|
| M  | 311m NE  | Tanks              | 1930          | 98467    |
| M  | 311m NE  | Gasometers         | 1890 - 1910   | 104228   |
| M  | 312m NE  | Gas Holder         | 1985 - 1990   | 98797    |
| L  | 316m N   | Unspecified Tank   | 1890          | 84207    |
| M  | 330m NE  | Unspecified Tank   | 1890 - 1930   | 103378   |
| M  | 331m NE  | Unspecified Tank   | 1910          | 84323    |
| P  | 336m SW  | Tanks              | 1930          | 87685    |
| M  | 351m NE  | Unspecified Tank   | 1930          | 84320    |
| M  | 351m NE  | Oil Tank           | 1910          | 88151    |
| M  | 352m NE  | Gas Holder         | 1985 - 1993   | 103081   |
| M  | 352m NE  | Unspecified Tank   | 1957          | 84321    |
| M  | 352m NE  | Gasholder          | 1973          | 85851    |
| M  | 364m NE  | Unspecified Tank   | 1910 - 1930   | 89781    |
| S  | 370m NE  | Tanks              | 1910          | 87682    |
| P  | 372m SW  | Tanks              | 1930          | 87679    |
| M  | 382m NE  | Gas Holder Station | 1979 - 1988   | 102601   |
| M  | 382m NE  | Gasholder Station  | 1997          | 101097   |
| 16 | 383m SW  | Settling Tanks     | 1978          | 78169    |
| M  | 386m NE  | Unspecified Tank   | 1957          | 98431    |
| T  | 387m W   | Tanks              | 1990 - 1993   | 100900   |
| M  | 387m NE  | Unspecified Tank   | 1957          | 95804    |
| 18 | 388m NE  | Unspecified Tank   | 1890 - 1930   | 95266    |
| M  | 390m NE  | Gas Works          | 1967          | 88580    |
| Q  | 390m N   | Tanks              | 1910          | 87681    |
| M  | 394m NE  | Unspecified Tank   | 1890          | 84324    |
| S  | 394m NE  | Unspecified Tank   | 1890          | 84325    |
| M  | 394m NE  | Tanks              | 1910 - 1930   | 99934    |
| P  | 397m SW  | Settling Tanks     | 1910 - 1930   | 104020   |

| ID | Location | Land use         | Dates present | Group ID |
|----|----------|------------------|---------------|----------|
| P  | 399m SW  | Tanks            | 1990 - 1992   | 95739    |
| M  | 403m NE  | Unspecified Tank | 1890          | 93909    |
| S  | 404m NE  | Unspecified Tank | 1890          | 84206    |
| M  | 404m NE  | Unspecified Tank | 1910 - 1930   | 90847    |
| M  | 405m NE  | Oil Tank         | 1910          | 88152    |
| M  | 406m NE  | Unspecified Tank | 1930          | 84328    |
| M  | 406m NE  | Gasometer        | 1890 - 1910   | 89434    |
| M  | 412m NE  | Unspecified Tank | 1959 - 1967   | 101819   |
| M  | 422m NE  | Tanks            | 1957          | 101178   |
| M  | 422m NE  | Tanks            | 1973          | 97431    |
| O  | 438m SW  | Tanks            | 1990          | 102872   |
| O  | 438m SW  | Tanks            | 1993          | 88962    |
| M  | 444m NE  | Unspecified Tank | 1910 - 1930   | 100490   |
| P  | 460m SW  | Unspecified Tank | 1957          | 99740    |
| P  | 460m SW  | Unspecified Tank | 1957 - 1964   | 93341    |
| M  | 461m NE  | Tanks            | 1930          | 87687    |
| M  | 466m NE  | Tanks            | 1890 - 1910   | 92095    |
| M  | 467m NE  | Tar Tanks        | 1910          | 78341    |
| 25 | 478m SW  | Settling Tanks   | 1978          | 78170    |
| O  | 479m SW  | Unspecified Tank | 1978          | 98113    |
| P  | 479m SW  | Unspecified Tank | 1910 - 1930   | 100652   |
| O  | 479m SW  | Unspecified Tank | 1990          | 92296    |
| O  | 480m SW  | Unspecified Tank | 1992          | 93416    |
| M  | 496m NE  | Tanks            | 1910 - 1930   | 100099   |
| M  | 500m NE  | Tanks            | 1957          | 103391   |

*This data is sourced from Ordnance Survey / Groundsure.*



### 1.3 Historical energy features

#### Records within 500m

29

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

Features are displayed on the Past land use map on **page 13**

| ID | Location | Land use               | Dates present | Group ID |
|----|----------|------------------------|---------------|----------|
| A  | 0m SW    | Electricity Substation | 1984 - 1990   | 57391    |
| F  | 65m E    | Electricity Substation | 1990          | 45540    |
| F  | 131m NE  | Electricity Substation | 1990          | 45541    |
| M  | 198m NE  | Corporation Gas Works  | 1890 - 1910   | 59229    |
| M  | 254m NE  | Gasholder Station      | 1990          | 46362    |
| M  | 259m NE  | Gasometer              | 1910          | 46132    |
| M  | 266m NE  | Gas Holder             | 1990          | 46490    |
| M  | 284m E   | Gasholder Station      | 1973 - 1974   | 57081    |
| M  | 284m E   | Gas Holder Station     | 1993          | 57023    |
| M  | 293m E   | Gasholder Station      | 1985 - 1990   | 51739    |
| M  | 311m NE  | Gasholder              | 1973          | 46340    |
| M  | 311m NE  | Gas Holder             | 1993          | 58404    |
| M  | 311m NE  | Gasometers             | 1890 - 1910   | 49188    |
| M  | 312m NE  | Gas Holder             | 1985 - 1990   | 55941    |
| Q  | 347m N   | Electricity Substation | 1987 - 1995   | 57714    |
| M  | 352m NE  | Gas Holder             | 1985 - 1993   | 53607    |
| M  | 352m NE  | Gasholder              | 1973          | 46339    |
| M  | 382m NE  | Gas Holder Station     | 1979 - 1988   | 54374    |
| M  | 382m NE  | Gasholder Station      | 1997          | 53887    |
| 17 | 384m E   | Electricity Substation | 1985 - 1993   | 57783    |
| M  | 389m NE  | Electricity Substation | 1988 - 1997   | 55227    |



| ID | Location | Land use                        | Dates present | Group ID |
|----|----------|---------------------------------|---------------|----------|
| M  | 390m NE  | Gas Works                       | 1967          | 46625    |
| M  | 406m NE  | Gasometer                       | 1890 - 1910   | 49944    |
| P  | 446m SW  | Electricity Substation          | 1990 - 1992   | 48196    |
| O  | 479m W   | Electricity Substation          | 1990 - 1993   | 56892    |
| 26 | 479m NW  | Electricity Substation          | 1992          | 45491    |
| 27 | 481m SW  | Electricity Substation          | 1990 - 1992   | 50686    |
| W  | 486m NE  | Corporation Electricity Station | 1910          | 46385    |
| 29 | 490m W   | Electricity Substation          | 1972 - 1993   | 58765    |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.4 Historical petrol stations

### Records within 500m

0

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

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.5 Historical garages

### Records within 500m

7

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

Features are displayed on the Past land use map on **page 13**

| ID | Location | Land use | Dates present | Group ID |
|----|----------|----------|---------------|----------|
| U  | 412m NW  | Garage   | 1980 - 1992   | 17535    |
| U  | 412m NW  | Garage   | 1989          | 17042    |
| M  | 443m E   | Garage   | 1973          | 15329    |



| ID | Location | Land use | Dates present | Group ID |
|----|----------|----------|---------------|----------|
| M  | 444m E   | Garage   | 1993          | 15733    |
| M  | 445m E   | Garage   | 1985 - 1990   | 19160    |
| Z  | 485m N   | Garage   | 1959 - 1978   | 17439    |
| Z  | 500m N   | Garage   | 1959          | 16797    |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.6 Historical military land

**Records within 500m**

**0**

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

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



## 2 Past land use - un-grouped



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

### 2.1 Historical industrial land uses

Records within 500m

227

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

Features are displayed on the Past land use - un-grouped map on **page 26**

| ID | Location | Land Use          | Date | Group ID |
|----|----------|-------------------|------|----------|
| A  | On site  | Unspecified Mill  | 1938 | 702127   |
| A  | On site  | Unspecified Mill  | 1908 | 723008   |
| A  | On site  | Industrial Estate | 1992 | 770430   |

| ID | Location | Land Use                          | Date | Group ID |
|----|----------|-----------------------------------|------|----------|
| A  | On site  | Industrial Estate                 | 1987 | 770430   |
| A  | On site  | Unspecified Commercial/Industrial | 1975 | 744042   |
| A  | On site  | Unspecified Works                 | 1968 | 701380   |
| A  | On site  | Colliery                          | 1851 | 645246   |
| A  | On site  | Unspecified Mill                  | 1949 | 707027   |
| A  | On site  | Unspecified Mill                  | 1890 | 786193   |
| A  | On site  | Unspecified Commercial/Industrial | 1968 | 744042   |
| A  | On site  | Unspecified Mill                  | 1928 | 702127   |
| B  | On site  | Gravel Pit                        | 1890 | 652934   |
| 1  | 6m SW    | Colliery                          | 1851 | 645245   |
| C  | 11m W    | Unspecified Mills                 | 1975 | 772761   |
| C  | 11m W    | Unspecified Mills                 | 1968 | 772761   |
| A  | 11m NW   | Shed                              | 1851 | 659583   |
| A  | 14m W    | Unspecified Works                 | 1992 | 773433   |
| A  | 14m W    | Unspecified Works                 | 1987 | 773433   |
| 2  | 15m E    | Unspecified Works                 | 1992 | 678966   |
| C  | 15m SW   | Unspecified Mills                 | 1949 | 759796   |
| A  | 15m NW   | Unspecified Commercial/Industrial | 1975 | 643270   |
| B  | 19m SW   | Unspecified Ground Workings       | 1908 | 648046   |
| C  | 20m W    | Unspecified Mill                  | 1908 | 657015   |
| C  | 21m W    | Unspecified Mills                 | 1938 | 774238   |
| C  | 21m W    | Unspecified Mills                 | 1928 | 774238   |
| D  | 44m N    | Unspecified Mill                  | 1975 | 762738   |
| D  | 44m N    | Unspecified Mill                  | 1968 | 762738   |
| E  | 46m W    | Sewage Farm                       | 1928 | 764863   |
| C  | 58m SW   | Unspecified Tank                  | 1949 | 729033   |
| D  | 59m NW   | Unspecified Mill                  | 1938 | 788874   |
| D  | 59m NW   | Unspecified Mill                  | 1928 | 788874   |



| ID | Location | Land Use                    | Date | Group ID |
|----|----------|-----------------------------|------|----------|
| D  | 61m NW   | Unspecified Mill            | 1908 | 788874   |
| D  | 63m N    | Unspecified Mill            | 1949 | 750483   |
| C  | 63m W    | Unspecified Tank            | 1938 | 729033   |
| C  | 63m W    | Unspecified Tank            | 1928 | 729033   |
| C  | 64m W    | Unspecified Tank            | 1908 | 729033   |
| E  | 67m W    | Sewage Farm                 | 1949 | 788969   |
| D  | 68m NW   | Unspecified Mill            | 1890 | 788874   |
| G  | 69m W    | Sewage Works                | 1992 | 725350   |
| G  | 69m W    | Sewage Works                | 1987 | 725350   |
| G  | 69m W    | Sewage Works                | 1975 | 725350   |
| 3  | 70m W    | Sludge Lagoons              | 1975 | 762930   |
| 4  | 71m E    | Unspecified Heap            | 1938 | 650756   |
| H  | 72m W    | Sludge Lagoons              | 1992 | 723894   |
| H  | 72m W    | Sludge Lagoons              | 1987 | 723894   |
| F  | 77m NE   | Laundry                     | 1938 | 746289   |
| F  | 77m NE   | Laundry                     | 1928 | 746289   |
| J  | 124m SE  | Refuse Heap                 | 1987 | 734733   |
| K  | 144m SE  | Unspecified Heap            | 1992 | 762394   |
| K  | 144m SE  | Unspecified Heap            | 1987 | 762394   |
| K  | 144m SE  | Unspecified Heap            | 1975 | 762394   |
| K  | 144m SE  | Unspecified Heap            | 1949 | 726687   |
| K  | 144m SE  | Unspecified Heap            | 1968 | 762394   |
| K  | 145m S   | Unspecified Heap            | 1938 | 787494   |
| K  | 145m S   | Unspecified Heap            | 1928 | 787494   |
| K  | 150m S   | Unspecified Ground Workings | 1908 | 648045   |
| L  | 152m NE  | Brick Works                 | 1908 | 749241   |
| L  | 153m NE  | Brick Works                 | 1938 | 748954   |
| L  | 153m NE  | Brick Works                 | 1928 | 748954   |



| ID | Location | Land Use                          | Date | Group ID |
|----|----------|-----------------------------------|------|----------|
| L  | 172m NE  | Unspecified Heap                  | 1890 | 742696   |
| D  | 173m N   | Unspecified Tank                  | 1908 | 740259   |
| D  | 176m N   | Unspecified Tank                  | 1949 | 748211   |
| L  | 184m NE  | Railway Sidings                   | 1908 | 759045   |
| L  | 184m NE  | Railway Sidings                   | 1938 | 782338   |
| L  | 184m NE  | Railway Sidings                   | 1928 | 782338   |
| L  | 184m NE  | Unspecified Pit                   | 1975 | 749474   |
| L  | 184m NE  | Unspecified Pit                   | 1968 | 749474   |
| 5  | 186m W   | Railway Sidings                   | 1949 | 641623   |
| M  | 191m NW  | Unspecified Heap                  | 1908 | 650754   |
| N  | 197m N   | Unspecified Mills                 | 1908 | 747111   |
| N  | 199m N   | Unspecified Mills                 | 1938 | 707412   |
| N  | 199m N   | Unspecified Mills                 | 1928 | 707412   |
| P  | 201m W   | Sludge Beds                       | 1992 | 752789   |
| P  | 201m W   | Sludge Beds                       | 1987 | 752789   |
| N  | 201m N   | Woollen Mill                      | 1851 | 670984   |
| O  | 202m NE  | Gas Works                         | 1908 | 721516   |
| K  | 203m S   | Refuse Heap                       | 1908 | 677420   |
| N  | 205m N   | Unspecified Mills                 | 1949 | 766909   |
| O  | 209m NE  | Unspecified Commercial/Industrial | 1949 | 711256   |
| O  | 209m NE  | Unspecified Works                 | 1968 | 678967   |
| M  | 211m N   | Refuse Heap                       | 1938 | 724425   |
| M  | 211m N   | Refuse Heap                       | 1928 | 724425   |
| 6  | 216m S   | Unspecified Disused Tip           | 1992 | 654671   |
| M  | 219m N   | Refuse Heap                       | 1949 | 734879   |
| L  | 227m NE  | Unspecified Quarry                | 1908 | 768102   |
| L  | 235m NE  | Unspecified Quarry                | 1938 | 738831   |
| L  | 235m NE  | Unspecified Quarry                | 1928 | 738831   |

| ID | Location | Land Use                          | Date | Group ID |
|----|----------|-----------------------------------|------|----------|
| L  | 248m NE  | Unspecified Heap                  | 1908 | 742696   |
| N  | 253m N   | Unspecified Mill                  | 1890 | 657014   |
| O  | 260m NE  | Gasometer                         | 1908 | 655110   |
| O  | 260m NE  | Unspecified Tank                  | 1938 | 768365   |
| O  | 260m NE  | Unspecified Tank                  | 1928 | 768365   |
| L  | 264m NE  | Unspecified Pit                   | 1975 | 726278   |
| J  | 264m SE  | Refuse Heap                       | 1975 | 782818   |
| O  | 267m NE  | Unspecified Tank                  | 1992 | 737435   |
| O  | 267m NE  | Unspecified Tank                  | 1987 | 737435   |
| O  | 267m NE  | Unspecified Tank                  | 1975 | 737435   |
| O  | 267m NE  | Unspecified Tank                  | 1949 | 729919   |
| O  | 267m NE  | Unspecified Tank                  | 1968 | 737435   |
| J  | 269m E   | Refuse Heap                       | 1949 | 776854   |
| 8  | 276m E   | Cuttings                          | 1851 | 642618   |
| O  | 279m E   | Unspecified Commercial/Industrial | 1938 | 713479   |
| O  | 279m E   | Unspecified Commercial/Industrial | 1928 | 713479   |
| L  | 287m N   | Unspecified Pit                   | 1968 | 726278   |
| O  | 289m E   | Unspecified Commercial/Industrial | 1992 | 738979   |
| O  | 289m E   | Unspecified Commercial/Industrial | 1987 | 738979   |
| O  | 289m E   | Unspecified Commercial/Industrial | 1975 | 738979   |
| O  | 293m NE  | Gas Works                         | 1890 | 735188   |
| Q  | 303m E   | Unspecified Ground Workings       | 1949 | 648020   |
| O  | 314m NE  | Gasometers                        | 1890 | 706696   |
| O  | 315m NE  | Gasometers                        | 1908 | 706696   |
| O  | 315m NE  | Unspecified Tank                  | 1938 | 780786   |
| O  | 315m NE  | Unspecified Tank                  | 1928 | 780786   |
| O  | 317m NE  | Unspecified Tank                  | 1992 | 756378   |
| O  | 317m NE  | Unspecified Tank                  | 1987 | 756378   |



| ID | Location | Land Use                          | Date | Group ID |
|----|----------|-----------------------------------|------|----------|
| O  | 317m NE  | Unspecified Tank                  | 1975 | 756378   |
| O  | 321m NE  | Unspecified Tank                  | 1949 | 773040   |
| O  | 321m NE  | Unspecified Tank                  | 1968 | 755852   |
| R  | 325m W   | Unspecified Works                 | 1968 | 678965   |
| Q  | 326m E   | Unspecified Pit                   | 1890 | 690685   |
| O  | 331m NE  | Unspecified Tanks                 | 1908 | 666406   |
| 10 | 333m E   | Unspecified Ground Workings       | 1890 | 648019   |
| T  | 344m N   | Unspecified Mill                  | 1890 | 754245   |
| O  | 346m NE  | Unspecified Tank                  | 1938 | 705447   |
| O  | 346m NE  | Unspecified Tank                  | 1928 | 705447   |
| O  | 351m NE  | Unspecified Tank                  | 1992 | 771526   |
| O  | 351m NE  | Unspecified Tank                  | 1987 | 771526   |
| O  | 351m NE  | Unspecified Tank                  | 1975 | 771526   |
| O  | 351m NE  | Unspecified Tank                  | 1949 | 749036   |
| O  | 351m NE  | Unspecified Tank                  | 1968 | 771526   |
| O  | 352m NE  | Unspecified Tanks                 | 1908 | 666407   |
| O  | 356m NE  | Unspecified Tank                  | 1949 | 674712   |
| T  | 358m N   | Sand Pit                          | 1851 | 643846   |
| U  | 366m S   | Refuse Heap                       | 1949 | 780948   |
| U  | 366m S   | Refuse Heap                       | 1938 | 762926   |
| Q  | 367m E   | Unspecified Pit                   | 1890 | 690687   |
| U  | 367m S   | Refuse Heap                       | 1928 | 697271   |
| V  | 373m NE  | Unspecified Works                 | 1975 | 678968   |
| S  | 373m SW  | Unspecified Mills                 | 1890 | 653215   |
| V  | 373m NE  | Unspecified Commercial/Industrial | 1992 | 768228   |
| V  | 373m NE  | Unspecified Commercial/Industrial | 1987 | 768228   |
| O  | 380m NE  | Unspecified Tank                  | 1938 | 776653   |
| O  | 380m NE  | Unspecified Tank                  | 1928 | 776653   |

| ID | Location | Land Use          | Date | Group ID |
|----|----------|-------------------|------|----------|
| 11 | 382m E   | Sand Pit          | 1851 | 643845   |
| O  | 385m NE  | Unspecified Tank  | 1949 | 736521   |
| O  | 385m NE  | Unspecified Tank  | 1968 | 701522   |
| T  | 385m N   | Unspecified Works | 1908 | 700400   |
| T  | 386m N   | Unspecified Works | 1938 | 778348   |
| T  | 386m N   | Unspecified Works | 1928 | 778348   |
| X  | 388m W   | Unspecified Tanks | 1992 | 728221   |
| X  | 388m W   | Unspecified Tanks | 1987 | 728221   |
| T  | 389m N   | Unspecified Works | 1949 | 740262   |
| O  | 391m NE  | Unspecified Tanks | 1908 | 666405   |
| R  | 393m SW  | Sewage Farm       | 1890 | 778690   |
| 13 | 394m SE  | Refuse Heap       | 1908 | 739108   |
| Z  | 395m N   | Unspecified Mill  | 1908 | 754245   |
| S  | 398m SW  | Settling Tanks    | 1908 | 681806   |
| O  | 407m NE  | Unspecified Tank  | 1938 | 787884   |
| O  | 407m NE  | Unspecified Tank  | 1928 | 787884   |
| T  | 407m N   | Sand Pit          | 1851 | 643847   |
| O  | 407m NE  | Gasometer         | 1908 | 790690   |
| O  | 410m NE  | Gasometer         | 1890 | 790690   |
| O  | 410m NE  | Unspecified Depot | 1992 | 743479   |
| O  | 410m NE  | Unspecified Depot | 1987 | 743479   |
| AA | 412m NW  | Garage            | 1992 | 745291   |
| AA | 412m NW  | Garage            | 1987 | 745291   |
| Z  | 414m N   | Unspecified Pit   | 1890 | 690684   |
| 14 | 416m S   | Refuse Heap       | 1851 | 677419   |
| Z  | 417m N   | Unspecified Heaps | 1992 | 733057   |
| Z  | 417m N   | Unspecified Heaps | 1987 | 733057   |
| 15 | 418m NW  | Sand Pit          | 1890 | 643844   |



| ID | Location | Land Use                          | Date | Group ID |
|----|----------|-----------------------------------|------|----------|
| V  | 420m NE  | Unspecified Commercial/Industrial | 1992 | 714400   |
| V  | 420m NE  | Unspecified Commercial/Industrial | 1987 | 714400   |
| R  | 425m W   | Unspecified Heap                  | 1908 | 650753   |
| AB | 427m N   | Unspecified Mill                  | 1992 | 754845   |
| AB | 427m N   | Unspecified Mill                  | 1987 | 754845   |
| Z  | 431m N   | Unspecified Quarry                | 1890 | 667799   |
| R  | 431m SW  | Unspecified Tanks                 | 1992 | 748092   |
| R  | 431m SW  | Unspecified Tanks                 | 1987 | 748092   |
| AC | 431m NE  | Cotton Mill                       | 1851 | 644261   |
| O  | 434m E   | Unspecified Ground Workings       | 1992 | 757649   |
| O  | 434m E   | Unspecified Ground Workings       | 1987 | 757649   |
| O  | 434m E   | Unspecified Ground Workings       | 1975 | 757649   |
| O  | 434m E   | Unspecified Ground Workings       | 1968 | 757649   |
| T  | 434m N   | Unspecified Heap                  | 1975 | 717515   |
| Z  | 435m N   | Mill Pond                         | 1938 | 769736   |
| Z  | 435m N   | Mill Pond                         | 1928 | 769736   |
| 16 | 437m SE  | Hospital                          | 1992 | 682599   |
| O  | 438m NE  | Gas Works                         | 1851 | 701538   |
| Z  | 440m N   | Unspecified Pit                   | 1975 | 775373   |
| Z  | 440m N   | Unspecified Pit                   | 1968 | 775373   |
| AA | 441m NW  | Unspecified Ground Workings       | 1928 | 740857   |
| Z  | 443m N   | Mill Pond                         | 1949 | 761387   |
| AA | 444m NW  | Unspecified Ground Workings       | 1975 | 732129   |
| AA | 444m NW  | Unspecified Ground Workings       | 1949 | 734239   |
| AA | 444m NW  | Unspecified Ground Workings       | 1968 | 732129   |
| T  | 445m N   | Unspecified Heap                  | 1992 | 713231   |
| T  | 445m N   | Unspecified Heap                  | 1987 | 713231   |
| O  | 448m E   | Unspecified Ground Workings       | 1890 | 700601   |

| ID | Location | Land Use                          | Date | Group ID |
|----|----------|-----------------------------------|------|----------|
| S  | 449m SW  | Unspecified Heap                  | 1975 | 757754   |
| S  | 449m SW  | Unspecified Heap                  | 1968 | 757754   |
| T  | 454m N   | Nursery                           | 1908 | 696329   |
| 17 | 460m S   | Brick Field                       | 1851 | 668535   |
| R  | 464m W   | Filter Beds                       | 1992 | 719807   |
| R  | 464m W   | Filter Beds                       | 1987 | 719807   |
| O  | 466m NE  | Gasometers                        | 1851 | 652228   |
| T  | 468m N   | Nursery                           | 1890 | 696329   |
| AD | 474m N   | Unspecified Works                 | 1992 | 730963   |
| AD | 474m N   | Unspecified Works                 | 1987 | 730963   |
| AE | 479m NE  | Iron Works                        | 1938 | 711428   |
| AE | 479m NE  | Iron Works                        | 1928 | 711428   |
| AE | 484m NE  | Iron Works                        | 1949 | 776877   |
| 20 | 484m E   | Refuse Heap                       | 1851 | 677421   |
| AE | 485m NE  | Unspecified Works                 | 1992 | 737212   |
| AE | 485m NE  | Unspecified Works                 | 1987 | 737212   |
| AE | 485m NE  | Unspecified Mills                 | 1975 | 724503   |
| AE | 486m NE  | Unspecified Works                 | 1968 | 740403   |
| AE | 486m NE  | Unspecified Commercial/Industrial | 1968 | 643263   |
| AC | 492m NE  | Unspecified Mills                 | 1949 | 653259   |
| AD | 493m N   | Unspecified Ground Workings       | 1992 | 696220   |
| AD | 493m N   | Unspecified Ground Workings       | 1987 | 696220   |
| AD | 493m N   | Unspecified Ground Workings       | 1975 | 696220   |
| AD | 494m N   | Unspecified Quarry                | 1938 | 782710   |
| AD | 494m N   | Unspecified Quarry                | 1928 | 782710   |
| 21 | 496m W   | Unspecified Disused Tip           | 1992 | 654670   |
| AG | 497m N   | Woollen Mill                      | 1851 | 670986   |
| AC | 498m NE  | Unspecified Commercial/Industrial | 1968 | 643264   |

*This data is sourced from Ordnance Survey / Groundsure.*



## 2.2 Historical tanks

### Records within 500m

**128**

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

Features are displayed on the Past land use - un-grouped map on **page 26**

| ID | Location | Land Use          | Date | Group ID |
|----|----------|-------------------|------|----------|
| A  | 14m NE   | Unspecified Tank  | 1890 | 84213    |
| C  | 59m SW   | Unspecified Tank  | 1957 | 96780    |
| C  | 60m SW   | Unspecified Tank  | 1957 | 96780    |
| F  | 89m NE   | Unspecified Tank  | 1957 | 103878   |
| F  | 89m NE   | Unspecified Tank  | -    | 77904    |
| F  | 90m NE   | Unspecified Tank  | 1957 | 103878   |
| I  | 109m NW  | Unspecified Tank  | 1957 | 102083   |
| I  | 109m NW  | Unspecified Tank  | -    | 77930    |
| I  | 109m NW  | Unspecified Tank  | 1957 | 89624    |
| I  | 109m NW  | Unspecified Tank  | 1984 | 100022   |
| I  | 145m W   | Unspecified Tank  | 1957 | 91675    |
| I  | 145m W   | Unspecified Tank  | 1957 | 102249   |
| I  | 148m NW  | Unspecified Tank  | 1984 | 84210    |
| I  | 149m NW  | Unspecified Tank  | 1957 | 96678    |
| I  | 149m NW  | Unspecified Tank  | 1957 | 99854    |
| I  | 151m NW  | Unspecified Tank  | -    | 77879    |
| D  | 173m N   | Unspecified Tank  | 1890 | 84208    |
| D  | 178m N   | Unspecified Tank  | 1957 | 95963    |
| D  | 179m N   | Unspecified Tank  | 1957 | 95963    |
| D  | 179m N   | Unspecified Tank  | -    | 77878    |
| 7  | 242m SE  | Unspecified Tank  | 1891 | 84317    |
| O  | 254m NE  | Gasholder Station | 1990 | 85874    |
| O  | 259m NE  | Gasometer         | 1910 | 78080    |



| ID | Location | Land Use           | Date | Group ID |
|----|----------|--------------------|------|----------|
| O  | 259m NE  | Unspecified Tank   | 1930 | 103497   |
| O  | 266m NE  | Unspecified Tank   | 1984 | 96689    |
| O  | 266m NE  | Gas Holder         | 1990 | 88188    |
| O  | 266m NE  | Unspecified Tank   | -    | 77847    |
| O  | 267m NE  | Unspecified Tank   | 1957 | 96689    |
| O  | 268m NE  | Unspecified Tank   | 1957 | 92517    |
| O  | 272m NE  | Unspecified Tank   | 1993 | 92553    |
| O  | 272m NE  | Unspecified Tank   | 1957 | 92517    |
| O  | 272m NE  | Unspecified Tank   | 1985 | 92553    |
| O  | 272m NE  | Unspecified Tank   | 1990 | 92553    |
| O  | 272m NE  | Unspecified Tank   | 1990 | 92553    |
| O  | 272m NE  | Unspecified Tank   | 1973 | 92553    |
| O  | 272m NE  | Unspecified Tank   | 1957 | 92517    |
| 9  | 279m NW  | Unspecified Tank   | 1910 | 84209    |
| O  | 284m E   | Gasholder Station  | 1973 | 101994   |
| O  | 284m E   | Gas Holder Station | 1993 | 95263    |
| O  | 293m E   | Gasholder Station  | 1985 | 88747    |
| O  | 293m E   | Gasholder Station  | 1990 | 88747    |
| O  | 293m E   | Gasholder Station  | 1990 | 88747    |
| N  | 300m N   | Unspecified Tank   | 1910 | 97541    |
| N  | 300m N   | Unspecified Tank   | 1930 | 97541    |
| O  | 311m NE  | Gasholder          | 1973 | 85852    |
| O  | 311m NE  | Unspecified Tank   | 1957 | 95823    |
| O  | 311m NE  | Gas Holder         | 1993 | 102245   |
| O  | 311m NE  | Gasometers         | 1890 | 104228   |
| O  | 311m NE  | Gasometers         | 1910 | 104228   |
| O  | 311m NE  | Tanks              | 1930 | 98467    |
| O  | 312m NE  | Unspecified Tank   | 1957 | 95823    |

| ID | Location | Land Use           | Date | Group ID |
|----|----------|--------------------|------|----------|
| O  | 312m NE  | Gas Holder         | 1985 | 98797    |
| O  | 312m NE  | Gas Holder         | 1990 | 98797    |
| O  | 312m NE  | Gas Holder         | 1990 | 98797    |
| N  | 316m N   | Unspecified Tank   | 1890 | 84207    |
| O  | 330m NE  | Unspecified Tank   | 1890 | 103378   |
| O  | 330m NE  | Unspecified Tank   | 1910 | 103378   |
| O  | 330m NE  | Unspecified Tank   | 1930 | 103378   |
| O  | 331m NE  | Unspecified Tank   | 1910 | 84323    |
| S  | 336m SW  | Tanks              | 1930 | 87685    |
| O  | 351m NE  | Oil Tank           | 1910 | 88151    |
| O  | 351m NE  | Unspecified Tank   | 1930 | 84320    |
| O  | 352m NE  | Gas Holder         | 1993 | 103081   |
| O  | 352m NE  | Gasholder          | 1973 | 85851    |
| O  | 352m NE  | Unspecified Tank   | 1957 | 84321    |
| O  | 353m NE  | Gas Holder         | 1985 | 103081   |
| O  | 353m NE  | Gas Holder         | 1990 | 103081   |
| O  | 353m NE  | Gas Holder         | 1990 | 103081   |
| O  | 364m NE  | Unspecified Tank   | 1910 | 89781    |
| O  | 364m NE  | Unspecified Tank   | 1930 | 89781    |
| O  | 368m NE  | Gasholder Station  | 1974 | 101994   |
| V  | 370m NE  | Tanks              | 1910 | 87682    |
| S  | 372m SW  | Tanks              | 1930 | 87679    |
| O  | 382m NE  | Gas Holder Station | 1979 | 102601   |
| O  | 382m NE  | Gas Holder Station | 1988 | 102601   |
| O  | 382m NE  | Gasholder Station  | 1997 | 101097   |
| 12 | 383m SW  | Settling Tanks     | 1978 | 78169    |
| O  | 386m NE  | Unspecified Tank   | 1957 | 98431    |
| X  | 387m W   | Tanks              | 1993 | 100900   |



| ID | Location | Land Use         | Date | Group ID |
|----|----------|------------------|------|----------|
| O  | 387m NE  | Unspecified Tank | 1957 | 95804    |
| X  | 387m W   | Tanks            | 1990 | 100900   |
| Y  | 388m NE  | Unspecified Tank | 1890 | 95266    |
| Y  | 388m NE  | Unspecified Tank | 1910 | 95266    |
| Y  | 388m NE  | Unspecified Tank | 1930 | 95266    |
| O  | 390m NE  | Gas Works        | 1967 | 88580    |
| T  | 390m N   | Tanks            | 1910 | 87681    |
| O  | 394m NE  | Unspecified Tank | 1890 | 84324    |
| V  | 394m NE  | Unspecified Tank | 1890 | 84325    |
| O  | 394m NE  | Tanks            | 1910 | 99934    |
| S  | 397m SW  | Settling Tanks   | 1910 | 104020   |
| S  | 397m SW  | Settling Tanks   | 1930 | 104020   |
| S  | 399m SW  | Tanks            | 1990 | 95739    |
| S  | 399m SW  | Tanks            | 1992 | 95739    |
| O  | 403m NE  | Tanks            | 1930 | 99934    |
| O  | 403m NE  | Unspecified Tank | 1890 | 93909    |
| V  | 404m NE  | Unspecified Tank | 1890 | 84206    |
| O  | 404m NE  | Unspecified Tank | 1910 | 90847    |
| O  | 404m NE  | Unspecified Tank | 1930 | 90847    |
| O  | 405m NE  | Oil Tank         | 1910 | 88152    |
| O  | 406m NE  | Gasometer        | 1890 | 89434    |
| O  | 406m NE  | Gasometer        | 1910 | 89434    |
| O  | 406m NE  | Unspecified Tank | 1930 | 84328    |
| O  | 412m NE  | Unspecified Tank | 1959 | 101819   |
| O  | 412m NE  | Unspecified Tank | 1967 | 101819   |
| O  | 413m NE  | Unspecified Tank | 1959 | 101819   |
| O  | 422m NE  | Tanks            | 1957 | 101178   |
| O  | 422m NE  | Tanks            | 1973 | 97431    |



| ID | Location | Land Use         | Date | Group ID |
|----|----------|------------------|------|----------|
| O  | 422m NE  | Tanks            | 1957 | 101178   |
| R  | 438m SW  | Tanks            | 1990 | 102872   |
| R  | 438m SW  | Tanks            | 1993 | 88962    |
| O  | 444m NE  | Unspecified Tank | 1910 | 100490   |
| O  | 444m NE  | Unspecified Tank | 1930 | 100490   |
| S  | 460m SW  | Unspecified Tank | 1957 | 99740    |
| S  | 460m SW  | Unspecified Tank | 1957 | 93341    |
| S  | 460m SW  | Unspecified Tank | 1964 | 93341    |
| O  | 461m NE  | Tanks            | 1930 | 87687    |
| O  | 466m NE  | Tanks            | 1890 | 92095    |
| O  | 466m NE  | Tanks            | 1910 | 92095    |
| O  | 467m NE  | Tar Tanks        | 1910 | 78341    |
| 18 | 478m SW  | Settling Tanks   | 1978 | 78170    |
| R  | 479m SW  | Unspecified Tank | 1978 | 98113    |
| S  | 479m SW  | Unspecified Tank | 1910 | 100652   |
| S  | 479m SW  | Unspecified Tank | 1930 | 100652   |
| R  | 479m SW  | Unspecified Tank | 1990 | 92296    |
| R  | 480m SW  | Unspecified Tank | 1992 | 93416    |
| O  | 496m NE  | Tanks            | 1910 | 100099   |
| O  | 496m NE  | Tanks            | 1930 | 100099   |
| O  | 500m NE  | Tanks            | 1957 | 103391   |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.3 Historical energy features

### Records within 500m

52

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

Features are displayed on the Past land use - un-grouped map on **page 26**



| ID | Location | Land Use               | Date | Group ID |
|----|----------|------------------------|------|----------|
| A  | 0m SW    | Electricity Substation | 1984 | 57391    |
| A  | 0m SW    | Electricity Substation | 1990 | 57391    |
| F  | 65m E    | Electricity Substation | 1990 | 45540    |
| F  | 131m NE  | Electricity Substation | 1990 | 45541    |
| O  | 198m NE  | Corporation Gas Works  | 1910 | 59229    |
| O  | 254m NE  | Gasholder Station      | 1990 | 46362    |
| O  | 259m NE  | Gasometer              | 1910 | 46132    |
| O  | 266m NE  | Gas Holder             | 1990 | 46490    |
| O  | 284m E   | Gasholder Station      | 1973 | 57081    |
| O  | 284m E   | Gas Holder Station     | 1993 | 57023    |
| O  | 290m NE  | Corporation Gas Works  | 1890 | 59229    |
| O  | 293m E   | Gasholder Station      | 1985 | 51739    |
| O  | 293m E   | Gasholder Station      | 1990 | 51739    |
| O  | 293m E   | Gasholder Station      | 1990 | 51739    |
| O  | 311m NE  | Gasholder              | 1973 | 46340    |
| O  | 311m NE  | Gas Holder             | 1993 | 58404    |
| O  | 311m NE  | Gasometers             | 1890 | 49188    |
| O  | 311m NE  | Gasometers             | 1910 | 49188    |
| O  | 312m NE  | Gas Holder             | 1985 | 55941    |
| O  | 312m NE  | Gas Holder             | 1990 | 55941    |
| O  | 312m NE  | Gas Holder             | 1990 | 55941    |
| T  | 347m N   | Electricity Substation | 1987 | 57714    |
| T  | 348m N   | Electricity Substation | 1995 | 57714    |
| O  | 352m NE  | Gas Holder             | 1993 | 53607    |
| O  | 352m NE  | Gasholder              | 1973 | 46339    |
| O  | 353m NE  | Gas Holder             | 1985 | 53607    |
| O  | 353m NE  | Gas Holder             | 1990 | 53607    |
| O  | 353m NE  | Gas Holder             | 1990 | 53607    |

| ID | Location | Land Use                        | Date | Group ID |
|----|----------|---------------------------------|------|----------|
| O  | 368m NE  | Gasholder Station               | 1974 | 57081    |
| O  | 382m NE  | Gas Holder Station              | 1979 | 54374    |
| O  | 382m NE  | Gas Holder Station              | 1988 | 54374    |
| O  | 382m NE  | Gasholder Station               | 1997 | 53887    |
| W  | 384m E   | Electricity Substation          | 1993 | 57783    |
| W  | 384m E   | Electricity Substation          | 1985 | 57783    |
| W  | 384m E   | Electricity Substation          | 1990 | 57783    |
| W  | 384m E   | Electricity Substation          | 1990 | 57783    |
| O  | 389m NE  | Electricity Substation          | 1997 | 55227    |
| O  | 390m NE  | Gas Works                       | 1967 | 46625    |
| O  | 390m NE  | Electricity Substation          | 1988 | 55227    |
| O  | 406m NE  | Gasometer                       | 1890 | 49944    |
| O  | 406m NE  | Gasometer                       | 1910 | 49944    |
| S  | 446m SW  | Electricity Substation          | 1990 | 48196    |
| S  | 447m SW  | Electricity Substation          | 1992 | 48196    |
| R  | 479m W   | Electricity Substation          | 1993 | 56892    |
| 19 | 479m NW  | Electricity Substation          | 1992 | 45491    |
| R  | 479m W   | Electricity Substation          | 1990 | 56892    |
| AF | 481m SW  | Electricity Substation          | 1992 | 50686    |
| AF | 481m SW  | Electricity Substation          | 1990 | 50686    |
| AC | 486m NE  | Corporation Electricity Station | 1910 | 46385    |
| AH | 490m W   | Electricity Substation          | 1993 | 58765    |
| AH | 490m W   | Electricity Substation          | 1972 | 58765    |
| AH | 490m W   | Electricity Substation          | 1990 | 58765    |

*This data is sourced from Ordnance Survey / Groundsure.*



## 2.4 Historical petrol stations

**Records within 500m**

**0**

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

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.5 Historical garages

**Records within 500m**

**11**

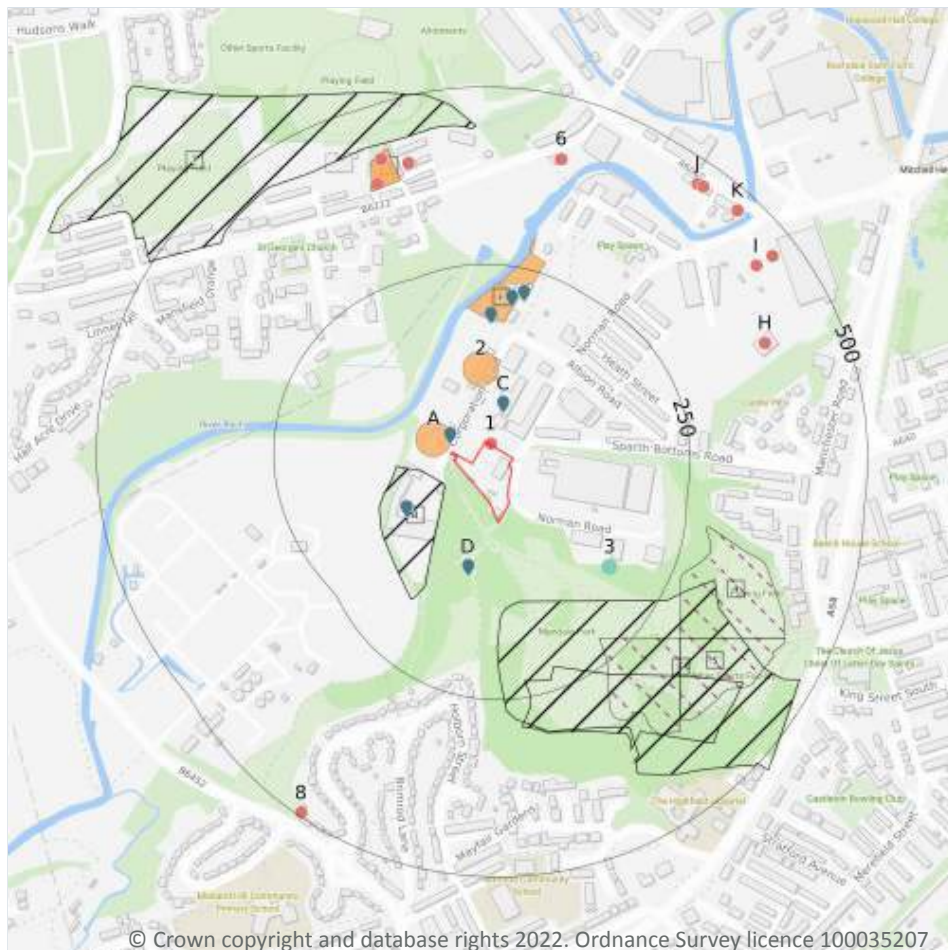
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 26**

| ID | Location | Land Use | Date | Group ID |
|----|----------|----------|------|----------|
| AA | 412m NW  | Garage   | 1992 | 17535    |
| AA | 412m NW  | Garage   | 1989 | 17042    |
| AA | 413m NW  | Garage   | 1980 | 17535    |
| O  | 443m E   | Garage   | 1973 | 15329    |
| O  | 444m E   | Garage   | 1993 | 15733    |
| O  | 445m E   | Garage   | 1990 | 19160    |
| O  | 445m E   | Garage   | 1990 | 19160    |
| O  | 445m E   | Garage   | 1985 | 19160    |
| AG | 485m N   | Garage   | 1978 | 17439    |
| AG | 485m N   | Garage   | 1959 | 17439    |
| AG | 500m N   | Garage   | 1959 | 16797    |

*This data is sourced from Ordnance Survey / Groundsure.*

## 3 Waste and landfill



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

### 3.1 Active or recent landfill

Records within 500m

0

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

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

### 3.2 Historical landfill (BGS records)

Records within 500m

1

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

Features are displayed on the Waste and landfill map on **page 43**

| ID | Location | Address                               | BGS Number | Risk               | Waste Type |
|----|----------|---------------------------------------|------------|--------------------|------------|
| 3  | 167m SE  | Mandale Park, Rochdale, Gt Manchester | 1853       | No risk to aquifer | N/A        |

*This data is sourced from the British Geological Survey.*

### 3.3 Historical landfill (LA/mapping records)

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>3</b> |
|----------------------------|----------|

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

Features are displayed on the Waste and landfill map on **page 43**

| ID | Location | Site address | Source       | Data type |
|----|----------|--------------|--------------|-----------|
| E  | 216m SE  | Refuse Tip   | 1975 mapping | Polygon   |
| 4  | 264m SE  | Refuse Tip   | 1973 mapping | Polygon   |
| 5  | 304m SE  | Refuse Tip   | 1973 mapping | Polygon   |

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

### 3.4 Historical landfill (EA/NRW records)

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>4</b> |
|----------------------------|----------|

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

Features are displayed on the Waste and landfill map on **page 43**

| ID | Location | Details                                                                                                      |                                                                                                                                                                                            |                                                                           |
|----|----------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| B  | 33m SW   | Site Address: Sparth Mill,<br>Corporation Road, Rochdale,<br>Greater Manchester<br>Licence Holder Address: - | Waste Licence: -<br>Site Reference: D084<br>Waste Type: Industrial, Commercial<br>Environmental Permitting<br>Regulations (Waste) Reference: -<br>Licence Issue: -<br>Licence Surrender: - | Operator: -<br>Licence Holder: -<br>First Recorded: -<br>Last Recorded: - |

| ID | Location | Details                                                                                                   |                                                                                                                                                                                                                         |                                                                                                                                            |
|----|----------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| E  | 115m S   | Site Address: Mandale Park, Rochdale, Greater Manchester<br>Licence Holder Address: -                     | Waste Licence: -<br>Site Reference: -<br>Waste Type: -<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: -<br>Licence Surrender: -                                                         | Operator: Rochdale County Borough Council<br>Licence Holder: -<br>First Recorded 31/12/1969<br>Last Recorded: -                            |
| E  | 217m S   | Site Address: Mandale Park Tip, Manchester Road, Rochdale<br>Licence Holder Address: Town Hall, Rochdale  | Waste Licence: Yes<br>Site Reference: D006, RD/LIC/228/81<br>Waste Type: Inert, Commercial, Household<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: 30/09/1983<br>Licence Surrender: - | Operator: -<br>Licence Holder: Rochdale Metropolitan Borough Council (Recs Dept)<br>First Recorded 31/12/1990<br>Last Recorded: 31/12/1990 |
| 7  | 439m NW  | Site Address: Sandy Brow, Rochdale, Sandy Brow, Rochdale, Greater Manchester<br>Licence Holder Address: - | Waste Licence: -<br>Site Reference: D075<br>Waste Type: -<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: -<br>Licence Surrender: -                                                      | Operator: -<br>Licence Holder: -<br>First Recorded -<br>Last Recorded: -                                                                   |

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

### 3.5 Historical waste sites

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>6</b> |
|----------------------------|----------|

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

Features are displayed on the Waste and landfill map on **page 43**

| ID | Location | Address                                                                | Further Details                                                                                                                                                                                                                                                                  | Date |
|----|----------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| A  | 7m NW    | Site Address: Corporation Road, ROCHDALE, Greater Manchester, OL11 4HJ | Type of Site: Waste Transfer Unit<br>Planning application reference: D33666<br>Description: An application (ref: D33666) for Detailed Planning permission was submitted to Rochdale B.C. on 22nd October 1996.<br>Data source: Historic Planning Application<br>Data Type: Point | -    |

| ID | Location | Address                                                                              | Further Details                                                                                                                                                                                                                                                                                                                                                                                                                        | Date       |
|----|----------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 2  | 78m N    | Site Address: Rochdale WWTW, Roch Valley Way, ROCHDALE, Greater Manchester, OL11 4HQ | Type of Site: Waste Water Transfer Station<br>Planning application reference: 09/D51654<br>Description: Scheme comprises construction of strain press building with integral odour controlled skip removal facility. An application (ref: 09/D51654) for detailed planning permission was granted by Rochdale B.C. A detailed planning application has been granted.<br>Data source: Historic Planning Application<br>Data Type: Point | 30/06/2009 |
| F  | 168m N   | Site Address: N/A                                                                    | Type of Site: Scrap Yard<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon                                                                                                                                                                                                                                                                                             | 1990       |
| F  | 224m N   | Site Address: N/A                                                                    | Type of Site: Scrap Yard<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon                                                                                                                                                                                                                                                                                             | 1995       |
| G  | 383m N   | Site Address: N/A                                                                    | Type of Site: Waste Rubber Works<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon                                                                                                                                                                                                                                                                                     | 1910       |
| G  | 383m N   | Site Address: N/A                                                                    | Type of Site: Waste Rubber Works<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon                                                                                                                                                                                                                                                                                     | 1930       |

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

### 3.6 Licensed waste sites

**Records within 500m**

**14**

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

Features are displayed on the Waste and landfill map on **page 43**



| ID | Location | Details                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                |
|----|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A  | 24m N    | Site Name: Slates Yard<br>Site Address: Slates Yard,<br>Corporation Road, Rochdale,<br>Lancashire, OL11 4EU<br>Correspondence Address: -                                                                      | Type of Site: Vehicle Depollution<br>Facility 5000 tps<br>Size: 25000 tonnes<br>Environmental Permitting<br>Regulations (Waste) Licence<br>Number: SUL008<br>EPR reference:<br>EA/EPR/UP3793VL/V002<br>Operator: Mr Shehzad Suleman<br>And Mr Arsalan Asim<br>Waste Management licence No:<br>53515<br>Annual Tonnage: 4999 | Issue Date: 06/01/1998<br>Effective Date: 21/09/2011<br>Modified: 30/09/2011<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Modified |
| C  | 58m NE   | Site Name: Mohammed Saeed<br>Site Address: Brimrod Yard,<br>Corporation Road, Sparth Bottoms,<br>Rochdale, Lancashire, OL11 4HJ<br>Correspondence Address: -                                                  | Type of Site: Metal Recycling Site<br>(Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting<br>Regulations (Waste) Licence<br>Number: JAP004<br>EPR reference: VP3495ET/V002<br>Operator: Mohammed Saeed<br>Waste Management licence No:<br>100110<br>Annual Tonnage: 0                                    | Issue Date: 26/09/2007<br>Effective Date: -<br>Modified: 29/07/2009<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Modified          |
| C  | 58m NE   | Site Name: Mohammed Saeed<br>Site Address: Brimrod Yard,<br>Corporation Road, Sparth Bottoms,<br>Rochdale, Lancashire, OL11 4HJ<br>Correspondence Address: -                                                  | Type of Site: ELV Facility<br>Size: 25000 tonnes<br>Environmental Permitting<br>Regulations (Waste) Licence<br>Number: JAP004<br>EPR reference:<br>EA/EPR/VP3495ET/V002<br>Operator: Mohammed Saeed<br>Waste Management licence No:<br>100110<br>Annual Tonnage: 2499                                                       | Issue Date: 26/09/2007<br>Effective Date: -<br>Modified: 29/07/2009<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Modified          |
| D  | 76m SW   | Site Name: Dickinson Environmental<br>Site Address: Corporation Road,<br>Rochdale, Lancashire, OL11 4EU<br>Correspondence Address: Lower<br>Stakehill Farm, Stakehill Lane,<br>Middleton, Manchester, M24 2RY | Type of Site: Household,<br>Commercial & Industrial Waste T<br>Stn<br>Size: 25000 tonnes<br>Environmental Permitting<br>Regulations (Waste) Licence<br>Number: PDI001<br>EPR reference: -<br>Operator: Dickinson Phil<br>Waste Management licence No:<br>53515<br>Annual Tonnage: 2084                                      | Issue Date: 06/01/1998<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Issued                     |



| ID | Location | Details                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                   |
|----|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D  | 76m SW   | Site Name: Kingsway Car Parts<br>Site Address: Slates Yard,<br>Corporation Road, Rochdale,<br>Lancashire, OL11 4EU<br>Correspondence Address: -                                                                               | Type of Site: Metal Recycling Site<br>(Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting<br>Regulations (Waste) Licence<br>Number: SUL008<br>EPR reference:<br>EA/EPR/UP3793VL/T001<br>Operator: Mr Shehzad Suleman<br>And Mr Arsalan Asim<br>Waste Management licence No:<br>53515<br>Annual Tonnage: 4999 | Issue Date: 06/01/1998<br>Effective Date: 21/09/2011<br>Modified: 30/06/2003<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Transferred |
| D  | 76m SW   | Site Name: Kingsway Car Parts<br>Site Address: Slates Yard,<br>Corporation Road, Rochdale,<br>Lancashire, OL11 4EU<br>Correspondence Address: -                                                                               | Type of Site: Metal Recycling Site<br>(Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting<br>Regulations (Waste) Licence<br>Number: AHK001<br>EPR reference:<br>EA/EPR/CP3092CJ/V002<br>Operator: Hayto Andrew<br>Waste Management licence No:<br>53515<br>Annual Tonnage: 2084                              | Issue Date: 06/01/1998<br>Effective Date: 10/07/2003<br>Modified: 30/06/2003<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Transferred |
| B  | 95m SW   | Site Name: Dickinson<br>Environmental<br>Site Address: End Yard, Corporation<br>Road, Rochdale, Lancashire, OL11<br>4EU<br>Correspondence Address: Lower<br>Stakehill Farm, Stakehill Lane,<br>Middleton, Manchester, M24 2RY | Type of Site: Metal Recycling Site<br>(mixed MRS's)<br>Size: 25000 tonnes<br>Environmental Permitting<br>Regulations (Waste) Licence<br>Number: DIC001<br>EPR reference: -<br>Operator: Mr P Dickinson & Mr D<br>Dickinson<br>Waste Management licence No:<br>50016<br>Annual Tonnage: 417                                      | Issue Date: 20/09/1999<br>Effective Date: 24/05/2002<br>Modified: 23/05/2002<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Modified    |



| ID | Location | Details                                                                                                                                                      |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                |
|----|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B  | 95m SW   | Site Name: Dickinson Environmental Transfer Station<br>Site Address: End Yard, Corporation Road, Rochdale, Lancashire, OL11 4EU<br>Correspondence Address: - | Type of Site: Household, Commercial & Industrial Waste T Stn<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: DIC001<br>EPR reference: EA/EPR/CP3098CH/V004<br>Operator: Mr P Dickinson<br>Waste Management licence No: 50016<br>Annual Tonnage: 25000 | Issue Date: 20/09/1999<br>Effective Date: 24/05/2002<br>Modified: 30/06/2003<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Modified |
| B  | 95m SW   | Site Name: Dickinson Environmental Transfer Station<br>Site Address: End Yard, Corporation Road, Rochdale, Lancashire, OL11 4EU<br>Correspondence Address: - | Type of Site: 75kte HCI Waste TS + treatment<br>Size: >= 75000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: DIC001<br>EPR reference: EA/EPR/CP3098CH/V006<br>Operator: Mr P Dickinson<br>Waste Management licence No: 50016<br>Annual Tonnage: 75000              | Issue Date: 20/09/1999<br>Effective Date: 24/05/2002<br>Modified: 17/02/2014<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Modified |
| B  | 95m SW   | Site Name: Dickinson Environmental Transfer Station<br>Site Address: End Yard, Corporation Road, Rochdale, Lancashire, OL11 4EU<br>Correspondence Address: - | Type of Site: 75kte HCI Waste TS + treatment<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: DIC001<br>EPR reference: EA/EPR/CP3098CH/V006<br>Operator: Mr P Dickinson<br>Waste Management licence No: 50016<br>Annual Tonnage: 75000                 | Issue Date: 20/09/1999<br>Effective Date: 24/05/2002<br>Modified: 17/02/2014<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Modified |

| ID | Location | Details                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                          |
|----|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| F  | 178m N   | Site Name: Mazda Spares<br>Site Address: Mandale Park,<br>Corporation Road, Rochdale,<br>Lancashire, OL11 4HJ<br>Correspondence Address: -               | Type of Site: Metal Recycling Site<br>(Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting<br>Regulations (Waste) Licence<br>Number: AMS001<br>EPR reference:<br>EA/EPR/FP3798CL/A001<br>Operator: Arshad Mahmood &<br>Shiraz Khan<br>Waste Management licence No:<br>50013<br>Annual Tonnage: 417 | Issue Date: 30/04/1999<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Issued               |
| F  | 205m N   | Site Name: Japs Of Rochdale<br>Site Address: Mandale Park,<br>Corporation Road, Rochdale,<br>Lancashire, OL11 4HJ<br>Correspondence Address: -           | Type of Site: Metal Recycling Site<br>(Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting<br>Regulations (Waste) Licence<br>Number: ALI001<br>EPR reference:<br>EA/EPR/PP3394CY/A001<br>Operator: Ali Saeed<br>Waste Management licence No:<br>50175<br>Annual Tonnage: 200                       | Issue Date: 05/12/2003<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Issued               |
| F  | 205m N   | Site Name: Rochdale Motor<br>Breakers<br>Site Address: Mandale Park,<br>Corporation Road, Rochdale,<br>Lancashire, OL11 4HJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site<br>(Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting<br>Regulations (Waste) Licence<br>Number: MUH001<br>EPR reference:<br>EA/EPR/BB3301UX/T001<br>Operator: Ikram Muhammad<br>Waste Management licence No:<br>50175<br>Annual Tonnage: 200                  | Issue Date: 05/12/2003<br>Effective Date: 13/09/2018<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Transferred |

| ID | Location | Details                                                                                                                                                        |                                                                                                                                                                                                                                                                                                       |                                                                                                                                                       |
|----|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| F  | 215m N   | Site Name: Mazda & Mitsubishi Spares<br>Site Address: Mazda & Mitsubishi Spares, Corporation Road, Rochdale, Lancashire, OL11 4HJ<br>Correspondence Address: - | Type of Site: Vehicle Depollution Facility 5000 tps<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: AMS001<br>EPR reference: EA/EPR/FP3798CL/V002<br>Operator: Mr Arshad Mahmood & Mr Shiraz Khan<br>Waste Management licence No: 50013<br>Annual Tonnage: 4999 | Issue Date: 30/04/1999<br>Effective Date: -<br>Modified: 28/02/2012<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Modified |

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

### 3.7 Waste exemptions

|                            |           |
|----------------------------|-----------|
| <b>Records within 500m</b> | <b>32</b> |
|----------------------------|-----------|

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

Features are displayed on the Waste and landfill map on **page 43**

| ID | Location | Site                                                          | Reference | Category                 | Sub-Category  | Description                                             |
|----|----------|---------------------------------------------------------------|-----------|--------------------------|---------------|---------------------------------------------------------|
| 1  | 1m NE    | NORMAN ROAD, ROCHDALE, OL11 4HS                               | WEX144000 | Storing waste exemption  | Not on a farm | Storage of waste in a secure place                      |
| H  | 390m NE  | DANE STREET, ROCHDALE, OL11 4EZ                               | WEX293314 | Storing waste exemption  | Not on a Farm | Storage of waste in a secure place                      |
| H  | 390m NE  | DANE STREET, ROCHDALE, OL11 4EZ                               | WEX293314 | Treating waste exemption | Not on a Farm | Preparatory treatments (baling, sorting, shredding etc) |
| H  | 390m NE  | DANE STREET, ROCHDALE, OL11 4EZ                               | WEX157469 | Storing waste exemption  | Not on a Farm | Storage of waste in a secure place                      |
| H  | 390m NE  | DANE STREET, ROCHDALE, OL11 4EZ                               | WEX157469 | Treating waste exemption | Not on a Farm | Preparatory treatments (baling, sorting, shredding etc) |
| G  | 393m N   | BRITANNIA METALS LIMITED, CHADWICK STREET, ROCHDALE, OL11 5HD | WEX295188 | Treating waste exemption | Not on a Farm | Recovery of scrap metal                                 |



| ID | Location | Site                                                          | Reference          | Category                 | Sub-Category                | Description                                                |
|----|----------|---------------------------------------------------------------|--------------------|--------------------------|-----------------------------|------------------------------------------------------------|
| G  | 407m N   | BRITANNIA METALS LIMITED, CHADWICK STREET, ROCHDALE, OL11 5HD | WEX157799          | Treating waste exemption | Not on a Farm               | Recovery of scrap metal                                    |
| G  | 407m N   | CHADWICK STREET, ROCHDALE, OL11 5HD                           | WEX153602          | Treating waste exemption | Not on a farm               | Recovery of scrap metal                                    |
| G  | 407m N   | Land at Chadwick Street ROCHDALE Lancashire OL11 5HD          | EPR/ZF0503EL /A001 | Treating waste exemption | Non-Agricultural Waste Only | Recovery of scrap metal                                    |
| 6  | 412m N   | 262-266, Bury Road, Rochdale, OL11 4EE                        | WEX293130          | Treating waste exemption | Not on a farm               | Sorting and de-naturing of controlled drugs for disposal   |
| G  | 424m N   | Land at Chadwick Street ROCHDALE Lancashire OL11 5HD          | EPR/HE5259FP /A001 | Storing waste exemption  | Non-Agricultural Waste Only | Storage of waste in secure containers                      |
| G  | 424m N   | Land at Chadwick Street ROCHDALE Lancashire OL11 5HD          | EPR/HE5259FP /A001 | Storing waste exemption  | Non-Agricultural Waste Only | Storage of waste in a secure place                         |
| G  | 424m N   | Land at Chadwick Street ROCHDALE Lancashire OL11 5HD          | EPR/HE5259FP /A001 | Treating waste exemption | Non-Agricultural Waste Only | Recovery of scrap metal                                    |
| I  | 436m NE  | -                                                             | WEX244774          | Using waste exemption    | Not on a farm               | Use of waste in construction                               |
| I  | 463m NE  | National Grid Dane Street OL11 4EZ                            | EPR/ZE5848VR /A001 | Treating waste exemption | Non-Agricultural Waste Only | Preparatory treatments (baling, sorting, shredding etc)    |
| J  | 466m NE  | -                                                             | WEX259767          | Storing waste exemption  | Not on a farm               | Storage of waste in a secure place                         |
| J  | 466m NE  | -                                                             | WEX259767          | Storing waste exemption  | Not on a farm               | Storage of waste in secure containers                      |
| J  | 466m NE  | -                                                             | WEX259767          | Treating waste exemption | Not on a farm               | Recovery of scrap metal                                    |
| J  | 466m NE  | -                                                             | WEX259767          | Treating waste exemption | Not on a farm               | Screening and blending of waste                            |
| J  | 466m NE  | -                                                             | WEX259767          | Using waste exemption    | Not on a farm               | Incorporation of ash into soil                             |
| J  | 466m NE  | -                                                             | WEX259767          | Using waste exemption    | Not on a farm               | Spreading waste on non-agricultural land to confer benefit |

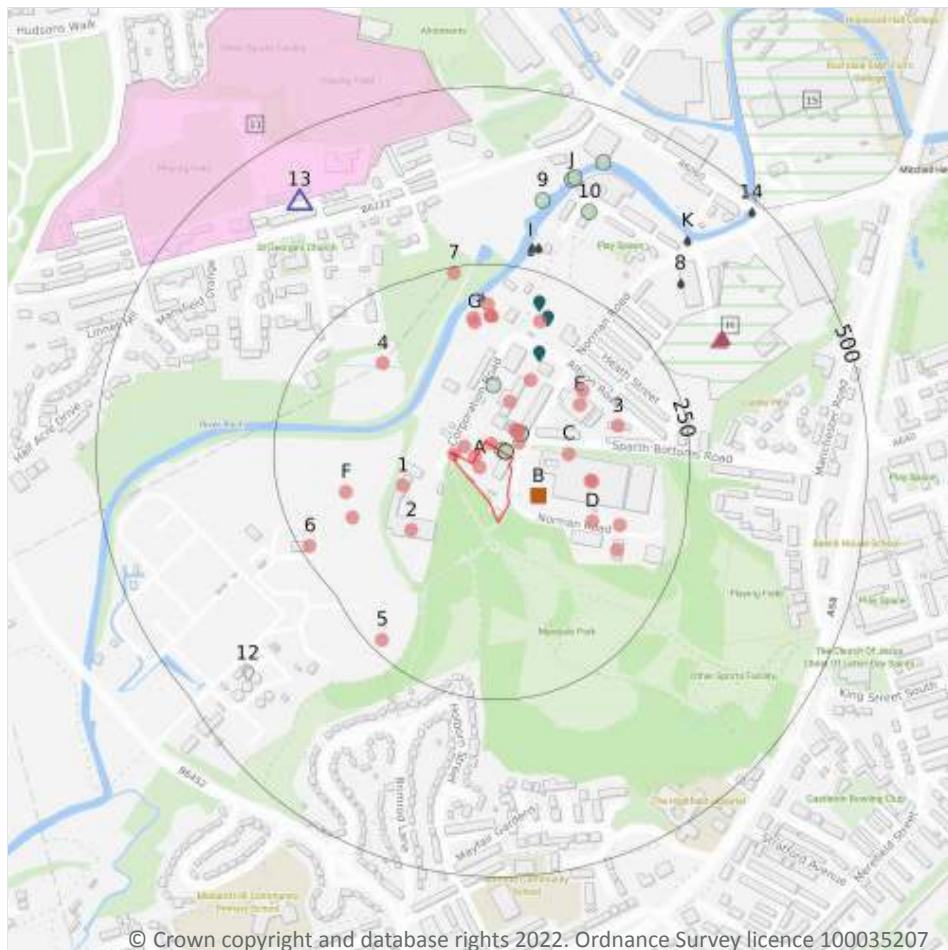


| ID | Location | Site                                                           | Reference          | Category                 | Sub-Category                | Description                                            |
|----|----------|----------------------------------------------------------------|--------------------|--------------------------|-----------------------------|--------------------------------------------------------|
| J  | 466m NE  | -                                                              | WEX259767          | Using waste exemption    | Not on a farm               | Spreading waste on agricultural land to confer benefit |
| J  | 466m NE  | -                                                              | WEX259767          | Using waste exemption    | Not on a farm               | Use of waste in construction                           |
| J  | 466m NE  | Mellor Street Storage Depot, Mellor Street, Rochdale, OL12 6XD | WEX099953          | Treating waste exemption | Not on a farm               | Sorting mixed waste                                    |
| J  | 466m NE  | Mellor Street Storage Depot, Mellor Street, Rochdale, OL12 6XD | WEX099953          | Using waste exemption    | Not on a farm               | Use of waste in construction                           |
| J  | 466m NE  | Mellor Street Storage Depot, Mellor Street, Rochdale, OL12 6XD | WEX099953          | Storing waste exemption  | Not on a farm               | Storage of waste in secure containers                  |
| J  | 466m NE  | Mellor Street Storage Depot, Mellor Street, Rochdale, OL12 6XD | WEX099953          | Treating waste exemption | Not on a farm               | Recovery of scrap metal                                |
| K  | 471m NE  | Mellor Street Storage Depot, Mellor Street, Rochdale, OL12 6XD | WEX244166          | Storing waste exemption  | Not on a farm               | Storage of waste in secure containers                  |
| K  | 471m NE  | Mellor Street Storage Depot, Mellor Street, Rochdale, OL12 6XD | WEX244166          | Treating waste exemption | Not on a farm               | Sorting mixed waste                                    |
| K  | 471m NE  | Mellor Street Storage Depot, Mellor Street, Rochdale, OL12 6XD | WEX244166          | Treating waste exemption | Not on a farm               | Recovery of scrap metal                                |
| K  | 471m NE  | Mellor Street Storage Depot, Mellor Street, Rochdale, OL12 6XD | WEX244166          | Using waste exemption    | Not on a farm               | Use of waste in construction                           |
| 8  | 496m SW  | Sewage Works Roch Valley Way ROCHDALE Lancashire OL11 4QH      | EPR/PH0976XZ /A001 | Using waste exemption    | Non-Agricultural Waste Only | Use of waste in construction                           |

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



## 4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- △ Current or recent petrol stations
- Sites determined as Contaminated Land
- Control of Major Accident Hazards
- ▲ Hazardous substance storage/usage
- ⬮ Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollutant release to public sewer
- Pollution Incidents (EA/NRW)

### 4.1 Recent industrial land uses

Records within 250m

35

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 54**

| ID | Location | Company                 | Address                                                                | Activity              | Category                      |
|----|----------|-------------------------|------------------------------------------------------------------------|-----------------------|-------------------------------|
| A  | On site  | Car & Van Dismantlers   | Brimrod Mill, Corporation Road, Rochdale, Greater Manchester, OL11 4EU | Scrap Metal Merchants | Recycling Services            |
| A  | On site  | Electricity Sub Station | Greater Manchester, OL11                                               | Electrical Features   | Infrastructure and Facilities |

| ID | Location | Company                      | Address                                                                                | Activity                                           | Category                      |
|----|----------|------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------|
| A  | 1m NW    | Global Parts Specialists Ltd | Unit 1, Norman Road, Rochdale, Greater Manchester, OL11 4HS                            | Scrap Metal Merchants                              | Recycling Services            |
| A  | 2m NE    | M A - M O T Centre           | Unit 1, Norman Road, Rochdale, Greater Manchester, OL11 4HS                            | Vehicle Repair, Testing and Servicing              | Repair and Servicing          |
| A  | 15m NE   | Mac's Skips                  | Corporation Road, Rochdale, Greater Manchester, OL11 4EU                               | Construction and Tool Hire                         | Hire Services                 |
| A  | 23m NE   | Chimney                      | Greater Manchester, OL11                                                               | Chimneys                                           | Industrial Features           |
| A  | 36m NE   | W & S Allely Ltd             | Unit 9, Albion Road Industrial Estate, Rochdale, Greater Manchester, OL11 4JB          | Metals Manufacturers, Fabricators and Stockholders | Industrial Products           |
| A  | 36m NE   | Eden Material Services Ltd   | Unit 9, Albion Road Industrial Estate, Rochdale, Greater Manchester, OL11 4JB          | Metals Manufacturers, Fabricators and Stockholders | Industrial Products           |
| A  | 38m NE   | Allely                       | Unit 9 Albion Industrial Estate, Albion Road, Rochdale, Greater Manchester, OL11 4JB   | Metals Manufacturers, Fabricators and Stockholders | Industrial Products           |
| A  | 66m NE   | Damar Interiors N W Ltd      | Unit 11, Albion Industrial Estate, Albion Road, Rochdale, Greater Manchester, OL11 4JB | Building and Component Suppliers                   | Construction Services         |
| C  | 79m E    | Electricity Sub Station      | Greater Manchester, OL11                                                               | Electrical Features                                | Infrastructure and Facilities |
| 1  | 80m SW   | Technical Welding Services   | Corporation Road, Rochdale, Greater Manchester, OL11 4HJ                               | Packaging                                          | Industrial Products           |
| A  | 107m NE  | Rochdale Industrial Centre   | Greater Manchester, OL11                                                               | Business Parks and Industrial Estates              | Industrial Features           |
| 2  | 109m SW  | Dickinson Environmental Ltd  | Corporation Road, Rochdale, Greater Manchester, OL11 4EU                               | Construction and Tool Hire                         | Hire Services                 |
| C  | 112m E   | Works                        | Greater Manchester, OL11                                                               | Unspecified Works Or Factories                     | Industrial Features           |
| C  | 115m E   | United Springs               | Norman Road, Rochdale, Greater Manchester, OL11 4HP                                    | Special Purpose Machinery and Equipment            | Industrial Products           |
| D  | 120m E   | Electricity Sub Station      | Greater Manchester, OL11                                                               | Electrical Features                                | Infrastructure and Facilities |



| ID | Location | Company                       | Address                                                                             | Activity                               | Category                      |
|----|----------|-------------------------------|-------------------------------------------------------------------------------------|----------------------------------------|-------------------------------|
| E  | 121m NE  | Works                         | Greater Manchester, OL11                                                            | Unspecified Works Or Factories         | Industrial Features           |
| E  | 138m NE  | Electricity Sub Station       | Greater Manchester, OL11                                                            | Electrical Features                    | Infrastructure and Facilities |
| 3  | 155m E   | J Cooney Ltd                  | Albion Road, Rochdale, Greater Manchester, OL11 4HQ                                 | Civil Engineers                        | Engineering Services          |
| F  | 157m W   | Solar Panels                  | Greater Manchester, OL11                                                            | Energy Production                      | Industrial Features           |
| 4  | 158m NW  | Pylon                         | Greater Manchester, OL11                                                            | Electrical Features                    | Infrastructure and Facilities |
| D  | 158m E   | Karmo Industrial Estate       | Greater Manchester, OL11                                                            | Business Parks and Industrial Estates  | Industrial Features           |
| F  | 164m SW  | Sewage Works                  | Greater Manchester, OL11                                                            | Waste Storage, Processing and Disposal | Infrastructure and Facilities |
| D  | 166m SE  | Multiwal UK Ltd               | Unit B Karmo Industrial Estate, Norman Road, Rochdale, Greater Manchester, OL11 4HS | Building and Component Suppliers       | Construction Services         |
| G  | 169m N   | Mast                          | Greater Manchester, OL11                                                            | Telecommunications Features            | Infrastructure and Facilities |
| G  | 174m N   | Pylon                         | Greater Manchester, OL11                                                            | Electrical Features                    | Infrastructure and Facilities |
| G  | 178m N   | Mazda & Mitsubishi Spares Ltd | Mandale Park, Corporation Road, Rochdale, Greater Manchester, OL11 4HJ              | Vehicle Parts and Accessories          | Motoring                      |
| G  | 178m N   | M M K Repairs                 | Mandale Park, Corporation Road, Rochdale, Greater Manchester, OL11 4HJ              | Vehicle Parts and Accessories          | Motoring                      |
| G  | 178m N   | Rochdale Vehicle Breakers     | Mandale Park, Corporation Road, Rochdale, Greater Manchester, OL11 4HJ              | Scrap Metal Merchants                  | Recycling Services            |
| A  | 186m NE  | Hopper                        | Greater Manchester, OL11                                                            | Hoppers and Silos                      | Farming                       |
| G  | 194m N   | Recycling Business            | Greater Manchester, OL11                                                            | Recycling Centres                      | Infrastructure and Facilities |
| 5  | 232m SW  | Solar Panels                  | Greater Manchester, OL11                                                            | Energy Production                      | Industrial Features           |
| 6  | 236m SW  | Electricity Sub Station       | Greater Manchester, OL11                                                            | Electrical Features                    | Infrastructure and Facilities |



| ID | Location | Company | Address                  | Activity            | Category                      |
|----|----------|---------|--------------------------|---------------------|-------------------------------|
| 7  | 242m N   | Pylon   | Greater Manchester, OL11 | Electrical Features | Infrastructure and Facilities |

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>1</b> |
|----------------------------|----------|

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 54**

| ID | Location | Company  | Address                                           | LPG            | Status   |
|----|----------|----------|---------------------------------------------------|----------------|----------|
| 13 | 416m NW  | OBSOLETE | Bury Road, Rochdale, Greater Manchester, OL11 4EB | Not Applicable | Obsolete |

*This data is sourced from Experian.*

## 4.3 Electricity cables

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>0</b> |
|----------------------------|----------|

High voltage underground electricity transmission cables.

*This data is sourced from National Grid.*

## 4.4 Gas pipelines

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>0</b> |
|----------------------------|----------|

High pressure underground gas transmission pipelines.

*This data is sourced from National Grid.*

## 4.5 Sites determined as Contaminated Land

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>1</b> |
|----------------------------|----------|

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

Features are displayed on the Current industrial land use map on **page 54**

| ID | Location | Description                                                                                                                                              | Site name                                           | Category                                | Year identified |
|----|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-----------------|
| 11 | 397m N   | Former landfill site. Assessment concluded that not meet the legal definition of "contaminated land" as defined by the 1990 Environmental Protection Act | Sandy Brow former landfill site. Spotland, Rochdale | Potentially Contaminated Land - Revoked | 2013            |

*This data is sourced from Local Authority records.*

## 4.6 Control of Major Accident Hazards (COMAH)

**Records within 500m**

**2**

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

Features are displayed on the Current industrial land use map on **page 54**

| ID | Location | Company               | Address                                                                                             | Operational status    | Tier |
|----|----------|-----------------------|-----------------------------------------------------------------------------------------------------|-----------------------|------|
| H  | 242m NE  | National Grid Gas Plc | National Grid Gas Plc, Rochdale Holder Station, Dane Street, Rochdale, Greater Manchester, OL11 4ES | Historical COMAH Site | -    |
| 15 | 496m NE  | British Gas           | British Gas, Dane Street, Rochdale                                                                  | Historical NIHHS Site | -    |

*This data is sourced from the Health and Safety Executive.*

## 4.7 Regulated explosive sites

**Records within 500m**

**0**

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

*This data is sourced from the Health and Safety Executive.*

## 4.8 Hazardous substance storage/usage

**Records within 500m**

**2**

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

Features are displayed on the Current industrial land use map on **page 54**



| ID | Location | Details                                                                                                                                                                                                                          |                                                                                                                                                                                                                  |
|----|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| H  | 334m NE  | Application reference number: 92/D28632<br>Application status: Historical Consent<br>Application date: 15/09/1992<br>Address: British Gas North Western, Dane Street, Rochdale, OL12 6XB                                         | Details: Application for Hazardous Substances Consent (Deemed Consent).<br>Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified              |
| H  | 340m NE  | Application reference number: 00/D37592<br>Application status: Approved<br>Application date: 28/04/2000<br>Address: National Grid Gas PLC, Rochdale Holder Station, Dane Street, Rochdale, Greater Manchester, England, OL11 4HD | Details: Application for consent to store hazardous substances at Dane Street depot.<br>Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |

*This data is sourced from Local Authority records.*

## 4.9 Historical licensed industrial activities (IPC)

**Records within 500m**

**0**

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

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

## 4.10 Licensed industrial activities (Part A(1))

**Records within 500m**

**1**

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

Features are displayed on the Current industrial land use map on **page 54**

| ID | Location | Details                                                                                                                                                                                                                                            |                                                                                                                                                               |
|----|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 | 412m SW  | Operator: UNITED UTILITIES WATER PLC<br>Installation Name: ROCHDALE WWTW<br>EPR/FP3638MU<br>Process: OTHER WASTE DISPOSAL; NON-HAZARDOUS WASTE >50T/D BY PHYSICO-CHEMICAL TREATMENT<br>Permit Number: FP3638MU<br>Original Permit Number: FP3638MU | EPR Reference: EA/EPR/FP3638MU/V003<br>Issue Date: 24/10/2007<br>Effective Date: 24/10/2007<br>Last date noted as effective: 13/06/2022<br>Status: SUPERCEDED |

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



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

### Records within 500m

**3**

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

Features are displayed on the Current industrial land use map on **page 54**

| ID | Location | Address                                                           | Details                                                                         |                                                                                                                             |
|----|----------|-------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| A  | 144m NE  | Tarmac Central Ltd, Albion Road, Rochdale                         | Process: Use of Bulk Cement<br>Status: Historical Permit<br>Permit Type: Part B | Enforcement: No Enforcements Notified<br>Date of enforcement: No Enforcements Notified<br>Comment: No Enforcements Notified |
| A  | 194m NE  | Breedon Southern Ltd, Albion Road, Rochdale, Lancashire, OL11 4HQ | Process: Use of Bulk Cement<br>Status: Current Permit<br>Permit Type: Part B    | Enforcement: No Enforcements Notified<br>Date of enforcement: No Enforcements Notified<br>Comment: No Enforcements Notified |
| A  | 208m N   | Topmix, Albion Road, Rochdale, OL11 4HQ                           | Process: Use of Bulk Cement<br>Status: Historical Permit<br>Permit Type: Part B | Enforcement: No Enforcements Notified<br>Date of enforcement: No Enforcements Notified<br>Comment: No Enforcements Notified |

*This data is sourced from Local Authority records.*

## 4.12 Radioactive Substance Authorisations

### Records within 500m

**0**

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

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

## 4.13 Licensed Discharges to controlled waters

### Records within 500m

**12**

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

Features are displayed on the Current industrial land use map on **page 54**



| ID | Location | Address                                                                                                                        | Details                                                                                                                                                       |                                                                                                                                                                |
|----|----------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| G  | 203m N   | ALBION RD W48, ROCHDALE, GREATER MANCHESTER                                                                                    | Effluent Type: SEWAGE<br>DISCHARGES - SEWER STORM<br>OVERFLOW - WATER COMPANY<br>Permit Number: 01ROC0088<br>Permit Version: 1<br>Receiving Water: -          | Status: REVOKED - UNSPECIFIED<br>Issue date: -<br>Effective Date: 13/05/1993<br>Revocation Date: 01/01/1995                                                    |
| I  | 276m N   | OAKENROD COMBINED SEWER<br>OVERFLOW, DOWNSTREAM OF<br>CORPORATION ROAD, OAKENROD,<br>ROCHDALE, GREATER<br>MANCHESTER, OL11 4EU | Effluent Type: SEWAGE<br>DISCHARGES - SEWER STORM<br>OVERFLOW - WATER COMPANY<br>Permit Number: 016982276<br>Permit Version: 5<br>Receiving Water: RIVER ROCH | Status: VARIED UNDER EPR 2010<br>Issue date: 16/01/2020<br>Effective Date: 16/01/2020<br>Revocation Date: -                                                    |
| I  | 280m N   | OAKENROD COMBINED SEWER<br>OVERFLOW, DOWNSTREAM OF<br>CORPORATION ROAD, OAKENROD,<br>ROCHDALE, GREATER<br>MANCHESTER, OL11 4EU | Effluent Type: SEWAGE<br>DISCHARGES - SEWER STORM<br>OVERFLOW - WATER COMPANY<br>Permit Number: 016982276<br>Permit Version: 1<br>Receiving Water: RIVER ROCH | Status: REVOKED - UNSPECIFIED<br>Issue date: -<br>Effective Date: 01/11/1991<br>Revocation Date: 14/02/1993                                                    |
| I  | 280m N   | OAKENROD COMBINED SEWER<br>OVERFLOW, DOWNSTREAM OF<br>CORPORATION ROAD, OAKENROD,<br>ROCHDALE, GREATER<br>MANCHESTER, OL11 4EU | Effluent Type: SEWAGE<br>DISCHARGES - SEWER STORM<br>OVERFLOW - WATER COMPANY<br>Permit Number: 016982276<br>Permit Version: 2<br>Receiving Water: RIVER ROCH | Status: POST NRA LEGISLATION<br>WHERE ISSUE DATE > 31-AUG-89<br>(HISTORIC ONLY)<br>Issue date: -<br>Effective Date: 15/02/1993<br>Revocation Date: 25/03/2010  |
| I  | 280m N   | OAKENROD COMBINED SEWER<br>OVERFLOW, DOWNSTREAM OF<br>CORPORATION ROAD, OAKENROD,<br>ROCHDALE, GREATER<br>MANCHESTER, OL11 4EU | Effluent Type: SEWAGE<br>DISCHARGES - SEWER STORM<br>OVERFLOW - WATER COMPANY<br>Permit Number: 016982276<br>Permit Version: 3<br>Receiving Water: RIVER ROCH | Status: MODIFIED - (WRA 91<br>SCHED 10 - AS AMENDED BY ENV<br>ACT 1995)<br>Issue date: 26/03/2010<br>Effective Date: 26/03/2010<br>Revocation Date: 29/04/2015 |
| I  | 280m N   | OAKENROD COMBINED SEWER<br>OVERFLOW, DOWNSTREAM OF<br>CORPORATION ROAD, OAKENROD,<br>ROCHDALE, GREATER<br>MANCHESTER, OL11 4EU | Effluent Type: SEWAGE<br>DISCHARGES - SEWER STORM<br>OVERFLOW - WATER COMPANY<br>Permit Number: 016982276<br>Permit Version: 4<br>Receiving Water: RIVER ROCH | Status: MODIFIED - (WRA 91<br>SCHED 10 - AS AMENDED BY ENV<br>ACT 1995)<br>Issue date: 30/04/2015<br>Effective Date: 30/04/2015<br>Revocation Date: 15/01/2020 |
| I  | 283m N   | OAKENROD COMBINED SEWER<br>OVERFLOW, DOWNSTREAM OF<br>CORPORATION ROAD, OAKENROD,<br>ROCHDALE, GREATER<br>MANCHESTER, OL11 4EU | Effluent Type: SEWAGE<br>DISCHARGES - SEWER STORM<br>OVERFLOW - WATER COMPANY<br>Permit Number: 01ROC0080<br>Permit Version: 1<br>Receiving Water: -          | Status: REVOKED - UNSPECIFIED<br>Issue date: -<br>Effective Date: 15/02/1993<br>Revocation Date: 31/12/1994                                                    |

| ID | Location | Address                                                                                                            | Details                                                                                                                                                     |                                                                                                                                                |
|----|----------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| I  | 283m N   | OAKENROD COMBINED SEWER OVERFLOW, DOWNSTREAM OF CORPORATION ROAD, OAKENROD, ROCHDALE, GREATER MANCHESTER, OL11 4EU | Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY<br>Permit Number: 01ROC0080<br>Permit Version: 2<br>Receiving Water: -              | Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1))<br>Issue date: -<br>Effective Date: 01/01/1995<br>Revocation Date: 01/01/1995  |
| 8  | 341m NE  | OXFORD MILL, BENTLEY STREET, ROCHDALE, GREATER MANCHESTER                                                          | Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY<br>Permit Number: 0167/630<br>Permit Version: 1<br>Receiving Water: SHAWCLOUGH BROOK | Status: REVOKED - UNSPECIFIED<br>Issue date: -<br>Effective Date: 23/09/1993<br>Revocation Date: 23/09/1993                                    |
| K  | 393m NE  | ROCH SYPHON, FENWICK STREET, ROCHDALE, GREATER MANCHESTER                                                          | Effluent Type: TRADE DISCHARGES - BOILER BLOWDOWN EFFLUENT<br>Permit Number: 016981384<br>Permit Version: 1<br>Receiving Water: RIVER ROCH                  | Status: REVOKED - UNSPECIFIED<br>Issue date: -<br>Effective Date: 13/07/1990<br>Revocation Date: 14/02/1993                                    |
| K  | 393m NE  | ROCH SYPHON, FENWICK STREET, ROCHDALE, GREATER MANCHESTER                                                          | Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY<br>Permit Number: 016981384<br>Permit Version: 2<br>Receiving Water: RIVER ROCH          | Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY)<br>Issue date: -<br>Effective Date: 15/02/1993<br>Revocation Date: - |
| 14 | 482m NE  | CHARLIE BROWNS AUTOCENTRE SWO, ENTWISTLE ROAD, MOLESWORTH STREET, ROCHDALE, GREATER MANCHESTER                     | Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER<br>Permit Number: 016991347<br>Permit Version: 1<br>Receiving Water: RIVER ROCH                     | Status: REVOKED - UNSPECIFIED<br>Issue date: -<br>Effective Date: 01/11/1994<br>Revocation Date: 01/11/1994                                    |

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

#### 4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

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

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



## 4.15 Pollutant release to public sewer

Records within 500m

2

Discharges of Special Category Effluents to the public sewer.

Features are displayed on the Current industrial land use map on **page 54**

| ID | Location | Address                                                                                    | Details                                                                                                                   |                                                    |
|----|----------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| B  | 41m E    | UNITED SPRINGS LTD, MANDALE PARK, NORMAN ROAD, NORMAN ROAD, ROCHDALE, LANCASHIRE, OL11 4HP | Permission reference: BB6505<br>Local Authority: ROCHDALE METROPOLITAN BOROUGH COUNCIL<br>First received date: 01/06/2001 | Last received date: 01/01/2018<br>Status: RECEIVED |
| B  | 41m E    | ROBERT RILEY LTD, MANDALE PARK, NORMAN ROAD, ROCHDALE, LANCASHIRE, OL11 4HP                | Permission reference: AT4538<br>Local Authority: ROCHDALE METROPOLITAN BOROUGH COUNCIL<br>First received date: 01/07/2010 | Last received date: 01/01/2018<br>Status: RECEIVED |

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

## 4.16 List 1 Dangerous Substances

Records within 500m

0

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

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

## 4.17 List 2 Dangerous Substances

Records within 500m

0

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

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

## 4.18 Pollution Incidents (EA/NRW)

Records within 500m

15

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

Features are displayed on the Current industrial land use map on **page 54**



| ID | Location | Details                                                                                                                                                                         |                                                                                                                 |
|----|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| A  | 3m NE    | Incident Date: 06/10/2003<br>Incident Identification: 164561<br>Pollutant: Specific Waste Materials<br>Pollutant Description: Smoke Tyres                                       | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 2 (Significant)<br>Air Impact: Category 3 (Minor) |
| A  | 3m NE    | Incident Date: 28/07/2003<br>Incident Identification: 177133<br>Pollutant: Specific Waste Materials<br>Pollutant Description: Tyres                                             | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor)       |
| A  | 3m NE    | Incident Date: 10/06/2003<br>Incident Identification: 164561<br>Pollutant: Atmospheric Pollutants and Effects:Specific Waste Materials<br>Pollutant Description: Smoke:Tyres    | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 2 (Significant)<br>Air Impact: Category 3 (Minor) |
| A  | 3m NE    | Incident Date: 10/06/2003<br>Incident Identification: 164561<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke                                   | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 2 (Significant)<br>Air Impact: Category 3 (Minor) |
| A  | 3m NE    | Incident Date: 10/06/2003<br>Incident Identification: 164561<br>Pollutant: Specific Waste Materials<br>Pollutant Description: Tyres                                             | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 2 (Significant)<br>Air Impact: Category 3 (Minor) |
| A  | 3m NE    | Incident Date: 06/10/2003<br>Incident Identification: 164561<br>Pollutant: Atmospheric Pollutants and Effects : Specific Waste Materials<br>Pollutant Description: Smoke :Tyres | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 2 (Significant)<br>Air Impact: Category 3 (Minor) |
| A  | 35m NE   | Incident Date: 07/01/2002<br>Incident Identification: 51014<br>Pollutant: Atmospheric Pollutants and Effects:Specific Waste Materials<br>Pollutant Description: Smoke:Tyres     | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor)       |
| A  | 35m NE   | Incident Date: 07/01/2002<br>Incident Identification: 51014<br>Pollutant: Specific Waste Materials<br>Pollutant Description: Tyres                                              | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor)       |
| A  | 35m NE   | Incident Date: 07/01/2002<br>Incident Identification: 51014<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke                                    | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor)       |
| A  | 80m N    | Incident Date: 27/07/2001<br>Incident Identification: 20284<br>Pollutant: Specific Waste Materials<br>Pollutant Description: Tyres                                              | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact)   |



| ID | Location | Details                                                                                                                                                                         |                                                                                                               |
|----|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 9  | 349m N   | Incident Date: 26/03/2002<br>Incident Identification: 66759<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Construction and Demolition Materials and Wastes | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| 10 | 355m NE  | Incident Date: 10/05/2002<br>Incident Identification: 77835<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust                                     | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| J  | 388m N   | Incident Date: 17/09/2002<br>Incident Identification: 110397<br>Pollutant: Oils and Fuel<br>Pollutant Description: Mixed/Waste Oils                                             | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| J  | 393m N   | Incident Date: 14/05/2003<br>Incident Identification: 158262<br>Pollutant: Oils and Fuel<br>Pollutant Description: Unidentified Oil                                             | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| J  | 427m NE  | Incident Date: 26/02/2003<br>Incident Identification: 139529<br>Pollutant: Oils and Fuel<br>Pollutant Description: Diesel                                                       | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

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

## 4.19 Pollution inventory substances

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>0</b> |
|----------------------------|----------|

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

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

## 4.20 Pollution inventory waste transfers

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>0</b> |
|----------------------------|----------|

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

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



## 4.21 Pollution inventory radioactive waste

Records within 500m

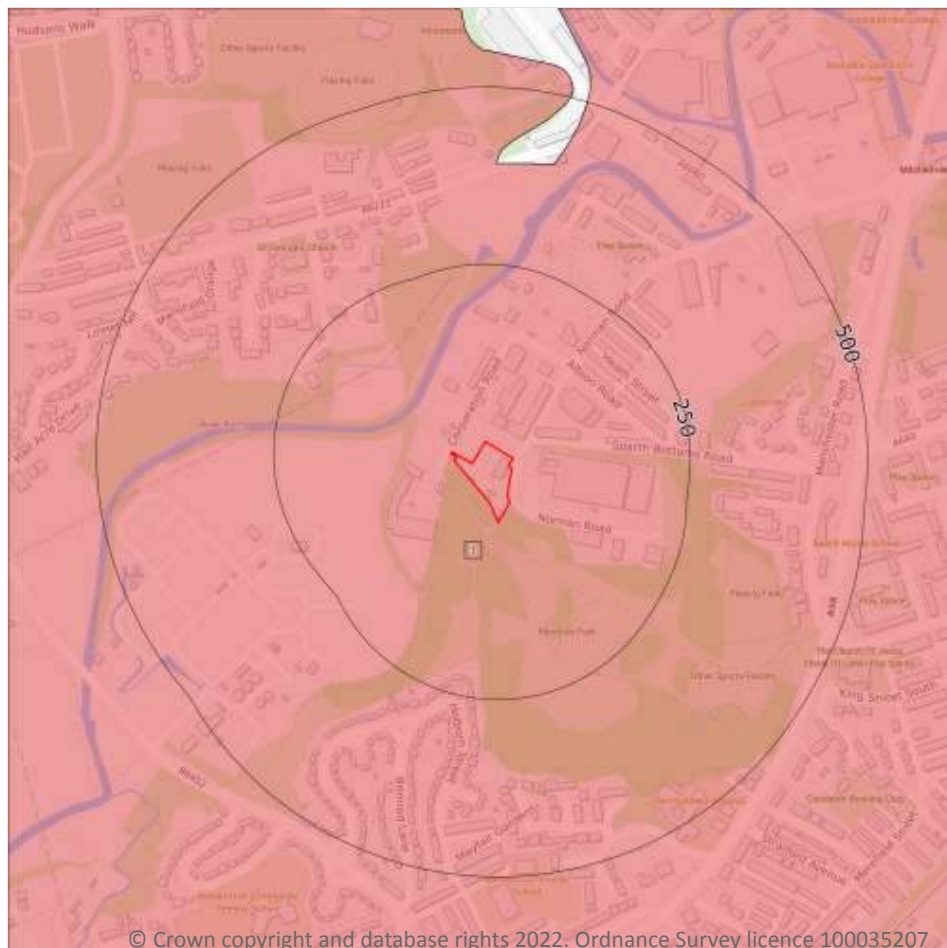
0

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

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



## 5 Hydrogeology - Superficial aquifer



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

### 5.1 Superficial aquifer

Records within 500m

1

Aquifer status of groundwater held within superficial geology.

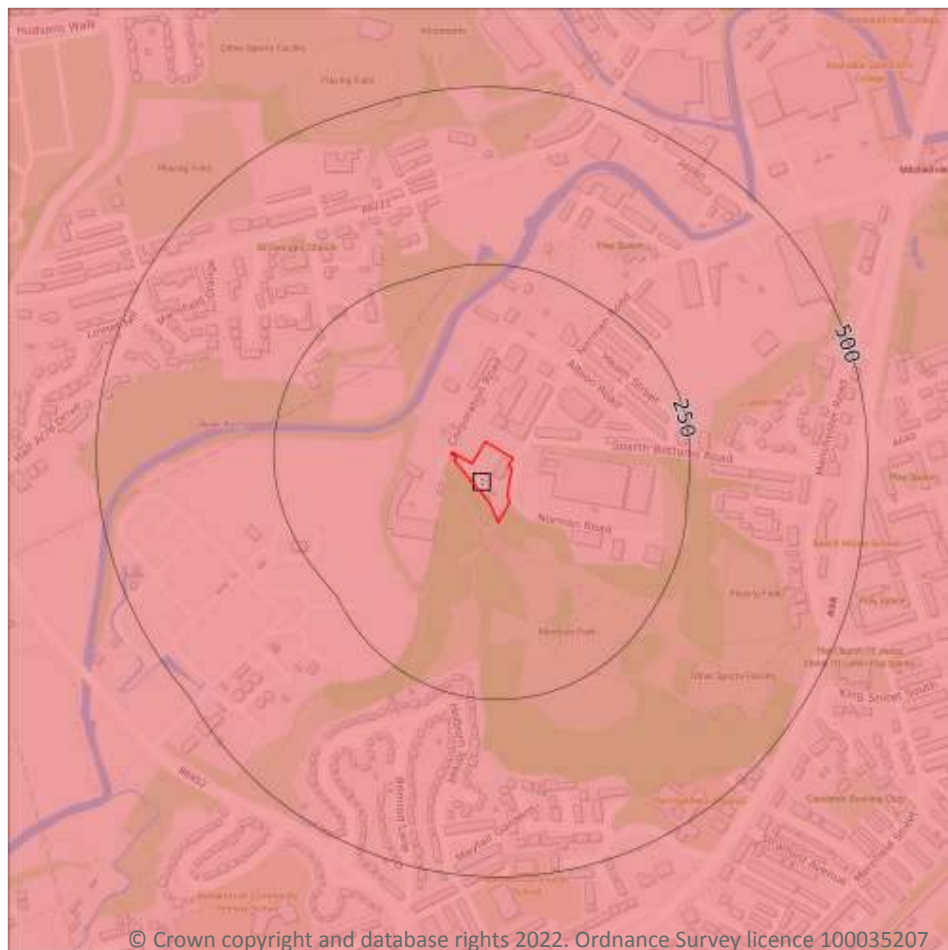
Features are displayed on the Hydrogeology map on **page 67**

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

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



## Bedrock aquifer



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

### 5.2 Bedrock aquifer

Records within 500m

1

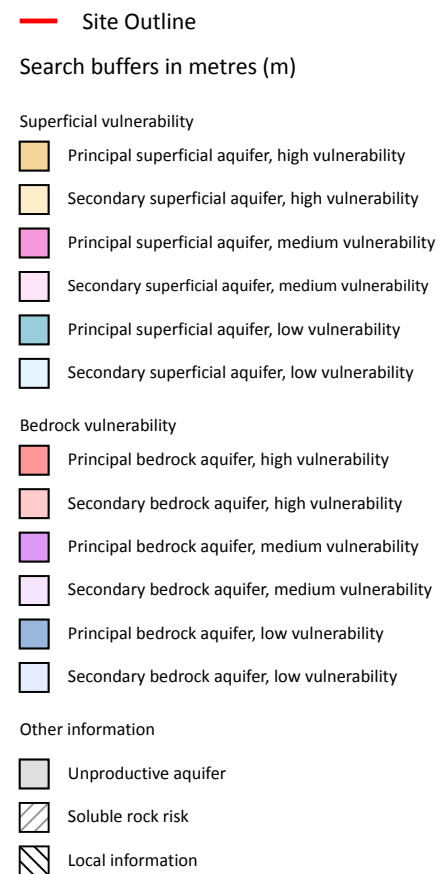
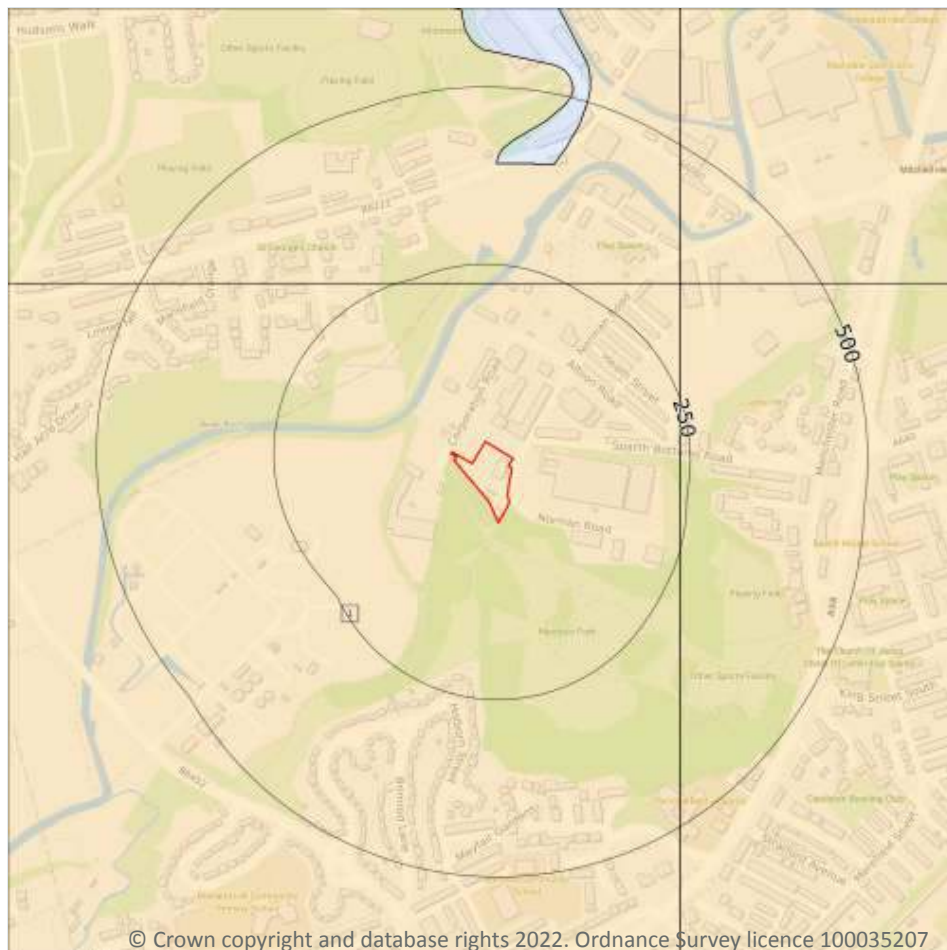
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 68](#)

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

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

## Groundwater vulnerability



### 5.3 Groundwater vulnerability

#### Records within 50m

1

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

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

Features are displayed on the Groundwater vulnerability map on **page 69**



| ID | Location | Summary                                                                                                                                                                                        | Soil / surface                                                                                             | Superficial geology                                                                                                                                        | Bedrock geology                                                                                                      |
|----|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| 1  | On site  | <b>Summary Classification:</b><br>Secondary superficial aquifer<br>- High Vulnerability<br><b>Combined classification:</b><br>Productive Bedrock Aquifer,<br>Productive Superficial<br>Aquifer | <b>Leaching class:</b> High<br><b>Infiltration value:</b><br>>70%<br><b>Dilution value:</b><br>>550mm/year | <b>Vulnerability:</b> High<br><b>Aquifer type:</b> Secondary<br><b>Thickness:</b> >10m<br><b>Patchiness value:</b> >90%<br><b>Recharge potential:</b> High | <b>Vulnerability:</b> Low<br><b>Aquifer type:</b><br>Secondary<br><b>Flow mechanism:</b> Well<br>connected fractures |

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

## 5.4 Groundwater vulnerability- soluble rock risk

Records on site

0

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

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

## 5.5 Groundwater vulnerability- local information

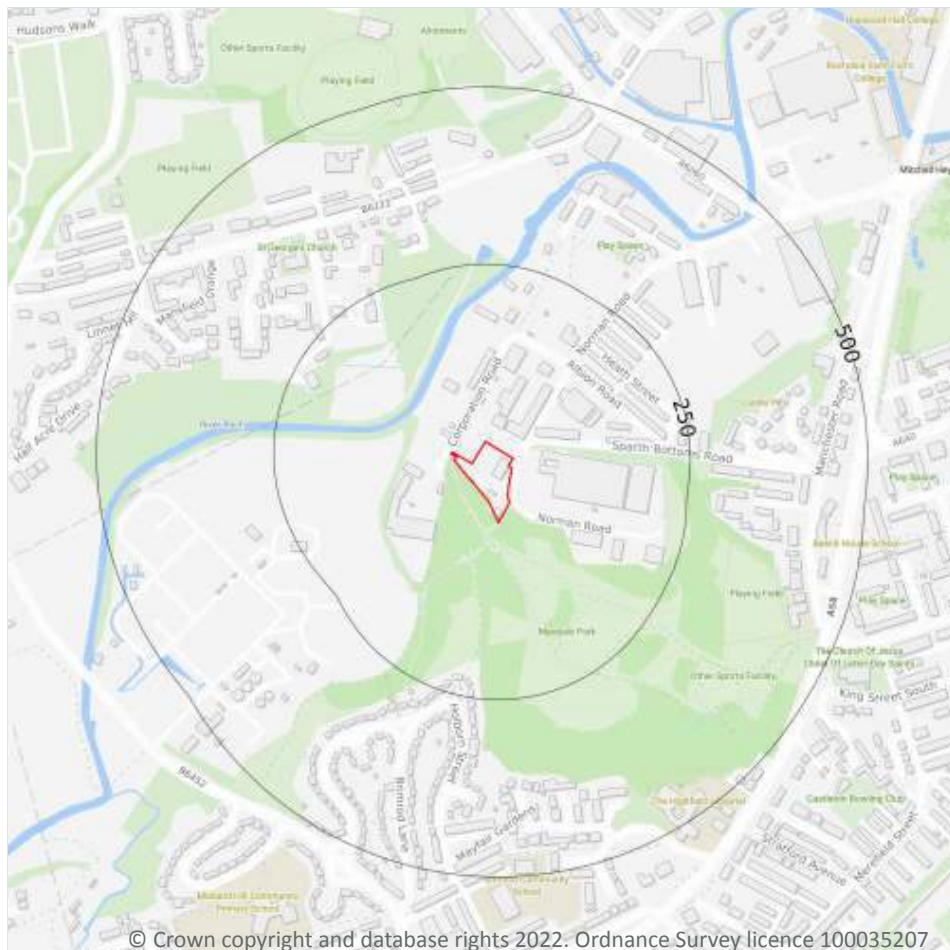
Records on site

0

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

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

## Abstractions and Source Protection Zones



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

### 5.6 Groundwater abstractions

#### Records within 2000m

3

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 71**

| ID | Location | Details                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                  |
|----|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -  | 723m N   | Status: Historical<br>Licence No: 2569002050<br>Details: Process water<br>Direct Source: Ground Water - North West Region<br>Point: "BOREHOLE AT PREMISES, SPOTLAND, ROCHDALE"<br>Data Type: Point<br>Name: ALEXANDER DREW & SONS LTD<br>Easting: 388700<br>Northing: 413500 | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 10/02/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 02/05/2000<br>Version End Date: -         |
| -  | 723m N   | Status: Historical<br>Licence No: 2569002050<br>Details: Process water<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT PREMISES, SPOTLAND, ROCHDALE<br>Data Type: Point<br>Name: ALEXANDER DREW LTD.<br>Easting: 388700<br>Northing: 413500         | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 10/02/1966<br>Expiry Date: -<br>Issue No: 102<br>Version Start Date: 01/04/2003<br>Version End Date: -         |
| -  | 723m N   | Status: Historical<br>Licence No: 2569002050<br>Details: Process water<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT PREMISES SPOTLAND ROCHDALE<br>Data Type: Point<br>Name: ALEXANDER DREW LTD<br>Easting: 388700<br>Northing: 413500            | Annual Volume (m <sup>3</sup> ): 500000<br>Max Daily Volume (m <sup>3</sup> ): 2100<br>Original Application No: -<br>Original Start Date: 10/02/1966<br>Expiry Date: -<br>Issue No: 102<br>Version Start Date: 01/04/2003<br>Version End Date: - |

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

## 5.7 Surface water abstractions

### Records within 2000m

**12**

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 71**



| ID | Location | Details                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                            |
|----|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -  | 1286m NE | Status: Active<br>Licence No: NW/069/0002/003<br>Details: Transfer Between Sources (Post Water Act 2003)<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: RIVER ROCH AT ROCHDALE WEIR<br>Data Type: Point<br>Name: Transport for Greater Manchester<br>Easting: 389916<br>Northing: 413325    | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: NPS/WR/007633<br>Original Start Date: 15/06/2010<br>Expiry Date: 31/03/2026<br>Issue No: 2<br>Version Start Date: 23/06/2011<br>Version End Date: -                |
| -  | 1286m NE | Status: Active<br>Licence No: NW/069/0002/001<br>Details: Hydroelectric Power Generation<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: RIVER ROCH AT ROCHDALE WEIR<br>Data Type: Point<br>Name: Transport for Greater Manchester<br>Easting: 389917<br>Northing: 413325                    | Annual Volume (m <sup>3</sup> ): 36,100,000<br>Max Daily Volume (m <sup>3</sup> ): 164,160<br>Original Application No: NPS/WR/007499<br>Original Start Date: 15/06/2010<br>Expiry Date: 31/03/2026<br>Issue No: 2<br>Version Start Date: 01/04/2015<br>Version End Date: - |
| -  | 1500m SE | Status: Historical<br>Licence No: 2569002107<br>Details: Boiler Feed<br>Direct Source: "Surface, Non-Tidal - North West Region"<br>Point: "ROCHDALE CANAL AT QUEENSWAY,ROCHDALE"<br>Data Type: Point<br>Name: SEALOCRETE PLA LTD<br>Easting: 390070<br>Northing: 411960                                         | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 02/02/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 20/12/1993<br>Version End Date: -                                   |
| -  | 1500m SE | Status: Historical<br>Licence No: 2569002107<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: "Surface, Non-Tidal - North West Region"<br>Point: "ROCHDALE CANAL AT QUEENSWAY,ROCHDALE"<br>Data Type: Point<br>Name: SEALOCRETE PLA LTD<br>Easting: 390070<br>Northing: 411960 | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 02/02/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 20/12/1993<br>Version End Date: -                                   |



| ID | Location | Details                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                    |
|----|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -  | 1500m SE | Status: Historical<br>Licence No: 2569002107<br>Details: Boiler Feed<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: ROCHDALE CANAL AT QUEENSWAY,ROCHDALE<br>Data Type: Point<br>Name: SEALOCRETE PLA LTD<br>Easting: 390070<br>Northing: 411960                                         | Annual Volume (m <sup>3</sup> ): 10455.8<br>Max Daily Volume (m <sup>3</sup> ): 45.46<br>Original Application No: -<br>Original Start Date: 02/02/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 01/04/2008<br>Version End Date: - |
| -  | 1500m SE | Status: Historical<br>Licence No: 2569002107<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: ROCHDALE CANAL AT QUEENSWAY,ROCHDALE<br>Data Type: Point<br>Name: SEALOCRETE PLA LTD<br>Easting: 390070<br>Northing: 411960 | Annual Volume (m <sup>3</sup> ): 10455.8<br>Max Daily Volume (m <sup>3</sup> ): 45.46<br>Original Application No: -<br>Original Start Date: 02/02/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 01/04/2008<br>Version End Date: - |
| -  | 1589m E  | Status: Historical<br>Licence No: 2569002076<br>Details: Boiler Feed<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: ROCHDALE CANAL AT ROCHDALE, LANCS<br>Data Type: Point<br>Name: J & J MAKIN CONVERTORS LTD<br>Easting: 390300<br>Northing: 412300                                    | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 18/01/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 01/04/1993<br>Version End Date: -           |
| -  | 1692m SE | Status: Historical<br>Licence No: 2569002178<br>Details: Boiler Feed<br>Direct Source: "Surface, Non-Tidal - North West Region"<br>Point: "CATCHPIT FED BY SURFACE DRAINAGE AT PREMISES, ROCHDALE"<br>Data Type: Point<br>Name: DUNPHY COMBUSTION LTD.<br>Easting: 390200<br>Northing: 411800               | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 18/02/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 12/02/1991<br>Version End Date: -           |

| ID | Location | Details                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                           |
|----|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -  | 1692m SE | Status: Active<br>Licence No: 2569002178<br>Details: Boiler Feed<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: CATCHPIT FED BY SURFACE DRAINAGE AT PREMISES, ROCHDALE<br>Data Type: Point<br>Name: DUNPHY COMBUSTION LTD<br>Easting: 390200<br>Northing: 411800                   | Annual Volume (m <sup>3</sup> ): 2,318.46<br>Max Daily Volume (m <sup>3</sup> ): 34.09<br>Original Application No: CW 1093<br>Original Start Date: 18/02/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 12/02/1991<br>Version End Date: - |
| -  | 1801m N  | Status: Historical<br>Licence No: 2569002018<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: LODGE FED BY R SPODDEN AT ROCHDALE<br>Data Type: Point<br>Name: FLEXITALLIC LTD<br>Easting: 388200<br>Northing: 414500 | Annual Volume (m <sup>3</sup> ): 1500211.393<br>Max Daily Volume (m <sup>3</sup> ): 4546.095<br>Original Application No: -<br>Original Start Date: 14/02/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 11/04/1997<br>Version End Date: - |
| -  | 1801m N  | Status: Historical<br>Licence No: 2569002018<br>Details: Boiler Feed<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: LODGE FED BY R SPODDEN AT ROCHDALE<br>Data Type: Point<br>Name: FLEXITALLIC LTD<br>Easting: 388200<br>Northing: 414500                                         | Annual Volume (m <sup>3</sup> ): 1500211.393<br>Max Daily Volume (m <sup>3</sup> ): 4546.095<br>Original Application No: -<br>Original Start Date: 14/02/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 11/04/1997<br>Version End Date: - |
| -  | 1801m N  | Status: Historical<br>Licence No: 2569002018<br>Details: Process Water<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: LODGE FED BY R SPODDEN AT ROCHDALE<br>Data Type: Point<br>Name: FLEXITALLIC LTD<br>Easting: 388200<br>Northing: 414500                                       | Annual Volume (m <sup>3</sup> ): 1500211.393<br>Max Daily Volume (m <sup>3</sup> ): 4546.095<br>Original Application No: -<br>Original Start Date: 14/02/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 11/04/1997<br>Version End Date: - |

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



## 5.8 Potable abstractions

### Records within 2000m

**0**

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

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

## 5.9 Source Protection Zones

### Records within 500m

**0**

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

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

## 5.10 Source Protection Zones (confined aquifer)

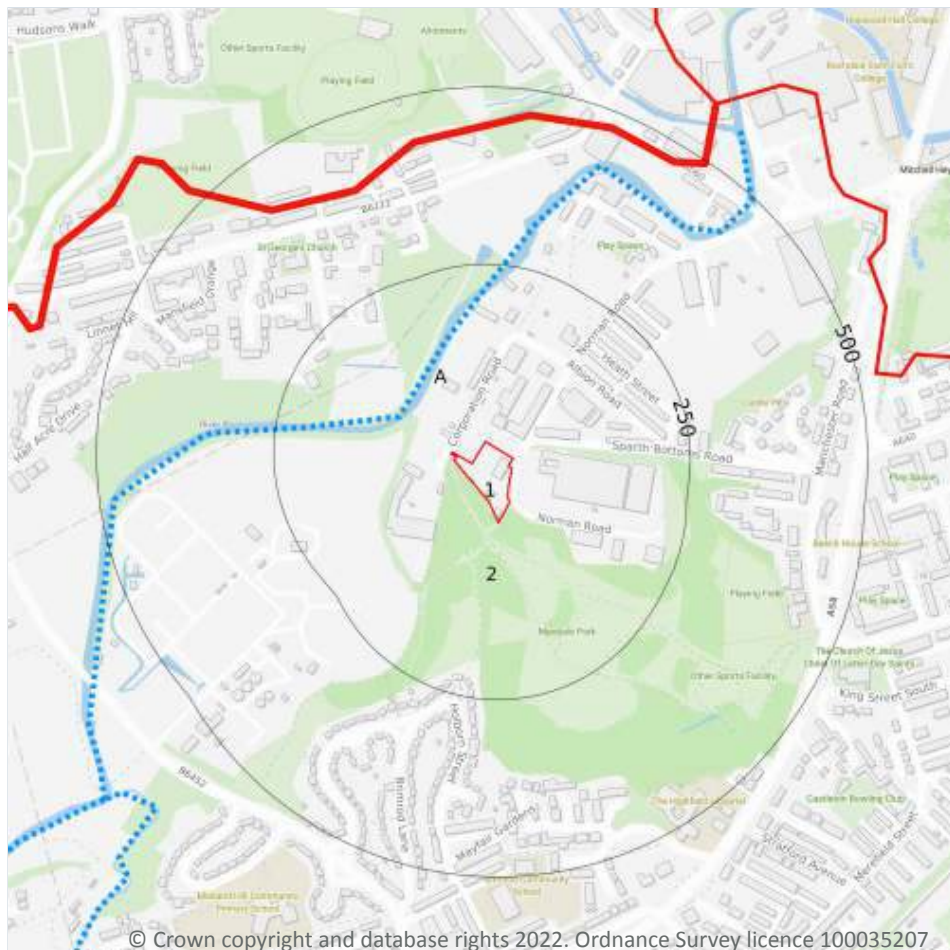
### Records within 500m

**0**

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

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

## 6 Hydrology



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

### 6.1 Water Network (OS MasterMap)

Records within 250m

3

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

Features are displayed on the Hydrology map on **page 77**

| ID | Location | Type of water feature                               | Ground level      | Permanence                                                      | Name       |
|----|----------|-----------------------------------------------------|-------------------|-----------------------------------------------------------------|------------|
| A  | 86m NW   | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | River Roch |

| ID | Location | Type of water feature                               | Ground level      | Permanence                                                      | Name |
|----|----------|-----------------------------------------------------|-------------------|-----------------------------------------------------------------|------|
| A  | 141m NW  | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | -    |
| A  | 151m NW  | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | -    |

*This data is sourced from the Ordnance Survey.*

## 6.2 Surface water features

### Records within 250m

4

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

Features are displayed on the Hydrology map on **page 77**

*This data is sourced from the Ordnance Survey.*

## 6.3 WFD Surface water body catchments

### Records on site

1

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

Features are displayed on the Hydrology map on **page 77**

| ID | Location | Type  | Water body catchment     | Water body ID  | Operational catchment | Management catchment |
|----|----------|-------|--------------------------|----------------|-----------------------|----------------------|
| 2  | On site  | River | Roch (Spodden to Irwell) | GB112069064600 | Roch Irk Medlock      | Irwell               |

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



## 6.4 WFD Surface water bodies

### Records identified

**1**

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

Features are displayed on the Hydrology map on **page 77**

| ID | Location | Type  | Name                     | Water body ID                  | Overall rating | Chemical rating | Ecological rating | Year |
|----|----------|-------|--------------------------|--------------------------------|----------------|-----------------|-------------------|------|
| 3  | 90m NW   | River | Roch (Spodden to Irwell) | <a href="#">GB112069064600</a> | Moderate       | Fail            | Moderate          | 2019 |

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

## 6.5 WFD Groundwater bodies

### Records on site

**1**

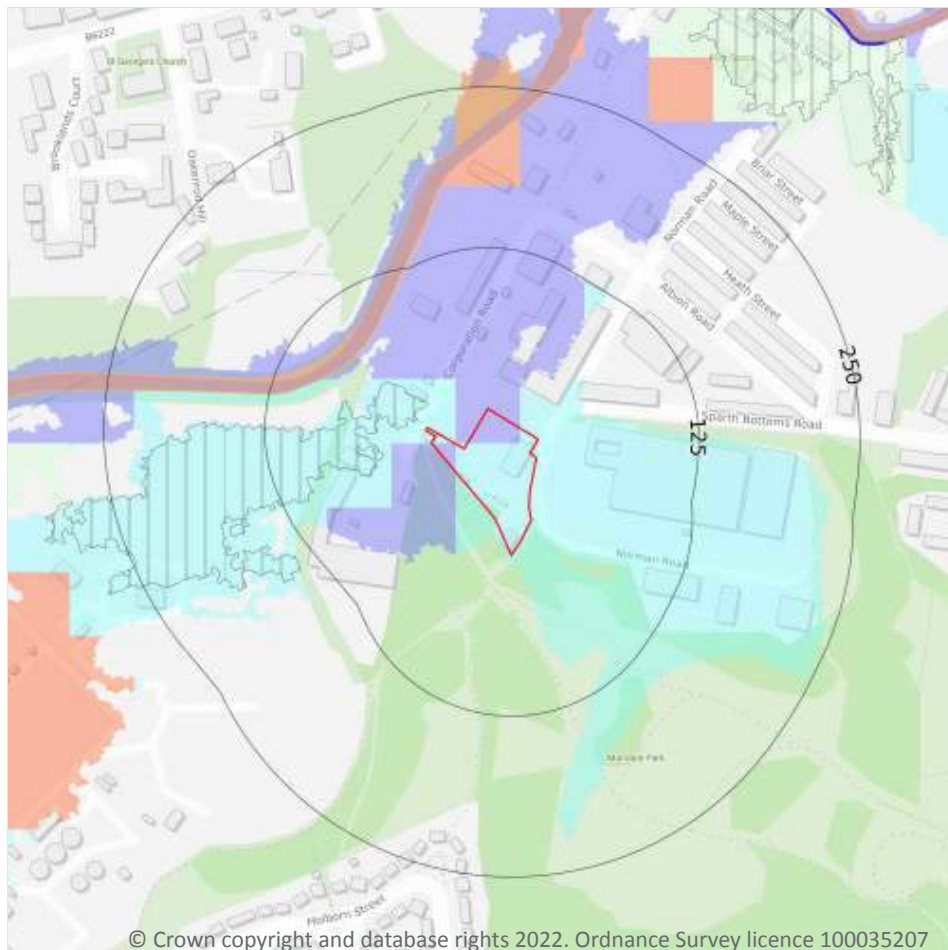
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 77**

| ID | Location | Name                                       | Water body ID                  | Overall rating | Chemical rating | Quantitative | Year |
|----|----------|--------------------------------------------|--------------------------------|----------------|-----------------|--------------|------|
| 1  | On site  | Northern Manchester Carboniferous Aquifers | <a href="#">GB41202G101800</a> | Poor           | Poor            | Good         | 2019 |

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

## 7 River and coastal flooding



— Site Outline  
Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

### 7.1 Risk of flooding from rivers and the sea

Records within 50m

5

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

Features are displayed on the River and coastal flooding map on **page 80**

| Distance       | Flood risk category |
|----------------|---------------------|
| <b>On site</b> | <b>Medium</b>       |
| 0 - 50m        | Medium              |

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

## 7.2 Historical Flood Events

|                            |          |
|----------------------------|----------|
| <b>Records within 250m</b> | <b>0</b> |
|----------------------------|----------|

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

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

## 7.3 Flood Defences

|                            |          |
|----------------------------|----------|
| <b>Records within 250m</b> | <b>0</b> |
|----------------------------|----------|

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

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

## 7.4 Areas Benefiting from Flood Defences

|                            |          |
|----------------------------|----------|
| <b>Records within 250m</b> | <b>1</b> |
|----------------------------|----------|

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

Features are displayed on the River and coastal flooding map on **page 80**

| ID | Location |                                     |
|----|----------|-------------------------------------|
| A  | 10m NW   | Area benefiting from flood defences |

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

## 7.5 Flood Storage Areas

Records within 250m

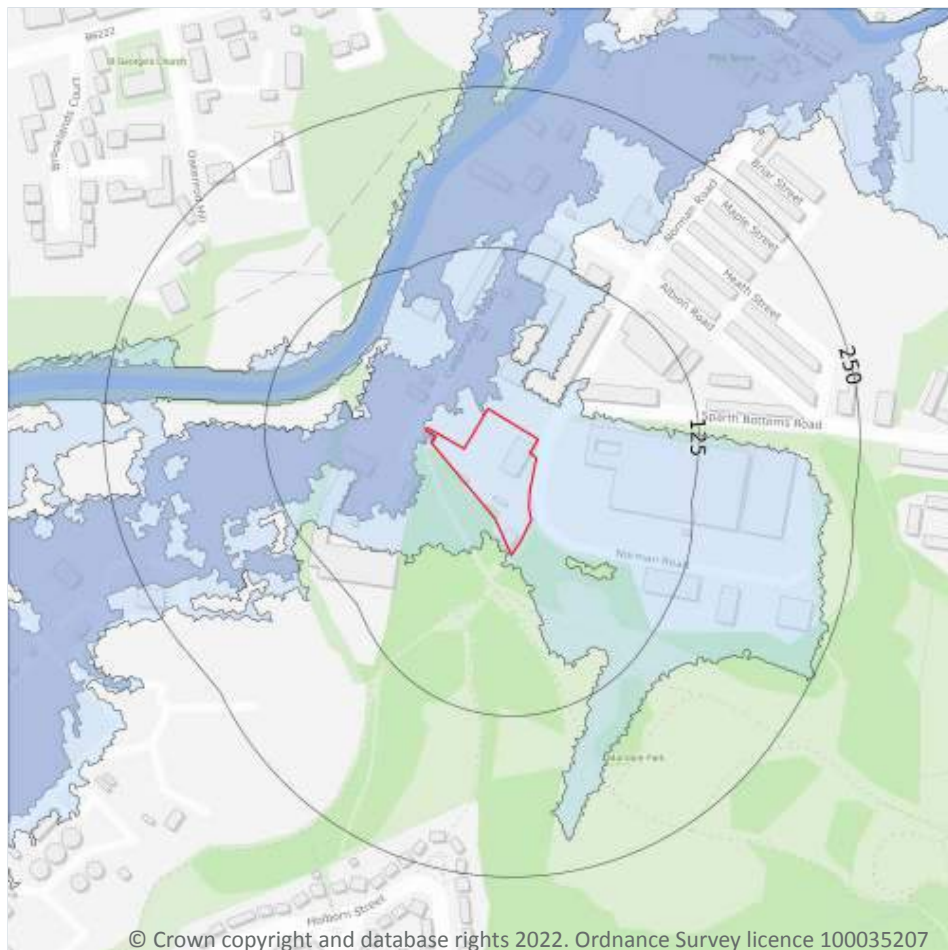
0

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

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



## River and coastal flooding - Flood Zones



- Site Outline
- Search buffers in metres (m)
- Flood zone 2
- Flood zone 3

### 7.6 Flood Zone 2

#### Records within 50m

1

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

Features are displayed on the River and coastal flooding map on **page 80**

| Location | Type                             |
|----------|----------------------------------|
| On site  | Zone 2 - (Fluvial /Tidal Models) |

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

## 7.7 Flood Zone 3

### Records within 50m

**1**

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

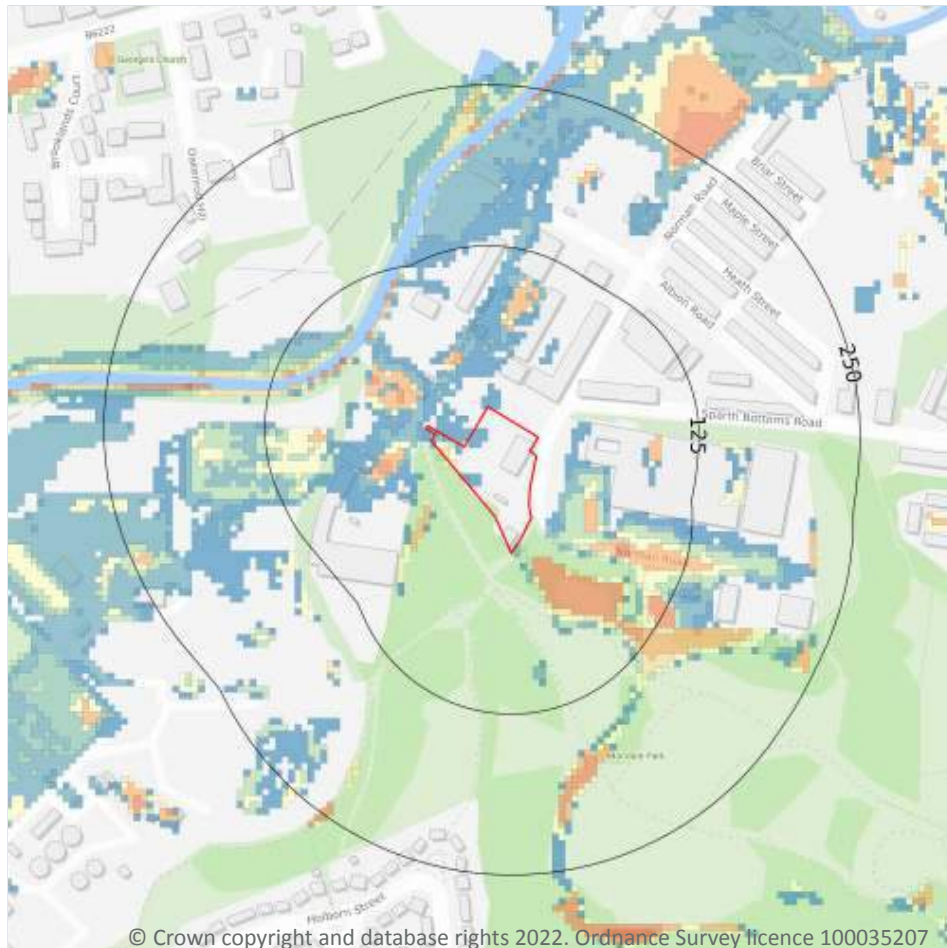
Features are displayed on the River and coastal flooding map on **page 80**

| Location | Type                      |
|----------|---------------------------|
| On site  | Zone 3 - (Fluvial Models) |

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



## 8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

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

1 in 250 return period

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

1 in 100 return period

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

1 in 30 return period

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

### 8.1 Surface water flooding

**Highest risk on site**

**1 in 100 year, 0.3m - 1.0m**

**Highest risk within 50m**

**1 in 30 year, 0.3m - 1.0m**

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

Features are displayed on the Surface water flooding map on **page 85**

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

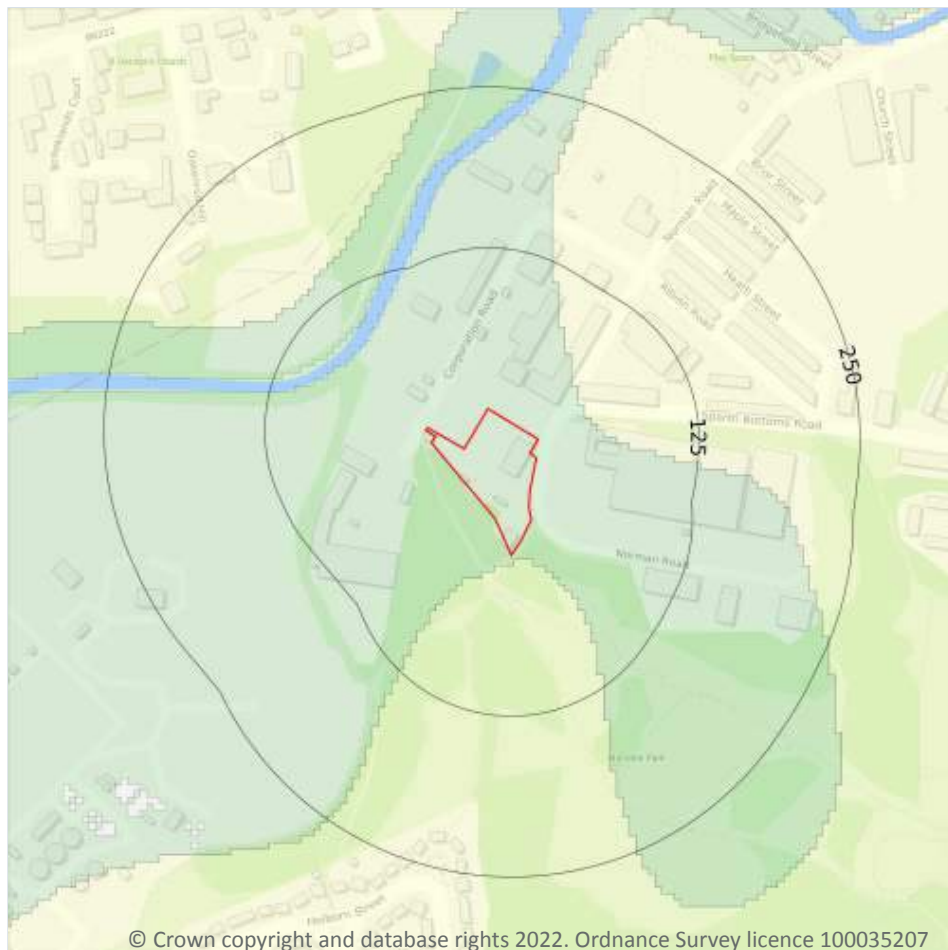
The table below shows the maximum flood depths for a range of return periods for the site.

| Return period  | Maximum modelled depth |
|----------------|------------------------|
| 1 in 1000 year | Between 0.3m and 1.0m  |
| 1 in 250 year  | Between 0.3m and 1.0m  |
| 1 in 100 year  | Between 0.3m and 1.0m  |
| 1 in 30 year   | Negligible             |

*This data is sourced from Ambiantal Risk Analytics.*



## 9 Groundwater flooding



— Site Outline  
Search buffers in metres (m)

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

### 9.1 Groundwater flooding

**Highest risk on site**

**Low**

**Highest risk within 50m**

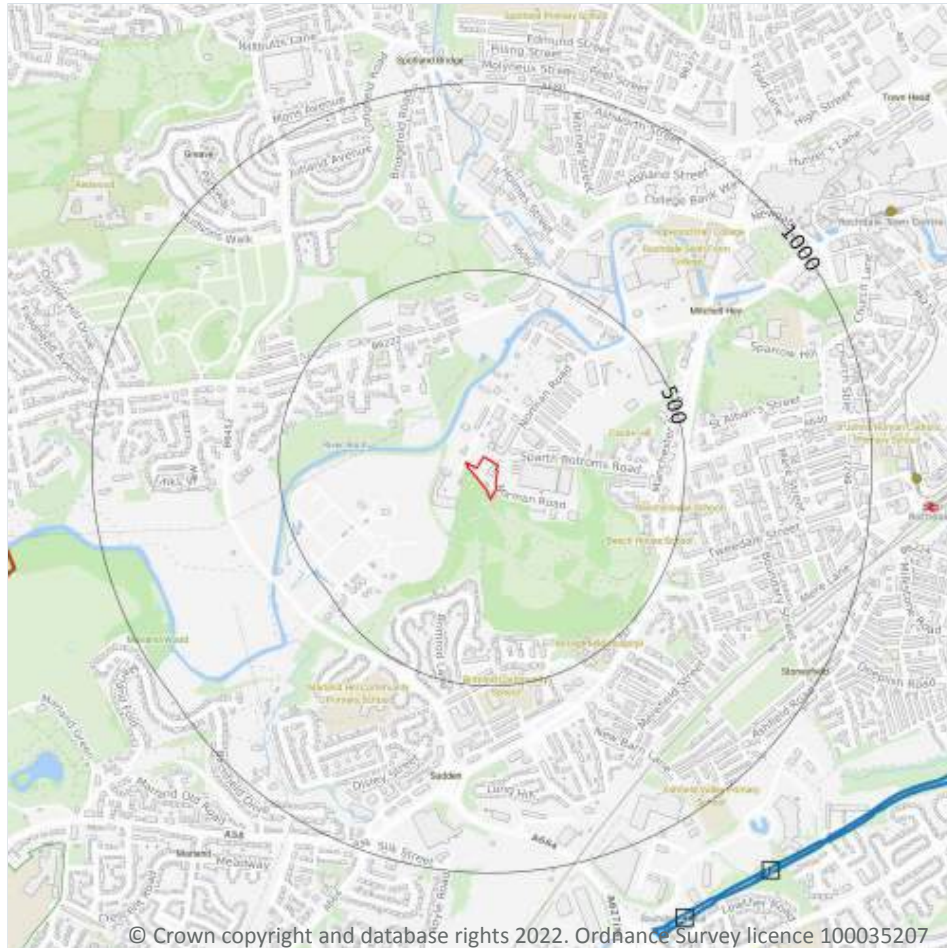
**Moderate**

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

Features are displayed on the Groundwater flooding map on **page 87**

*This data is sourced from Ambiantal Risk Analytics.*

## 10 Environmental designations



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- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- Special Areas of Conservation (SAC)
- Designated Ancient Woodland
- Green Belt

### 10.1 Sites of Special Scientific Interest (SSSI)

#### Records within 2000m

4

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

Features are displayed on the Environmental designations map on **page 88**

| ID | Location | Name           | Data source     |
|----|----------|----------------|-----------------|
| A  | 1222m SE | Rochdale Canal | Natural England |

| ID | Location | Name           | Data source     |
|----|----------|----------------|-----------------|
| B  | 1223m SE | Rochdale Canal | Natural England |
| C  | 1279m SE | Rochdale Canal | Natural England |
| -  | 1361m S  | Rochdale Canal | Natural England |

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

## 10.2 Conserved wetland sites (Ramsar sites)

**Records within 2000m**

**0**

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

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

## 10.3 Special Areas of Conservation (SAC)

**Records within 2000m**

**4**

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

Features are displayed on the Environmental designations map on **page 88**

| ID | Location | Name           | Features of interest     | Habitat description                                                                                                                       | Data source     |
|----|----------|----------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| A  | 1222m SE | Rochdale Canal | Floating water-plantain. | Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water) | Natural England |
| B  | 1223m SE | Rochdale Canal | Floating water-plantain. | Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water) | Natural England |
| C  | 1279m SE | Rochdale Canal | Floating water-plantain. | Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water) | Natural England |



| ID | Location | Name           | Features of interest     | Habitat description                                                                                                                       | Data source     |
|----|----------|----------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| -  | 1361m S  | Rochdale Canal | Floating water-plantain. | Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water) | Natural England |

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

## 10.4 Special Protection Areas (SPA)

**Records within 2000m**

**0**

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

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

## 10.5 National Nature Reserves (NNR)

**Records within 2000m**

**0**

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

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

## 10.6 Local Nature Reserves (LNR)

**Records within 2000m**

**0**

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

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

## 10.7 Designated Ancient Woodland

**Records within 2000m**

**3**

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

Features are displayed on the Environmental designations map on **page 88**

| ID | Location | Name                | Woodland Type                   |
|----|----------|---------------------|---------------------------------|
| 1  | 1240m W  | Springfield Wood    | Ancient & Semi-Natural Woodland |
| -  | 1279m W  | River Rock Wood (2) | Ancient & Semi-Natural Woodland |
| -  | 1794m W  | Unknown             | Ancient & Semi-Natural Woodland |

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

## 10.8 Biosphere Reserves

**Records within 2000m**

**0**

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

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

## 10.9 Forest Parks

**Records within 2000m**

**0**

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

*This data is sourced from the Forestry Commission.*

## 10.10 Marine Conservation Zones

**Records within 2000m**

**0**

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

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

## 10.11 Green Belt

**Records within 2000m**

**1**

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

Features are displayed on the Environmental designations map on **page 88**

| ID | Location | Name                              | Local Authority name |
|----|----------|-----------------------------------|----------------------|
| 3  | 1465m SW | Merseyside and Greater Manchester | Rochdale             |

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

## 10.12 Proposed Ramsar sites

**Records within 2000m**

**0**

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

*This data is sourced from Natural England.*

## 10.13 Possible Special Areas of Conservation (pSAC)

**Records within 2000m**

**0**

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

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

## 10.14 Potential Special Protection Areas (pSPA)

**Records within 2000m**

**0**

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

*This data is sourced from Natural England.*

## 10.15 Nitrate Sensitive Areas

**Records within 2000m**

**0**

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

Sensitive Areas fall within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

*This data is sourced from Natural England.*

## 10.16 Nitrate Vulnerable Zones

Records within 2000m

0

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

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



## SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

### 10.17 SSSI Impact Risk Zones

#### Records on site

1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 94**

| ID | Location | Type of developments requiring consultation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | On site  | <p>Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals.</p> <p>Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil &amp; gas exploration/extraction.</p> <p>Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock &amp; poultry units with floorspace &gt; 500m<sup>2</sup>, slurry lagoons &amp; digestate stores &gt; 200m<sup>2</sup>, manure stores &gt; 250t).</p> <p>Combustion - General combustion processes &gt;20mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.</p> <p>Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill.</p> <p>Composting - Any composting proposal with more than 75000 tonnes maximum annual operational throughput. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.</p> <p>Water supply - Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m<sup>2</sup> or more.</p> |

*This data is sourced from Natural England.*

## 10.18 SSSI Units

|                             |          |
|-----------------------------|----------|
| <b>Records within 2000m</b> | <b>4</b> |
|-----------------------------|----------|

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

Features are displayed on the SSSI Impact Zones and Units map on **page 94**

ID: 7  
 Location: 1222m SE  
 SSSI name: Rochdale Canal  
 Unit name: Failsworth  
 Broad habitat: Standing Open Water And Canals  
 Condition: Unfavourable - Recovering  
 Reportable features:

| Feature name                                                              | Feature condition         | Date of assessment |
|---------------------------------------------------------------------------|---------------------------|--------------------|
| Population of Schedule 8 plant - Luronium natans, Floating Water-plantain | Unfavourable - Recovering | 25/11/2010         |

ID: A  
Location: 1223m SE  
SSSI name: Rochdale Canal  
Unit name: Failsworth  
Broad habitat: Standing Open Water And Canals  
Condition: Unfavourable - Recovering  
Reportable features:

| Feature name                                                              | Feature condition         | Date of assessment |
|---------------------------------------------------------------------------|---------------------------|--------------------|
| Population of Schedule 8 plant - Luronium natans, Floating Water-plantain | Unfavourable - Recovering | 25/11/2010         |

ID: 9  
Location: 1279m SE  
SSSI name: Rochdale Canal  
Unit name: Failsworth  
Broad habitat: Standing Open Water And Canals  
Condition: Unfavourable - Recovering  
Reportable features:

| Feature name                                                              | Feature condition         | Date of assessment |
|---------------------------------------------------------------------------|---------------------------|--------------------|
| Population of Schedule 8 plant - Luronium natans, Floating Water-plantain | Unfavourable - Recovering | 25/11/2010         |

ID: -  
Location: 1361m S  
SSSI name: Rochdale Canal  
Unit name: Failsworth  
Broad habitat: Standing Open Water And Canals  
Condition: Unfavourable - Recovering  
Reportable features:

| Feature name                                                              | Feature condition         | Date of assessment |
|---------------------------------------------------------------------------|---------------------------|--------------------|
| Population of Schedule 8 plant - Luronium natans, Floating Water-plantain | Unfavourable - Recovering | 25/11/2010         |

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



## 11 Visual and cultural designations

### 11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

### 11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

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

### 11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

*This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.*

### 11.4 Listed Buildings

Records within 250m

0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.



*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.5 Conservation Areas

**Records within 250m**

**0**

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.6 Scheduled Ancient Monuments

**Records within 250m**

**0**

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.7 Registered Parks and Gardens

**Records within 250m**

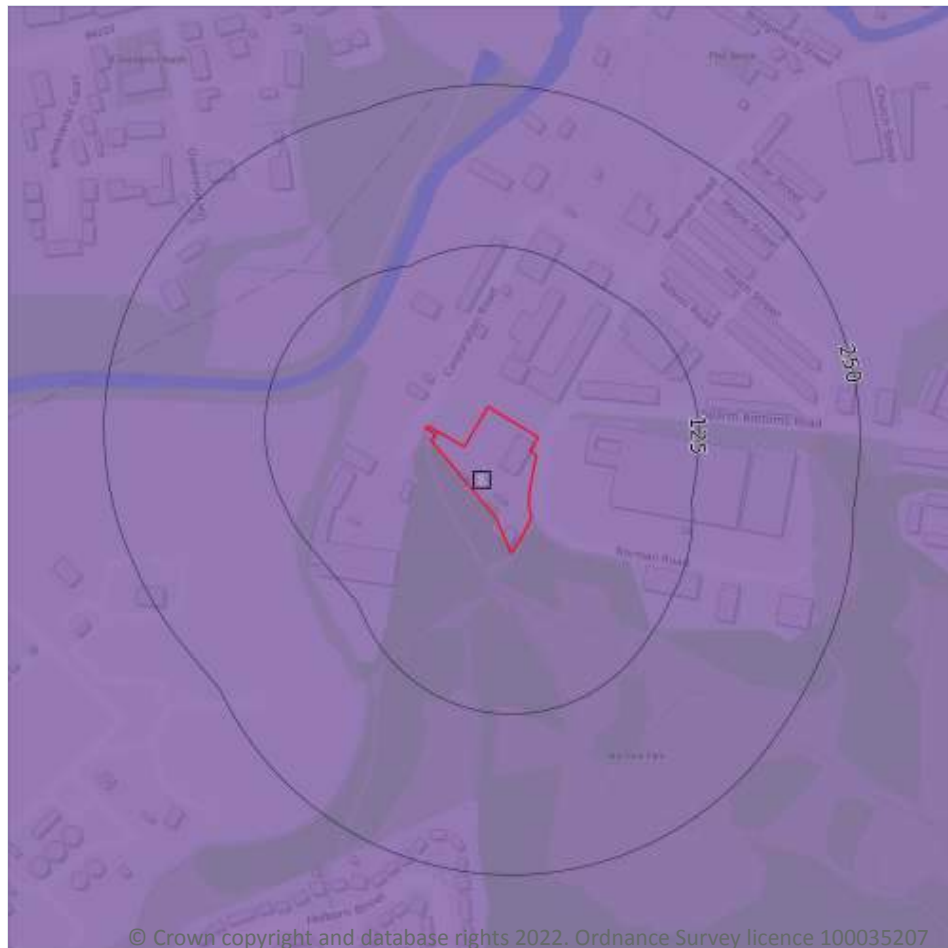
**0**

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*



## 12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

### 12.1 Agricultural Land Classification

Records within 250m

1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 99**

| ID | Location | Classification | Description |
|----|----------|----------------|-------------|
| 1  | On site  | Urban          | -           |

*This data is sourced from Natural England.*

## 12.2 Open Access Land

**Records within 250m****0**

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

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

## 12.3 Tree Felling Licences

**Records within 250m****0**

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

*This data is sourced from the Forestry Commission.*

## 12.4 Environmental Stewardship Schemes

**Records within 250m****0**

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

*This data is sourced from Natural England.*

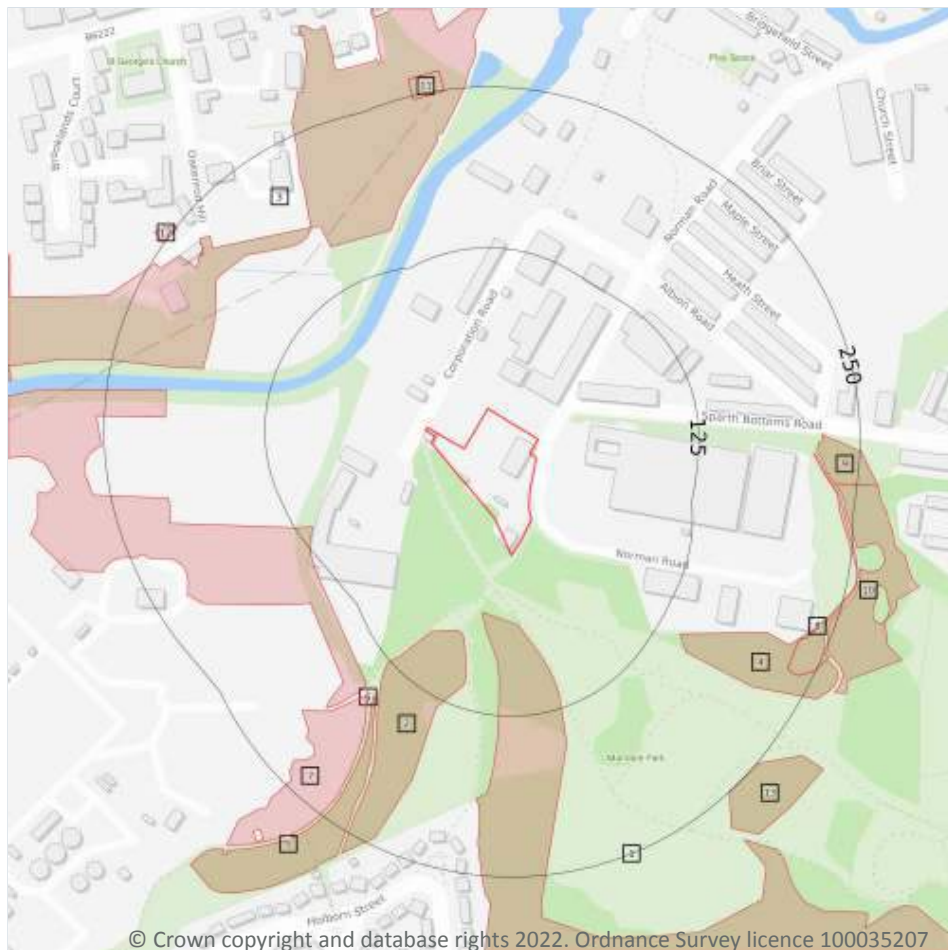
## 12.5 Countryside Stewardship Schemes

**Records within 250m****0**

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

*This data is sourced from Natural England.*

## 13 Habitat designations



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

### 13.1 Priority Habitat Inventory

Records within 250m

13

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 101**

| ID | Location | Main Habitat       | Other habitats                  |
|----|----------|--------------------|---------------------------------|
| 1  | 49m S    | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 2  | 72m SW   | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 3  | 113m SW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 4  | 143m SE  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |



| ID | Location | Main Habitat       | Other habitats                  |
|----|----------|--------------------|---------------------------------|
| 5  | 153m SW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 6  | 154m SW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 7  | 156m SW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 8  | 215m E   | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 9  | 217m E   | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 10 | 233m E   | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 11 | 247m N   | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 12 | 248m NW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 13 | 250m SE  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |

*This data is sourced from Natural England.*

## 13.2 Habitat Networks

**Records within 250m**

**0**

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

*This data is sourced from Natural England.*

## 13.3 Open Mosaic Habitat

**Records within 250m**

**0**

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

*This data is sourced from Natural England.*

## 13.4 Limestone Pavement Orders

**Records within 250m**

**0**

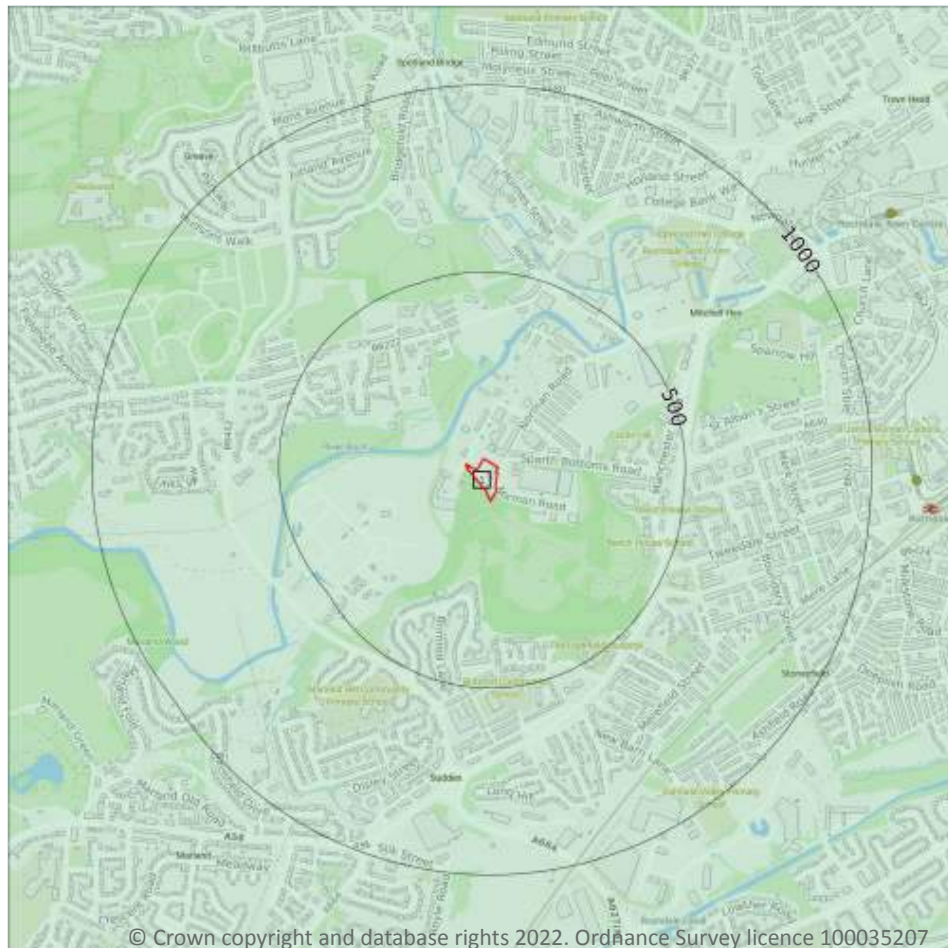
Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave

them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

*This data is sourced from Natural England.*



## 14 Geology 1:10,000 scale - Availability



— Site Outline  
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

### 14.1 10k Availability

#### Records within 500m

1

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

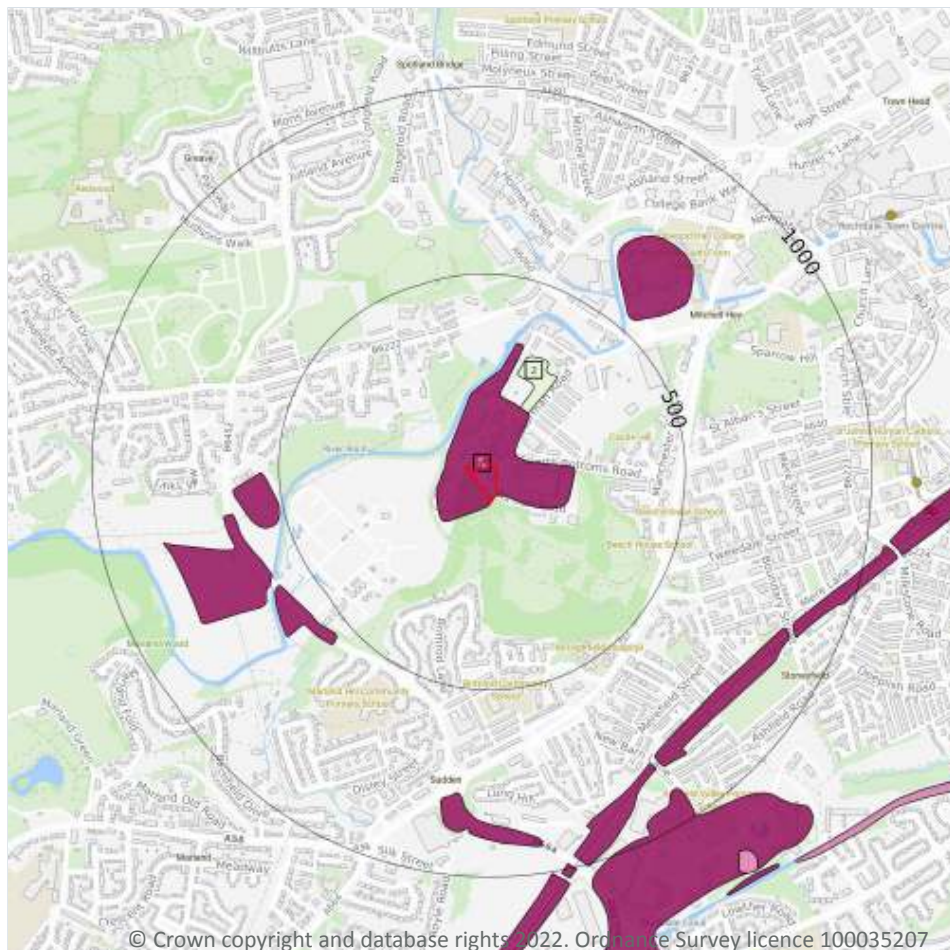
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 104**

| ID | Location | Artificial | Superficial | Bedrock | Mass movement | Sheet No. |
|----|----------|------------|-------------|---------|---------------|-----------|
| 1  | On site  | Full       | Full        | Full    | Full          | SD81SE    |

*This data is sourced from the British Geological Survey.*



## Geology 1:10,000 scale - Artificial and made ground



— Site Outline  
Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

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### 14.2 Artificial and made ground (10k)

Records within 500m

2

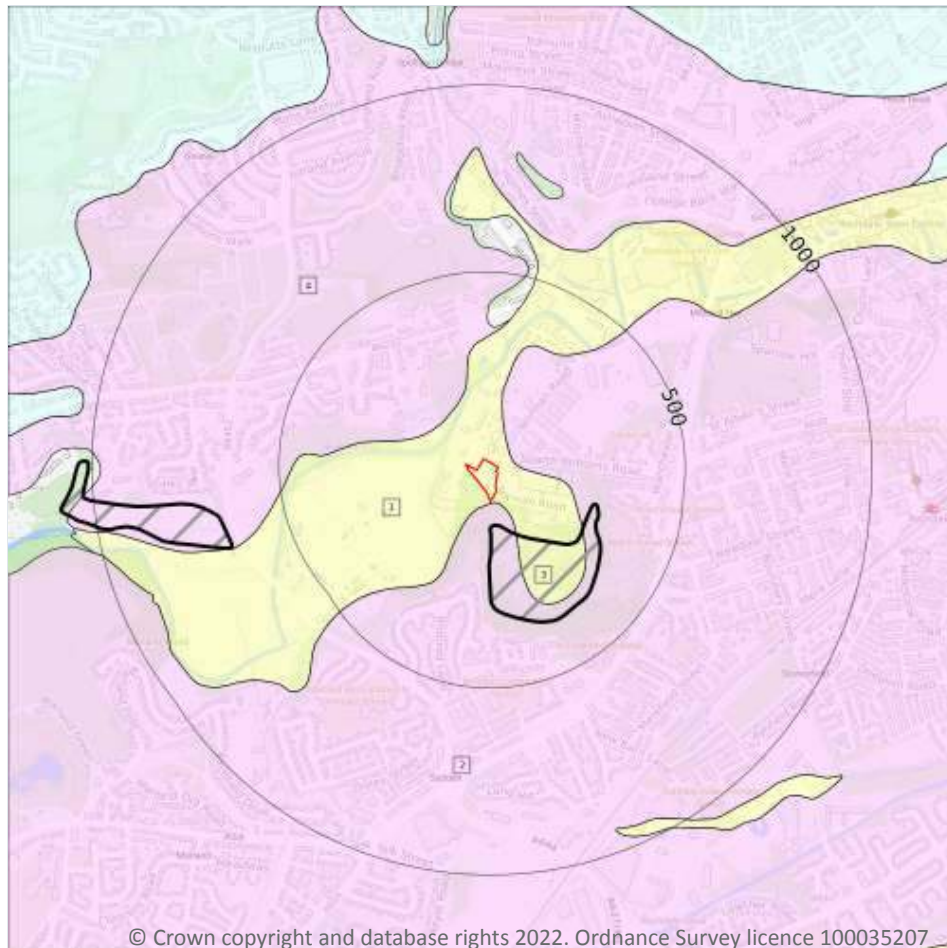
Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 105**

| ID | Location | LEX Code   | Description             | Rock description   |
|----|----------|------------|-------------------------|--------------------|
| 1  | On site  | MGR-ARTDP  | Made Ground (Undivided) | Artificial Deposit |
| 2  | 171m NE  | WMGR-ARTDP | Infilled Ground         | Artificial Deposit |

*This data is sourced from the British Geological Survey.*

## Geology 1:10,000 scale - Superficial



**Site Outline**

Search buffers in metres (m)

**Landslip (10k)**

**Superficial geology (10k)**  
Please see table for more details.

### 14.3 Superficial geology (10k)

#### Records within 500m

3

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 106**

| ID | Location | LEX Code  | Description                                         | Rock description            |
|----|----------|-----------|-----------------------------------------------------|-----------------------------|
| 1  | On site  | ALV-XCZSV | Alluvium - Clay, Silt, Sand And Gravel              | Clay, Silt, Sand And Gravel |
| 2  | 6m S     | GFDUD-XSV | Glaciofluvial Deposits, Devensian - Sand And Gravel | Sand And Gravel             |
| 4  | 127m NW  | GFDUD-XSV | Glaciofluvial Deposits, Devensian - Sand And Gravel | Sand And Gravel             |

*This data is sourced from the British Geological Survey.*



## 14.4 Landslip (10k)

### Records within 500m

**1**

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

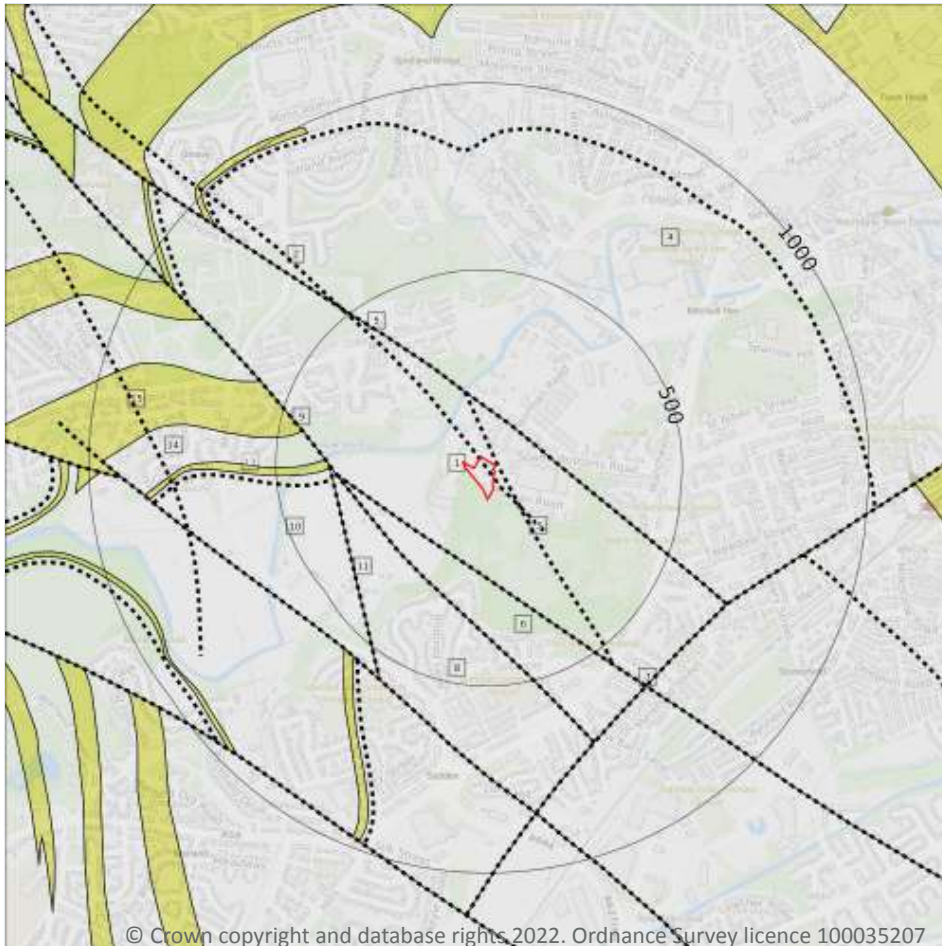
Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 106**

| ID | Location | LEX Code     | Description        | Rock description           |
|----|----------|--------------|--------------------|----------------------------|
| 3  | 65m S    | SLIP-UNKNOWN | Landslide Deposits | Unknown/unclassified Entry |

*This data is sourced from the British Geological Survey.*



## Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (10k)

Bedrock geology (10k)  
Please see table for more details.

### 14.5 Bedrock geology (10k)

Records within 500m

8

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 108**

| ID | Location | LEX Code  | Description                                                               | Rock age            |
|----|----------|-----------|---------------------------------------------------------------------------|---------------------|
| 1  | On site  | PLCM-MDSS | Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone | Langsettian Sub-age |
| 4  | 110m NE  | PLCM-MDSS | Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone | Langsettian Sub-age |

| ID | Location | LEX Code  | Description                                                               | Rock age            |
|----|----------|-----------|---------------------------------------------------------------------------|---------------------|
| 6  | 177m SW  | PLCM-MDSS | Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone | Langsettian Sub-age |
| 8  | 268m SW  | PLCM-MDSS | Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone | Langsettian Sub-age |
| 10 | 349m W   | PLCM-MDSS | Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone | Langsettian Sub-age |
| 13 | 355m W   | RSC-SDST  | Riddle Scout Rock - Sandstone                                             | Langsettian Sub-age |
| 14 | 367m W   | PLCM-MDSS | Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone | Langsettian Sub-age |
| 15 | 436m W   | OL-SDST   | Old Lawrence Rock - Sandstone                                             | Langsettian Sub-age |

*This data is sourced from the British Geological Survey.*

## 14.6 Bedrock faults and other linear features (10k)

### Records within 500m

**7**

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

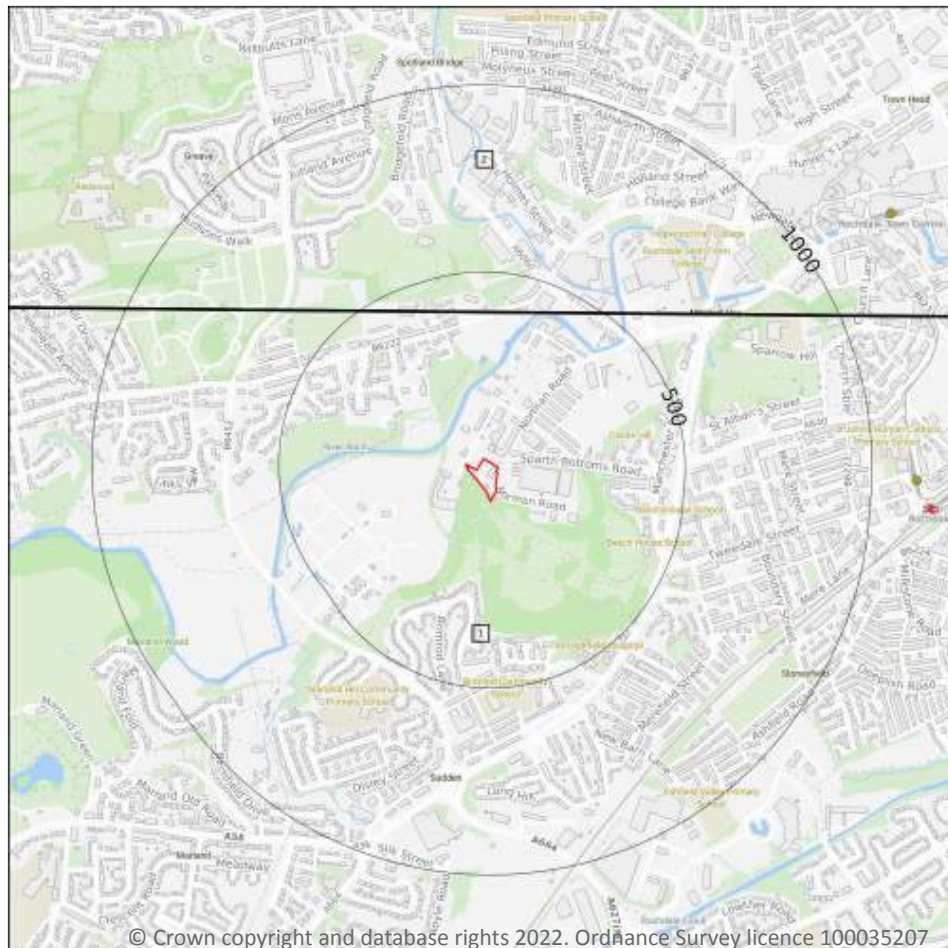
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 108**

| ID       | Location       | Category        | Description                                          |
|----------|----------------|-----------------|------------------------------------------------------|
| <b>2</b> | <b>On site</b> | <b>LANDFORM</b> | <b>Buried channel or valley margin</b>               |
| 3        | 7m NE          | FAULT           | Normal fault, inferred; crossmarks on downthrow side |
| 5        | 110m NE        | FAULT           | Normal fault, inferred; crossmarks on downthrow side |
| 7        | 177m SW        | FAULT           | Normal fault, inferred; crossmarks on downthrow side |
| 9        | 268m SW        | FAULT           | Normal fault, inferred; crossmarks on downthrow side |
| 11       | 349m W         | FAULT           | Normal fault, inferred; crossmarks on downthrow side |
| 12       | 351m W         | ROCK            | Coal seam, inferred                                  |

*This data is sourced from the British Geological Survey.*



## 15 Geology 1:50,000 scale - Availability



— Site Outline  
Search buffers in metres (m)

☐ Geological map tile

### 15.1 50k Availability

Records within 500m

2

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 110**

| ID | Location | Artificial  | Superficial | Bedrock | Mass movement | Sheet No.           |
|----|----------|-------------|-------------|---------|---------------|---------------------|
| 1  | On site  | No coverage | Full        | Full    | No coverage   | EW085_manchester_v4 |
| 2  | 392m N   | No coverage | Full        | Full    | Full          | EW076_rochdale_v4   |

*This data is sourced from the British Geological Survey.*



## Geology 1:50,000 scale - Artificial and made ground

### 15.2 Artificial and made ground (50k)

Records within 500m

0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

*This data is sourced from the British Geological Survey.*

### 15.3 Artificial ground permeability (50k)

Records within 50m

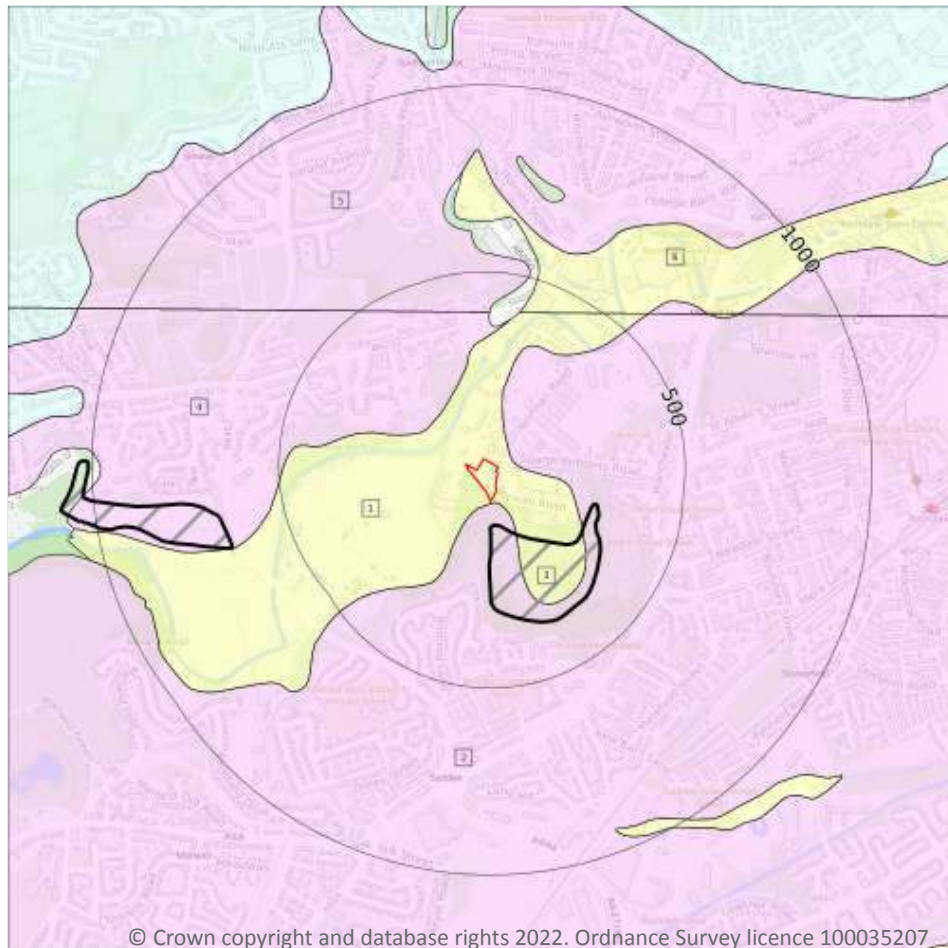
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

*This data is sourced from the British Geological Survey.*



## Geology 1:50,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
- Landslip (50k)
- Superficial geology (50k)  
Please see table for more details.

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### 15.4 Superficial geology (50k)

#### Records within 500m

5

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 112**

| ID | Location | LEX Code  | Description                       | Rock description            |
|----|----------|-----------|-----------------------------------|-----------------------------|
| 1  | On site  | ALV-XCZSV | ALLUVIUM                          | CLAY, SILT, SAND AND GRAVEL |
| 2  | 6m S     | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL             |
| 4  | 141m NW  | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL             |
| 5  | 392m N   | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL             |



| ID | Location | LEX Code  | Description | Rock description            |
|----|----------|-----------|-------------|-----------------------------|
| 6  | 403m N   | ALV-XCZSV | ALLUVIUM    | CLAY, SILT, SAND AND GRAVEL |

*This data is sourced from the British Geological Survey.*

## 15.5 Superficial permeability (50k)

|                           |          |
|---------------------------|----------|
| <b>Records within 50m</b> | <b>2</b> |
|---------------------------|----------|

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

| Location       | Flow type            | Maximum permeability | Minimum permeability |
|----------------|----------------------|----------------------|----------------------|
| <b>On site</b> | <b>Intergranular</b> | <b>High</b>          | <b>Very Low</b>      |
| 6m SW          | Intergranular        | Very High            | High                 |

*This data is sourced from the British Geological Survey.*

## 15.6 Landslip (50k)

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>1</b> |
|----------------------------|----------|

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 112**

| ID | Location | LEX Code     | Description        | Rock description           |
|----|----------|--------------|--------------------|----------------------------|
| 3  | 66m S    | SLIP-UNKNOWN | LANDSLIDE DEPOSITS | UNKNOWN/UNCLASSIFIED ENTRY |

*This data is sourced from the British Geological Survey.*

## 15.7 Landslip permeability (50k)

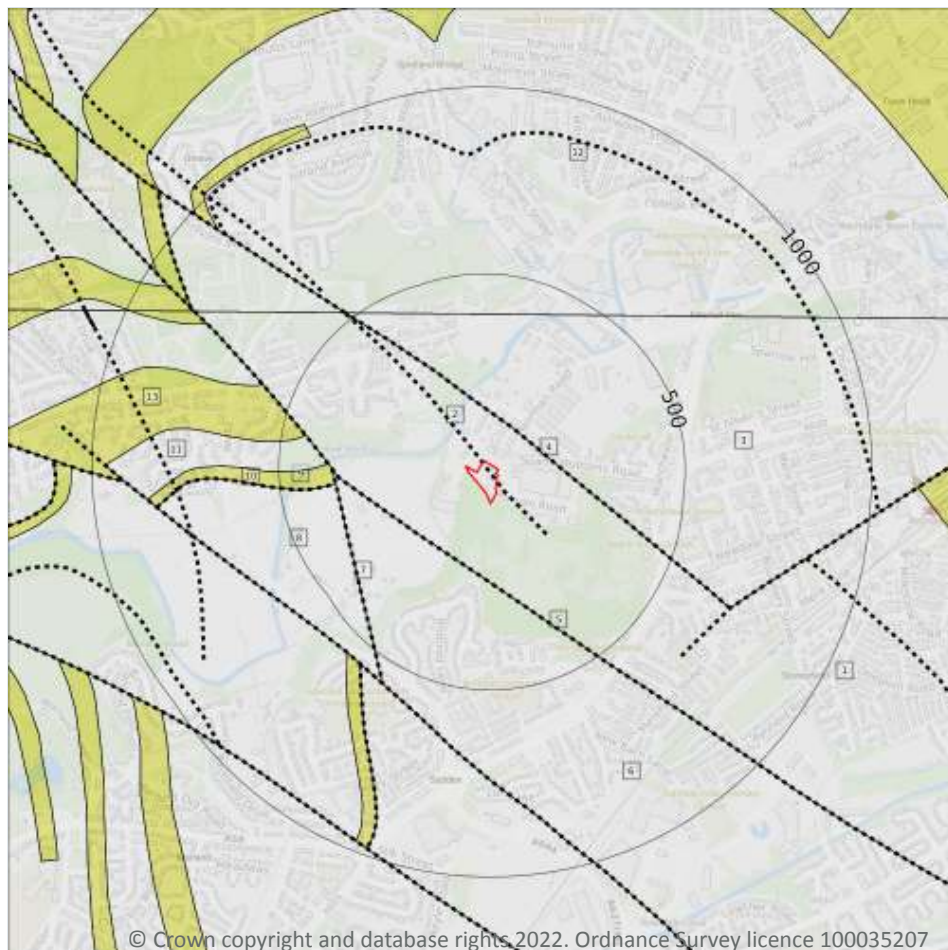
|                           |          |
|---------------------------|----------|
| <b>Records within 50m</b> | <b>0</b> |
|---------------------------|----------|

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

*This data is sourced from the British Geological Survey.*



## Geology 1:50,000 scale - Bedrock



**Site Outline**

Search buffers in metres (m)

..... Bedrock faults and other linear features (50k)

Bedrock geology (50k)  
Please see table for more details.

### 15.8 Bedrock geology (50k)

Records within 500m

8

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 114**

| ID | Location | LEX Code  | Description                                                               | Rock age    |
|----|----------|-----------|---------------------------------------------------------------------------|-------------|
| 1  | On site  | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 3  | 111m NE  | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |

| ID | Location | LEX Code  | Description                                                               | Rock age    |
|----|----------|-----------|---------------------------------------------------------------------------|-------------|
| 6  | 177m SW  | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 8  | 349m W   | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 9  | 351m W   | RSC-SDST  | RIDDLE SCOUT ROCK - SANDSTONE                                             | WESTPHALIAN |
| 11 | 367m W   | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 12 | 392m N   | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 13 | 436m W   | OL-SDST   | OLD LAWRENCE ROCK - SANDSTONE                                             | WESTPHALIAN |

*This data is sourced from the British Geological Survey.*

## 15.9 Bedrock permeability (50k)

### Records within 50m

**1**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

| Location | Flow type | Maximum permeability | Minimum permeability |
|----------|-----------|----------------------|----------------------|
| On site  | Fracture  | Moderate             | Low                  |

*This data is sourced from the British Geological Survey.*

## 15.10 Bedrock faults and other linear features (50k)

### Records within 500m

**5**

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 114**

| ID | Location | Category | Description                                                                 |
|----|----------|----------|-----------------------------------------------------------------------------|
| 2  | On site  | LANDFORM | Approximate margin of buried (superficial deposit-filled) channel or valley |
| 4  | 111m NE  | FAULT    | Fault, inferred                                                             |
| 5  | 177m SW  | FAULT    | Fault, inferred                                                             |

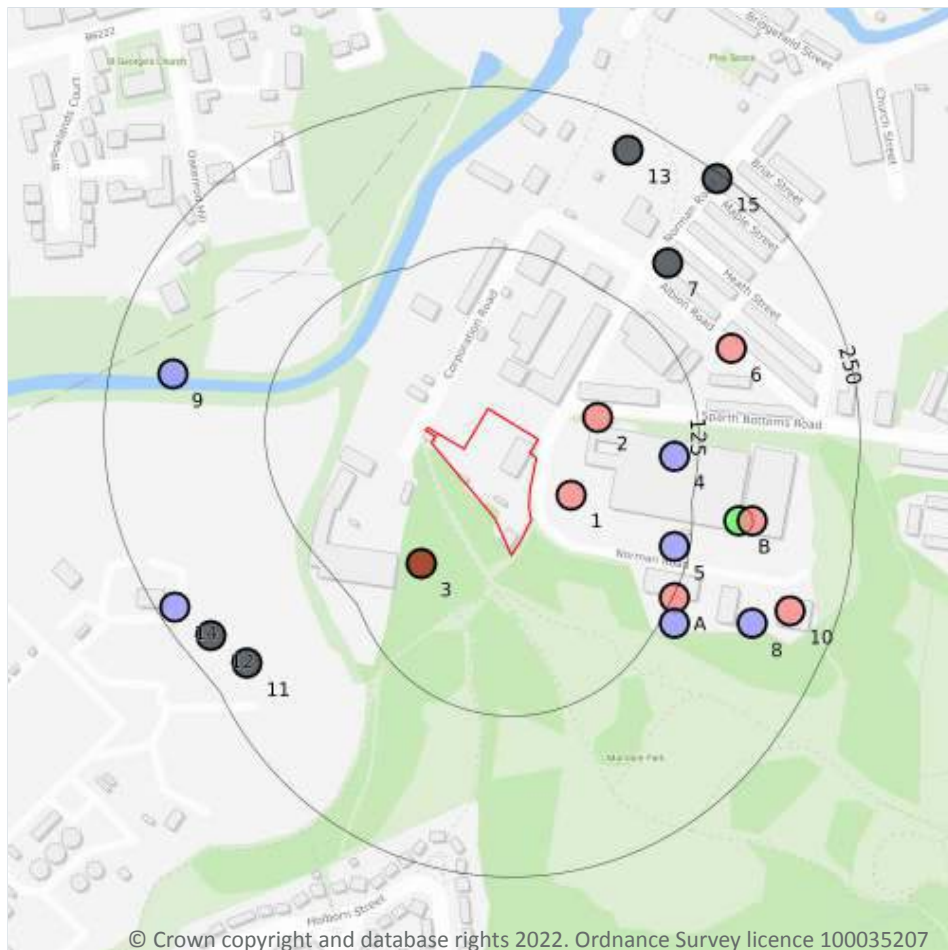


| ID | Location | Category | Description         |
|----|----------|----------|---------------------|
| 7  | 349m W   | FAULT    | Fault, inferred     |
| 10 | 351m W   | ROCK     | Coal seam, inferred |

*This data is sourced from the British Geological Survey.*



## 16 Boreholes



— Site Outline  
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

### 16.1 BGS Boreholes

Records within 250m

19

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

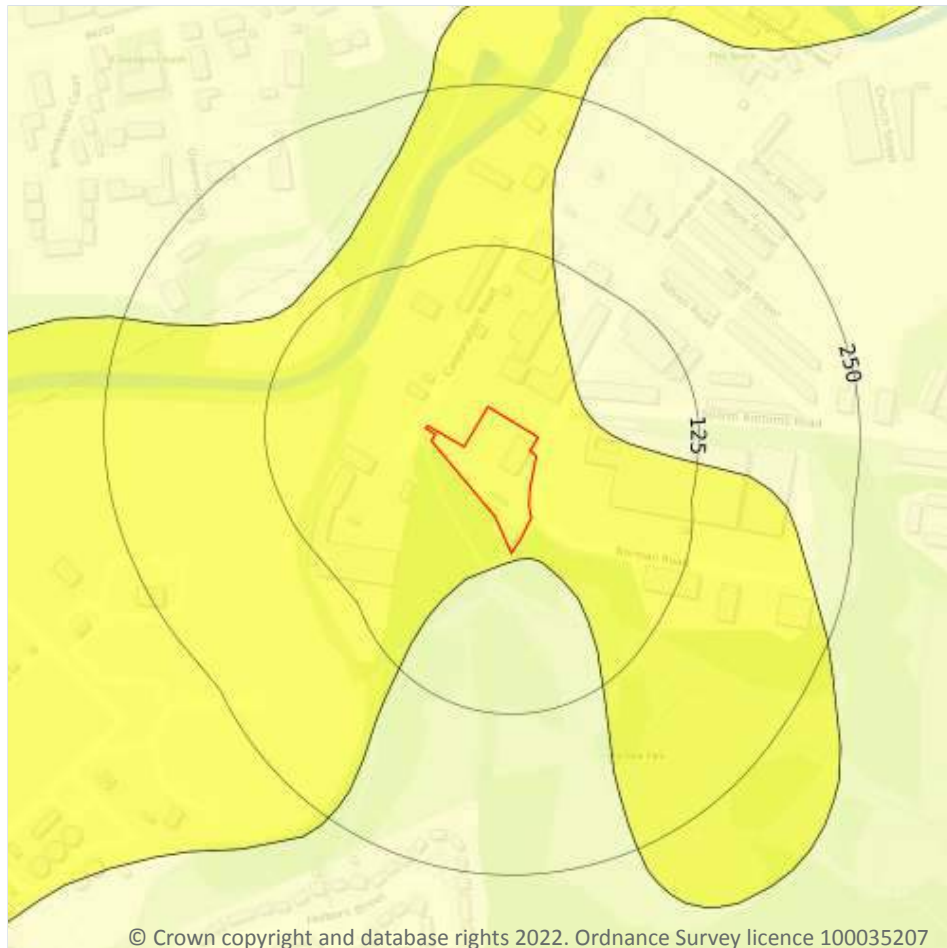
Features are displayed on the Boreholes map on **page 117**

| ID | Location | Grid reference | Name                            | Length | Confidential | Web link              |
|----|----------|----------------|---------------------------------|--------|--------------|-----------------------|
| 1  | 32m E    | 388790 412710  | SPARTH BOTTOMS ROAD ROCHDALE R5 | 30.5   | N            | <a href="#">30210</a> |
| 2  | 49m E    | 388810 412770  | SPARTH BOTTOMS ROAD ROCHDALE R1 | 30.5   | N            | <a href="#">30206</a> |
| 3  | 66m SW   | 388673 412657  | SPARN MILL                      | -1.0   | N            | <a href="#">29737</a> |

| ID | Location | Grid reference | Name                               | Length | Confidential | Web link              |
|----|----------|----------------|------------------------------------|--------|--------------|-----------------------|
| 4  | 107m E   | 388870 412740  | SPARTH BOTTOMS ROAD ROCHDALE 1     | 7.0    | N            | <a href="#">30201</a> |
| 5  | 113m E   | 388870 412670  | SPARTH BOTTOMS ROAD ROCHDALE 5     | 7.5    | N            | <a href="#">30205</a> |
| A  | 127m SE  | 388870 412630  | SPARTH BOTTOMS ROAD ROCHDALE R4    | 30.5   | N            | <a href="#">30209</a> |
| A  | 136m SE  | 388870 412610  | SPARTH BOTTOMS ROAD ROCHDALE 4     | 8.0    | N            | <a href="#">30204</a> |
| B  | 161m E   | 388920 412690  | SPARTH BOTTOMS ROAD ROCHDALE 2     | 10.8   | N            | <a href="#">30202</a> |
| 6  | 166m NE  | 388914 412824  | ROCHDALE CO-OP LAUNDRY ALBION ROAD | 71.81  | N            | <a href="#">29738</a> |
| 7  | 170m NE  | 388865 412890  | W CENTRAL DIST ROCHDALE 19         | -      | Y            | N/A                   |
| B  | 171m E   | 388930 412690  | SPARTH BOTTOMS ROAD ROCHDALE R2    | 30.5   | N            | <a href="#">30207</a> |
| 8  | 189m SE  | 388930 412610  | SPARTH BOTTOMS ROAD ROCHDALE 3     | 8.5    | N            | <a href="#">30203</a> |
| 9  | 202m W   | 388480 412804  | ROCH MILLS TREATMENT WRKS BH44     | 8.23   | N            | <a href="#">29964</a> |
| 10 | 213m E   | 388960 412620  | SPARTH BOTTOMS ROAD ROCHDALE R3    | 30.5   | N            | <a href="#">30208</a> |
| 11 | 220m SW  | 388538 412579  | Rochdale WwTW BH3                  | -      | Y            | N/A                   |
| 12 | 227m SW  | 388510 412601  | Rochdale WwTW BH1                  | -      | Y            | N/A                   |
| 13 | 229m NE  | 388834 412978  | W CENTRAL DIST ROCHDALE 21         | -      | Y            | N/A                   |
| 14 | 236m SW  | 388482 412623  | ROCH MILLS TREATMENT WRKS BH43     | 9.75   | N            | <a href="#">29963</a> |
| 15 | 246m NE  | 388903 412956  | W CENTRAL DIST ROCHDALE 20         | -      | Y            | N/A                   |

*This data is sourced from the British Geological Survey.*

## 17 Natural ground subsidence - Shrink swell clays



— Site Outline  
Search buffers in metres (m)

- ☐ No data
- ☐ Negligible
- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High

### 17.1 Shrink swell clays

Records within 50m

2

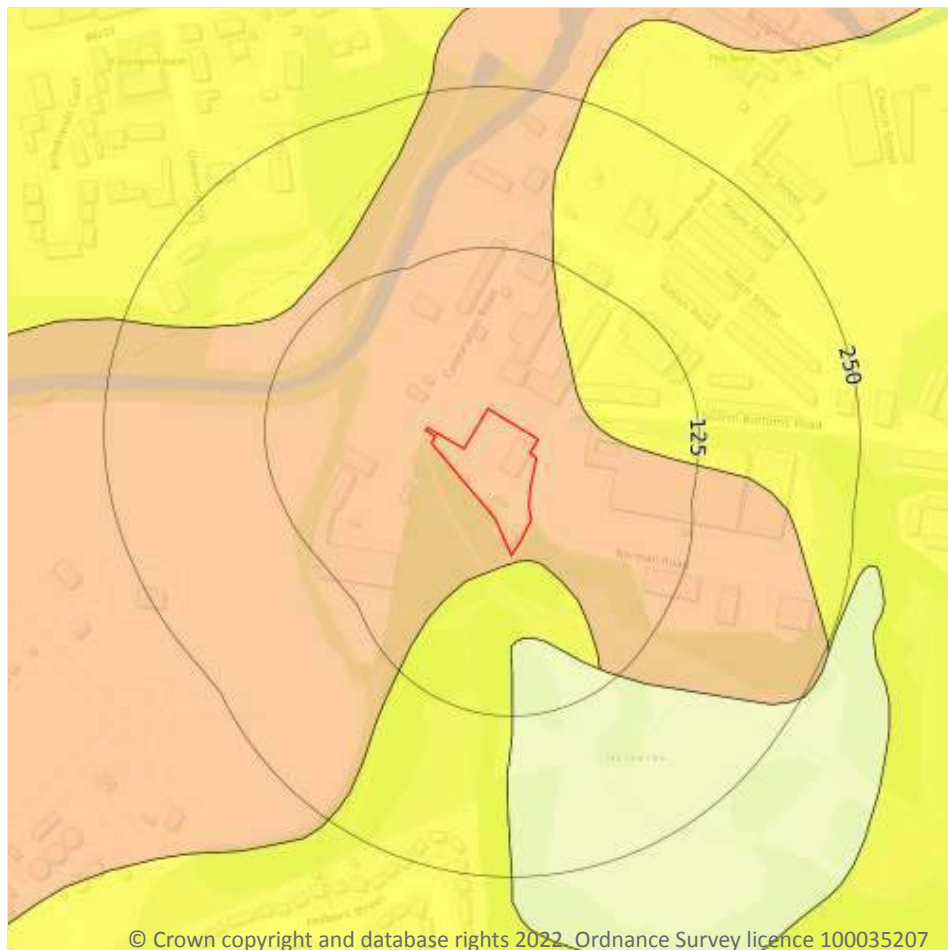
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 119**

| Location | Hazard rating | Details                                         |
|----------|---------------|-------------------------------------------------|
| On site  | Very low      | Ground conditions predominantly low plasticity. |
| 6m S     | Negligible    | Ground conditions predominantly non-plastic.    |

*This data is sourced from the British Geological Survey.*

## Natural ground subsidence - Running sands



— Site Outline  
Search buffers in metres (m)

- ☐ No data
- ☐ Negligible
- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High

### 17.2 Running sands

#### Records within 50m

2

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 120**

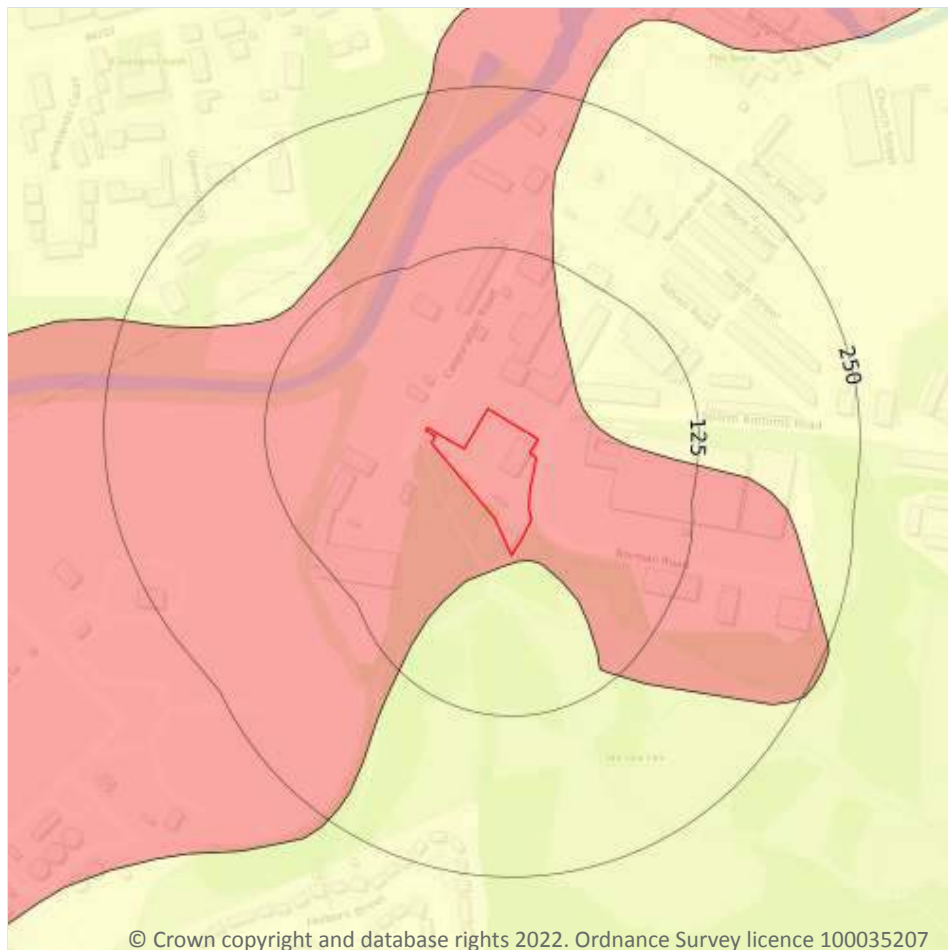
| Location | Hazard rating | Details                                                                                                                              |
|----------|---------------|--------------------------------------------------------------------------------------------------------------------------------------|
| On site  | Low           | Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water. |

| Location | Hazard rating | Details                                                                                                                                 |
|----------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 6m S     | Very low      | Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly. |

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Compressible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.3 Compressible deposits

#### Records within 50m

2

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 122**

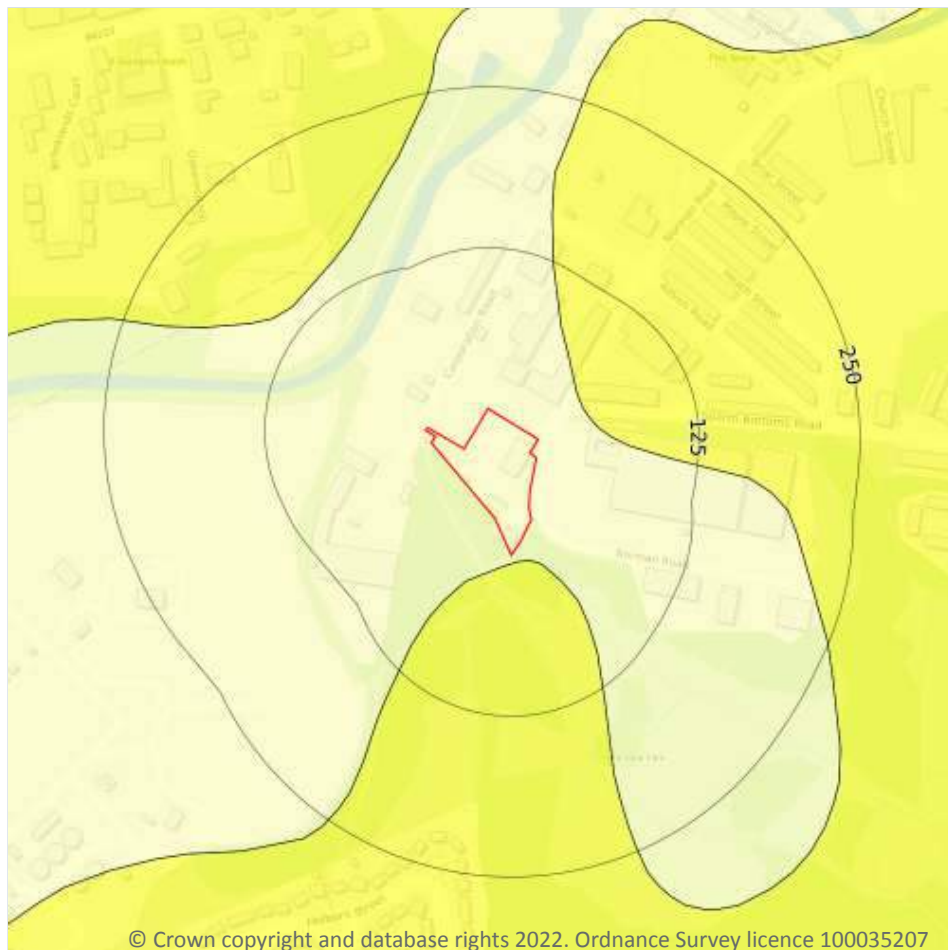
| Location | Hazard rating | Details                                                                                                                                                    |
|----------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| On site  | Moderate      | Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site. |
| 6m S     | Negligible    | Compressible strata are not thought to occur.                                                                                                              |



*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Collapsible deposits



— Site Outline  
Search buffers in metres (m)

- ☐ No data
- ☐ Negligible
- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High

### 17.4 Collapsible deposits

Records within 50m

2

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

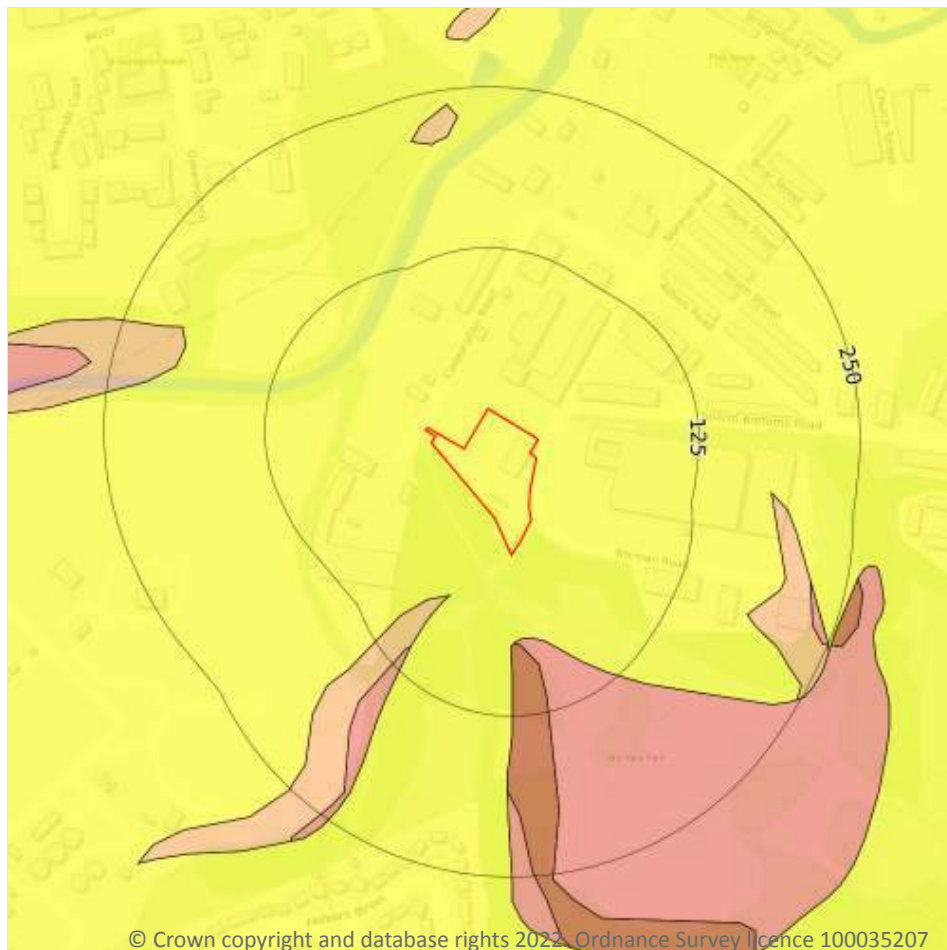
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 124**

| Location | Hazard rating | Details                                                                                       |
|----------|---------------|-----------------------------------------------------------------------------------------------|
| On site  | Negligible    | Deposits with potential to collapse when loaded and saturated are believed not to be present. |
| 6m S     | Very low      | Deposits with potential to collapse when loaded and saturated are unlikely to be present.     |

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Landslides



— Site Outline  
Search buffers in metres (m)

- ☐ No data
- ☐ Negligible
- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High

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### 17.5 Landslides

#### Records within 50m

1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

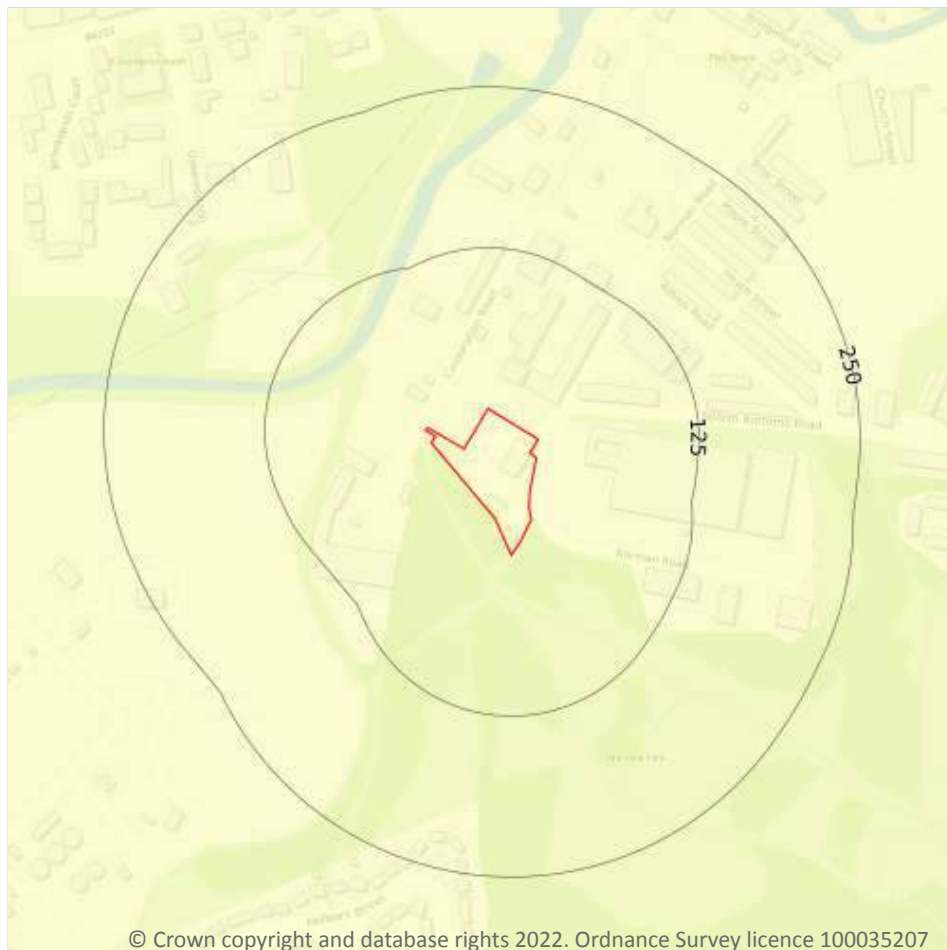
Features are displayed on the Natural ground subsidence - Landslides map on **page 125**

| Location | Hazard rating | Details                                                                                                                                                         |
|----------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| On site  | Very low      | Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered. |

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Ground dissolution of soluble rocks



— Site Outline  
Search buffers in metres (m)

- ☐ No data
- ☐ Negligible
- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High

### 17.6 Ground dissolution of soluble rocks

#### Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

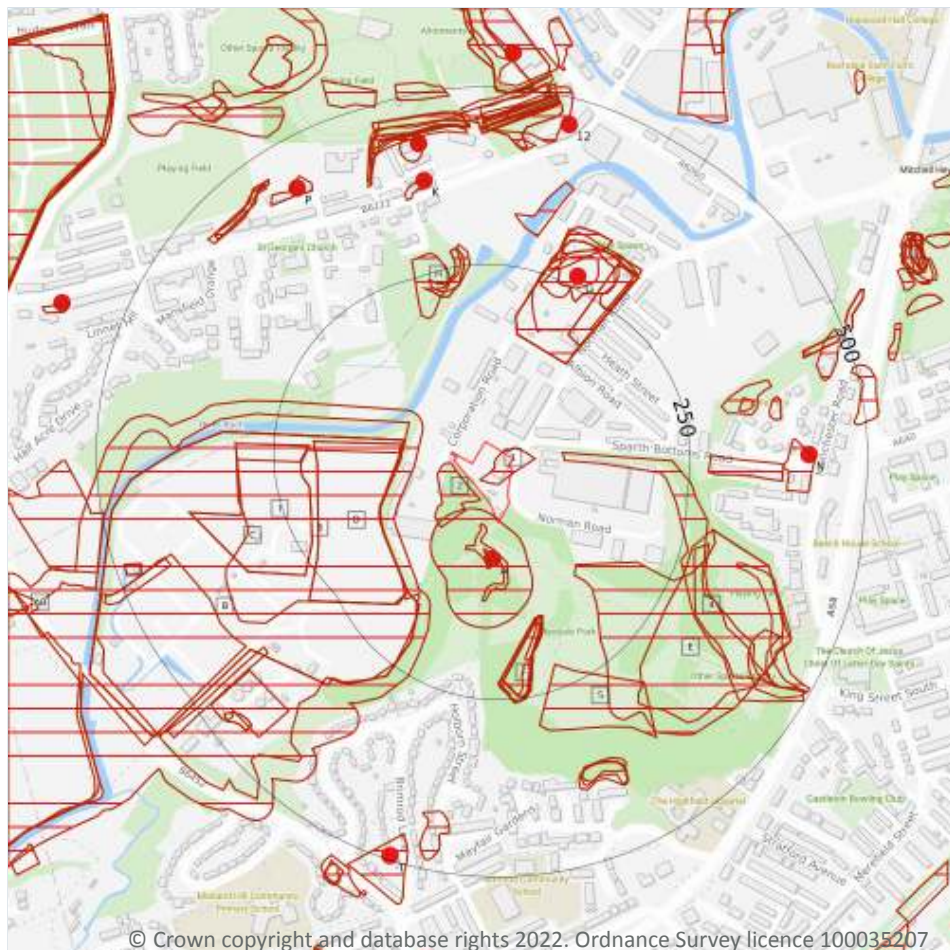
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 126**

| Location | Hazard rating | Details                                                                                                                                             |
|----------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| On site  | Negligible    | Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present. |

*This data is sourced from the British Geological Survey.*



## 18 Mining, ground workings and natural cavities



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

### 18.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

*This data is sourced from Stantec UK Ltd.*

## 18.2 BritPits

### Records within 500m

8

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining, ground workings and natural cavities map on **page 128**

| ID | Location | Details                                                                                                                 | Description                                                                                                                                                                                                                                                                                                                              |
|----|----------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A  | 51m S    | Name: West Hill Gravel Pit<br>Address: Mitchell Hey, ROCHDALE, Lancashire<br>Commodity: Sand & Gravel<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| G  | 266m NE  | Name: Sparth Brick Works<br>Address: ROCHDALE, Lancashire<br>Commodity: Clay & Shale<br>Status: Ceased                  | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| K  | 378m N   | Name: Oaken House Sand Pit<br>Address: Mitchell Hey, ROCHDALE, Lancashire<br>Commodity: Sand<br>Status: Ceased          | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| N  | 416m E   | Name: Castle Hill Sand Pit<br>Address: Mitchell Hey, ROCHDALE, Lancashire<br>Commodity: Sand<br>Status: Ceased          | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| K  | 430m N   | Name: Oaken House Sand Pit<br>Address: Mitchell Hey, ROCHDALE, Lancashire<br>Commodity: Sand<br>Status: Ceased          | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |



| ID | Location | Details                                                                                                               | Description                                                                                                                                                                                                                                                                                                                              |
|----|----------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| P  | 431m NW  | Name: Sandy Brow Sand Pit<br>Address: Mitchell Hey, ROCHDALE, Lancashire<br>Commodity: Sand<br>Status: Ceased         | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| 12 | 462m N   | Name: Coptrod Wood<br>Address: Mitchell Hey, ROCHDALE, Lancashire<br>Commodity: Sandstone<br>Status: Ceased           | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| T  | 494m S   | Name: Brimrod Brick Field<br>Address: Mitchell Hey, ROCHDALE, Lancashire<br>Commodity: Clay & Shale<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

*This data is sourced from the British Geological Survey.*

## 18.3 Surface ground workings

**Records within 250m**

**40**

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 128**

| ID | Location | Land Use                    | Year of mapping | Mapping scale |
|----|----------|-----------------------------|-----------------|---------------|
| 1  | On site  | Colliery                    | 1851            | 1:10560       |
| A  | On site  | Gravel Pit                  | 1890            | 1:10560       |
| 2  | 6m SW    | Colliery                    | 1851            | 1:10560       |
| A  | 19m SW   | Unspecified Ground Workings | 1908            | 1:10560       |
| B  | 46m W    | Sewage Farm                 | 1928            | 1:10560       |
| B  | 67m W    | Sewage Farm                 | 1949            | 1:10560       |
| C  | 69m W    | Sewage Works                | 1992            | 1:10000       |



| ID | Location | Land Use                    | Year of mapping | Mapping scale |
|----|----------|-----------------------------|-----------------|---------------|
| C  | 69m W    | Sewage Works                | 1987            | 1:10000       |
| C  | 69m W    | Sewage Works                | 1975            | 1:10000       |
| 3  | 70m W    | Sludge Lagoons              | 1975            | 1:10000       |
| 4  | 71m E    | Unspecified Heap            | 1938            | 1:10560       |
| D  | 72m W    | Sludge Lagoons              | 1992            | 1:10000       |
| D  | 72m W    | Sludge Lagoons              | 1987            | 1:10000       |
| E  | 124m SE  | Refuse Heap                 | 1987            | 1:10000       |
| F  | 144m SE  | Unspecified Heap            | 1992            | 1:10000       |
| F  | 144m SE  | Unspecified Heap            | 1987            | 1:10000       |
| F  | 144m SE  | Unspecified Heap            | 1975            | 1:10000       |
| F  | 144m SE  | Unspecified Heap            | 1949            | 1:10560       |
| F  | 144m SE  | Unspecified Heap            | 1968            | 1:10560       |
| F  | 145m S   | Unspecified Heap            | 1928            | 1:10560       |
| F  | 145m S   | Unspecified Heap            | 1938            | 1:10560       |
| F  | 150m S   | Unspecified Ground Workings | 1908            | 1:10560       |
| G  | 152m NE  | Brick Works                 | 1908            | 1:10560       |
| G  | 153m NE  | Brick Works                 | 1928            | 1:10560       |
| G  | 153m NE  | Brick Works                 | 1938            | 1:10560       |
| G  | 172m NE  | Unspecified Heap            | 1890            | 1:10560       |
| G  | 184m NE  | Unspecified Pit             | 1975            | 1:10000       |
| G  | 184m NE  | Unspecified Pit             | 1968            | 1:10560       |
| H  | 191m NW  | Unspecified Heap            | 1908            | 1:10560       |
| I  | 201m W   | Sludge Beds                 | 1992            | 1:10000       |
| I  | 201m W   | Sludge Beds                 | 1987            | 1:10000       |
| F  | 203m S   | Refuse Heap                 | 1908            | 1:10560       |
| H  | 211m N   | Refuse Heap                 | 1928            | 1:10560       |
| H  | 211m N   | Refuse Heap                 | 1938            | 1:10560       |
| 5  | 216m S   | Unspecified Disused Tip     | 1992            | 1:10000       |



| ID | Location | Land Use           | Year of mapping | Mapping scale |
|----|----------|--------------------|-----------------|---------------|
| H  | 219m N   | Refuse Heap        | 1949            | 1:10560       |
| G  | 227m NE  | Unspecified Quarry | 1908            | 1:10560       |
| G  | 235m NE  | Unspecified Quarry | 1938            | 1:10560       |
| G  | 235m NE  | Unspecified Quarry | 1928            | 1:10560       |
| G  | 248m NE  | Unspecified Heap   | 1908            | 1:10560       |

*This is data is sourced from Ordnance Survey/Groundsure.*

## 18.4 Underground workings

**Records within 1000m**

**2**

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

Features are displayed on the Mining, ground workings and natural cavities map on **page 128**

| ID | Location | Land Use          | Year of mapping | Mapping scale |
|----|----------|-------------------|-----------------|---------------|
| T  | 553m S   | Unspecified Shaft | 1890            | 1:10560       |
| AB | 622m W   | Tunnel            | 1968            | 1:10560       |

*This is data is sourced from Ordnance Survey/Groundsure.*

## 18.5 Historical Mineral Planning Areas

**Records within 500m**

**0**

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

*This data is sourced from the British Geological Survey.*

## 18.6 Non-coal mining

**Records within 1000m**

**0**

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).



*This data is sourced from the British Geological Survey.*

## 18.7 Mining cavities

**Records within 1000m**

**0**

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

*This data is sourced from Stantec UK Ltd.*

## 18.8 JPB mining areas

**Records on site**

**0**

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

*This data is sourced from Johnson Poole and Bloomer.*

## 18.9 Coal mining

**Records on site**

**1**

Areas which could be affected by past, current or future coal mining.

| Location | Details                                                                                                                                                                                                                                                              |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| On site  | The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider. |

*This data is sourced from the Coal Authority.*

## 18.10 Brine areas

**Records on site**

**0**

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

*This data is sourced from the Cheshire Brine Subsidence Compensation Board.*



## 18.11 Gypsum areas

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

Generalised areas that may be affected by gypsum extraction.

*This data is sourced from British Gypsum.*

## 18.12 Tin mining

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

Generalised areas that may be affected by historical tin mining.

*This data is sourced from Groundsure.*

## 18.13 Clay mining

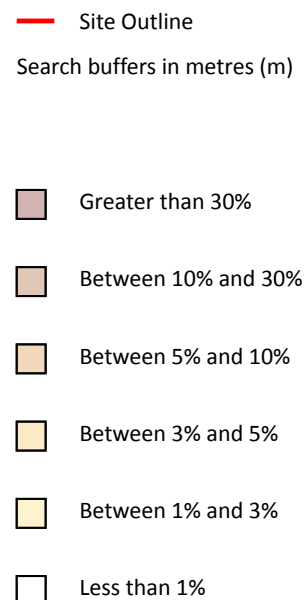
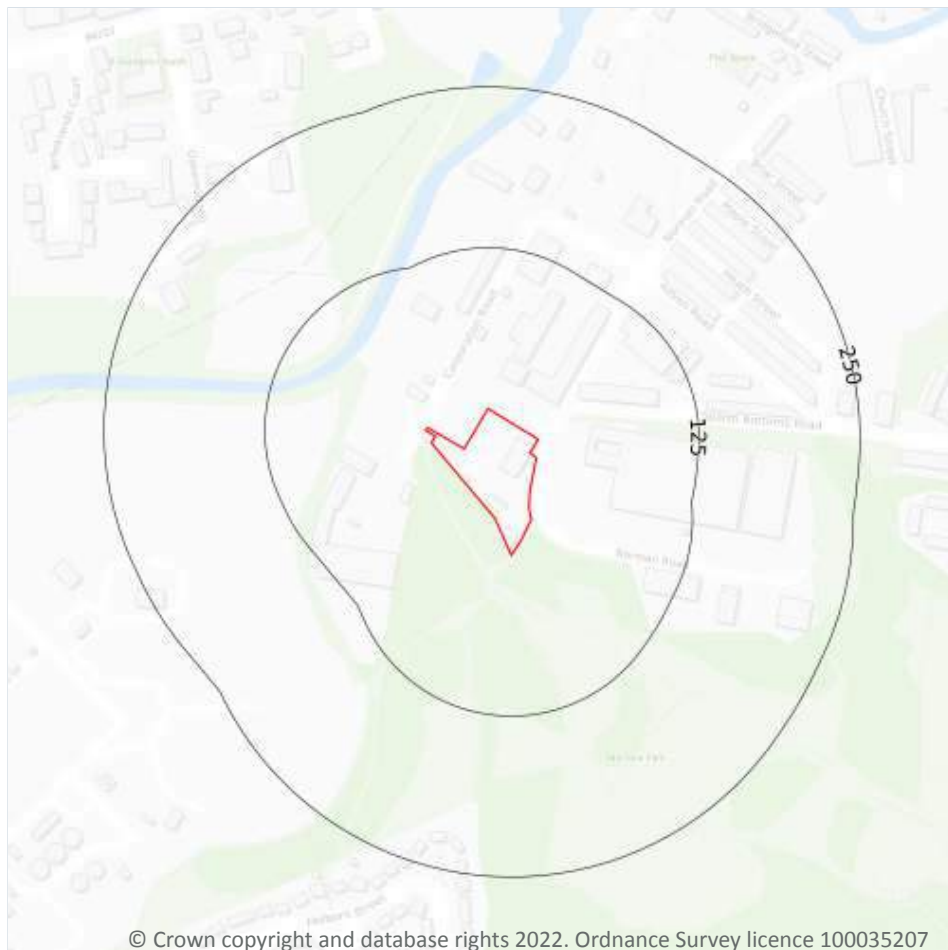
|                 |   |
|-----------------|---|
| Records on site | 0 |
|-----------------|---|

Generalised areas that may be affected by kaolin and ball clay extraction.

*This data is sourced from the Kaolin and Ball Clay Association (UK).*



## 19 Radon



### 19.1 Radon

#### Records on site

1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 135**

| Location | Estimated properties affected | Radon Protection Measures required |
|----------|-------------------------------|------------------------------------|
| On site  | Less than 1%                  | None**                             |

*This data is sourced from the British Geological Survey and Public Health England.*



## 20 Soil chemistry

### 20.1 BGS Estimated Background Soil Chemistry

Records within 50m

2

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km<sup>2</sup>. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km<sup>2</sup>; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

| Location       | Arsenic              | Bioaccessible Arsenic | Lead                   | Bioaccessible Lead     | Cadmium                | Chromium             | Nickel               |
|----------------|----------------------|-----------------------|------------------------|------------------------|------------------------|----------------------|----------------------|
| <b>On site</b> | <b>15 - 25 mg/kg</b> | <b>No data</b>        | <b>200 - 300 mg/kg</b> | <b>120 - 240 mg/kg</b> | <b>1.8 - 2.2 mg/kg</b> | <b>60 - 90 mg/kg</b> | <b>30 - 45 mg/kg</b> |
| 35m E          | 15 - 25 mg/kg        | No data               | 200 - 300 mg/kg        | 120 - 240 mg/kg        | 1.8 - 2.2 mg/kg        | 60 - 90 mg/kg        | 15 - 30 mg/kg        |

*This data is sourced from the British Geological Survey.*

### 20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km<sup>2</sup>).

*This data is sourced from the British Geological Survey.*

### 20.3 BGS Measured Urban Soil Chemistry

Records within 50m

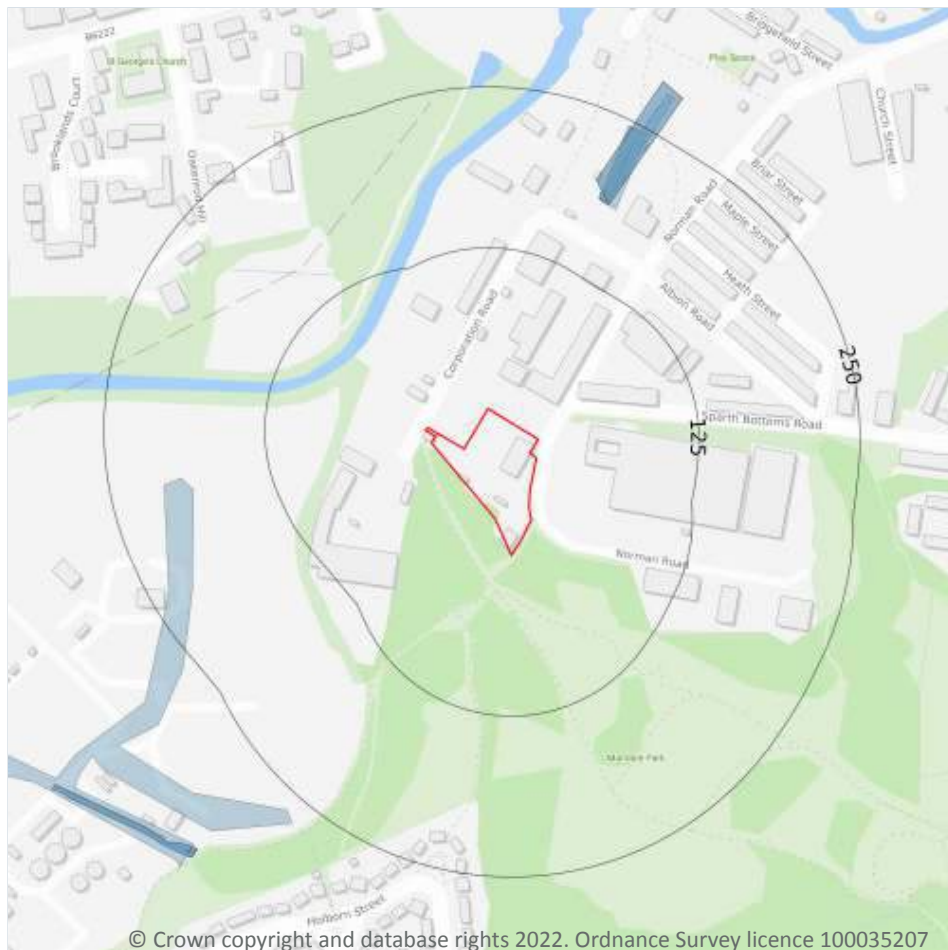
0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km<sup>2</sup>.

*This data is sourced from the British Geological Survey.*



## 21 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

### 21.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

*This data is sourced from publicly available information by Groundsure.*

### 21.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.



*This data is sourced from publicly available information by Groundsure.*

## 21.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

*This data is sourced from the Ordnance Survey.*

## 21.4 Historical railway and tunnel features

Records within 250m

6

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on **page 137**

| Location | Land Use        | Year of mapping | Mapping scale |
|----------|-----------------|-----------------|---------------|
| 184m NE  | Railway Sidings | 1908            | 10560         |
| 184m NE  | Railway Sidings | 1930            | 2500          |
| 184m NE  | Railway Sidings | 1938            | 10560         |
| 184m NE  | Railway Sidings | 1928            | 10560         |
| 184m NE  | Railway Sidings | 1910            | 2500          |
| 186m W   | Railway Sidings | 1949            | 10560         |

*This data is sourced from Ordnance Survey/Groundsure.*

## 21.5 Royal Mail tunnels

Records within 250m

0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

*This data is sourced from Groundsure/the Postal Museum.*



## 21.6 Historical railways

Records within 250m

0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

*This data is sourced from OpenStreetMap.*

## 21.7 Railways

Records within 250m

0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

*This data is sourced from Ordnance Survey and OpenStreetMap.*

## 21.8 Crossrail 1

Records within 500m

0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

*This data is sourced from publicly available information by Groundsure.*

## 21.9 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

*This data is sourced from publicly available information by Groundsure.*

## 21.10 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

*This data is sourced from HS2 Ltd.*



## Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference>.

## Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: <https://www.groundsure.com/terms-and-conditions-jan-2020/>.



## COAL AUTHORITY MINING REPORT

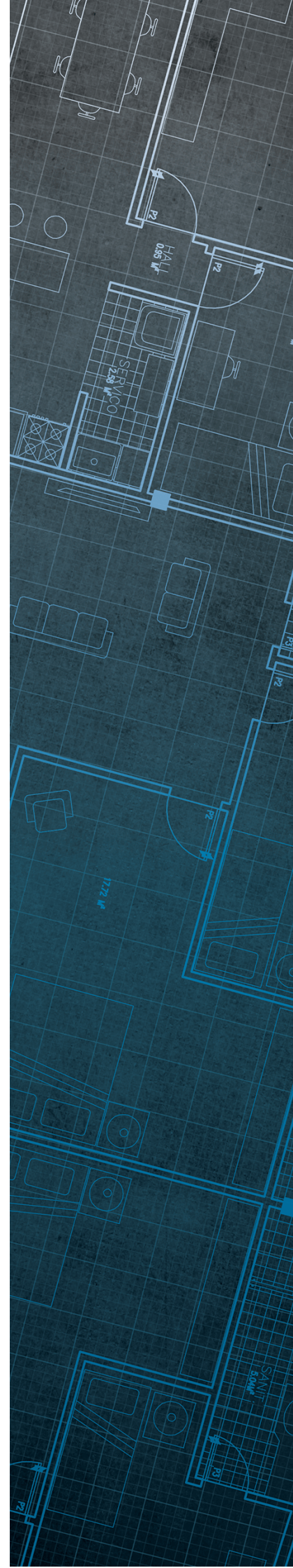


The Coal  
Authority

# Consultants Coal Mining Report

Norman Road  
Rochdale  
OL11 4HS

|                        |                  |
|------------------------|------------------|
| Date of enquiry:       | 8 September 2022 |
| Date enquiry received: | 8 September 2022 |
| Issue date:            | 8 September 2022 |
| Our reference:         | 51003310377001   |
| Your reference:        | 7569             |



# Consultants

## Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

### Client name

SUB SURFACE LIMITED

### Enquiry address

Norman Road  
Rochdale  
OL11 4HS

### How to contact us

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NG18 4RG

[www.groundstability.com](http://www.groundstability.com)

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



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# Section 1 – Mining activity and geology

## Past underground mining

| Colliery | Seam  | Mineral | Coal Authority reference | Depth (m) | Direction to working | Dipping rate of seam worked (degrees) | Dipped direction of seam worked | Extraction thickness (cm) | Year last mined |
|----------|-------|---------|--------------------------|-----------|----------------------|---------------------------------------|---------------------------------|---------------------------|-----------------|
| unnamed  | ARLEY | Coal    | 3XOI                     | 71        | North-East           | 15.1                                  | South-West                      | 120                       | 1849            |
| unnamed  | ARLEY | Coal    | 3XO6                     | 89        | Beneath Property     | 15.0                                  | South-West                      | 120                       | 1849            |
| unnamed  | ARLEY | Coal    | 3XNR                     | 92        | Beneath Property     | 15.0                                  | South-West                      | 120                       | 1849            |

## Probable unrecorded shallow workings

None.

## Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

## Mine entries

| Entry type | Reference  | Grid reference | Treatment description                                                                 | Mineral | Conveyancing details |
|------------|------------|----------------|---------------------------------------------------------------------------------------|---------|----------------------|
| Shaft      | 388412-002 | 388796 412781  |                                                                                       | Coal    |                      |
| Shaft      | 388412-003 | 388802 412770  | This shaft was located in 1989 and was found to be filled to an unknown specification | Coal    |                      |
| Shaft      | 388412-004 | 388688 412673  |                                                                                       | Coal    |                      |
| Shaft      | 388412-005 | 388641 412646  |                                                                                       | Coal    |                      |

## Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

|        |        |       |
|--------|--------|-------|
| NW1178 | NW162  | 16820 |
| PO0    | NW1177 |       |

**Please contact us on 0345 762 6848** to determine the exact abandoned mine plans you require based on your needs.

## Outcrops

| Seam name | Mineral | Seam workable | Distance to outcrop (m) | Direction to outcrop | Bearing of outcrop |
|-----------|---------|---------------|-------------------------|----------------------|--------------------|
| HALF YARD | Coal    | Yes           | 3.4                     | North                | 268                |

## Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

## Opencast mines

None recorded within 500 metres of the enquiry boundary.

## Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

## Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

### Site investigations

None recorded within 50 metres of the enquiry boundary.

### Remediated sites

None recorded within 50 metres of the enquiry boundary.

### Coal mining subsidence

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

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

The Coal 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

None recorded within 500 metres of the enquiry boundary.

### Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

## Section 3 – Licensing and future mining activity

### Future underground mining

None recorded.

### Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

### Court orders

None recorded.

### Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

### Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

### Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

## Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

### Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

**For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at [groundstability@coal.gov.uk](mailto:groundstability@coal.gov.uk).**

## Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at [groundstability@coal.gov.uk](mailto:groundstability@coal.gov.uk)**.

### Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

### Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

### Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

### Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

### Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

### Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

### Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

### **Opencast mines**

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

### **Coal Authority managed tips**

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

### **Site investigations**

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

### **Remediated sites**

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

### **Coal mining subsidence**

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

### **Mine gas**

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission.

### **Mine water treatment schemes**

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

### **Future underground mining**

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

### **Coal mining licensing**

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

### **Court orders**

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

### **Section 46 notices**

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

### **Withdrawal of support notices**

Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

### **Payment to owners of former copyhold land**

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

The map highlights any specific surface or subsurface features within or near to the boundary of the site.

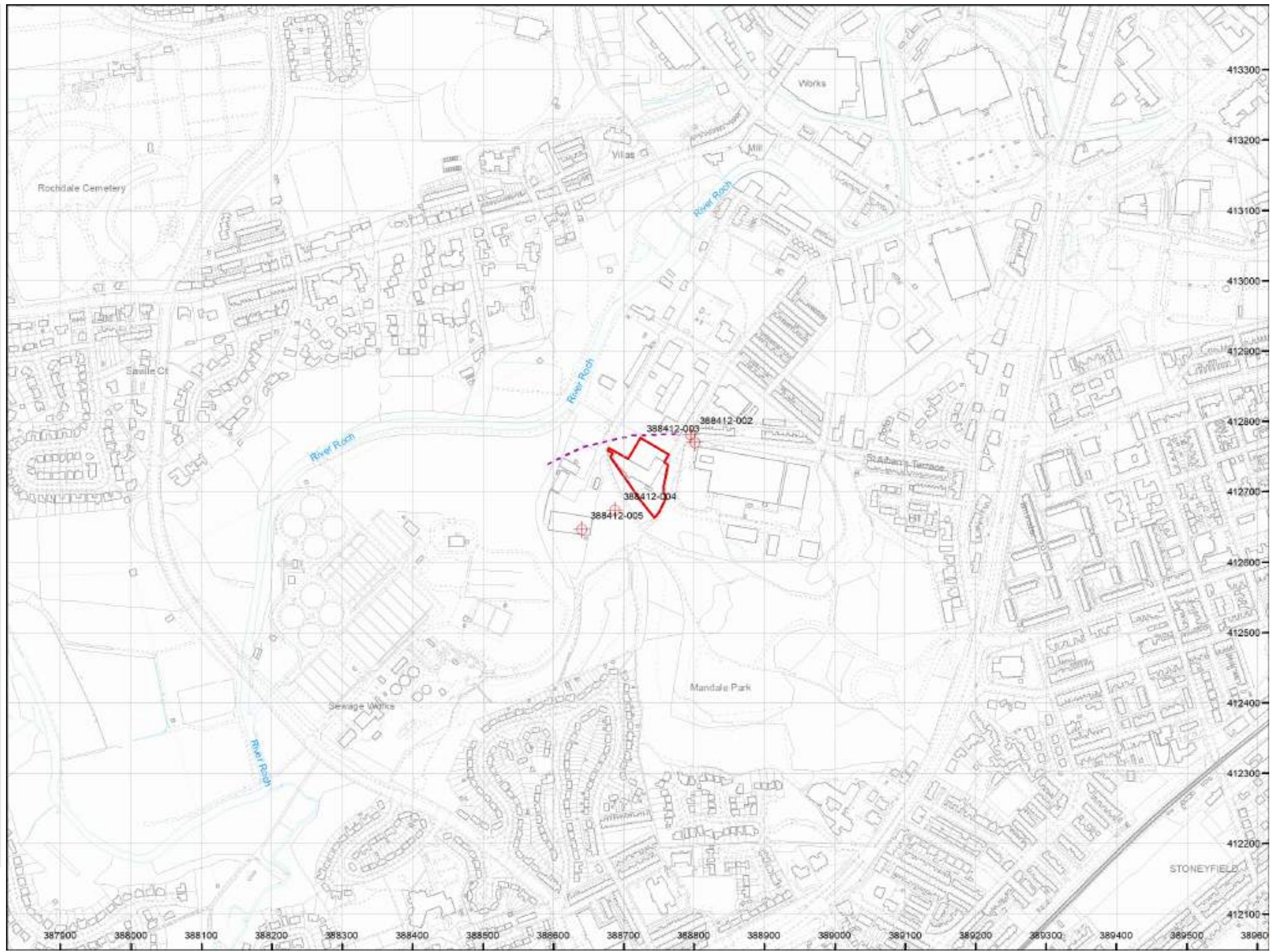
**Key**

Approximate position of the enquiry boundary shown 

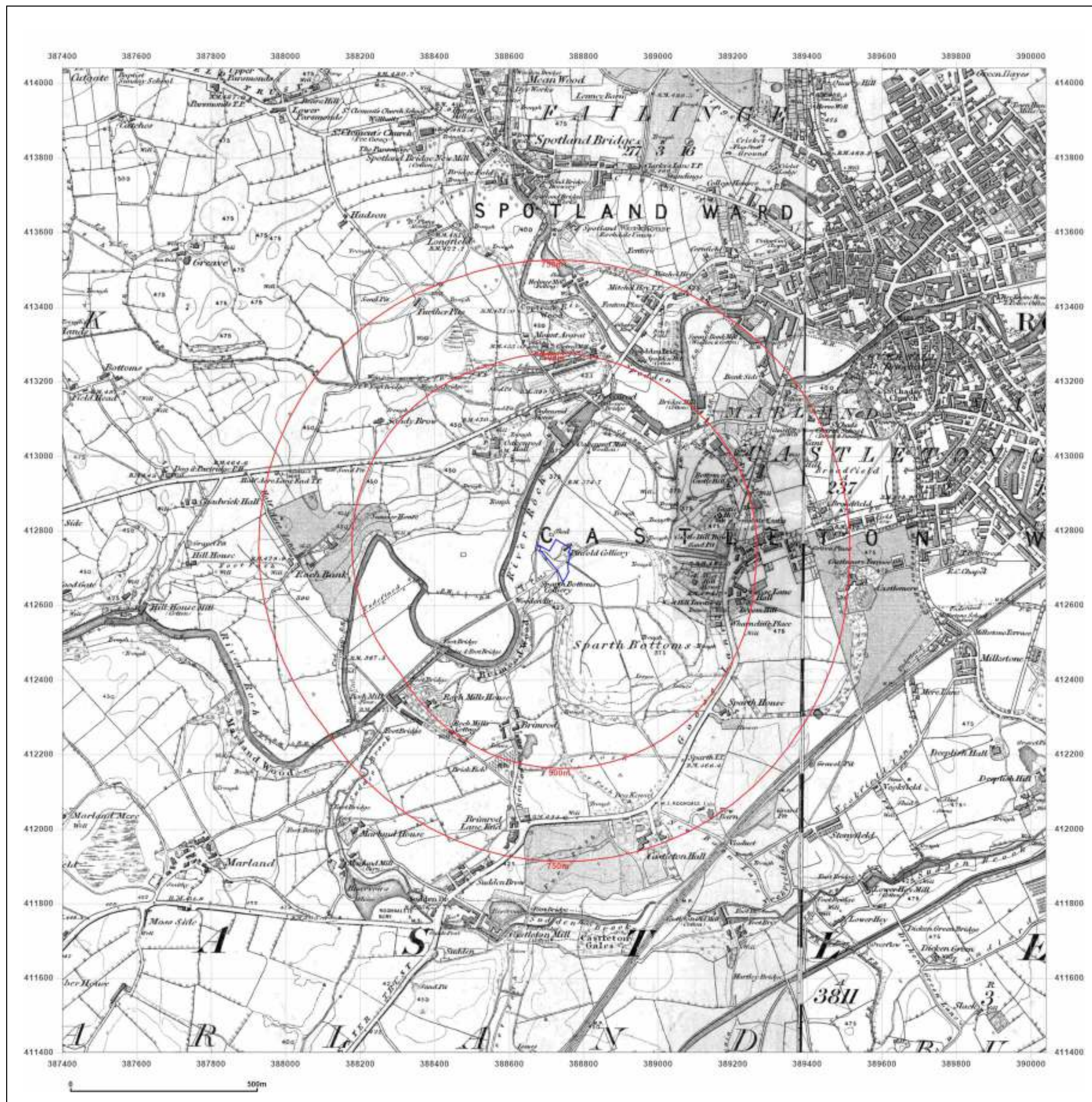
Disused mine shaft 

Outcrop (Conjectured) 

**How to contact us**  
0345 762 6848 (UK)  
+44 (0)1623 637 000 (International)  
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## **SMALL SCALE SURVEY PLANS**



#### Site Details:

Norman Road, Rochdale

Client Ref: CMAPS-CM-1055535-4199-120822  
Report Ref: CMAPS-CM-1055535-4199-120822HIS  
Grid Ref: 388720, 412720

Map Name: County Series

Map date: 1851

Scale: 1:10,560

Printed at: 1:10,560



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#### Site Details:

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**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** County Series

**Map date:** 1890-1891

**Scale:** 1:10,560

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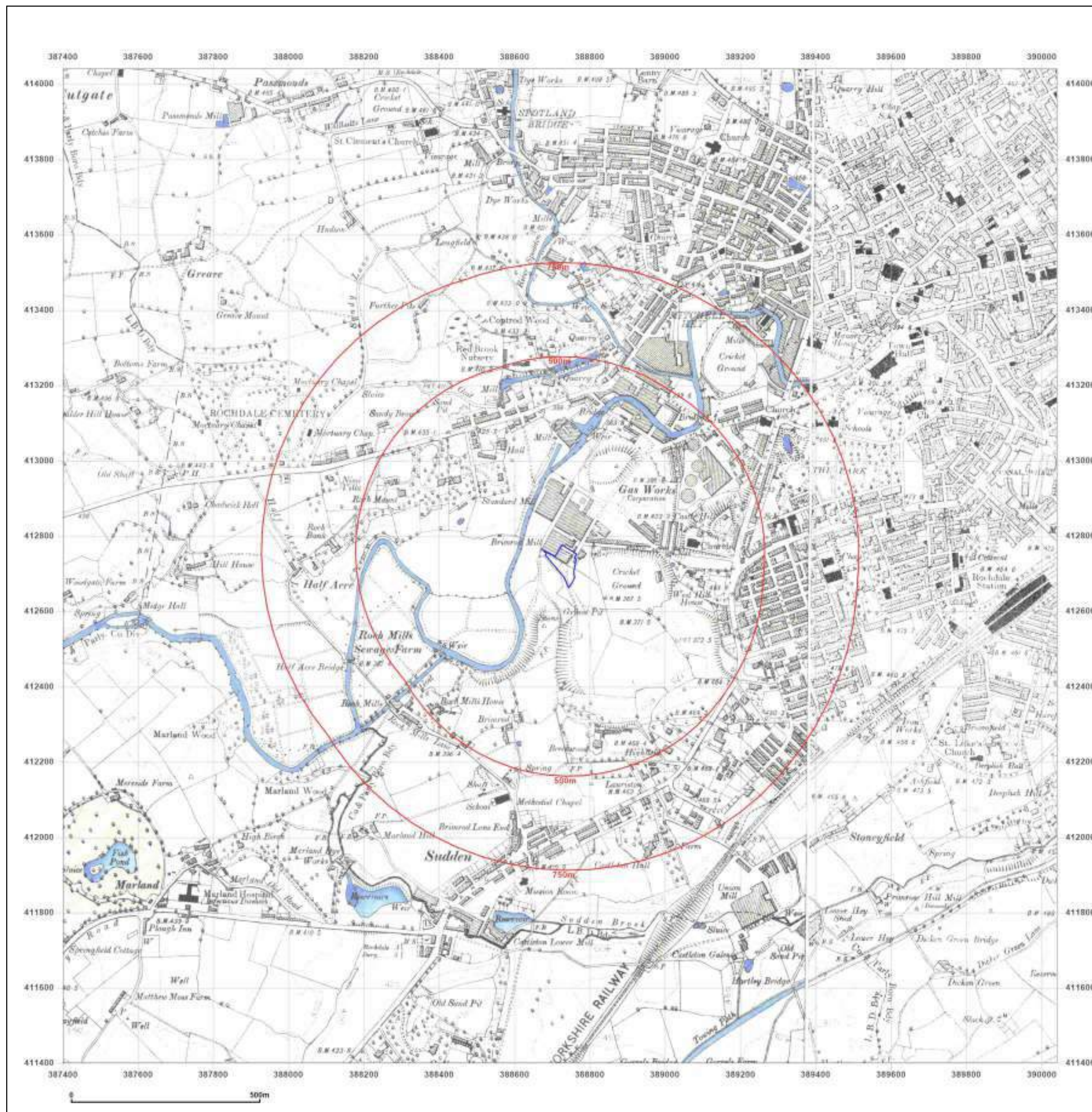


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#### Site Details:

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**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** County Series

**Map date:** 1908

**Scale:** 1:10,560

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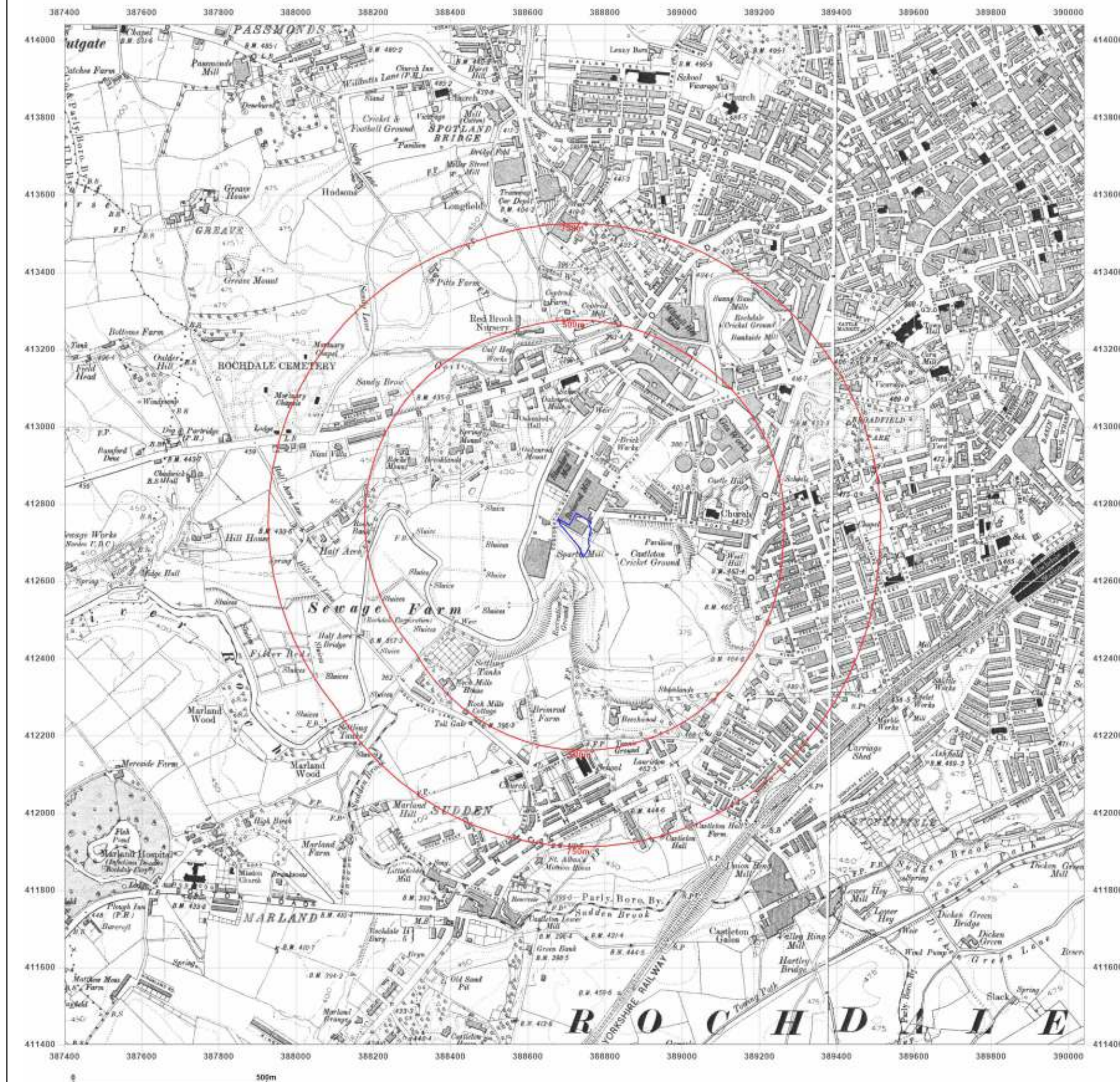


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**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
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**Map Name:** County Series

**Map date:** 1928

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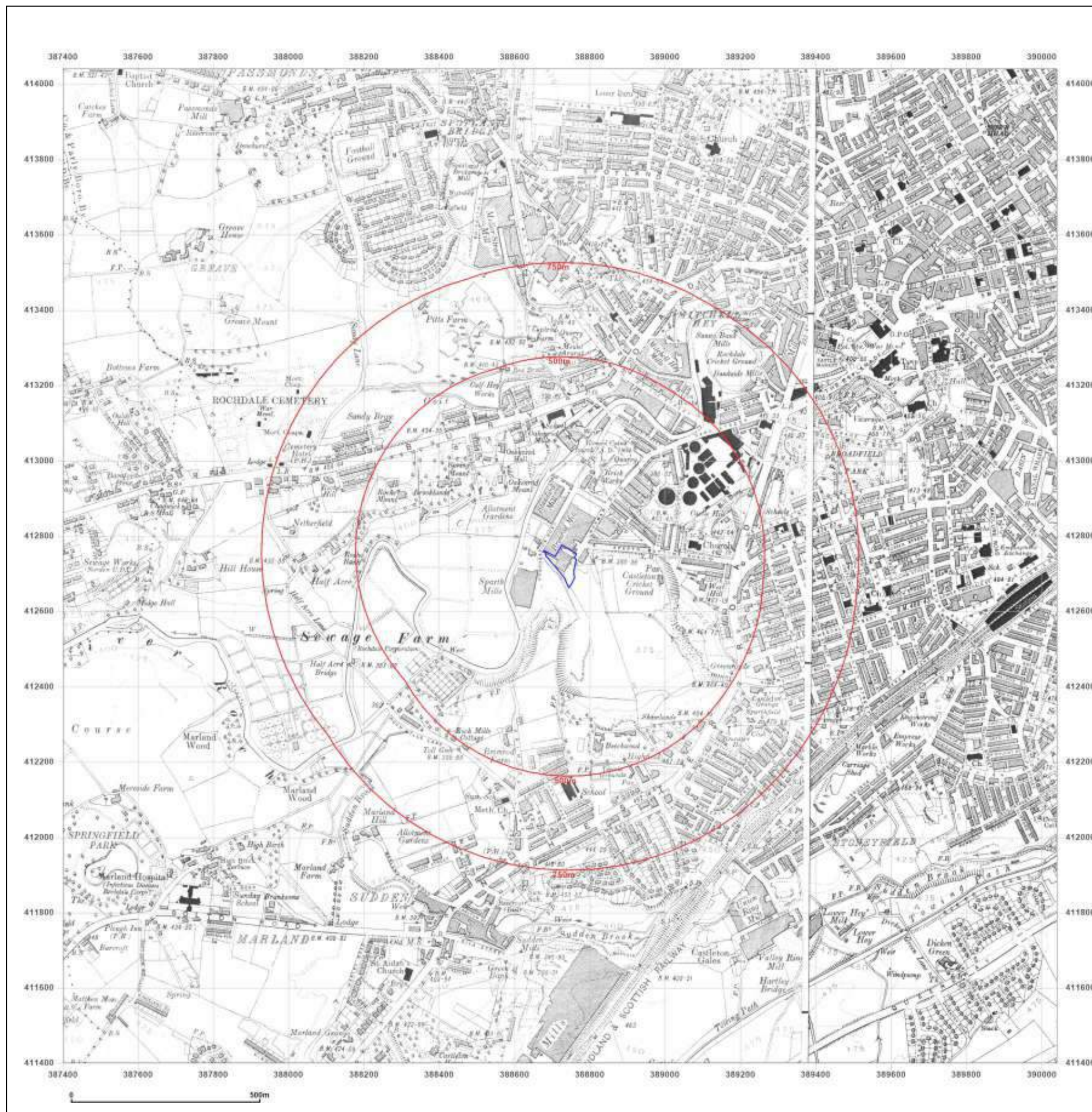


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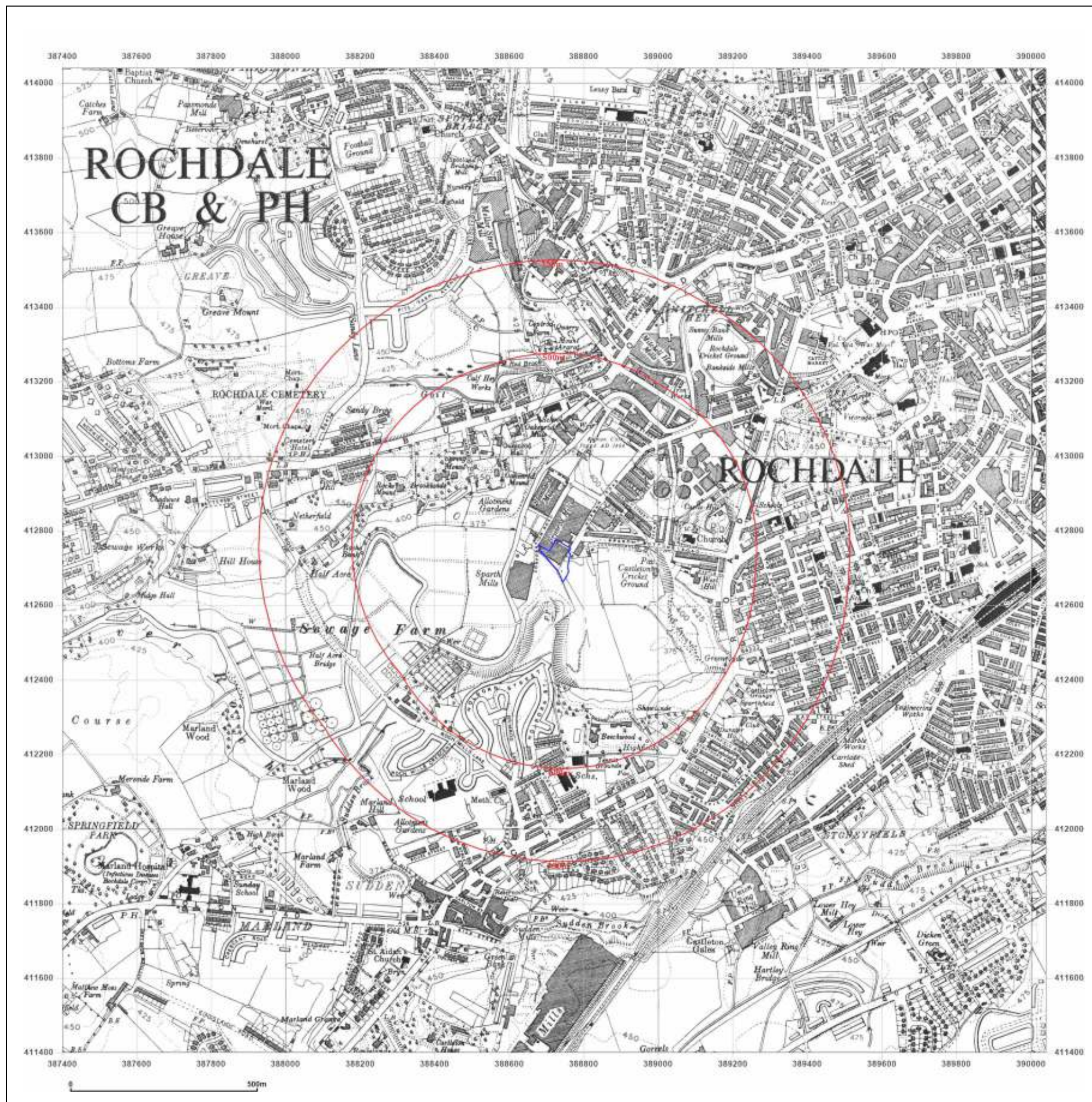
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**Map Name:** Provisional

**Map date:** 1954-1956

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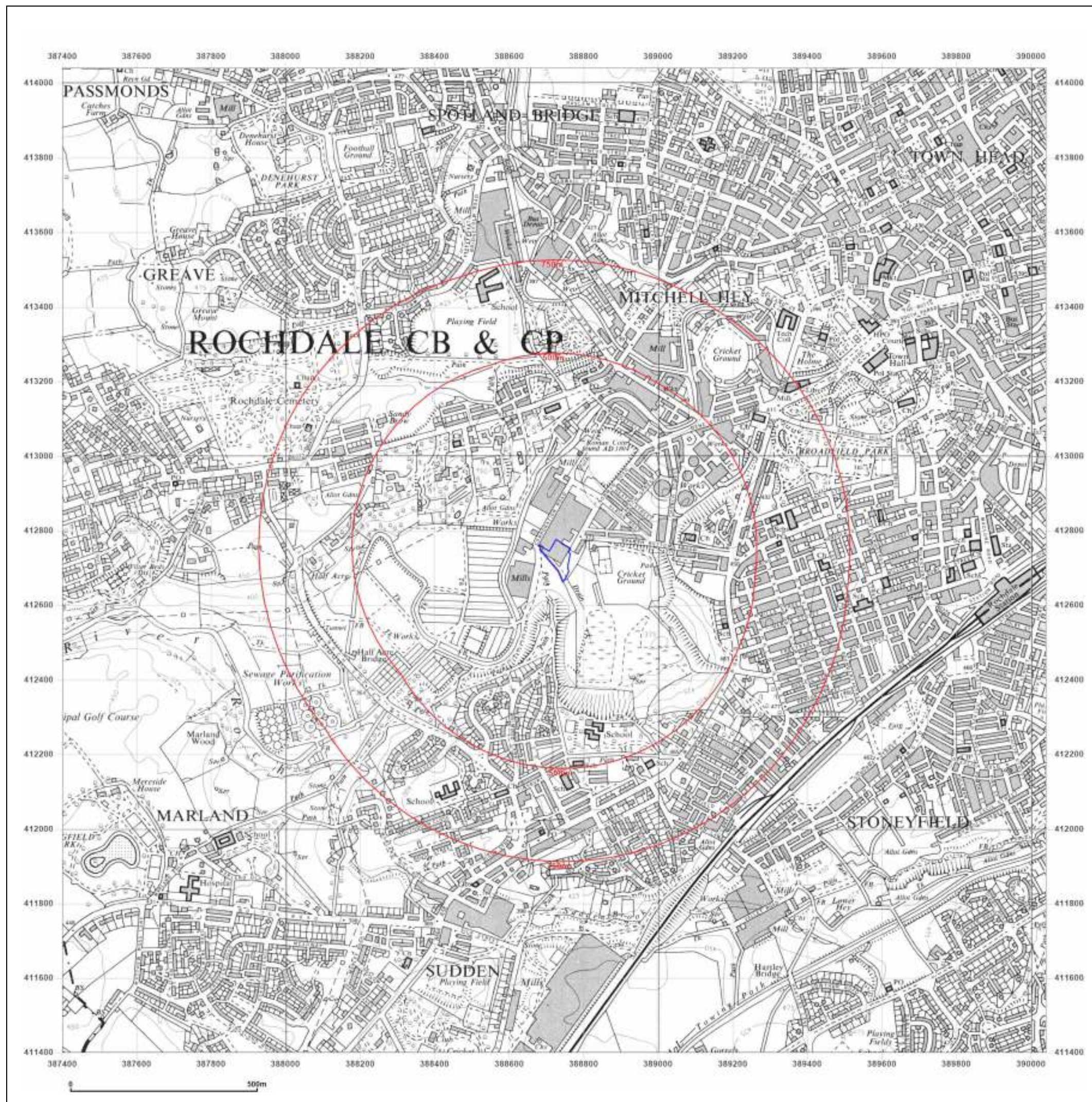


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**Map Name:** Provisional

**Map date:** 1967-1968

**Scale:** 1:10,560

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**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** National Grid

**Map date:** 1975

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#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
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**Map Name:** National Grid

**Map date:** 1987

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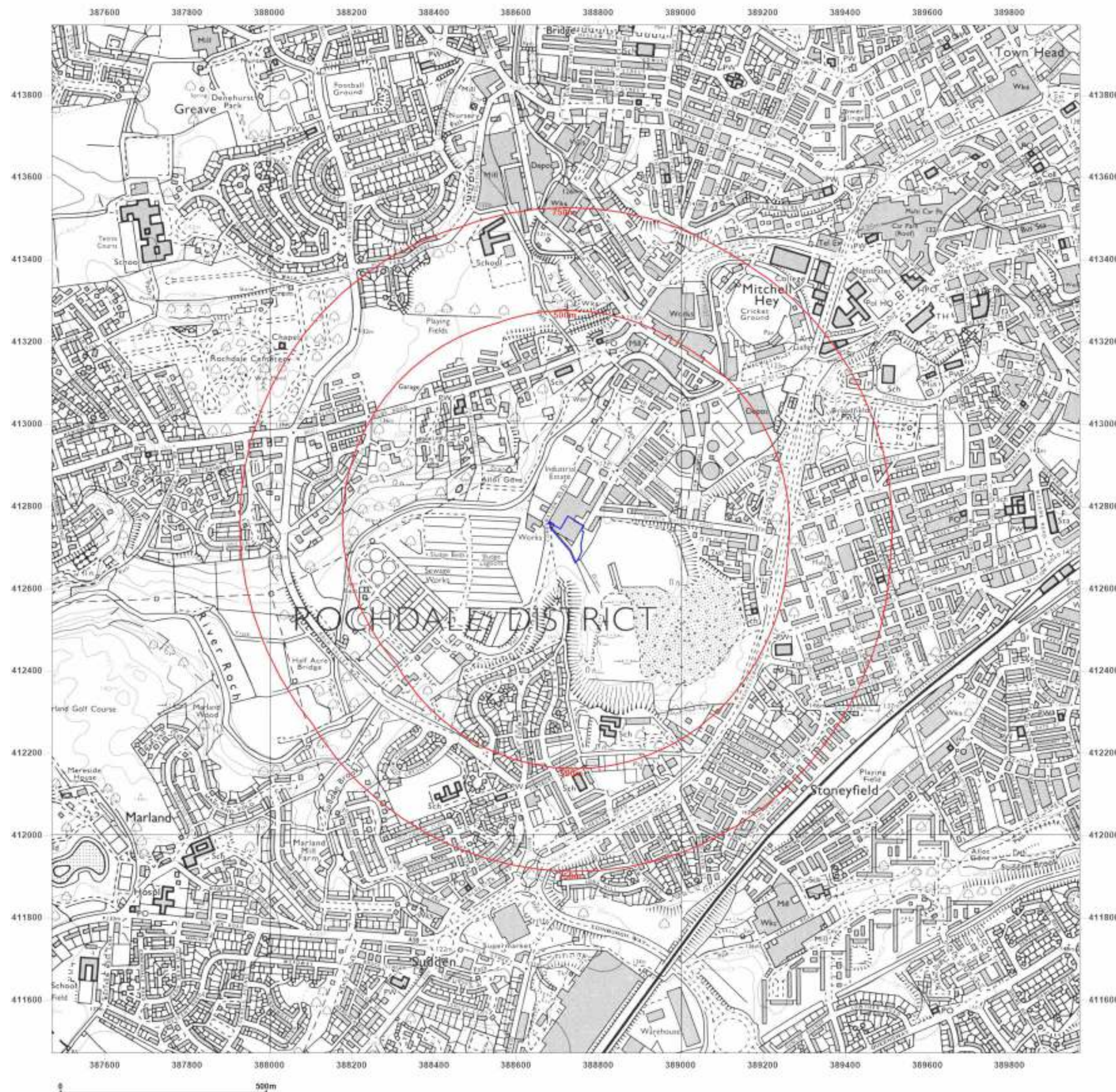


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#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** National Grid

**Map date:** 1992

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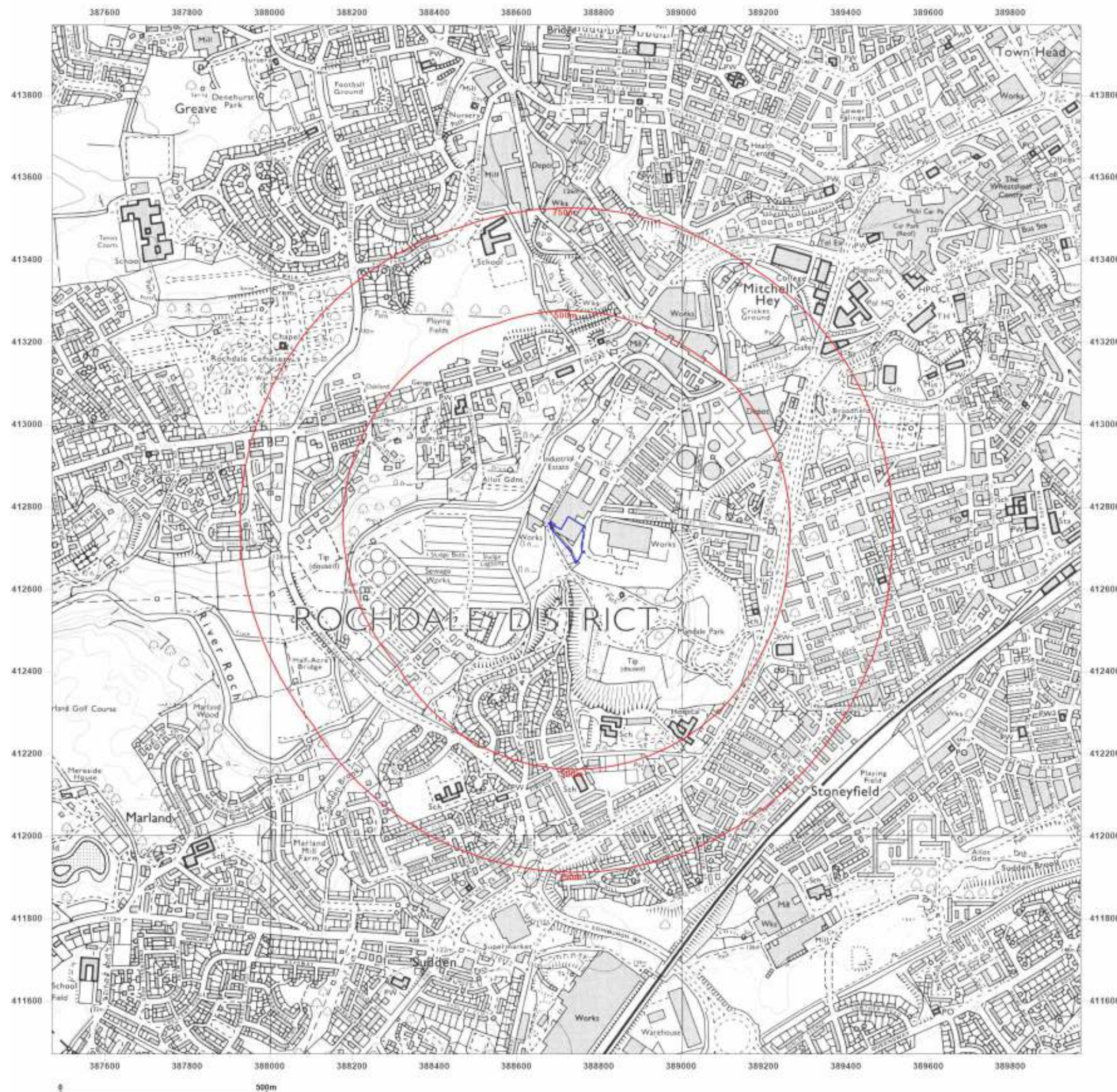


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#### Site Details:

Norman Road, Rochdale

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**Map Name:** National Grid

**Map date:** 2001

**Scale:** 1:10,000

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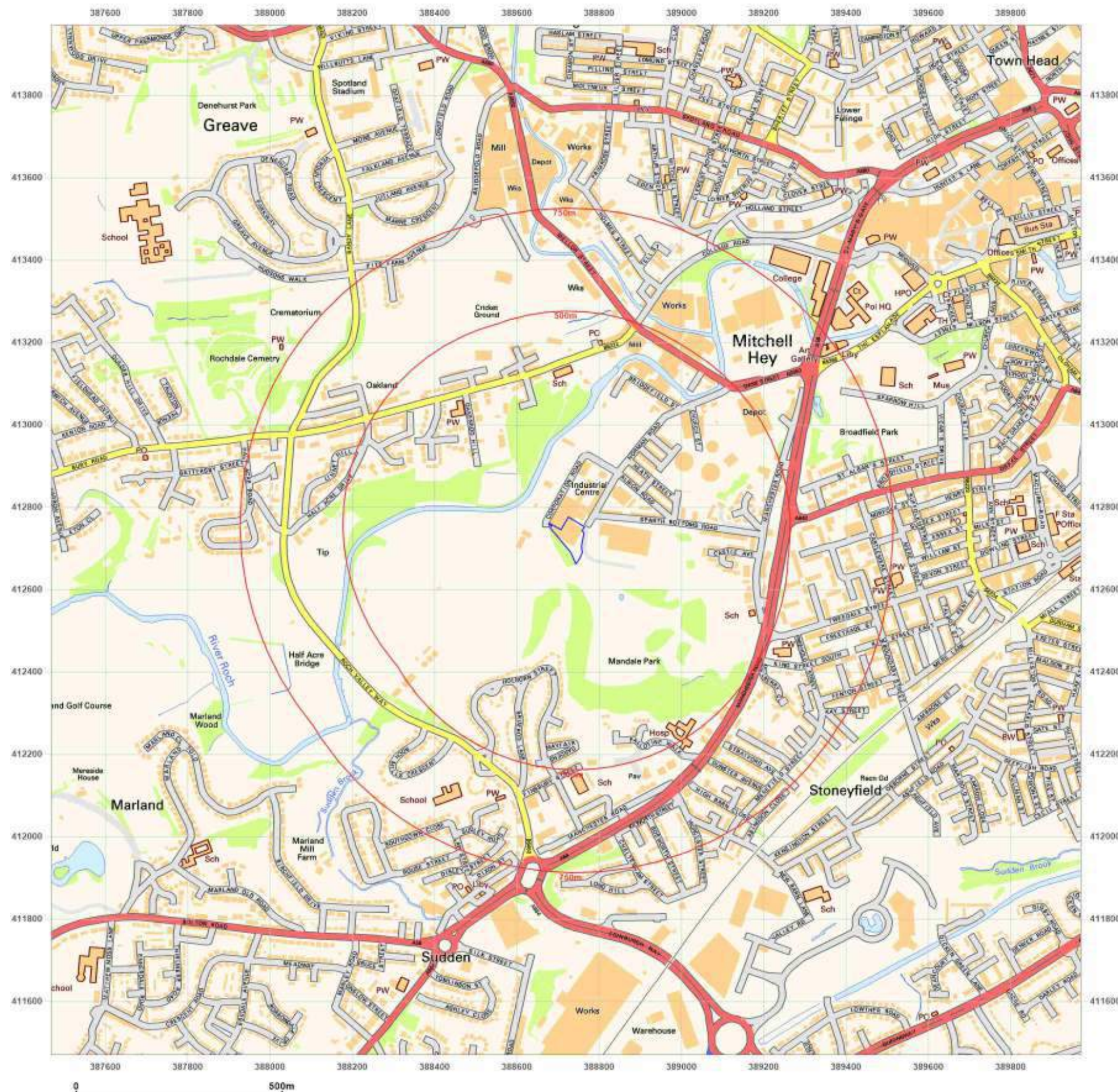


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#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** National Grid

**Map date:** 2010

**Scale:** 1:10,000

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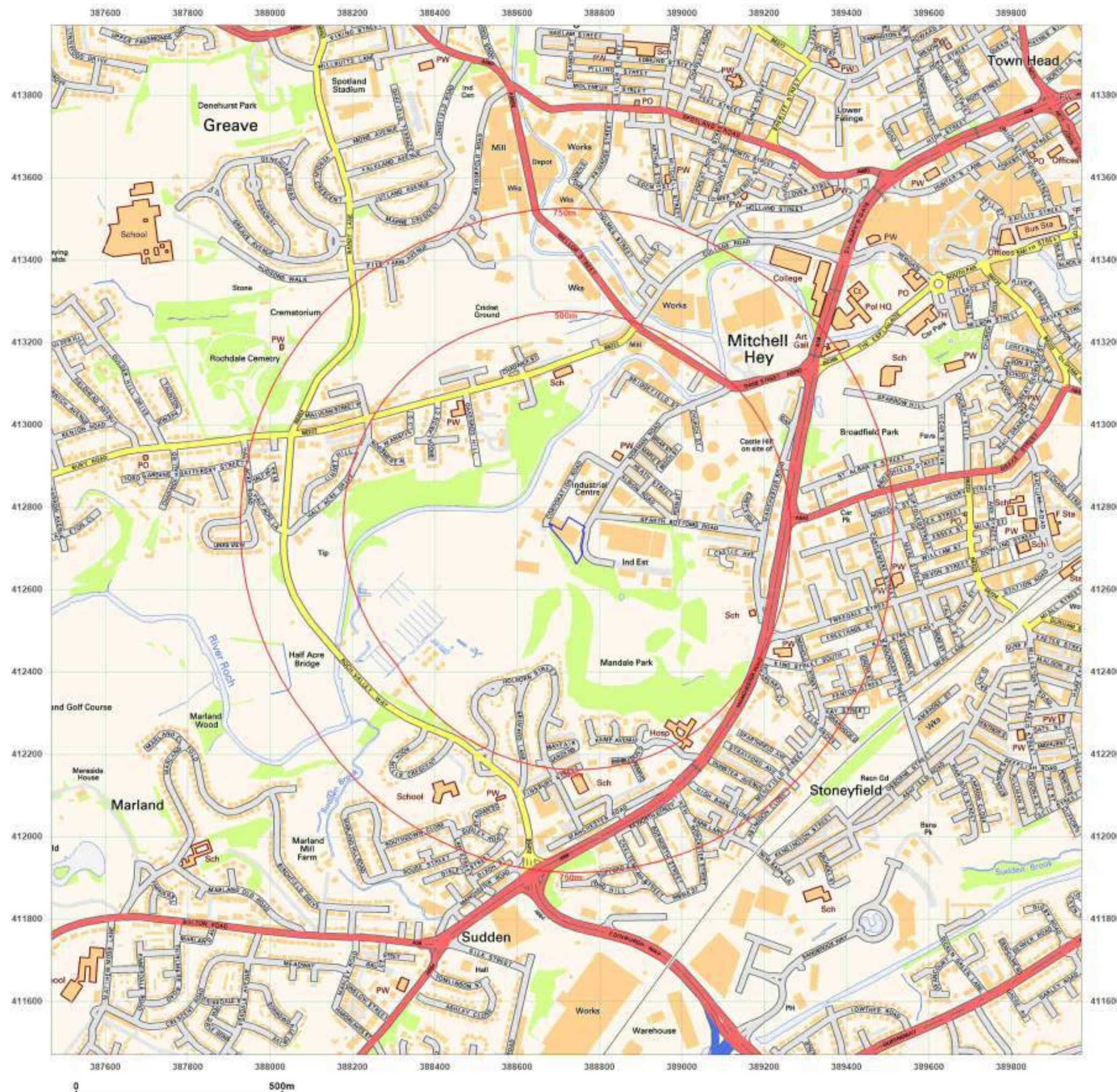


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**Site Details:**

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** National Grid

**Map date:** 2022

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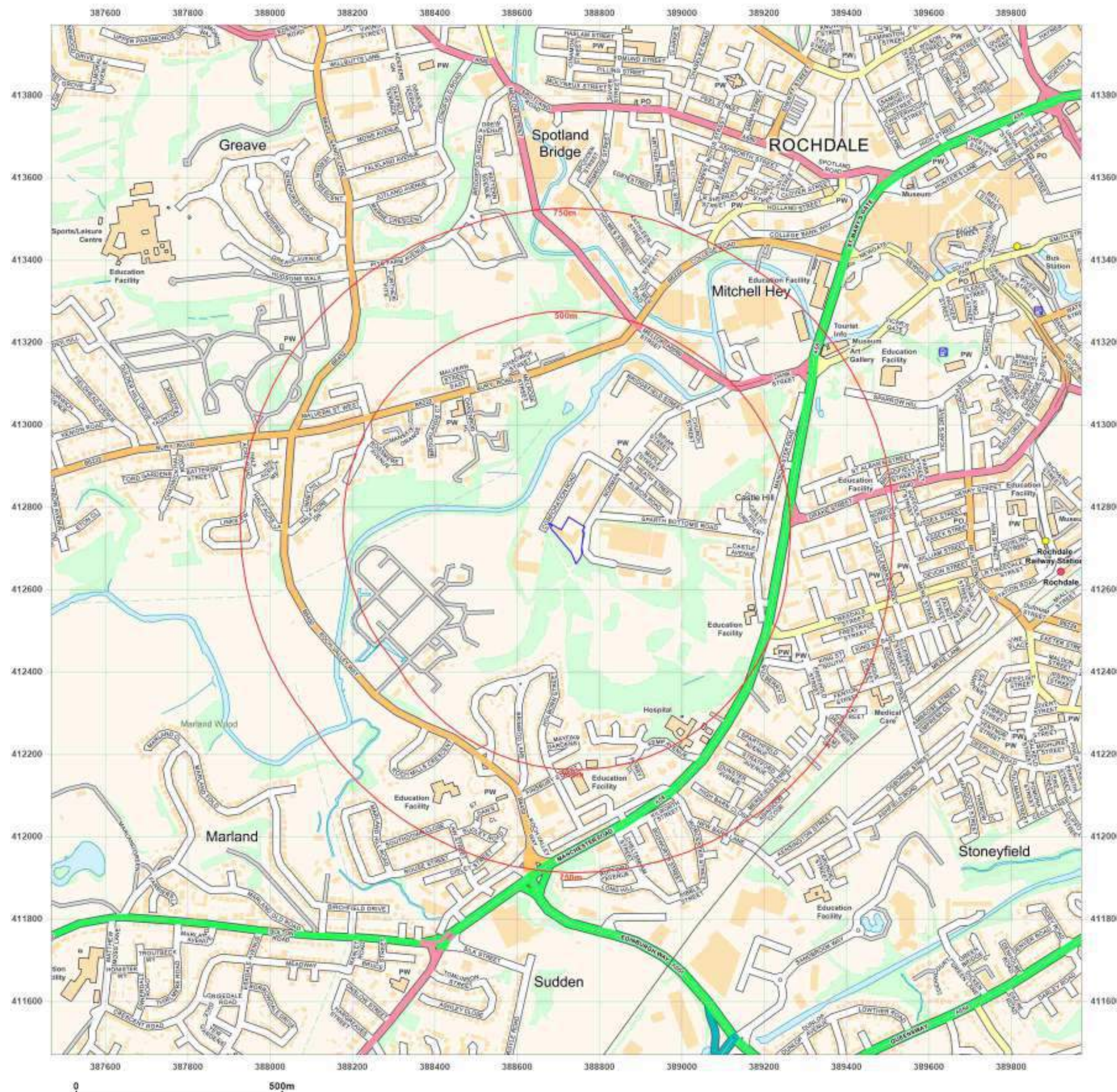


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## **LARGE SCALE SURVEY PLANS**



#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** 1056 Scale Town Plan

**Map date:** 1851

**Scale:** 1:1,056

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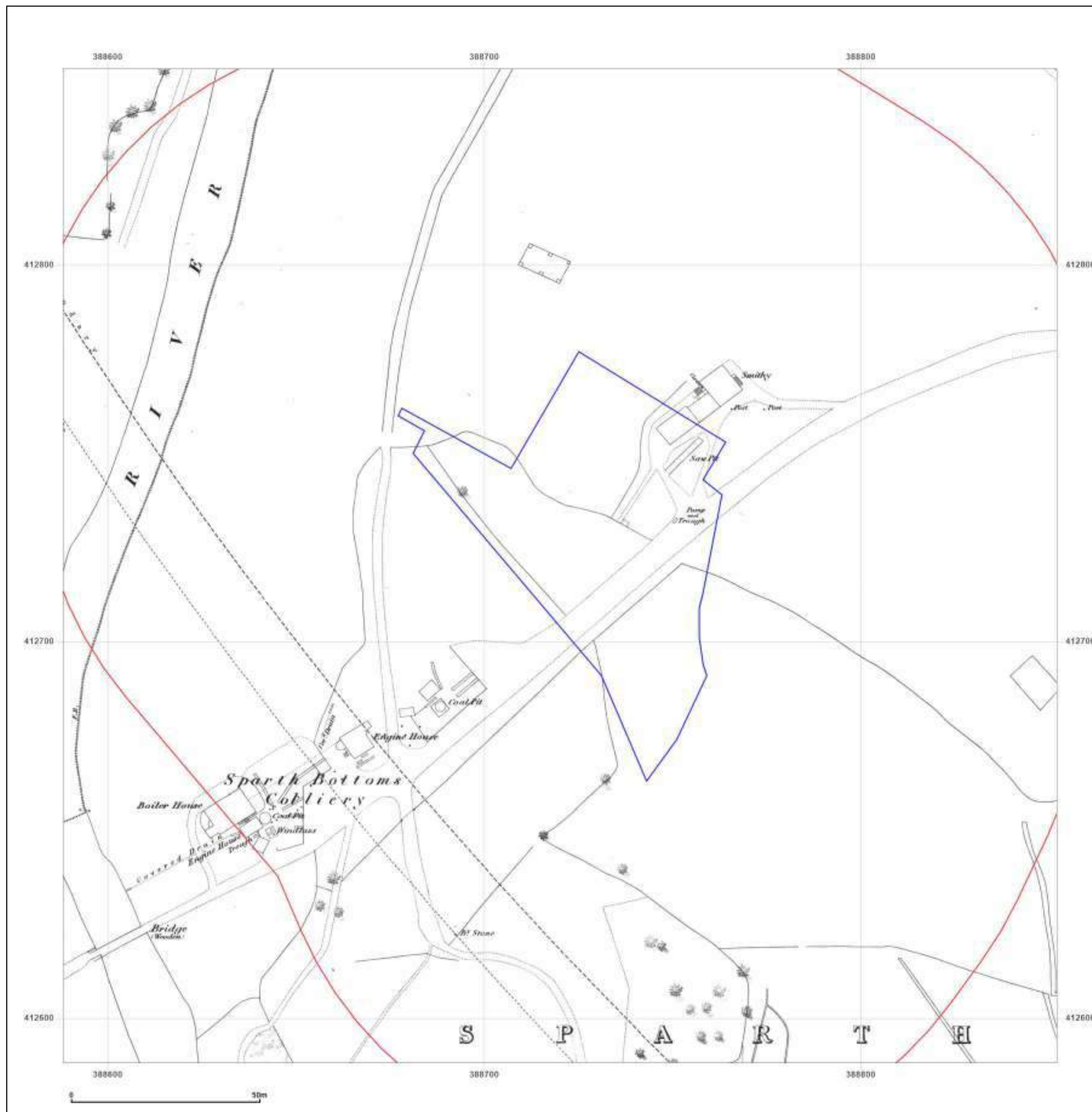


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#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** County Series

**Map date:** 1890-1891

**Scale:** 1:2,500

**Printed at:** 1:2,500



Surveyed 1890  
Revised 1890  
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Revised 1891  
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#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** County Series

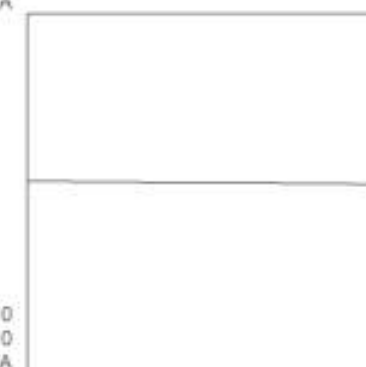
**Map date:** 1910

**Scale:** 1:2,500

**Printed at:** 1:2,500



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#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** County Series

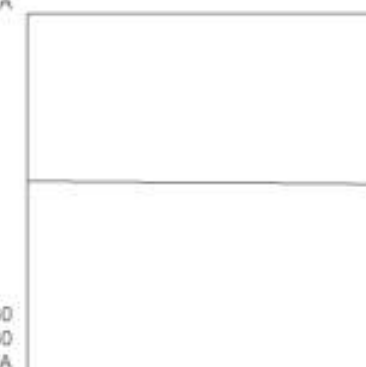
**Map date:** 1930

**Scale:** 1:2,500

**Printed at:** 1:2,500



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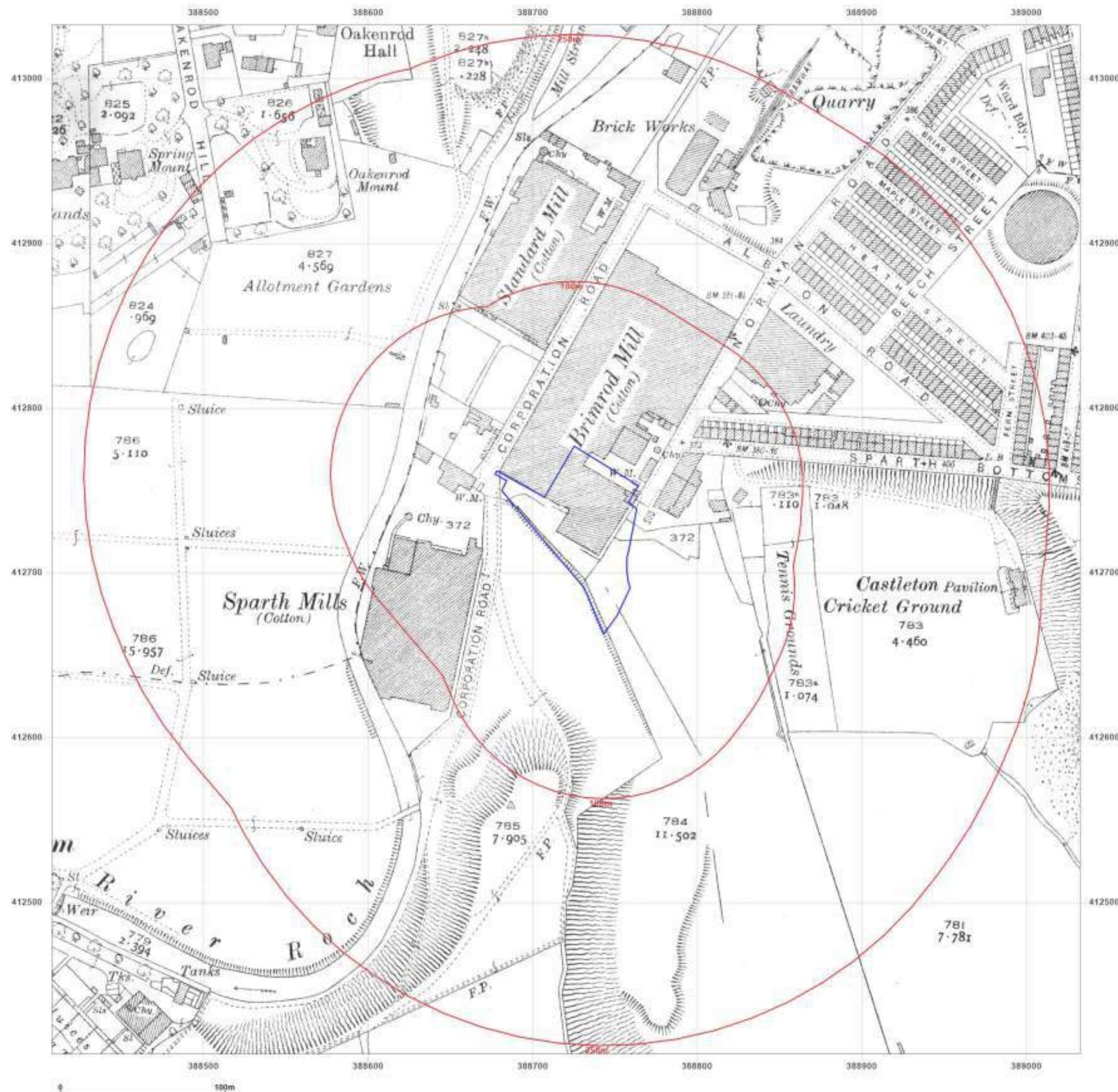


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#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** National Grid

**Map date:** 1957

**Scale:** 1:1,250

**Printed at:** 1:2,000



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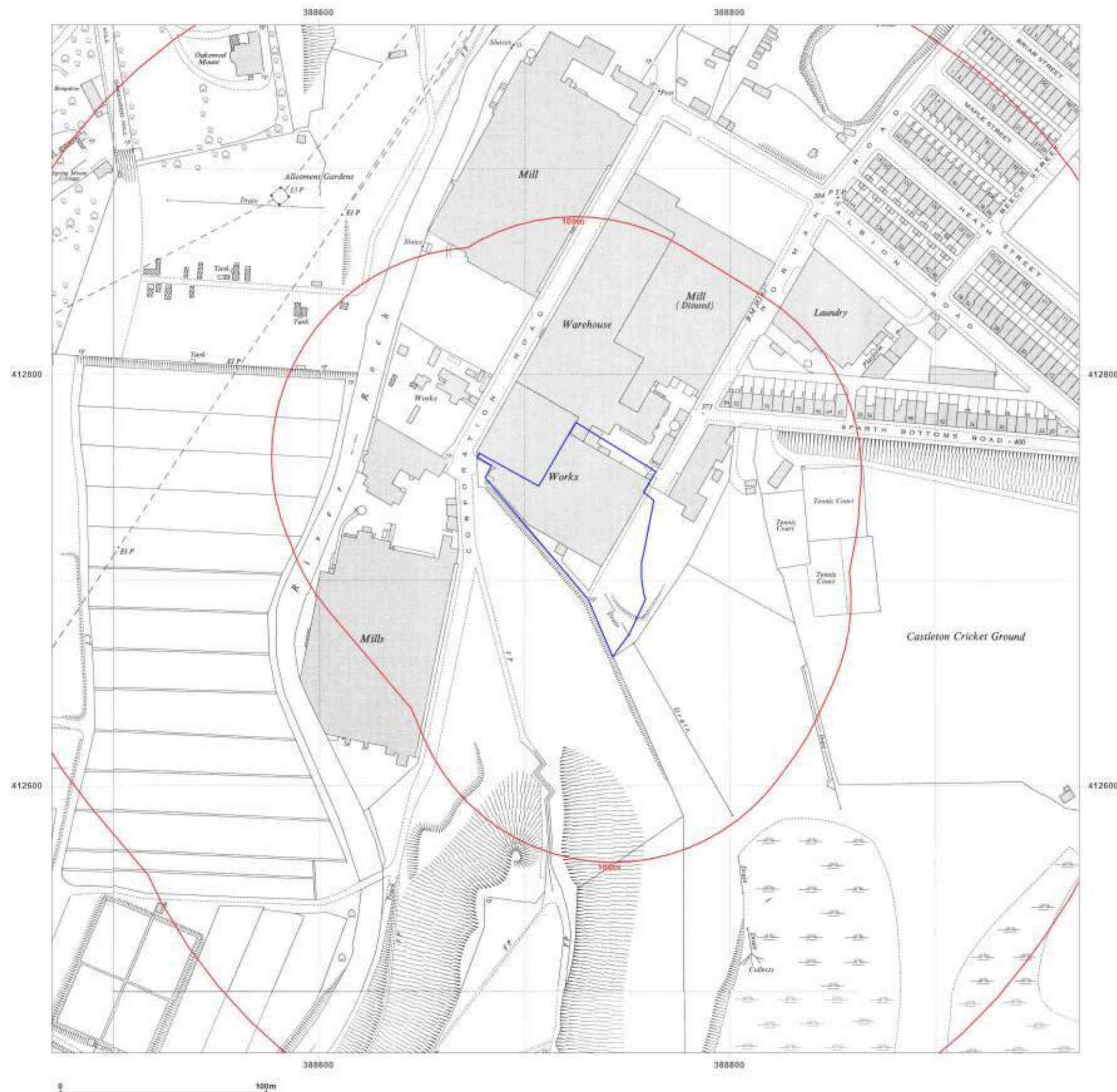


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#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** National Grid

**Map date:** 1958-1959

**Scale:** 1:2,500

**Printed at:** 1:2,500



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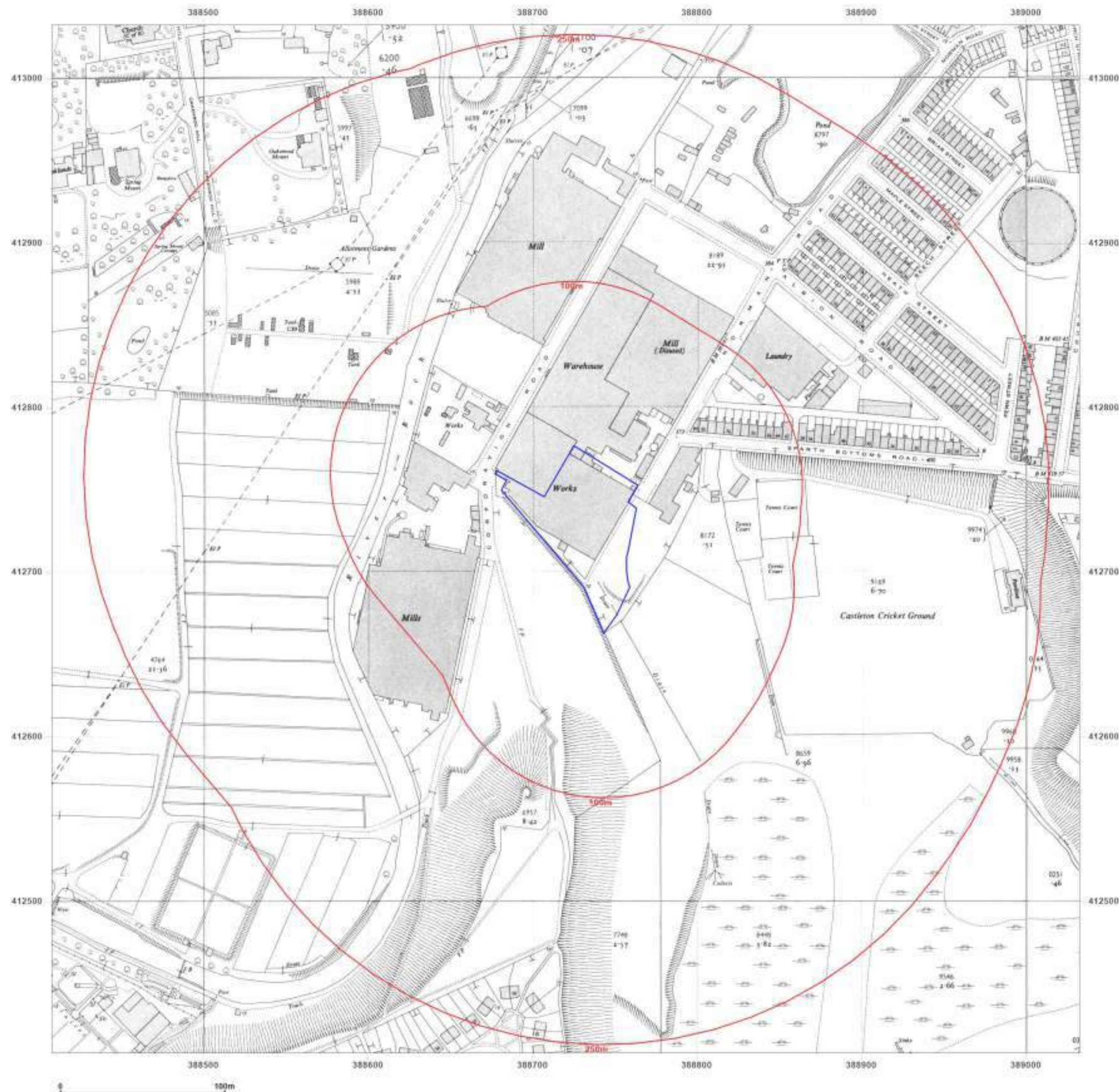


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#### Site Details:

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**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** National Grid

**Map date:** 1972-1975

**Scale:** 1:1,250

**Printed at:** 1:2,000



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Edition N/A  
Copyright 1975  
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Edition N/A  
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DRAWN AT SCALE 1:1250 OR 50.688 INCHES TO 1 MILE



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#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** National Grid

**Map date:** 1984

**Scale:** 1:1,250

**Printed at:** 1:2,000



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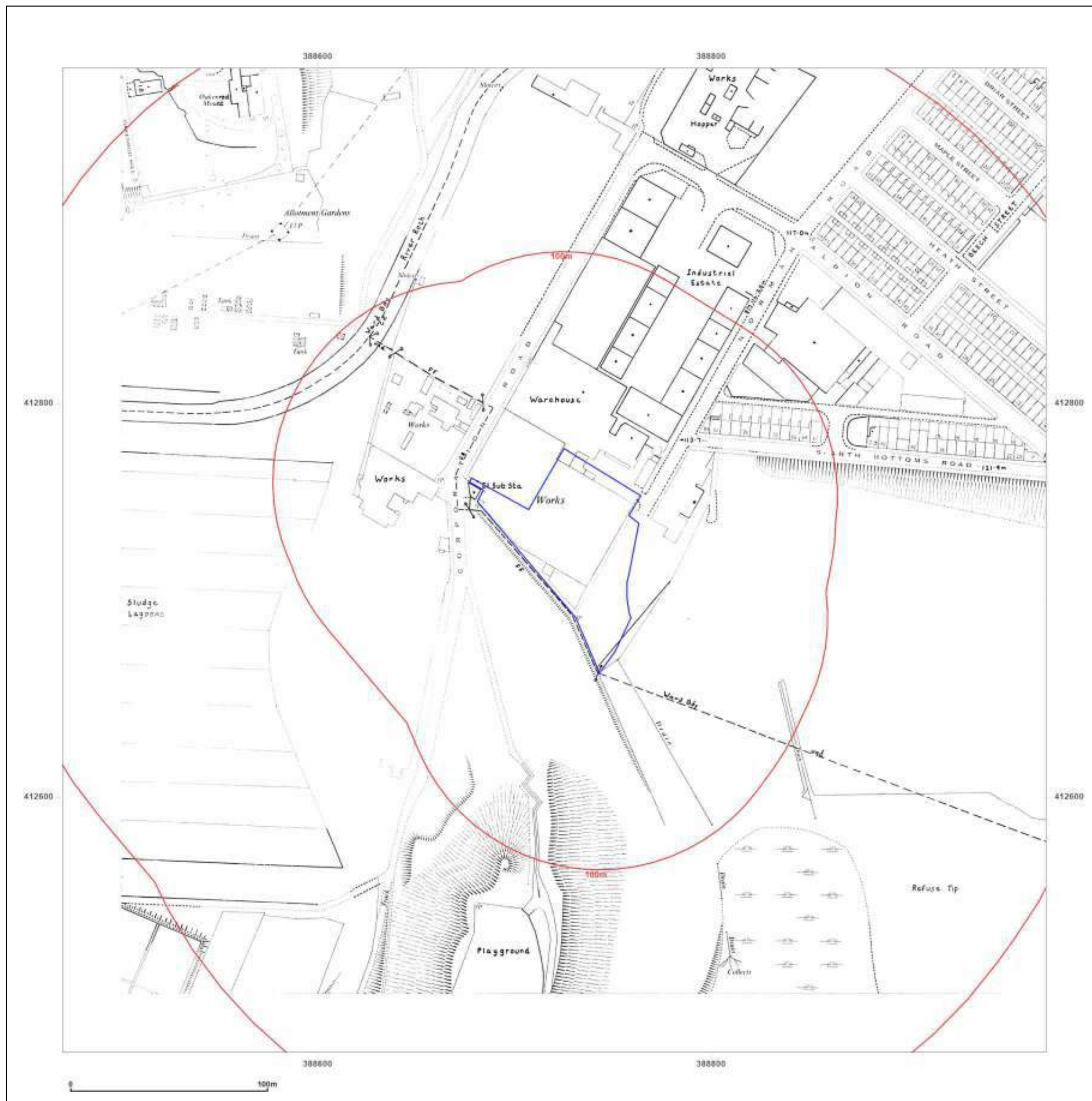


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#### Site Details:

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**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** National Grid

**Map date:** 1990

**Scale:** 1:1,250

**Printed at:** 1:2,000



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#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** National Grid

**Map date:** 1992-1993

**Scale:** 1:1,250

**Printed at:** 1:2,000



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#### Site Details:

Norman Road, Rochdale

**Client Ref:** CMAPS-CM-1055535-4199-120822  
**Report Ref:** CMAPS-CM-1055535-4199-120822HIS  
**Grid Ref:** 388720, 412720

**Map Name:** LandLine

**Map date:** 2003

**Scale:** 1:1,250

**Printed at:** 1:1,250



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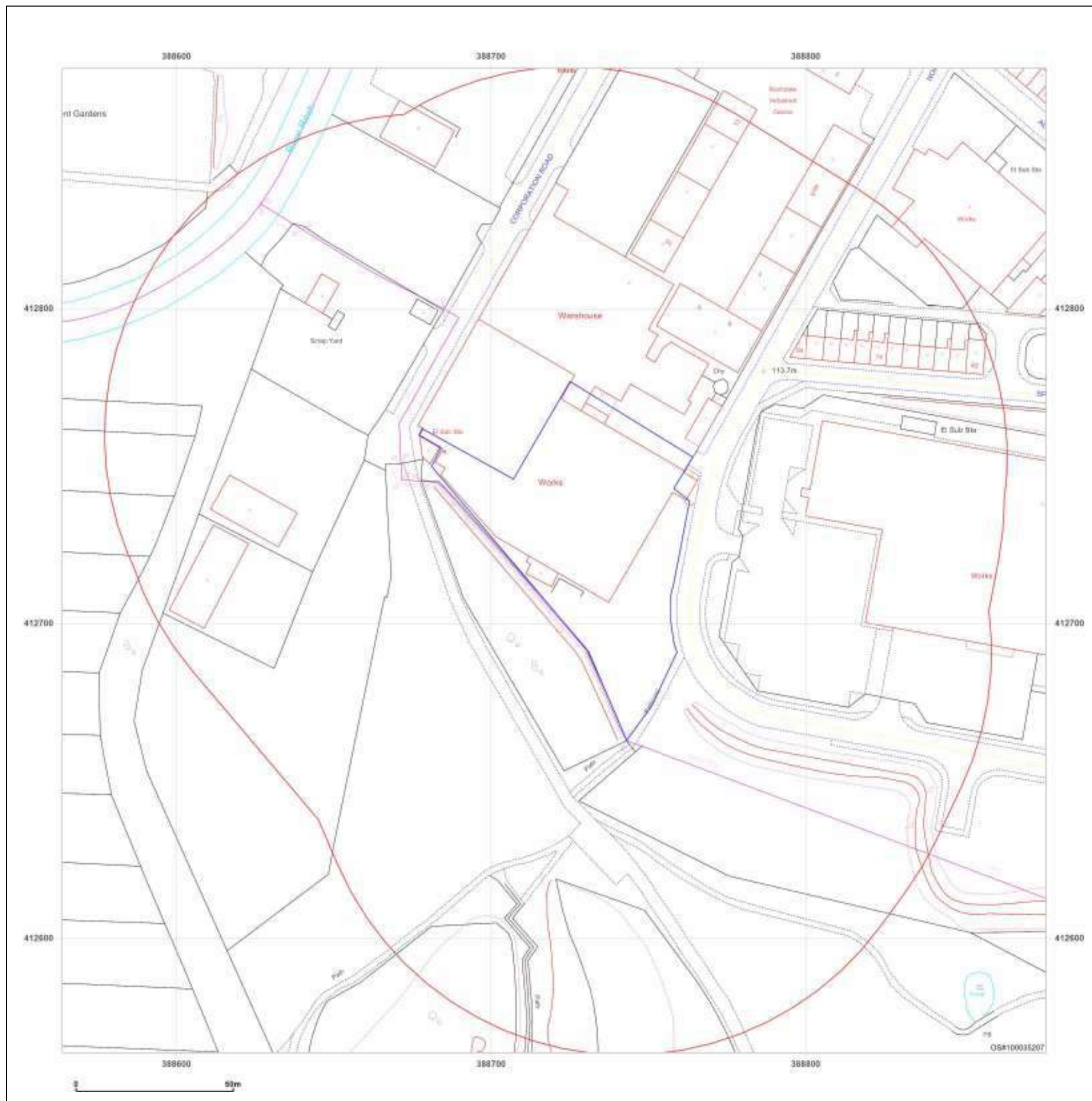


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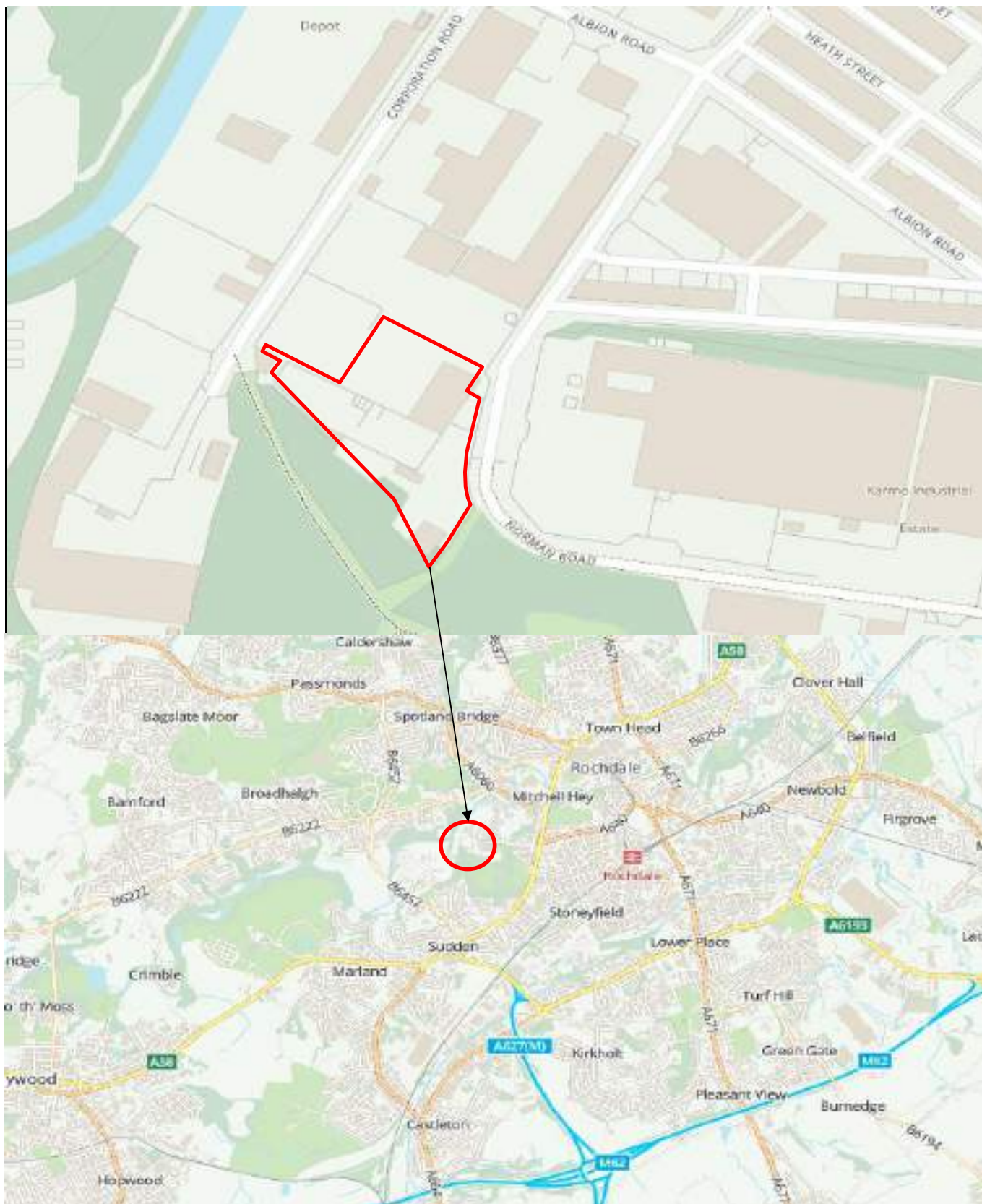
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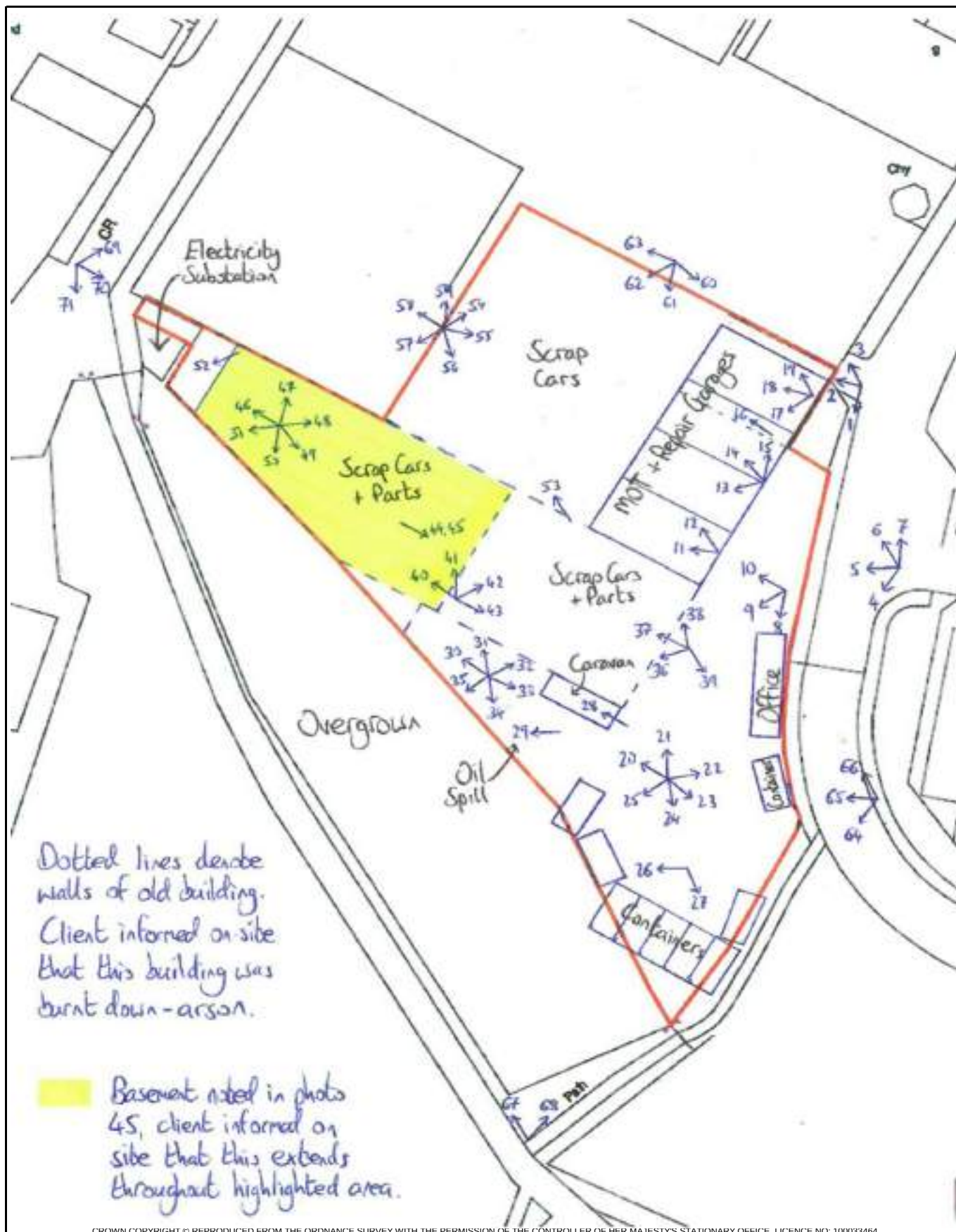
Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



## FIGURES



|                                                                                                                                                                                           |                          |               |                                                                                                       |                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------|-------------------------------------------------------------------------------------------------------|---------------------|
| <b>SS SUB SURFACE</b><br>SITE INVESTIGATION SPECIALISTS, GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS<br>3 Peel Street, Preston, Lancashire, PR2 2QS. Tel: (01772) 561135 Fax: (01772) 204907 | Site Location Plan       |               |                                                                                                       |                     |
| Site:<br>NORMAN ROAD, ROCHDALE                                                                                                                                                            | Date Drawn:<br>08-Sep-22 | Date Checked: | Orientation:<br> | Job Number:<br>7569 |
| Client:<br>SHEHZAD SULEMAN                                                                                                                                                                | Drawn By:<br>WP          | Checked By:   | Scale:<br>—                                                                                           | Figure Number:<br>1 |



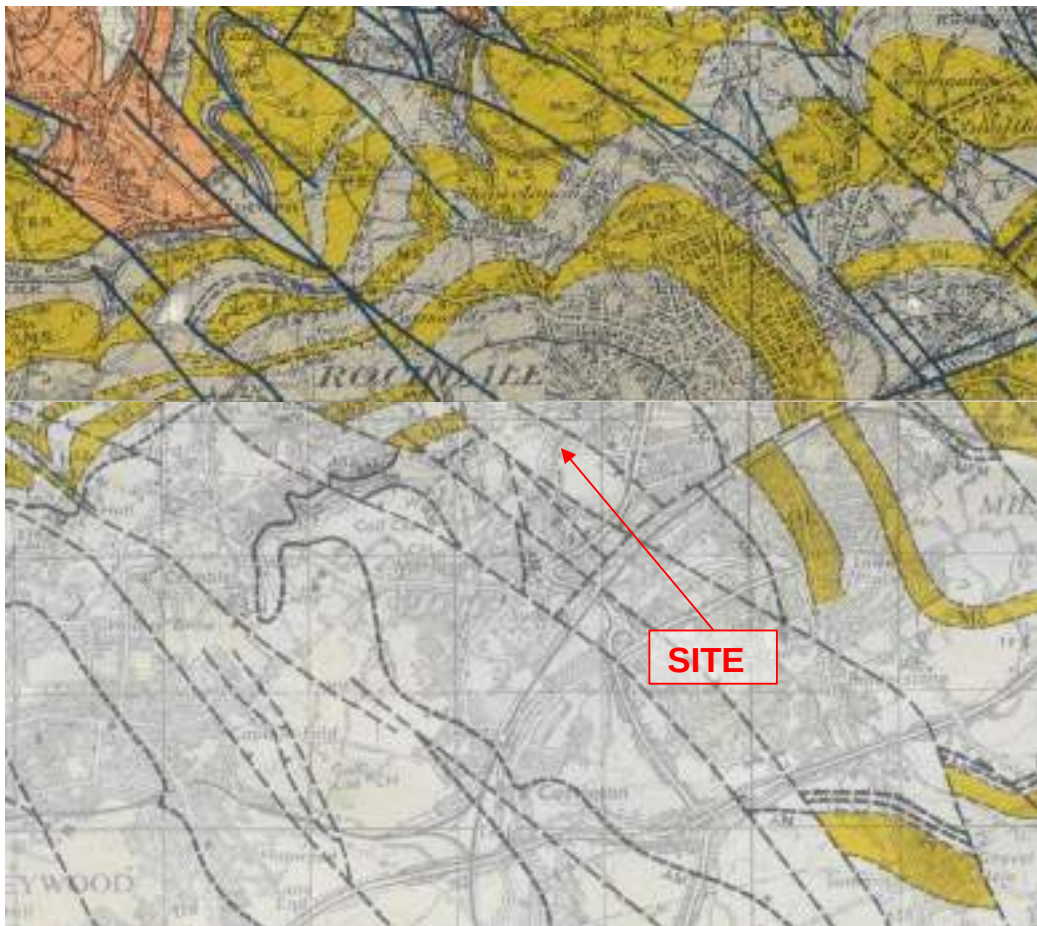
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|                                                                                                                                                                                          |                                     |               |                                                                                                       |                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------|-------------------------------------------------------------------------------------------------------|---------------------|
| <b>S SUB SURFACE</b><br>SITE INVESTIGATION SPECIALISTS, GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS<br>3 Peel Street, Preston, Lancashire, PR2 2QS. Tel: (01772) 561135 Fax: (01772) 204907 | Site Plan/ Walkover Photo Locations |               |                                                                                                       |                     |
| Site:<br><br>NORMAN ROAD, ROCHDALE                                                                                                                                                       | Date Drawn:<br>08-Sep-22            | Date Checked: | Orientation:<br> | Job Number:<br>7569 |
| Client:<br>SHEHZAD SULEMAN                                                                                                                                                               | Drawn By:<br>WP                     | Checked By:   | Scale:<br>-                                                                                           | Figure Number:<br>2 |

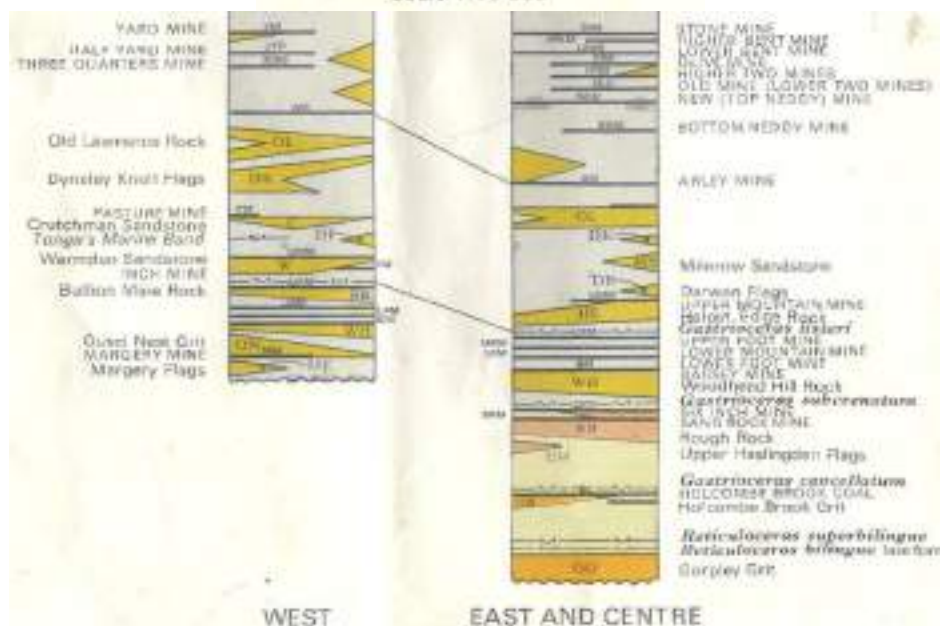


|                                                                                                                                                                                        |                          |               |                                                                                                       |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------|-------------------------------------------------------------------------------------------------------|---------------------|
| <b>SUB SURFACE</b><br>SITE INVESTIGATION SPECIALISTS, GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS<br>3 Peel Street, Preston, Lancashire, PR2 2QS. Tel: (01772) 561135 Fax: (01772) 204907 | Proposed Development     |               |                                                                                                       |                     |
| Site:<br>NORMAN ROAD, ROCHDALE                                                                                                                                                         | Date Drawn:<br>08-Sep-22 | Date Checked: | Orientation:<br> | Job Number:<br>7569 |
| Client:<br>SHEHZAD SULEMAN                                                                                                                                                             | Drawn By:<br>WP          | Checked By:   | Scale:<br>—                                                                                           | Figure Number:<br>3 |





GENERALIZED VERTICAL SECTIONS  
and  
KEY TO GEOLOGICAL COLOURS  
Scale 1:10 000



|                                                                                                                                                                                          |                                                |               |                                                                                                       |                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|---------------|-------------------------------------------------------------------------------------------------------|---------------------|
| <b>S SUB SURFACE</b><br>SITE INVESTIGATION SPECIALISTS, GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS<br>3 Peel Street, Preston, Lancashire, PR2 2QS. Tel: (01772) 561135 Fax: (01772) 204907 | Geology<br>(Extract from BGS Sheets 76 and 85) |               |                                                                                                       |                     |
| Site:<br><br>NORMAN ROAD, ROCHDALE                                                                                                                                                       | Date Drawn:<br>08-Sep-22                       | Date Checked: | Orientation:<br> | Job Number:<br>7569 |
| Client:<br>SHEHZAD SULEMAN                                                                                                                                                               | Drawn By:<br>WP                                | Checked By:   | Scale:<br>1:50,000                                                                                    | Figure Number:<br>5 |