

Confidential

The Island Site, Radcliffe

Due Diligence Report

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For

Homes England

Project Number:

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1.0 EXECUTIVE SUMMARY

- 1.1.1. Homes England are proposing to dispose the Island Site of East Lancs Paper Mill, Radcliffe for residential end-use of approximately 25 dwellings.
- 1.1.2. The site is located at a former paper mill in Radcliffe, Manchester, M26 2PR at National Grid Reference 379011E 407407N. The site lies approximately 10 km North West of Manchester and extends to ~1.1 ha in area.
- 1.1.3. CampbellReith have been appointed to undertake a gap analysis as part of a Due Diligence exercise.

1.2. Ground Conditions

- 1.2.1. The site is underlain by glaciofluvial sheet deposits (sand and gravel), which in turn are underlain by Pennine Middle Coal Measures comprising mudstone, siltstone, sandstone and coal. A variable thickness of made ground may be present on site due to historical developments.
- 1.2.2. Potential ground stability hazards vary overall between negligible and very low.
- 1.2.3. The site is considered to have a moderate sensitivity in respect to hydrogeology and a moderately high sensitivity with respect to hydrology.
- 1.2.4. The site has been judged to have a low risk in relation to Radon and UXO.
- 1.2.5. Overall, significant contamination requiring immediate intervention is unlikely to be encountered.

1.3. Foul Drainage Assessment

- 1.3.1. The Foul Drainage Assessment found existing public combined sewers located within the immediate vicinity of the site.
- 1.3.2. Upon review of information and liaison with Untied Utilities, it is expected a gravity connection will be feasible and foul effluent from the development will be able to drain at an unrestricted rate to the combined system on Howard Street.

1.4. Utilities Assessment

- 1.4.1. Utilities Enquiries were made to all relevant statutory undertakers by CampbellReith in October 2020.
- 1.4.2. Points of Connection and sufficient capacity in the existing network has been confirmed by the utility companies where possible.
- 1.4.3. It is recommended that the enquiries are confirmed once a full site layout plan has been established.

1.5. Ecology & Arboriculture Assessment

- 1.5.1. The Environment Partnership (TEP) produced an Ecology and Arboriculture assessment in October 2020.
- 1.5.2. TEP have outlined their results from desk-based and site surveys and have recommended that some additional/repeated surveys will be necessary at various stages of design and construction to mitigate the impacts of the development on local ecology and arboriculture.

1.6. Air Quality Assessment

- 1.6.1. The Air Quality Assessment produced by Millar Goodall concludes that no air quality measures are necessary during the operational phase of the proposed development.
- 1.6.2. During the construction phase, with the use of appropriate mitigation methods, it is suggested that the impact on local air quality would not be significant.
- 1.6.3. It is unlikely any further Air Quality Assessments will be required.

1.7. Noise Assessment

- 1.7.1. Millar Goodall produced a Noise Assessment in October 2020.
- 1.7.2. The report noted that the Outline Planning Permission for the wider East Lancs Paper Mill site was granted with a condition relating to noise (Condition 9).
- 1.7.3. Noise monitoring undertaken by WYG in 2018 identified that noise levels generally achieved the BS8233 criterion for external noise.
- 1.7.4. The report detailed that any new development has the potential to increase traffic noise, if this is to exceed 1dB, then this may necessitate the requirement for a detailed noise impact assessment.
- 1.7.5. Noise considerations and mitigation during the construction phase should be outlined in the CEMP.

2.0 INTRODUCTION

2.1 Appointment and Scope of Works

- 2.1.1. Homes England are proposing to dispose the Island Site of East Lancs Paper Mill, Radcliffe for residential end-use of approximately 25 dwellings.
- 2.1.2. CampbellReith have been appointed to undertake a gap analysis as part of a Due Diligence exercise.
- 2.1.3. The scope of services includes an assessment of the Ground Conditions, Foul Drainage, Utilities, Ecology, Arboriculture, Air Quality and Noise elements associated with the proposed development, and a summary of potential further works and associated recommendations.
- 2.1.4. CampbellReith has endeavoured to assess all the information provided to them during the assessment. This reports summarises information from a number of external sources and CampbellReith do not offer any guarantees or warranties as to the completeness or accuracy of information relied upon.
- 2.1.5. A summary table of cost estimates for any further work highlighted in this report is available in Appendix 1.

2.2 Site Location

- 2.2.1. The site is located at a former paper mill in Radcliffe, Manchester, M26 2PR at National Grid Reference 379011E 407407N. The site lies approximately 10 km North West of Manchester and extends to ~1.1 ha in area. The site location plan is shown Appendix 1.

2.3 Reviewed Documents List

Date	Author	Title / Revision
December 2016	WYG	Extended Phase 1 Habitat Survey. Ref: A090070-193.
December 2016	WYG	East Lancashire Paper Mill, Radcliffe – Phase 1 Geo-Environmental Desk Study. Ref: A090070-193
June 2017	WYG	East Lancashire Paper Mill, Radcliffe – Coal Mining Investigation and Updated Risk Assessment. Ref: A090070-193
June 2017	WYG	East Lancashire Paper Mill, Radcliffe – Preliminary Ground Investigation Report. Ref: A090070-193
August 207	WYG	Breeding Bird Survey. Ref: A090070-193.
October 2017	WYG	Breeding Bat Survey. Ref: A090070-193.
June 2018	WYG	Flood Risk and Drainage Assessment. Ref: A090070-193.
June 2018	WYG	Air Quality Assessment. Ref: A090070-193.
June 2018	WYG	Noise Assessment. Ref: A090070-193.
October 2020	TEP	Ecology Desk Stud. Ref: 8463.001

2.4. Planning Status

- 2.4.1. A planning application for the wider site was registered to Bury Metropolitan Borough Council by WYG on 29/06/2018.
- 2.4.2. Outline planning permission for up to 400 residential dwellings and associated works was granted on 19/12/2018.

3.0 GROUND CONDITIONS

3.1 Environmental Setting

Geology

- 3.1.1. The site is indicated to be underlain by Glaciofluvial Sheet Deposits (sand and gravel), which are in turn underlain by Pennine Middle Coal Measures comprising mudstone, siltstone, sandstone and coal.
- 3.1.2. Although not shown on the geological map consulted, a variable thickness of Made Ground may be present on site due to historical developments. Made Ground was also encountered in the limited intrusive investigation undertaken on site by WYG (2017) and is discussed in more detail in Section 3.3 below.
- 3.1.3. The site is located within a Coal Mining Reporting Area, however, it is not located within a Coal Authority Development High Risk Area.
- 3.1.4. Reference to the Groundsure Report has indicated the following potential ground stability hazards:
- Shrink swell clays – negligible
 - Running sands – very low
 - Compressible deposits – negligible
 - Collapsible deposits – very low
 - Landslides – very low
 - Dissolution of soluble rocks - negligible

Hydrogeology

- 3.1.5. The site hydrogeology is summarised in Table 3.1, below.

TABLE 3.1: Summary of Hydrogeology

Type	Description
Superficial Deposits [Glaciofluvial Sheet Deposits]	Secondary A Aquifer – permeable layers capable of supporting water supplies at local rather than strategic scale, and in some cases forming an important source of base flow to rivers
Bedrock Deposits [Pennine Middle Coal Measures]	
Source Protection Zone	None on site
Groundwater Abstractions	None located within 1km of the site

- 3.1.6. The site is considered to have a moderate sensitivity with respect to hydrogeology. The sensitivity is based upon the definitions provided in NHBC R&D66, as amended to include the requirements of the Water Framework Directive and the Environment Agency's River Basin Management Plans.

Hydrology

- 3.1.7. The site hydrology is summarised in Table 3.2, below.

TABLE 3.2: Summary of Hydrology

Type	Distance	Description
Surface Waters	On site	Watercourse (likely culverted) shown to cross the centre of the site flowing approx. north-north-west to south-south-east. Discharges in to River Irwell approx. 110m to the south
	Approx. 110m south	River Irwell
Surface Water Abstractions	Approx. 400m North	Abstraction from surface reservoir fed by surface drainage for process water. Noted as "historical"
Flooding	On site	Flood Zone 1

- 3.1.8. The site is considered to have a Moderately High Sensitivity with respect to hydrology. The sensitivities have been based upon the guidance detailed for the hydrogeological assessment above.

Radon

- 3.1.9. Reference to the Groundsure report and the Radon Atlas of England and Wales indicate the site is in an area where less than 1% of homes are estimated to be above the action level. Reference to BRE211 [8] indicates that full or basic protection measures are not required. As such, a LOW risk is adjudged in relation to Radon

3.2. Site History

- 3.2.1. Information relating to the site history has been obtained by reference to the Groundsure Report and is summarised for the site and its surroundings in Table 3.3 and Table 3.4, below.

TABLE 3.3: Site History

Date	Development	Location
1848 – 51	Brewery	North
	Well	West
1893	Residential properties	East, south and west
	Watercourse / stream, flowing north to south	Central west
1909	Alignment of watercourse appears to have changed	Central west
1929 – 37	Watercourse no longer shown	-
	Undeveloped area in centre of site shown to have been divided into smaller plots	Centre
1956	Allotment gardens with glass houses and other ancillary buildings	Central west
	Chimney	North
1984 – 1992	Public House	South east corner
	Buildings cleared from previous edition	South boundary
	Buildings noted as works	North and west
2003	Works no longer shown	North

TABLE 3.4: Adjacent Land History

Date	Development	Distance and Orientation
1848 – 51	Gravel pit	Adjacent west
	Well	Adjacent south east
	Barracks and gasometer	200m east
	Bleach Works and Print Works	250m east
1890 – 93	Residential properties	Adjacent south, south east north and north west
	Filter beds, raised ground	Adjacent east
	Reservoirs	80m east
	East Lancashire Paper Mill	20m south east
	Cotton Mill	80m north
	Print works	150m east
	Radcliffe Station and railway lines	120m west
1909	Tram way	Adjacent north
	Cotton Mills	50m & 150m south
	Tanks	100m east
	Dye works and iron works	200m north
1929	Warehouse / Works	30m south
1956 – 2003	No significant changes	-
2010	Paper Mill and other works no longer shown	South / south east

Unexploded Ordinance (UXO)

- 3.2.2. A preliminary review has been made of the UXO risk presented by the site based upon CIRIA C681 ('Unexploded Ordnance (UXO) – A guide for the construction industry') and the assessment matrices presented in Tables 5.1 - 5.3 therein.
- 3.2.3. Reference to the Zetica unexploded bomb risk maps indicates that the site is located within a low risk area.
- 3.2.4. Notwithstanding this, any works that disturb the ground such as demolition and groundworks should include UXO tool-box talks and further advice sought from a specialist if suspicious articles are encountered.

Industrial Setting

- 3.2.5. Table 3.5 summarises identified industrial features which may present a potential source of contamination to the site based upon the Groundsure report. The Groundsure report should be consulted for further details. Unless otherwise stated, only those features that are within the stated review distances have been included.

TABLE 3.5: Industrial Setting

Type	Distance Reviewed	Distance from Site	Description
Contaminated land register entries and notices	<500m	-	None recorded
Landfills	<250m	-	None recorded
Waste Transfer / Treatment Stations	<100m	-	None recorded
Potentially Infilled Land	<250m	Adjacent W	Infilled ground – artificial deposit
		100m E	Worked ground – void
		107m E	Made ground – artificial deposit
		196m NE	Worked ground - void
Pollution Incidents	<50m	-	None recorded
Environmental Permits	<150m	-	None recorded
Discharge Consents	<100m	2m SE	Sewage discharge, storm overflow/storm tank. Receiving water noted as an unnamed tributary of the River Irwell.
		36m NW	Discharge of surface water to Crow Trees Brook. Noted to have been revoked in 1991
		99m SE	Sewage discharges – sewer storm overflow. Receiving water noted as River Irwell.
Abstractions	<250m	-	None recorded
Fuel Stations	<200m	-	None recorded
Contemporary trade directory entries – Active	<100m	On site	Unspecified works or factories
		Adjacent NE	Substation
		42m SW	Vehicle repair, testing and servicing
		47m SW	Unspecified works or factories
Contemporary trade directory entries – Inactive	<100m	-	None recorded
Control of Major Accident Hazards (COMAH) Sites	<500m	-	None recorded

3.3. Review of Available Information

Phase 1 Geo-Environmental Desk Study - WYG

- 3.3.1. The Island site did not form part of the desk study assessment of the wider East Lancs Paper Mill site undertaken by WYG. The boundary of the site considered in the WYG report extended to Cock Clod Street to the east of The Island site and to the southern site boundary.
- 3.3.2. The WYG report includes a summary of several other reports, including intrusive ground investigation works that have been carried out across the former paper mill site. From WYG's review, it is difficult to ascertain if any GI was carried out in the vicinity of the site i.e. towards

the boundaries of the paper mill site. However, reference is made to investigation works undertaken by Encia in 2005 of the upper surface of an area of "*public open space (surrounded by Cross Lane, Rectory Lane, Cock Clod Street and Church Street East)*". It is stated that the investigation identified numerous arsenic hotspots and that remediation was undertaken by Encia in June 2005 via source removal, with reference to the following report:

- Encia, Land off Rectory Lane, Radcliffe – Completion Statement for Arsenic Hotspot(s) Removal. Ref: 7031/CS, dated July 2005.

- 3.3.3. WYG also discussed a Summary Report undertaken by ADM in 2009, which comprised a review of further reports produced by Elluc. The ADM report is stated to have summarised that "*land north of Rectory Lane – minimal site investigation works completed within this area. Further site investigation required and preparatory earthworks*".
- 3.3.4. The above report and other 3rd Party reports that form the review undertaken by WYG have not been made available to TCR for part of this review.
- 3.3.5. A well is identified adjacent to the south east of the site on the WYG Development Constraints Plan (Figure 4).
- 3.3.6. It is noted that Crow Tree Farm Brook is culverted beneath the site. The brook originates from Withins Reservoir to the north and discharges into the River Irwell to the south.

Coal Mining Risk Assessment - WYG

- 3.3.7. The Coal Mining Risk Assessment undertaken by WYG focused on potential for shallow mine workings in the wider East Lancs Paper Mill site. As The Island site is not located within a Coal Authority Development High Risk area, this area was not investigated during the WYG coal mining intrusive investigation.

Preliminary Ground Investigation Report - WYG

- 3.3.8. WYG undertook intrusive ground investigation works across the wider East Lancs Paper Mill site in 2017. As part of this work, only limited investigations were completed at The Island site comprising 1 No. dynamic sampler borehole and 2 No. hand pits.
- 3.3.9. The WYG Exploratory Hole Location Plan (Drawing No. 002) indicates that the majority of the site was identified to be located within "Area of no Intrusive Access", likely associated with the existing housing and hardstanding area in the south east.
- 3.3.10. DS27, located in the north of the site encountered Made Ground to a depth of 0.4m below ground level (bgl). The Made Ground is described as cobbly gravelly sand and no visual or olfactory evidence of contamination was noted.
- 3.3.11. Beneath the Made Ground in DS27, natural granular soils were encountered to 1.8m bgl overlying soft to firm clay to a proven depth of 3.95m. Groundwater was recorded to have been encountered at 2.5m depth and a monitoring installation was fitted.
- 3.3.12. HP07 and HP08 were excavated in the landscaped area towards the centre of the site. HP07 encountered Made Ground to the full depth of 1.0m bgl and HP08 encountered Made Ground to 0.6m bgl. The Made Ground at both locations was indicated to include ash, glass and coal deposits as detailed on WYG drawing, Visual and Olfactory Evidence of Contamination (Drawing No. 003).
- 3.3.13. Monitored groundwater levels within the installation fitted in DS27 ranged from 1.60 to 1.70m bgl during the 6 No. monitoring rounds completed by WYG.

- 3.3.14. Ground gas concentrations were also monitored on 6 No. occasions. Methane was not recorded above the equipment's limits of detection (<0.1% v/v) and carbon dioxide was recorded at a peak concentration 0.4% v/v, with a maximum recorded flow rate of 0.4 l/h.
- 3.3.15. From the WYG assessment of ground gas risk, the site is located in Zone 3 (Land North of Church Street) which was identified as not requiring gas protection measures for new development, i.e. Characteristic Situation 1.
- 3.3.16. The WYG Ground Related Development Constraints Plan (Drawing No. 008) identifies the site to required "mitigation hardstanding / soil cover system for soft landscaping. Additionally, this drawing indicates that "in ground concrete obstruction" was encountered in DS27, however, this is not reflected on the drilling log record.

3.4. Summary and Recommendations

- 3.4.1. The WYG reports reviewed have considered the wider East Lancs Paper Mill site with a primary focus on historical industrial land use. The Island site which is the focus of this appraisal is likely to have been of lesser significance during the WYG assessments given its predominant residential usage.
- 3.4.2. Given the historical development of the site, significant contamination requiring immediate intervention is unlikely to be encountered, however, localised contamination should be anticipated. WYG reported that the Made Ground within the three exploratory holes on site recorded concentrations of metals and PAH above screening values and suggested that soil cover system will be required for soft landscaping areas, such as private gardens.
- 3.4.3. It should be noted that existing intrusive ground investigation undertaken to date on site is extremely limited and does not provide sufficient site wide coverage to enable an appropriate assessment of ground related risk, confirm foundation requirements or likely development abnormalities.
- 3.4.4. Based on the information reviewed, potential constraints to site development include, but are not limited to:
- Obstructions and substructures from existing and previous on site development
 - Made Ground associated with previous development
 - Localised contamination associated with the works in the north and south west of the site
 - The culverted watercourse
 - Ground gas from Made Ground and infilled ground to the west
 - Low strength Made Ground and natural soils
 - Shallow groundwater may be encountered
- 3.4.5. At this stage, consideration could be given to undertaking a preliminary ground investigation as part of phase works. This would allow confirmation of ground conditions in easily accessible areas of the site to aid with reducing uncertainty in relation to ground risk. If existing buildings are to be cleared to allow further development, this should be followed up by further ground investigation following demolition.

4.0 FOUL DRAINAGE ASSESSMENT

4.1 Review of Available Information

Existing Foul Sewers

- 4.1.1. There are existing public combined sewers located within Cock Clod Street, Rectory Lane and Spring Lane which all bound the site. Public Combined Sewers are also situated within Howard Street and Pollitt Street which are within the site boundary.
- 4.1.2. A copy of the sewer records received from UU are included in Appendix 3.

4.2 Proposed Foul Drainage

- 4.2.1. Based upon 25 dwellings and in accordance with Sewers for Adoption 7th Edition a peak foul flow of 1.15l/s is generated from the site.
- 4.2.2. In a predevelopment response dated 6th October 2018, United Utilities confirmed that a foul effluent generated by the development would be permitted to discharge to their existing combined sewers situated within Howard Street at an unrestricted flow rate.
- 4.2.3. The response provided by UU is included in Appendix 3.
- 4.2.4. Reviewing the Sewer Records and Topographical survey it is considered that a gravity foul drainage system to serve the development will be feasible and the pumping of foul flows will not be required.

4.3 Summary and Recommendations

- 4.3.1. In consideration of the above and the response received from United Utilities no further works are recommend to de-risk the site in respect to the discharge of foul effluent.

5.0 UTILITIES ASSESSMENT

5.1 Review of Available Information

- 5.1.1. CampbellReith were commissioned to make enquiries with all relevant statutory undertakers to determine the location and extent of existing services on and adjacent to the site, and to confirm if the apparatus had sufficient capacity for the proposed development.

Gas – Cadent

- 5.1.2. Information provided by Cadent Gas confirmed that a 10" CI Low Pressure (LP) main 2 m from the site boundary has sufficient capacity to serve the proposed development. The proposed point of connection is to the north of the site on Spring Lane.
- 5.1.3. A copy of the plans and correspondence with Cadent is available in Appendix 4.

Electricity – Electricity North West

- 5.1.4. Liaison with Electricity North West confirmed that a point of connection is feasible to the apparatus on Cock Clod Street at any suitable location.
- 5.1.5. Electricity North West also provided an indicative cost for the provision of the connection including any diversion and/or reinforcement at £54,000.
- 5.1.6. A copy of the response and plans from Electricity North West are provided in Appendix 4.

Telecommunications – Openreach

- 5.1.7. Openreach confirmed that they can provide fibre to all premises on the development free of charge.
- 5.1.8. A copy of the response from Openreach is available in Appendix 4.

Telecommunications – Virgin Media

- 5.1.9. Liaison with Virgin Media confirmed that they have network in the vicinity of the site, and connection in theory should not be an issue, however, they cannot confirm a connection until a site plan is available.
- 5.1.10. A copy of the correspondence with Virgin Media is available in Appendix 4.

Water Mains – United Utilities

- 5.1.11. United Utilities confirmed that the point of connection to the water main network will be at the nearest practical point on the network. United Utilities will confirm the exact location and details of the connection once a site layout plan is available.
- 5.1.12. A copy of the response and asset records from United Utilities are provided in Appendix 4.

Wastewater – United Utilities

- 5.1.13. United Utilities confirmed that foul flows from the site will be allowed to drain to the public foul/combined sewer system. Their preferred point of discharge would be to the 300 mm diameter public combined sewer on Howard Street, to the west of the site.
- 5.1.14. A copy of the response from United Utilities is available in Appendix 3. For further information regarding foul flows, see Chapter 4.0 'Foul Drainage Assessment'.

5.2. Summary and Recommendations

- 5.2.1. The utilities information reviewed dates from September and October 2020. It is recommended that all statutory undertakers are contacted again to confirm the responses once a full site layout plan is confirmed.
- 5.2.2. Statutory undertakers will also need to be contacted for confirmation of any potential connections, disconnections, protections or diversions that may be required as a result of the development.

6.0 ECOLOGY & ARBORICULTURE ASSESSMENT

6.1 Review of Available Information

- 6.1.1. The Environment Partnership (TEP) have produced an Ecology & Arboricultural Assessment in October 2020 to inform the Due Diligence.
- 6.1.2. A Phase 1 habitat walkover survey and an Arboricultural survey was undertaken by TEP on 07/10/2020. It should be noted that the survey was undertaken just outside the optimal survey season of mid-April to end of September.

Ecology

- 6.1.3. A walkover assessment identified the site predominantly includes houses with associated roads and hard standing pavements. Amenity grassland and dense scrub with scattered trees are also present. No priority habitats are present but the site comprises habitats with potential to support protected species.
- 6.1.4. The Ecology Desk Study is available for reference in Appendix 5.

Designated Sites

- 6.1.5. The closest statutory designated site of international importance is Rochdale Canal SAC, 9.2km to the east of the site. There are two statutory designated sites of national importance within 5km of the site; Ashclogh Site of Special Scientific Interest (SSSI) and Nob End SSSI, 2.6km and 4km from the site respectively.
- 6.1.6. The site falls within the SSSI Impact Risk Zone (IRZ) for Nob End SSSI. Planning applications for residential development is not listed within the IRZ as a category of concern.
- 6.1.7. There is one statutory designated site of local importance within 1km of the site (0.9km away); Chapelfield Local Nature Reserve (LNR), important for its habitats supporting winter birds.
- 6.1.8. The site is not within a Conservation Area.
- 6.1.9. There are four non-statutory locally designated sites within 1km of the site:
- Wetland near Radcliff SBI (approximately 0.4km from site)
 - Manchester, Bolton & Bury Canal (East) SBI (approximately 0.5km from site)
 - Sailor's Brow & Springwater Park (approximately 0.5km from site)
 - Swan Lodge SBI (approximately 1.2km from site)
- 6.1.10. Online mapping confirmed that the site is located within the Red Rose Community Forest.

Habitats

- 6.1.11. Habitats identified within the Phase 1 habitat survey are listed below and described in further detail in the report.
- Hard standing and buildings;
 - Amenity grassland;
 - Dense/ continuous scrub; and
 - Scattered scrub and broad-leaved trees.

Fauna

- 6.1.12. The GMEU data search returned no records of great crested newt (GCN) presence within the site boundary but did return GCN presence at 1.2km from the site boundary, to the south east beyond the River Irwell.
- 6.1.13. Based on the report completed by WYG, there are five ponds (referenced P1 - P5) within 500m of the Island site with no dispersal barriers to amphibians. The closest of these 5 ponds is 120m from the site boundaries. No great crested newt *Triturus cristatus* (GCN) surveys were completed by WYG, but the waterbodies were appraised for their suitability to support the species through completion of a Habitat Suitability Index (HSI) assessment. The 2016 surveys assessed P1 to P5 to range in suitability from Poor to Good.
- 6.1.14. There is no breeding habitat on site for amphibians, including GCN and the majority of the site offers no suitable terrestrial habitat. The small areas of dense scrub afford some foraging and refuge potential.

Badger

- 6.1.15. The GMEU data search returned no records of badger presence within the site itself but returned records of setts around 800m from the site; south of the River Irwell and North of the Manchester, Bolton and Bury Canal Towpath.
- 6.1.16. A full badger survey was completed by WYG with no evidence of badger recorded across the wider ELPM site.
- 6.1.17. The walkover found no evidence of badger setts or other badger activity such as paths, latrines or signs of foraging.
- 6.1.18. The habitats (amenity area and dense scrub) on site are sub-optimal for badger sett creation.

Bats

- 6.1.19. The GMEU data search returned a large dataset of records of bat activity, including a number across the former paper mill site.
- 6.1.20. The former public house building on Church Street East in the west of the site was deemed to have low potential to support roosting bats in the assessment completed by WYG in 2016. This was not subject to an emergence/ re-entry survey to assess if a bat roost is present.
- 6.1.21. The four rows of terraced housing (on Buybutt Street, Howard Street, Rectory Lane and Cock Clod Street) and the sub-station on the north of Cock Clod Street were all deemed to have negligible potential to support roosting bats during the assessments completed by WYG in 2016.
- 6.1.22. The WYG surveys conclude the presence of three bat potential trees on site; one moderate (a mature willow in the amenity area immediately south of Howard Street); two Low (both Limes *Tilia* sp., within the dense shrub next to the hardstanding, adjacent to Rectory Lane - TN1 within G7507.29.007).
- 6.1.23. Bat activity surveys were undertaken by WYG of the wider ELPM site in 2017. The transect route did not take into account the Island Site, likely due to the lack of suitable commuting and foraging habitat present.

Breeding Birds

- 6.1.24. A breeding bird survey was undertaken by WYG in 2017. House Sparrow, a red list birds of Conservation Concern (BoCC) species was recorded nesting across the Island portion of the site, likely within the buildings.
- 6.1.25. The small areas of dense scrub and the mature trees also provide some nesting opportunities for other local bird species.

Reptiles

- 6.1.26. The GMEU data search returned a record of common lizard over 1km from the site.
- 6.1.27. While it is possible reptiles have populated the adjacent ELPM site, the land is isolated. The habitats on the Island site do not favour reptiles and there are no obvious habitat corridors into the site that would favour reptile dispersal. The site is therefore considered unlikely to support any reptile population.

Water Vole/Otter

- 6.1.28. No water courses are present on or immediately adjacent to the site and therefore no habitats to support these riparian species are present. No constraints or required mitigation is necessary.

Arboriculture

- 6.1.29. A desktop review identified no Tree Preservation Orders; no trees within a Conservation Area; no ancient woodland; no veteran trees; and no Habitats of Principal Importance. The site is located within the Red Rose Community Forest and falls within the SSSI Impact Risk Zone for Nob End SSSI.
- 6.1.30. In general the trees on and adjacent to the site are in good health and condition, with few significant defects observed. To the north of the central greenspace area are two trees, a mature goat willow and a middle age cherry that require management. The goat willow is a lapsed pollard that is twin-stemmed at approximately 2m with large diameter stem regrowth from the former pruning point at 2.5m. There appears to be some wood degradation within the pollard unions, although this has not yet progressed to cavity formation. The cherry, has prominent wounds and decay on the north and south-western sides of the main stem. The northern wound is large and spreads longitudinally from around 0.5m up to a multi-stemmed union at around 2m. There is some degree of wound-wood formation but it is likely that the rate of decay will exceed the rate at which the tree can lay down new wood, therefore failure will eventually occur.
- 6.1.31. Two cherry trees, one at either end of a footpath running east to west across the central greenspace, are causing lifting and cracking of the tarmac surface.
- 6.1.32. A check of Bury Metropolitan Borough Council's online mapping on the 7th October 2020 confirmed that there are no trees protected by TPO on or immediately adjacent to the site.
- 6.1.33. There is no ancient woodland within or adjacent to the site. Ancient Woodland is defined in England as any area that has been wooded continuously since at least 1600 AD; it is regarded as 'irreplaceable'. The distribution of Ancient Woodland has been assessed on the basis of Natural England's Ancient Woodland Inventory (Provisional) for England via www.magic.defra.gov.uk.

- 6.1.34. NPPF defines veteran trees are those which, because of age, size and condition, are of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are ancient, though they tend to be relatively old for the species. Ancient and veteran trees are regarded as 'irreplaceable'. There is no comprehensive national register of veteran trees. The Woodland Trust maintains an inventory of significant trees which includes some ancient and veteran individuals. At the time of writing it contained no records of relevance to the site. An assessment of each tree was made by a qualified arboriculturist as part of the tree survey. There are no veteran trees within or adjacent to the site.
- 6.1.35. A list of habitats which are of principal importance for the purpose of conserving biodiversity is maintained by the Secretary of State. The list includes habitat types that are defined by woody vegetation, including Deciduous Woodland, Wood Pasture and Parkland, Traditional Orchards and Hedgerow. The geographical extent and location of these habitats (excluding hedgerow) is mapped by Natural England on the Priority Habitat Inventory. Observations were also made to corroborate the mapping during the site survey. No arboreal Habitats of Principal Importance are present at the site.

6.2. Summary and Recommendations

Ecology

Designated Sites

- 6.2.1. The statutory designated sites are sufficiently distant so not to be directly affected by the development. The desk based assessment can conclude no likely significant effect will be experienced by any European designation or associated special interest feature. Therefore no mitigation requirements are necessary with regards to statutory designated sites.
- 6.2.2. The site is physically separated from any of the SBI's and there are no pathways anticipated that would lead to adverse impacts upon the local wildlife sites. Therefore no mitigation requirements are necessary with regards to non-statutory designated sites.

Habitats

- 6.2.3. The walkover survey was undertaken just outside the optimal survey season of mid-April to end of September, but given the habitats are considered of low ecological value and match those recorded by White Young Green (WYG) in 2016, the time of year the survey was completed is not considered to have a constraint on the results of the report.
- 6.2.4. In order to show compliance with NPPF, current policy requires the demonstration of biodiversity net gain (BNG) with any planning applications. Following the imminent revised Environment Act, the majority of developments in England will be required to provide a minimum of 10% BNG. Whilst this is not yet mandatory, we have experienced various Local Planning Authorities requesting that 10% BNG is achieved and verified via the means of an approved metric. It is recommended a biodiversity assessment is undertaken, using the Natural England Biodiversity Metric 2.0 calculator in support of a detailed application. This will quantify the change in biodiversity units at the site between the pre-development baseline and post-development remaining and created habitats.
- 6.2.5. In cases where a negative Habitat Biodiversity Impact Score is generated, further discussions are required on how to achieve a positive result (net gain). This can be through the creation or enhancement of habitats either within the site i.e. amendment to the development layout and

landscaping or areas of land off-site, earmarked for ecological mitigation through sympathetic landscaping management and design. Off-site biodiversity offsetting will require discussions with the LPA and potentially other landowners such as the Local Wildlife Trust.

Fauna

- 6.2.6. Development proposals will dictate if GCN surveys are required in support of a detailed/ RM application. Consultation with an ecologist should be sought when details plans have been drawn. As a worst case, it is recommended that the ponds within 250m from the site are surveyed for GCN. If GCN are present, it would trigger the legislation protecting the species and their habitats, as well as policies protecting legally protected species. The results would direct the level of mitigation necessary to support the development.

Badger

- 6.2.7. Due to the sub-optimal habitats present on site and known lack of records in the site's vicinity, badger are not considered a constraint for future development. An updated survey is recommended after 12 months (October 2021) to ensure badger are still absent from the site.

Bats

- 6.2.8. Survey data obtained on the buildings and trees is no longer valid and require updates. An updated ground based assessment will be required on any trees and buildings likely to be lost or impacted under any future RM/ detailed application.

Buildings

- 6.2.9. An updated daytime internal and external inspection of built structures on the site for roosting bats should be undertaken by a licensed bat consultant, in accordance with the Bat Conservation Trust (BCT) Good Practice Guidelines (Collins, 2016). The assessment should include the exterior and all safely accessible internal spaces including roof and cellar voids to search for bats, evidence of their presence and suitability for roosting. Following the inspection, the buildings will be classified in terms of suitability for roosting bats (High, Moderate, Low or Negligible) or as a confirmed roost.
- 6.2.10. There are no strict seasonal constraints for this type of survey, although it is recognised that field signs will not be fresh during winter hibernation, and may decompose or be washed away by inclement weather. Following the assessment, the built structure(s) will be classified in terms of suitability for roosting bats (High, Moderate, Low or Negligible) or as a confirmed roost.
- 6.2.11. If any of the trees or buildings/ houses are to be lost or impacted for development, impacts maybe incurred on potential bat roosts.

Trees

- 6.2.12. An updated ground level tree assessment (GLTA) should be undertaken of any trees within and immediately adjacent to the site that may be impacted by the proposals, for their suitability to support roosting bats. This survey should be undertaken by an experienced surveyor following the BCT Guidelines (Collins, 2016). Following the inspection, the trees will be classified in terms of suitability for roosting bats (High, Moderate, Low or Negligible) or as a confirmed roost.
- 6.2.13. The optimal survey season for ground level assessment is between December and March (inclusive). The surveys can be sub-optimal between April and November where foliage obscures visibility. If all parts of the tree are visible then the survey can be carried out at any time.

Emergence/ re-entry surveys

- 6.2.14. Trees that are classified as having suitability for bats (with the exception of Low suitability) that will unavoidably be impacted (either directly or indirectly) will require nocturnal surveys to determine the species and status of any roost present. The buildings that have suitability for bats will also require nocturnal surveys. As a general guide, the scope of nocturnal surveys is as tabulated below.
- 6.2.15. The seasonal window for roost surveys extends May to September with surveys spread throughout this period.
- 6.2.16. Aerial inspection may be used to re-inspect potential roost features from close distance, thereby rationalising the need for nocturnal roost survey work.
- 6.2.17. A lighting strategy will need to be completed that is sensitive to commuting and foraging bats.
- 6.2.18. Bat box installation should be incorporated into the buildings and masterplan.

Breeding Birds

- 6.2.19. The vegetation removal and destruction of houses will impact the potential habitat available for nesting birds. This will trigger the legislation and planning policy protecting birds, their nests and eggs.
- 6.2.20. Once works commence on site in order to prevent a breach of UK or European wildlife legislation it is recommended that any works that will likely disturb, damage or destroy an active nest be avoided during the bird breeding season (i.e. March to September inclusive). If restricting works to outside the bird nesting season is not possible, it is recommended that an Ecological Clerk of Works (ECoW) conducts a check for the nesting birds within the site in advance of any works commencing.
- 6.2.21. If a nesting bird is identified, the ECoW will advise on suitable working methods and exclusion zones to restrict works on site. Measures recommended will depend on the nature of the works in that area as well as any bird species identified to be nesting.
- 6.2.22. The loss of nesting potential of the site can be mitigated through the installation of bird boxes on retained mature trees on site and future built structures.

Reptiles

- 6.2.23. Reptiles are not considered likely to be impacted by development and therefore no mitigation requirements are necessary with regards to these species.

Water Vole/Otter

- 6.2.24. Water Voles and Otters are not considered likely to be impacted by development and therefore no mitigation requirements are necessary with regards to these species.

Arboriculture

- 6.2.25. An Arboricultural Impact Assessment (AIA) written in accordance with BS 5837 will be required in support of a detailed application. This will identify, evaluate and possibly mitigate the impacts of developing land on the existing tree resource. The AIA should include a detailed Tree Removal Plan outlining the proposed schedule of tree works. It must also include details of any tree protection measures that would be required during the construction phase in accordance with local planning policy. It may defer tree protection to an Arboricultural Method Statement where

complex, procedural tree protection measures or construction design is required to adequately safeguard retained trees.

- 6.2.26. Replacement tree planting is likely to be required in the event that trees are lost as a result of development. This is most commonly secured by the provision of a planting scheme submitted in support of a outline planning application. The requirement for replacement and/or mitigation planting and its extent should be assessed as part of the AIA process.
- 6.2.27. Trees however are a material consideration in the planning process. It is likely that development of this site would be constrained in some way by the presence of trees. This constraint could take the form of trees that must be retained to comply with policy or the law. However, it might equally also take the form of prescribed working methods, future management liabilities, mitigation requirements, or legal agreements for off-site mitigation (or within the wider ELPM application site).
- 6.2.28. Any future design should respond to the quality categorisation of trees during a detailed tree survey in accordance with BS 5837. The Standard places trees into one of four categories to describe their arboricultural, landscape or cultural qualities: A (high quality), B (moderate quality) C (low quality) and U (unsuitable for retention). This allows a weighting to be given to each tree within the context of proposed development but is not prescriptive.
- 6.2.29. The trees around the central greenspace are of better quality and individual prominence than those forming the larger area of trees in the north-east corner of the site, some of which will be Category A or Category B. Any requirement to remove them must be justified by sound design rationale and may result in the requirement for an increased level of mitigation compared to the removal of lower value trees.
- 6.2.30. Trees containing significant defects, at the beginning or end of their natural life cycle, or those of limited contribution to amenity or functional benefits should be considered to be of low value, Category C. This includes trees in the north-east corner and selected individuals across the remaining site. Typically, their presence should not unduly constrain development design.
- 6.2.31. An approved Community Forest Plan may be a material consideration in preparing development plans and in deciding planning applications.

7.0 AIR QUALITY ASSESSMENT

7.1 Review of Available Information

- 7.1.1. Millar Goodall have prepared an Air Quality Assessment Report (Report Number: 102414) in October 2020 to inform the Gap Analysis.
- 7.1.2. Material from the 2018 Outline Planning application and a number of relevant national and local policies were used to inform the report.

Baseline Air Quality

- 7.1.3. The outline planning application for the wider site was supported by an Air Quality Assessment completed by WYG in June 2018.
- 7.1.4. The report outlines the use of DEFRA location specific background concentration maps of specific air quality indicators and references these conditions in the area including the development and nearby receptors which may be affected by the development.
- 7.1.5. The report further summaries local NO₂ and PM₁₀ concentration monitoring in the Radcliffe area, these are shown to be below the relevant health-based air quality objectives.
- 7.1.6. In terms of road traffic emissions, a detailed dispersion model was created and the impact of road traffic emissions associated with the operational phase of the development on 28 selected receptors was found to be not significant in respect of both NO₂ and PM₁₀. No air quality mitigation measures were recommended in respect of the operational phase of the development. It is likely that the northern part of the site would experience higher concentrations due to its proximity to the road network.

Construction Phase

- 7.1.7. The impact of demolition and construction activities on local air quality have been assessed within the outline application which found that, with the use of appropriate mitigation, the impact of the development on local air quality would not be significant. There is no reason to suggest that adequate mitigation cannot be employed upon this site.
- 7.1.8. In terms of construction dust, it was concluded that, with the use of appropriate mitigation, the impact of the development on local air quality would not be significant.

Operational Phase

- 7.1.9. The development is not located within or adjacent to an AQMA. It would not be expected to introduce changes in AADT flows of more than 500 LDV and 100 HDV in its own right. It would also not be expected to introduce changes in AADT flows of more than 100 LDV and 25 HDV within the closest AQMA. IAQM guidance⁵, therefore, indicates that the impact of road traffic associated with the development is likely to have an insignificant impact on local air quality.

Mitigation

- 7.1.10. The outline planning permission for the whole of the paper mill site contains a condition which requires mitigation of air quality impacts. Condition 8 of the permission states;
- 7.1.11. "Prior to occupation, the applicant shall provide a scheme for electric vehicle charging points for the residential units. EV charge points shall be chosen from the Electric Vehicle Home charge Scheme approved charge point model list.

Reason. To safeguard residential amenity, public health and quality of life and to encourage the uptake of ultra- low emission vehicles and ensure the development is sustainable, in accordance with paragraph 35 and 124 of the NPPF.”

- 7.1.12. This level of mitigation conforms to the IAQM guidance referred to in the GMCA Air Quality Action Plan. Further conditions relating to traffic generation within the site are contained within the planning permission, including the requirement for a “Construction Traffic Management Plan” (condition 26), a parking strategy (condition 41) and a residential travel plan (condition 44).

7.2. Summary and Recommendations

- 7.2.1. The report concluded that, following the adoption of recommended mitigation measures during the construction phase, the proposed development would not be contrary to any national or local planning policies.
- 7.2.2. This development is brought forward under the extant outline permission for the wider paper mill site, it is unlikely that further air quality assessments will be required. If a material change was to occur, for example, a change to means of access to the site, changes to policy or legislation etc a further air quality assessment may be required 5 EPUK and IAQM (January 2017) Land Use Planning and Development Control: Planning for Air Quality (v1.2) and further mitigation or offsetting measures may be raised by the local authority. In this instance, a discussion should be initiated with Bury MBC as the project progresses.
- 7.2.3. A dust management plan, which may form part of the Construction Environmental Management Plan (CEMP) should be produced for the site. This should take into account the demolition and construction dust assessment produced for the outline planning permission.

8.0 NOISE ASSESSMENT

8.1. Review of Available Information

- 8.1.1. Millar Goodall have prepared a Noise Quality Assessment Report (Report Number: 102413) in October 2020 to inform the Gap Analysis.
- 8.1.2. Material from the 2018 Outline Planning application and a number of relevant national and local policies were used to inform the report.

Site Specific Considerations

- 8.1.3. The outline development was approved with the following conditions which relate to noise:

Condition 9

An acoustic attenuation scheme for all dwellings fronting onto the A6053 shall be submitted at the first detailed planning application stage. The scheme shall include details of acoustic glazing and acoustically treated ventilation. The acoustic attenuation scheme hereby approved shall be implemented in full before use of the residential premises first commences.

Impact of Existing Noise on the Development

- 8.1.4. The noise assessment outlines that a previous Noise Assessment was undertaken in June 2018 by WYG, in support of the outline planning application for the wider site. This provided extensive noise measurements and noise modelling, and provided specific noise mitigation measures for the wider site.
- 8.1.5. Millar Goodall identified 4 monitoring positions located close to the development side, and provided a summary table of measured noise levels in each location. The measured noise levels mainly achieved the BS8233 criterion for external noise of 55 dB LAeq,T during the daytime for the majority of the with the exception of the area of the site closest to the A6053, Spring Lane.
- 8.1.6. DEFRA Noise Mapping shows that areas of the site closest to Spring Lane are expected to be subject to high noise levels, which would require noise mitigation in order to meet BS 8233 criteria. The areas of highest risk are considered to be within 25 m of the A6053, Spring Lane with the level of risk increasing with proximity to the road.
- 8.1.7. The only commercial premise which may impact on the future development of the site is Water St. Motors, located at 20 Rectory Lane, Radcliffe, M26 2QU. This site is open from 08:30 – 17:30 Monday to Friday and operates as a car body shop. There is the potential for loud banging noises from the site. It appears that the activities take place within the building which is approximately 35 m from the proposed development site boundary.
- 8.1.8. A review of the noise monitoring provided in the previous report identifies that noise levels at locations ST1 and LT4, the two measurement locations closest to the works, show noise levels which would achieve the BS8233 noise criteria for external noise and the impact is therefore not considered to be significant.

Impact of Noise from the Proposed Development

- 8.1.9. New residential developments have the potential for additional vehicles on the local road network. At this stage traffic data is not available to allow an assessment to evaluate the extent of noise increase as a result of this development. If there are any roads with a 25% increase in traffic

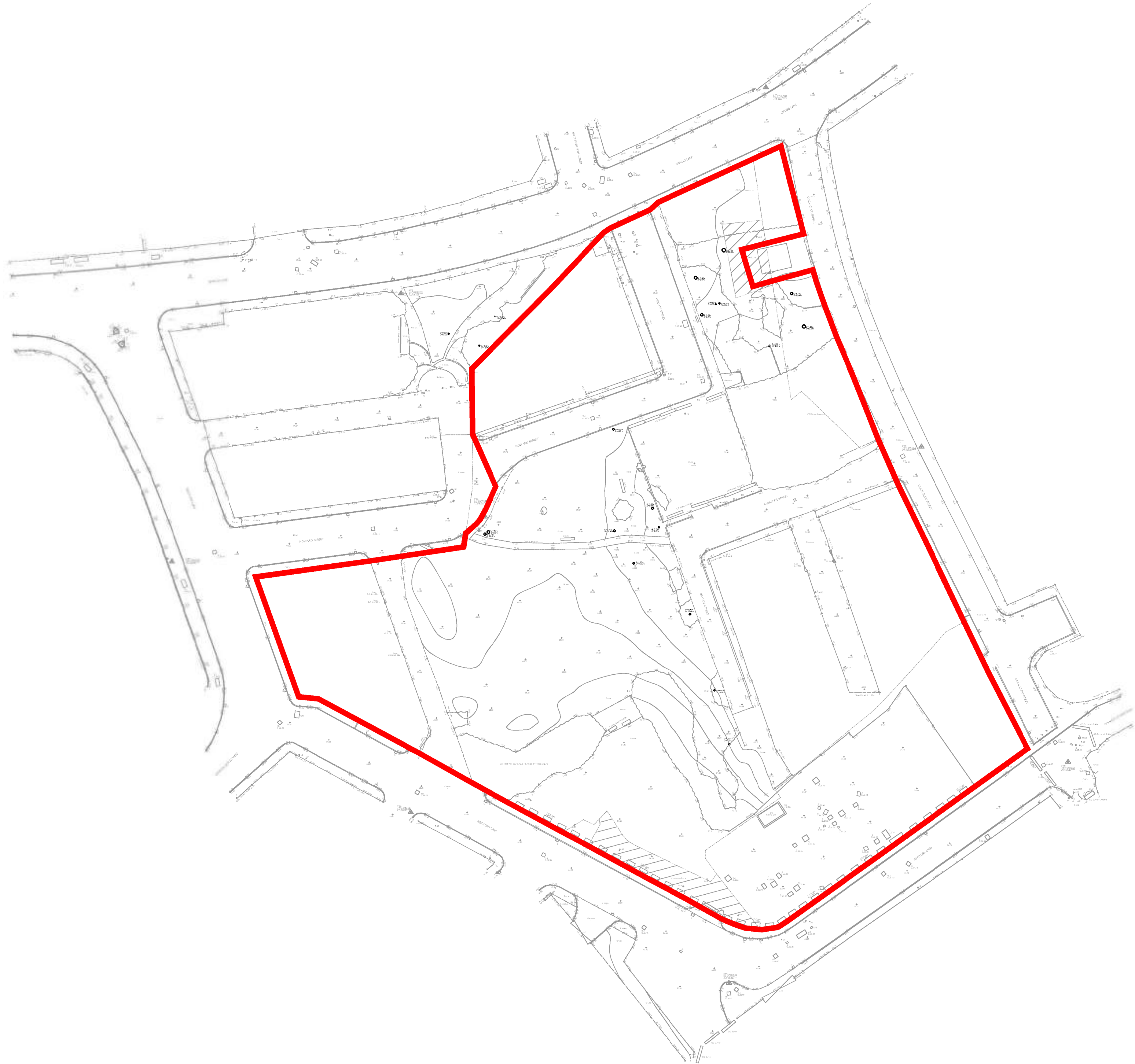
flow, which would indicate a potential increase in traffic noise of 1dB, this may necessitate the requirement for a detailed noise assessment. Miller Goodall consider that this development will not lead to a significant impact on existing noise sensitive receptors as a result of road traffic noise.

- 8.1.10. During construction, it is common for the control of construction noise, vibration and dust emission to be addressed by the application of Best Practicable Means (BPM) and detailed within a Construction and Environmental Management Plan (CEMP). The impact of construction noise from the development is likely to be the main noise impacting on existing noise sensitive receptors.

8.2. Summary and Recommendations

- 8.2.1. The information indicates that with the appropriate mitigation noise should not pose a barrier to residential development at the site. There is one commercial noise sources to consider, Water Street Motors, however with careful design considerations Millar Goodall do not consider that a detailed further noise assessment would be required in this area. On the majority of site located away from Spring Lane and the Water Street Motor site, noise mitigation is unlikely to be necessary. Miller Goodall consider overall the site low risk in terms of noise, and would be suitable for residential development, provided that the mitigation was assessed and specified to higher risk areas to the site.
- 8.2.2. For the future applications, consideration shall be required to protect the amenity of future external amenity spaces which are to be located close to Spring Lane. Millar Goodall's recommendation would be to orientate the properties in such a way that that the garden amenity area is screened by the building massing of the development in this area.
- 8.2.3. Noise mitigation in the form of acoustic glazing and ventilation will also be required for any developments to be located close to Spring Lane. An example glazing specification provided in the previous noise assessment was for 6mm /16mm / 10mm (33 dB Rtr). A detailed glazing and ventilation mitigation scheme can be provided upon detailed planning application application.
- 8.2.4. Prior to commencement of works, a quantitative noise impact assessment using guidance in BS 52289 on site may also be required but in our experience is usually unnecessary, unless there are nearby high risk or noise sensitive receptors, provided a robust CEMP is in place and agreed upon by the Local Authority. Bury Council are likely to have their own recommended wording for planning conditions relating to the control of noise and vibration from construction works.
- 8.2.5. The main impact for the site is in relation to existing road traffic noise and in order to provide suitable noise mitigation for areas located closest to the road, mitigation should be considered in the form of suitable design of the site to protect habitable rooms and garden amenity areas from the loudest noise sources. A detailed glazing and ventilation scheme will be required as part of the outline application, further additional noise monitoring is unlikely to be required and noise mitigation measures can be assessed utilising the previous noise measurement data for the site.
- 8.2.6. An assessment of the impact of the development in terms of noise from; transport and construction noise has determined that there will be a low impact and a detailed assessment at the outline application phase would not be considered necessary.

Appendix 1 – Site Location and Site Constraints



Notes

1. Do not scale from this drawing on print or electronically. Work from figured dimensions only.
2. No deviation from the details on this drawing is allowed without CampbellReith's prior permission in writing.
3. Read this drawing with all Architect's, Service Engineer's and CampbellReith's relevant details, specifications and drawings.
4. All work is to be done in accordance with the relevant specifications issued by CampbellReith, British Standard Codes of Practice, Statutory Requirements and the Contract Documents.

5. Drawing status:
- | | |
|------------------------|--|
| P: Preliminary | Evolving drawings for approvals, tenders, billings etc. |
| C: Construction | Fully developed drawings issued under instructions for construction. |

6. Only status **C** drawings to be used for construction.

7. Suitability code:
- Work in progress
S0 - Work in progress
Shared (Non-contractual)
S1 - For coordination, **S2** - For information, **S3** - For internal review and comment, **S4** - For construction approval.
Documentation (For contractors purposes)
D1 - For Costing, **D2** - For Tender, **D3** - For contractor design, **D4** - for manufacture/procurement.
Construction
A - For construction, **B** - For construction but with comments (i.e. areas in abeyance), **CR** - Construction Record (Final Construction ONLY. Any deviations to that which is on site is not the liability of Campbell Reith)

APPROXIMATE SITE BOUNDARY

P1	Issued for information	29/10/20	HB
Rev	Description	Date	By

CampbellReith
consulting engineers

London	020 7340 1700	☐	☒ Manchester	0161 819 3060
Surrey	01737 784 500	☐	☐ Birmingham	01675 467 484
Bristol	0117 916 1066	☐	☐ Dubai	00 971 4345 7088
www.campbellreith.com				

Job Title	THE ISLAND SITE, RADCLIFFE
Client	HOMES ENGLAND

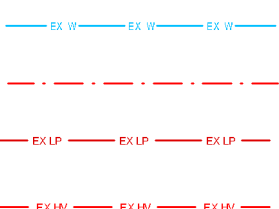
SITE LOCATION
PLAN

Drawn by	Date made	Scale @ A1	Checked by	Suitability	CR Project
HB	29/10/20	1:500	HB	S2	13529

Project No.	Originator	Volume	Lvl/Loc	Type	Role	Number	Rev
13529	CRH	ZZ	XX	DR	C	4000	P1

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3. Read this drawing with all Architect's, Service Engineer's and CampbellReith's relevant details, specifications and drawings.
4. All work is to be done in accordance with the relevant specifications issued by CampbellReith, British Standard Codes of Practice, Statutory Requirements and the Contract Documents.
5. Drawing status:

P: Preliminary	Evolving drawings for approvals, tenders, billings etc.
C: Construction	Fully developed drawings issued under instructions for construction.

- 
-  APPROXIMATE SITE BOUNDARY
 -  EXISTING WATER MAINS
 -  EXISTING COMBINED SEWER
 -  EXISTING LOW PRESSURE GAS MAINS
 -  EXISTING HIGH VOLTAGE ELECTRICITY MAINS
 -  EXISTING SUBSTATION
 -  EXISTING TREES

P1	Issued for information	29/10/20	HB
Rev	Description	Date	By

CampbellReith
consulting engineers

London	020 7340 1700	☐	☒	Manchester	0161 819 3060
Surrey	01737 784 500	☐	☐	Birmingham	01675 467 484
Bristol	0117 916 1066	☐	☐	Dubai	00 971 4345 7088

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Job Title **THE ISLAND SITE, RADCLIFFE**

Client	HOMES ENGLAND
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SITE CONSTRAINTS PLAN

Drawn by	Date made	Scale @ A1	Checked by	Suitability	CR Project
HB	29/10/20	1:500	HB	S2	13529

Project No.	Originator	Volume	Lvl/Loc	Type	Role	Number	Rev
13529	CRH	ZZ	XX	DR	C	4000	P1

Appendix 2 – Groundsure Report

379030 407400,

Order Details

Date: 19/10/2020
Your ref: 13529
Our Ref: GS-7173428
Client: CampbellReith

Site Details

Location: 379041 407401
Area: 1.02 ha
Authority: [Bury Metropolitan Borough Council](#)



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Summary of findings

p. 2

Aerial image

p. 8

OS MasterMap site plan

p.12

groundsure.com/insightuserguide

Contact us with any questions at:

info@groundsure.com

08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
13	1.1	Historical industrial land uses	1	8	75	113	-
21	1.2	Historical tanks	0	1	37	23	-
23	1.3	Historical energy features	1	1	15	21	-
25	1.4	Historical petrol stations	0	0	0	0	-
25	1.5	Historical garages	0	0	0	10	-
26	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
27	2.1	Historical industrial land uses	1	15	111	160	-
38	2.2	Historical tanks	0	2	65	52	-
42	2.3	Historical energy features	1	2	36	52	-
46	2.4	Historical petrol stations	0	0	0	0	-
46	2.5	Historical garages	0	0	0	17	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
48	3.1	Active or recent landfill	0	0	0	0	-
48	3.2	Historical landfill (BGS records)	0	0	0	0	-
49	3.3	Historical landfill (LA/mapping records)	0	0	0	1	-
49	3.4	Historical landfill (EA/NRW records)	0	0	0	4	-
50	3.5	Historical waste sites	0	0	5	8	-
52	3.6	Licensed waste sites	0	0	0	0	-
52	3.7	Waste exemptions	0	0	14	20	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
56	4.1	Recent industrial land uses	1	3	26	-	-
58	4.2	Current or recent petrol stations	0	0	0	1	-
59	4.3	Electricity cables	0	0	0	0	-
59	4.4	Gas pipelines	0	0	0	0	-
59	4.5	Sites determined as Contaminated Land	0	0	0	0	-



59	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
59	4.7	Regulated explosive sites	0	0	0	0	-
60	4.8	Hazardous substance storage/usage	0	0	0	0	-
60	4.9	<u>Historical licensed industrial activities (IPC)</u>	0	0	8	0	-
61	4.10	<u>Licensed industrial activities (Part A(1))</u>	0	0	0	6	-
62	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	0	1	4	-
63	4.12	Radioactive Substance Authorisations	0	0	0	0	-
63	4.13	<u>Licensed Discharges to controlled waters</u>	0	3	7	6	-
66	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
66	4.15	Pollutant release to public sewer	0	0	0	0	-
66	4.16	<u>List 1 Dangerous Substances</u>	0	0	3	1	-
67	4.17	List 2 Dangerous Substances	0	0	0	0	-
67	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	4	4	-
68	4.19	<u>Pollution inventory substances</u>	0	0	0	2	-
69	4.20	<u>Pollution inventory waste transfers</u>	0	0	0	1	-
71	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
72	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
74	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
75	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
76	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
76	5.5	Groundwater vulnerability- local information	None (within 0m)				
77	5.6	<u>Groundwater abstractions</u>	0	0	0	0	17
82	5.7	<u>Surface water abstractions</u>	0	0	0	1	19
87	5.8	<u>Potable abstractions</u>	0	0	0	0	3
88	5.9	Source Protection Zones	0	0	0	0	-
88	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
89	6.1	<u>Water Network (OS MasterMap)</u>	1	1	8	-	-



90	6.2	<u>Surface water features</u>	0	1	4	-	-
91	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
91	6.4	<u>WFD Surface water bodies</u>	0	0	1	-	-
91	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
93	7.1	<u>Risk of Flooding from Rivers and Sea (RoFRaS)</u>	High (within 50m)				
94	7.2	<u>Historical Flood Events</u>	0	0	3	-	-
94	7.3	Flood Defences	0	0	0	-	-
94	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
95	7.5	Flood Storage Areas	0	0	0	-	-
96	7.6	<u>Flood Zone 2</u>	Identified (within 50m)				
97	7.7	<u>Flood Zone 3</u>	Identified (within 50m)				
Page	Section	Surface water flooding					
98	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding					
100	9.1	<u>Groundwater flooding</u>	Moderate (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
101	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
102	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
102	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
102	10.4	Special Protection Areas (SPA)	0	0	0	0	0
102	10.5	National Nature Reserves (NNR)	0	0	0	0	0
103	10.6	<u>Local Nature Reserves (LNR)</u>	0	0	0	0	3
103	10.7	<u>Designated Ancient Woodland</u>	0	0	0	0	1
103	10.8	Biosphere Reserves	0	0	0	0	0
104	10.9	Forest Parks	0	0	0	0	0
104	10.10	Marine Conservation Zones	0	0	0	0	0
104	10.11	<u>Green Belt</u>	0	0	1	1	2
104	10.12	Proposed Ramsar sites	0	0	0	0	0



105	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
105	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
105	10.15	Nitrate Sensitive Areas	0	0	0	0	0
105	10.16	<u>Nitrate Vulnerable Zones</u>	0	0	0	0	1
107	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
108	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
109	11.1	World Heritage Sites	0	0	0	-	-
109	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
109	11.3	National Parks	0	0	0	-	-
109	11.4	Listed Buildings	0	0	0	-	-
110	11.5	Conservation Areas	0	0	0	-	-
110	11.6	Scheduled Ancient Monuments	0	0	0	-	-
110	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
111	12.1	<u>Agricultural Land Classification</u>	Urban (within 250m)				
112	12.2	Open Access Land	0	0	0	-	-
112	12.3	Tree Felling Licences	0	0	0	-	-
112	12.4	Environmental Stewardship Schemes	0	0	0	-	-
112	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
113	13.1	<u>Priority Habitat Inventory</u>	0	0	2	-	-
114	13.2	<u>Habitat Networks</u>	0	0	1	-	-
114	13.3	<u>Open Mosaic Habitat</u>	0	1	0	-	-
114	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
115	14.1	<u>10k Availability</u>	Identified (within 500m)				
116	14.2	<u>Artificial and made ground (10k)</u>	1	0	3	11	-
118	14.3	<u>Superficial geology (10k)</u>	1	1	1	4	-

119	14.4	Landslip (10k)	0	0	0	2	-
120	14.5	Bedrock geology (10k)	1	1	1	6	-
121	14.6	Bedrock faults and other linear features (10k)	0	0	3	9	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
123	15.1	50k Availability	Identified (within 500m)				
124	15.2	Artificial and made ground (50k)	0	0	1	1	-
125	15.3	Artificial ground permeability (50k)	0	0	-	-	-
126	15.4	Superficial geology (50k)	1	1	1	3	-
127	15.5	Superficial permeability (50k)	Identified (within 50m)				
127	15.6	Landslip (50k)	0	0	0	1	-
127	15.7	Landslip permeability (50k)	None (within 50m)				
128	15.8	Bedrock geology (50k)	1	1	1	6	-
129	15.9	Bedrock permeability (50k)	Identified (within 50m)				
129	15.10	Bedrock faults and other linear features (50k)	0	0	3	7	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
131	16.1	BGS Boreholes	0	0	11	-	-
Page	Section	Natural ground subsidence					
133	17.1	Shrink swell clays	Very low (within 50m)				
134	17.2	Running sands	Low (within 50m)				
136	17.3	Compressible deposits	Moderate (within 50m)				
138	17.4	Collapsible deposits	Very low (within 50m)				
139	17.5	Landslides	Very low (within 50m)				
140	17.6	Ground dissolution of soluble rocks	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
142	18.1	Natural cavities	0	0	0	0	-
143	18.2	BritPits	0	1	0	1	-
143	18.3	Surface ground workings	0	2	46	-	-
145	18.4	Underground workings	0	0	0	1	8
146	18.5	Historical Mineral Planning Areas	0	0	0	3	-



146	18.6	Non-coal mining	0	0	0	0	0
147	18.7	Mining cavities	0	0	0	0	0
<u>147</u>	<u>18.8</u>	<u>JPB mining areas</u>	Identified (within 0m)				
<u>147</u>	<u>18.9</u>	<u>Coal mining</u>	Identified (within 0m)				
147	18.10	Brine areas	None (within 0m)				
148	18.11	Gypsum areas	None (within 0m)				
148	18.12	Tin mining	None (within 0m)				
148	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
<u>149</u>	<u>19.1</u>	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
<u>150</u>	<u>20.1</u>	<u>BGS Estimated Background Soil Chemistry</u>	2	5	-	-	-
150	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
151	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
152	21.1	Underground railways (London)	0	0	0	-	-
152	21.2	Underground railways (Non-London)	0	0	0	-	-
153	21.3	Railway tunnels	0	0	0	-	-
<u>153</u>	<u>21.4</u>	<u>Historical railway and tunnel features</u>	0	0	27	-	-
154	21.5	Royal Mail tunnels	0	0	0	-	-
<u>154</u>	<u>21.6</u>	<u>Historical railways</u>	0	0	4	-	-
<u>155</u>	<u>21.7</u>	<u>Railways</u>	0	0	24	-	-
156	21.8	Crossrail 1	0	0	0	0	-
156	21.9	Crossrail 2	0	0	0	0	-
156	21.10	HS2	0	0	0	0	-



Recent aerial photograph



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Capture Date: 23/05/2019

Site Area: 1.02ha



Contact us with any questions at:

info@groundsure.com

08444 159 000

Date: 19 October 2020

Recent site history - 2015 aerial photograph



Capture Date: 11/06/2015

Site Area: 1.02ha



Contact us with any questions at:

info@groundsure.com

08444 159 000

Date: 19 October 2020

Recent site history - 2011 aerial photograph



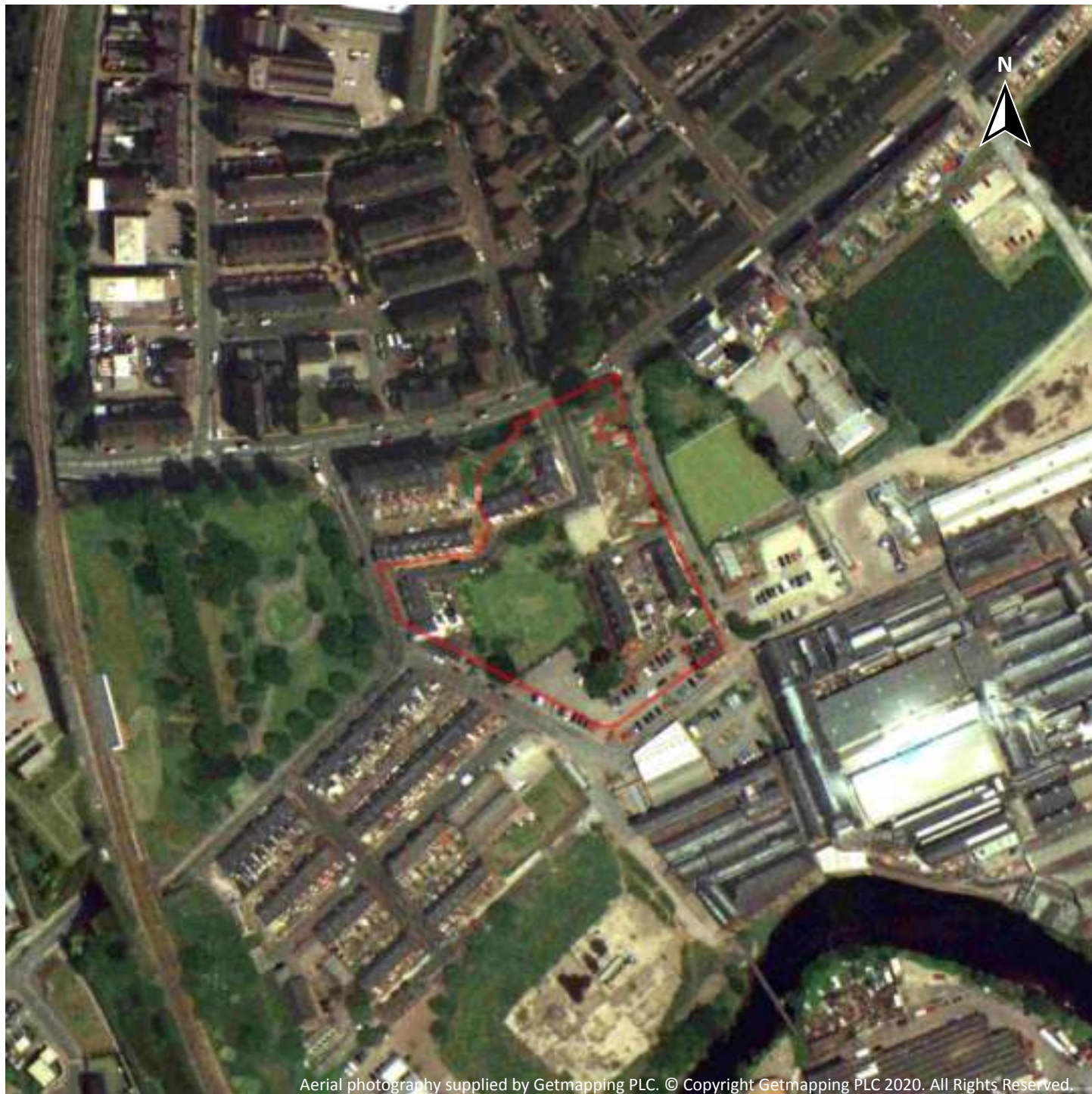
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Capture Date: 02/05/2011

Site Area: 1.02ha



Recent site history - 2000 aerial photograph



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Capture Date: 27/06/2000

Site Area: 1.02ha



OS MasterMap site plan



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Site Area: 1.02ha



1 Past land use



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

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1.1 Historical industrial land uses

Records within 500m

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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	Brewery	1851	672160



ID	Location	Land use	Dates present	Group ID
B	6m SE	Unspecified Mill	1965	656767
C	10m SE	Paper Mill	1955	747342
B	10m SE	Paper Mill	1977	752930
C	11m SE	Paper Mill	1891 - 1938	754835
B	13m SE	Paper Mill	1988 - 1991	738283
D	21m W	Gravel Pit	1851	652857
E	25m SW	Unspecified Mill	1955	759364
E	28m S	Unspecified Mill	1965 - 1991	767702
E	51m S	Unspecified Mill	1908 - 1938	743686
D	54m W	Refuse Heap	1908	758978
F	63m N	Unspecified Mill	1908	771373
F	63m N	Unspecified Commercial/Industrial	1891	643349
F	63m N	Unspecified Mill	1927 - 1938	713990
C	64m E	Barracks	1851	693095
F	70m N	Unspecified Mill	1965	729758
D	75m W	Refuse Heap	1927 - 1938	764696
B	107m E	Print Works	1851 - 1891	731949
D	110m W	Railway Station	1965	725611
D	112m W	Railway Station	1988 - 1991	704324
D	113m W	Railway Station	1977	786452
G	120m SE	Cotton Mills	1977	659316
G	120m SE	Unspecified Mills	1988 - 1991	704567
G	120m SE	Unspecified Mills	1965	739051
D	122m W	Railway Station	1955	736411
H	125m N	Unspecified Works	1977 - 1991	725304
G	127m SE	Unspecified Mill	1955	656766
D	128m W	Railway Station	1891 - 1938	782244
H	129m N	Unspecified Works	1965	724121



ID	Location	Land use	Dates present	Group ID
H	130m NW	Railway Sidings	1955	768828
I	130m SE	Railway Sidings	1927 - 1938	736519
H	132m NW	Railway Sidings	1965	770535
H	132m W	Railway Sidings	1891	720079
H	132m W	Railway Sidings	1908 - 1927	741317
H	132m W	Railway Sidings	1938	791022
2	140m SW	Unspecified Works	1965 - 1991	762683
3	143m SE	Unspecified Works	1988 - 1991	765296
D	148m SW	Railway Building	1955	670348
B	148m E	Unspecified Tanks	1908	666456
B	148m E	Filter Beds	1927 - 1938	711639
B	154m SE	Railway Sidings	1955	724525
D	156m SW	Railway Building	1891 - 1938	700111
K	158m W	Railway Buildings	1965	681653
K	160m W	Railway Building	1955	788787
K	160m W	Railway Building	1908	766658
4	161m NE	Bleach Works	1851	658161
5	161m S	Unspecified Ground Workings	1965 - 1991	721999
L	161m SW	Railway Building	1955	670351
G	163m SE	Unspecified Mills	1908 - 1938	772610
K	164m W	Railway Buildings	1938	681651
6	165m NE	Unspecified Works	1977 - 1991	773215
L	169m SW	Junction Station	1908	659384
L	169m SW	Railway Building	1938	787323
L	169m SW	Railway Building	1891	789355
K	176m NW	Railway Building	1955	670347
B	178m E	Filter Beds	1927 - 1938	750959
B	187m E	Filter Beds	1955	767266



ID	Location	Land use	Dates present	Group ID
K	187m W	Railway Buildings	1955	681652
B	187m SE	Unspecified Tank	1891	674802
M	194m SW	Timber Yard	1988 - 1991	767289
B	195m E	Unspecified Tanks	1908	666455
K	199m W	Railway Building	1955	702193
B	200m E	Unspecified Ground Workings	1927 - 1938	751625
B	202m E	Unspecified Ground Workings	1955	770611
N	202m E	Filter Beds	1955	745462
O	209m SW	Unspecified Works	1965	679081
N	210m NE	Filter Beds	1927 - 1938	740593
B	210m E	Gasometer	1851	655144
K	210m W	Railway Building	1908	729914
7	211m W	Railway Building	1955	670350
O	216m SW	Chemical Works	1955	721911
O	224m SW	Chemical Works	1927 - 1938	724314
P	224m W	Unspecified Mill	1991	656763
P	224m W	Unspecified Commercial/Industrial	1977 - 1988	763484
K	226m W	Goods Sheds	1965	691683
K	227m W	Goods Station	1908	778227
K	227m W	Goods Station	1955	762621
K	230m W	Good Station	1891	644023
K	230m W	Goods Station	1927 - 1938	773782
H	231m NW	Iron Works	1908	672245
K	236m W	Railway Building	1908	670349
H	237m NW	Unspecified Works	1965	679060
G	244m SE	Unspecified Tank	1908	727343
G	244m SE	Unspecified Tank	1938	753697
9	251m SE	Refuse Heap	1977	787422



ID	Location	Land use	Dates present	Group ID
H	252m NW	Goods Yard	1965	659613
H	253m NW	Goods Sheds	1955	691682
H	254m NW	Railway Building	1927 - 1938	745301
H	256m NW	Dye Works	1908	681891
N	264m NE	Filter Beds	1927 - 1938	744467
H	272m NW	Railway Building	1908	767476
T	275m SW	Unspecified Works	1965	776856
I	276m E	Refuse Heap	1908	724060
T	281m SW	Unspecified Works	1977 - 1991	741370
Q	283m NW	Colliery	1891	645293
M	290m SW	Refuse Heap	1965	678024
T	290m SW	Refuse Heap	1965	678031
V	293m W	Unspecified Ground Workings	1988	697607
P	293m W	Industrial Estate	1988 - 1991	748531
P	293m W	Unspecified Works	1965 - 1977	773599
Q	293m NW	Refuse Heap	1908	760800
V	294m W	Unspecified Ground Workings	1965 - 1977	784113
Q	295m NW	Refuse Heap	1891	779808
P	300m W	Iron Works	1955	775999
W	303m SW	Unspecified Heap	1891	650989
T	305m SW	Unspecified Commercial/Industrial	1955	643354
V	307m W	Unspecified Ground Workings	1938	704395
X	308m E	Sewage Works	1908	769944
P	308m W	Iron Works	1927 - 1938	705908
P	308m W	Unspecified Commercial/Industrial	1891 - 1908	739634
V	310m W	Unspecified Ground Workings	1955	735131
Y	315m NW	Unspecified Ground Workings	1977 - 1991	777235
X	323m E	Unspecified Ground Workings	1965	648181

ID	Location	Land use	Dates present	Group ID
Z	323m NE	Soap Works	1891	682700
Z	323m NE	Unspecified Commercial/Industrial	1908 - 1927	717282
AA	324m SW	Sandstone Quarry	1851	686656
Y	326m NW	Railway Building	1891	670340
Y	326m NW	Goods Sheds	1908 - 1938	754044
AB	327m S	Unspecified Works	1965	679078
AB	327m S	Unspecified Commercial/Industrial	1977	750221
Y	329m NW	Cuttings	1965	788563
AB	331m S	Unspecified Commercial/Industrial	1955	708864
X	331m E	Unspecified Heaps	1965	679643
X	332m E	Refuse Heap	1977	790838
Y	332m NW	Cuttings	1955	733559
10	332m NW	Cuttings	1851	743135
AB	333m S	Unspecified Commercial/Industrial	1988 - 1991	784304
AC	335m NW	Cuttings	1927	756389
Y	336m NW	Cuttings	1908	754462
Y	336m NW	Cuttings	1891	776151
T	337m S	Unspecified Mills	1908 - 1938	746009
T	337m S	Unspecified Commercial/Industrial	1891	772047
W	337m SW	Dye Works	1851	681880
Q	343m NW	Refuse Heap	1927 - 1938	697784
X	343m E	Sewage Works	1927 - 1938	771592
AD	344m W	Cuttings	1938 - 1988	734643
AA	344m SW	Unspecified Ground Workings	1891	648167
11	347m NW	Railway Sidings	1988 - 1991	746287
X	347m E	Sewage Works	1955	742810
T	351m SW	Railway Sidings	1955	641665
12	355m NW	Railway Building	1891	670346

ID	Location	Land use	Dates present	Group ID
T	355m SW	Unspecified Mill	1965	656764
Q	355m N	Unspecified Ground Workings	1955	648152
AD	356m W	Cuttings	1955	740221
AD	361m W	Cuttings	1891 - 1908	705309
X	363m E	Unspecified Tanks	1908	666454
AE	367m NW	Railway Building	1927 - 1938	725307
AF	368m W	Unspecified Commercial/Industrial	1977	643348
AF	368m W	Unspecified Works	1965	679082
AE	370m NW	Railway Building	1955	773543
Q	373m N	Refuse Heap	1891	726545
T	379m SW	Unspecified Mills	1965	757593
13	382m NW	Railway Sidings	1977	784849
X	383m SE	Unspecified Tanks	1908	666453
X	384m E	Refuse Heap	1927 - 1938	759592
AG	384m NW	Unspecified Ground Workings	1927 - 1938	737329
AH	385m SW	Unspecified Works	1988 - 1991	777650
AH	386m SW	Unspecified Commercial/Industrial	1977	643353
T	388m SW	Unspecified Mills	1955	784683
Z	393m NE	Unspecified Works	1965	679063
X	393m E	Refuse Heap	1955	743623
X	393m E	Unspecified Heap	1955	650892
15	399m SE	Refuse Heap	1988 - 1991	755598
AI	405m S	Cuttings	1965 - 1991	709910
AC	406m W	Cuttings	1988	710586
AI	406m S	Cuttings	1955	774935
AC	410m W	Cuttings	1851	758394
AI	410m S	Cuttings	1891 - 1938	755502
AC	411m W	Cuttings	1938	737977



ID	Location	Land use	Dates present	Group ID
AC	411m W	Cuttings	1891 - 1908	767946
AJ	412m NE	Tower Works	1955	778655
AJ	412m E	Unspecified Commercial/Industrial	1908	694693
AJ	412m E	Tower Works	1927 - 1938	704950
AJ	412m E	Unspecified Commercial/Industrial	1891	771773
AC	414m W	Cuttings	1955 - 1977	726792
AJ	422m E	Unspecified Works	1988 - 1991	751996
AJ	424m NE	Unspecified Works	1965	727566
AJ	424m NE	Unspecified Commercial/Industrial	1977	774253
AK	427m NE	Unspecified Mill	1908 - 1938	711306
AK	427m NE	Unspecified Commercial/Industrial	1891	782718
AH	430m SW	Cotton Mill	1851	644067
AK	433m NE	Unspecified Mill	1955	696615
AK	437m NE	Unspecified Works	1988 - 1991	728251
AK	439m NE	Unspecified Commercial/Industrial	1977	718948
AK	439m NE	Unspecified Mill	1965	750445
AL	439m W	Refuse Heap	1908	678023
AG	448m NW	Railway Building	1955	753043
AG	449m NW	Railway Building	1927 - 1938	743927
AG	450m NW	Railway Building	1965 - 1977	755344
AN	455m SE	Unspecified Ground Workings	1851	746947
X	456m E	Filter Beds	1891	665813
AN	457m S	Unspecified Ground Workings	1927 - 1938	698249
16	467m N	Railway Building	1891	670345
AL	474m W	Refuse Heap	1908	678022
AG	477m NW	Disused Canal	1988 - 1991	788290
AG	479m NW	Disused Canal	1977	706247
18	496m NW	Colliery	1891	645294

This data is sourced from Ordnance Survey / Groundsure.



1.2 Historical tanks

Records within 500m

61

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
1	45m SE	Unspecified Tank	1956	94735
B	93m NE	Tanks	1984 - 1996	102509
B	93m NE	Unspecified Tank	1909	100091
F	94m N	Unspecified Tank	1893	85020
B	115m NE	Unspecified Tank	1984	95540
B	116m NE	Unspecified Tank	1956	102574
B	116m NE	Unspecified Tank	1956	89402
B	132m NE	Unspecified Tank	1984 - 1987	101215
B	133m NE	Unspecified Tank	1956 - 1996	98708
B	134m NE	Unspecified Tank	1929 - 1937	99697
B	134m E	Unspecified Tank	1956	95770
B	148m E	Unspecified Tank	1956 - 1996	104149
B	150m SE	Tanks	1929 - 1937	90009
B	150m E	Unspecified Tank	1956	99474
E	163m S	Unspecified Tank	1956 - 1987	95156
B	165m E	Unspecified Tank	1956	88735
B	165m E	Unspecified Tank	1956 - 1996	94224
E	170m S	Unspecified Tank	1929 - 1937	96272
B	188m E	Settling Tanks	1956	99970
B	188m SE	Unspecified Tank	1893	85036
B	189m E	Settling Tanks	1956	97227



ID	Location	Land use	Dates present	Group ID
B	189m E	Settling Tanks	1984 - 1987	99461
B	190m E	Settling Tanks	1996	92380
B	191m E	Unspecified Tank	1984	101766
B	192m E	Tanks	1909	87877
B	193m E	Unspecified Tank	1956	92508
B	193m E	Unspecified Tank	1956	100722
B	199m E	Unspecified Tank	1956 - 1996	90801
B	203m E	Unspecified Tank	1956 - 1987	94455
B	213m E	Unspecified Tank	1984 - 1987	91954
B	213m E	Unspecified Tank	1956 - 1996	102147
Q	224m N	Tanks	1988	87883
8	226m NE	Tanks	1985 - 1987	93339
B	226m E	Unspecified Tank	1996	85024
G	233m SE	Unspecified Tank	1956	99607
G	233m SE	Unspecified Tank	1956	95677
R	238m N	Unspecified Tank	1956	89496
R	239m N	Unspecified Tank	1956	93292
H	270m NW	Unspecified Tank	1909 - 1937	91491
X	334m E	Unspecified Tank	1996	85023
AA	351m SW	Tanks	1909	87880
AB	358m S	Tanks	1981 - 1994	96357
X	377m SE	Tanks	1909 - 1937	97918
X	378m SE	Unspecified Tank	1956	94625
Z	395m NE	Unspecified Tank	1929 - 1937	97446
T	400m SW	Unspecified Tank	1956 - 1970	100605
X	403m E	Unspecified Tank	1956	103930
X	403m E	Unspecified Tank	1956	94050
AF	406m W	Unspecified Tank	1956	102761

ID	Location	Land use	Dates present	Group ID
T	406m SW	Unspecified Tank	1929 - 1937	92840
X	428m E	Tanks	1956	92422
T	441m SW	Tanks	1955	102152
T	449m SW	Tanks	1955	97577
T	452m SW	Tanks	1955	98096
T	453m SW	Tanks	1955	92130
AJ	453m E	Unspecified Tank	1956 - 1994	95441
T	455m SW	Tanks	1955	93690
AJ	470m E	Unspecified Tank	1980 - 1992	101029
AJ	470m E	Unspecified Tank	1956 - 1998	94223
T	488m SW	Unspecified Tank	1929 - 1937	104207
17	491m W	Unspecified Tank	1909	85019

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

38

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	On site	Electricity Substation	1996	54390
A	1m S	Electricity Substation	1984 - 1987	54833
D	141m W	Electricity Substation	1994 - 1995	49012
E	143m S	Electricity Substation	1956	58290
E	143m S	Electricity Substation	1956 - 1996	48810
J	148m SE	Electricity Substation	1956 - 1987	47803



ID	Location	Land use	Dates present	Group ID
J	149m SE	Electricity Substation	1956	49307
B	179m E	Electricity Substation	1984 - 1996	48907
B	179m SE	Electricity Substation	1956 - 1984	54747
B	186m E	Electricity Substation	1956	57699
K	191m NW	Electricity Substation	1995	47864
K	191m NW	Electricity Substation	1988	55715
K	206m NW	Electricity Substation	1988 - 1995	53833
H	217m NW	Electricity Substation	1956 - 1995	52654
B	219m E	Electricity Substation	1956	45640
H	223m NW	Electricity Substation	1988	45636
B	225m E	Electricity Substation	1956 - 1996	56250
H	250m NW	Electricity Substation	1956	47533
H	251m NW	Electricity Substation	1956 - 1995	54507
H	252m NW	Electricity Substation	1988	57575
B	258m E	Electricity Substation	1996	45639
U	285m SE	Electricity Substation	1984 - 1987	47616
U	286m SE	Electricity Substation	1996	52574
P	301m W	Electricity Substation	1956	55625
AB	346m S	Electricity Substation	1970 - 1995	47168
14	383m W	Electricity Substation	1970 - 1995	53640
T	394m SW	Electricity Substation	1955	52078
Z	398m NE	Electricity Substation	1985 - 1987	51206
Z	398m NE	Electricity Substation	1956 - 1994	57450
Z	400m NE	Electricity Substation	1956	58081
AG	446m NW	Electricity Substation	1956	47823
X	454m E	Electricity Substation	1956	58153
AM	454m SW	Electricity Substation	1970	50924
AM	454m SW	Electricity Substation	1989	59333



ID	Location	Land use	Dates present	Group ID
AM	455m SW	Electricity Substation	1978 - 1988	49397
AM	456m SW	Electricity Substation	1994 - 1995	56565
AJ	479m E	Electricity Substation	1956 - 1998	47202
AJ	485m E	Electricity Substation	1956	45638

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0
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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	10
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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
S	259m S	Garage	1956	15002
S	259m S	Garage	1956	17424
S	261m S	Garage	1984 - 1987	18996
S	264m S	Garage	1970 - 1978	19299
Q	266m NW	Garage	1956	19090
Q	282m NW	Garage	1956	16514
Q	301m NW	Garage	1956	16435



ID	Location	Land use	Dates present	Group ID
Z	330m NE	Garage	1956 - 1966	17769
Z	331m NE	Garage	1956	16941
Z	381m NE	Garage	1987 - 1994	18556

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

287

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

Features are displayed on the Past land use - un-grouped map on **page 27**

ID	Location	Land Use	Date	Group ID
A	On site	Brewery	1851	672160
B	6m SE	Unspecified Mill	1965	656767
C	10m SE	Paper Mill	1955	747342



ID	Location	Land Use	Date	Group ID
B	10m SE	Paper Mill	1977	752930
C	11m SE	Paper Mill	1938	754835
C	11m SE	Paper Mill	1927	754835
C	11m SE	Paper Mill	1908	754835
C	11m SE	Paper Mill	1891	754835
B	13m SE	Paper Mill	1991	738283
B	13m SE	Paper Mill	1988	738283
D	21m W	Gravel Pit	1851	652857
E	25m SW	Unspecified Mill	1955	759364
E	28m S	Unspecified Mill	1991	767702
E	28m S	Unspecified Mill	1977	767702
E	28m S	Unspecified Mill	1965	767702
E	28m S	Unspecified Mill	1988	767702
E	51m S	Unspecified Mill	1938	743686
E	51m S	Unspecified Mill	1927	743686
E	51m S	Unspecified Mill	1908	743686
D	54m W	Refuse Heap	1908	758978
G	63m N	Unspecified Mill	1908	771373
G	63m N	Unspecified Mill	1938	713990
G	63m N	Unspecified Mill	1927	713990
G	63m N	Unspecified Commercial/Industrial	1891	643349
C	64m E	Barracks	1851	693095
G	70m N	Unspecified Mill	1965	729758
D	75m W	Refuse Heap	1938	764696
D	75m W	Refuse Heap	1927	764696
B	107m E	Print Works	1851	731949
D	110m W	Railway Station	1965	725611
D	112m W	Railway Station	1991	704324



ID	Location	Land Use	Date	Group ID
D	112m W	Railway Station	1988	704324
D	113m W	Railway Station	1977	786452
H	120m SE	Unspecified Mills	1991	704567
H	120m SE	Cotton Mills	1977	659316
H	120m SE	Unspecified Mills	1965	739051
H	120m SE	Unspecified Mills	1988	704567
D	122m W	Railway Station	1955	736411
I	125m N	Unspecified Works	1991	725304
I	125m N	Unspecified Works	1977	725304
I	125m N	Unspecified Works	1988	725304
H	127m SE	Unspecified Mill	1955	656766
D	128m W	Railway Station	1938	782244
D	128m W	Railway Station	1927	782244
D	128m W	Railway Station	1908	782244
D	128m W	Railway Station	1891	782244
I	129m N	Unspecified Works	1965	724121
I	130m NW	Railway Sidings	1955	768828
J	130m SE	Railway Sidings	1938	736519
J	130m SE	Railway Sidings	1927	736519
I	132m NW	Railway Sidings	1965	770535
I	132m W	Railway Sidings	1938	791022
I	132m W	Railway Sidings	1927	741317
I	132m W	Railway Sidings	1908	741317
I	132m W	Railway Sidings	1891	720079
B	134m E	Print Works	1891	731949
K	140m SW	Unspecified Works	1991	762683
K	140m SW	Unspecified Works	1988	762683
L	143m SE	Unspecified Works	1991	765296



ID	Location	Land Use	Date	Group ID
L	143m SE	Unspecified Works	1988	765296
K	143m SW	Unspecified Works	1977	762683
K	143m SW	Unspecified Works	1965	762683
D	148m SW	Railway Building	1955	670348
B	148m E	Filter Beds	1938	711639
B	148m E	Filter Beds	1927	711639
B	148m E	Unspecified Tanks	1908	666456
B	154m SE	Railway Sidings	1955	724525
D	156m SW	Railway Building	1938	700111
D	156m SW	Railway Building	1927	700111
D	156m SW	Railway Building	1908	700111
D	156m SW	Railway Building	1891	700111
N	158m W	Railway Buildings	1965	681653
N	160m W	Railway Building	1955	788787
N	160m W	Railway Building	1908	766658
1	161m NE	Bleach Works	1851	658161
O	161m SW	Railway Building	1955	670351
P	161m S	Unspecified Ground Workings	1991	721999
P	161m S	Unspecified Ground Workings	1977	721999
P	161m S	Unspecified Ground Workings	1965	721999
P	161m S	Unspecified Ground Workings	1988	721999
H	163m SE	Unspecified Mills	1938	772610
H	163m SE	Unspecified Mills	1927	772610
H	163m SE	Unspecified Mills	1908	772610
N	164m W	Railway Buildings	1938	681651
Q	165m NE	Unspecified Works	1991	773215
Q	165m NE	Unspecified Works	1977	773215
Q	165m NE	Unspecified Works	1988	773215



ID	Location	Land Use	Date	Group ID
O	169m SW	Railway Building	1938	787323
O	169m SW	Junction Station	1908	659384
O	169m SW	Railway Building	1891	789355
N	176m NW	Railway Building	1955	670347
B	178m E	Filter Beds	1938	750959
B	178m E	Filter Beds	1927	750959
B	187m E	Filter Beds	1955	767266
N	187m W	Railway Buildings	1955	681652
B	187m SE	Unspecified Tank	1891	674802
R	194m SW	Timber Yard	1991	767289
R	194m SW	Timber Yard	1988	767289
B	195m E	Unspecified Tanks	1908	666455
N	199m W	Railway Building	1955	702193
B	200m E	Unspecified Ground Workings	1938	751625
B	200m E	Unspecified Ground Workings	1927	751625
B	202m E	Unspecified Ground Workings	1955	770611
S	202m E	Filter Beds	1955	745462
R	209m SW	Unspecified Works	1965	679081
S	210m NE	Filter Beds	1938	740593
S	210m NE	Filter Beds	1927	740593
B	210m E	Gasometer	1851	655144
N	210m W	Railway Building	1908	729914
2	211m W	Railway Building	1955	670350
R	216m SW	Chemical Works	1955	721911
R	224m SW	Chemical Works	1938	724314
R	224m SW	Chemical Works	1927	724314
T	224m W	Unspecified Mill	1991	656763
T	224m W	Unspecified Commercial/Industrial	1977	763484



ID	Location	Land Use	Date	Group ID
T	224m W	Unspecified Commercial/Industrial	1988	763484
N	226m W	Goods Sheds	1965	691683
N	227m W	Goods Station	1908	778227
N	227m W	Goods Station	1955	762621
N	230m W	Goods Station	1938	773782
N	230m W	Goods Station	1927	773782
N	230m W	Good Station	1891	644023
I	231m NW	Iron Works	1908	672245
N	236m W	Railway Building	1908	670349
I	237m NW	Unspecified Works	1965	679060
H	244m SE	Unspecified Tank	1938	753697
H	244m SE	Unspecified Tank	1908	727343
3	251m SE	Refuse Heap	1977	787422
I	252m NW	Goods Yard	1965	659613
I	253m NW	Goods Sheds	1955	691682
I	254m NW	Railway Building	1938	745301
I	254m NW	Railway Building	1927	745301
I	256m NW	Dye Works	1908	681891
S	264m NE	Filter Beds	1938	744467
S	264m NE	Filter Beds	1927	744467
I	272m NW	Railway Building	1908	767476
Y	275m SW	Unspecified Works	1965	776856
J	276m E	Refuse Heap	1908	724060
Y	281m SW	Unspecified Works	1991	741370
Y	281m SW	Unspecified Works	1977	741370
Y	281m SW	Unspecified Works	1988	741370
U	283m NW	Colliery	1891	645293
R	290m SW	Refuse Heap	1965	678024



ID	Location	Land Use	Date	Group ID
Y	290m SW	Refuse Heap	1965	678031
AA	293m W	Unspecified Ground Workings	1988	697607
T	293m W	Unspecified Works	1977	773599
T	293m W	Industrial Estate	1988	748531
U	293m NW	Refuse Heap	1908	760800
T	294m W	Industrial Estate	1991	748531
AA	294m W	Unspecified Ground Workings	1977	784113
AA	294m W	Unspecified Ground Workings	1965	784113
U	295m NW	Refuse Heap	1891	779808
T	295m W	Unspecified Works	1965	773599
T	300m W	Iron Works	1955	775999
AB	303m SW	Unspecified Heap	1891	650989
Y	305m SW	Unspecified Commercial/Industrial	1955	643354
AA	307m W	Unspecified Ground Workings	1938	704395
AC	308m E	Sewage Works	1908	769944
T	308m W	Iron Works	1938	705908
T	308m W	Iron Works	1927	705908
T	308m W	Unspecified Commercial/Industrial	1908	739634
T	308m W	Unspecified Commercial/Industrial	1891	739634
AA	310m W	Unspecified Ground Workings	1955	735131
AD	315m NW	Unspecified Ground Workings	1991	777235
AD	315m NW	Unspecified Ground Workings	1977	777235
AD	315m NW	Unspecified Ground Workings	1988	777235
AC	323m E	Unspecified Ground Workings	1965	648181
AE	323m NE	Unspecified Commercial/Industrial	1927	717282
AE	323m NE	Unspecified Commercial/Industrial	1908	717282
AE	323m NE	Soap Works	1891	682700
AF	324m SW	Sandstone Quarry	1851	686656



ID	Location	Land Use	Date	Group ID
AD	326m NW	Goods Sheds	1938	754044
AD	326m NW	Goods Sheds	1927	754044
AD	326m NW	Goods Sheds	1908	754044
AD	326m NW	Railway Building	1891	670340
AG	327m S	Unspecified Commercial/Industrial	1977	750221
AG	327m S	Unspecified Works	1965	679078
AD	329m NW	Cuttings	1965	788563
AG	331m S	Unspecified Commercial/Industrial	1955	708864
AC	331m E	Unspecified Heaps	1965	679643
AC	332m E	Refuse Heap	1977	790838
AD	332m NW	Cuttings	1955	733559
4	332m NW	Cuttings	1851	743135
AG	333m S	Unspecified Commercial/Industrial	1991	784304
AG	333m S	Unspecified Commercial/Industrial	1988	784304
AH	335m NW	Cuttings	1927	756389
AD	336m NW	Cuttings	1908	754462
AD	336m NW	Cuttings	1891	776151
Y	337m S	Unspecified Mills	1938	746009
Y	337m S	Unspecified Mills	1927	746009
Y	337m S	Unspecified Mills	1908	746009
Y	337m S	Unspecified Commercial/Industrial	1891	772047
AB	337m SW	Dye Works	1851	681880
U	343m NW	Refuse Heap	1938	697784
U	343m NW	Refuse Heap	1927	697784
AC	343m E	Sewage Works	1938	771592
AC	343m E	Sewage Works	1927	771592
AA	344m W	Cuttings	1977	734643
AA	344m W	Cuttings	1965	734643



ID	Location	Land Use	Date	Group ID
AA	344m W	Cuttings	1988	734643
AF	344m SW	Unspecified Ground Workings	1891	648167
AI	347m NW	Railway Sidings	1991	746287
AI	347m NW	Railway Sidings	1988	746287
AC	347m E	Sewage Works	1955	742810
Y	351m SW	Railway Sidings	1955	641665
5	355m NW	Railway Building	1891	670346
Y	355m SW	Unspecified Mill	1965	656764
U	355m N	Unspecified Ground Workings	1955	648152
AA	356m W	Cuttings	1955	740221
AA	361m W	Cuttings	1938	734643
AA	361m W	Cuttings	1908	705309
AA	361m W	Cuttings	1891	705309
AC	363m E	Unspecified Tanks	1908	666454
AJ	367m NW	Railway Building	1938	725307
AJ	367m NW	Railway Building	1927	725307
AK	368m W	Unspecified Commercial/Industrial	1977	643348
AK	368m W	Unspecified Works	1965	679082
AJ	370m NW	Railway Building	1955	773543
U	373m N	Refuse Heap	1891	726545
Y	379m SW	Unspecified Mills	1965	757593
6	382m NW	Railway Sidings	1977	784849
AC	383m SE	Unspecified Tanks	1908	666453
AC	384m E	Refuse Heap	1938	759592
AC	384m E	Refuse Heap	1927	759592
AM	384m NW	Unspecified Ground Workings	1938	737329
AM	384m NW	Unspecified Ground Workings	1927	737329
AN	385m SW	Unspecified Works	1991	777650



ID	Location	Land Use	Date	Group ID
AN	385m SW	Unspecified Works	1988	777650
AN	386m SW	Unspecified Commercial/Industrial	1977	643353
Y	388m SW	Unspecified Mills	1955	784683
AE	393m NE	Unspecified Works	1965	679063
AC	393m E	Refuse Heap	1955	743623
AC	393m E	Unspecified Heap	1955	650892
AO	399m SE	Refuse Heap	1991	755598
AO	399m SE	Refuse Heap	1988	755598
AP	405m S	Cuttings	1991	709910
AP	405m S	Cuttings	1977	709910
AP	405m S	Cuttings	1965	709910
AP	405m S	Cuttings	1988	709910
AH	406m W	Cuttings	1988	710586
AP	406m S	Cuttings	1955	774935
AH	410m W	Cuttings	1851	758394
AP	410m S	Cuttings	1938	755502
AP	410m S	Cuttings	1927	755502
AP	410m S	Cuttings	1908	755502
AP	410m S	Cuttings	1891	755502
AH	411m W	Cuttings	1938	737977
AH	411m W	Cuttings	1908	767946
AH	411m W	Cuttings	1891	767946
AQ	412m NE	Tower Works	1955	778655
AQ	412m E	Tower Works	1938	704950
AQ	412m E	Tower Works	1927	704950
AQ	412m E	Unspecified Commercial/Industrial	1908	694693
AQ	412m E	Unspecified Commercial/Industrial	1891	771773
AH	414m W	Cuttings	1977	726792



ID	Location	Land Use	Date	Group ID
AH	414m W	Cuttings	1965	726792
AH	414m W	Cuttings	1955	726792
AQ	422m E	Unspecified Works	1991	751996
AQ	422m E	Unspecified Works	1988	751996
AQ	424m NE	Unspecified Commercial/Industrial	1977	774253
AQ	424m NE	Unspecified Works	1965	727566
AR	427m NE	Unspecified Mill	1938	711306
AR	427m NE	Unspecified Mill	1927	711306
AR	427m NE	Unspecified Mill	1908	711306
AR	427m NE	Unspecified Commercial/Industrial	1891	782718
AN	430m SW	Cotton Mill	1851	644067
AR	433m NE	Unspecified Mill	1955	696615
AR	437m NE	Unspecified Works	1991	728251
AR	437m NE	Unspecified Works	1988	728251
AR	439m NE	Unspecified Commercial/Industrial	1977	718948
AR	439m NE	Unspecified Mill	1965	750445
AS	439m W	Refuse Heap	1908	678023
AM	448m NW	Railway Building	1955	753043
AM	449m NW	Railway Building	1938	743927
AM	449m NW	Railway Building	1927	743927
AM	450m NW	Railway Building	1977	755344
AM	450m NW	Railway Building	1965	755344
AU	455m SE	Unspecified Ground Workings	1851	746947
AC	456m E	Filter Beds	1891	665813
AU	457m S	Unspecified Ground Workings	1938	698249
AU	457m S	Unspecified Ground Workings	1927	698249
7	467m N	Railway Building	1891	670345
AS	474m W	Refuse Heap	1908	678022



ID	Location	Land Use	Date	Group ID
AM	477m NW	Disused Canal	1991	788290
AM	477m NW	Disused Canal	1988	788290
AM	479m NW	Disused Canal	1977	706247
9	496m NW	Colliery	1891	645294

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

119

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

Features are displayed on the Past land use - un-grouped map on **page 27**

ID	Location	Land Use	Date	Group ID
F	45m SE	Unspecified Tank	1956	94735
F	46m SE	Unspecified Tank	1956	94735
B	93m NE	Tanks	1996	102509
B	93m NE	Tanks	1984	102509
B	93m NE	Tanks	1987	102509
B	93m NE	Unspecified Tank	1909	100091
G	94m N	Unspecified Tank	1893	85020
B	115m NE	Unspecified Tank	1984	95540
B	116m NE	Unspecified Tank	1956	102574
B	116m NE	Unspecified Tank	1956	89402
B	132m NE	Unspecified Tank	1984	101215
B	132m NE	Unspecified Tank	1987	101215
B	133m NE	Unspecified Tank	1996	98708
B	133m E	Unspecified Tank	1956	98708
B	134m NE	Unspecified Tank	1929	99697
B	134m NE	Unspecified Tank	1937	99697



ID	Location	Land Use	Date	Group ID
B	134m E	Unspecified Tank	1956	95770
B	148m E	Unspecified Tank	1984	104149
B	148m E	Unspecified Tank	1987	104149
B	149m E	Unspecified Tank	1996	104149
B	149m E	Unspecified Tank	1956	104149
B	150m SE	Tanks	1929	90009
B	150m SE	Tanks	1937	90009
B	150m E	Unspecified Tank	1956	99474
E	163m S	Unspecified Tank	1956	95156
E	163m S	Unspecified Tank	1984	95156
E	163m S	Unspecified Tank	1987	95156
E	164m S	Unspecified Tank	1956	95156
B	165m E	Unspecified Tank	1956	88735
B	165m E	Unspecified Tank	1984	94224
B	165m E	Unspecified Tank	1987	94224
B	166m NE	Unspecified Tank	1996	94224
B	167m E	Unspecified Tank	1956	94224
E	170m S	Unspecified Tank	1929	96272
E	170m S	Unspecified Tank	1937	96272
B	188m E	Settling Tanks	1956	99970
B	188m SE	Unspecified Tank	1893	85036
B	189m E	Settling Tanks	1956	97227
B	189m E	Settling Tanks	1984	99461
B	189m E	Settling Tanks	1987	99461
B	190m E	Settling Tanks	1996	92380
B	191m E	Unspecified Tank	1984	101766
B	192m E	Tanks	1909	87877
B	193m E	Unspecified Tank	1956	92508



ID	Location	Land Use	Date	Group ID
B	193m E	Unspecified Tank	1956	100722
B	199m E	Unspecified Tank	1984	90801
B	199m E	Unspecified Tank	1987	90801
B	200m E	Unspecified Tank	1996	90801
B	200m E	Unspecified Tank	1956	90801
B	200m E	Unspecified Tank	1956	90801
B	203m E	Unspecified Tank	1984	94455
B	203m E	Unspecified Tank	1987	94455
B	204m E	Unspecified Tank	1956	94455
B	205m E	Unspecified Tank	1956	94455
B	213m E	Unspecified Tank	1984	91954
B	213m E	Unspecified Tank	1987	91954
B	213m E	Unspecified Tank	1996	102147
B	213m E	Unspecified Tank	1956	102147
B	215m E	Unspecified Tank	1956	102147
U	224m N	Tanks	1988	87883
V	226m NE	Tanks	1985	93339
V	226m NE	Tanks	1987	93339
B	226m E	Unspecified Tank	1996	85024
H	233m SE	Unspecified Tank	1956	99607
H	233m SE	Unspecified Tank	1956	95677
W	238m N	Unspecified Tank	1956	89496
W	239m N	Unspecified Tank	1956	93292
I	270m NW	Unspecified Tank	1929	91491
I	271m NW	Unspecified Tank	1909	91491
I	271m NW	Unspecified Tank	1937	91491
AC	334m E	Unspecified Tank	1996	85023
AF	351m SW	Tanks	1909	87880



ID	Location	Land Use	Date	Group ID
AG	358m S	Tanks	1989	96357
AG	358m S	Tanks	1994	96357
AG	358m S	Tanks	1981	96357
AG	358m S	Tanks	1988	96357
AG	358m S	Tanks	1988	96357
AG	358m S	Tanks	1992	96357
AC	377m SE	Tanks	1909	97918
AC	377m SE	Tanks	1929	97918
AC	377m SE	Tanks	1937	97918
AC	378m SE	Unspecified Tank	1956	94625
AC	379m SE	Unspecified Tank	1956	94625
AE	395m NE	Unspecified Tank	1929	97446
AE	395m NE	Unspecified Tank	1937	97446
Y	400m SW	Unspecified Tank	1956	100605
Y	400m SW	Unspecified Tank	1970	100605
AC	403m E	Unspecified Tank	1956	103930
AC	403m E	Unspecified Tank	1956	94050
AK	406m W	Unspecified Tank	1956	102761
Y	406m SW	Unspecified Tank	1929	92840
Y	406m SW	Unspecified Tank	1937	92840
AK	406m W	Unspecified Tank	1956	102761
AC	428m E	Tanks	1956	92422
AC	429m E	Tanks	1956	92422
Y	441m SW	Tanks	1955	102152
Y	442m SW	Tanks	1955	102152
Y	449m SW	Tanks	1955	97577
Y	449m SW	Tanks	1955	97577
Y	452m SW	Tanks	1955	98096



ID	Location	Land Use	Date	Group ID
Y	453m SW	Tanks	1955	92130
AQ	453m E	Unspecified Tank	1985	95441
AQ	453m E	Unspecified Tank	1987	95441
AQ	453m E	Unspecified Tank	1994	95441
AQ	454m E	Unspecified Tank	1966	95441
AQ	454m E	Unspecified Tank	1956	95441
Y	455m SW	Tanks	1955	93690
AQ	470m E	Unspecified Tank	1980	101029
AQ	470m E	Unspecified Tank	1987	101029
AQ	470m E	Unspecified Tank	1992	101029
AQ	470m E	Unspecified Tank	1996	94223
AQ	470m E	Unspecified Tank	1994	94223
AQ	470m E	Unspecified Tank	1998	94223
AQ	470m E	Unspecified Tank	1975	94223
AQ	470m E	Unspecified Tank	1956	94223
AQ	471m E	Unspecified Tank	1956	94223
Y	488m SW	Unspecified Tank	1929	104207
Y	488m SW	Unspecified Tank	1937	104207
8	491m W	Unspecified Tank	1909	85019

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

91

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

Features are displayed on the Past land use - un-grouped map on **page 27**

ID	Location	Land Use	Date	Group ID
A	On site	Electricity Substation	1996	54390



ID	Location	Land Use	Date	Group ID
A	1m S	Electricity Substation	1984	54833
A	1m S	Electricity Substation	1987	54833
D	141m W	Electricity Substation	1995	49012
D	141m W	Electricity Substation	1994	49012
D	141m W	Electricity Substation	1995	49012
E	143m S	Electricity Substation	1956	58290
E	143m S	Electricity Substation	1984	48810
E	143m S	Electricity Substation	1987	48810
E	144m S	Electricity Substation	1956	48810
E	145m S	Electricity Substation	1996	48810
M	148m SE	Electricity Substation	1984	47803
M	148m SE	Electricity Substation	1987	47803
M	148m SE	Electricity Substation	1956	47803
M	149m SE	Electricity Substation	1956	49307
B	179m E	Electricity Substation	1984	48907
B	179m E	Electricity Substation	1987	48907
B	179m SE	Electricity Substation	1984	54747
B	180m SE	Electricity Substation	1956	54747
B	180m E	Electricity Substation	1996	48907
B	180m SE	Electricity Substation	1956	54747
B	186m E	Electricity Substation	1956	57699
B	186m E	Electricity Substation	1956	57699
N	191m NW	Electricity Substation	1995	47864
N	191m NW	Electricity Substation	1995	47864
N	191m NW	Electricity Substation	1988	55715
N	206m NW	Electricity Substation	1995	53833
N	206m NW	Electricity Substation	1995	53833
N	207m NW	Electricity Substation	1988	53833



ID	Location	Land Use	Date	Group ID
I	217m NW	Electricity Substation	1956	52654
I	217m NW	Electricity Substation	1956	52654
I	218m NW	Electricity Substation	1995	52654
I	218m NW	Electricity Substation	1995	52654
B	219m E	Electricity Substation	1956	45640
I	223m NW	Electricity Substation	1988	45636
B	225m E	Electricity Substation	1984	56250
B	225m E	Electricity Substation	1987	56250
B	226m E	Electricity Substation	1996	56250
B	226m E	Electricity Substation	1956	56250
I	250m NW	Electricity Substation	1956	47533
I	251m NW	Electricity Substation	1956	54507
I	251m NW	Electricity Substation	1995	54507
I	251m NW	Electricity Substation	1995	54507
I	252m NW	Electricity Substation	1988	57575
B	258m E	Electricity Substation	1996	45639
Z	285m SE	Electricity Substation	1984	47616
Z	285m SE	Electricity Substation	1987	47616
Z	286m SE	Electricity Substation	1996	52574
T	301m W	Electricity Substation	1956	55625
T	302m W	Electricity Substation	1956	55625
AG	346m S	Electricity Substation	1978	47168
AG	346m S	Electricity Substation	1988	47168
AG	347m S	Electricity Substation	1995	47168
AG	347m S	Electricity Substation	1994	47168
AG	347m S	Electricity Substation	1995	47168
AG	347m S	Electricity Substation	1970	47168
AG	347m S	Electricity Substation	1989	47168



ID	Location	Land Use	Date	Group ID
AL	383m W	Electricity Substation	1978	53640
AL	383m W	Electricity Substation	1988	53640
AL	384m W	Electricity Substation	1970	53640
AL	384m W	Electricity Substation	1989	53640
AL	385m W	Electricity Substation	1995	53640
AL	385m W	Electricity Substation	1994	53640
AL	385m W	Electricity Substation	1995	53640
Y	394m SW	Electricity Substation	1955	52078
Y	395m SW	Electricity Substation	1955	52078
AE	398m NE	Electricity Substation	1985	51206
AE	398m NE	Electricity Substation	1987	51206
AE	398m NE	Electricity Substation	1994	57450
AE	400m NE	Electricity Substation	1956	58081
AE	400m NE	Electricity Substation	1956	57450
AM	446m NW	Electricity Substation	1956	47823
AM	447m NW	Electricity Substation	1956	47823
AC	454m E	Electricity Substation	1956	58153
AC	454m E	Electricity Substation	1956	58153
AT	454m SW	Electricity Substation	1970	50924
AT	454m SW	Electricity Substation	1989	59333
AT	455m SW	Electricity Substation	1978	49397
AT	455m SW	Electricity Substation	1988	49397
AT	456m SW	Electricity Substation	1995	56565
AT	456m SW	Electricity Substation	1994	56565
AT	456m SW	Electricity Substation	1995	56565
AQ	479m E	Electricity Substation	1996	47202
AQ	479m E	Electricity Substation	1994	47202
AQ	479m E	Electricity Substation	1998	47202



ID	Location	Land Use	Date	Group ID
AQ	479m E	Electricity Substation	1975	47202
AQ	479m E	Electricity Substation	1956	47202
AQ	479m E	Electricity Substation	1980	47202
AQ	479m E	Electricity Substation	1987	47202
AQ	479m E	Electricity Substation	1992	47202
AQ	485m E	Electricity Substation	1956	45638

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

17

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

Features are displayed on the Past land use - un-grouped map on **page 27**

ID	Location	Land Use	Date	Group ID
X	259m S	Garage	1956	17424
X	259m S	Garage	1956	15002
X	261m S	Garage	1984	18996
X	261m S	Garage	1987	18996
X	264m S	Garage	1978	19299
X	265m S	Garage	1956	17424
X	265m S	Garage	1970	19299

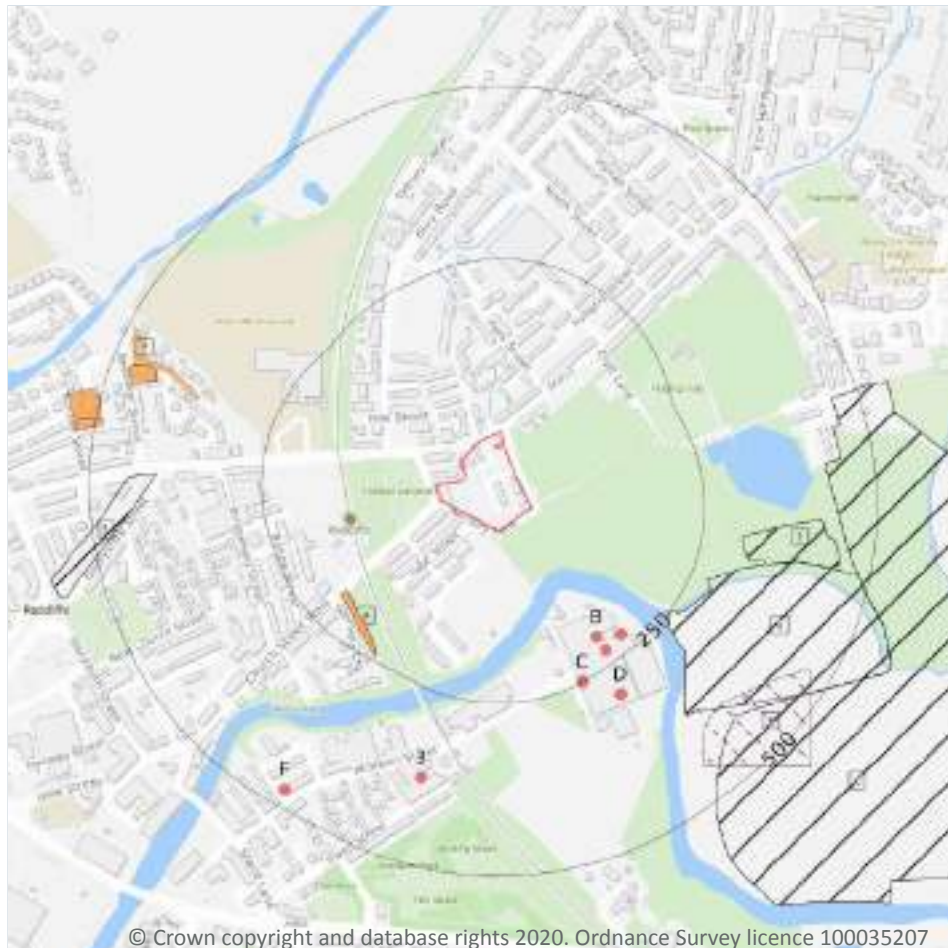


ID	Location	Land Use	Date	Group ID
X	266m S	Garage	1956	17424
U	266m NW	Garage	1956	19090
U	266m NW	Garage	1956	19090
U	282m NW	Garage	1956	16514
U	301m NW	Garage	1956	16435
AE	330m NE	Garage	1966	17769
AE	330m NE	Garage	1956	17769
AE	331m NE	Garage	1956	16941
AE	381m NE	Garage	1994	18556
AE	382m NE	Garage	1987	18556

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



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

0

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

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m

1

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

Features are displayed on the Waste and landfill map on **page 48**

ID	Location	Site address	Source	Data type
4	397m SE	Refuse Tip	1996 mapping	Polygon

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

3.4 Historical landfill (EA/NRW records)

Records within 500m

4

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 48**

ID	Location	Details		
1	251m SE	Site Address: East Lancashire Paper Mill, Rear of Church Street East, Radcliffe, Bury, Greater Manchester Licence Holder Address: -	Waste Licence: Yes Site Reference: C002, WML/0109, RD/LIC/109/77 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 15/06/1979 Licence Surrender: -	Operator: - Licence Holder: East Lancashire Paper Mill Company Limited First Recorded 01/03/1979 Last Recorded: -
2	310m E	Site Address: Boiler house East Lancashire Paper Mill, Church Street East, Radcliffe, Bury, Greater Manchester Licence Holder Address: Church Street East, Radcliffe, Bury, Greater Manchester	Waste Licence: Yes Site Reference: RD/LIC/240/82, C057 Waste Type: Inert, Industrial, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 26/08/1982 Licence Surrender: 19/09/1990	Operator: - Licence Holder: East Lancashire Paper Mill Company Limited First Recorded 31/12/1939 Last Recorded: 31/12/1989



ID	Location	Details		
5	403m W	Site Address: Land at Darbyshire Street, Radcliffe, Bury, Greater Manchester Licence Holder Address: -	Waste Licence: - Site Reference: C116 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded 31/12/1974 Last Recorded: -
6	422m SE	Site Address: Tower Farm, Off Church Street East, Radcliffe, Bury, Greater Manchester Licence Holder Address: The Octagon, 143, Derby Road, Nottingham	Waste Licence: Yes Site Reference: C010, RD/LIC/201/80, RD/LIC/018/76 Waste Type: Inert, Industrial, Commercial, Household, Special, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 13/06/1978 Licence Surrender: 10/03/1993	Operator: - Licence Holder: P D Pollution Control Limited First Recorded 31/12/1980 Last Recorded: 31/12/1992

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

3.5 Historical waste sites

Records within 500m	13
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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 48**

ID	Location	Address	Further Details	Date
A	188m SW	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1988
A	188m SW	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1995
A	188m SW	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1994

ID	Location	Address	Further Details	Date
A	188m SW	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1989
A	188m SW	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1995
E	362m W	Site Address: N/A	Type of Site: Ground Workings and Refuse Heap Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1978
E	429m W	Site Address: N/A	Type of Site: Scrap Metal Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1956
E	430m W	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1978
E	430m W	Site Address: N/A	Type of Site: Scrap Metal Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1956
G	487m W	Site Address: N/A	Type of Site: Public Cleansing Depot Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1956
G	489m W	Site Address: N/A	Type of Site: Public Cleansing Depot Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1956
G	489m W	Site Address: N/A	Type of Site: Public Cleansing Depot Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1969



ID	Location	Address	Further Details	Date
G	490m W	Site Address: N/A	Type of Site: Public Cleansing Depot Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1956

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

3.6 Licensed waste sites

Records within 500m	0
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Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

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

3.7 Waste exemptions

Records within 500m	34
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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 48**

ID	Location	Site	Reference	Category	Sub-Category	Description
B	207m SE	Unit 29, Milltown Street , Radcliffe , M26 1wn	WEX134265	Storing waste exemption	Not on a farm	Storage of waste in secure containers
B	207m SE	Unit 29, Milltown Street , Radcliffe , M26 1wn	WEX134265	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	207m SE	Unit 29, Milltown Street , Radcliffe , M26 1wn	WEX134265	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
B	207m SE	Unit 29, Milltown Street , Radcliffe , M26 1wn	WEX134265	Using waste exemption	Not on a farm	Use of waste in construction
B	207m SE	unit 29, Pioneer mills, Milltown street, Radcliffe, manchester, M26 1WN	WEX136908	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
B	224m SE	Unit 47 Pioneer Mill Milltown Street MANCHESTER M26 1WN	EPR/PE5186Z Q/A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in a secure place

ID	Location	Site	Reference	Category	Sub-Category	Description
B	224m SE	Unit 47 Pioneer Mill Milltown Street MANCHESTER M26 1WN	EPR/PE5186Z Q/A001	Treating waste exemption	Non- Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
B	231m SE	Unit 74, Pioneer Mill Milltown Street, Radcliffe, Manchester, M261WN	WEX072365	Storing waste exemption	Not on a farm	Storage of waste in secure containers
B	231m SE	Unit 74, Pioneer Mill Milltown Street, Radcliffe, Manchester, M261WN	WEX072365	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	231m SE	Unit 74, Pioneer Mill Milltown Street, Radcliffe, Manchester, M261WN	WEX072365	Treating waste exemption	Not on a farm	Cleaning, washing, spraying or coating relevant waste
B	231m SE	Unit 74, Pioneer Mill Milltown Street, Radcliffe, Manchester, M261WN	WEX072365	Treating waste exemption	Not on a farm	Sorting mixed waste
B	231m SE	Unit 74, Pioneer Mill Milltown Street, Radcliffe, Manchester, M261WN	WEX072365	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
C	250m SE	PIONEER MILL, UNIT 34, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX215460	Disposing of waste exemption	Not on a farm	Burning waste in the open
C	250m SE	PIONEER MILL, UNIT 34, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX060713	Disposing of waste exemption	Not on a farm	Burning waste in the open
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX211881	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Using waste exemption	Not on a farm	Use of waste in construction
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Treating waste exemption	Not on a farm	Cleaning, washing, spraying or coating relevant waste
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Treating waste exemption	Not on a farm	Sorting mixed waste



ID	Location	Site	Reference	Category	Sub-Category	Description
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Treating waste exemption	Not on a farm	Recovery of textiles
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Using waste exemption	Not on a farm	Use of baled end-of-life tyres in construction
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Disposing of waste exemption	Not on a farm	Burning waste in the open
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Using waste exemption	Not on a farm	Use of waste to manufacture finished goods
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Treating waste exemption	Not on a farm	Screening and blending of waste
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Treating waste exemption	Not on a farm	Manual treatment of waste
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Treating waste exemption	Not on a farm	Recovery of scrap metal
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Storing waste exemption	Not on a farm	Storage of waste in a secure place

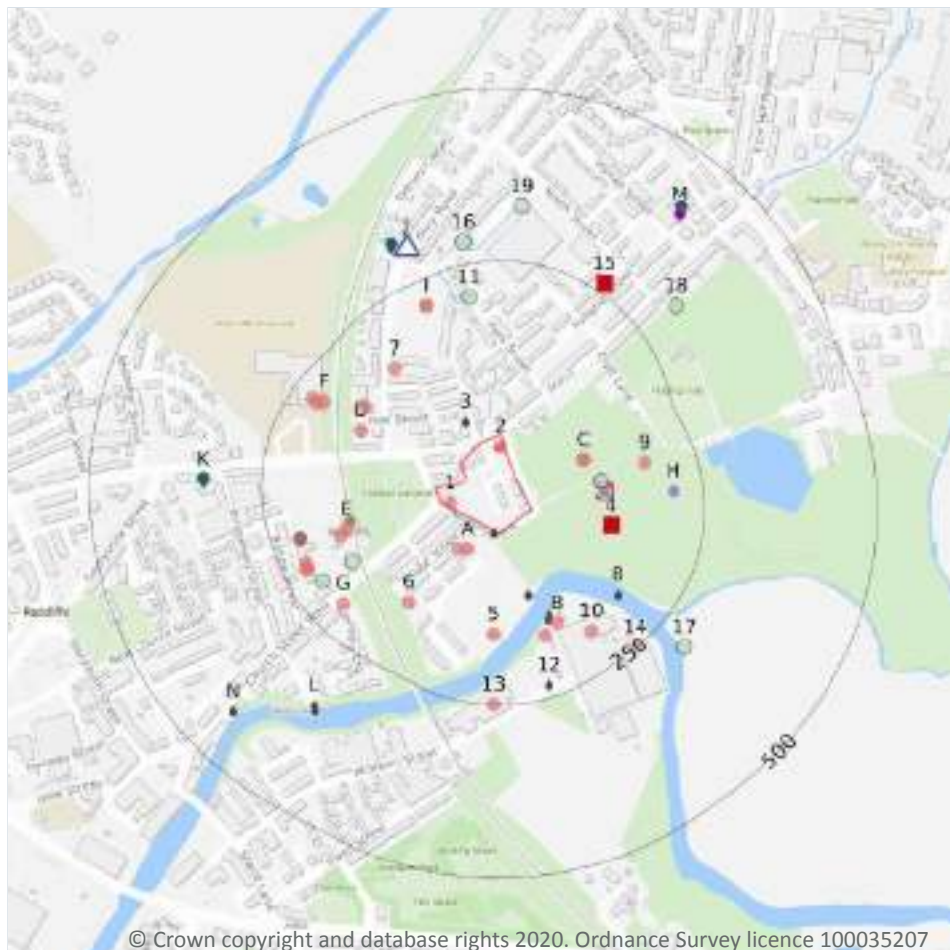


ID	Location	Site	Reference	Category	Sub-Category	Description
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Storing waste exemption	Not on a farm	Storage of waste in secure containers
D	294m SE	PIONEER MILL, UNIT 75, MILLTOWN STREET, RADCLIFFE, MANCHESTER, M26 1WN	WEX153062	Using waste exemption	Not on a farm	Use of waste for a specified purpose
3	375m S	West & Senior Ltd Milltown Street MANCHESTER M26 1WE	EPR/MF0208B E/A001	Treating waste exemption	Non- Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
F	476m SW	8 Milltown Street MANCHESTER M26 1WD	EPR/YF0009BB /A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in secure containers
F	476m SW	8 Milltown Street MANCHESTER M26 1WD	EPR/YF0009BB /A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in a secure place
F	476m SW	8 Milltown Street MANCHESTER M26 1WD	EPR/YF0009BB /A001	Using waste exemption	Non- Agricultural Waste Only	Use of depolluted end-of-life vehicles for vehicle parts

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
- Historical licensed industrial activities
- ▽ Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- List 1 Dangerous Substances
- Pollution Incidents (EA/NRW)
- Pollution inventory substances
- Pollution inventory waste transfers

4.1 Recent industrial land uses

Records within 250m

30

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 56**

ID	Location	Company	Address	Activity	Category
1	On site	Works	Greater Manchester, M26	Unspecified Works Or Factories	Industrial Features
2	2m S	Electricity Sub Station	Greater Manchester, M26	Electrical Features	Infrastructure and Facilities

ID	Location	Company	Address	Activity	Category
A	42m SW	Water Street Motors	20, Rectory Lane, Radcliffe, Manchester, Greater Manchester, M26 2QU	Vehicle Repair, Testing and Servicing	Repair and Servicing
A	47m SW	Works	Greater Manchester, M26	Unspecified Works Or Factories	Industrial Features
C	100m NE	Tank	Greater Manchester, M26	Tanks (Generic)	Industrial Features
C	100m NE	Tanks	Greater Manchester, M26	Tanks (Generic)	Industrial Features
D	135m NW	Dean Smith Car Sales	Pine Street Garage 6, Pine Street, Radcliffe, Manchester, Greater Manchester, M26 2UW	Secondhand Vehicles	Motoring
E	141m W	Radcliffe (Manchester Metrolink)	Greater Manchester, M26	Tram, Metro and Light Railway Stations and Stops	Public Transport, Stations and Infrastructure
5	148m S	Electricity Sub Station	Greater Manchester, M26	Electrical Features	Infrastructure and Facilities
6	150m SW	Works	Greater Manchester, M26	Unspecified Works Or Factories	Industrial Features
E	152m W	Electricity Sub Station	Greater Manchester, M26	Electrical Features	Infrastructure and Facilities
D	154m NW	Kwik-Fit (GB) Limited	Bury Road, Radcliffe, Manchester, Greater Manchester, M26 2UG	Vehicle Repair, Testing and Servicing	Repair and Servicing
B	155m SE	Works	Greater Manchester, M26	Unspecified Works Or Factories	Industrial Features
7	160m NW	Electricity Sub Station	Greater Manchester, M26	Electrical Features	Infrastructure and Facilities
B	162m SE	Depot	Greater Manchester, M26	Container and Storage	Transport, Storage and Delivery
9	178m E	Tank	Greater Manchester, M26	Tanks (Generic)	Industrial Features
10	193m SE	Trend Mania Ltd	Unit 36 Pioneer Mill, Milltown Street, Radcliffe, Manchester, Greater Manchester, M26 1WN	Wood Products Including Charcoal, Paper, Card and Board	Industrial Products
F	202m NW	Electricity Sub Station	Greater Manchester, M26	Electrical Features	Infrastructure and Facilities
G	203m SW	Electricity Sub Station	Greater Manchester, M26	Electrical Features	Infrastructure and Facilities
G	209m W	K C Motors	Barlow Street, Radcliffe, Manchester, Greater Manchester, M26 2SU	Vehicle Repair, Testing and Servicing	Repair and Servicing



ID	Location	Company	Address	Activity	Category
F	210m NW	Electricity Sub Station	Greater Manchester, M26	Electrical Features	Infrastructure and Facilities
I	213m N	N B S	Wilton House 2, Bury Road, Radcliffe, Manchester, Greater Manchester, M26 2UA	Industrial Engineers	Engineering Services
I	213m N	Ferrari Electroplating	Station Works, Bury Road, Radcliffe, Manchester, Greater Manchester, M26 2UA	Industrial Coatings and Finishings	Industrial Products
G	213m SW	M B M Garage Services	Church Street West, Radcliffe, Manchester, Greater Manchester, M26 2SX	Vehicle Repair, Testing and Servicing	Repair and Servicing
G	216m SW	Radcliffe Enginnering Services	101, Church Street West, Radcliffe, Manchester, Greater Manchester, M26 2SX	Mechanical Engineers	Engineering Services
G	216m SW	B & G M O T Centre Ltd	101, Church Street West, Radcliffe, Manchester, Greater Manchester, M26 2SX	Vehicle Repair, Testing and Servicing	Repair and Servicing
G	216m SW	Cold Roll Rings	101, Church Street West, Radcliffe, Manchester, Greater Manchester, M26 2SX	Cooling and Refrigeration	Industrial Products
F	218m NW	Chimney	Greater Manchester, M26	Chimneys	Industrial Features
13	250m S	Works	Greater Manchester, M26	Unspecified Works Or Factories	Industrial Features
14	250m SE	Chimney	Greater Manchester, M26	Chimneys	Industrial Features

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m

1

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 56**

ID	Location	Company	Address	LPG	Status
J	305m NW	TEXACO	55, Bury Road, Radcliffe, Manchester, Greater Manchester, M26 2UG	No	Open

This data is sourced from Experian.



4.3 Electricity cables

Records within 500m	0
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High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0
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High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0
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Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0
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Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0
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Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.



4.8 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

8

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.

Features are displayed on the Current industrial land use map on **page 56**

ID	Location	Details	
C	108m E	Operator: East Lancashire Paper Mill Co Ltd Address: Church Street East, Radcliffe, Manchester, M26 2EL Process: Combustion Processes Permit Number: AA2933	Original Permit Number: IPCAPP Date Approved: 10-6-1992 Effective Date: 10-6-1992 Status: Superseded By Variation
C	108m E	Operator: East Lancashire Paper Mill Co Ltd Address: Church Street East, Radcliffe, Manchester, M26 2EL Process: Combustion Processes Permit Number: AH7763	Original Permit Number: IPCMINVAR Date Approved: 9-3-1993 Effective Date: 9-3-1993 Status: Revoked
C	108m E	Operator: East Lancashire Paper Mill Co Ltd Address: Church Street East, Radcliffe, Manchester, M26 2PG Process: Paper And Pulp Manufacturing Processes Permit Number: AU7702	Original Permit Number: IPCAPP Date Approved: 6-10-1997 Effective Date: 17-10-1997 Status: Superseded By Variation
C	108m E	Operator: East Lancashire Paper Mill Co Ltd Address: Church Street East, Radcliffe, Manchester, M26 2PG Process: Paper And Pulp Manufacturing Processes Permit Number: BD4651	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
C	108m E	Operator: East Lancashire Paper Mill Co Ltd Address: Church Street East, Radcliffe, Manchester, M26 2PG Process: Paper And Pulp Manufacturing Processes Permit Number: BH9701	Original Permit Number: IPCMINVAR Date Approved: 8-5-2000 Effective Date: 8-5-2000 Status: Revoked



ID	Location	Details	
H	207m E	Operator: Scottish and Southern Energy Plc Address: East Lancashire Paper Mill Co Ltd, Ratcliffe, Manchester, M26 2EL Process: Combustion Processes Permit Number: AO5018	Original Permit Number: IPCAPP Date Approved: 18-11-1994 Effective Date: 18-11-1994 Status: Superseded By Variation
H	207m E	Operator: Scottish and Southern Energy Plc Address: East Lancashire Paper Mill Co Ltd, Ratcliffe, Manchester, M26 2EL Process: Combustion Processes Permit Number: AW6766	Original Permit Number: IPCMINVAR Date Approved: 16-1-1997 Effective Date: 20-1-1997 Status: Superseded By Variation
H	207m E	Operator: Scottish and Southern Energy Plc Address: East Lancashire Paper Mill Co Ltd, Ratcliffe, Manchester, M26 2EL Process: Combustion Processes Permit Number: BD6921	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

6

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 56**

ID	Location	Details	
M	409m NE	Operator: COLOUR ANODISING LTD Installation Name: COLOUR ANODISING RADCLIFFE Process: SOLVENT EMISSIONS DIRECTVE; ACTIVITIES EXCEEDING SOLVENT THRESHOLD Permit Number: BN5386IN Original Permit Number: BN5386IN	EPR Reference: - Issue Date: 23/11/2004 Effective Date: 23/11/2004 Last date noted as effective: 28/09/2020 Status: SUPERCEDED
M	409m NE	Operator: COLOUR ANODISING LTD Installation Name: ANOTEC WORKS EPR/BN5386IN Process: SOLVENT EMISSIONS DIRECTVE; ACTIVITIES EXCEEDING SOLVENT THRESHOLD Permit Number: WP3234YA Original Permit Number: BN5386IN	EPR Reference: - Issue Date: 15/06/2017 Effective Date: 15/06/2017 Last date noted as effective: 28/09/2020 Status: EFFECTIVE



ID	Location	Details	
M	409m NE	Operator: COLOUR ANODISING LTD Installation Name: ANOTEC WORKS EPR/BN5386IN Process: SURFACE TREATING METALS AND PLASTICS; ELECTROLYTIC/CHEMICAL >30 CU M Permit Number: WP3234YA Original Permit Number: BN5386IN	EPR Reference: - Issue Date: 15/06/2017 Effective Date: 15/06/2017 Last date noted as effective: 28/09/2020 Status: EFFECTIVE
M	409m NE	Operator: COLOUR ANODISING LTD Installation Name: COLOUR ANODISING RADCLIFFE Process: SURFACE TREATING METALS AND PLASTICS; ELECTROLYTIC/CHEMICAL >30 CU M Permit Number: BN5386IN Original Permit Number: BN5386IN	EPR Reference: - Issue Date: 23/11/2004 Effective Date: 23/11/2004 Last date noted as effective: 28/09/2020 Status: SUPERCEDED
M	409m NE	Operator: COLOUR ANODISING LTD Installation Name: COLOUR ANODISING RADCLIFFE Process: SOLVENT EMISSIONS DIRECTVE; ACTIVITIES EXCEEDING SOLVENT THRESHOLD Permit Number: QP3634AD Original Permit Number: BN5386IN	EPR Reference: - Issue Date: 02/11/2015 Effective Date: 02/11/2015 Last date noted as effective: 28/09/2020 Status: SUPERCEDED
M	409m NE	Operator: COLOUR ANODISING LTD Installation Name: COLOUR ANODISING RADCLIFFE Process: SURFACE TREATING METALS AND PLASTICS; ELECTROLYTIC/CHEMICAL >30 CU M Permit Number: QP3634AD Original Permit Number: BN5386IN	EPR Reference: - Issue Date: 02/11/2015 Effective Date: 02/11/2015 Last date noted as effective: 28/09/2020 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

5

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 56**

ID	Location	Address	Details	
G	209m W	K.C. Motors, Back Barlow Street, Radcliffe, M26 2SU	Process: Waste Oil Burner 0.4 MW Status: New Legislation Applies Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified



ID	Location	Address	Details	
J	313m NW	Radcliffe Service Station (Formerly Central Service Station), Bury Road, Radcliffe, M26 2UG	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
K	334m W	Radcliffe Auto Centre, Unit 9, Spring Lane, Radcliffe, M26 2TA	Process: Waste Oil Burner 0.4 MW Status: New Legislation Applies Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
K	334m W	Radcliffe Auto Centre, Unit 9, Spring Lane, Radcliffe, M26 2TA	Process: Waste Oil Burner 0.4 MW Status: New Legislation Applies Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
M	416m NE	Anodising & Plating Ltd, Holland St, M26 2RH	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

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

16

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 56**



ID	Location	Address	Details	
A	2m SW	CHURCH STREET EAST 09003, SIDE OF 13 BAYBUTT STREET, RADCLIFFE, MANCHESTER, M26 2PR	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016993586 Permit Version: 1 Receiving Water: UNNAMED TRIB OF RIVER IRWELL	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 31/05/2006 Effective Date: 31/05/2006 Revocation Date: 17/06/2018
A	2m SW	CHURCH STREET EAST 09003, SIDE OF 13 BAYBUTT STREET, RADCLIFFE, MANCHESTER, M26 2PR	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: 016993586 Permit Version: 2 Receiving Water: UNNAMED TRIB OF RIVER IRWELL	Status: VARIED UNDER EPR 2010 Issue date: 18/06/2018 Effective Date: 18/06/2018 Revocation Date: -
3	36m NW	IRWELL VALLEY HA DEVELOPMENT SWO, BUTTERWORTH STREET, RADCLIFFE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 016991037 Permit Version: 1 Receiving Water: CROW TREES FARM BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 30/09/1985 Revocation Date: 15/02/1991
B	99m SE	AINSWORTH RD, RADCLIFFE, BURY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0129 Permit Version: 1 Receiving Water: -	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01/01/1995 Revocation Date: -
B	99m SE	CHURCH STREET EAST 09003, SIDE OF 13 BAYBUTT STREET, RADCLIFFE, MANCHESTER, M26 2PR	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0031 Permit Version: 1 Receiving Water: RIVER IRWELL	Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: 01/01/1995 Effective Date: 01/01/1995 Revocation Date: 30/05/2006
B	139m SE	MILLTOWN ST WW NTWK PS (09008), MILLTOWN STREET, RADCLIFFE, LANCASHIRE, M26 1WN	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 01BRY0061 Permit Version: 1 Receiving Water: RIVER IRWELL	Status: VARIED UNDER EPR 2010 Issue date: - Effective Date: 01/01/1995 Revocation Date: 02/09/2010
B	139m SE	MILLTOWN ST WW NTWK PS (09008), MILLTOWN STREET, RADCLIFFE, LANCASHIRE, M26 1WN	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0061 Permit Version: 2 Receiving Water: RIVER IRWELL	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 09/06/2016



ID	Location	Address	Details	
B	144m SE	MILLTOWN ST WW NTWK PS (09008), MILLTOWN STREET, RADCLIFFE, LANCASHIRE, M26 1WN	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0061 Permit Version: 3 Receiving Water: RIVER IRWELL	Status: VARIED UNDER EPR 2010 Issue date: 10/06/2016 Effective Date: 10/06/2016 Revocation Date: -
8	176m SE	CHURCH ST EAST, RADCLIFFE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016993109 Permit Version: 1 Receiving Water: RIVER IRWELL	Status: CONSENT REVOKED - DISCHARGE CEASED (SECTION 37(1)) Issue date: - Effective Date: 19/12/1995 Revocation Date: 01/01/2004
12	231m S	MILLTOWN ST WW NTWK PS (09008), MILLTOWN STREET, RADCLIFFE, LANCASHIRE, M26 1WN	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 016982126 Permit Version: 1 Receiving Water: RIVER IRWELL	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: - Effective Date: - Revocation Date: -
L	345m SW	CHURCH STREET WEST CSO 091KB, CHURCH STREET WEST, RADCLIFFE, MANCHESTER, M26 2SY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0029 Permit Version: 1 Receiving Water: RIVER IRWELL	Status: VARIED UNDER EPR 2010 Issue date: - Effective Date: 01/01/1995 Revocation Date: 02/09/2010
L	345m SW	CHURCH STREET WEST CSO 091KB, CHURCH STREET WEST, RADCLIFFE, MANCHESTER, M26 2SY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0029 Permit Version: 2 Receiving Water: RIVER IRWELL	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 04/02/2016
L	345m SW	CHURCH STREET WEST CSO 091KB, CHURCH STREET WEST, RADCLIFFE, MANCHESTER, M26 2SY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0029 Permit Version: 3 Receiving Water: RIVER IRWELL	Status: VARIED UNDER EPR 2010 Issue date: 05/02/2016 Effective Date: 05/02/2016 Revocation Date: 31/03/2018
L	351m SW	CHURCH STREET WEST CSO 091KB, CHURCH STREET WEST, RADCLIFFE, MANCHESTER, M26 2SY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0029 Permit Version: 4 Receiving Water: RIVER IRWELL	Status: VARIED UNDER EPR 2010 Issue date: 21/03/2018 Effective Date: 01/04/2018 Revocation Date: -



ID	Location	Address	Details	
N	424m SW	RADCLIFFE CENTRAL CSO, RIVER COURT, 2 BLACKBURN STREET, RADCLIFFE, MANCHESTER, M26 1WW	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982932 Permit Version: 4 Receiving Water: RIVER IRWELL	Status: VARIED UNDER EPR 2010 Issue date: 27/11/2014 Effective Date: 01/04/2015 Revocation Date: 05/08/2018
N	424m SW	RADCLIFFE CENTRAL CSO, RIVER COURT, 2 BLACKBURN STREET, RADCLIFFE, MANCHESTER, M26 1WW	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982932 Permit Version: 5 Receiving Water: RIVER IRWELL	Status: VARIED UNDER EPR 2010 Issue date: 06/08/2018 Effective Date: 06/08/2018 Revocation Date: -

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

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

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

4.15 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m

4

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.

Features are displayed on the Current industrial land use map on **page 56**

ID	Location	Name	Status	Receiving Water	Authorised Substances
C	109m E	East Lancashire Paper Mill Co Ltd, Radcliffe	Not Active	-	-

ID	Location	Name	Status	Receiving Water	Authorised Substances
C	109m E	East Lancashire Paper Mill Co Ltd, Radcliffe	Active	-	-
4	118m E	East Lancashire Paper Mill Co Ltd, Radcliffe	Active	-	Mercury (other), Cadmium, Pentachlorophenol
15	264m NE	Colour Anodising Ltd	Active	-	Mercury (other)

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

8

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 56**

ID	Location	Details	
C	108m E	Incident Date: 09/03/2002 Incident Identification: 62912 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
E	153m SW	Incident Date: 14/03/2003 Incident Identification: 143009 Pollutant: Inert Materials and Wastes Pollutant Description: Other Inert Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
11	202m N	Incident Date: 22/10/2002 Incident Identification: 116132 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
G	204m SW	Incident Date: 13/05/2002 Incident Identification: 78273 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)



ID	Location	Details	
16	282m N	Incident Date: 22/06/2003 Incident Identification: 167804 Pollutant: Oils and Fuel Pollutant Description: Unidentified Oil	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
17	298m SE	Incident Date: 29/04/2001 Incident Identification: 4105 Pollutant: Contaminated Water Pollutant Description: Landfill Leachate	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
18	313m NE	Incident Date: 16/10/2002 Incident Identification: 115048 Pollutant: Specific Waste Materials Pollutant Description: Metal Wastes	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
19	330m N	Incident Date: 19/06/2002 Incident Identification: 86018 Pollutant: Oils and Fuel Pollutant Description: Other Oil or Fuel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m

2

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.

Features are displayed on the Current industrial land use map on **page 56**

ID: M, Location: 410m NE, Permit: BN5386IN
 Operator: COLOUR ANODISING LTD
 Activity: SURFACE TREATING METALS AND PLASTICS; ELECTROLYTIC/CHEMICAL >30 CU M
 Address: COLOUR ANODISING RADCLIFFE Anotec Works Holland Street Radcliffe Lancashire M26 2RH
 Sector: Metals, Sub-sector: Surface treatment
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Nickel	20kg	43.6kg



ID: M, Location: 410m NE, Permit: BN5386IN
 Operator: COLOUR ANODISING LTD
 Activity: SURFACE TREATING METALS AND PLASTICS; ELECTROLYTIC/CHEMICAL >30 CU M
 Address: COLOUR ANODISING RADCLIFFE Anotec Works Holland Street Radcliffe Lancashire M26 2RH
 Sector: Metals, Sub-sector: Surface treatment
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Nitrous oxide	10000kg	Below Reporting Threshold
Air	Nitrogen oxides (NO and NO2) as NO2	100000kg	Below Reporting Threshold
Wastewater	Chromium	20kg	Below Reporting Threshold
Wastewater	Copper	20kg	Below Reporting Threshold
Wastewater	Lead	20kg	Below Reporting Threshold
Wastewater	Zinc	100kg	Below Reporting Threshold
Air	Sulphur oxides (SO2 and SO3) as SO2	100000kg	Below Reporting Threshold
Air	Carbon dioxide	10000000kg	Below Reporting Threshold

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

4.20 Pollution inventory waste transfers

Records within 500m

1

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.

Features are displayed on the Current industrial land use map on **page 56**

ID: M, Location: 410m NE, Permit: BN5386IN
 Operator: COLOUR ANODISING LTD
 Activity: SURFACE TREATING METALS AND PLASTICS; ELECTROLYTIC/CHEMICAL >30 CU M
 Address: COLOUR ANODISING RADCLIFFE Anotec Works Holland Street Radcliffe Lancashire M26 2RH
 Sector: Metals, Sub-sector: Surface treatment
 Releases:



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D5	Specially engineered landfill (eg placement into lined discrete cells which are capped and isolated from one another and the environment, etc)	61.74	Absolute Value	11 01 09	sludges and filter cakes containing dangerous substances	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.25	Absolute Value	11 01 05	pickling acids	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12 (eg evaporation, drying, calcination, etc.)	6.764	Absolute Value	16 10 01	aqueous liquid wastes containing dangerous substances	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12 (eg evaporation, drying, calcination, etc.)	26.85	Absolute Value	11 01 07	pickling bases	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12 (eg evaporation, drying, calcination, etc.)	94.86	Absolute Value	11 01 06	acids not otherwise specified	Yes
D1	Deposit into or onto land (eg landfill, etc.)	Below Reporting Threshold	Below Reporting Threshold	20 03 01	mixed municipal waste	No
R5	Recycling/reclamation of other inorganic materials	6.375	Absolute Value	20 03 01	mixed municipal waste	No
R5	Recycling/reclamation of other inorganic materials	10.3	Absolute Value	15 01 06	mixed packaging	No
R4	Recycling/reclamation of metals and metal compounds	Below Reporting Threshold	Below Reporting Threshold	17 04 02	aluminium	No
R4	Recycling/reclamation of metals and metal compounds	Below Reporting Threshold	Below Reporting Threshold	19 12 03	non-ferrous metal	No

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



4.21 Pollution inventory radioactive waste

Records within 500m

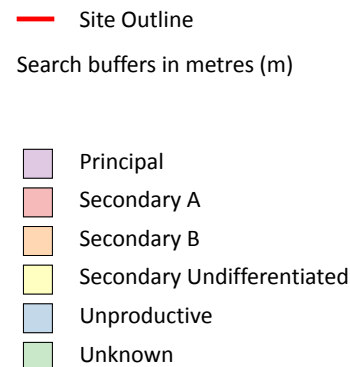
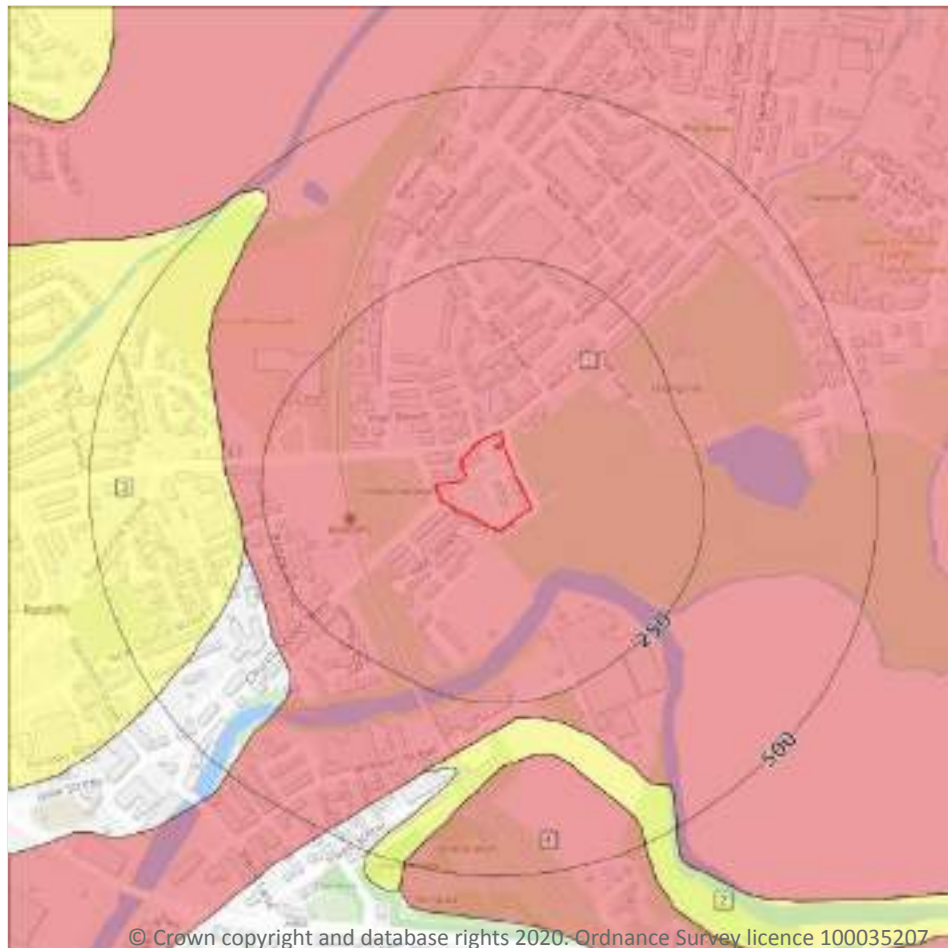
0

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



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5.1 Superficial aquifer

Records within 500m

4

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 72**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	274m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

ID	Location	Designation	Description
3	285m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	329m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

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5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

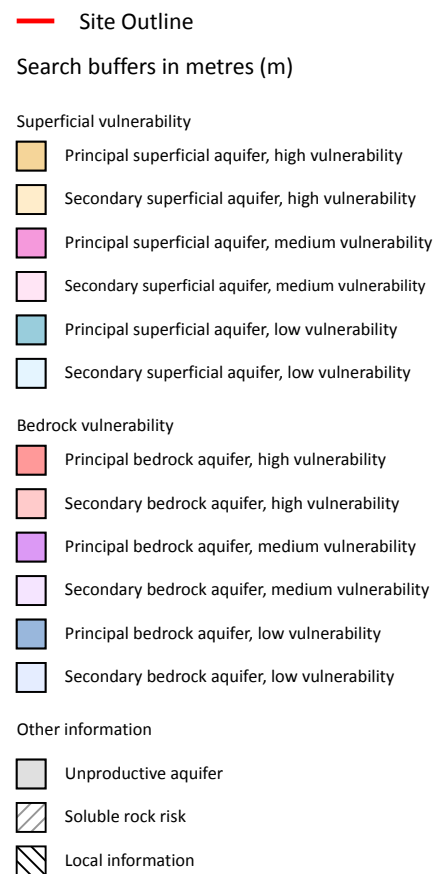
Features are displayed on the Bedrock aquifer map on **page 74**

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

2

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 75**

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

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site

0

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

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

5.5 Groundwater vulnerability- local information

Records on site

0

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

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



Abstractions and Source Protection Zones



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

5.6 Groundwater abstractions

Records within 2000m

17

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 77**

ID	Location	Details	
-	1177m SE	Status: Historical Licence No: 2569004030 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "WELLPOINT SYSTEM AT PREMISES, RADCLIFFE" Data Type: Point Name: JAMES HALSTEAD LTD Easting: 379600 Northing: 406300	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 24/01/1995 Version End Date: -
-	1177m SE	Status: Historical Licence No: 2569004030 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: WELLPOINT SYSTEM AT PREMISES, RADCLIFFE Data Type: Point Name: POLYFLOR LTD Easting: 379600 Northing: 406300	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -
-	1177m SE	Status: Historical Licence No: 2569004030 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: WELL POINT SYSTEM AT PREMISES RADCLIFFE Data Type: Point Name: POLYFLOR LTD Easting: 379600 Northing: 406300	Annual Volume (m ³): 68200 Max Daily Volume (m ³): 382 Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -
-	1641m SE	Status: Active Licence No: 2569004053 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE AT STAND GOLF CLUB Data Type: Point Name: Stand Golf Club Limited Easting: 379754 Northing: 405858	Annual Volume (m ³): 9,000 Max Daily Volume (m ³): 55 Original Application No: - Original Start Date: 28/05/1997 Expiry Date: - Issue No: 102 Version Start Date: 12/05/2015 Version End Date: -



ID	Location	Details	
-	1642m SE	Status: Historical Licence No: 2569004053 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: "A BOREHOLE AT STAND GOLF CLUB, WHITEFIELD" Data Type: Point Name: STAND GOLF CLUB Easting: 379760 Northing: 405860	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 28/05/1997 Expiry Date: - Issue No: 100 Version Start Date: 28/05/1997 Version End Date: -
-	1642m SE	Status: Historical Licence No: 2569004053 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: A BOREHOLE AT STAND GOLF CLUB, WHITEFIELD Data Type: Point Name: STAND GOLF CLUB Easting: 379760 Northing: 405860	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 28/05/1997 Expiry Date: - Issue No: 100 Version Start Date: 28/05/1997 Version End Date: -
-	1642m SE	Status: Historical Licence No: 2569004053 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE AT STAND GOLF CLUB WHITEFIELD Data Type: Point Name: THE TRUSTEES OF STAND GOLF CLUB Easting: 379760 Northing: 405860	Annual Volume (m ³): 9000 Max Daily Volume (m ³): 55 Original Application No: - Original Start Date: 28/05/1997 Expiry Date: - Issue No: 101 Version Start Date: 07/09/2005 Version End Date: -
-	1679m SE	Status: Historical Licence No: NW/069/0004/004 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT WHITEFIELD, MANCHESTER Data Type: Point Name: Total Fitness Health Clubs Limited Easting: 380450 Northing: 406381	Annual Volume (m ³): 24,000 Max Daily Volume (m ³): 166 Original Application No: - Original Start Date: 29/01/2014 Expiry Date: 31/03/2020 Issue No: 1 Version Start Date: 29/01/2014 Version End Date: -



ID	Location	Details	
-	1680m SE	Status: Historical Licence No: 2569004056 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: LAND AT TOTAL FITNESS, BURY NEW ROAD, WHITEFIELD, BURY Data Type: Point Name: TOTAL FITNESS UK LTD Easting: 380450 Northing: 406380	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: 31/03/2011 Issue No: 1 Version Start Date: 17/02/2005 Version End Date: -
-	1680m SE	Status: Historical Licence No: 2569004056 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: LAND AT TOTAL FITNESS BURY NEW ROAD WHITEFIELD BURY Data Type: Point Name: TOTAL FITNESS UK LTD Easting: 380450 Northing: 406380	Annual Volume (m ³): 24000 Max Daily Volume (m ³): 166 Original Application No: - Original Start Date: 17/02/2005 Expiry Date: 31/03/2011 Issue No: 1 Version Start Date: 17/02/2005 Version End Date: -
-	1892m E	Status: Historical Licence No: 2569002264R1 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: A BOREHOLE AT BURY GOLF CLUB, BLACKFORD BRIDGE, BURY Data Type: Point Name: RAYMOND ADAMS Easting: 380963 Northing: 407673	Annual Volume (m ³): 7000 Max Daily Volume (m ³): 50 Original Application No: - Original Start Date: 01/06/2007 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 01/04/2008 Version End Date: -
-	1892m E	Status: Active Licence No: 2569002264R02 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: A BOREHOLE AT BURY GOLF CLUB, BLACKFORD BRIDGE, BURY Data Type: Point Name: Bury Golf Club Limited Easting: 380963 Northing: 407673	Annual Volume (m ³): 7,000 Max Daily Volume (m ³): 50 Original Application No: - Original Start Date: 01/04/2015 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/04/2015 Version End Date: -



ID	Location	Details	
-	1898m E	Status: Historical Licence No: 2569002264 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: "A BOREHOLE AT BURY GOLF CLUB, BLACKFORD BRIDGE, BURY" Data Type: Point Name: BURY GOLF CLUB Easting: 380970 Northing: 407670	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 17/04/1997 Expiry Date: 16-Apr-07 Issue No: 100 Version Start Date: 17/04/1997 Version End Date: -
-	1898m E	Status: Historical Licence No: 2569002264 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: A BOREHOLE AT BURY GOLF CLUB, BLACKFORD BRIDGE, BURY Data Type: Point Name: RAYMOND ADAMS Easting: 380970 Northing: 407670	Annual Volume (m ³): 9000 Max Daily Volume (m ³): 55 Original Application No: - Original Start Date: 17/04/1997 Expiry Date: 16/04/2007 Issue No: 101 Version Start Date: 27/01/2004 Version End Date: 16/04/2007
-	1898m E	Status: Historical Licence No: 2569002264R1 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: A BOREHOLE AT BURY GOLF CLUB, BLACKFORD BRIDGE, BURY Data Type: Point Name: RAYMOND ADAMS Easting: 380970 Northing: 407670	Annual Volume (m ³): 7000 Max Daily Volume (m ³): 50 Original Application No: - Original Start Date: 01/06/2007 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 01/04/2008 Version End Date: -
-	1956m NE	Status: Historical Licence No: 2569001258 Details: Pollution Remediation Direct Source: Ground Water - North West Region Point: "WELL POINT SYSTEM AT MANCHESTER ROAD, BURY" Data Type: Point Name: TOTALFINAELF UK LTD Easting: 380450 Northing: 408850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 12/06/2002 Expiry Date: - Issue No: 1 Version Start Date: 12/06/2002 Version End Date: -



ID	Location	Details	
-	1956m NE	Status: Historical Licence No: 2569001258 Details: Pollution Remediation Direct Source: Ground Water - North West Region Point: WELL POINT SYSTEM AT MANCHESTER ROAD, BURY Data Type: Point Name: TOTALFINAELF UK LTD Easting: 380450 Northing: 408850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 12/06/2002 Expiry Date: - Issue No: 1 Version Start Date: 12/06/2002 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	20
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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 77**

ID	Location	Details	
1	396m NW	Status: Historical Licence No: 2569004004 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY SURFACE DRAINAGE ATRADCLIFFE Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 378800 Northing: 407800	Annual Volume (m ³): 40004.8 Max Daily Volume (m ³): 109.104 Original Application No: - Original Start Date: 28/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/05/2001 Version End Date: -
-	1297m N	Status: Historical Licence No: 2569004019 Details: Boiler Feed Direct Source: "Surface, Non-Tidal - North West Region" Point: "WITHINS RESERVOIR, FED BY & O/FLOW TO UNNAMED TRIB OF R IRW" Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 378600 Northing: 408700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 05/05/2001 Version End Date: -



ID	Location	Details	
-	1297m N	Status: Historical Licence No: 2569004019 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "WITHINS RESERVOIR, FED BY & O/FLOW TO UNNAMED TRIB OF R IRW" Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 378600 Northing: 408700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 05/05/2001 Version End Date: -
-	1297m N	Status: Historical Licence No: 2569004019 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: WITHINS RESERVOIR, FED BY & O/FLOW TO UNNAMED TRIB OF R IRW Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 378600 Northing: 408700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 05/05/2001 Version End Date: -
-	1297m N	Status: Historical Licence No: 2569004019 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: WITHINS RESERVOIR, FED BY & O/FLOW TO UNNAMED TRIB OF R IRW Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 378600 Northing: 408700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 05/05/2001 Version End Date: -
-	1297m N	Status: Historical Licence No: 2569004019 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: WITHINS RESERVOR FED BY UNNAMED TRIBUTARY OF RIVER IRWELL Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 378600 Northing: 408700	Annual Volume (m ³): 270000 Max Daily Volume (m ³): 8728.32 Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 05/05/2001 Version End Date: -



ID	Location	Details	
-	1297m N	Status: Historical Licence No: 2569004019 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: WITHINS RESERVOR FED BY UNNAMED TRIBUTARY OF RIVER IRWELL Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 378600 Northing: 408700	Annual Volume (m ³): 270000 Max Daily Volume (m ³): 8728.32 Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 05/05/2001 Version End Date: -
-	1315m N	Status: Historical Licence No: 2569004054 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "THE MANCHESTER, BOLTON AND BURY CANAL AT BANK TOP, BURY" Data Type: Point Name: BRITISH WATERWAYS Easting: 379200 Northing: 408790	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 04/12/1998 Version End Date: -
-	1315m N	Status: Historical Licence No: 2569004054 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: THE MANCHESTER, BOLTON AND BURY CANAL AT BANK TOP, BURY Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 379200 Northing: 408790	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 04/12/1998 Version End Date: -
-	1543m NE	Status: Historical Licence No: 2569001245 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "RIVER IRWELL AT RADCLIFFE, MANCHESTER" Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -



ID	Location	Details	
-	1543m NE	Status: Historical Licence No: 2569001245 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "RIVER IRWELL AT RADCLIFFE, MANCHESTER" Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -
-	1543m NE	Status: Historical Licence No: 2569001245 Details: Boiler Feed Direct Source: "Surface, Non-Tidal - North West Region" Point: "RIVER IRWELL AT RADCLIFFE, MANCHESTER" Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -
-	1543m NE	Status: Historical Licence No: 2569001245 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RADCLIFFE, MANCHESTER Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -
-	1543m NE	Status: Historical Licence No: 2569001245 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RADCLIFFE, MANCHESTER Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -
-	1543m NE	Status: Historical Licence No: 2569001245 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RADCLIFFE, MANCHESTER Data Type: Point Name: UNIFI DYED YARNS LTD Easting: 380000 Northing: 408700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/11/1993 Expiry Date: - Issue No: 101 Version Start Date: 01/03/2000 Version End Date: -



ID	Location	Details	
-	1630m N	Status: Active Licence No: NW/069/0001/004 Details: Hydroelectric Power Generation Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT BEALEY'S WEIR Data Type: Point Name: Resolution Hydro Limited Easting: 379607 Northing: 409015	Annual Volume (m ³): 80,000,000 Max Daily Volume (m ³): 259,200 Original Application No: - Original Start Date: 20/12/2010 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/04/2019 Version End Date: -
-	1654m N	Status: Historical Licence No: 2569001158 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "R IRWELL AT RADCLIFFE, MANCHESTER" Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 379400 Northing: 409100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 29/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/05/2001 Version End Date: -
-	1654m N	Status: Historical Licence No: 2569001158 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "R IRWELL AT RADCLIFFE, MANCHESTER" Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 379400 Northing: 409100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 29/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/05/2001 Version End Date: -
-	1654m N	Status: Historical Licence No: 2569001158 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: R IRWELL AT RADCLIFFE, MANCHESTER Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 379400 Northing: 409100	Annual Volume (m ³): 3636800 Max Daily Volume (m ³): 14183.52 Original Application No: - Original Start Date: 29/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/05/2001 Version End Date: -



ID	Location	Details	
-	1654m N	Status: Historical Licence No: 2569001158 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: R IRWELL AT RADCLIFFE, MANCHESTER Data Type: Point Name: ST REGIS PAPER COMPANY U K LTD Easting: 379400 Northing: 409100	Annual Volume (m ³): 3636800 Max Daily Volume (m ³): 14183.52 Original Application No: - Original Start Date: 29/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/05/2001 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	3
-----------------------------	----------

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.

Features are displayed on the Abstractions and Source Protection Zones map on **page 77**

ID	Location	Details	
-	1679m SE	Status: Historical Licence No: NW/069/0004/004 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT WHITEFIELD, MANCHESTER Data Type: Point Name: Total Fitness Health Clubs Limited Easting: 380450 Northing: 406381	Annual Volume (m ³): 24,000 Max Daily Volume (m ³): 166 Original Application No: - Original Start Date: 29/01/2014 Expiry Date: 31/03/2020 Issue No: 1 Version Start Date: 29/01/2014 Version End Date: -
-	1680m SE	Status: Historical Licence No: 2569004056 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: LAND AT TOTAL FITNESS, BURY NEW ROAD, WHITEFIELD, BURY Data Type: Point Name: TOTAL FITNESS UK LTD Easting: 380450 Northing: 406380	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: 31/03/2011 Issue No: 1 Version Start Date: 17/02/2005 Version End Date: -



ID	Location	Details	
-	1680m SE	Status: Historical Licence No: 2569004056 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: LAND AT TOTAL FITNESS BURY NEW ROAD WHITEFIELD BURY Data Type: Point Name: TOTAL FITNESS UK LTD Easting: 380450 Northing: 406380	Annual Volume (m ³): 24000 Max Daily Volume (m ³): 166 Original Application No: - Original Start Date: 17/02/2005 Expiry Date: 31/03/2011 Issue No: 1 Version Start Date: 17/02/2005 Version End Date: -

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

5.9 Source Protection Zones

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

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

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

5.10 Source Protection Zones (confined aquifer)

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

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

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

6 Hydrology



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

6.1 Water Network (OS MasterMap)

Records within 250m

10

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 89**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
B	16m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	94m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	94m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	106m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Irwell
C	119m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Irwell
D	197m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	241m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Irwell
8	241m SE	Manmade watercourse for water transfer.	On ground surface	Watercourse contains water year round (in normal circumstances)	Bealey's Goit
D	247m N	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

5

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 89**

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 89**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River WB catchment	Irwell (Roch to Croal)	GB112069060840	Croal Irwell	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 89**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
5	109m SE	River	Irwell (Roch to Croal)	GB112069060840	Moderate	Good	Moderate	2016

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 89**

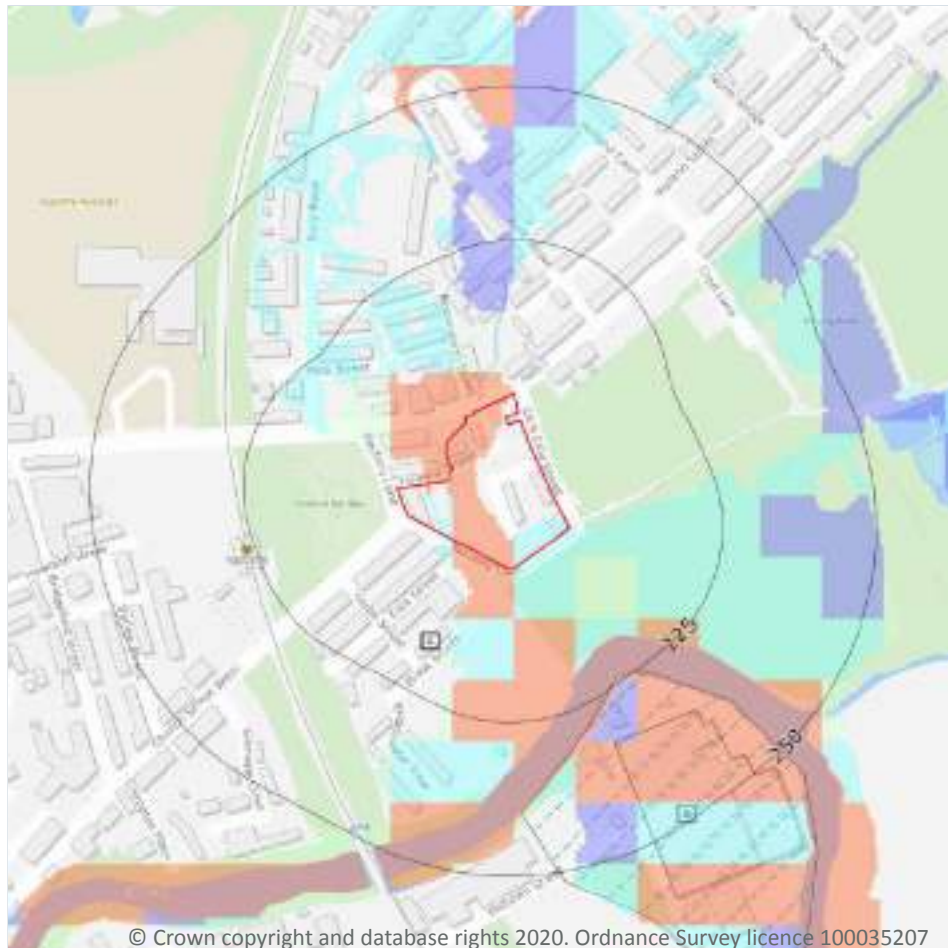


ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Northern Manchester Carboniferous Aquifers	<u>GB41202G101800</u>	Poor	Poor	Good	2015

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



7 River and coastal flooding



- Site Outline
- Search buffers in metres (m)
- Environment Agency 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 Sea (RoFRaS)

Records within 50m

11

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; 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).

Features are displayed on the River and coastal flooding map on **page 93**

Distance	RoFRaS flood risk
On site	High
0 - 50m	High



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

7.2 Historical Flood Events

Records within 250m

3

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.

Features are displayed on the River and coastal flooding map on **page 93**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
C	79m SW	Ea01313_21 January 2008_Crow Trees Farm Brook_Radc	2008-01-21 2008-01-22	Main river	Unknown	Fluvial
G	121m SE	Pioneer Mill	2015-12-26 2015-12-26	Main river	Channel capacity exceeded (no raised defences)	Fluvial
G	164m SE	Irwe	1998-10-23 1998-10-24	Main river	Obstruction/blockage - channel	Fluvial

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

7.3 Flood Defences

Records within 250m

0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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



7.5 Flood Storage Areas

Records within 250m

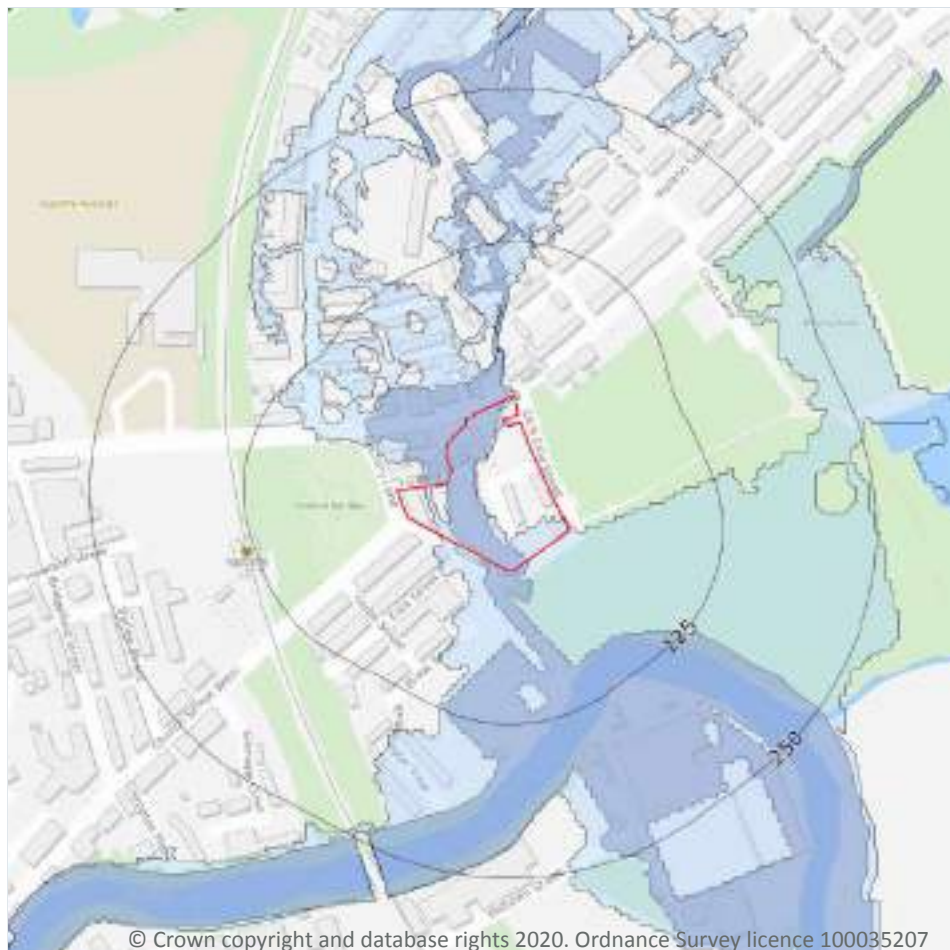
0

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

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



River and coastal flooding - Flood Zones



- 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 93**

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 93**

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 30 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 98**

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	Between 0.3m and 1.0m

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

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

9.1 Groundwater flooding

Highest risk on site

Moderate

Highest risk within 50m

Moderate

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

Features are displayed on the Groundwater flooding map on **page 100**

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- + Local Nature Reserves (LNR)
- ▨ Designated Ancient Woodland
- ▨ Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m**0**

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m**0**

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m**0**

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m**0**

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m

3

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

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

ID	Location	Name	Data source
A	857m S	Chapelfield	Natural England
4	895m S	Chapelfield	Natural England
A	914m S	Chapelfield	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m

1

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 101**

ID	Location	Name	Woodland Type
-	1887m SW	Nuttall Wood	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**4**

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

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

ID	Location	Name	Local Authority name
1	244m SE	Liverpool and Manchester	Bury
2	379m NW	Liverpool and Manchester	Bury
3	886m SW	Liverpool and Manchester	Bury
-	1724m E	Liverpool and Manchester	Bury

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

10.12 Proposed Ramsar sites

Records within 2000m**0**

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

This data is sourced from Natural England.



10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

1

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.

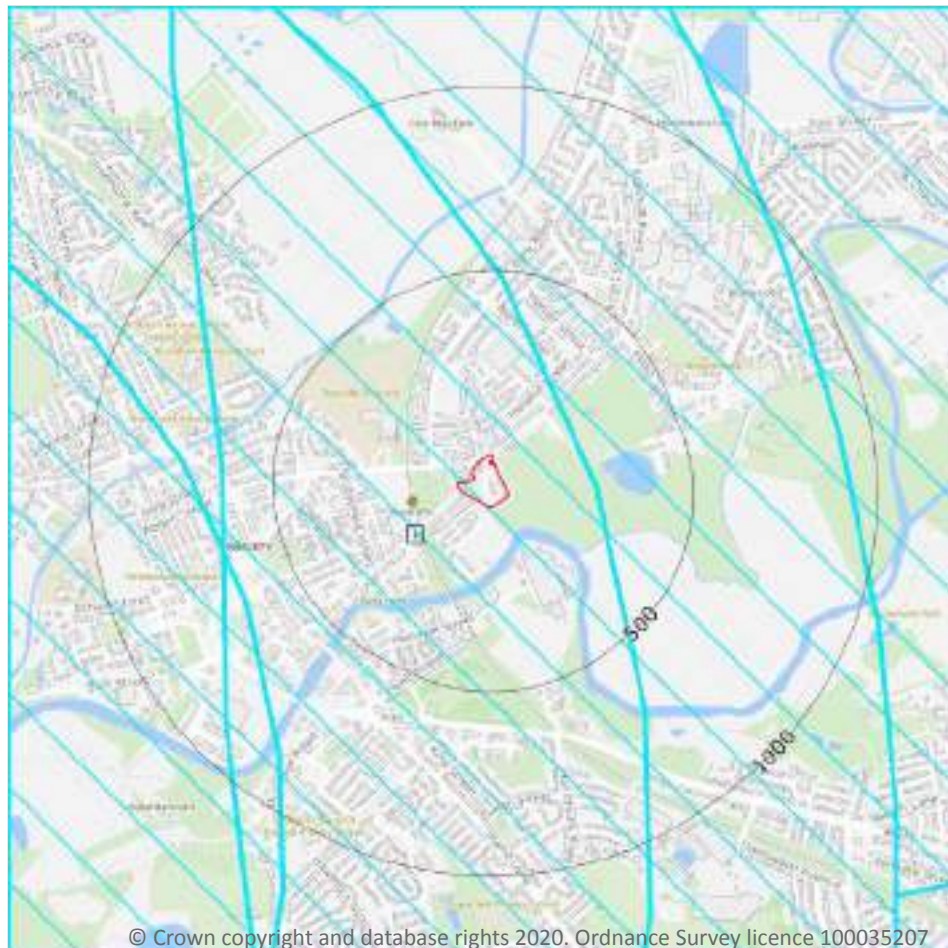
Location	Name	Type	NVZ ID	Status
1605m S	Irwell / Man. Ship Canal (Kearsley to Irlam Locks) NVZ	Surface Water	S643	Existing



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 107**

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500t. Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0
-----------------------------	----------

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.

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 English Heritage, 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 English Heritage, 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 English Heritage, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m

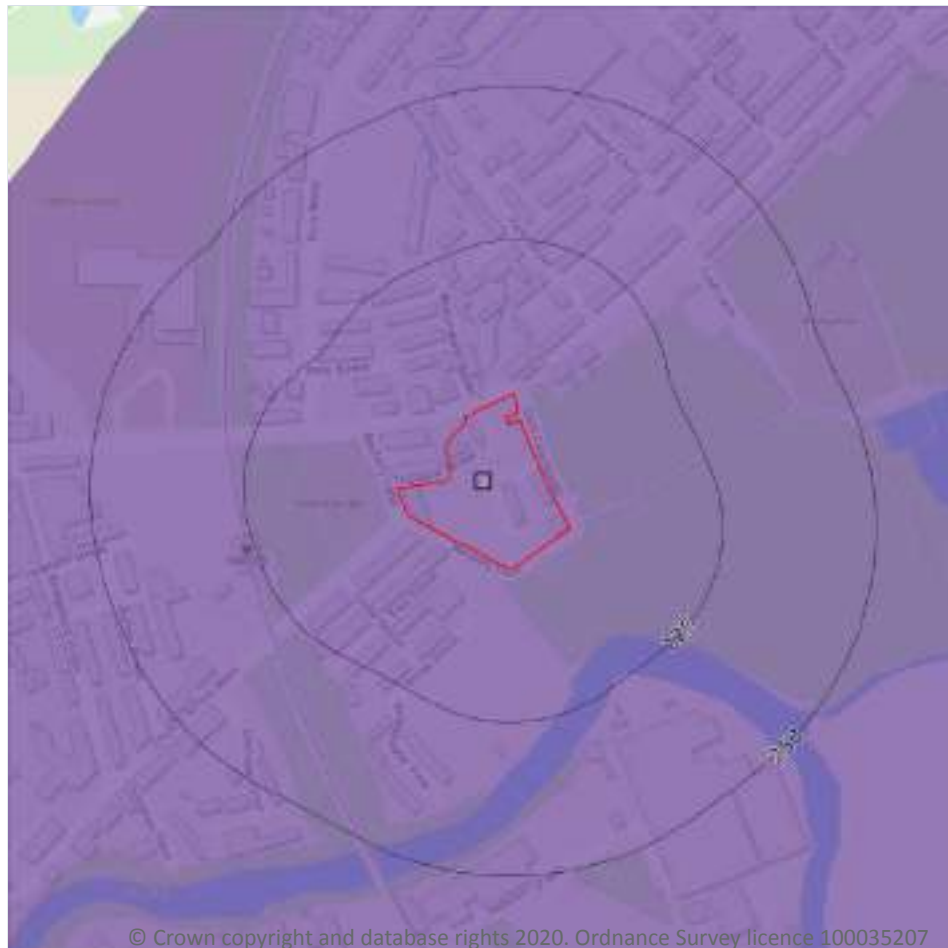
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Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process,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

This data is sourced from English Heritage, 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

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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 111**

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.

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

2

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 113**

ID	Location	Main Habitat	Other habitats
A	57m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	75m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.



13.2 Habitat Networks

Records within 250m

1

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.

Features are displayed on the Habitat designations map on **page 113**

ID	Location	Type	Habitat
2	196m NW	Network Enhancement Zone 2	Not specified

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

1

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.

Features are displayed on the Habitat designations map on **page 113**

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
1	7m E	NLUD Ref: 421000255	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

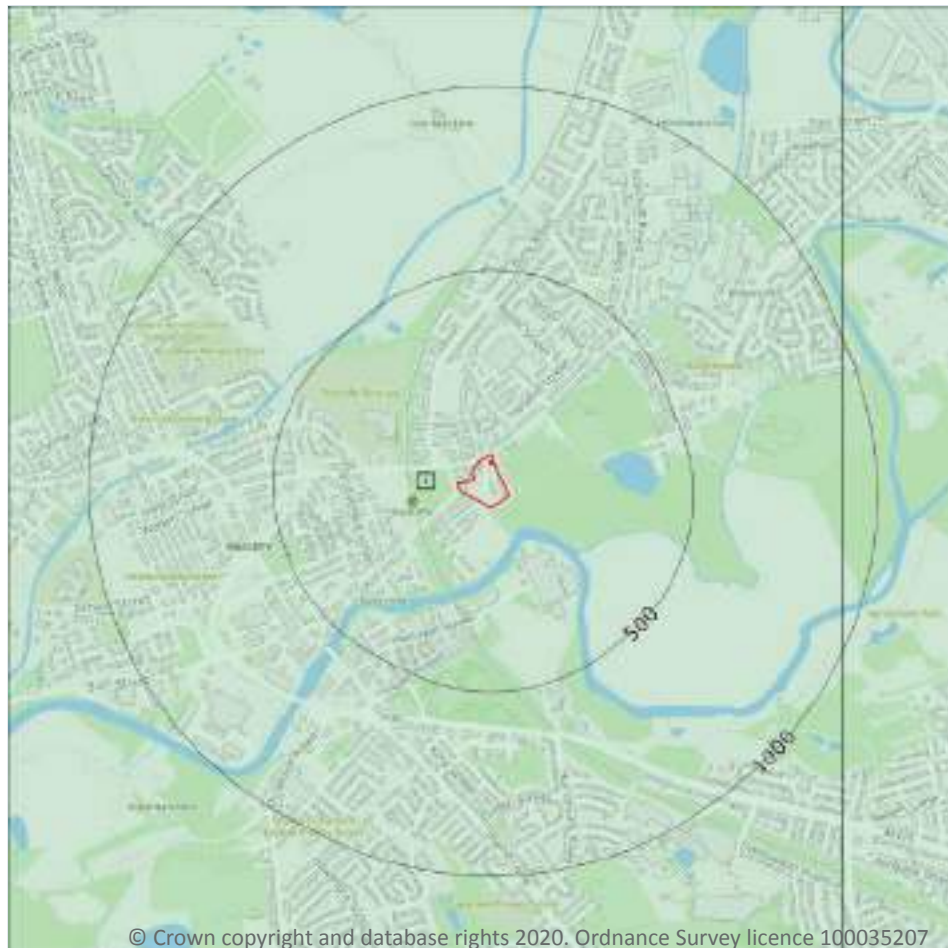
0

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 115**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	SD70NE

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

14.2 Artificial and made ground (10k)

Records within 500m

15

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 116**

ID	Location	LEX Code	Description	Rock description
1	On site	WMGR-ARTDP	Infilled Ground	Artificial Deposit
2	100m E	WGR-VOID	Worked Ground (Undivided)	Void
3	107m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	196m NE	WGR-VOID	Worked Ground (Undivided)	Void

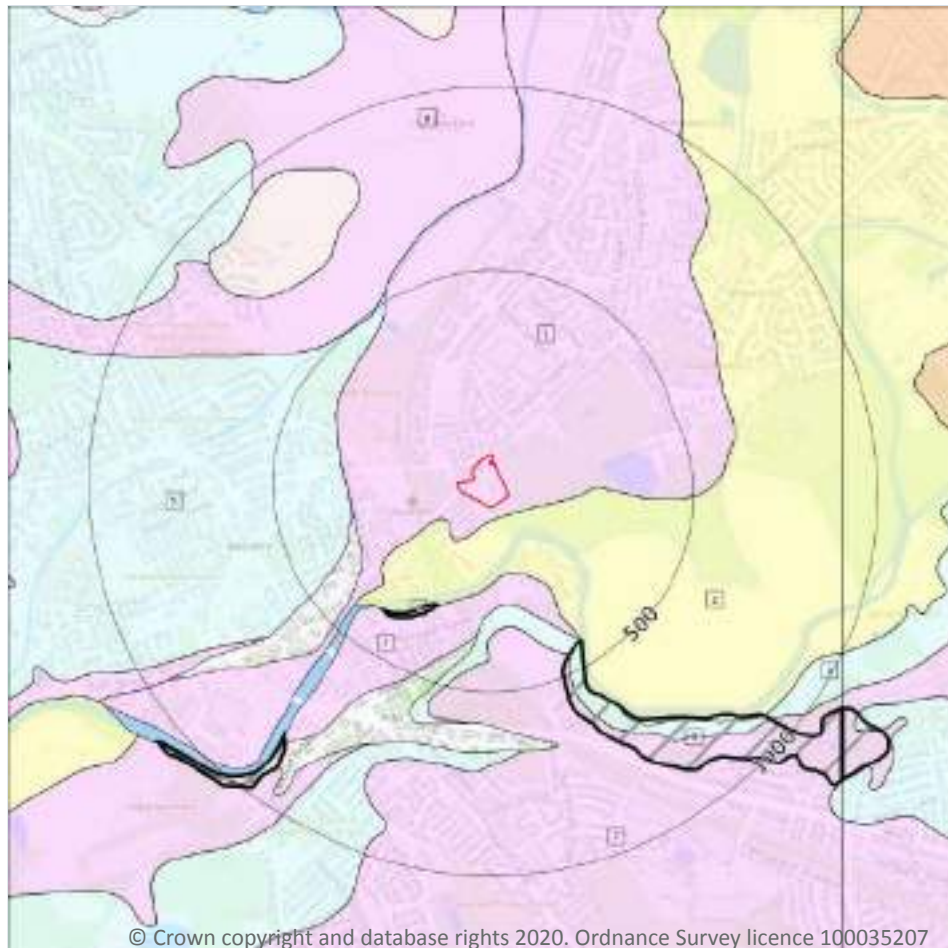


ID	Location	LEX Code	Description	Rock description
A	273m E	WGR-VOID	Worked Ground (Undivided)	Void
5	287m SW	WMGR-ARTDP	Infilled Ground	Artificial Deposit
A	300m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	327m NW	WGR-VOID	Worked Ground (Undivided)	Void
7	340m W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
B	344m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
8	393m S	WGR-VOID	Worked Ground (Undivided)	Void
9	400m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
B	420m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
B	440m S	WGR-VOID	Worked Ground (Undivided)	Void
C	481m NW	WGR-VOID	Worked Ground (Undivided)	Void

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

7

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 118**

ID	Location	LEX Code	Description	Rock description
1	On site	GFSDD-XSV	Glaciofluvial Sheet Deposits, Devensian - Sand And Gravel	Sand And Gravel
2	34m S	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
3	186m S	GFSDD-XSV	Glaciofluvial Sheet Deposits, Devensian - Sand And Gravel	Sand And Gravel
4	266m S	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton



ID	Location	LEX Code	Description	Rock description
5	296m W	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton
7	327m S	GFDUD-XSV	Glaciofluvial Deposits, Devensian - Sand And Gravel	Sand And Gravel
9	490m 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

2

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 118**

ID	Location	LEX Code	Description	Rock description
6	301m SW	SLIP-UNKNOWN	Landslide Deposits	Unknown/unclassified Entry
8	435m SE	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

9

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 120**

ID	Location	LEX Code	Description	Rock age
1	On site	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
2	36m SE	NR-SDST	Nob End Rock - Sandstone	Bolsovia Sub-age
4	139m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age



ID	Location	LEX Code	Description	Rock age
7	266m NW	PR-SDST	Peel Hall Rock - Sandstone	Duckmantian Sub-age
8	276m SW	NR-SDST	Nob End Rock - Sandstone	Bolsovia Sub-age
10	289m SW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
12	301m SE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
14	351m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
18	450m E	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

12

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 120**

ID	Location	Category	Description
3	139m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
5	142m N	ROCK	Coal seam, inferred
6	208m NE	ROCK	Coal seam, inferred
9	276m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
11	295m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
13	314m S	FOSSIL_HORIZON	Fossil horizon, marine band
15	374m NW	ROCK	Coal seam, inferred
16	397m SE	FOSSIL_HORIZON	Fossil horizon, marine band
17	437m E	ROCK	Coal seam, inferred
19	450m E	FAULT	Normal fault, inferred; crossmarks on downthrow side
20	472m NW	ROCK	Coal seam, inferred

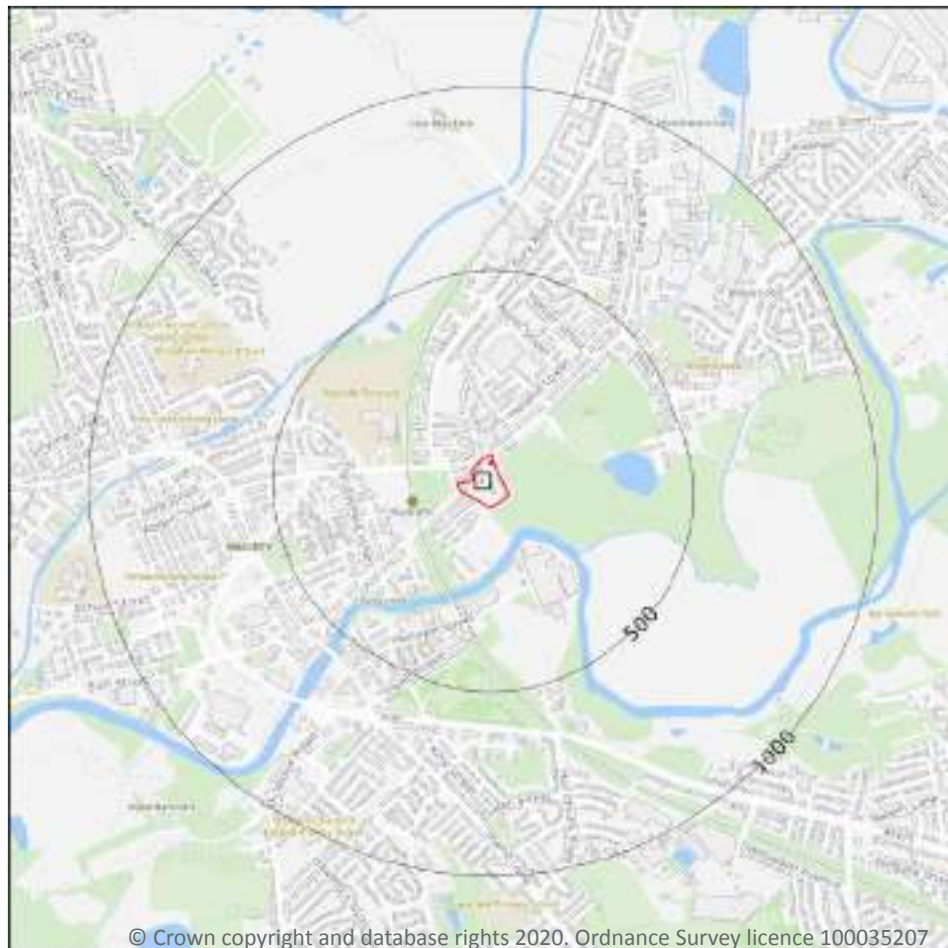


ID	Location	Category	Description
21	473m NW	ROCK	Coal seam, inferred

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

1

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

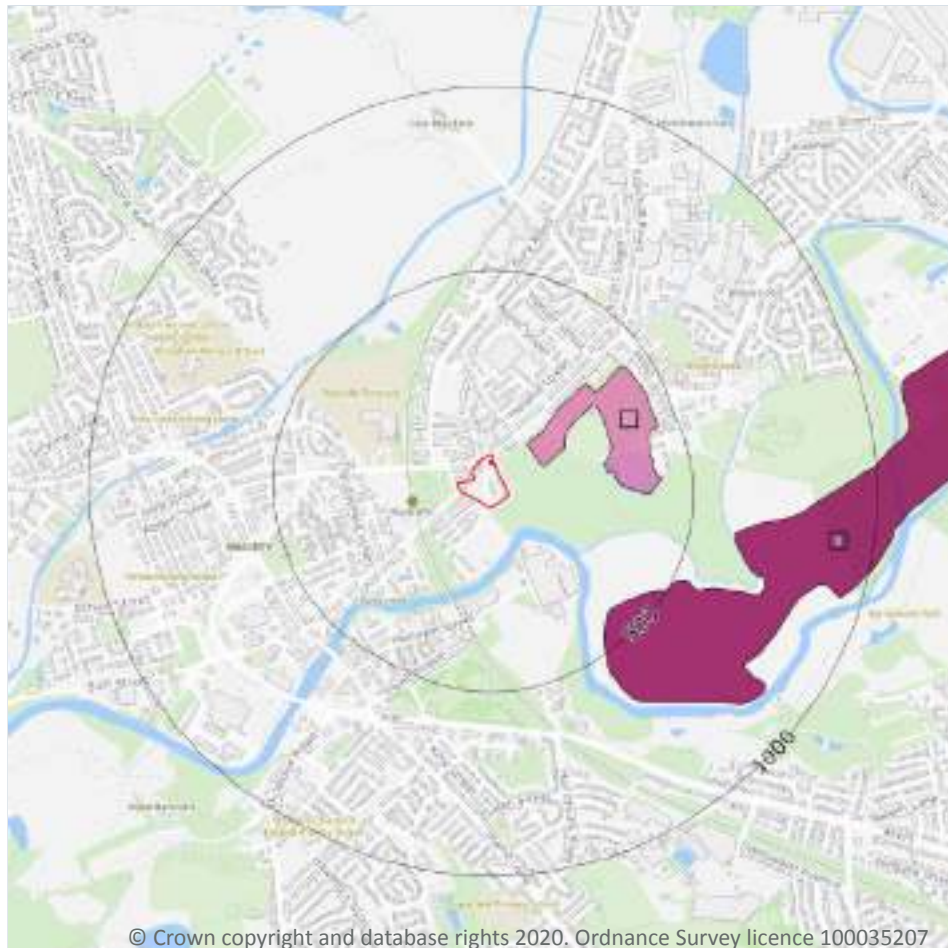
Features are displayed on the Geology 1:50,000 scale - Availability map on **page 123**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW085_manchester_v4

This data is sourced from the British Geological Survey.



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



- Site Outline
- Search buffers in metres (m)
- Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m

2

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.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 124**

ID	Location	LEX Code	Description	Rock description
1	100m E	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
2	418m SE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.



15.3 Artificial ground permeability (50k)

Records within 50m

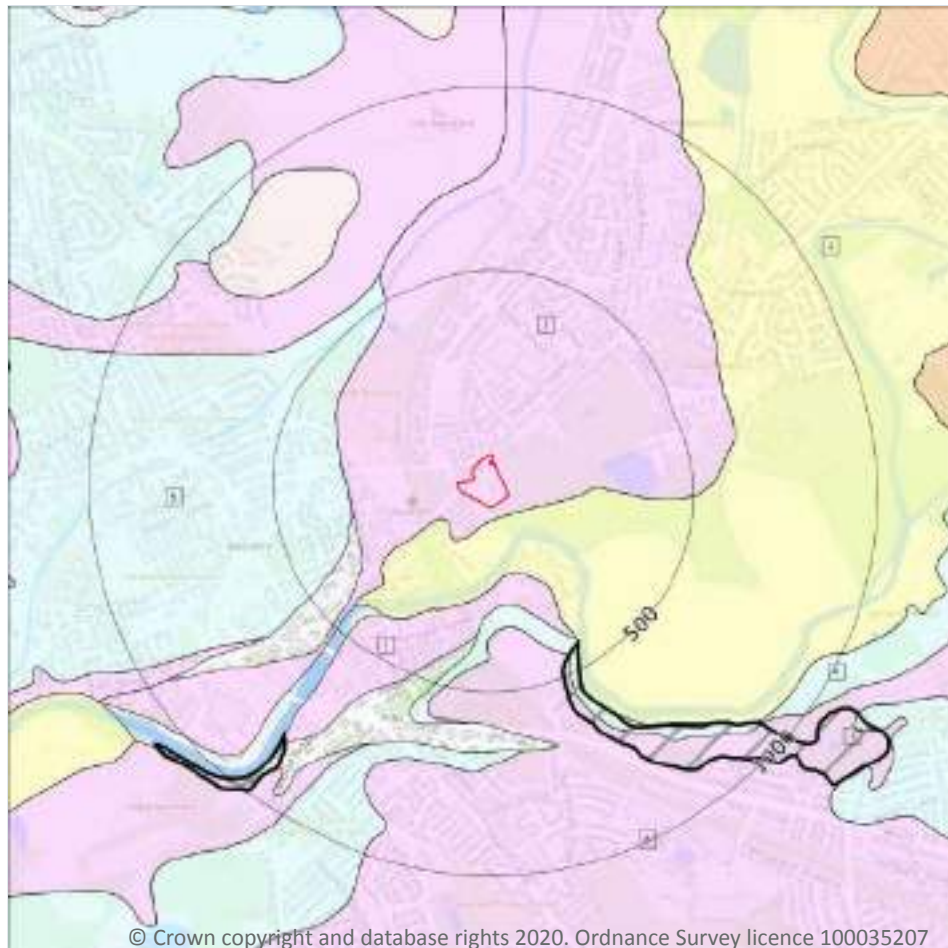
0

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.

15.4 Superficial geology (50k)

Records within 500m

6

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 126**

ID	Location	LEX Code	Description	Rock description
1	On site	GFSDD-XSV	GLACIOFLUVIAL SHEET DEPOSITS, DEVENSIAN	SAND AND GRAVEL
2	34m S	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
3	187m S	GFSDD-XSV	GLACIOFLUVIAL SHEET DEPOSITS, DEVENSIAN	SAND AND GRAVEL
4	266m S	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON

ID	Location	LEX Code	Description	Rock description
5	296m W	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
6	327m S	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

2

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
On site	Intergranular	Very High	High
34m NE	Intergranular	High	Very Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

1

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 126**

ID	Location	LEX Code	Description	Rock description
7	436m SE	SLIP-UNKNOWN	LANDSLIDE DEPOSITS	UNKNOWN/UNCLASSIFIED ENTRY

This data is sourced from the British Geological Survey.

15.7 Landslip 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 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

9

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 128**

ID	Location	LEX Code	Description	Rock age
1	On site	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
2	37m SE	NR-SDST	NOB END ROCK - SANDSTONE	WESTPHALIAN
4	139m NE	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN



ID	Location	LEX Code	Description	Rock age
7	266m NW	PR-SDST	PEEL HALL ROCK - SANDSTONE	WESTPHALIAN
9	276m SW	NR-SDST	NOB END ROCK - SANDSTONE	WESTPHALIAN
10	289m SW	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
11	302m SE	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
13	350m NW	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
17	450m E	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	2
---------------------------	----------

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
37m SE	Fracture	High	Moderate

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	10
----------------------------	-----------

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 128**

ID	Location	Category	Description
3	139m NE	FAULT	Fault, inferred
5	142m N	ROCK	Coal seam, inferred

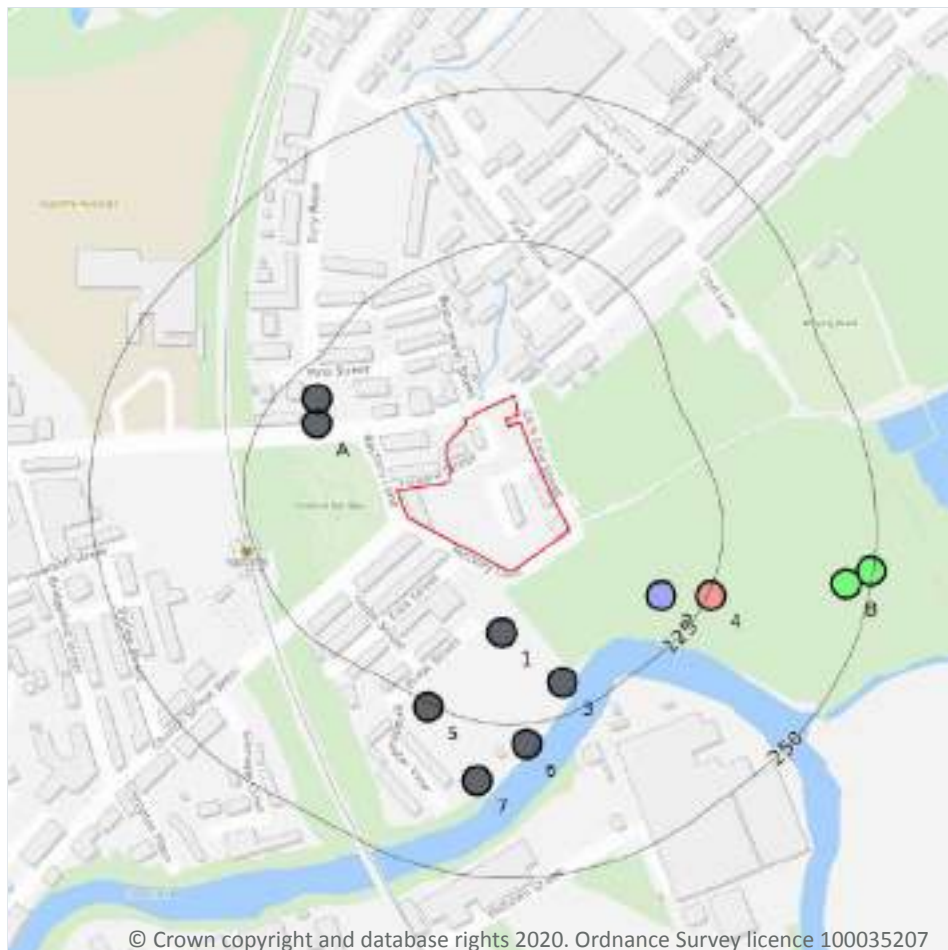


ID	Location	Category	Description
6	208m NE	ROCK	Coal seam, inferred
8	275m SW	FAULT	Fault, inferred
12	314m S	FOSSIL_HORIZON	Marine band
14	375m NW	ROCK	Coal seam, inferred
15	397m SE	FOSSIL_HORIZON	Marine band
16	436m E	ROCK	Coal seam, inferred
18	450m E	FAULT	Fault, inferred
19	472m NW	ROCK	Coal seam, 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

11

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 131**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	51m S	379040 407290	EAST LANCASHIRE PAPER MILL 18	-	Y	N/A
A	85m NW	378890 407460	RADCLIFFE AREA SEWER SCHEME 2	-	Y	N/A
2	92m SE	379170 407320	RADCLIFFE	-2.0	N	18774

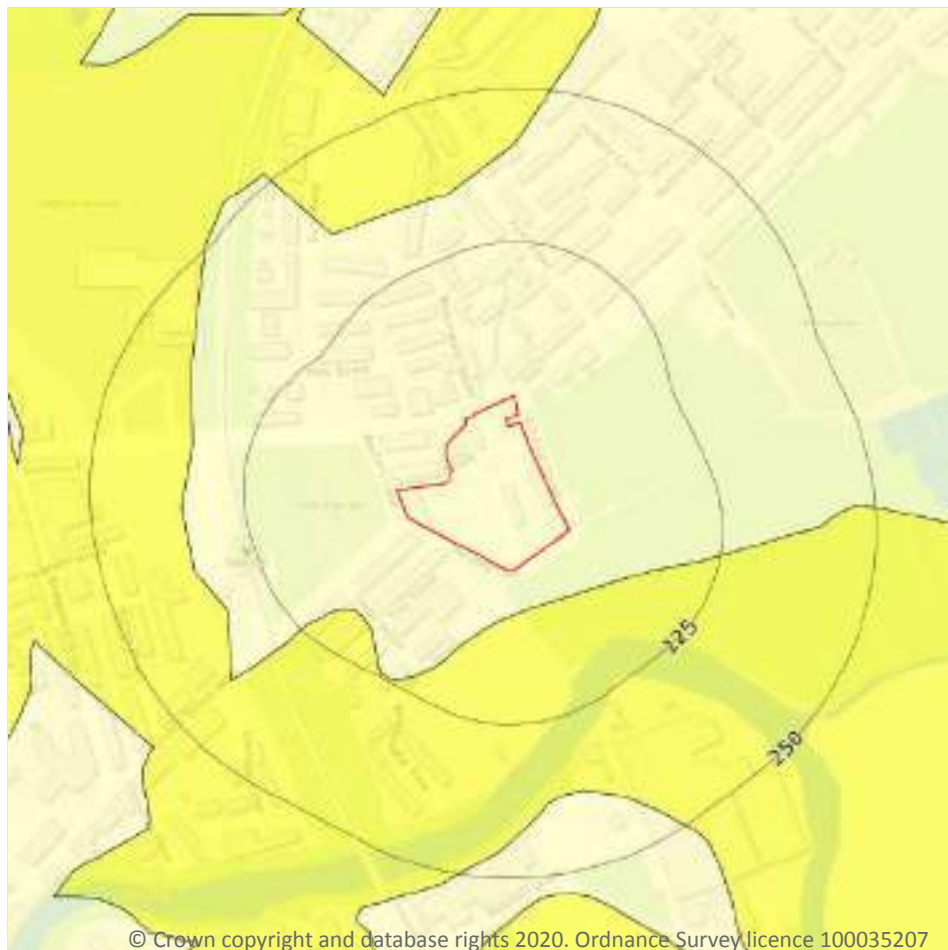


ID	Location	Grid reference	Name	Length	Confidential	Web link
A	99m NW	378890 407480	RADCLIFFE AREA SEWER SCHEME 1	-	Y	N/A
3	99m SE	379090 407250	EAST LANCASHIRE PAPER MILL 19	-	Y	N/A
4	127m SE	379210 407320	J. WILD & SONS	124.36	N	18406
5	128m SW	378980 407230	EAST LANCASHIRE PAPER MILL 21	-	Y	N/A
6	141m S	379060 407200	EAST LANCASHIRE PAPER MILL 17	-	Y	N/A
7	172m S	379020 407170	EAST LANCASHIRE PAPER MILL 20	-	Y	N/A
B	230m E	379320 407330	RADCLIFFE NO.1	13.5	N	18490
B	248m E	379340 407340	RADCLIFFE NO.2	20.0	N	18491

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).

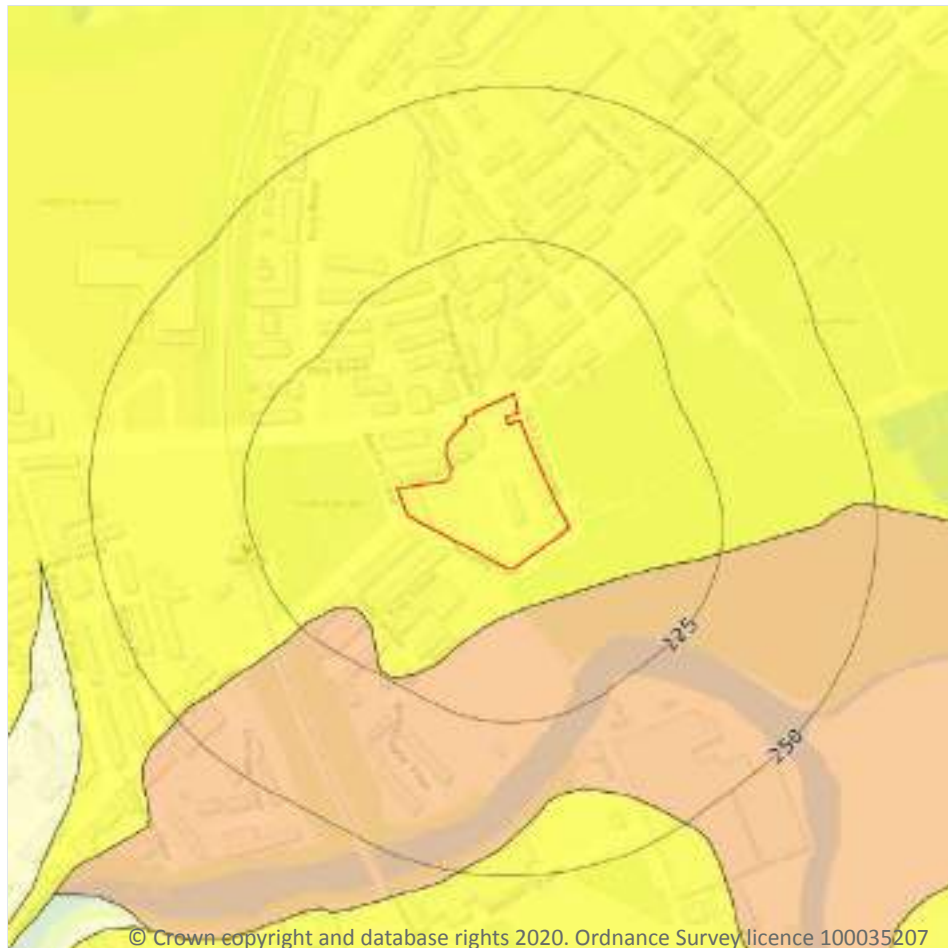
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 133**

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
34m S	Very low	Ground conditions predominantly low plasticity.

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

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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 134**

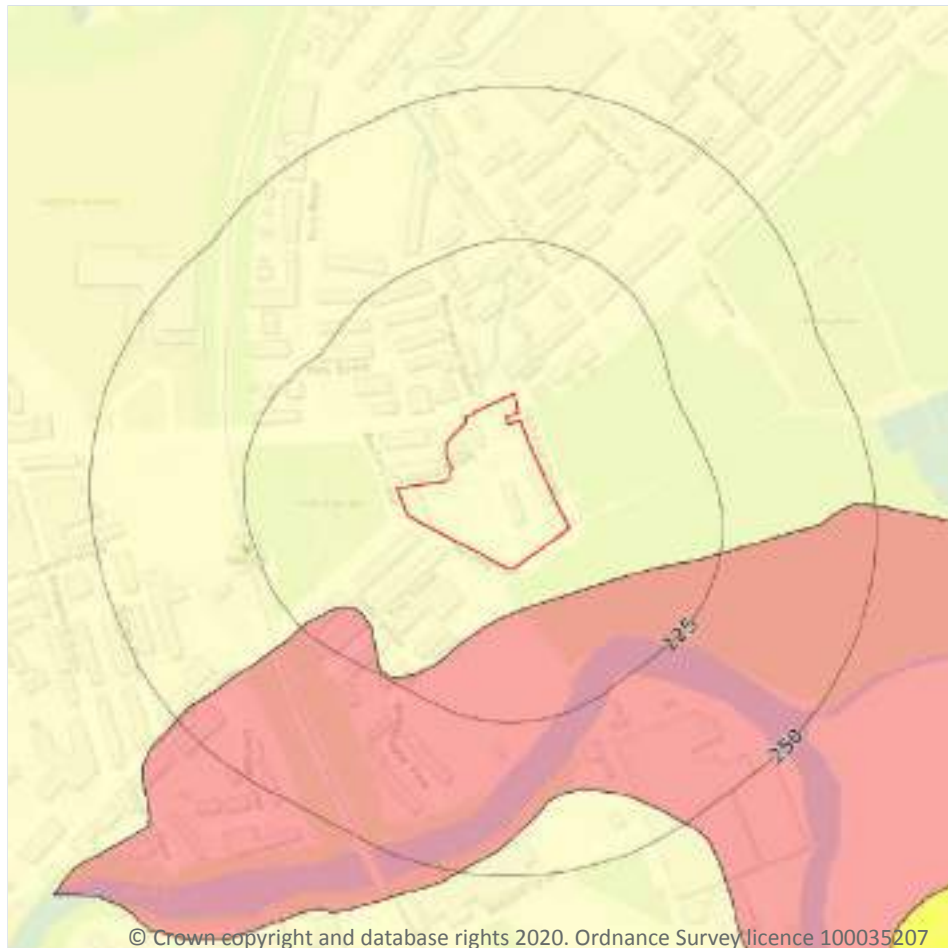
Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

Location	Hazard rating	Details
34m S	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.

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

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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 136**

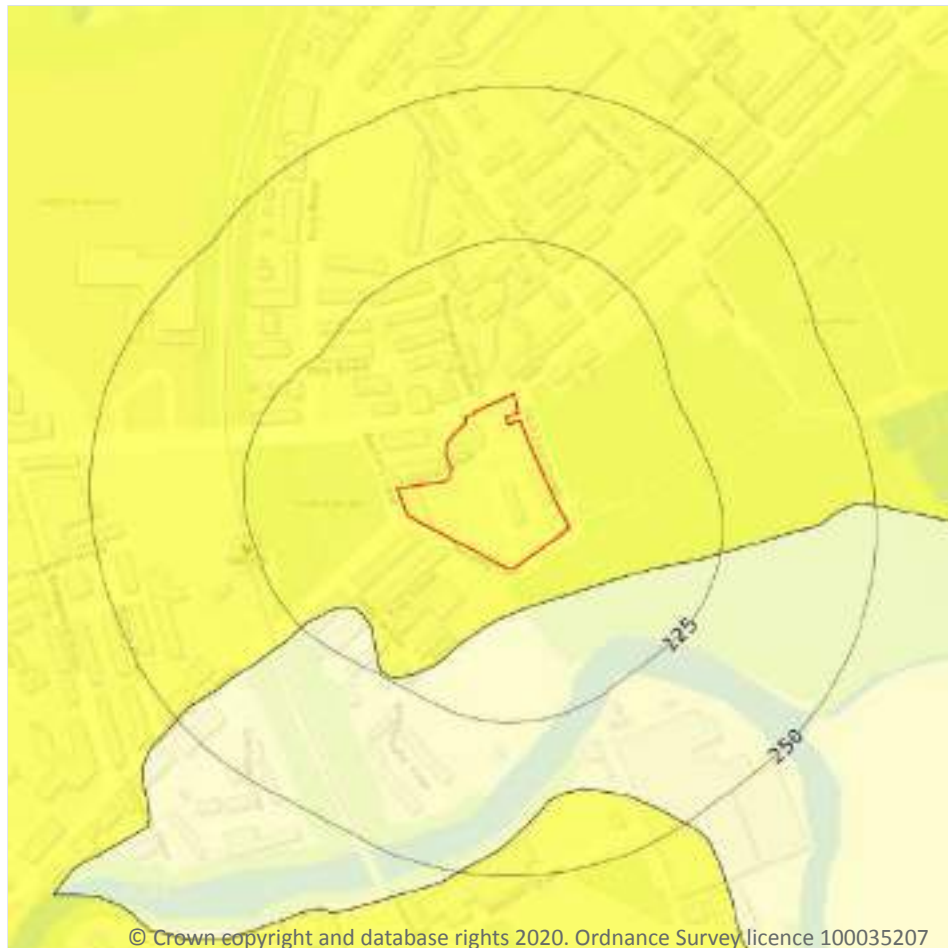
Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
34m S	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.



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.

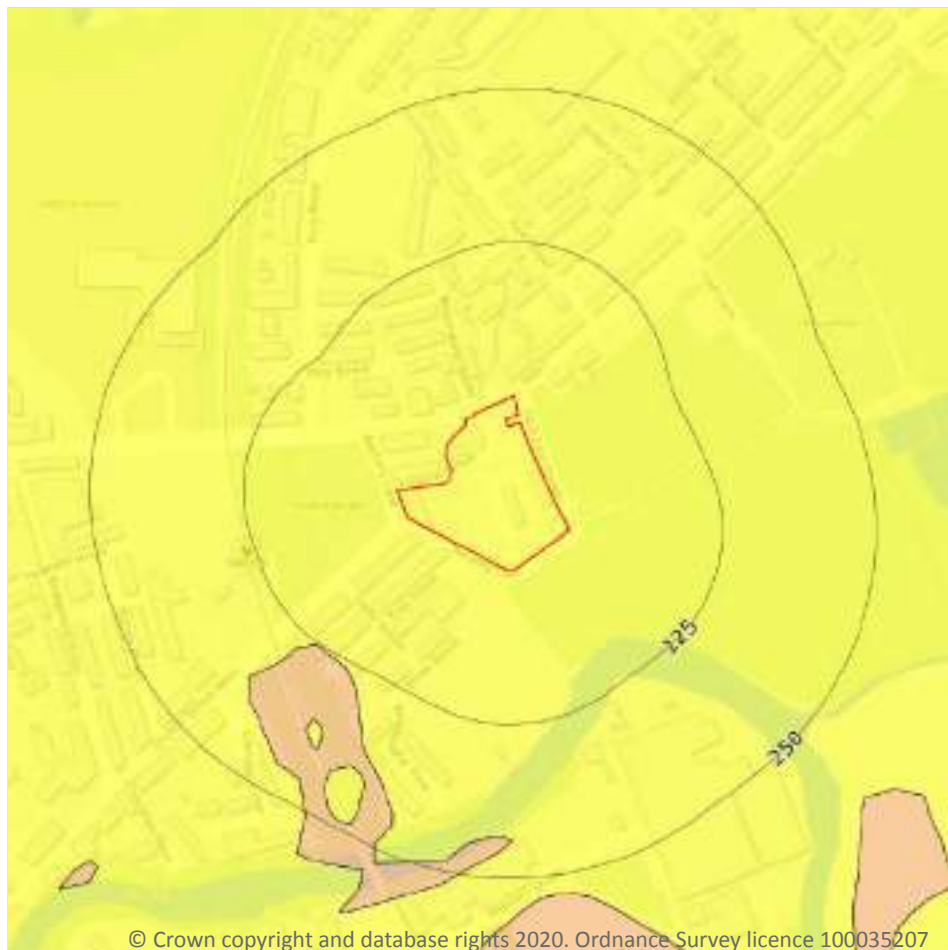
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 138**

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.
34m S	Negligible	Deposits with potential to collapse when loaded and saturated are believed not 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

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 139**

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 140**

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 Peter Brett Associates (PBA).

18.2 BritPits

Records within 500m

2

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 142**

ID	Location	Details	Description
A	48m W	Name: Radcliffe Gravel Pit Address: RADCLIFFE, Lancashire Commodity: Sand & Gravel Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Type: Ceased 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
O	321m SW	Name: Scar Top Address: RADCLIFFE, Lancashire Commodity: Sandstone Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Type: Ceased 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

48

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 142**

ID	Location	Land Use	Year of mapping	Mapping scale
A	21m W	Gravel Pit	1851	1:10560
B	39m E	Reservoirs	1891	1:10560
A	54m W	Refuse Heap	1908	1:10560
B	57m E	Reservoirs	1891	1:10560
B	58m E	Reservoirs	1908	1:10560
A	75m W	Refuse Heap	1938	1:10560
A	75m W	Refuse Heap	1927	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
C	81m E	Reservoir	1938	1:10560
C	81m E	Reservoir	1927	1:10560
C	81m E	Reservoir	1908	1:10560
C	81m E	Reservoir	1891	1:10560
C	88m E	Reservoir	1955	1:10560
C	94m E	Ponds	1977	1:10000
C	94m E	Ponds	1965	1:10560
C	95m E	Pond	1991	1:10000
C	95m E	Pond	1988	1:10000
C	104m NE	Reservoir	1938	1:10560
C	104m NE	Reservoir	1927	1:10560
C	104m NE	Reservoir	1908	1:10560
C	104m NE	Reservoir	1891	1:10560
C	111m NE	Reservoir	1955	1:10560
D	147m E	Ponds	1891	1:10560
D	148m E	Filter Beds	1938	1:10560
D	148m E	Filter Beds	1927	1:10560
E	161m S	Unspecified Ground Workings	1991	1:10000
E	161m S	Unspecified Ground Workings	1977	1:10000
E	161m S	Unspecified Ground Workings	1965	1:10560
E	161m S	Unspecified Ground Workings	1988	1:10000
1	170m NE	Ponds	1851	1:10560
D	178m E	Filter Beds	1938	1:10560
D	178m E	Filter Beds	1927	1:10560
F	181m NE	Reservoirs	1938	1:10560
F	181m NE	Reservoirs	1927	1:10560
F	181m NE	Reservoir	1908	1:10560
F	184m NE	Reservoirs	1891	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
D	187m E	Filter Beds	1955	1:10560
F	190m NE	Reservoirs	1955	1:10560
G	196m NE	Reservoirs	1991	1:10000
G	196m NE	Reservoirs	1977	1:10000
G	196m NE	Ponds	1965	1:10560
G	196m NE	Reservoirs	1988	1:10000
H	200m E	Unspecified Ground Workings	1938	1:10560
H	200m E	Unspecified Ground Workings	1927	1:10560
H	202m E	Unspecified Ground Workings	1955	1:10560
I	202m E	Filter Beds	1955	1:10560
I	210m NE	Filter Beds	1938	1:10560
I	210m NE	Filter Beds	1927	1:10560
J	245m E	Ponds	1851	1:10560

This data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m

9

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 142**

ID	Location	Land Use	Year of mapping	Mapping scale
L	283m NW	Colliery	1891	1:10560
AE	535m NW	Air Shaft	1950	1:10560
AE	570m NW	Air Shaft	1938	1:10560
AE	570m NW	Air Shaft	1927	1:10560
AE	570m NW	Air Shaft	1908	1:10560
-	819m W	Unspecified Shaft	1891	1:10560
-	865m S	Unspecified Old Shaft	1950	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
-	870m S	Unspecified Old Shaft	1938	1:10560
-	870m S	Unspecified Old Shaft	1927	1:10560

This data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

3

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 142**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
3	255m SE	Dumers Lane	Sand and gravel	Surface mineral working	Valid	23/1/51
10	387m SE	Dumers Lane	Sand and gravel	Surface mineral working	Valid	23/1/51
Z	422m E	Close Park	Sand and gravel	Surface mineral working	Valid	23/1/51

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 Peter Brett Associates (PBA).

18.8 JPB mining areas

Records on site

1

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

Location	Details
On site	In addition to being located inside an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) have information such as mining plans and maps held within their archive of mining activities that have occurred within 1km of this property which may supplement this information. Further details and a quote for services can be obtained by emailing this report to enquiries.gs@jpb.co.uk .

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 Mining Searches UK.

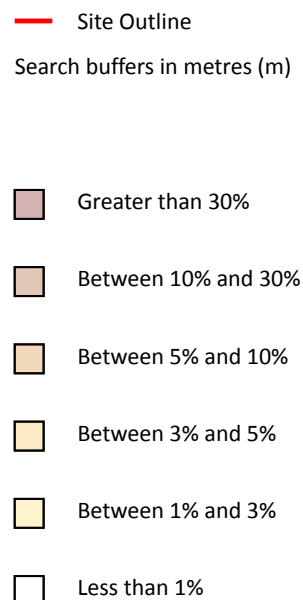
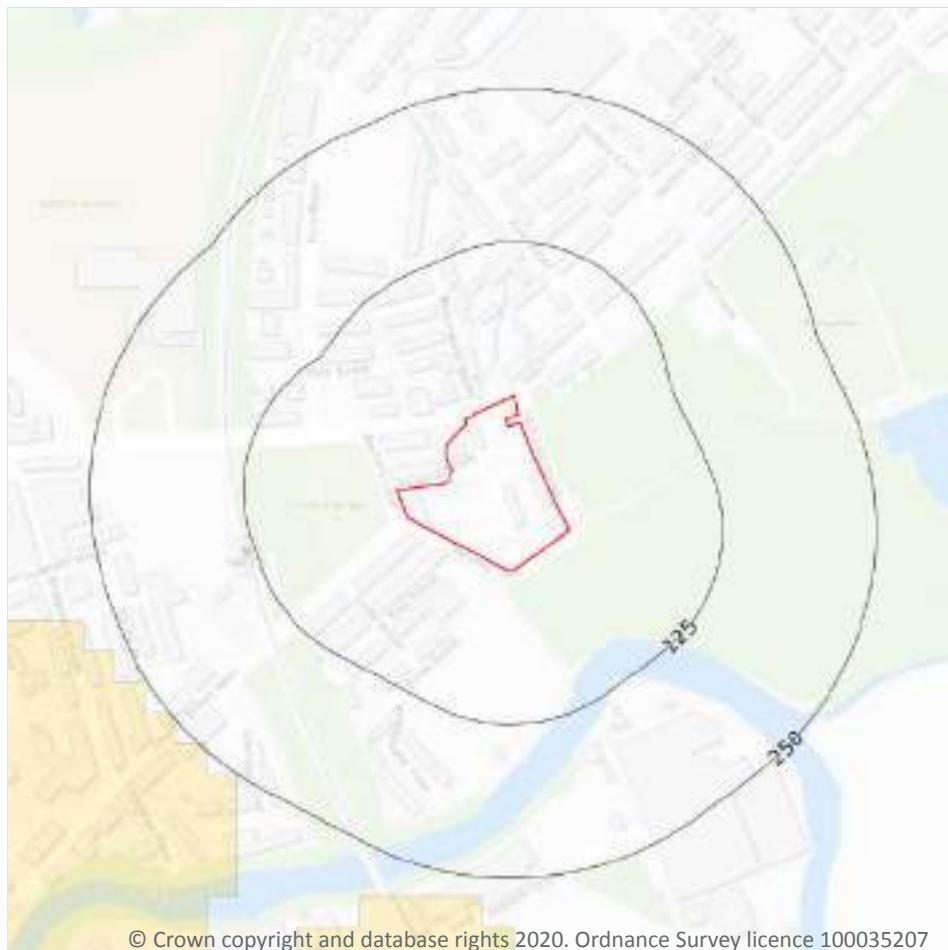
18.13 Clay mining

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 149**

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

7

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 km². 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 km²; 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
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
17m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
19m S	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
28m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
34m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
36m NW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 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 km²).

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 km².

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
- Crossrail 1 Worksites
- 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

27

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 152**

Location	Land Use	Year of mapping	Mapping scale
130m NW	Railway Sidings	1955	10560
130m SE	Railway Sidings	1938	10560
130m SE	Railway Sidings	1927	10560
132m NW	Railway Sidings	1965	10560
132m W	Railway Sidings	1938	10560
132m W	Railway Sidings	1927	10560
132m W	Railway Sidings	1908	10560
132m W	Railway Sidings	1891	10560
154m SE	Railway Sidings	1955	10560
162m SW	Railway Sidings	1956	1250
167m SE	Tramway Sidings	1929	2500
167m SE	Tramway Sidings	1937	2500
168m SW	Railway Sidings	1956	2500
171m SW	Railway Sidings	1909	2500
172m SW	Railway Sidings	1893	2500
172m SW	Railway Sidings	1929	2500
172m SW	Railway Sidings	1937	2500



Location	Land Use	Year of mapping	Mapping scale
185m NW	Railway Sidings	1956	2500
187m NW	Railway Sidings	1956	1250
188m NW	Railway Sidings	1929	2500
188m NW	Railway Sidings	1937	2500
192m NW	Railway Sidings	1909	2500
196m W	Railway Sidings	1956	1250
197m NW	Railway Sidings	1893	2500
209m W	Railway Sidings	1956	1250
209m NW	Railway Sidings	1956	1250
246m W	Railway Sidings	1956	1250

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

4

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

Features are displayed on the Railway infrastructure and projects map on **page 152**

Location	Description
158m SW	Abandoned
161m SW	Razed
161m SW	Abandoned



Location	Description
164m SW	Abandoned

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	24
----------------------------	-----------

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways. Features are displayed on the Railway infrastructure and projects map on **page 152**

Location	Name	Type
129m W	-	light_rail
129m W	Not given	Multi Track
131m W	Not given	Multi Track
132m W	-	light_rail
133m W	Not given	Multi Track
134m W	Not given	Multi Track
136m SW	Not given	Multi Track
140m W	-	light_rail
141m SW	-	light_rail
143m W	-	light_rail
145m SW	-	light_rail
145m W	Not given	Multi Track
147m SW	Not given	Multi Track
147m W	Not given	Multi Track
147m W	-	light_rail
150m W	Metrolink	light_rail
150m SW	-	light_rail
154m SW	-	light_rail
157m NW	Not given	Multi Track
225m SW	-	light_rail



Location	Name	Type
228m SW	-	light_rail
230m SW	Not given	Multi Track
239m NW	Not given	Multi Track
245m NW	Not given	Multi Track

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

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379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: County Series

Map date: 1893

Scale: 1:2,500

Printed at: 1:2,500



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

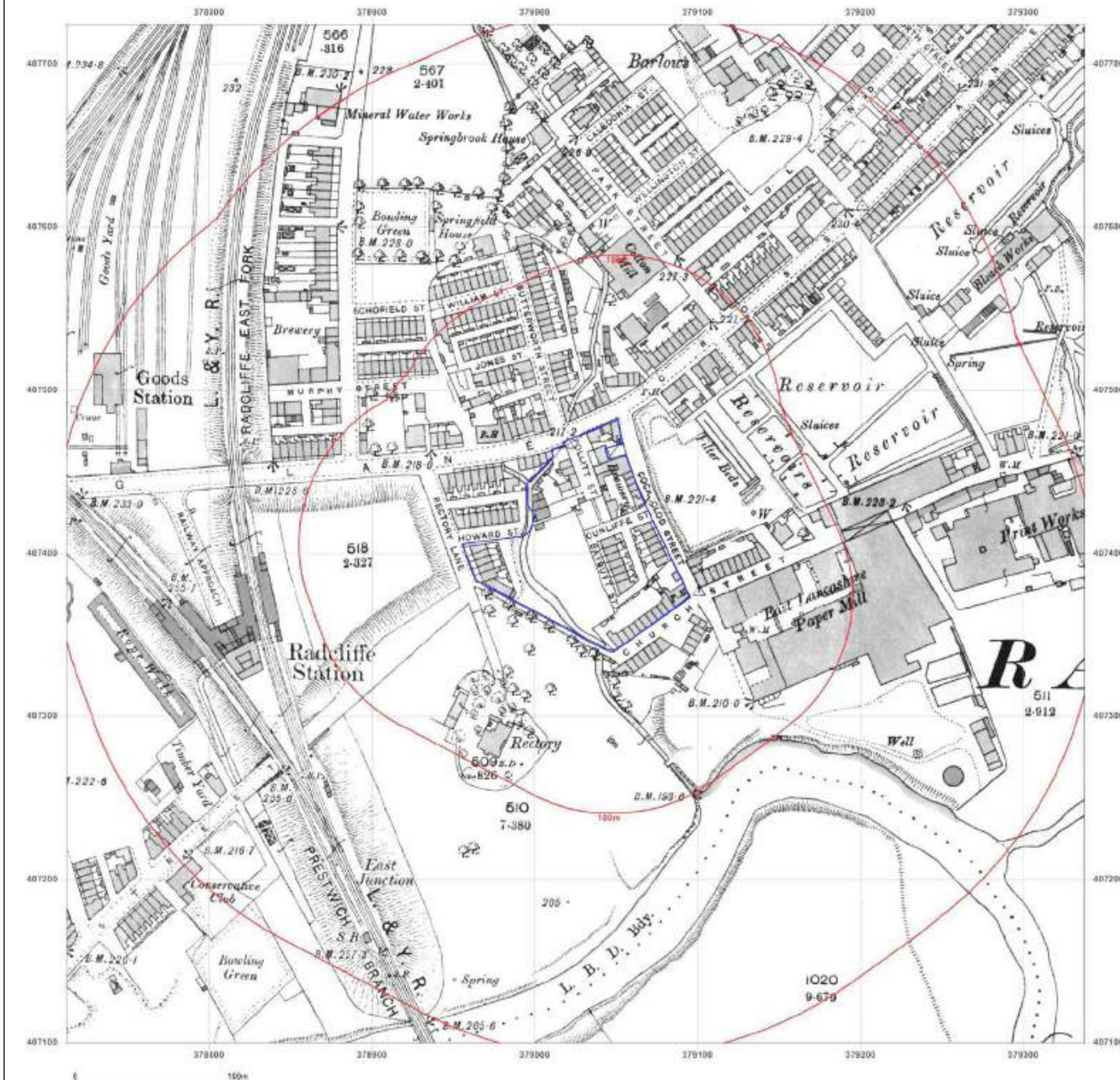


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Site Details:

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Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: County Series

Map date: 1909

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1909
Revised 1909
Edition N/A
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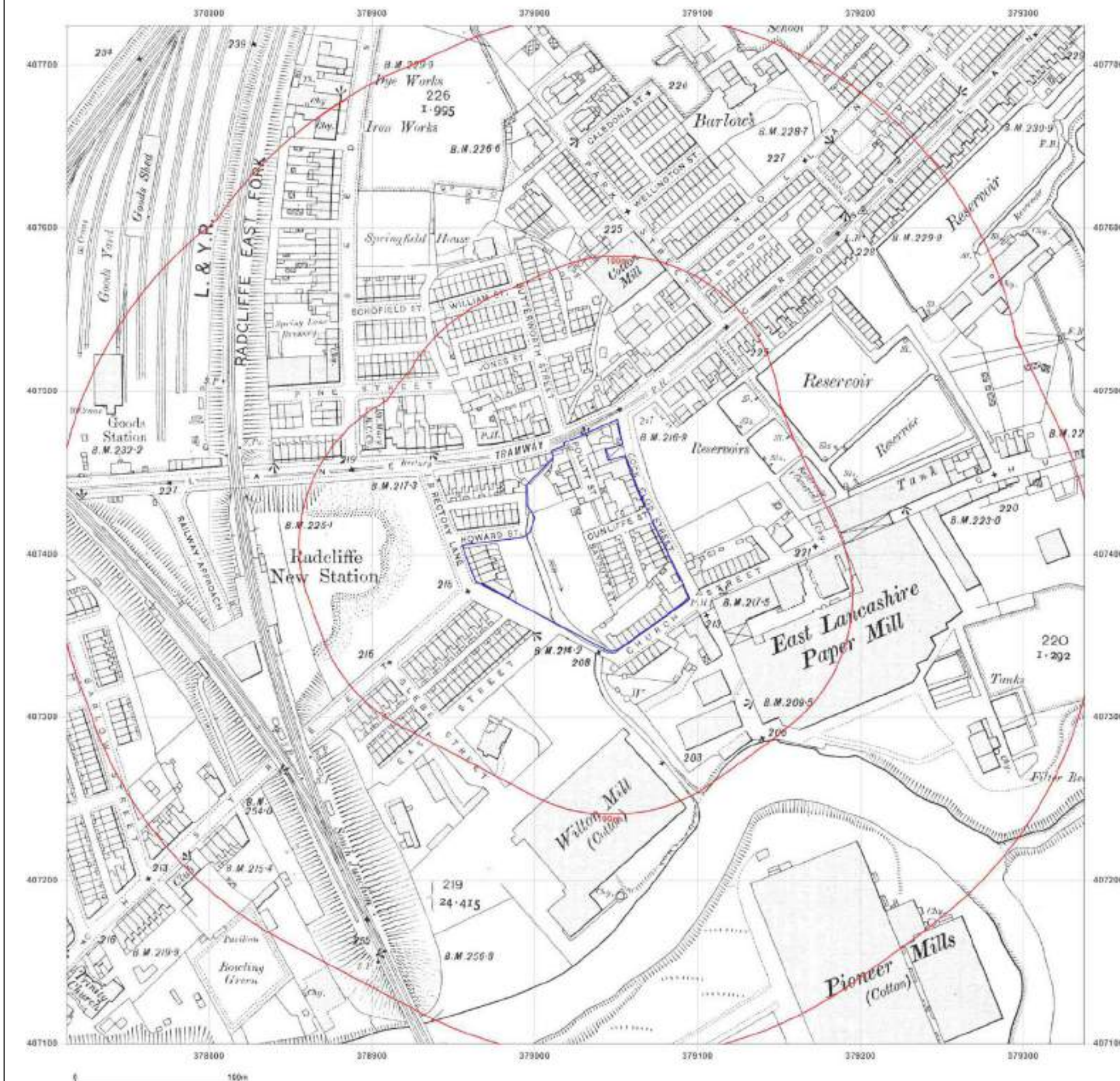


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Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: County Series

Map date: 1929

Scale: 1:2,500

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Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: County Series

Map date: 1937

Scale: 1:2,500

Printed at: 1:2,500



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Client Ref: 13529
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Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1956

Scale: 1:1,250

Printed at: 1:2,000



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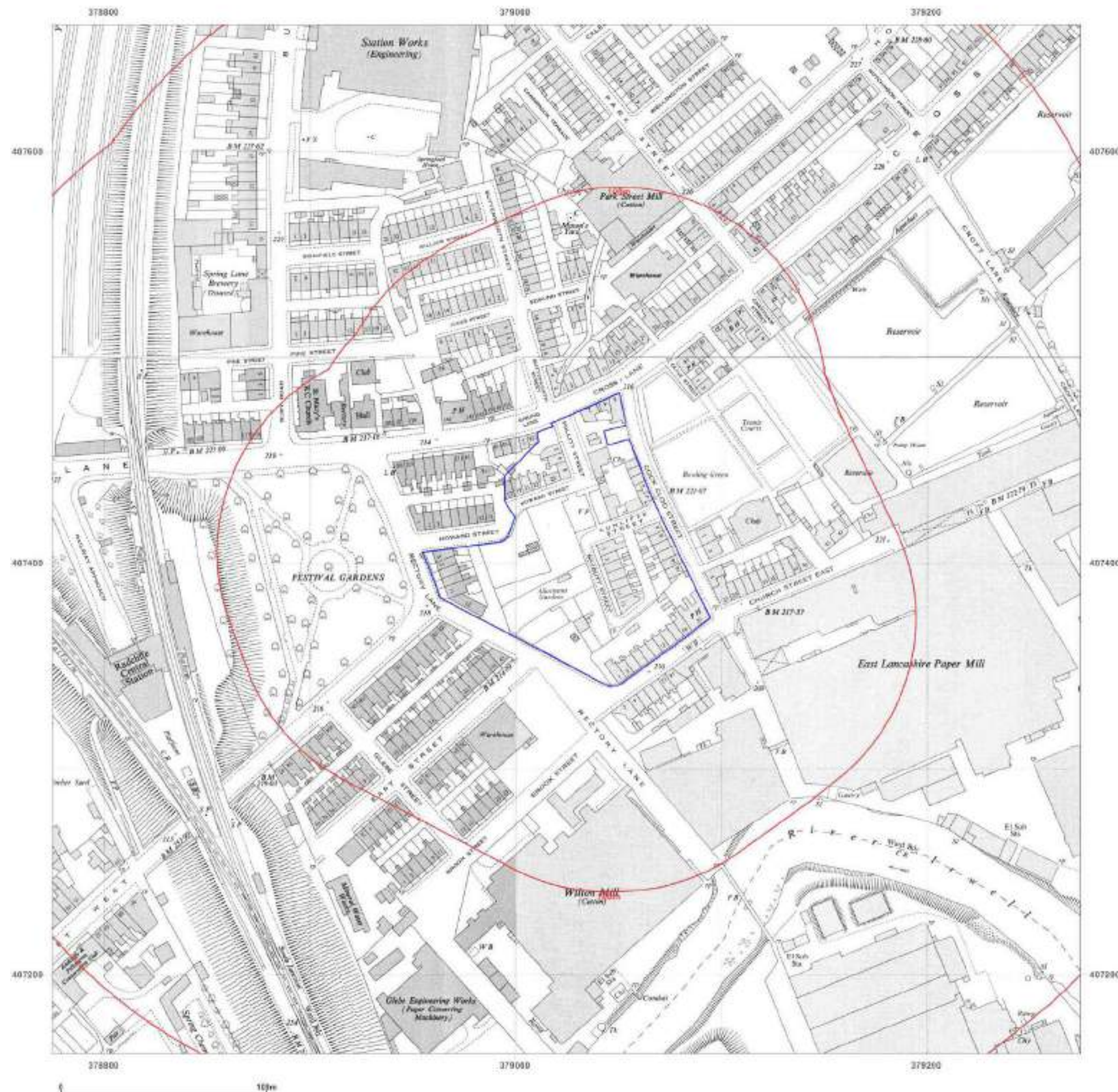


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Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1956

Scale: 1:2,500

Printed at: 1:2,500



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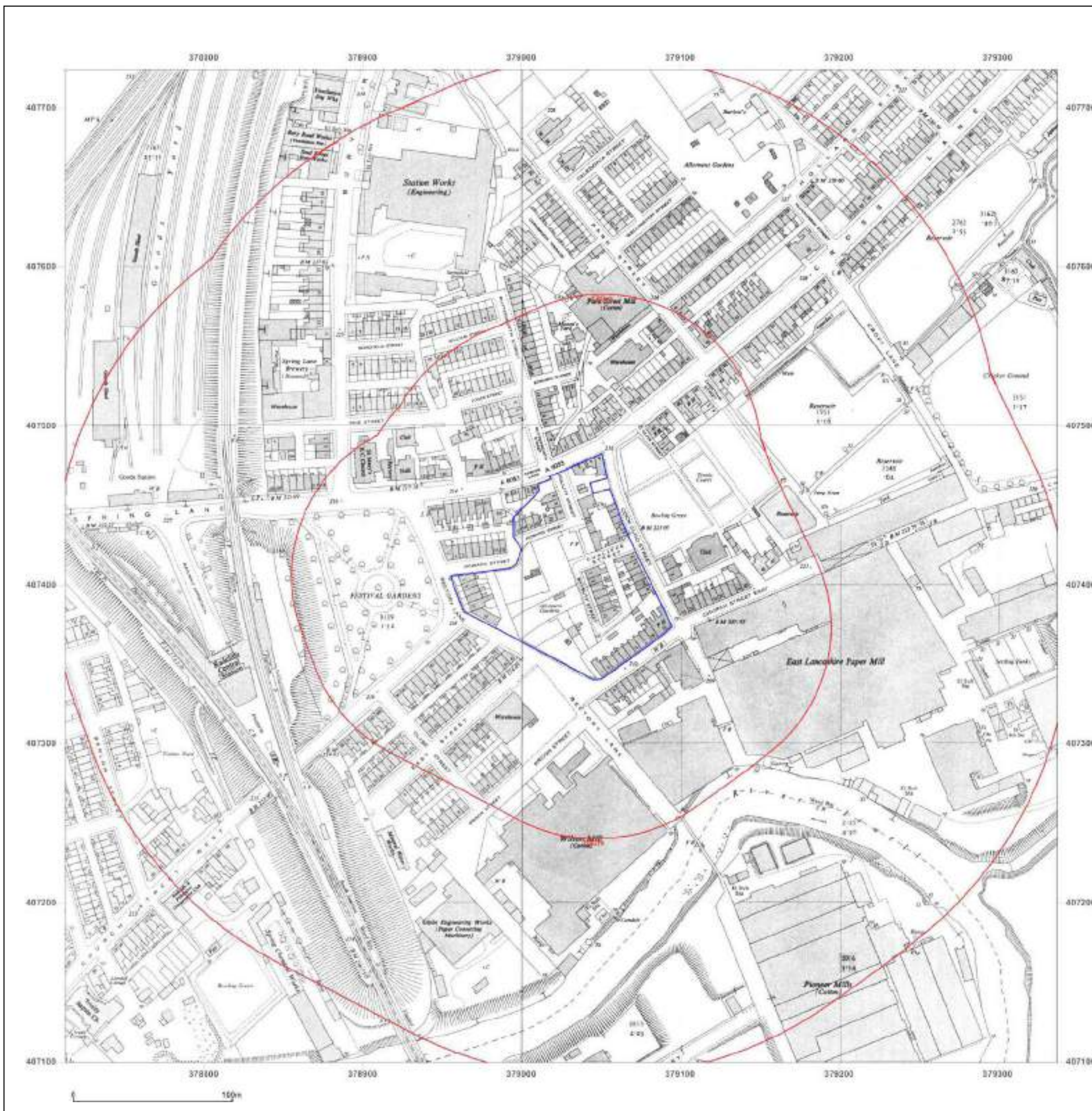


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Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1957

Scale: 1:1,250

Printed at: 1:2,000



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 Revised N/A
 Edition N/A
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 Revised N/A
 Edition N/A
 Copyright 1957
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Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1966-1970

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1956
 Revised 1963
 Edition N/A
 Copyright 1966
 Levelled 1962

Surveyed 1956
 Revised 1963
 Edition N/A
 Copyright 1970
 Levelled 1963

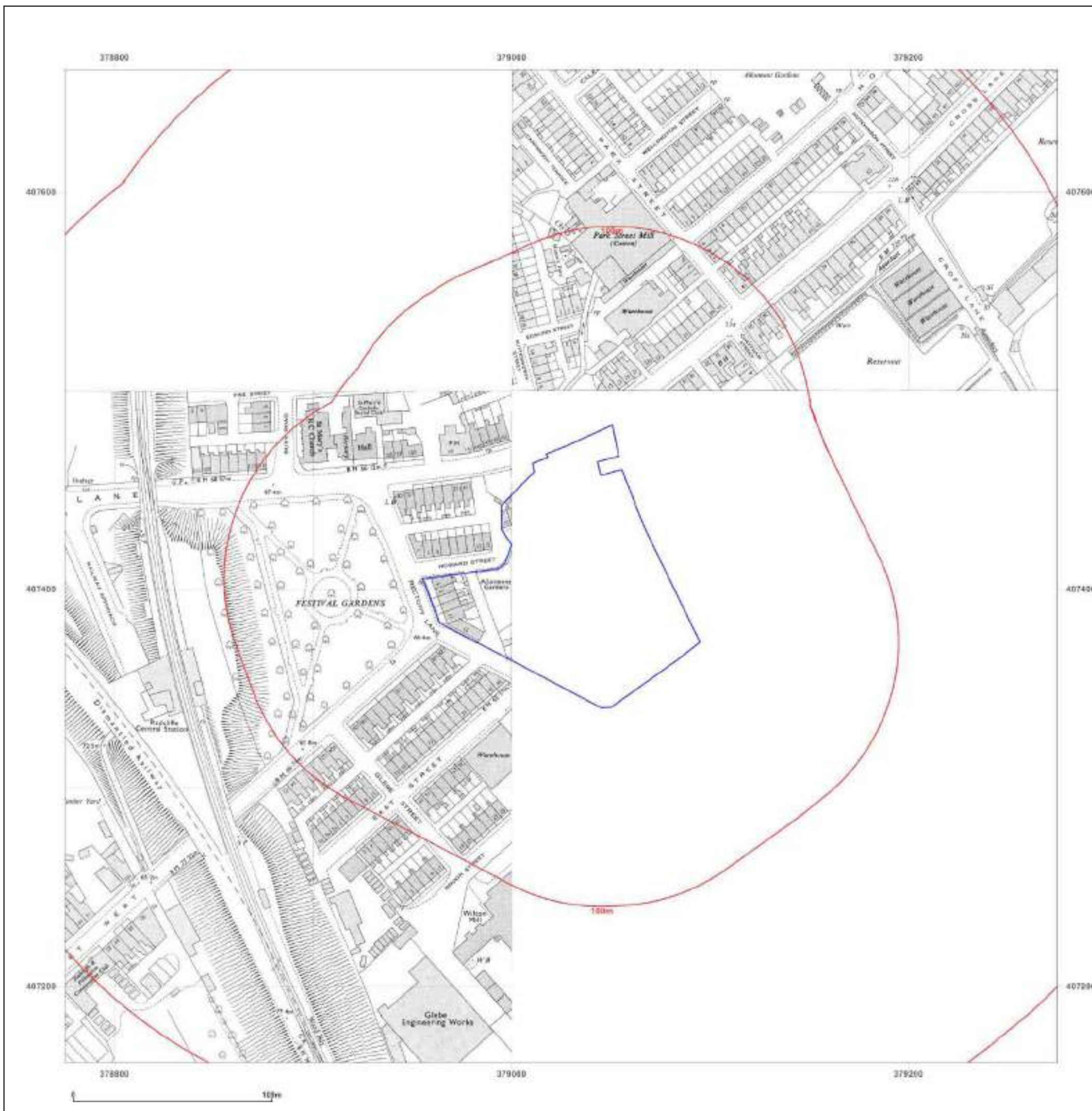


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Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1976-1978

Scale: 1:1,250

Printed at: 1:2,000



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

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1978
Levelled 1963



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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1984-1988

Scale: 1:1,250

Printed at: 1:2,000



Surveyed N/A
 Revised N/A
 Edition N/A
 Copyright 1988
 Levelled 1963

Surveyed 1962
 Revised 1985
 Edition N/A
 Copyright 1985
 Levelled 1963

Surveyed 1963
 Revised 1988
 Edition N/A
 Copyright 1988
 Levelled 1963

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

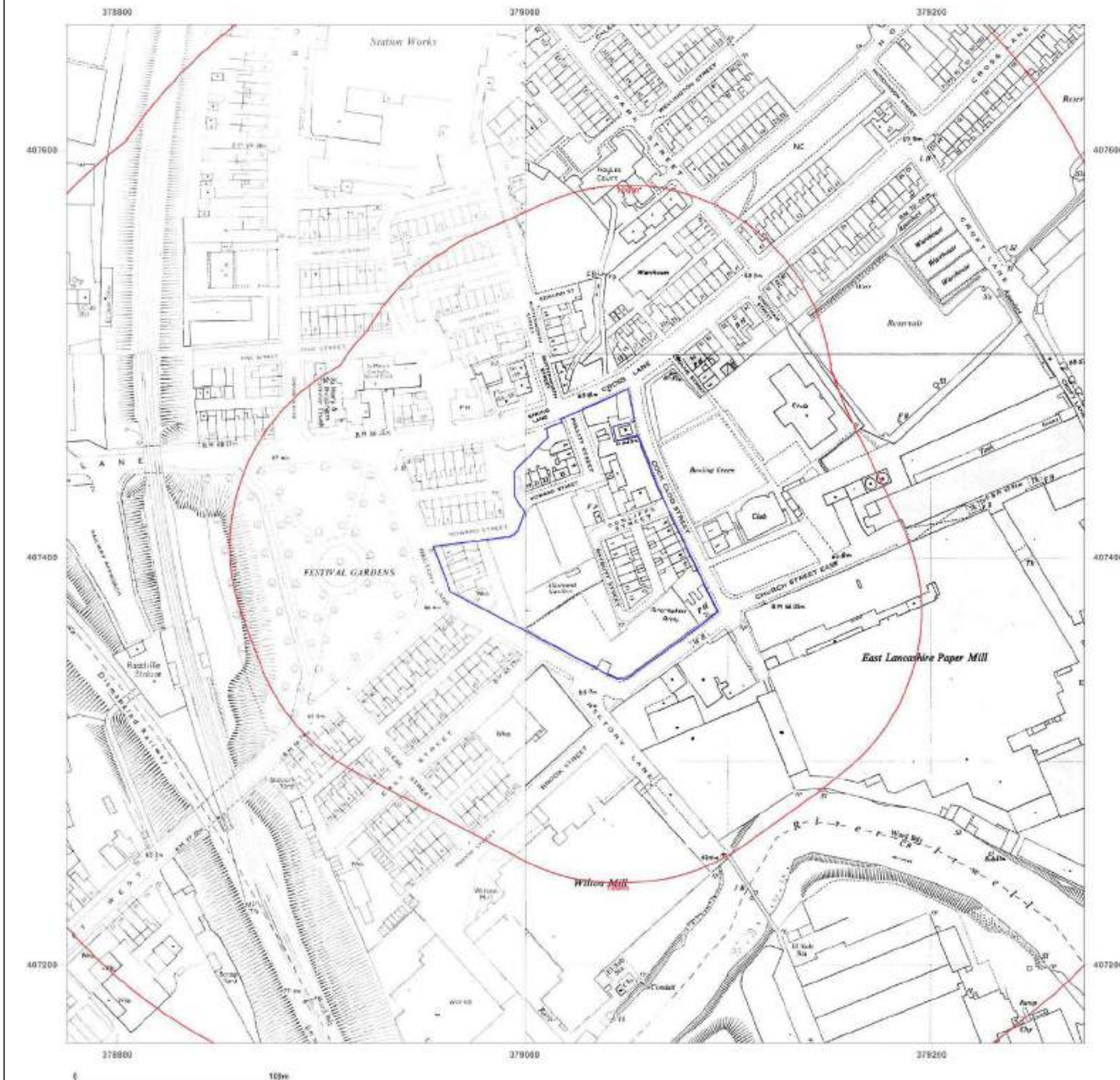


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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1987-1992

Scale: 1:1,250

Printed at: 1:2,000



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

Surveyed 1962
 Revised 1997
 Edition N/A
 Copyright 1987
 Levelled 1962

Surveyed 1959
 Revised 1989
 Edition N/A
 Copyright 1989
 Levelled N/A

Surveyed 1962
 Revised 1997
 Edition N/A
 Copyright 1987
 Levelled 1962

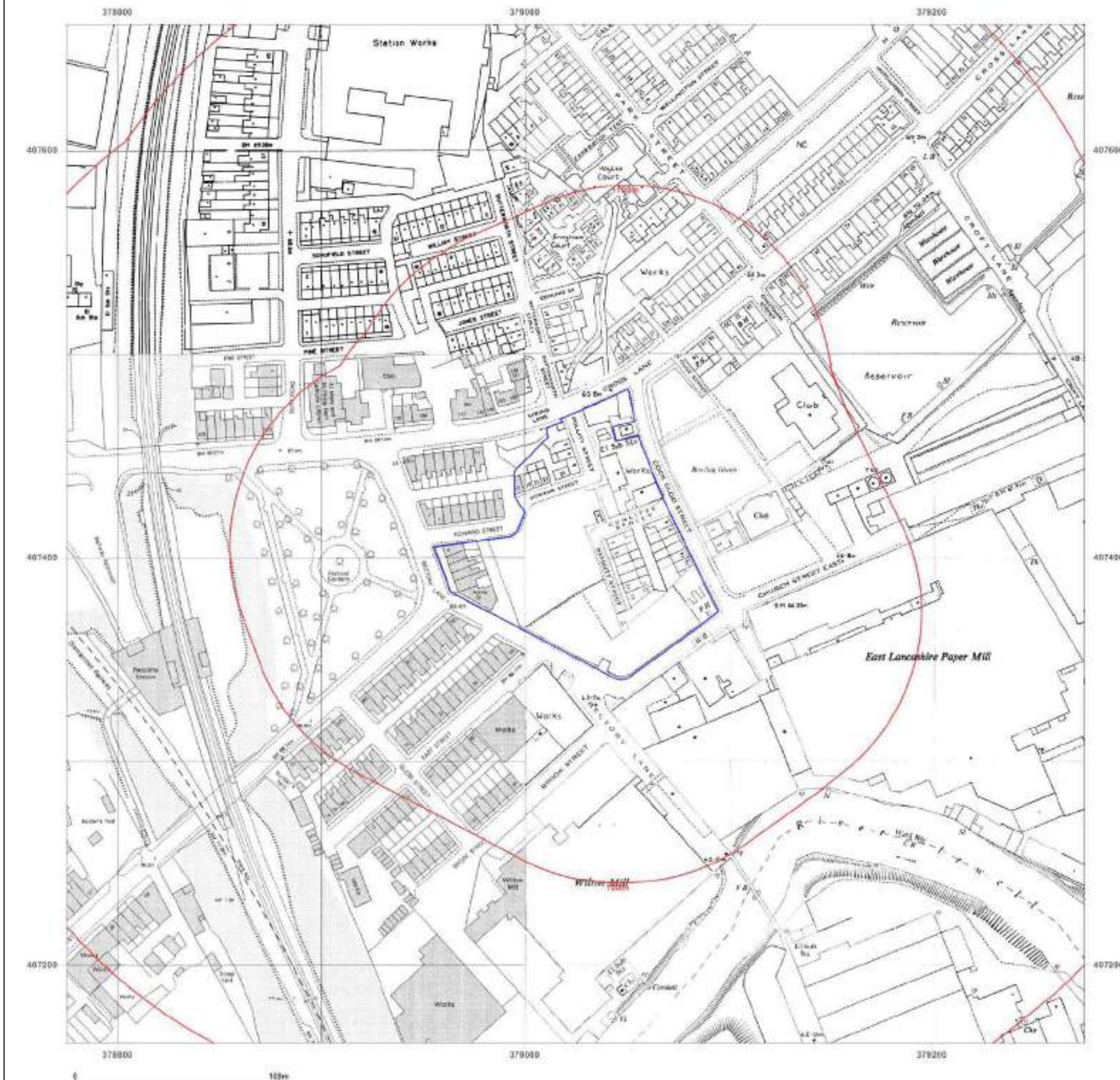


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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1994

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1994
 Revised 1994
 Edition N/A
 Copyright N/A
 Levelled N/A

Surveyed 1994
 Revised 1994
 Edition N/A
 Copyright N/A
 Levelled N/A

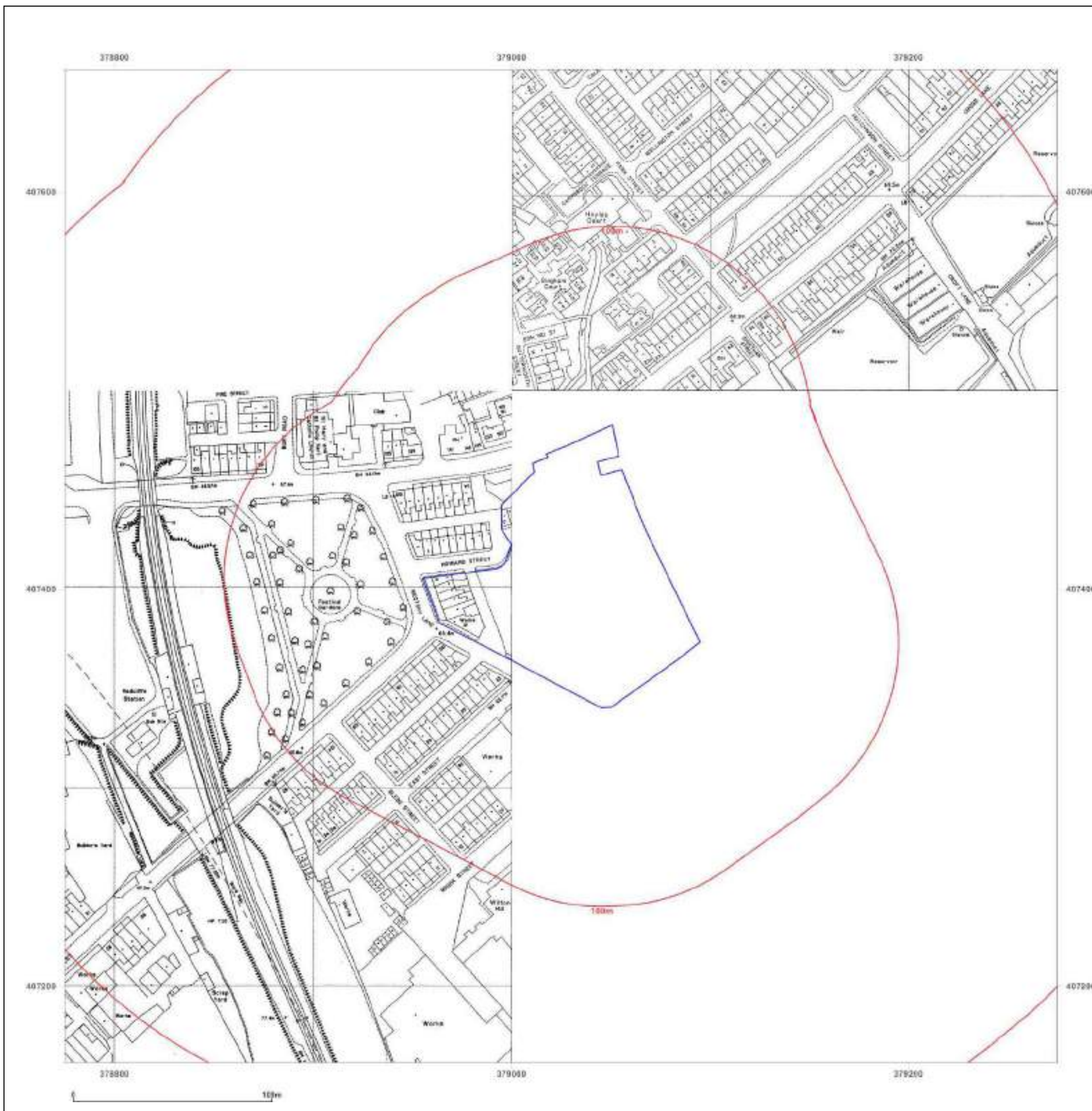


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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1995

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1995
 Revised N/A
 Edition N/A
 Copyright 1995
 Levelled N/A

Surveyed N/A
 Revised N/A
 Edition N/A
 Copyright 1995
 Levelled N/A

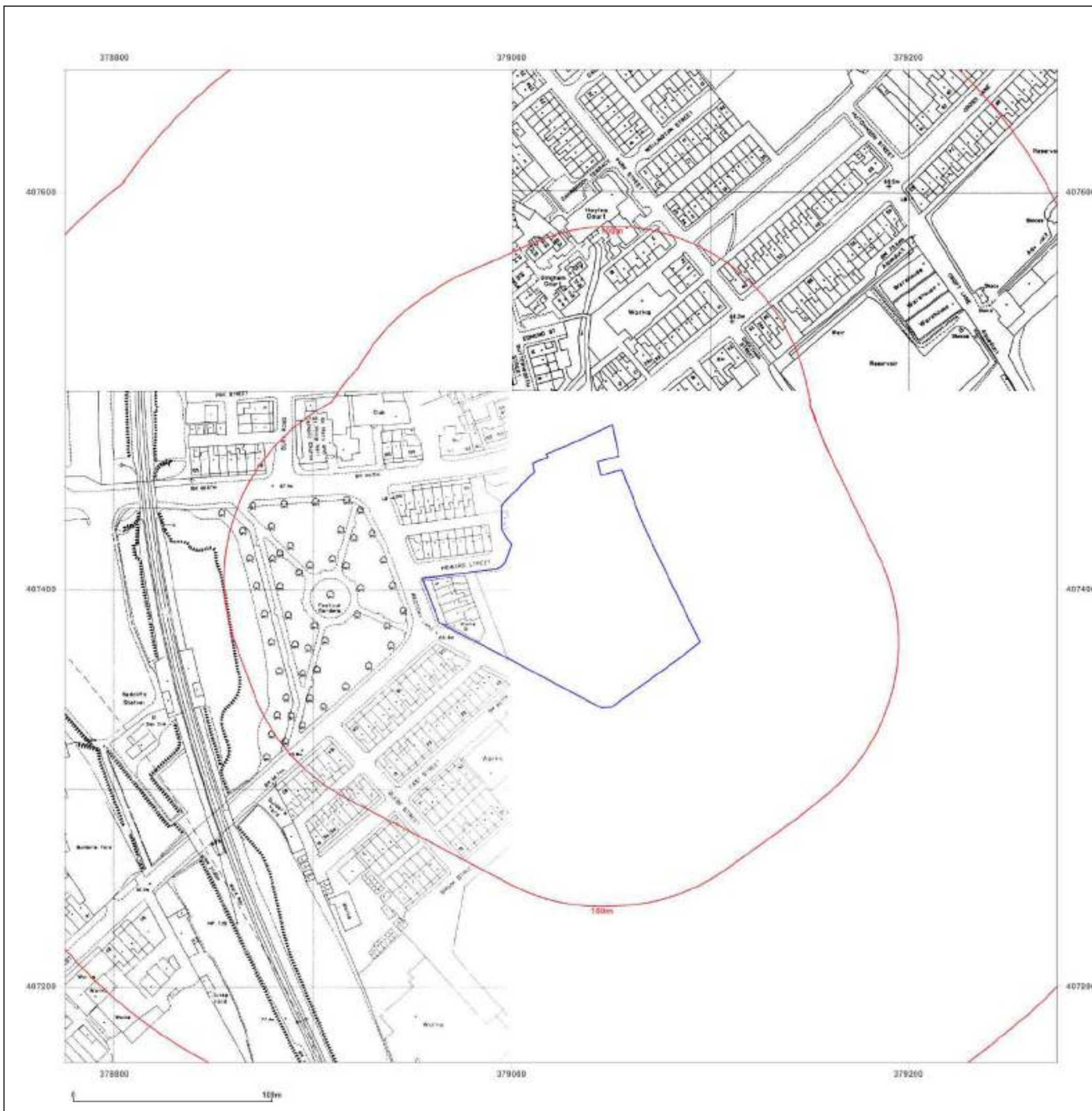


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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1995

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1995
 Revised 1995
 Edition N/A
 Copyright 1995
 Levelled N/A

Surveyed 1995
 Revised 1995
 Edition N/A
 Copyright N/A
 Levelled N/A

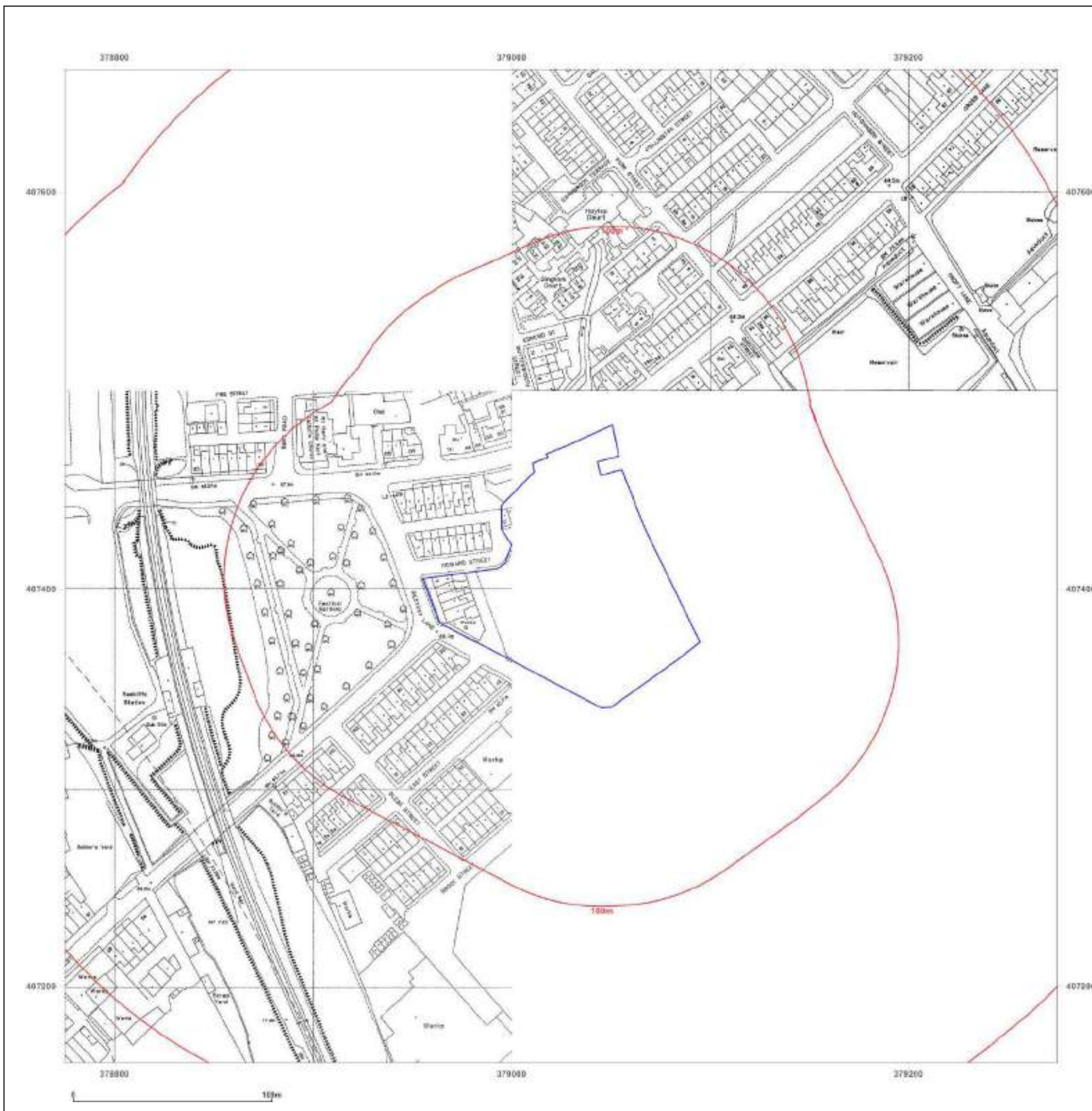


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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1992-1995

Scale: 1:1,250

Printed at: 1:2,000



Surveyed N/A
 Revised N/A
 Edition N/A
 Copyright 1995
 Levelled N/A

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

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

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

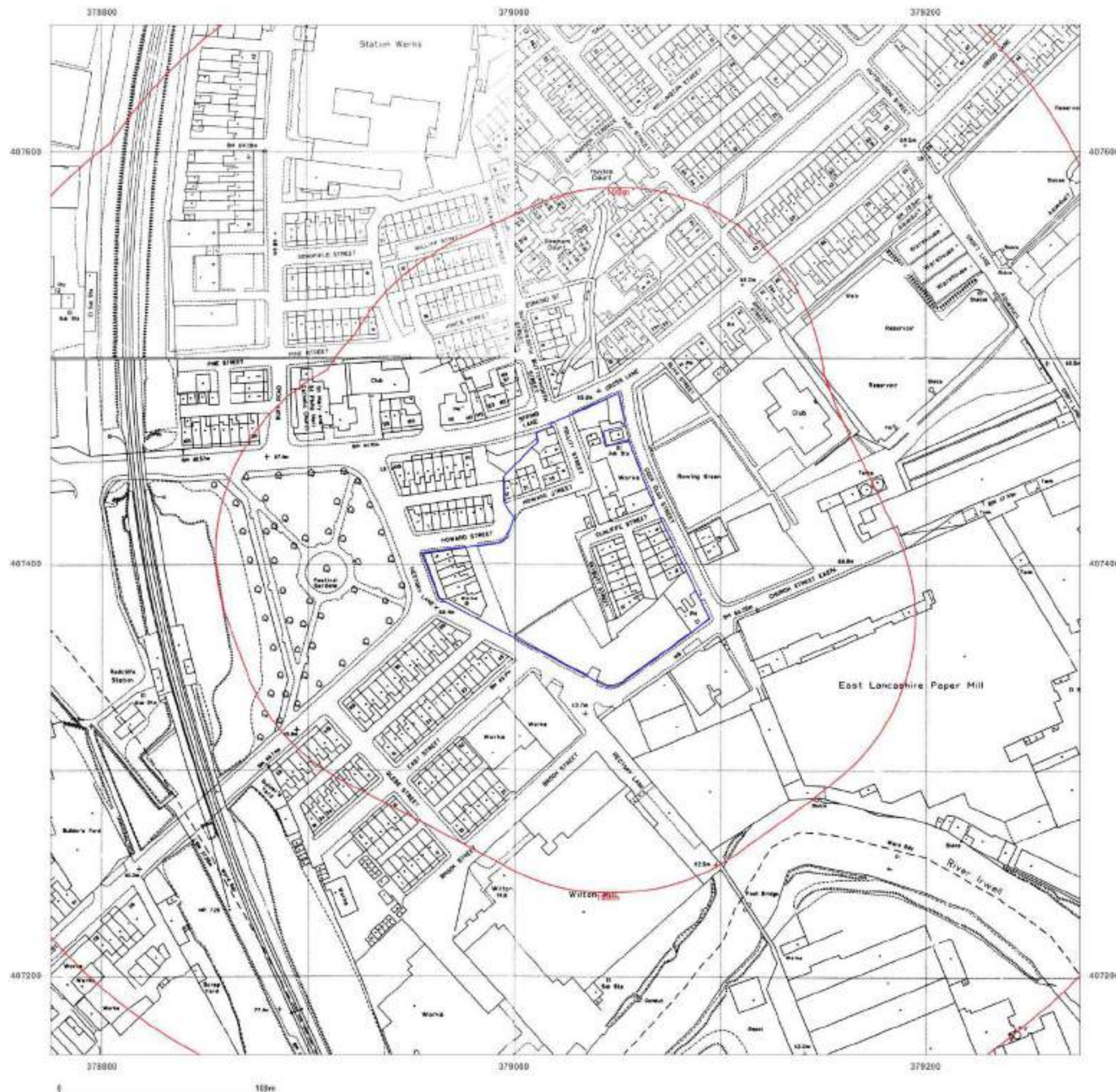


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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name:	National Grid
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Map date: 1994-1995

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1995
Revised 1995
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1994
Revised N/A
Edition N/A
Copyright 1994
Levelled N/A

Surveyed 1994
Revised N/A
Edition N/A
Copyright 1994
Levelled N/A



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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

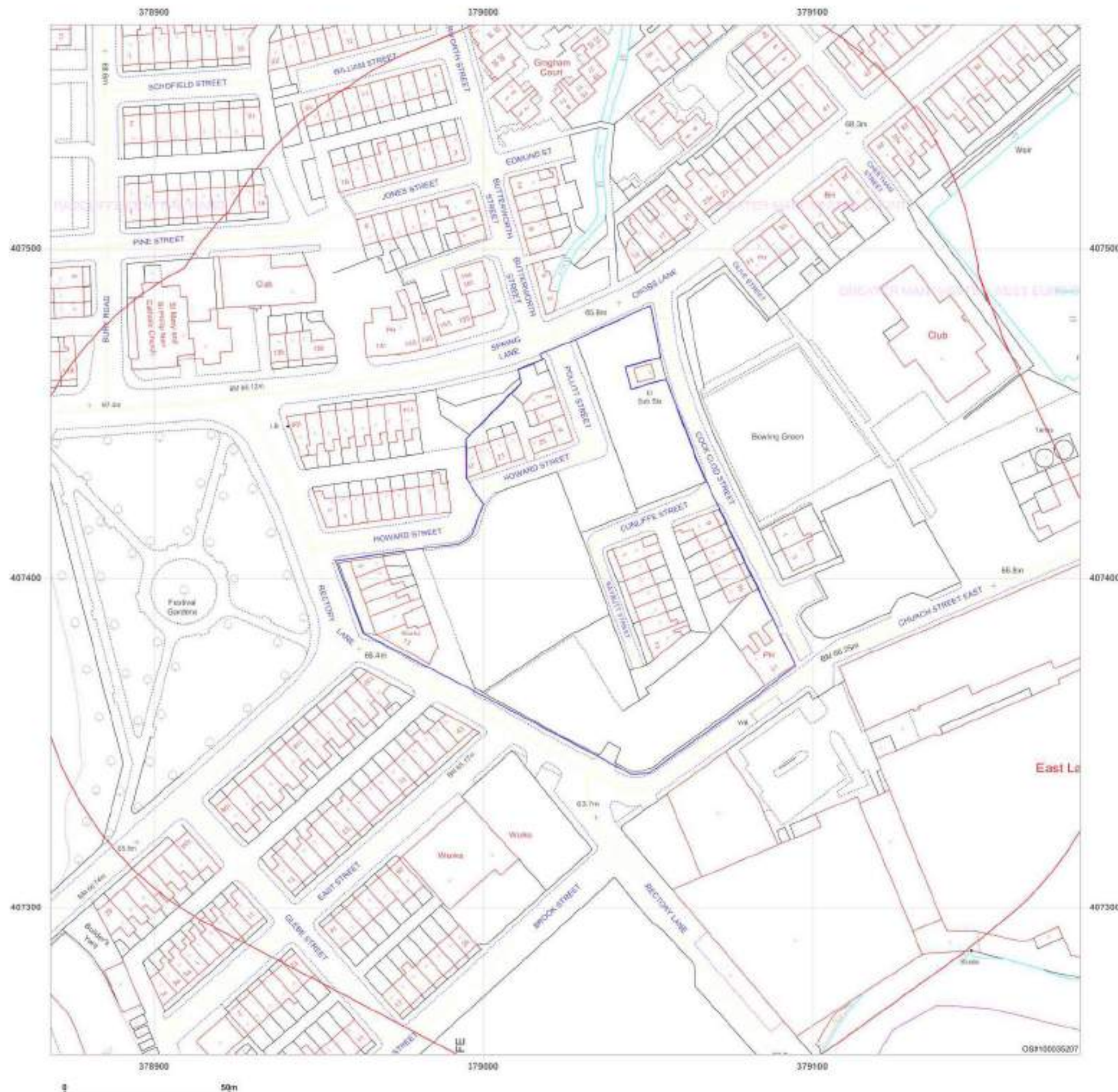


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Production date: 19 October 2020

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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: County Series

Map date: 1848-1851

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1847
Revised N/A
Edition 1850
Copyright N/A
Levelled N/A

Surveyed 1847
Revised N/A
Edition 1851
Copyright N/A
Levelled N/A

Surveyed 1845
Revised N/A
Edition 1850
Copyright N/A
Levelled N/A

Surveyed 1845
Revised N/A
Edition 1848
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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: County Series

Map date: 1890-1891

Scale: 1:10,560

Printed at: 1:10,560



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

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

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

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

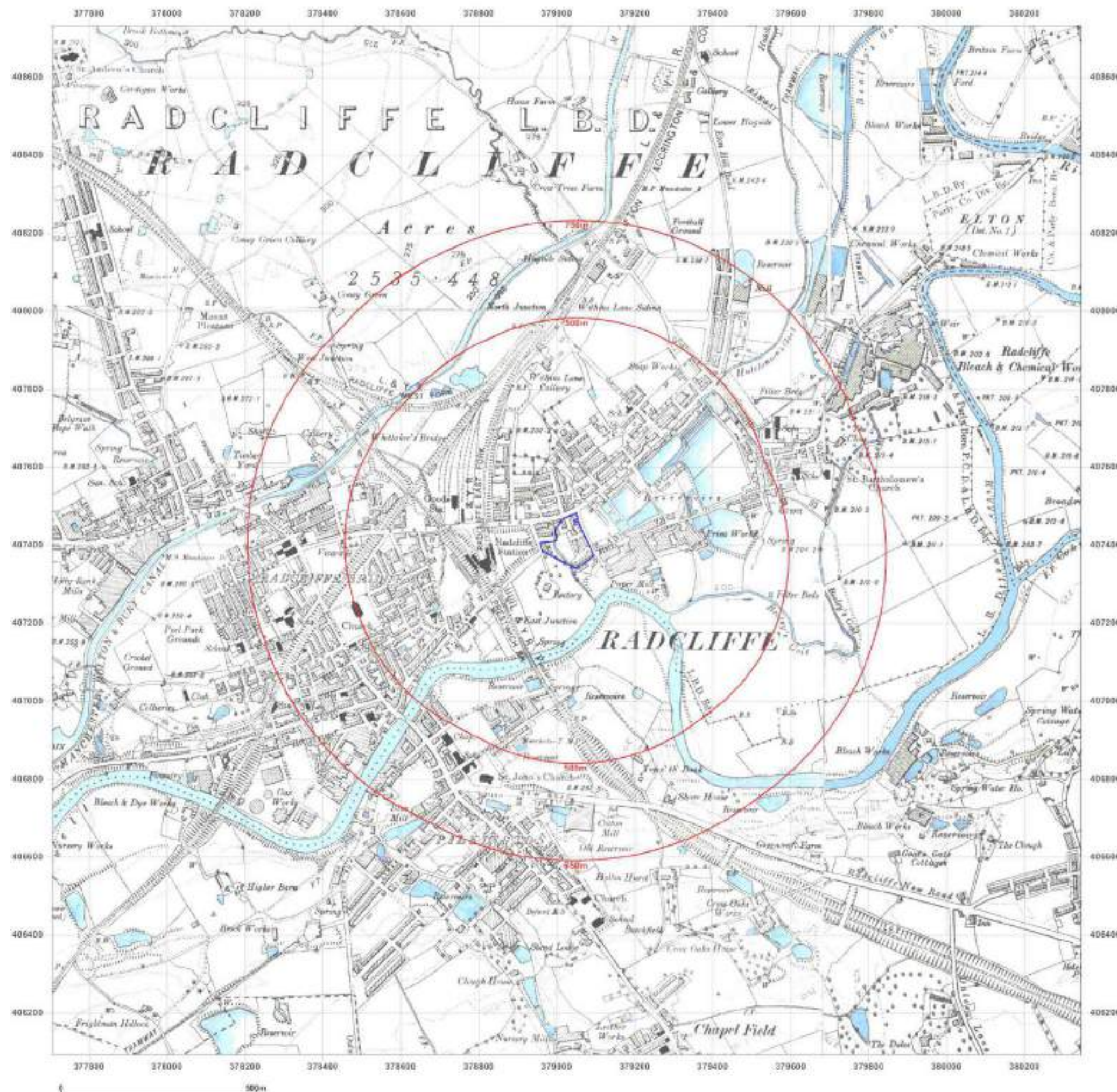


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Production date: 19 October 2020

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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: County Series

Map date: 1907-1908

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1908
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1908
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1908
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1907
Edition N/A
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Site Details:

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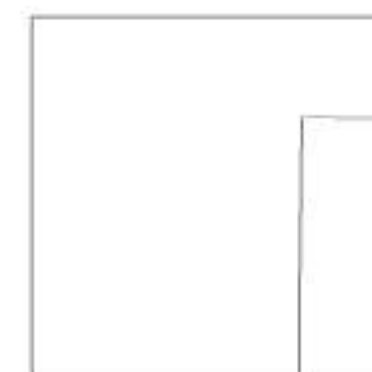
Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: County Series

Map date: 1915

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
 Revised 1915
 Edition N/A
 Copyright N/A
 Levelled N/A

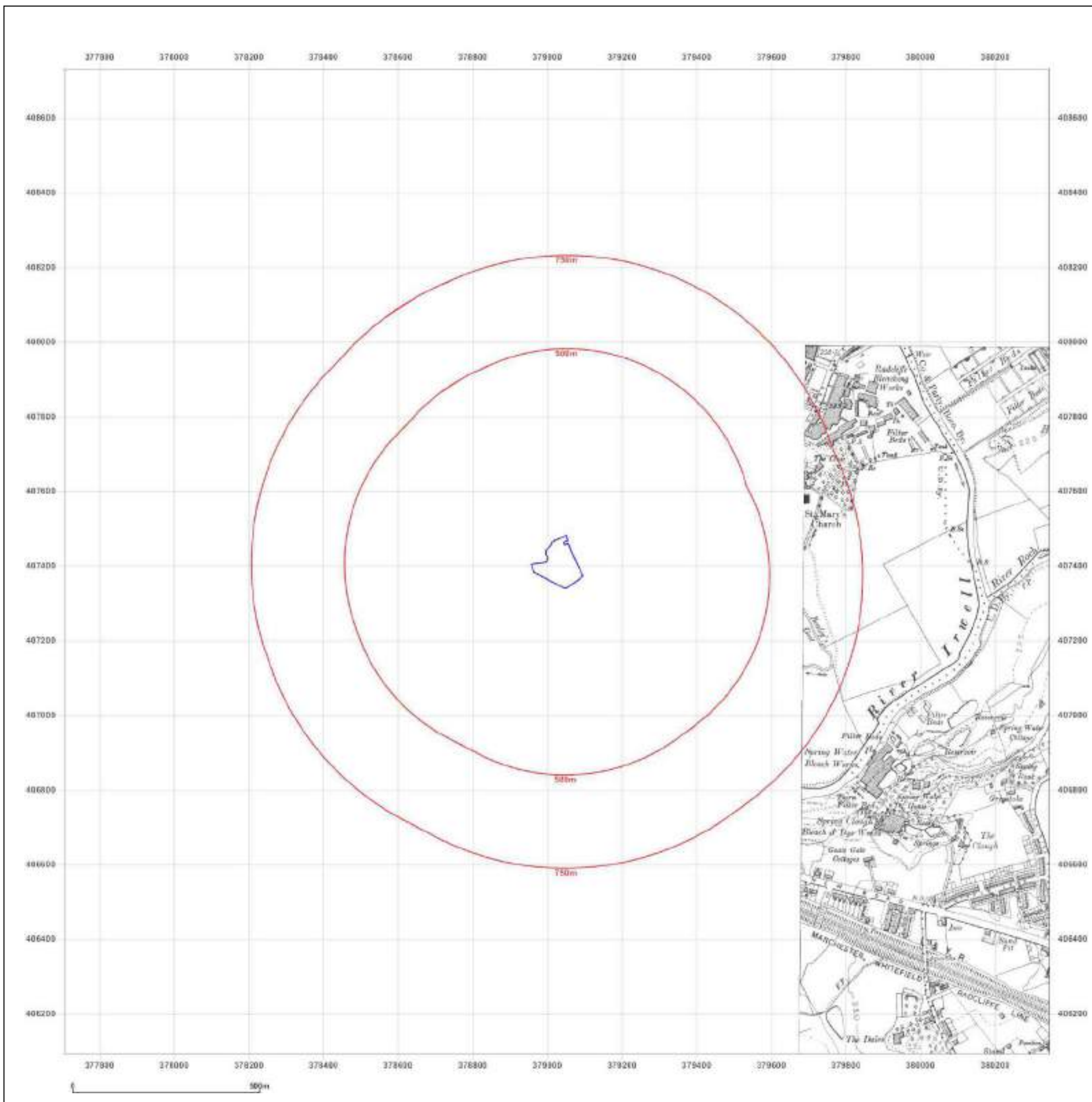


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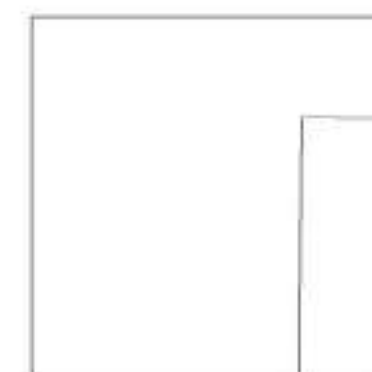
Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: County Series

Map date: 1923

Scale: 1:10,560

Printed at: 1:10,560



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

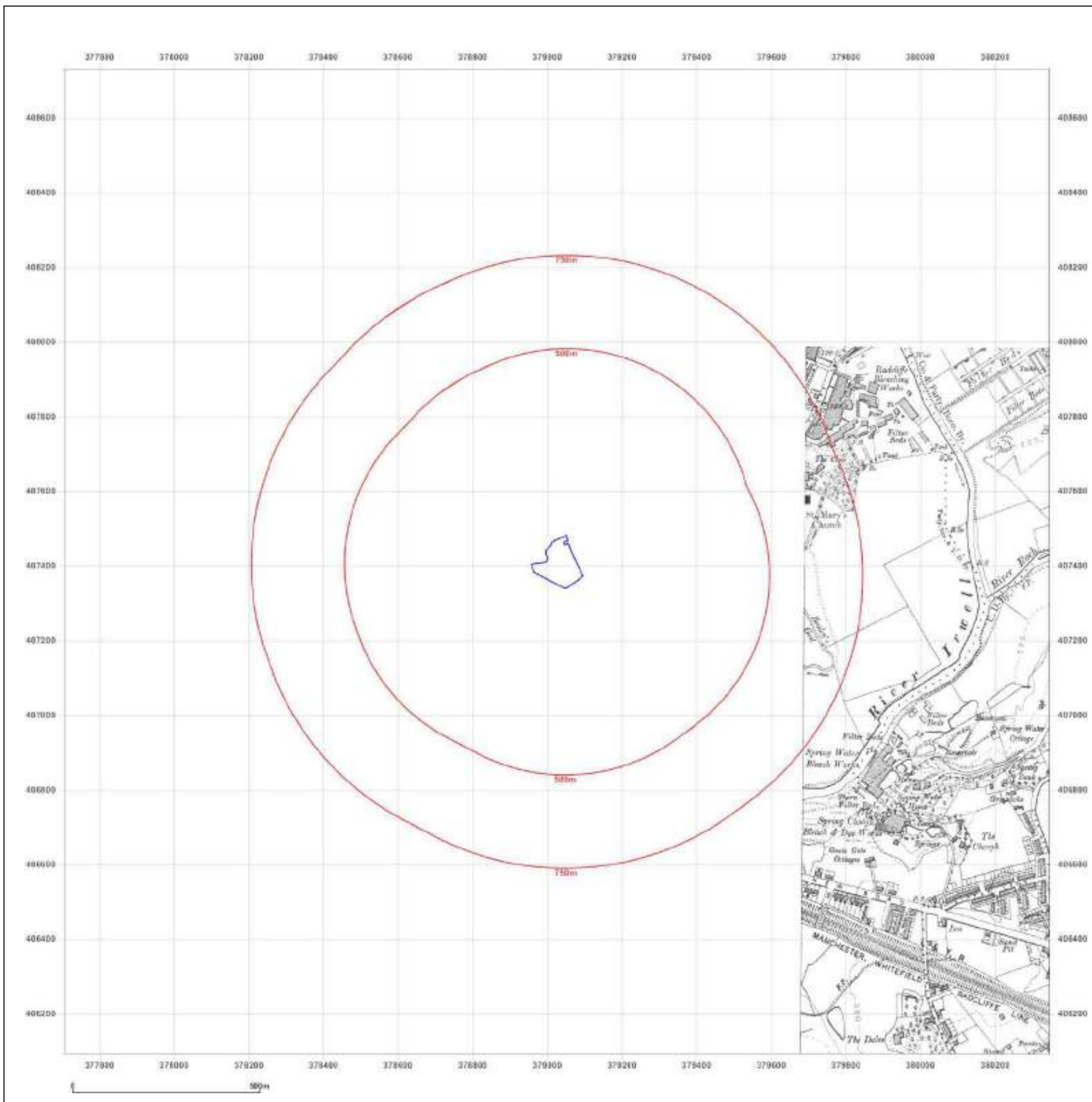


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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: County Series

Map date: 1927-1932

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1927
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1926
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1927
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1932
Edition N/A
Copyright N/A
Levelled N/A

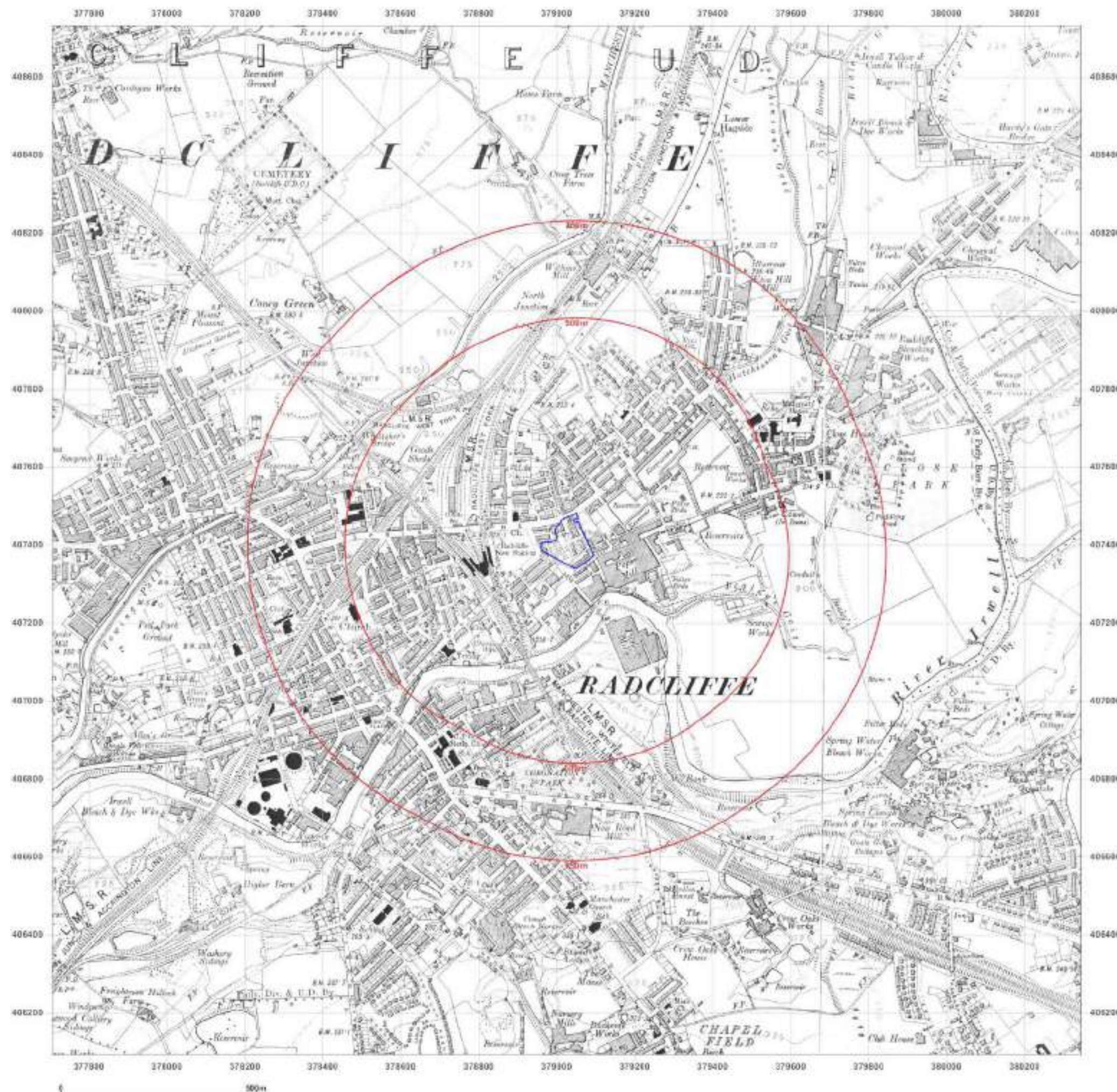


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Production date: 19 October 2020

Map legend available at:
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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



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

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

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

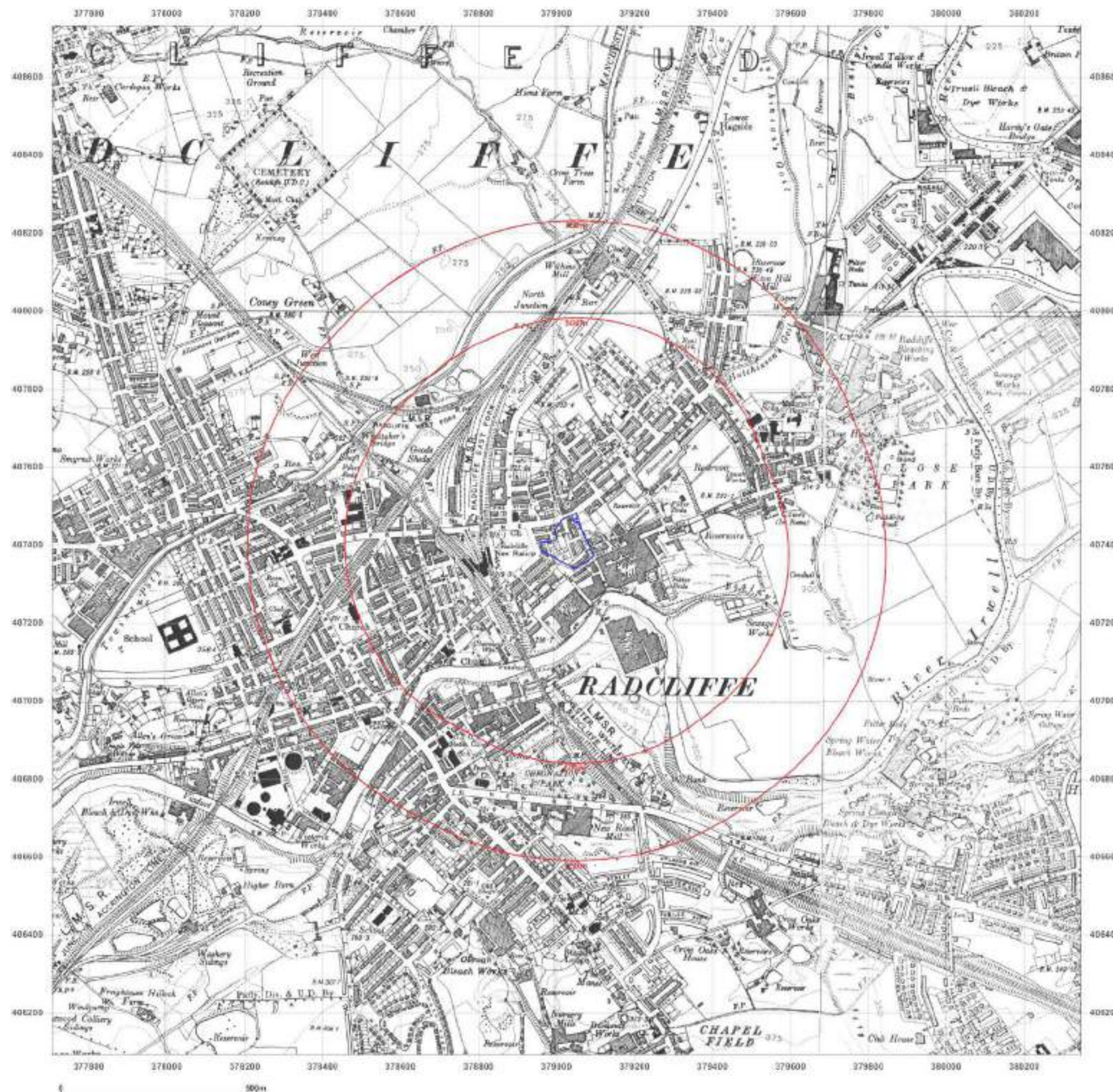


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Site Details:

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Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: Provisional

Map date: 1955

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1950
Revised 1955
Edition 1955
Copyright N/A
Levelled N/A

Surveyed 1949
Revised 1955
Edition 1955
Copyright N/A
Levelled N/A

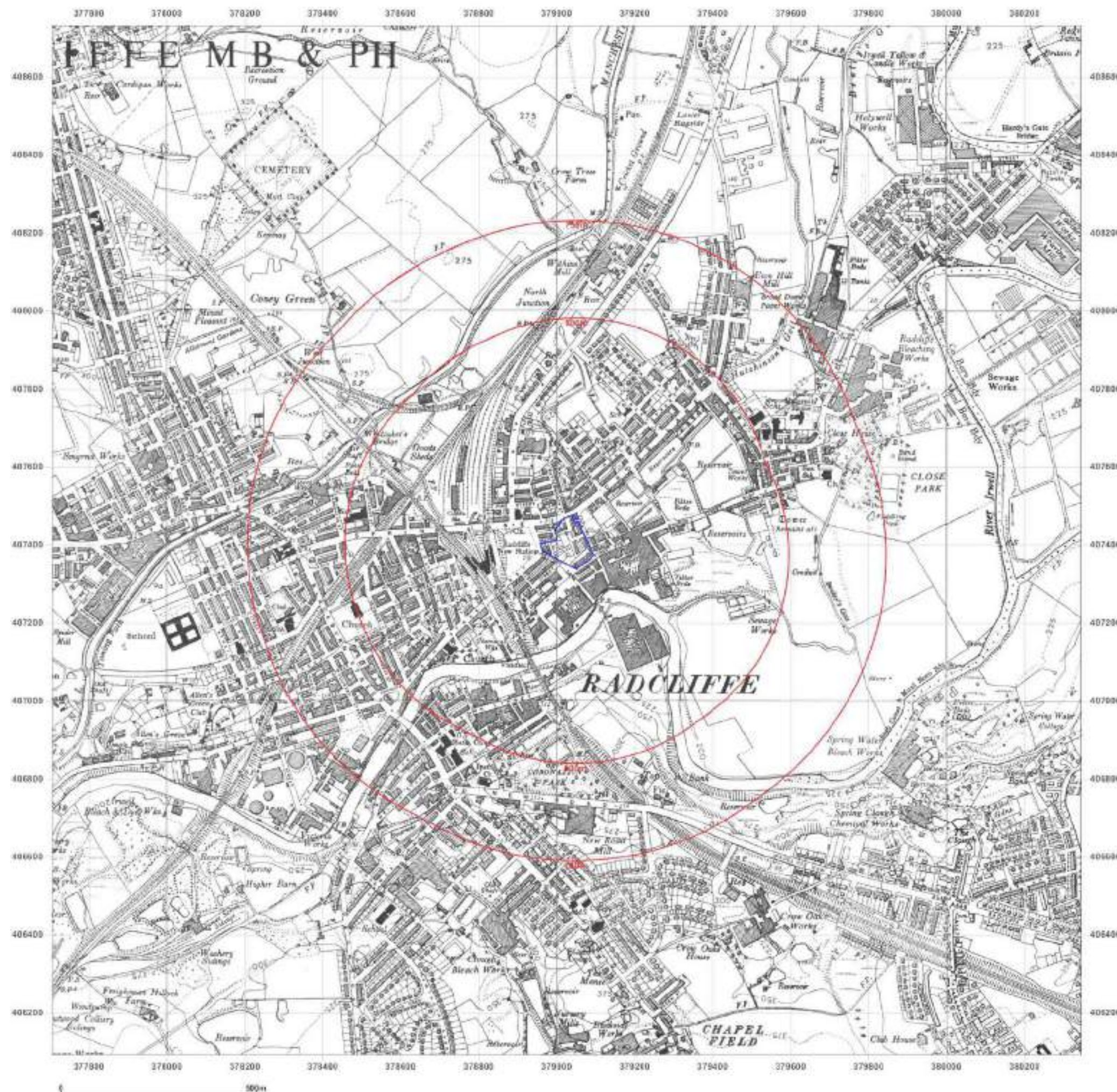


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Site Details:

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Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: Provisional

Map date: 1965

Scale: 1:10,560

Printed at: 1:10,560



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

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

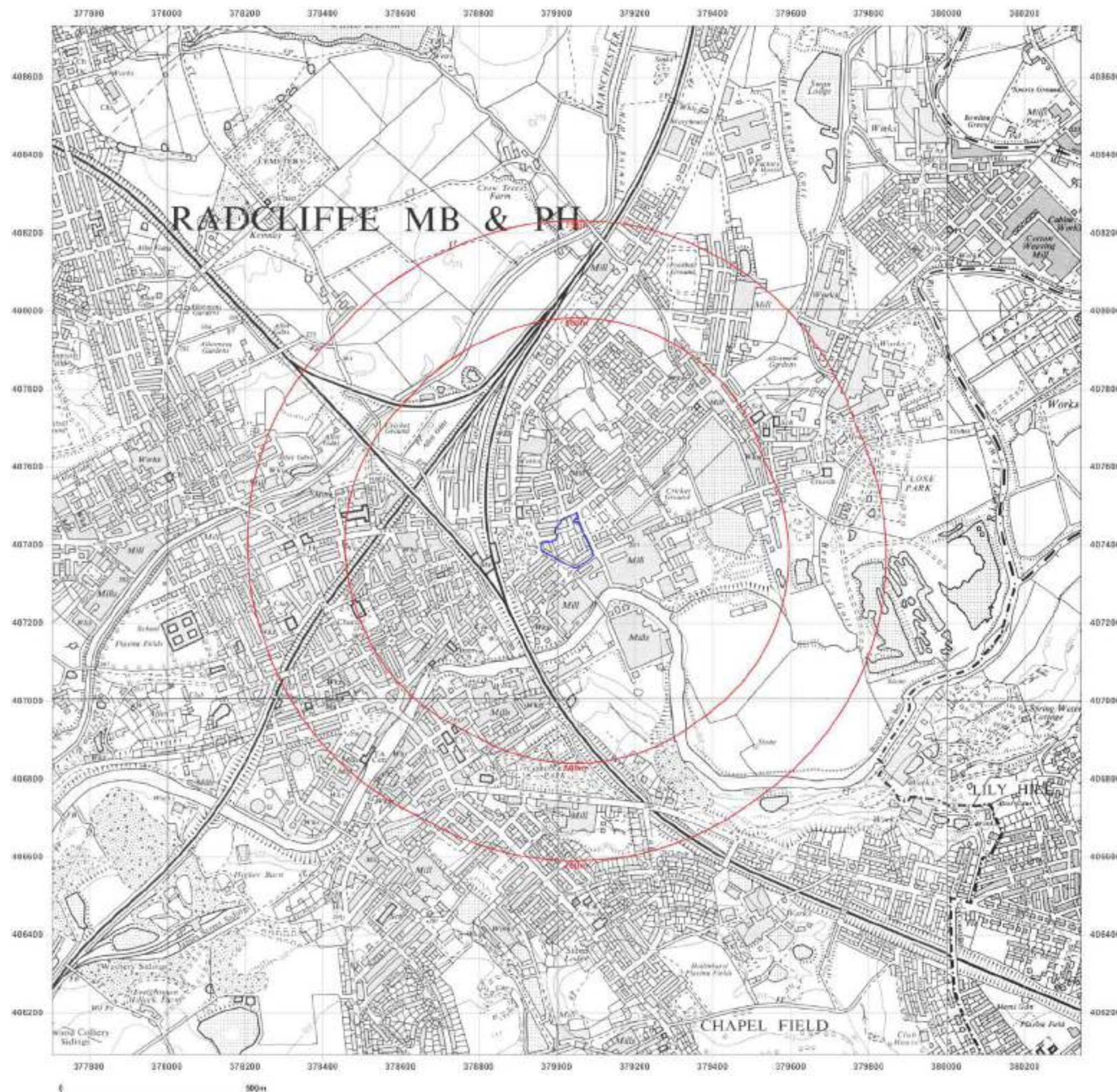


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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1974-1977

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1976
 Revised 1977
 Edition N/A
 Copyright N/A
 Levelled N/A

Surveyed 1974
 Revised 1974
 Edition N/A
 Copyright N/A
 Levelled N/A

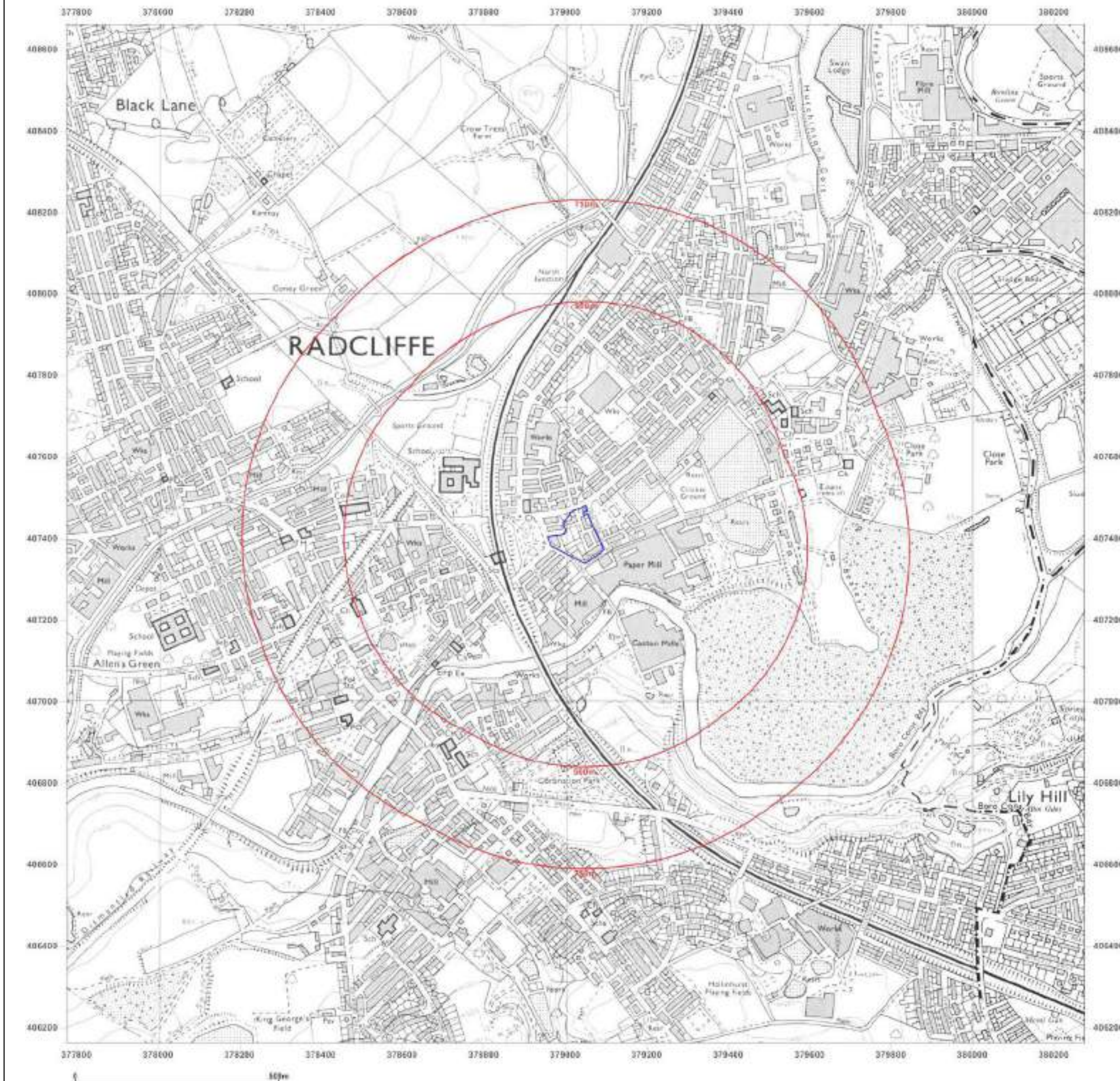


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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1988

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1985
 Revised 1988
 Edition N/A
 Copyright N/A
 Levelled N/A

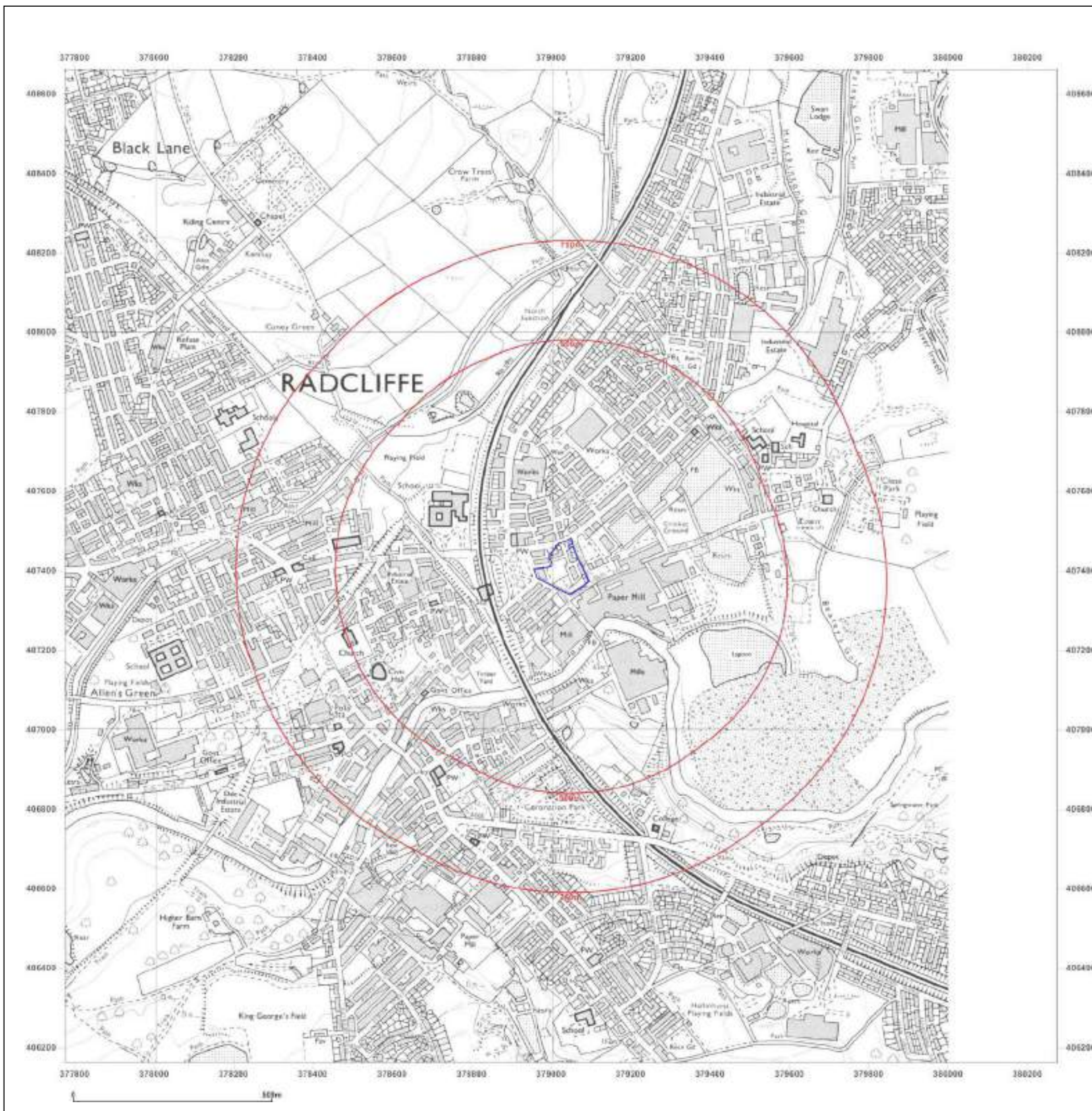


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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 1991

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1987
 Revised 1991
 Edition N/A
 Copyright N/A
 Levelled N/A

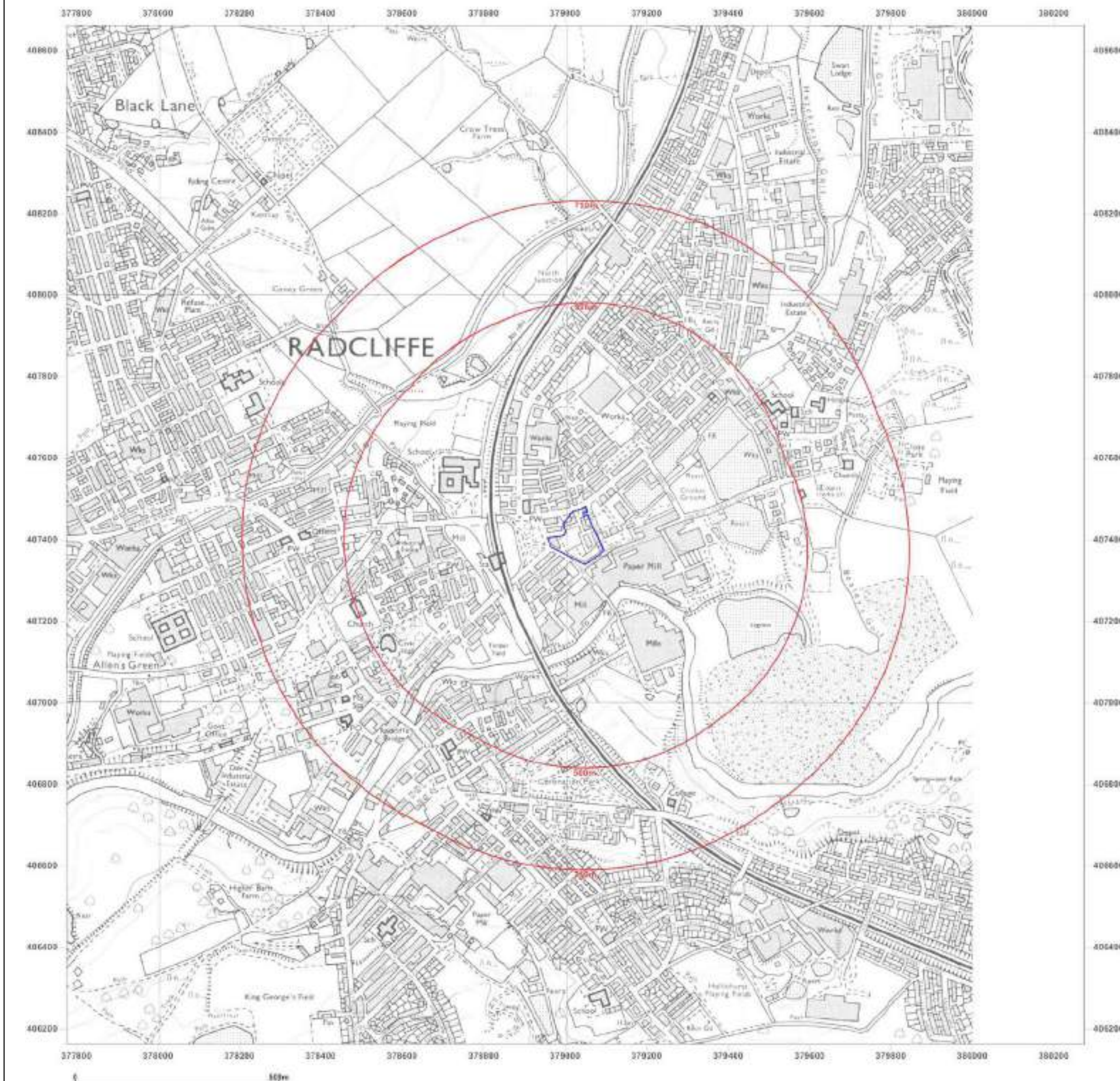


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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000

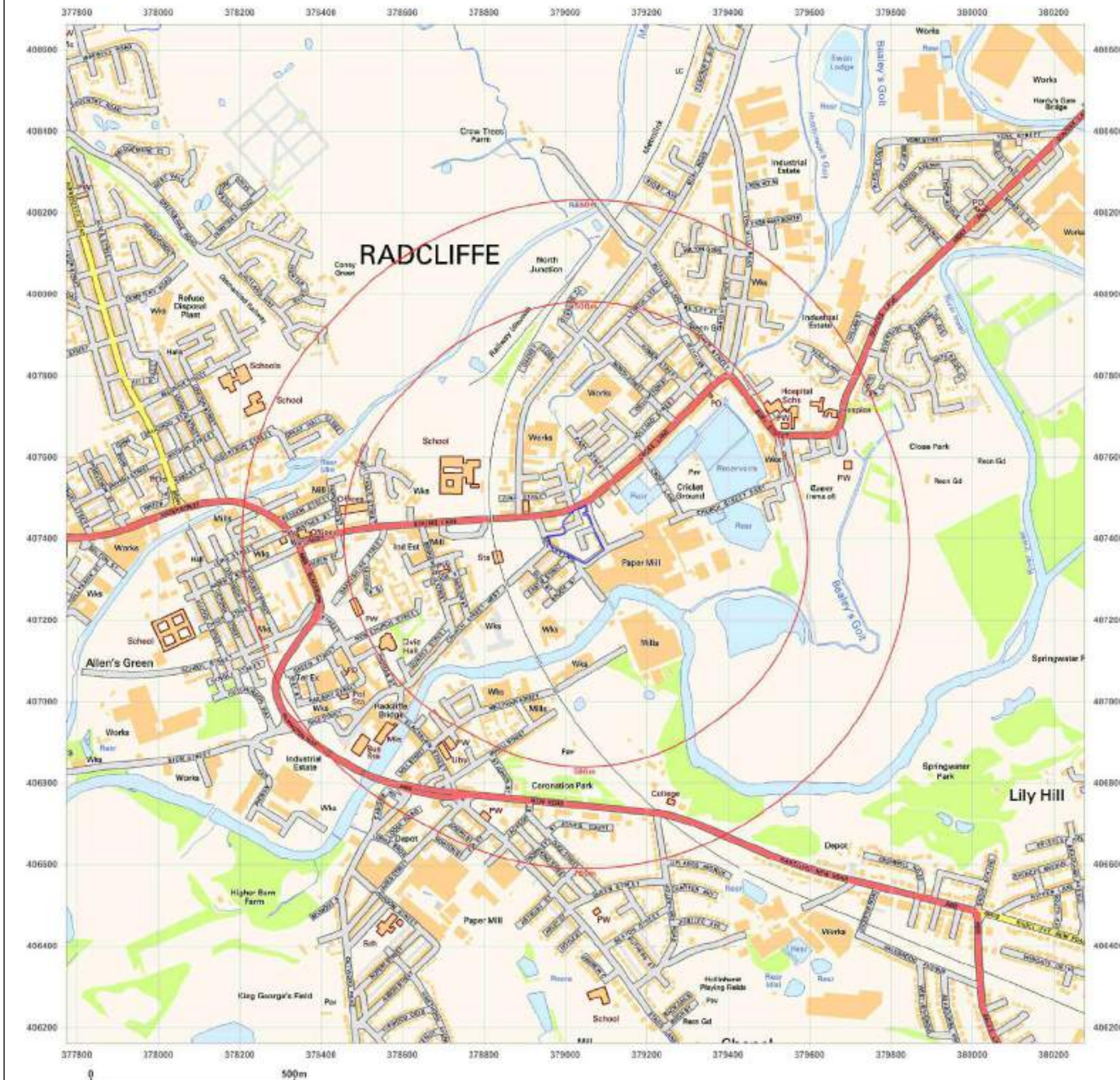


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Production date: 19 October 2020

Map legend available at:
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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

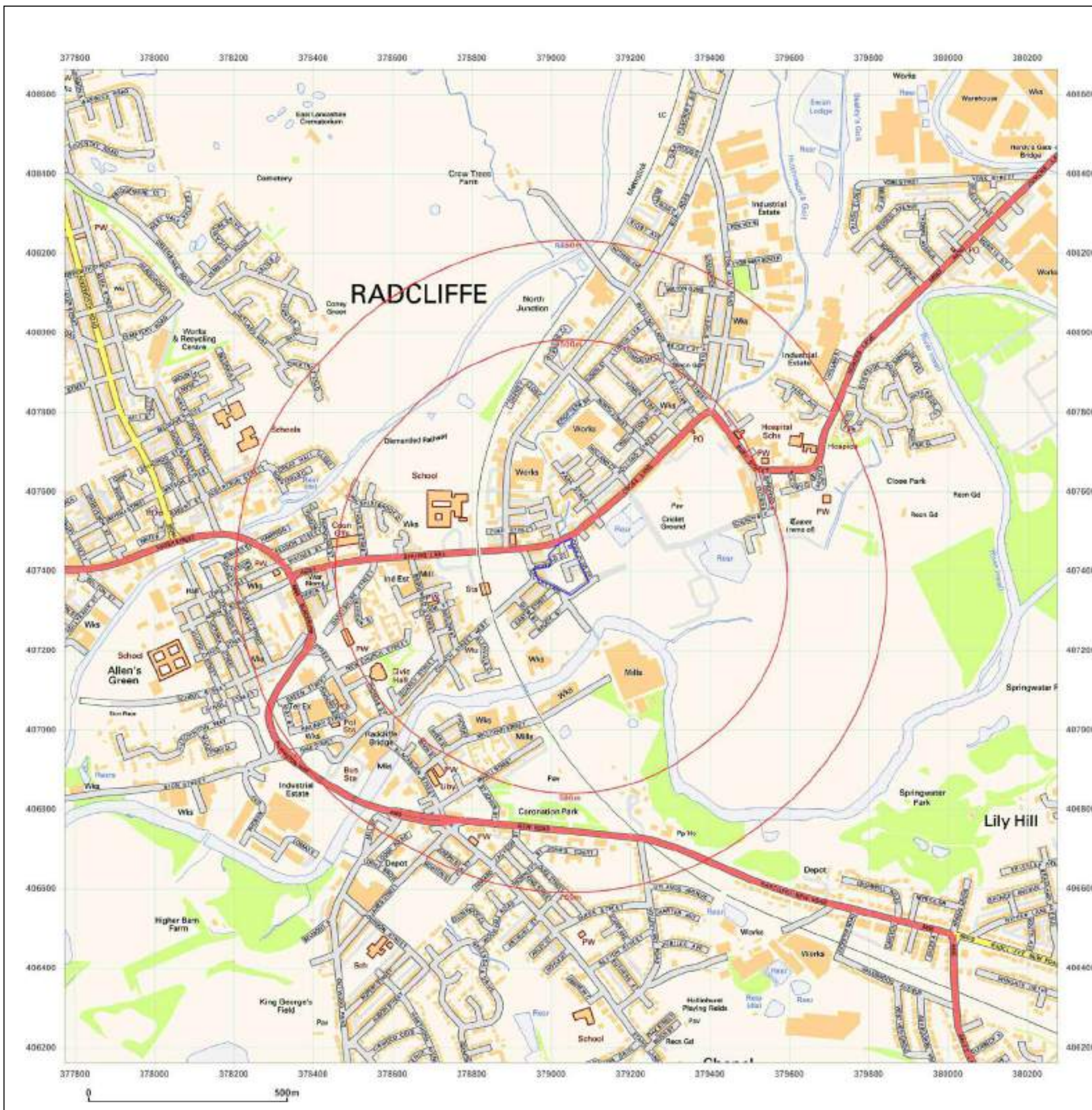


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Production date: 19 October 2020

Map legend available at:
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Site Details:

379030 407400

Client Ref: 13529
Report Ref: GS-7173427
Grid Ref: 379025, 407412

Map Name: National Grid

Map date: 2020

Scale: 1:10,000

Printed at: 1:10,000

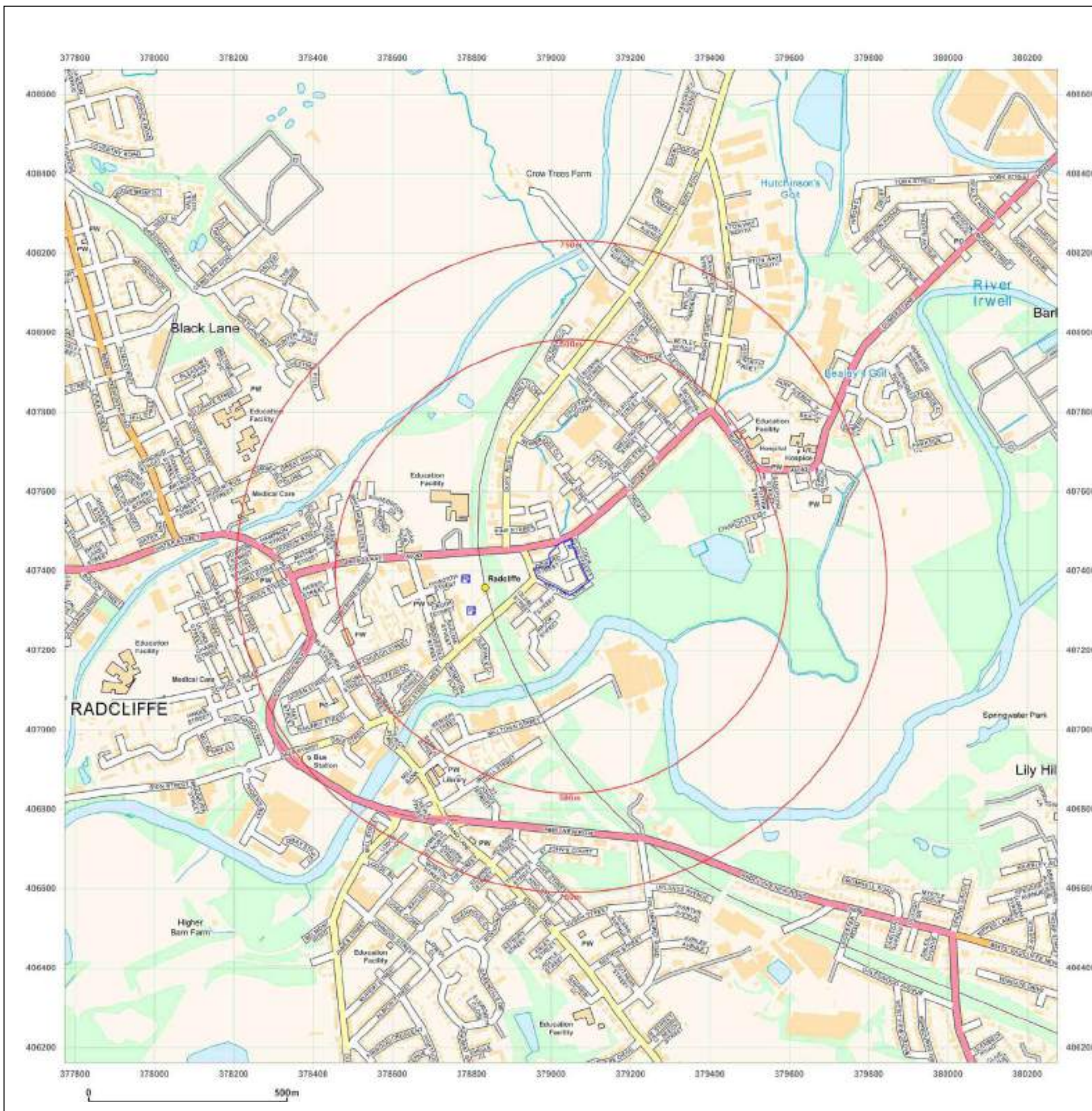


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Appendix 3 – United Utilities Sewer Records and Foul Drainage Response



RE: East Lancs Paper Mill, Radcliffe - 4200033879
Wastewater Developer Services to: 'HannahBewley@campbellreith.com' 06/10/2020 15:00
Cc: "Wastewater Developer Services"

Good Afternoon Hannah,

Pre Development Enquiry for: East Lancs Paper Mill, Radcliffe UU Reference Number : 4200033879

We have carried out an assessment of your application which is based on the information provided. This pre-development advice on your drainage strategy will be valid for 12 months. Your drainage strategy will need to be reviewed by other competent authorities as part of the planning process, and we advise that you carry out the necessary site investigations to confirm the viability of your proposals.

If your investigations require access to our public sewer network, we ask that you contact our network engineers with a request for an access certificate via our main contact telephone number 0345 3723223 or refer to the link below:

<https://www.unitedutilities.com/builders-developers/working-near-our-assets/>

Foul Water

Foul flow from this site will be allowed to drain into the public foul water/combined sewer system.

Our preferred point of discharge would be to the 300mm diameter public combined sewer within Howard Street located to the West of your proposed development at an unrestricted rate.

If you are able to identify an alternative, more suitable point of discharge, we request that you contact us at your earliest convenience so that we can assess suitability.

Surface Water

All surface water flow from the proposed development should drain in-line with the drainage hierarchy, as outlined in Paragraph 80, (Reference ID: 7-080-20150323), of the National Planning Practice Guidance. We also recommend you prioritise the use of multi-functional sustainable drainage systems for the management of surface water in accordance with national planning policy.

Generally, the aim should be to discharge surface run off as high up the following hierarchy of drainage options as reasonably practicable.

This is outlined as follows, in order of priority:

- 1. into the ground (infiltration);**
- 2. to a surface waterbody;**
- 3. to a surface water sewer or highway drain;**
- 4. to a combined sewer.**

For guidance, The North West SuDS Pro-Forma provides information on the appropriate evidence required at each stage of the hierarchy, to demonstrate how each level has been discounted.

The Lead Local Flood Authority has responsibility for all surface water drainage concerns and their input to your proposal is critical. You should also consider whether it is necessary to discuss your proposal with the Environment Agency, or Internal Drainage Board (if operating in your area).

The Local Planning Authority are the determining authority for any application for planning permission and the appropriate authority for determining cost viability of a proposed drainage scheme, such assessments are outside of the jurisdiction of United Utilities.

Infiltration

Surface water runoff generated from this development should discharge to the ground via infiltration system where feasible.

A detailed evidence based feasibility assessment must be carried out in line with Chapter 25 of the CIRIA SuDS Manual 2015 to determine whether infiltration is a suitable method of surface water disposal.

Particular attention must be paid to Ground Water Source Protection Zones to ensure that the risk of pollution to these valuable resources is not compromised. Details can be obtained from the government website:

<https://www.gov.uk/guidance/groundwater-source-protection-zones-spzs#find-groundwater-spzs>

If your site is in a Groundwater Source Protection Zone, you should have regard to the Environment Agency's approach to Groundwater Protection. Information on this is available via the link below:

<https://www.gov.uk/government/publications/groundwater-protection-position-statements>

Please note that such a location could have implications for the principle of your development and the need for additional mitigating measures to protect the groundwater environment and public water supply in the detailed design of your site.

Waterbody

If an evidence based assessment has been carried out and confirms that infiltration is not feasible, we recommend that you contact the Lead Local Flood Authority and/or Environment Agency to discuss a point of discharge to the culverted watercourse located within the site boundary of the proposed site.

We would encourage you to identify and engage with any third party landowner and riparian owner to agree access and discharge rights to the water body if this is not in your ownership.

Levels

For low-lying sites, (where the ground level of the site or the level of a basement is below the ground level at the point where the drainage connects to the public sewer), care should be taken to ensure that the property is not at increased risk of flooding. If these circumstances exist, we recommend that you contact us to discuss further. It could affect the detailed design of your site and result in the need to incorporate appropriate mitigating measures in your drainage scheme.

Sewer Adoptions

You have indicated on your application form that you intend to put the sewers forward for adoption (including any SuDS components that can come within the meaning of a sewer).

United Utilities assess adoption applications based on the current Design & Construction Guidance and local practices which have now replaced 'Sewers For Adoption 6th Edition'.

We recommend that you submit a pre design assessment to the sewer adoption mailbox (SewerAdoptions@uuplc.co.uk) stating pre design assessment in the title

Please refer to links below to obtain further guidance:

<https://www.unitedutilities.com/builders-developers/larger-developments/wastewater/sewer-adoptions/>

Site drainage must be designed in accordance with Building Regulations, National Planning Policy, and local flood authority guidelines, we would recommend that you speak and make suitable agreements with the relevant statutory bodies.

If you intend to put forward your wastewater assets for adoption by United Utilities, the proposed detail design will be subject to a technical appraisal by an Adoption Engineer as we need to be sure that the proposals meets the requirements set out in the Design & Construction Guidance. The proposed design should give consideration to long term operability and give United Utilities a safe and cost effective proposal for the lifetime of the assets. In these cases, we strongly recommend that no construction commences until the detailed drainage design, submitted as part of the Section 104 application, has been assessed and accepted in writing by United Utilities. Any work carried out prior to the technical assessment being approved is done entirely at the developer's own risk and could be subject to change.

Codes For Adoption

The new Codes for Adoption are outlined on the Water UK Website. The link below takes you to their webpage:

<https://www.water.org.uk/technical-guidance/developers-services/codes-for-adoption/>

A free copy of the new Design & Construction Guidance can be downloaded via the link below:

<https://www.water.org.uk/wp-content/uploads/2020/03/SSG-App-C-Des-Con-Guide-v-2-100320-C.pdf>

Existing Wastewater Assets Crossing the Site

We have significant assets within this site that cannot realistically be diverted. We would ask that you obtain a copy of our asset data records from your provider and plan your development around them ensuring that all legal easements are observed. If any work is required that may impart vibration into the ground we would ask that you contact us for further advice. As mentioned in the submitted drainage report, United Utilities will require unrestricted vehicular access to the large tank systems to the south of the site. This will need to be incorporated into the final design of the site.

According to our public sewer records there are public sewers located within your site boundary. We will require unrestricted access to the sewer for maintenance purposes, we would ask that you maintain a minimum clearance of 6m which is measured 3m from

the centre line of the pipe unless there happens to be a formal easement agreement in place, in which case the specified easement width would apply. If you cannot achieve this then you may wish to consider diverting and or abandoning the public sewer.

Please refer to the link below to obtain full details of the processes involved with sewer diversions:

<https://www.unitedutilities.com/builders-developers/larger-developments/wastewater/sewer-diversions/>

Existing Water Assets Crossing the Site

It is the developer responsibility to identify utilities on-site. Where clean water assets are shown on our records, we recommend that you contact our Water Pre-Development Team, via the following email address: DeveloperServicesWater@uuplc.co.uk. Further information for this service can be found on our website via the link below:

<https://www.unitedutilities.com/builders-developers/larger-developments/pre-development/water-pre-dev/>

Connection Application

Although we may discuss and agree discharge points and rates in principle, please be aware that you will have to apply for a formal sewer connection. This is so that we can assess the method of construction, Health & Safety requirements and to ultimately inspect the connection when it is made. Details of the application process and the form itself can be obtained from our website by following the link below:

<https://www.unitedutilities.com/builders-developers/larger-developments/wastewater/sewer-connections/>

We recommend that the detailed design should confirm the locations of all utilities in the area and ensure that any proposed drainage solution considers routing and clash checks where required.

If we can be of any further assistance please don't hesitate to contact us further.

Kind regards,



Matthew Dodd
Developer Engineer
Developer Services & Metering
Customer Services
T: 07468 758244
unitedutilities.com

If you have received a great service today why not tell us?

Visit: unitedutilities.com/wow

We now have a live chat facility available to you Mon to Friday 8 -5pm. You just click on the orange live chat box on our webpage and one of our advisors will be ready to chat to you and help you with your enquiry

<https://www.unitedutilities.com/builders-developers/> or you can email us at developerserviceswater@uuplc.co.uk

From: HannahBewley@campbellreith.com [<mailto:HannahBewley@campbellreith.com>]

Sent: 24 September 2020 09:46

To: Wastewater Developer Services <WastewaterDeveloperServices@uuplc.co.uk>

Subject: Fw: East Lancs Paper Mill, Radcliffe

Please see below - I am unable to send the site boundary and topo due to the email exceeding the mail size for sending. Please contact me when the enquiry is processed and I will send them along separately.

Kind Regards,
Hannah Bewley
Graduate Civil Engineer

CampbellReith
consulting engineers

No. 1 Marsden Street
Manchester
M2 1HW

Tel: +44 (0)161 817 2391
www.campbellreith.com

Scale: 1:1250 Date: 05/12/2016

Printed By: Property Searches

[illegible]

WASTE WATER SYMBOLLOGY

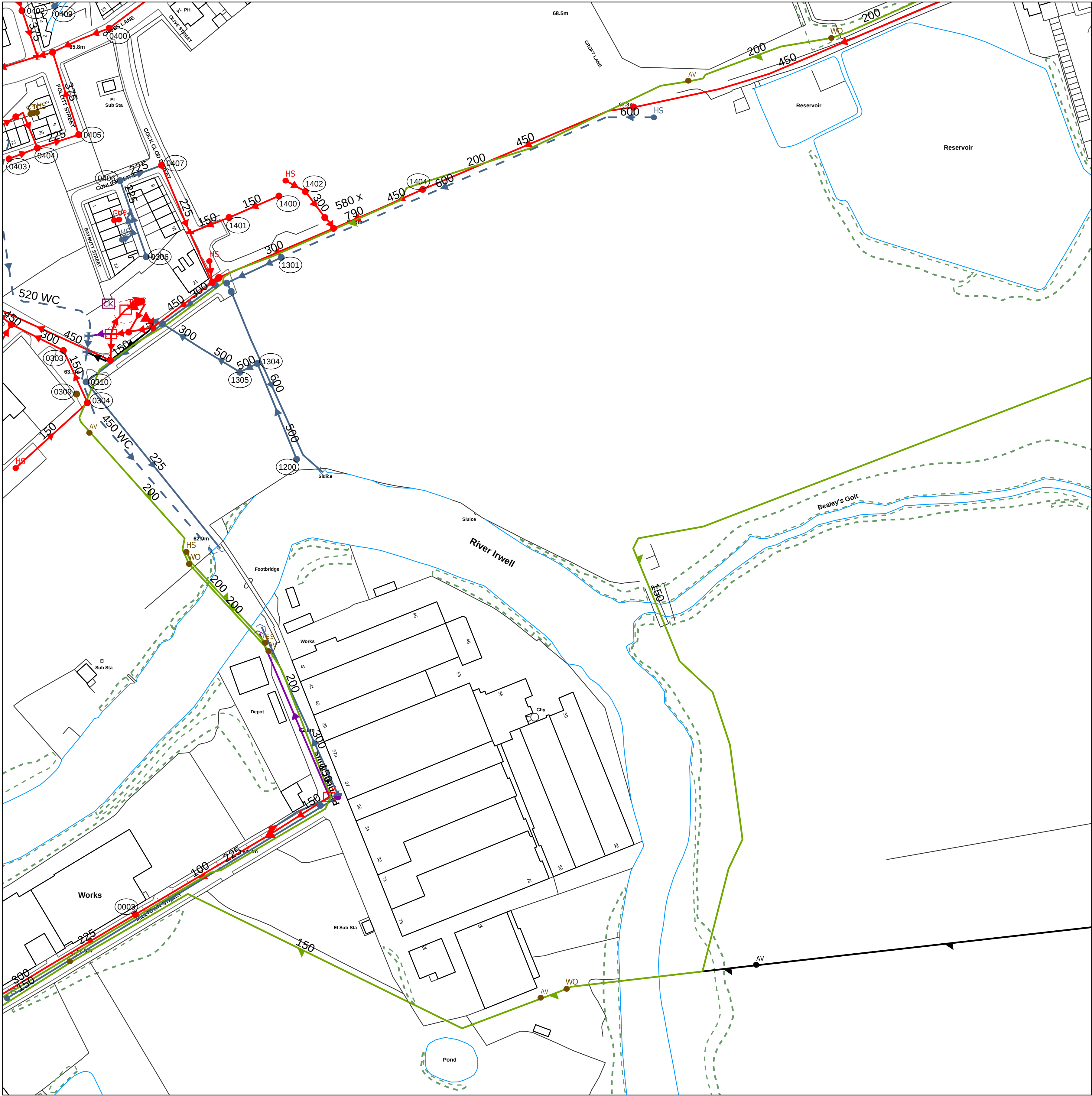
Foul	Surface	Combined	Overflow	Manhole
				Manhole, Side Entry
				MainSewer, Public
				MainSewer, Private
				MainSewer, S104
				Sising Main, Public
				Sising Main, Private
				Sising Main, S104
				Highway Drain, Private

Foul	Surface	Combined		
			WW Site Termination	
			Air Valve	
			Cascade	
			Non Return Valve	
			Extant of Survey	ABANDONED PIPE
			Flow Meter	
			Gully	
			Hatch Box	
			Head of System	
			Hydrobrake / vortex	
			Irrlet	
			Inspection Chamber	
			Bifurcation	
			Catchpit	
			Contaminated Surface Water	
			WW Pumping Station	
			Sludge Pumping Station	
			Sewer Overflow	
			T Junction/Saddle	
			LampPole	
			Oil Intercept or	
			PenStock	
			Pump	
			RoofingEye	
			Soakaway	
			Summit	
			Valve	
			Valve Chamber	
			Washout Chamber	
			DropShaft	
			WW Treatment Works	
			Septic Tank	
			Vent Column	
			Network Storage Tank	
			Orifice Plate	
			Vortex Chamber	
			Penstock Chamber	
			Blind Manhole	
			Screen Chamber	
			Discharge Point	
			Outfall	

LEGEND

MANHOLE FUNCTION			
FO	Foul		
SW	Surface Water		
CO	Combined		
OV	Overflow		
SEWER SHAPE			
CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		
SEWER MATERIAL			
AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	PVC	Polyvinyl Chloride
PE	Polyethylene	CI	Cast Iron
RP	Reinforced Plastic Matrix	SI	Spun Iron
CO	Concrete	ST	Steel
CSB	Concrete Segment Bolted	VC	Vitrified Clay
CSU	Concrete Segment Unbolted	PP	Polypropylene
CC	Concrete Box Culverted	PF	Pitch Fibre
PSC	Plastic/Steel Composite	MAC	Masonry, Coursed
GRC	Glass Reinforced Concrete	MAR	Masonry, Random
GRP	Glass Reinforced Plastic	U	Unspecified

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.
 Crown copyright and database rights [2016] Ordnance Survey 100022432.



WASTE WATER SYMOLOGY

Combined	Foul	Surface	Overflow	
				Manhole
				Manhole, side entry
				Public sewer
				Private sewer
				S104 sewer
				Rising Main, public
				Rising Mian, private
				Rising main, S104
				Highway Drain, private
				WW Pumping Station
				Inspection Chamber
				Extent of Survey
				Head of System
				Soakaway
				Rodding Eye
				Lamp Hole
				T Junction/Saddle
				Gully
				Air Valve
				Non Return Valve
				Sewer Overflow
				Cascade
				Flow Meter
				Hatch Box
				Hydrobrake
				Inlet
				Bifurcation
				Catchpit
				Oil Interceptor
				Penstock
				Summit
				Valve
				Valve chamber
				Washout Chamber
				Drop Shaft
				WW Treatment Works
				Septic Tank
				Vent Column
				Network Storage Tank
				Orifice Plate
				Vortex Chamber
				Penstock Chamber
				Screen Chamber
				Discharge Point
				Outfall

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	SQ	Square
EG	Egg	TR	Trapezoidal
OV	Oval	AR	Arch
FT	Flat Top	BA	Barrel
RE	Rectangular	HO	Horse Shoe
		U	Unspecified

SEWER MATERIAL

AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	VC	Vitrified Clay
CO	Concrete	PP	Polypropylene
CSB	Concrete Segment	PF	Pitched Fibre
CSU	Concrete Segment	MA	Masonary, Coursed
CC	Concrete Box Culverted	MA	Masonary, Random
PSC	Plastic	RP	Reinforced Plastic
GR	Glass Reinforced	CI	Cast Iron
GRP	Glass Reinforced	SI	Spun Iron
PVC	Polyvinyl Chloride	ST	Steel
PE	Polyeththlene	U	Unspecified



Control Kiosk



Sludge Main

ABANDONED PIPE

	Public Sewer
	Rising Main
	Private Sewer
	Sludge Main

Appendix 4 – Utilities Enquiries

Network Enquiry No : 180012884
Your Reference : M26 2PR

Cadent Gas Limited

National Gas Emergency Service - 0800 111 999* (24hrs)
*calls will be recorded and may be monitored

Hannah Bewley
CAMPBELL REITH CONSULTING ENGINEERS
FRIARS BRIDGE COURT
41-45 BLACKFRIARS ROAD
LONDON
SE1 8NZ

Date : 6th October 2020
Contact : Performance and Support
Direct Tel : 0845 3666758
Email : networkdesign@cadentgas.com

www.cadentgas.com

Dear Hannah,

Re: Land Enquiry for Proposed Development Site at NEW SUPPLY, EAST LANCS PAPER MILL, THE ISLAND SITE, RADCLIFFE, MANCHESTER, M26 2PR.

Thank you for your enquiry which we received on 29th September 2020. I enclose details of Cadent Gas plant in the vicinity of your proposed supply.

The nearest main with sufficient capacity is 2 metres from the site boundary and it is a Low Pressure main.

This Developer Enquiry response is a reflection of the network at the time delivered and is not a guarantee of gas flow or capacity due to the changing dynamics of the gas distribution network. If you wish to secure capacity and connect to the network please submit quotation Connections Request via the official connections route allowing for further analysis to verify the capability of the network again.

Standard design pressures have been used. Refer to www.Cadentgas.com

Please be aware of existing mains or services within the site boundary that may require diversionary or abandonment works, this will be costed upon receipt of a firm request.

Plans attached: Yes

A copy of the Cadent Connections Charging Statement referenced in this letter can be found on Cadent's website:

<http://cadentgas.com/Get-connected>

If you require a printed version please contact us on the details provided above.

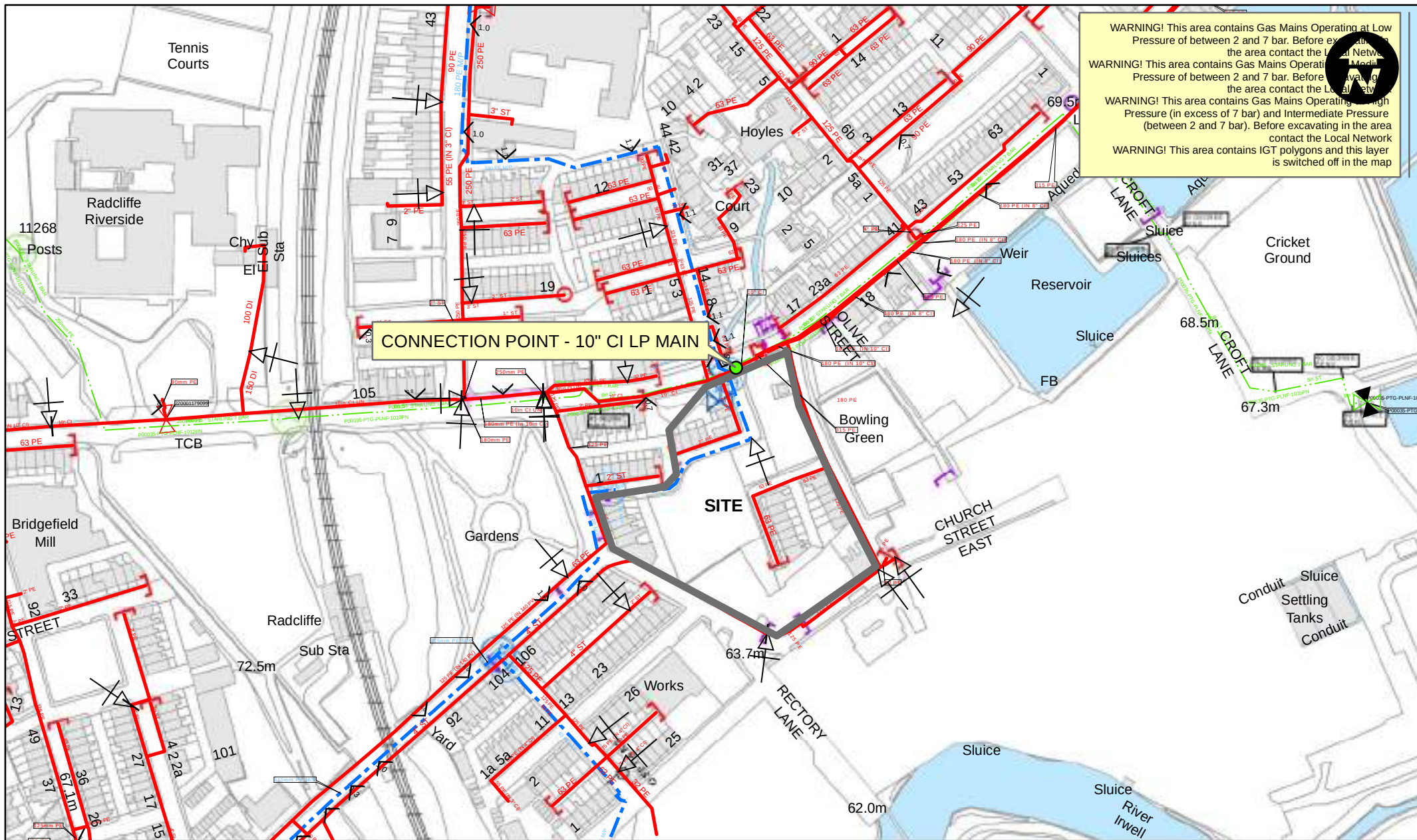
I trust this meets with your requirements at this stage. If you have any queries please do not hesitate to contact Performance and Support on the above number.

Yours sincerely,



Laura Cheshire





SCALE: 1:500 @ A4	L/P GAS MAIN
USER ID:james.mason	M/P GAS MAIN
DATE: 30-Sep-2020 15:44:55	I/P GAS MAIN
INTERNAL USE ONLY	H/P GAS MAIN
OS Ref:379014, 407445	N/H/P GAS MAIN
CENTRE: <Centre>	PROPOSED PIPE - LP
	PROPOSED PIPE - MP
	PROPOSED PIPE - IP
	ABANDON - LP
	ABANDON - MP
	Out Of Standard Service

Some examples of Plant Items:	Valve	Syphon	Depth of Cover	Change of Dia	Change of Material
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SCHEME: <NG GDFO Scheme Name>
DESIGN: <NG GDFO Design Number>
REVISION: <NG GDFO Revision>

This plan shows those pipes owned by Cadent in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and any other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

180012884

This plan is reproduced from or based on the OS map by Cadent Gas Limited, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved..



Ms Hannah Bewley
Campbell Reith Hill LLP
No. 1 Marsden Street
Manchester
M2 1HW

Our Ref: 5500184665/B

T: 0800-195-4141
DD: 07818587049
E: sam.ingham@enwl.co.uk

07 October 2020

Dear Ms Hannah Bewley

Re: Indicative Cost for the New Supply at East Lancs Paper Mill, The Island Site, Radcliffe, Manchester, M26 2PR

Thank you for your enquiry for the above information. As requested please find details of the indicative works and costs envisaged at this moment.

This letter is based upon the details submitted in your request for a maximum import power of 35 KVA.

The indicative cost for the provision of the new/modified connection including any diversion/reinforcement works is £54,000.00 plus VAT of £0.00 totalling £54,000.00.

A brief description of the indicative works to facilitate your proposal is detailed on the following page.

An assessment of the indicative contestable & non contestable charges can be obtained by referring to Electricity North West Limited's "Statement of Methodology & Charges for Connection to Electricity North West Limited's Electricity Distribution Network", available on our website www.enwl.co.uk.

This budget letter is provided in order to give an indication to your request for indicative costs and will enable you to assess the cost of the connection and any associated infrastructure reinforcement or diversion charges that might be applicable.

At this stage a full assessment of the network has not been undertaken and this letter is not a formal offer and is not open for acceptance.

A firm quotation will be provided when we are in receipt of a complete application, details of the information needed to provide a firm quotation can be found in Electricity North West Limited's "Statement of Methodology & Charges for Connection to Electricity North West Limited's Electricity Distribution Network".

We would like to thank you for your valued enquiry and look forward to working closely with you in due course. If you require any further assistance please do not hesitate to contact me.

Yours sincerely,

Sam Ingham
Electricity North West

Brief Description of the indicative works:

The charges included are for the provision of a new or existing Electricity North West Low Voltage infrastructure installation:

- Installation of LV infrastructure.
- Install new low voltage single phase service/s.
- For additional bespoke information, please refer to the project specification.

The charges do not include for:

- Land acquisition costs for legal consents etc
- Clearing the site of trees, vegetation etc for construction / access.
- Provision of metering room.
- Damage to crops / land during operational access / work etc.
- Installation of cable entry duct from the service position to your land boundary.
- The provision and installation of a cable entry duct for new service/s.
- Alterations to your private network, e.g. wiring back existing supplies
- The provision and the installation of your LV singles/tails and earth cables, including termination lugs.
- Out of hours working.

Quotation price

The Indicative quotation price is provided based upon your application and the information you provided. The charges are based upon Electricity North West completing both the non contestable and contestable works.

Non Contestable Charges

If you require a full description of the non contestable charges these can be viewed on our website <http://www.enwl.co.uk/our-services/connection-services/help-faqs/useful-information/common-charging-methodology>. If you are unable to access the internet please contact us on 0800 048 1820 and we will post a copy to you.

Determinations

We hope you are satisfied with the service Electricity North West has provided and hope that any possible disputes have been resolved satisfactorily. However if a situation should arise and we are unable to reach a mutually acceptable solution, you can contact The Energy Ombudsman, who will assist in resolving the dispute. You can contact The Energy Ombudsman in writing to PO BOX 966, Warrington, WA4 9DF, by telephone on 0845 055 0760 or online at www.energy-ombudsman.org.uk

"DANGER"
HIGH VOLTAGE CABLES PRESENT
EXPOSE ALL CABLES BEFORE
JOINTING

For Planning Purpose Only



PROJECT DETAIL

Title: BUDGET

Address: EAST LANCS Paper Mill, Radcliffe, M26 2PR

Scheme Ref Number:	5500184665
--------------------	------------

Drawn By: Sam Ingham

Date: 07-Oct-2020

Grid Reference:	(X)	379038
	(Y)	407391

Scale: N.T.S

Point of Connection Expiry Date:
Valid for a period of 180 days from the date of the Quotation

POINT OF CONNECTION TECHNICAL DETAIL

Cable Size @ P.O.C :	4c.1 PILC
-----------------------------	------------------

Voltage :	240-415 Volts
------------------	----------------------

Minimum Cable Size :

Loop or Teed (HV only)

Feeder Name / No : Cock Clod St - 232807

Transformer Size : 750 kVA

Transformer Size :	750 KVA
Fuse Size :	315 Amps

Fuse Size :	515 Amps
Earth Loop Impedance :	0.032 ohms

Earth Loop Impedance	Short-Circuit
% Voltage Drop	

1) Including site load	0.59 %
------------------------	--------

2) excluding site Load	0.25 %
Generation:	

Generation	Voltage Rise relative to initial BP	%
1	1.0	0.0
2	1.0	0.0
3	1.0	0.0
4	1.0	0.0
5	1.0	0.0
6	1.0	0.0
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97	1.0	0.0
98	1.0	0.0
99	1.0	0.0
100	1.0	0.0

primary BB :
Positive sequence R+JX (% on

100MVA base)
Notes:

Notes :

For reference only

depths and positions of Electricity North West Limited equipment was accurate as shown when the equipment was removed from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to

DANGER OF DEATH

ALL EXCAVATION SHOULD BE CARRIED OUT BY TAKING THE APPROPRIATE SAFETY PRECAUTIONS IN THE HEALTH & SAFETY EXECUTIVE GUIDE (HSG47) "AVOIDING DANGER FROM UNDERGROUND SERVICES" AND (HSG6), "AVOIDING DANGER FROM OVERHEAD ELECTRICAL LINES". AT ALL TIMES TAKING INTO ACCOUNT THAT OTHER PLANT MAY BE IN THE VICINITY WHICH IS NOT SHOWN ON OUR PLANS.

DANGER OF DEATH

ALL EXCAVATION SHOULD BE CARRIED OUT BY TAKING THE APPROPRIATE SAFETY PRECAUTIONS IN THE HEALTH & SAFETY EXECUTIVE GUIDE (HSG47) "AVOIDING DANGER FROM UNDERGROUND SERVICES" AND (HSG6), "AVOIDING DANGER FROM OVERHEAD ELECTRICAL LINES". AT ALL TIMES TAKING INTO ACCOUNT THAT OTHER PLANT MAY BE IN THE VICINITY WHICH IS NOT SHOWN ON OUR PLANS.

N
↑

This plan is issued by Electricity North West Limited. Unless otherwise indicated Electricity North West Limited cables are laid at depths in accordance with NJUG 2 (typically 450mm for Low Voltage & 600mm for 11KV cables in footpath). 33KV/132KV cables are laid at depths as marked. The depths and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However, third parties may have altered the surface level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from that shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated in the cable records.



Other apparatus may also be present which is owned by a third party other than Electricity North West Limited. Reproduced from or based upon Ordnance Survey's map with permission of the controller of Her Majesty's Stationery Office. Crown Copyright Reserved. LICENCE No 100017892. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Reference should be made to HSE guidance HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines". Electricity North West Limited, registered number 2366949, registered in England and Wales, registered office: 304 Bridgewater Place, Birchwood Park, Warrington, WA3 6XG



RE: East Lancs Paper Mill, Radcliffe
nsrecep to: HannahBewley 29/09/2020 09:20
Sent by: <sue.dunlop@openreach.co.uk>
Please respond to nsrecep

Hannah

Thank you for your enquiry. Openreach will deploy FTTP, free of charge, into all new housing developments of 20 or more homes.

Openreach can provide your development with Fibre to the Premises, free of charge.

Fibre to the Premises provides estimated speeds of up to 1Gbps enabling your home owners to stream HDTV, play computer games and write emails simultaneously providing the best communications experience

At this time your site has not been registered, if you would like to proceed to register your site with Openreach, please use the appropriate form on our website at <https://www.ournetwork.openreach.co.uk/property-developers/site-registration.aspx>, scroll down to Register Your Site and complete the form link. Our registration team will confirm further within 5 working days.

Kind regards

Sue Dunlop
Infrastructure Solutions customer service Openreach

Telephone 0800 783 2023 Option 2 Option 1
Web: openreach.co.uk

We build and maintain the digital network that enables more than 600 providers to deliver broadband to homes, hospitals, schools and businesses large and small. Our engineers work in every community, every day, because we believe everyone deserves decent and reliable broadband.

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Openreach Limited

Registered Office: Kelvin House, 123 Judd Street, London WC1H 9NP Registered in England and Wales no. 10690039

From: HannahBewley@campbellreith.com [<mailto:HannahBewley@campbellreith.com>]

Sent: 23 September 2020 16:47

To: NSRECEP T <nsrecep@openreach.co.uk>

Subject: East Lancs Paper Mill, Radcliffe

Good Afternoon,

I am enquiring regarding a potential point of connection for the below site:

East Lancs Paper Mill, The Island Site
Radcliffe
Manchester
M26 2PR

Grid Reference: 379030E 407408N

Please could you confirm if a point of connection to existing telecoms services would be feasible for the site, and if the apparatus has sufficient capacity to serve the development. The site is approximately 1.1 ha in area and is anticipated to serve around 25 dwellings.

I have attached a site plan for your reference.

Please contact me if you need anything further.

Kind Regards,
Hannah Bewley
Graduate Civil Engineer

CampbellReith
consulting engineers

No. 1 Marsden Street
Manchester
M2 1HW

Tel: +44 (0)161 817 2391
www.campbellreith.com

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RE: ELPM, The Island Site, Radcliffe.

Keogh, Gerard to: HannahBewley@campbellreith.com 29/09/2020 11:50

Good morning Hannah

I can confirm we have network in the area so there shouldn't be an issue but without a site plan we are unable to complete due diligence/feasibility. Once you have a site plan we will complete a design for you.

Many thanks

Ged Keogh

New Build Account Manager

Virgin Media | New Build developments North West

Mobile 07855 806 462

E-mail: gerard.keogh@virginmedia.co.uk

New Build website: www.virginmedia.com/developer



From: HannahBewley@campbellreith.com [<mailto:HannahBewley@campbellreith.com>]

Sent: 25 September 2020 16:41

To: Keogh, Gerard

Subject: RE: ELPM, The Island Site, Radcliffe.

Hi Ged,

Unfortunately we don't at the moment. We are looking to undertake a due diligence exercise for our client, and this is very early stages. We are essentially looking to know if virgin media could in theory serve c.25 dwellings on site.

Kind Regards,

Hannah Bewley

Graduate Civil Engineer

CampbellReith
consulting engineers

No. 1 Marsden Street
Manchester
M2 1HW

Tel: +44 (0)161 817 2391
www.campbellreith.com

From: "Keogh, Gerard" <Gerard.Keogh@virginmedia.co.uk>

To: "HannahBewley@campbellreith.com" <HannahBewley@campbellreith.com>, "Johnson, Darryl 01" <Darryl.Johnson2@virginmedia.co.uk>

Cc: ">Newbuild" <new.build@virginmedia.co.uk>

Date: 25/09/2020 16:34
Subject: RE: ELPM, The Island Site, Radcliffe.

Hi Hannah

Thanks very much for returning the form, do you have any site plans you could please send me?

Many thanks

Ged Keogh

New Build Account Manager

Virgin Media | New Build developments North West

Mobile 07855 806 462

E-mail: gerard.keogh@virginmedia.co.uk

New Build website: www.virginmedia.com/developer



From: HannahBewley@campbellreith.com [<mailto:HannahBewley@campbellreith.com>]
Sent: 25 September 2020 16:02
To: Johnson, Darryl 01
Cc: Keogh, Gerard
Subject: RE: ELPM, The Island Site, Radcliffe.

Thanks Darryl.

Ged, please find the completed form attached. I have also attached the RLB again for ease.

Kind Regards,
Hannah Bewley
Graduate Civil Engineer

CampbellReith
consulting engineers

No. 1 Marsden Street
Manchester
M2 1HW

Tel: +44 (0)161 817 2391
www.campbellreith.com

From: "Johnson, Darryl 01" <Darryl.Johnson2@virginmedia.co.uk>
To: "'HannahBewley@campbellreith.com'" <HannahBewley@campbellreith.com>
Cc: "Keogh, Gerard" <Gerard.Keogh@virginmedia.co.uk>
Date: 25/09/2020 14:21
Subject: RE: ELPM, The Island Site, Radcliffe.

Good afternoon Hannah,

Thanks for your email. I have had a quick look at the location and looks like the site is in a position to receive Virgin Media services however we will need to run a few checks to be 100% sure, in order for us to do this please could you fill in the attached document completing as much info as possible.

My colleague Ged (cc'd) covers this area of Manchester and will take over this with your response.

Kind Regards,

Darryl Johnson | New Build Account Manager - North West & Yorkshire
Network Expansion - Newbuild
Virgin Media | Middleton Grove, Leeds, LS11 5LP
M07811316369 | **E** Darryl.johnson2@virginmedia.co.uk
W <http://www.virginmedia.com/developer>



From: HannahBewley@campbellreith.com [<mailto:HannahBewley@campbellreith.com>]

Sent: 25 September 2020 09:31

To: Johnson, Darryl 01

Subject: Fw: ELPM, The Island Site, Radcliffe.

Hi Darryl,

I was directed to your inbox from Clare's out of office notification.

Please see the email below.

Kind Regards,
Hannah Bewley
Graduate Civil Engineer

CampbellReith
consulting engineers

No. 1 Marsden Street
Manchester
M2 1HW

Your Guidance for your Point of connection enquiry



Campbell Reith
1 Marsden Street
Manchester
M2 1HW
FA0 Hannah Bewley

United Utilities Water Limited
Developer Services Water
Water Connections
Second Floor Grasmere House
Lingley Mere Business Park
Lingley Green Avenue
Warrington WA5 3LP

Telephone: 0345 072 6067
Email: developerserviceswater@uuplc.co.uk

Your Ref:
Our Ref: 4100458107
Date: 26th October 2020

Dear Hannah,

Location: East Lancs Papermill, The Island Site, Radcliffe M26 2PR

Based upon the information provided in your recent enquiry, and the current guidelines, the point of connection for your development will be the nearest practical point on the existing network.

The point(s) of connection for your development will be supplied from the existing water mains in the area. Without a site layout plan we cannot confirm which of the mains can be used.

Existing United Utilities water assets

To help you plan your development I have enclosed a copy of our asset records. This shows that we have operational assets within the boundaries of your proposed development.

You may be able to design your development in such a way that our operational assets can remain in their current location, but if this is not possible any equipment affected by the development will need relocating to an agreed alternative position. Without a site layout plan we cannot confirm which of the mains will need diverting or abandoning.

If you decide to take your development forward, please contact us as early as you can so that we can agree a new location for the existing assets, and to agree timescales and firm costs for the work. It may be possible to reduce these costs if you are able to do some work yourselves.

It is the responsibility of the developer to arrange for the disconnection of the existing services to site.

Note billing only accepts written requests to email: customer.services@uuplc.co.uk

You will need to attach the bill and the request to disconnect and confirm if the property was domestic or commercial.

Important note

This copy of our asset records is only provided to help you assess the likely risks when planning your development at a desk top stage. It is not intended to be used for planning any actual excavation or construction work. You are reminded that a Health and Safety plan should include an up to date record of all underground equipment.

Infrastructure Charges

Based on the information you have provided we would advise you to allow a budget of £581.00 per plot for water and wastewater infrastructure charges for the planned 25 new connections. At present this charge is outside the scope of VAT.

Infrastructure Credits

We have no record of any water or sewerage connections to previous premises on this site within the last 5 years. This means that we are unable to offer any infrastructure credits against new connections on your proposed development.

Our records show there were water and sewerage connections on this site within the last 5 years. This means that you can include a budget credit of £14,525.00 (25 credits) against the total infrastructure charges, if your development were to commence in the next 12 months.

Income Offset

Income offset is levied against the Infrastructure Water charge and is applicable to all plots which are using water for domestic purposes which have not received an infra credit. The per plot allowance for this is £751.00 but in this instance because all plots which will receive an infrastructure credit there will be no income offset.

What to do next:

If you decide to proceed with your development, you can choose between requisitioning your new clean water directly from us, or you can employ a contractor directly to self-lay the new mains. A list of approved installers is available at Lloyds Register www.lr.org.

We have a booklet "Obtaining water supplies for new developments - Guidance notes for developers" which is available on request or can be downloaded from our website unitedutilities.com. This document contains information to help you make the right choice for your new water main or water connection.

The information given is valid for up to 6 months, if you need any further information or assistance, please do not hesitate to contact me at this office.

Please do not hesitate to contact us should you need further assistance on 0345 072 6067 or email to Developerserviceswater@uuplc.co.uk, always using our reference number provided on this letter.

Regards

Rachel Yates

Enc. UU assets plan
Standard Conditions for Works Adjacent to Pipelines

Water Industry Act Section 47(3) Counter Notice

Please note that in accordance with Section 47(3) of the Water Industry Act 1991, United Utilities Water requires compliance with the conditions below, prior to the connection of any service connection to any of United Utilities Water's mains that form part of your requisition application.

- Advance security may be required to be lodged with United Utilities Water equal to the total value of any connections and associated ancillary works. We will in due course estimate the cost of these works and provide you with the value of any security that may be required.
- Premises under separate occupation must be supplied by separate individual service pipes.
- Where it is deemed appropriate by United Utilities Water, a meter will be installed to determine the volumetric charge for the supply of water which can be connected by our contractor or by an approved third party in accordance with United Utilities Water's specification.
- Laying of the service pipe to a depth of no less than 750mm and no more than 1350mm below finished ground level, within the private land from the Street boundary into your premises. Service pipes must be installed to United Utilities Water's current specifications, and have a stopcock fitted. Standard connections (up to 25mm OD) shall consist of an un-jointed appropriate type and construction of pipe with marker tape laid no more than 400mm below finished ground level. Provision for volumetric metering must be installed fully in accordance with United Utilities Water's current specifications.
- If you are installing new plumbing or making alterations to existing internal plumbing arrangements, you must ensure that the plumbing complies with the Water Supply (Water Fittings) Regulations 1999 and with United Utilities Water's specification for the purposes of ensuring it will be reasonably practicable to install and connect a meter.
- Where your development or property requires water to be delivered at a height greater than 10.5 metres below the draw off point of the reservoir or tower supplying the area it is a requirement, in accordance with Section 66 of the Water Industry Act 1991, that you install a cold water storage cistern to cover twenty-four hours demand.
- Any outstanding charges payable as a result of a disconnection notice or any charges payable for any outstanding compliance requirement from any Section 75 notice that has been served (waste, contamination or misuse) have been paid in full.

In addition to the statutory conditions above, if you have yet to provide us with a full postal address for the property/s to be connected, please remember that we will need this information before we can make any service connection/s. If you have not yet obtained or agreed this information with your local planning authority, we strongly recommend that you contact your planning representative as soon as possible to prevent your connection being delayed later on in the process.

Standard Conditions for Works Adjacent to Pipelines

Document Ref. 90048

Issue 3.1 July 2015

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AMENDMENT SUMMARY

Amendment No. Date	Brief Description and Amending Action	Owner	Verifier
3.1 July 2015	'Easement Area' defined and legal clarifications made.	Neil Sixsmith	Jim Tresnan
3.0 March 2015	Full review and update	Neil Sixsmith	Jim Tresnan
2.0 May 2014	Full review and update. Appendix 1 incorporated to provide guidance on tree roots and planting. Improvements to document around vibration monitoring and discolouration	Peter Tucker	Nick Preston
1.2 October 2007	Alterations into Distribution Manual	Richard Duckett	
1.1 August 2007	Alteration to Guideline number 12	Paul Gough	Tony Conway
1 July 2003	First issue in standard format	Phil Hayden / Ian Skilling	Peter Womersley

HISTORY OF THE DOCUMENT

The following table details the task team involved in the full review of the Standard Conditions:

Date and Issue Number	Task Team members
3.0 March 2015	Peter Tucker – UU Engineering Nick Preston – UU Engineering Jim Tresnan – UU Engineering Neil Sixsmith – UU Water Services (Network) Owen Newton - UU Engineering Mike Taylor – UU Water Services (Network)

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1. SCOPE

This document sets out United Utilities Ltd (UU) standard conditions for work carried out over, under or adjacent to a UU Pipeline which can include multiple UU Pipelines laid adjacent to each other.

It is UU company policy not to allow any building over UU Pipelines or water mains. Any such building / structure would compromise UU's obligation to maintain a constant water supply and, in particular, would obstruct UU's ability to respond in the event of a failure of the Pipeline. Building over mains also has potential risks to the health and safety of anyone who might be affected by a failure, including the occupants of the building.

2. DEFINITIONS

Term	Definition
Pipeline	Means any aqueduct, trunk main, water distribution main, multiple pipes laid adjacent to each other or non-potable main vested in UU as water undertaker.
Easement Area	Means the easement specified in any relevant document, e.g. conveyance, transfer or deed of grant with such widths as specified therein.
Easement Width	Means the Easement Width for any Pipeline laid under statutory powers. For large diameter Pipelines, unless otherwise specified, the Easement Width shall extend 5 metres to each side of the Pipeline from its centreline (10 metres total width). For small single Pipelines of up to and including 300mm diameter, unless otherwise specified, the Easement Width shall extend 3 metres to each side of the Pipeline from its centreline (6 metres total width) Contact UU for specific Easement Width limits and conditions.
Street	The whole or part of any highway, any road, lane, footway, alley or passage, square or court, whether or not a thoroughfare. A Street can therefore be a footpath, cycle track, bridleway or full vehicular highway. Where a Street passes over a bridge or through a tunnel these are included as part of the Street.
PPV	Peak Particle Velocity
Shall or Must	Mandatory requirements are adopted through the use of 'shall' or 'must' or are otherwise specifically stated. The document also contains information and guidance that is not mandatory but is provided for consideration.
Stopping up Order	An order authorising the stopping up (removal of public rights of way) of any highway, if the Secretary of State is satisfied to do so, to allow development to be carried out in accordance to a valid and relevant planning permission granted under the Town and Country Planning Act 2008 as amended or re-enacted from time to time.
Promoter	Any utility company, self-lay organisation, developer, Highway Authority, Local Authority or any other organisation wishing to work adjacent to or cross over or under a UU Pipeline.

3. GUIDELINES

3.1. General Guidelines

3.1.1. The Standard Conditions are issued for the guidance of Promoters and others to reduce the risk of damage to the Pipeline and the consequent liability for such damage. They do not replace or alter any powers or rights exercisable by, or protection afforded to UU by virtue of: -

- a) Its ownership of the Pipeline or any rights or privileges in relation thereto;
- b) Any conveyance, lease, deed or grant, easement (see Figure 1 Easement Widths), licence, wayleave or other legal document relating to the Pipeline;
- c) Any statutory provision (including any provision in subordinate legislation) including but not limited to: -
 - i. The Water Industry Act 1991 as amended or re-enacted from time to time, will also apply.
 - ii. Any local statutory provision relating to a Pipeline and to any work of any other body or person which regulate, either generally or in relation to any specific crossing or work, the relations between UU and such other body or person, including any agreement or other document referred to in or incorporated with any such statutory provision.

In the event of any inconsistency between the provisions of these Standard Conditions and those of any document or statutory provision mentioned above, the latter shall prevail unless capable of variation by agreement and the substitution of the relevant provisions of these Standard Conditions is expressly agreed.

- 3.1.2. The Standard Conditions apply to all Pipeline(s). In the case of Pipeline(s) located in streets, the provisions of the New Roads and Street Works Act 1991 and the Traffic Management Act 2004, as amended or re-enacted from time to time, will also apply.
- 3.1.3. No work of any description shall take place on or within the Easement Area or Easement Width before full agreement has been reached with UU regarding the manner in which the work shall be carried out and consent to the same has been given in writing. At least 28 days' notice shall be given of any intention to carry out works in the Easement Area or Easement Width.
- 3.1.4. No vehicle, plant or machinery is to stand, operate or travel within the Easement Area or Easement Width of the Pipeline except as agreed by United Utilities.
- 3.1.5. UU reserves the right to supervise any work carried out on or within the Easement Area or Easement Width and to recover the costs incurred.
- 3.1.6. No buildings / structures of any description shall be erected within the Easement Area or the Easement Width.
- 3.1.7. No service shall cross the Pipeline at less than 1 metre in front of a socket face or at less than 300mm behind it. (See Figure 2)
- 3.1.8. No materials including spoil shall be placed on or stored within the Easement Area or Easement Width.
- 3.1.9. Access to and along the Easement Area or Easement Width shall be kept clear and unrestricted at all times. See Section 7, 'Easement Infringements'.

- 3.1.10. Sanitary arrangements approved by UU shall be provided for persons working on or within the Easement Area or Easement Width. Precautions shall be taken to avoid spillage of fuels, oils, paints, solvents or any other substance, which may damage the Pipeline or its protection.
- 3.1.11. Where construction of a new structure / building is proposed within 1m of the edge of the Easement Area or Easement Width, its foundations shall be designed to ensure that load from the structure / building is not transferred onto the Pipeline. The design shall also ensure that UU has full access to the lowest point of the bedding of the Pipeline for maintenance or construction purposes
- 3.1.12. No alteration to the existing ground levels or surface use of the Easement Area or Easement Width shall be made without prior written consent from UU. At least 28 days notice shall also be given of any proposal to alter ground levels or the surface of land adjoining the Easement Area or Easement Width. This includes increasing the ground level above the Pipeline by placing material to form a landscaping bund or road (or other) embankment, as this has the potential to cause settlement to the Pipeline that could damage it.
- 3.1.13. Persons or their Promoters working on or within the Easement Area or Easement Width shall be required to indemnify UU for the full cost of any damage caused to its Pipelines and for any costs, charges and expenses resulting from these operations.
- 3.1.14. In an emergency, contact shall be made immediately using the following telephone number:

The UU Response Manager is available on-

07713887302 and this number shall be used for EMERGENCIES ONLY

e.g. if the UU Pipeline is damaged / burst the UU response Manager must be contacted immediately.

Please supply the UU Response Manager with the following information:

Who you are (name and company)?

What is your contact number?

Exactly where you are (in order to quickly identify which main is damaged and potential risks to UU)?

What is the damage?

Is it causing flooding?

Is flood water entering a watercourse?

4 ISSUES AFFECTING A PIPELINE DURING CONSTRUCTION ACTIVITIES

4.1. Temporary Access

- 4.1.1. Movement of vehicles and plant with a total weight exceeding 6 tonnes across the unprotected Pipeline is forbidden. The repetitive movement of vehicles or plant of any weight over the unprotected Pipeline in the same position is forbidden. Where temporary or permanent access is required, the Promoter must consult with UU prior to gaining access.

- 4.1.2. Each proposed temporary crossing point of a Pipeline shall be considered on an individual basis. The Promoter shall submit the design of the proposed crossing point to UU for acceptance. Work to construct the temporary crossing point shall not commence without prior written consent from UU.
- 4.1.3. The Promoter shall design any temporary crossing point such that the load from any vehicle or any item of construction plant that will use the crossing point creates a suitably factored bearing pressure of not more than 8.5kN/m² at the crown of the UU Pipeline. (N.B. *This load is approximately equivalent to the loading on a Pipeline with 900mm of cover when a 6 tonne excavator crosses above it.*) In order to achieve this, the Promoter may use substantial timber baulks, reinforced concrete slabs or proprietary ground protection systems (e.g. Eve Trakway). Where it is not possible to distribute the surcharge load from the plant to less than 8.5kN/m² at the crown of the Pipeline, then the design of the temporary crossing point shall consist of a suspended crossing which bridges over the Pipeline.
- 4.1.4. Temporary crossing points shall only be used to allow vehicles and plant to traverse across a Pipeline. Temporary crossing points are not to be used as working platforms for construction plant. Plant shall not be allowed to operate above a UU Pipeline unless specific written consent is given by UU. Any request by a Promoter for them to site working plant above a UU Pipeline must demonstrate that the platform which their plant is to be sited on has been designed as a working platform and will ensure that the maximum surcharge load from that plant is distributed to less than 8.5kN/m² at the crown of the Pipeline, or bridges over the Pipeline.
- 4.1.5. All parts of a temporary crossing point must be removed when the work is complete, unless written consent is obtained from UU for the crossing to be left in place. The design and construction of the temporary crossing point shall be such that it permits for its removal (and the reinstatement of the ground beneath it) without exposing the Pipeline to undue loading, vibration or risk.

4.2. Temporary Fencing

- 4.2.1. Fencing shall be erected by the Promoter when they are working in and around the Easement Area or the Easement Width to demarcate its location, to regulate vehicle movements and to confine the crossing of the Pipeline only to approved crossing points. The fencing shall be of substantial construction. It shall be adequately maintained at all times to the satisfaction of United Utilities.

4.3. Excavations within an Easement Area or Easement Width

- 4.3.1. Prior to general excavation, trial holes shall be dug by hand to determine the precise location of the Pipeline. UU reserves the right to carry out such excavations. The cost of all such excavations shall be borne by the Promoter.
- 4.3.2. Excavations shall be fully supported and shall be backfilled to the satisfaction of UU. All work shall be carried out during normal working hours, which shall have been previously agreed with UU. UU reserves the right to stop all work on or within the Easement Area or Easement Width which, in the opinion of its officers, places the Pipeline at risk. As a consequence of such action, UU shall not accept any claims for financial loss.
- 4.3.3. All excavations within the Easement Area or Easement Width shall be carried out by hand or may be carried out by mechanical excavator if under the supervision of UU personnel. Excavation within 1 metre of the Pipeline(s) must be carried out by hand and great care must be exercised to ensure that any protective wrapping is not damaged.
- 4.3.4. If a thrust block is discovered within any excavation adjacent to a Pipeline(s), then work shall be stopped and the excavation backfilled as soon as possible.

4.4. Ground Vibration

- 4.4.1. No blasting shall be carried out within 300 metres of the Pipeline(s) without prior written consent from UU, unless it can be demonstrated that ground vibration from such activities shall not exceed a peak particle velocity (PPV) of 5mm/s in any plane at the closest point of the Pipeline(s) to the blast.
- 4.4.2. Demolition, piling, tunneling or any other construction technique which induces significant vibration (not exceeding a peak particle velocity of 5mm/s) shall be permitted up to 10 metres away from the Pipeline(s). Permission will be granted by UU provided that the Promoter has accurately established the position of the Pipeline(s) and this has been verified by UU and a written statement of the precautions to be taken to ensure the safety of the Pipeline(s) has been submitted by the Promoter and received and consented to by UU prior to works being undertaken.
- 4.4.3. Should demolition, piling, tunneling or any other construction technique which induces significant vibration be proposed within 3.5 - 10 metres of the Pipeline(s) this shall be subject to seismic monitoring in order to prevent damage to the Pipeline(s). The Promoter shall accurately establish the position of the Pipeline(s). Seismograph readings shall be taken by the Promoter's specialist organisation on the line of the Pipeline at locations to be agreed with UU. Vibration monitoring shall be done under the supervision of a specialist organisation which has significant experience of similar monitoring work. The identity of the specialist organisation shall be proposed by the Promoter and approved by UU. This approval should not be unreasonably withheld or delayed. The cost of the seismic monitoring shall be borne by the Promoter. Vibration shall be measured in terms of peak particle velocity (PPV) and the Promoter shall employ suitable methods of construction in carrying out its works such that the PPV does not exceed 5mm/s. If the measured PPV does exceed 5mm/s then work shall cease immediately and a review of the monitoring data shall be undertaken between the Promoter and UU Engineering staff. If necessary UU shall notify the Promoter of any reasonable mitigation measures to protect the Pipeline(s) that it requires the Promoter to carry out. The Promoter shall comply with these reasonable mitigation measures in carrying out its works. A written statement of the precautions to be taken to ensure the safety of the Pipeline(s) shall be submitted by the Promoter and received and approved by UU prior to works being undertaken.
- 4.4.4. If UU identify that there is a risk of discolouration of the potable water supply the Promoter shall not excavate within 1m of the Pipeline(s) in any plane. Given the fact that there shall be significant excavation by hand, it may be more economical for the Promoter to consider directional drilling or another form of trenchless technique. UU would prefer this as an alternative construction technique.
- 4.4.5. Where practical, and when requested by UU due to the risk of discolouration, downstream turbidity monitoring should be undertaken for potable water Pipelines irrespective of Pipeline diameter. If UU reports to the Promoter that the turbidity levels measured in the main are very close to or exceeding the regulatory standards then work shall cease immediately and a review of the monitoring data shall be undertaken between the Promoter and UU Engineering staff. If necessary UU shall notify the Promoter of any reasonable mitigation measures to protect the Pipeline(s) that it requires the Promoter to carry out. The Promoter shall comply with these reasonable mitigation measures in carrying out its works.

5 ISSUES PERMANENTLY AFFECTING A PIPELINE OR EASEMENT

5.1. Permanent Access

- 5.1.1. Any proposed crossing of the Pipeline shall be considered on an individual basis. Any permanent access crossing the Easement Area or Easement Width shall be

designed and constructed by the Promoter to prevent any damage to the Pipeline. This may typically consist of mass concrete filled trenches constructed on either side of the Pipeline(s) with reinforced concrete slabs spanning between them. The Promoter shall submit the design of the proposed crossing point to UU for acceptance. Work to construct the permanent crossing point shall not commence without prior express written consent from UU.

5.2. Permanent Fences and Boundaries

- 5.2.1. Fences or other boundaries structures crossing the Easement Area or Easement Width shall be as near as possible perpendicular to the line of Pipeline and in no case shall be made at an angle of less than 45 degrees. Proposals for any new fences or other boundary structures shall be submitted to UU for approval. Where necessary a lockable gate shall be provided for UU for their sole use.

5.3. Installation of New Services within the Easement

- 5.3.1. Any pipes, drains, electricity cables or sewers crossing unmade ground over or under the Pipeline shall be laid in steel conduit or ductile iron pipe ideally unjointed (or similar UU approved material) and adequately supported so as to be self-supporting over any subsequent excavation which may have to be carried out i.e. they should extend well into the undisturbed ground at each side of the Pipeline trench and shall cross as near as possible to 90 degrees to the Pipeline.
- 5.3.2. In no case shall any crossing be made at an angle of less than 45 degrees.
- 5.3.3. Provided that ground conditions are suitable, pipes crossing below the Pipeline shall be constructed by an approved tunneling method, and agreed by UU. The Promoter shall demonstrate that the predicted - and actual - ground settlement at the level of the invert of the Pipeline as a result of their pipes crossing below the Pipeline is not more than 20mm.
- 5.3.4. For UU Pipelines up to and including 300mm diameter, any pipes drains, electricity cables or sewers laid adjacent to the Pipeline must have a minimum clearance of 300mm from it. For UU potable water Pipelines over 300mm diameter (or for smaller diameter Pipelines where UU network operations have highlighted a risk of discoloration), there shall be a clearance between the pipes, drains, electricity cables or sewers and the Pipeline that is greater than or equal to the diameter of the Pipeline (ideally at least 1m clearance if possible to reduce the risk of discoloration). These clearances shall apply to crossings above or below the Pipeline, and include pipes, drains, electricity cables or sewers laid adjacent to the Pipeline.
- 5.3.5. The Promoter shall exercise suitable care when selecting and placing backfill material for any excavation dug within the Pipeline Easement to ensure that it is adequately compacted, provides sufficient support to the Pipeline and will not cause damage to the Pipeline. Reference should be made to the current version of 'Civil Engineering Specification for the Water Industry' (CESWI).

5.4. Cathodic Protection of Pipelines

- 5.4.1. Where cathodic protection is proposed for the Promoter's works, or where it exists in connection with UU's Pipeline, the Promoter shall take all necessary steps to ensure that the integrity of the system is maintained during the construction of the works. Where cathodic protection exists on UU's Pipeline, or is to be installed by the Promoter on his apparatus, interference tests shall be carried out on completion of the works at the Promoter's expense. Where such tests indicate that UU's Pipeline may be at risk, then the Promoter, at his own expense, must install suitable remedial measures, to be agreed by UU. UU must be consulted in the case of installation of electric tramways over Pipelines.

5.5 Mains Adjacent to Buildings in Streets

- 5.5.1 Water mains may be laid in a Street or an Easement Area. Sometimes this is immediately adjacent to a building. In the case of an Easement Area, new buildings and their foundations may not be built within 2.5m of an existing water main (5m for mains > 300mm). This is to facilitate repair and maintenance.

5.6. New Roads, Communal Parking and Driveways

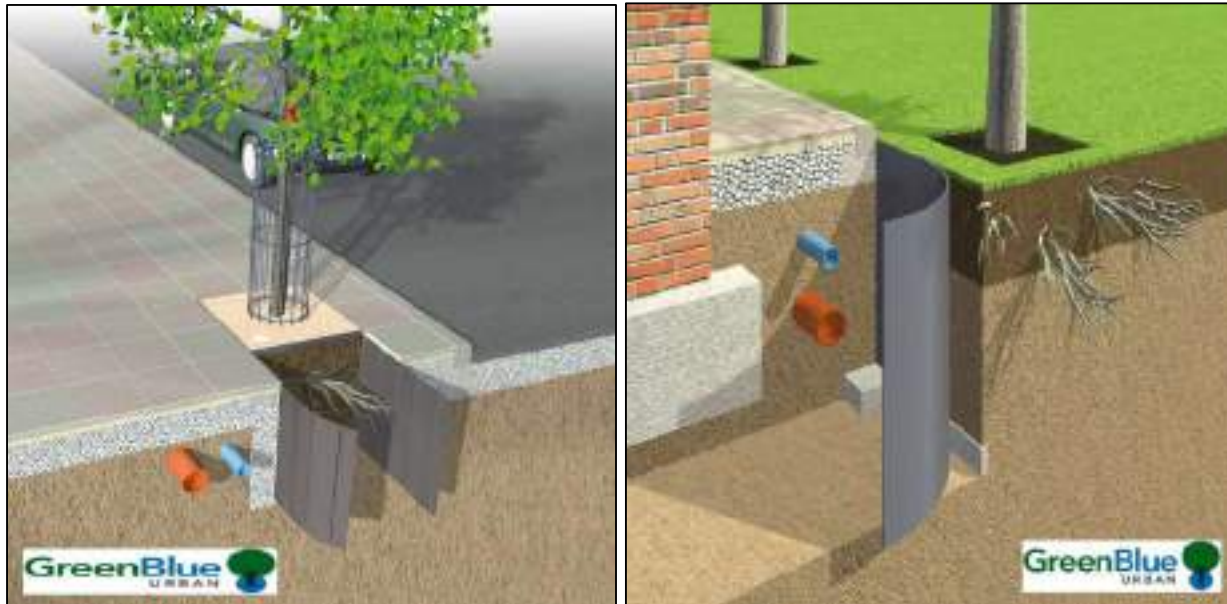
No alteration to the surface use of the Easement Area or Easement Width for the purpose of constructing a road, communal parking or private driveways (except for vehicular crossings at >45degrees) shall be made without prior written consent being obtained from UU.

6 PLANTING NEAR TO PIPELINES

- 6.1 Written consent must be obtained from UU before any tree or shrub planting is carried out. Any consent is subject to UU retaining the right to remove, at any time, all trees or shrubs that in its opinion becomes a danger or nuisance to the pipeline or asset.
- 6.2 Selection and planting of tree species should be in accordance with BS8545:2014 Trees: from nursery to independence in the landscape. Recommendation.
- 6.3 Planting of shallow rooted hedge plants, domestic soft fruiting bushes and ornamental shrubs shall be permitted however these shall not be permitted to develop as shrub trees and shall be maintained by the Promoter / Owner to a maximum height of 1.5m.
- 6.4 There shall be strictly no planting of Populus ssp. or Salix ssp. within 10 metres of a Pipeline.
- 6.5 Restrictions apply to all Easement Areas and Easement Widths see Appendix 1 for details. This includes a non-exhaustive list of trees and recommended planting distances.



- 6.6 United Utilities will consider the provision of specific tree root barriers where there is a need to establish trees closer to Pipeline(s) than would normally be acceptable best practice. Vertical or horizontal barriers can be effective and acceptable so long as they are professionally specified and installed following manufacturer's instructions and a suitable distance from the tree trunk to ensure tree stability at maturity. See the figures below for typical examples of these methods. These barriers shall be 1 – 2mm thick semi rigid type and be fitted by either a specialist installer or by very closely following the manufacturer's guidance. Further advice about root barriers can be found in BS8545.



Images supplied by GreenBlue Urban

- 6.7 A useful publication that can assist with planting near to utilities is “*NJUG Guidelines for the Planting, Installation and Maintenance of Utility Apparatus in Proximity to Trees*”

7 EASEMENT INFRINGEMENTS

- 7.1 UU acknowledges that there are situations where structures have been erected either directly above the Pipeline, or within an Easement Area or Easement Width. These encroachments should be assessed and recorded and appropriate actions taken. The assessment shall consider the potential risks to both UU's asset and the structure upon it.
- 7.2 The options available to UU are:-
- Notify owner of risks
 - Notify owner and consider mains diversion at owners cost with any required legal documentation to entered into
 - UU may take legal action to obtain a court order to instruct removal of the structure at the owners cost.

The key factors to be considered when selecting one of these options are:-

- a) Security of supply
- b) Health and safety
- c) Cost benefit
- d) Company reputation
- e) Probability of Pipeline failure and likely consequences. These will vary with the Pipeline material, diameter, depth below foundation, ground conditions and the operating regime of the Pipeline

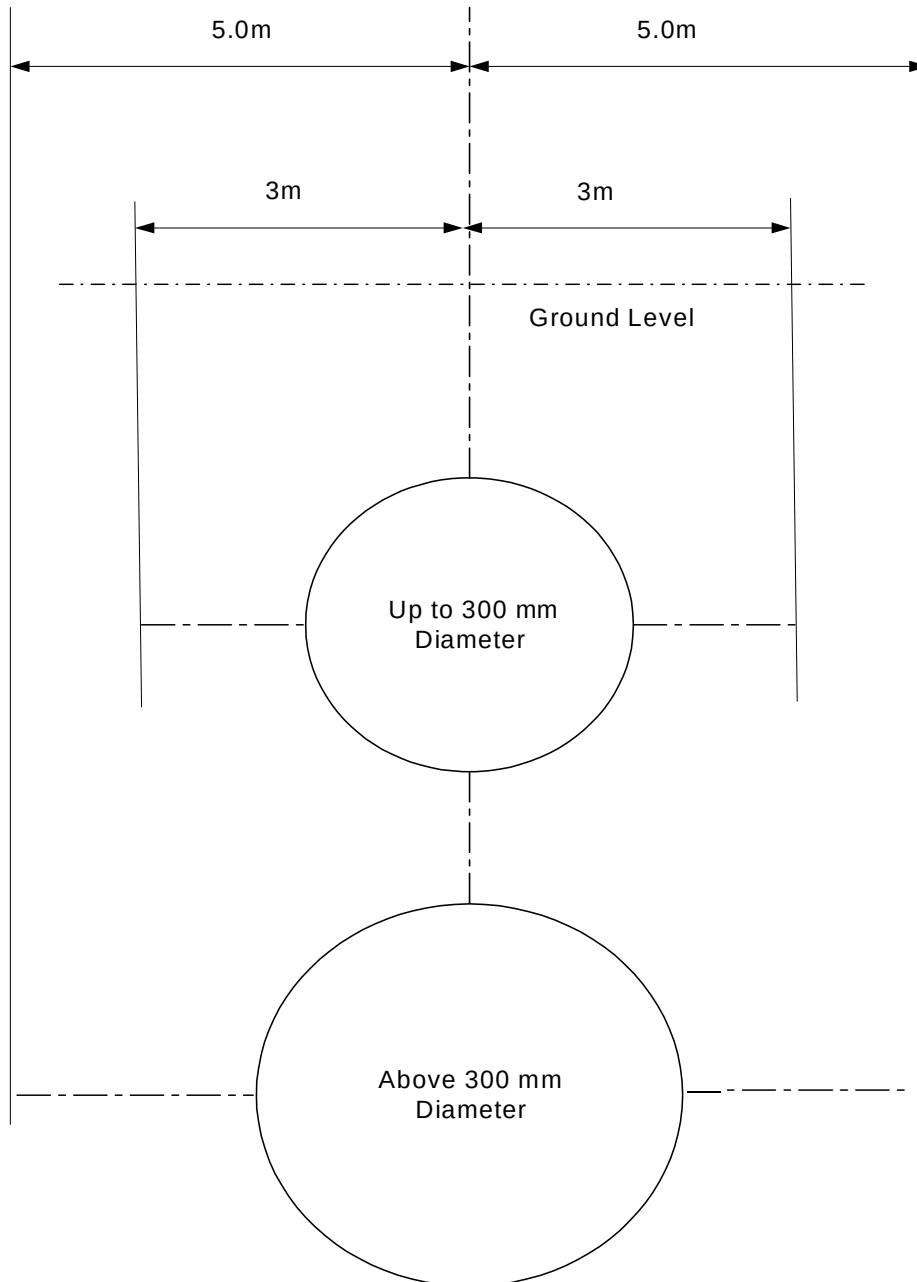
- 7.3 The notification given to the owner of the building shall state that, notwithstanding our Statutory Rights and those contained in any deed, UU shall not be liable for any costs whatsoever if damage is occasioned to the structure whilst carrying out our works.
- 7.4 In the case of structures of a temporary or easily removable character consent to such structures may after consideration be given by UU strictly on a case by case basis and the decision of UU being final. UU's access to any Easement Area or Easement Width should not be obstructed or impeded in any way

8 STOPPING UP ORDERS

- 8.1 UU has no objection to a Stopping up Order, provided that access remains for repair and maintenance of the network within the area affected.
- 8.2 If the proposed development will impede clear access, then the water main must be abandoned or diverted at the applicants cost.
- 8.3 Typically, there would be no objection if the water main remains within a Street to which there is vehicular access sufficient for UU to perform its statutory duties. It is not necessarily a problem if the Street is within a gated enclosure, e.g. alley gates are not a problem.
- 8.4 If the main does not remain within a Street, the developer must provide an easement according to UU standard conditions. Detailed information is available from the United Utilities Website
- 8.5 The following is specifically not permitted in relation to easements.
 - a) Any alteration to ground level which leaves the water main at a depth less than 900mm (750mm for PE pipes), or more than 1200mm.
 - b) Any building over the main, or within the Easement Area or Easement Width, such that an excavation of the main would threaten the stability of the building.
 - c) Planting of large trees (detailed information available in Appendix 1). This shows the distances that various trees and shrubs can be planted away from Pipelines and water mains. Root barriers can be used when planting closer to the mains; however trees root barriers need to be deep enough to stop roots from penetrating under the barrier.

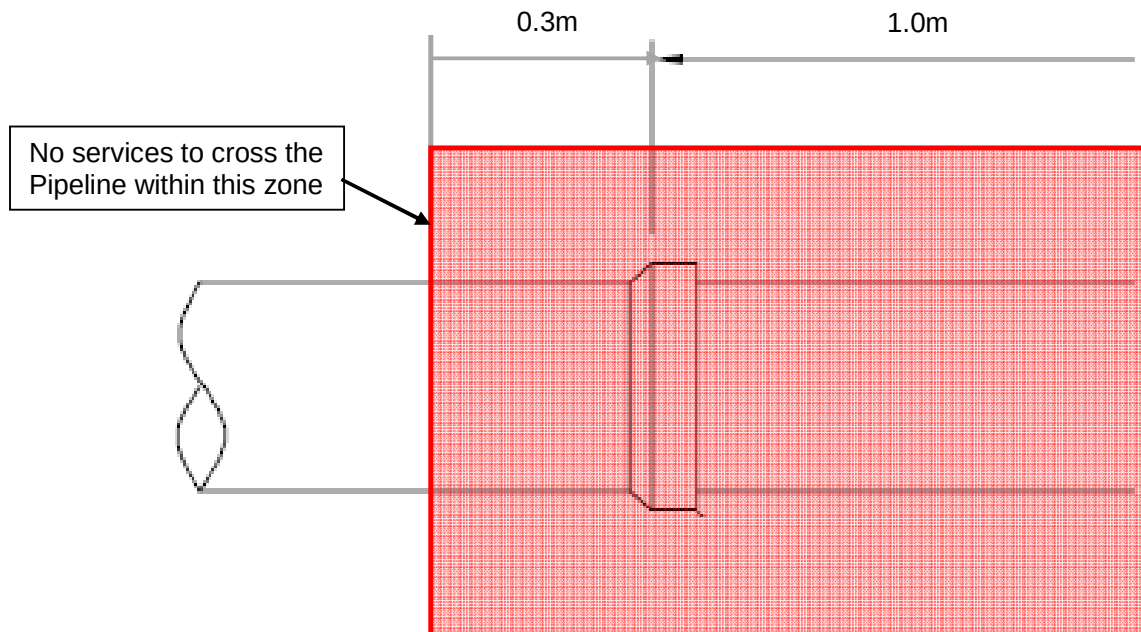
9 DRAWINGS

Figure 1: Easement Widths for Single Pipes



Note: This sketch is issued for guidance only (not to scale)

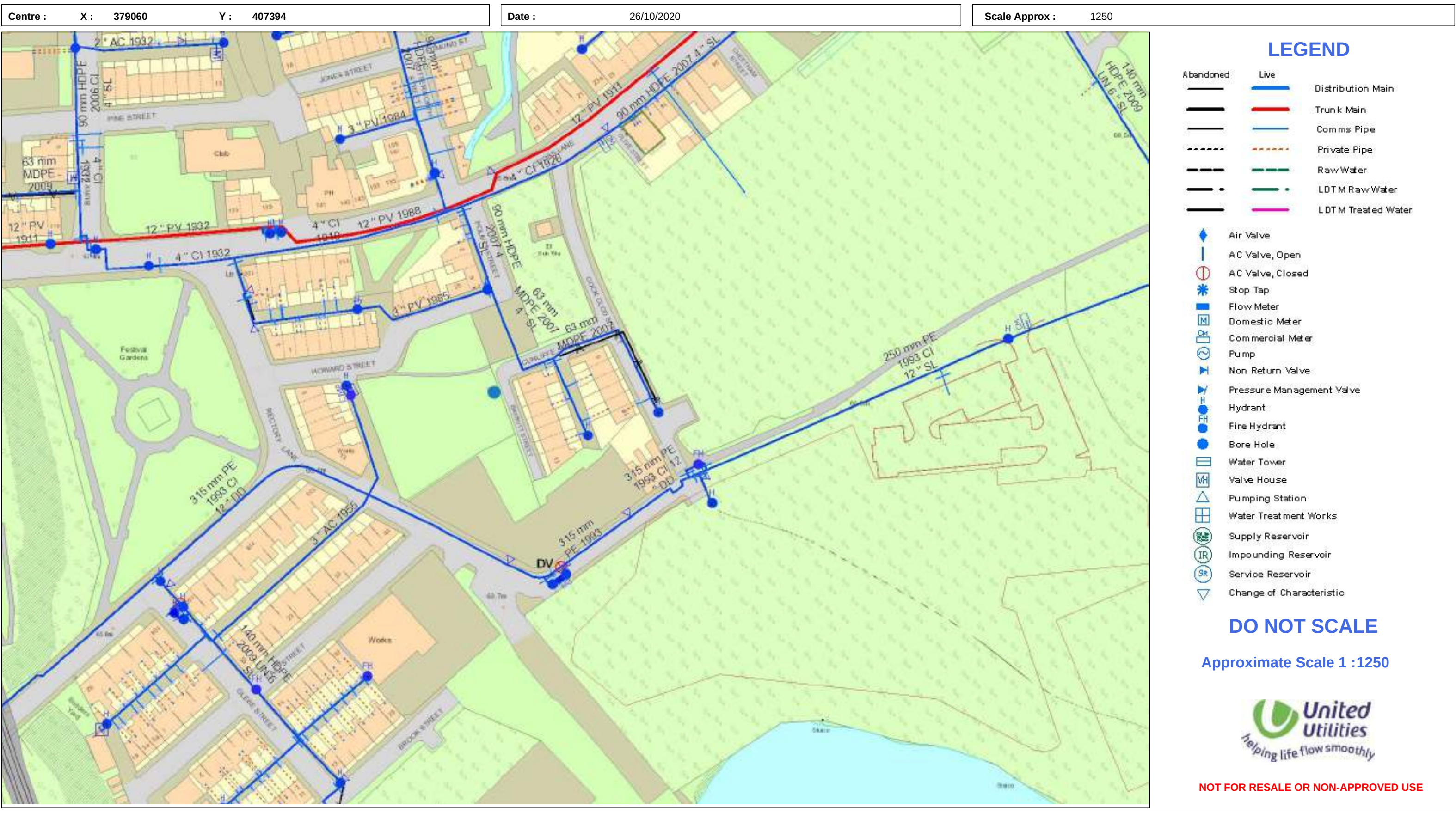
Figure 2: Service Crossing Restrictions in relation to Pipeline Sockets



APPENDIX 1: PLANTING NEAR TO PIPELINES

Latin Name	Common Name	Tree or shrub planting maintained as hedge (no higher than 1.5m height)	Individual trees planted from 3 metres of underground asset or pipe	Individual trees planted from 6 metres of underground asset or pipe	Group trees planted from 10 metres of underground asset or pipe
<i>Acer campestre</i>	Field Maple	Yes	Yes	Yes	Yes
<i>Aesculus hippocastanum</i>	Horse chestnut	✗	✗	✗	Yes
<i>Carpinus betulus</i>	Hornbeam	Yes	✗	✗	Yes
<i>Castanea sativa</i>	Sweet Chestnut	✗	✗	✗	Yes
<i>Corylus avellana</i>	Hazel	Yes	Yes	Yes	Yes
<i>Crateagus monogyna</i>	Hawthorn	Yes	Yes	Yes	Yes
<i>Fagus sylvatica</i>	Beech	Yes	✗	✗	Yes
<i>Ilex aquifolium</i>	Holly	Yes	Yes	Yes	Yes
<i>Larix decidua</i>	Larch	✗	✗	✗	Yes
<i>Ligustrum vulgare</i>	Privet	Yes	Yes	Yes	Yes
<i>Malus domestica</i>	Apple	✗	Yes	Yes	Yes
<i>Malus sylvestris</i>	Crab Apple	✗	Yes	Yes	Yes
<i>Pinus nigra</i>	Black pine	✗	✗	✗	Yes
<i>Pinus sylvestica</i>	Scots Pine	✗	✗	✗	Yes
<i>Platanus acerifolia</i>	London Plane	✗	✗	✗	Yes
<i>Prunus avium</i>	Wild Cherry	✗	Yes	Yes	Yes
<i>Prunus cerasifera</i>	Plum	✗	Yes	Yes	Yes
<i>Prunus lusitanica</i>	Laurel	Yes	Yes	Yes	Yes
<i>Prunus padus</i>	Bird Cherry	✗	Yes	Yes	Yes
<i>Prunus spinosa</i>	Blackthorn	Yes	Yes	Yes	Yes
<i>Pyrus communis</i>	Pear	✗	Yes	Yes	Yes

Latin Name	Common Name	Tree or shrub planting maintained as hedge (no higher than 1.5m height)	Individual trees planted from 3 metres of underground asset or pipe	Individual trees planted from 6 metres of underground asset or pipe	Group trees planted from 10 metres of underground asset or pipe
<i>Sambucus nigra</i>	Elder	Yes	Yes	Yes	Yes
<i>Sorbus aria</i>	Whitebeam	X	X	X	Yes
<i>Sorbus aucuparia</i>	Rowan	X	X	Yes	Yes
<i>Taxus baccata</i>	Yew	Yes	X	X	Yes
<i>Tilia cordata</i>	Lime	X	X	X	Yes
<i>Ulmus glabra</i>	Wych Elm	X	X	Yes	Yes



Appendix 5 – Ecology Desk Study



THE
ENVIRONMENT
PARTNERSHIP



ELPM ISLAND RADCLIFFE ECOLOGY DESK STUDY

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APPENDICES

APPENDIX A: Citations for Statutory Designated Wildlife Sites of International Importance

APPENDIX B: Citations for Statutory Designated Wildlife Sites of National Importance

1.0 Introduction

- 1.1 The Environment Partnership (TEP) were commissioned, by Campbell Reith in September 2020, to complete an ecology desk based assessment of land known as ELPM Island in Radcliffe, Bury (hereafter referred to as 'the site'). This assessment is required to inform site disposal.
- 1.2 The central grid reference of the site is SD 79010 07402 and the location of the site is shown in Figure 1 below.



Figure 1: Site Location Plan

2.0 Method

- 2.1 Information regarding historic species records and protected sites was requested/gathered from the sources listed in Table 1. This collated data gives a useful indication of the distribution and abundance of ecological receptors at a given locale. An absence of records does not indicate the absence of protected species from the search area.

Table 1: Sources of Ecological Information

Source of Information	Nature of Information
Magic Map	Statutory designated wildlife sites of international importance within 10km Statutory designated wildlife sites of national importance within 5km Statutory designated wildlife sites of local importance within 2km Natural England licences within 2km of the site Habitats of value to biodiversity within and adjacent to the site Great crested newt survey pond records 2017 - 2019 within 2km of the site
Greater Manchester Ecology Unit (GMEU)	Protected species records within 2km Non-statutory designated wildlife sites of local importance within 2km
Bury Council	Land allocations and relevant policies
ArcMap10	Ordnance & Aerial survey mapping

- 2.2 Statutory designated wildlife sites of international importance may include:

- Ramsar sites;
- Special Areas of Conservation (SAC); and
- Special Protection Areas (SPA).

- 2.3 Statutory designated wildlife sites of national importance may include:

- Site of Special Scientific Interest (SSSI);
- National Nature Reserve (NNR);
- Marine Nature Reserve (MNR); and
- Area of Outstanding National Beauty (AONB).

- 2.4 Statutory designated wildlife sites of local importance refers to Local Nature Reserves (LNR).

2.5 Non-statutory designated wildlife sites of local importance may include:

- Local Wildlife Site (LWS);
- Site of Biological Importance (SBI); and
- Biological Heritage Site (BHS).

2.6 Habitats of value may include those listed under any of the following:

- Ancient woodland;
- Main rivers¹;
- Habitats of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (S41); and
- Local Biodiversity Action Plan Habitats (LBAP).

2.7 Protected species records may include those listed under any of the following:

- European Protected Species (EPS);
- Protected bird species under Schedule 1 of the Wildlife and Countryside Act 1981, as amended (WCA1);
- Protected animal species under Schedule 5 of the Wildlife and Countryside Act 1981, as amended (WCA5);
- Protected plant species under Schedule 8 of the Wildlife and Countryside Act 1981, as amended (WCA8);
- Invasive non-native plant species under Schedule 9 of the Wildlife and Countryside Act 1981, as amended (WCA9);
- Protection of Badgers Act 1992 (PBA);
- Species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (S41);
- Red and Amber listed Birds of Conservation Concern (BRd/BAm); and
- Local Biodiversity Action Plan Species (LBAP).

¹ Main rivers are statutory watercourses designated by the Environment Agency (in England). 'Main rivers' are usually larger streams and rivers, but some of them are small watercourses of significance. Works within 8m of main rivers are generally prohibited or require permission as there could be flood risk implications.

3.0 Legislation and Planning Policy

- 3.1 This section details legislation and planning policy which may have relevance to the site. Only legislation and policy relevant to biodiversity are included.

International Planning Policy

Conservation of Habitats and Species Regulations 2017

Protected Species

- 3.2 European Protected Species (EPS) and their breeding sites or resting places are protected under Regulation 41 of the Conservation of Habitats and Species Regulations 2017 (and as amended), which makes it illegal to:
- Deliberately capture, injure or kill any such animal or to deliberately take or destroy their eggs;
 - Deliberately disturb such an animal; and
 - Damage or destroy a breeding site or resting place of such an animal.
- 3.3 European Protected Species (EPS) licenses can be granted by Natural England in respect of development to permit activities that would otherwise be unlawful under the Conservation Regulations, providing that the following 3 tests (set out in the EC Habitats Directive) are passed, namely:
- The development is for reasons of overriding public interest;
 - There is no satisfactory alternative; and
 - The favourable conservation status of the species concerned will be maintained and/or enhanced.
- 3.4 Under Regulation 9(5) of the Conservation Regulations, Planning Authorities have a duty to 'have regard to the requirements of the EC Habitats Directive' i.e. LPA's must consider the above 3 'tests' when determining whether Planning Permission should be granted for developments likely to cause an offence under the Conservation Regulations.

Protected Sites

- 3.5 The Regulations also deal with the assessment of potential impacts on sites of European nature conservation importance, in this case, the Manchester Mosses SAC. Requirements are set out within Regulations 63 and 64 of the Habitats Regulations, where a series of steps and tests are followed for plans or projects that could potentially affect a European site. The steps and tests set out within Regulations 63 and 64 are commonly referred to as the 'Habitats Regulations Assessment' process.

- 3.6 All plans and projects (including planning applications) which are not directly connected with, or necessary for, the conservation management of a habitat site, require consideration of whether the plan or project is likely to have significant effects on that site. This consideration should take into account the potential effects both of the plan/project itself and in combination with other plans or projects. Where an adverse effect on the site's integrity cannot be ruled out, and where there are no alternative solutions, the plan or project can only proceed if there are imperative reasons of over-riding public interest and if the necessary compensatory measures can be secured.

National Planning Policy

National Planning Policy Framework 2019

- 3.7 The National Planning Policy Framework (NPPF19) sets out the Government's planning policies for England and how these are expected to be applied at a local level in development plans and how developers should address them. The Framework places great emphasis on plans and developments contributing to sustainable development.
- 3.8 The NPPF19 states:
- 3.9 When determining planning applications, local planning authorities should apply the following principles:
- if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
 - development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
 - development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and;
 - development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity;
 - The following should be given the same protection as habitats sites:
 - a) potential Special Protection Areas and possible Special Areas of Conservation;
 - b) listed or proposed Ramsar sites; and

- c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

Wildlife and Countryside Act 1981

- 3.10 Animal species listed under Schedule 5 of the Wildlife and Countryside Act 1981 (and as amended) receive full protection which makes it illegal (subject to certain exceptions) to:
- Intentionally kill, injure or take any such animal;
 - Intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any such animal; and
 - Intentionally or recklessly disturb such animals while they occupy a place used for shelter or protection.
- 3.11 Some species receive partial protection under The Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which provide protection against intentional killing or injury of any such animal.
- 3.12 All wild birds (as defined by the act) are protected under the Wildlife and Countryside Act 1981 (and as amended), which makes it illegal (subject to exceptions) to:
- Intentionally kill, injure or take any wild bird;
 - Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.
- 3.13 Additional protection is provided to birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (and as amended). In addition to the offences detailed above relating to all wild birds, it is illegal to:
- Intentionally or recklessly disturb any bird listed on Schedule 1, or their dependent young while nesting.
- 3.14 Plant species listed under Schedule 8 of the Wildlife and Countryside Act 1981 (and as amended) are protected from unauthorised intentional picking, uprooting and destruction.

Natural Environment and Rural Communities (NERC) Act 2006

- 3.15 Section 40 of the NERC Act places a duty to conserve biodiversity on public authorities in England. It requires local authorities and government departments to have regard to the purposes of conserving biodiversity in a manner that is consistent with the exercise of their normal functions such as policy and decision-making. 'Conserving biodiversity' may include enhancing, restoring or protecting a population or a habitat.

- 3.16 Section 41 requires the Secretary of State to publish and maintain lists of species and types of habitats which are regarded by Natural England to be of "principal importance" for the purposes of conserving biodiversity in England. These 56 priority habitats and 943 species are drawn from earlier lists of United Kingdom Biodiversity Action Plan Priority Species and Habitats. The Section 41 lists are needed by decision-makers in local and regional authorities when carrying out their duties under Section 40 of the Act.

Protection of Badgers Act 1992

- 3.17 The Protection of Badgers Act 1992 makes it an offence to kill, injure or take a badger from the wild. It is also an offence to disturb, damage or interfere with a sett unless a licence is obtained from a statutory authority.

Local Planning Policy

Bury Unitary Development Plan (UDP) (adopted 29 August 1997)

- 3.18 The Bury Unitary Development Plan (UDP) acts as a guide for the future development or protection of land in the Borough and its policies and proposals currently form the basis for the Council's decisions on planning applications. The Council is now working to replace the adopted UDP with a new document called the Bury Local Plan. Until the new Local Plan is produced the UDP will continue be used to make planning decisions.
- 3.19 The interactive policies map for the UDP can be viewed by following the link: <https://maps.bury.gov.uk/webmaplayers8/Map.aspx?MapName=PA>
- 3.20 Neither the site nor adjacent land is allocated for biodiversity purposes.
- 3.21 The UDP policies document can be viewed by following the link: <https://www.bury.gov.uk/index.aspx?articleid=10734>
- 3.22 The following policies relate to biodiversity and nature conservation:
- Policy EN6 Conservation of the Natural Environment
 - Policy EN8 Woodland and Trees

Greater Manchester Spatial Framework Revised Draft (January 2019)

- 3.23 The Greater Manchester Spatial Framework Draft 2019 (GMSF) sets out how Greater Manchester should develop up until 2037 and identifies the amount of new development that will come forward across Bury, plus the 9 other districts within the scheme/ The plan will supports the delivery of key infrastructure, such as transport and utilities, protect the important environmental assets across the city region, allocate sites for employment and housing outside of the existing urban area and define a new green belt boundary for Greater Manchester.
- 3.24 The GMSF draft document can be viewed by following the link: <https://www.greatermanchester-ca.gov.uk/what-we-do/housing/greater-manchester-spatial-framework/gmsf-full-plan/>
- 3.25 The following policies relate to biodiversity and nature conservation:

- GM-G2 Green Infrastructure Network
- GM-G7 Tree and Woodland
- Gm-G10 A Net Enhancement of Biodiversity and Geodiversity

Local Biodiversity Action Plans (LBAP)

3.26 The LBAP document for Greater Manchester can be viewed by following the link:
<http://www.wildaboutmanchester.info/www/images/stories/pdfs/mbs.pdf>

3.27 The following habitats are identified within LBAPs for Greater Manchester:

- Acid grassland;
- Ancient and/or species-rich hedgerows;
- Wet woodlands;
- Lowland broadleaved woodland;
- Lowland heathland;
- Lowland meadows;
- Unimproved neutral grassland;
- Marshy grassland;
- Managed greenspace;
- Rivers;
- Canals; and
- Ponds and lodges.

3.28 The following species are identified within LBAPs for Greater Manchester:

- Great crested newt;
- Water vole;
- Brown hare;
- Pipistrelle bat;
- Skylark;
- Linnet;
- Reed bunting;
- Spotted flycatcher;
- Tree sparrow;
- Grey partridge;
- Bullfinch;
- Song thrush;
- Floating water plantain;
- Grass-wrack pondweed; and
- Manchester poplar.

4.0 Site Designations

Statutory Designated Wildlife Sites of International Importance

- 4.1 There is one internationally designated wildlife site within 10km of the site (Figure 2). These are detailed in Table 2 below. Citations are provided in Appendix A.

Table 2: Details of Internationally Designated Wildlife Sites within 10km of the Site

Name of Designation	Type of Designation	Location of Designation in Relation to Site	Reason for Site Designation
Rochdale Canal	SAC	9.2 km to the east	Rochdale Canal supports a significant population of floating water-plantain <i>Luronium natans</i> in a botanically diverse waterplant community which also holds a wide range of pondweeds <i>Potamogeton spp.</i>



Figure 2: Internationally Designated Wildlife Sites within 10km of the Site

Statutory Designated Wildlife Sites of National Importance

- 4.2 There are two nationally designated wildlife sites within 5km of the site (Figure 3). These are detailed in Table 3 below. Citations are provided in Appendix B.

Table 3: Details of Nationally Designated Wildlife Sites within 5km of the Site

Name of Designation	Type of Designation	Location of Designation in Relation to Site	Reason for Site Designation
Ashclough	SSSI	2.6km to the east-south-east	Geological SSSI Unfavourable condition.
Nob End	SSSI	4km to the east-south-east	It is the best example in Greater Manchester and Merseyside of the nationally rare species rich variant of the tall fescue–coltsfoot plant community and is of especial interest because of its development on an unusual and scientifically interesting substrate. Unfavourable Recovering condition.



- October 2020

- 4.4 Site disposal is not listed as a risk category with regard to this SSSI. The Local Authority is not required to consult with Natural England with regard to potential impacts on the SSSI as a result of the site disposal. Table 4 provides information on the likely impacts of development proposals on the SSSI.

Table 4: Likely Impacts of Development Proposals on Nob End & Ashclough SSSI.

Planning Proposal Categories	LPA Should Consult Natural England on Likely Risks from the Following:
All planning applications	Assessed as unlikely to impact the SSSI.
Infrastructure	Airports, helipads and other aviation proposals.
Wind and solar energy	Assessed as unlikely to impact the SSSI.
Minerals, oil and gas	Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.
Rural non-residential	Assessed as unlikely to impact the SSSI.
Residential	Assessed as unlikely to impact the SSSI.
Rural residential	Assessed as unlikely to impact the SSSI.
Air pollution	Livestock & poultry units with floorspace > 500m ² , slurry lagoons > 750m ² & manure stores > 3500t.
Combustion	General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion.
Waste	Assessed as unlikely to impact the SSSI.
Composting	Assessed as unlikely to impact the SSSI.
Discharges	Assessed as unlikely to impact the SSSI.
Water supply	Assessed as unlikely to impact the SSSI.

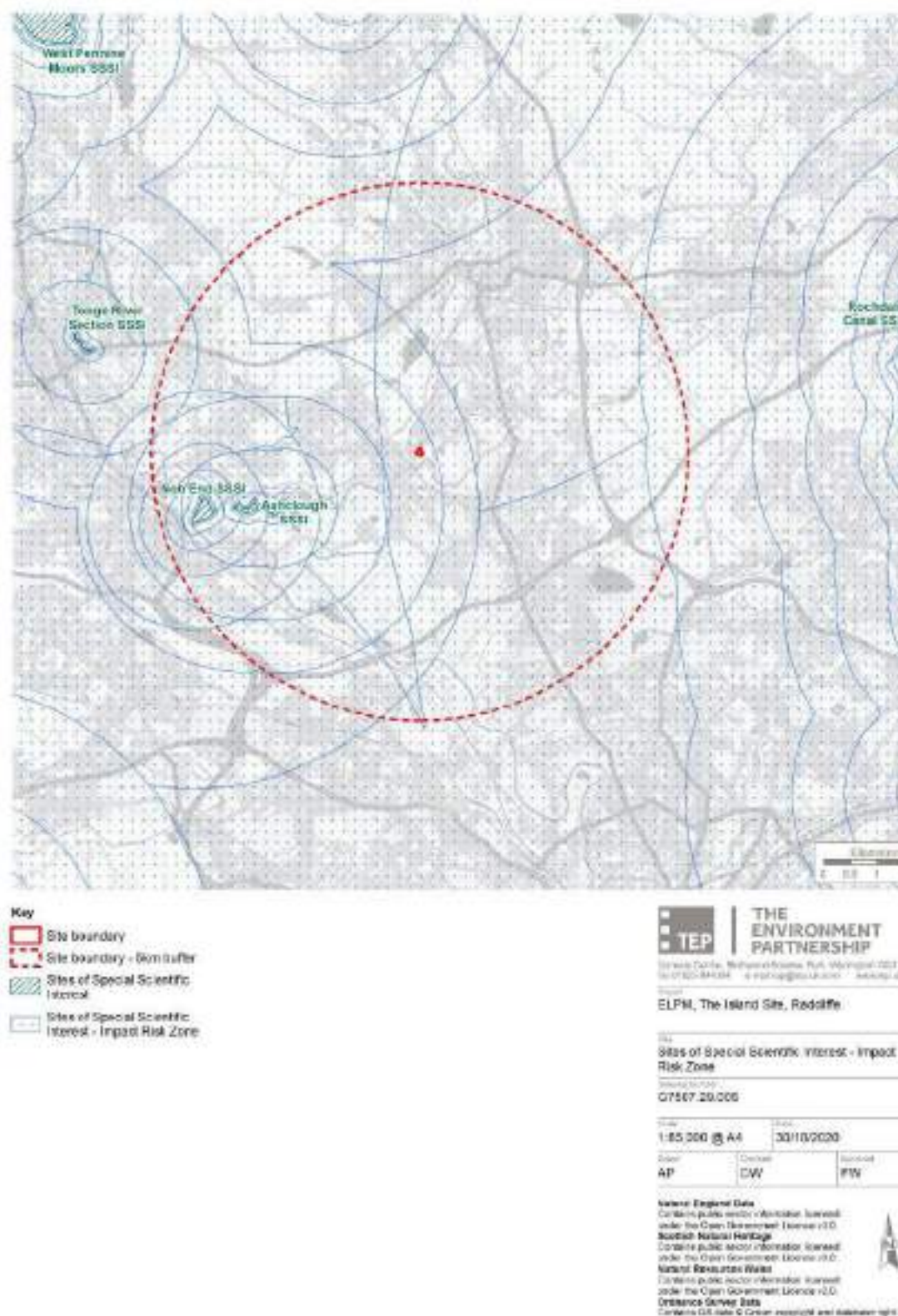


Figure 4: SSSI IRZ within the Site

Statutory Designated Wildlife Sites of Local Importance

- 4.5 There is one statutory locally designated wildlife site within 2km of the site (Figure 5). This is detailed in Table 5 below.

Table 5: Details of Statutory Locally Designated Wildlife Sites within 2km of the Site

Name of Designation	Type of Designation	Location of Designation in Relation to Site	Reason for Site Designation
Chapelfield	LNR	0.9km to the south	No citation given

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Non-statutory Designated Wildlife Sites of Local Importance

- 4.6 There are ten non-statutory locally designated wildlife sites within 2km of the site (Figure 6). These are detailed in Table 6 below.

Table 6: Details of Non-statutory Locally Designated Wildlife Sites within 2km of the Site

Name of Designation	Type of Designation	Location of Designation in Relation to Site	Reason for Site Designation
Wetland near Radcliffe	SBI	Within 1km	Citation not given
Manchester, Bolton & Bury Canal (East)	SBI	Within 1km	Citation not given
Sailor's Brow & Springwater Park	SBI	Within 1km	Citation not given
Swan Lodge	SBI	Within 1km	Citation not given
Elton Goyt	SBI	Within 2km	Citation not given
Withins Reservoir	SBI	Within 2km	Citation not given
Reservoirs at Chapelfield	SBI	Within 2km	Citation not given
Marl Pits at Black Lane	SBI	Within 2km	Citation not given
Elton Reservoir	SBI	Within 2km	Citation not given
Ringley Woods (East)	SBI	Within 2km	Citation not given

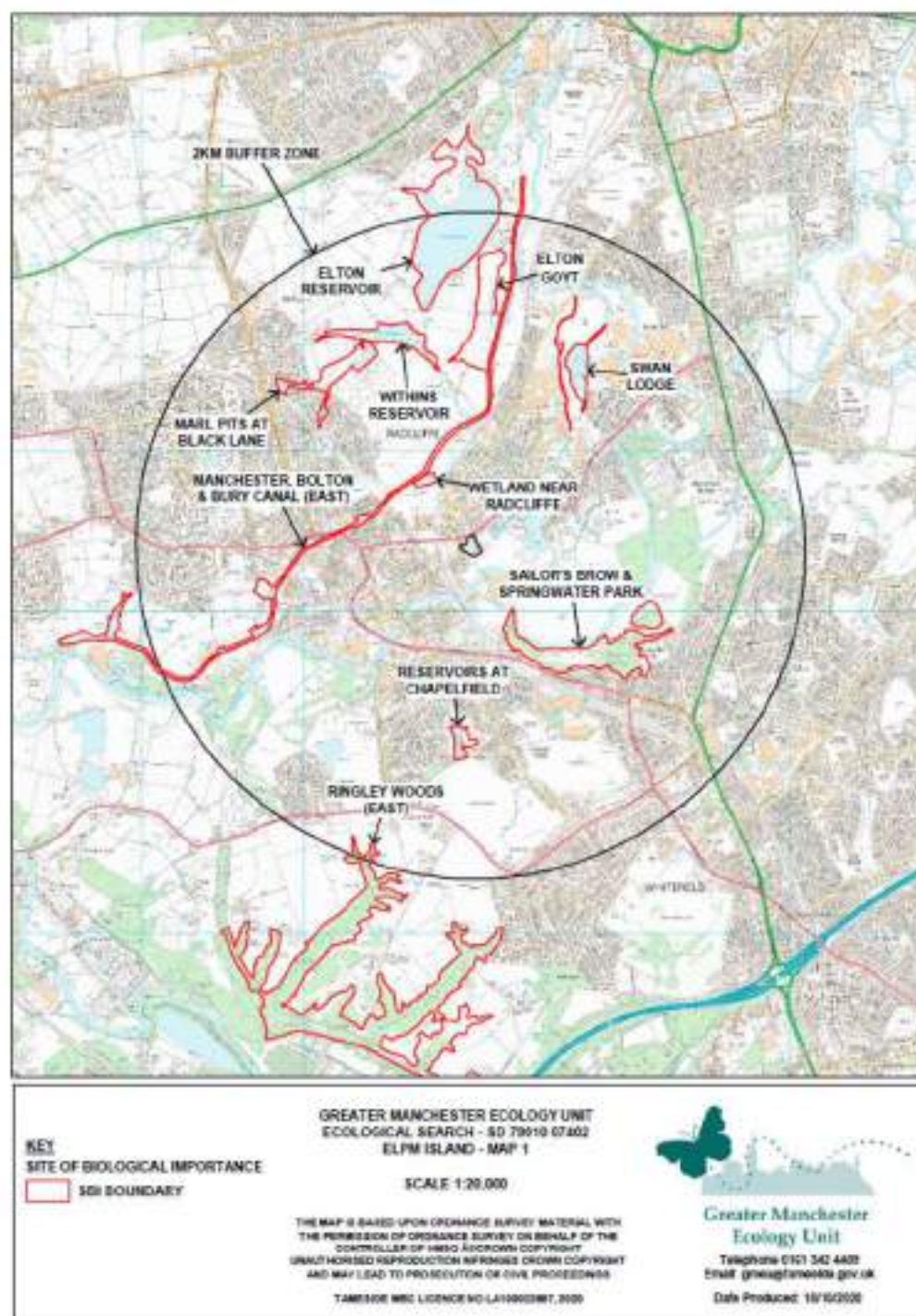


Figure 6: Non-statutory Locally Designated Wildlife Sites within 2km of the Site

5.0 Habitats

5.1 The following notable habitats are present within or adjacent to the site (Figure 7):

- Statutory River
- Open mosaic
- Deciduous Woodland (within 500m)
- Lowland Fen (within 500m)

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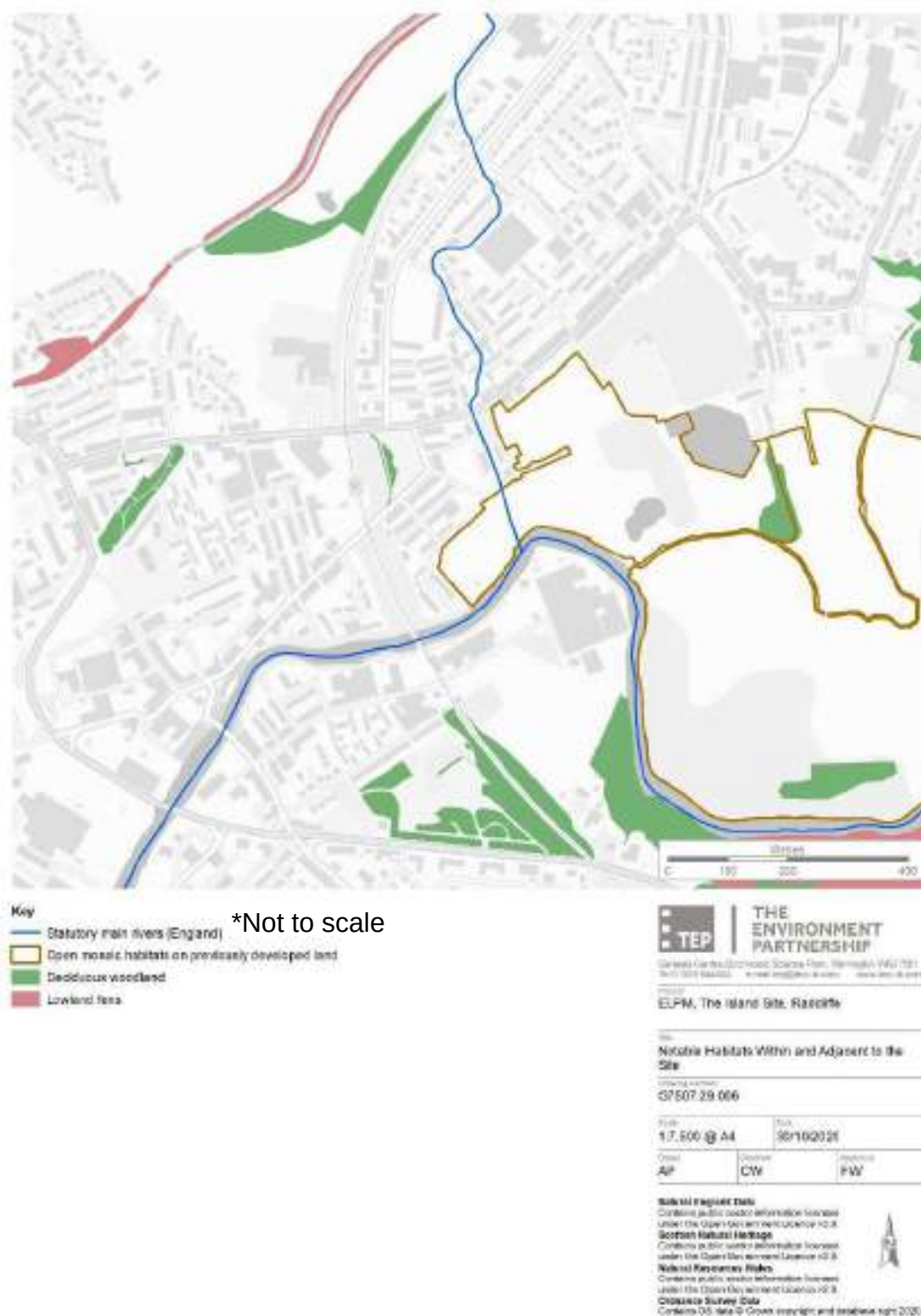


Figure 7: Notable Habitats within and Adjacent to the Site

6.0 Species

- 6.1 Fifty-four species records were returned from GMEU for within 2km of the site. These are shown in Table 7 and Figures 8 to 11.
- 6.2 A review of Magic Maps great crested newt class licence returns and pond survey data confirmed the presence of great crested newts between 2017 and 2019 within 2km of the site.

Table 7: Notable Species Records within 2km of the Site

Name of Species	Legislation	Closest Record to Site
<i>Amphibians</i>		
Great crested newt	EPS, WCA5, S41, LBAP	1200m to the east-south-east beyond the River Irwell
Common Toad	S41	Within 1km of the site
<i>Birds</i>		
Barn Owl	WCA1	2km to the north
Bittern	WCA1, S41, BAm	1.7km to the north
Black Redstart	WCA1, BRd	1.9km to the north
Black-tailed Godwit	S41, BRd	Within 2km of the site
Bullfinch	S41, LBAP, BAm	Within 2km of the site
Common Scoter	WCA1, S41, BRd	1.3km to the north-west
Cuckoo	S41, BRd	Within 2km of the site
Curlew	S41, BRd	Within 2km of the site
Dunnock	S41, BAm	Within 2km of the site
Grasshopper Warbler	S41, BRd	Within 2km of the site
Grey Partridge	S41, LBAP, BRd	Within 2km of the site
Herring Gull	S41, BRd	Within 2km of the site
Hobby	WCA1	1.3km to the north-west
House Sparrow	S41, BRd	Within 2km of the site
Kingfisher	WCA1, BAm	0.5km to the north-west

Name of Species	Legislation	Closest Record to Site
Lapwing	S41, BRd	Within 2km of the site
Lesser Redpoll	S41, BRd	Within 2km of the site
Linnet	S41, LBAP, BRd	Within 2km of the site
Little Ringed Plover	WCA1	0.4km to the east
Peregrine	WCA1	0.5km to the south-west
Reed Bunting	S41, LBAP, BAm	Within 2km of the site
Ring Ouzel	S41, BRd	Within 2km of the site
Scaup	WCA1, S41, BRd	1.6km to the north
Skylark	S41, LBAP, BRd	Within 2km of the site
Song Thrush	S41, LBAP, BRd	Within 2km of the site
Spotted Flycatcher	S41, LBAP, BRd	Within 2km of the site
Starling	S41, BRd	Within 2km of the site
Tree Pipit	S41, BRd	Within 2km of the site
Tree Sparrow	S41, LBAP, BRd	Within 2km of the site
Twite	S41, BRd	Within 2km of the site
Willow Tit	S41, BRd	Within 2km of the site
Wood Warbler	S41, BRd	Within 2km of the site
Yellow Wagtail	S41, BRd	Within 2km of the site
<i>Invertebrates</i>		
'S41 moth'	S41	Within 2km of the site
Wall butterfly	S41	Within 2km of the site
<i>Fish</i>		
Brown Trout	S41	Within 2km of the site
<i>Mammals</i>		
Bat sp.	EPS, WCA5, LBAP	Within 1km of the site

Name of Species	Legislation	Closest Record to Site
Brandt's Bat	EPS, WCA5	Within 1km of the site
Brown Long-eared Bat	EPS, WCA5, S41	Within 2km of the site
Common Pipistrelle	EPS, WCA5, LBAP	Within 1km of the site
Daubenton's Bat	EPS, WCA5,	Adjacent to site (east)
Myotis sp.	EPS, WCA5	Within 1km of the site
Nathusius's Pipistrelle	EPS, WCA5, LBAP	Within 2km of the site
Noctule Bat	EPS, WCA5, S41	Adjacent to site (north-east)
Pipistrelle sp.	EPS, WCA5, S41, LBAP	Within 1km of the site
Soprano Pipistrelle	EPS, WCA5, LBAP	Within 1km of the site
Badger	PBA	Two sets 1200m to the east-south-east beyond River Irwell
Hedgehog	S41	Within 1km of the site
Brown Hare	S41, LBAP	Within 2km of the site
Otter	WCA5	1.5km to the north-east
<i>Plants</i>		
Yellow Bird's Nest	S41	Within 2km of the site
<i>Reptiles</i>		
Common Lizard	WCA5, S41	1.1km to the south-east beyond River Irwell

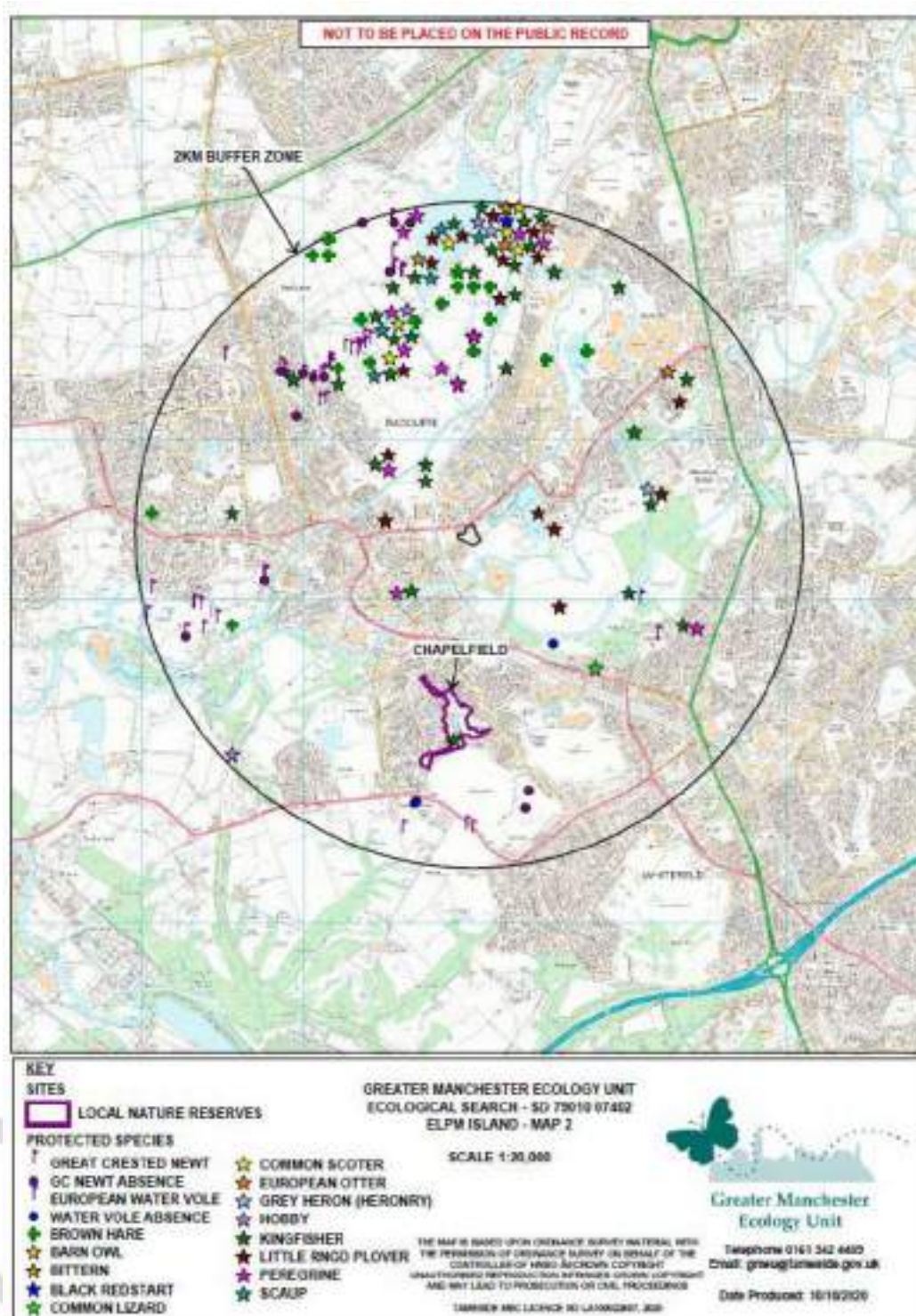


Figure 8: WCA Scheduled species records within 2km of the Site

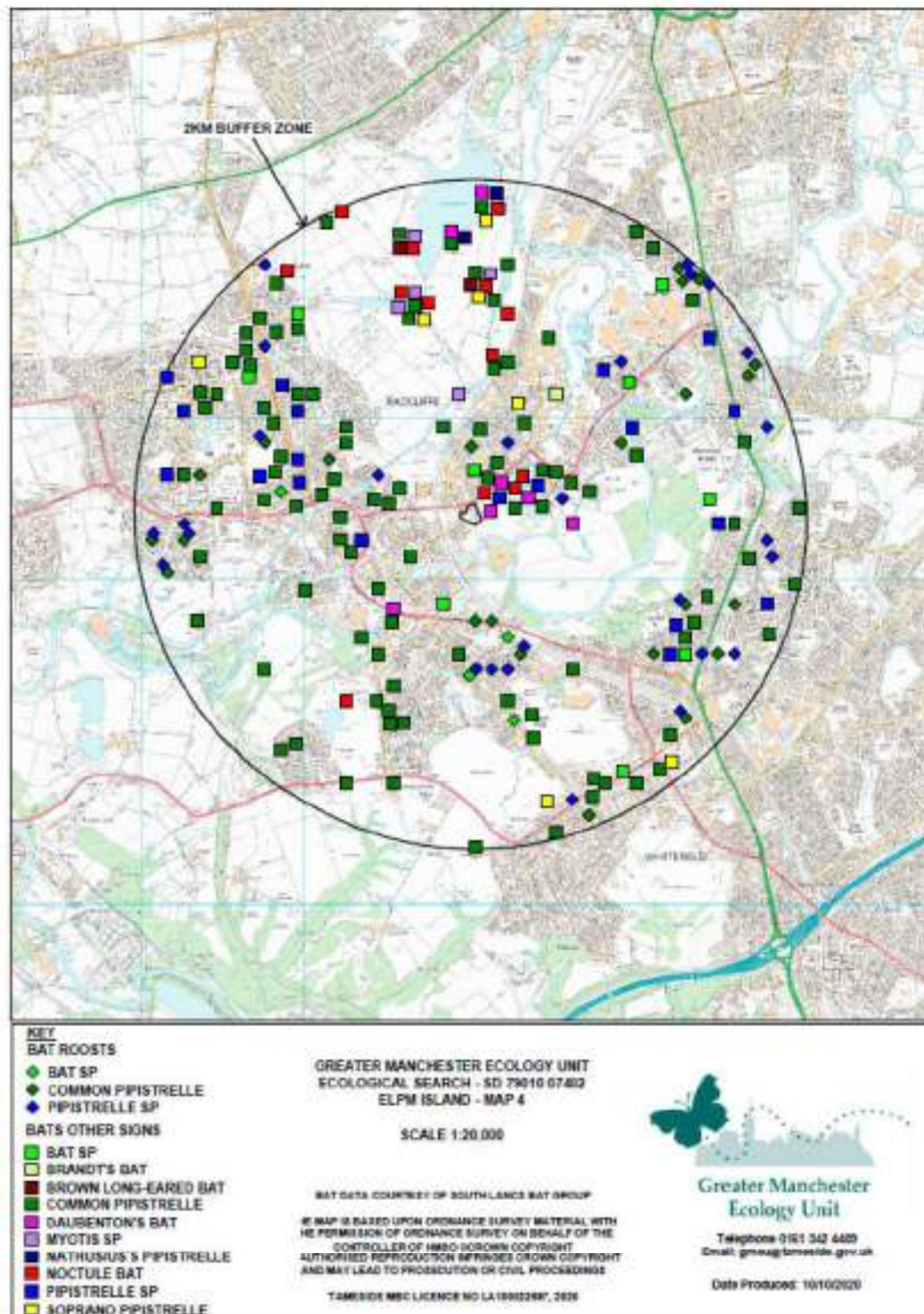


Figure 9: Bat records

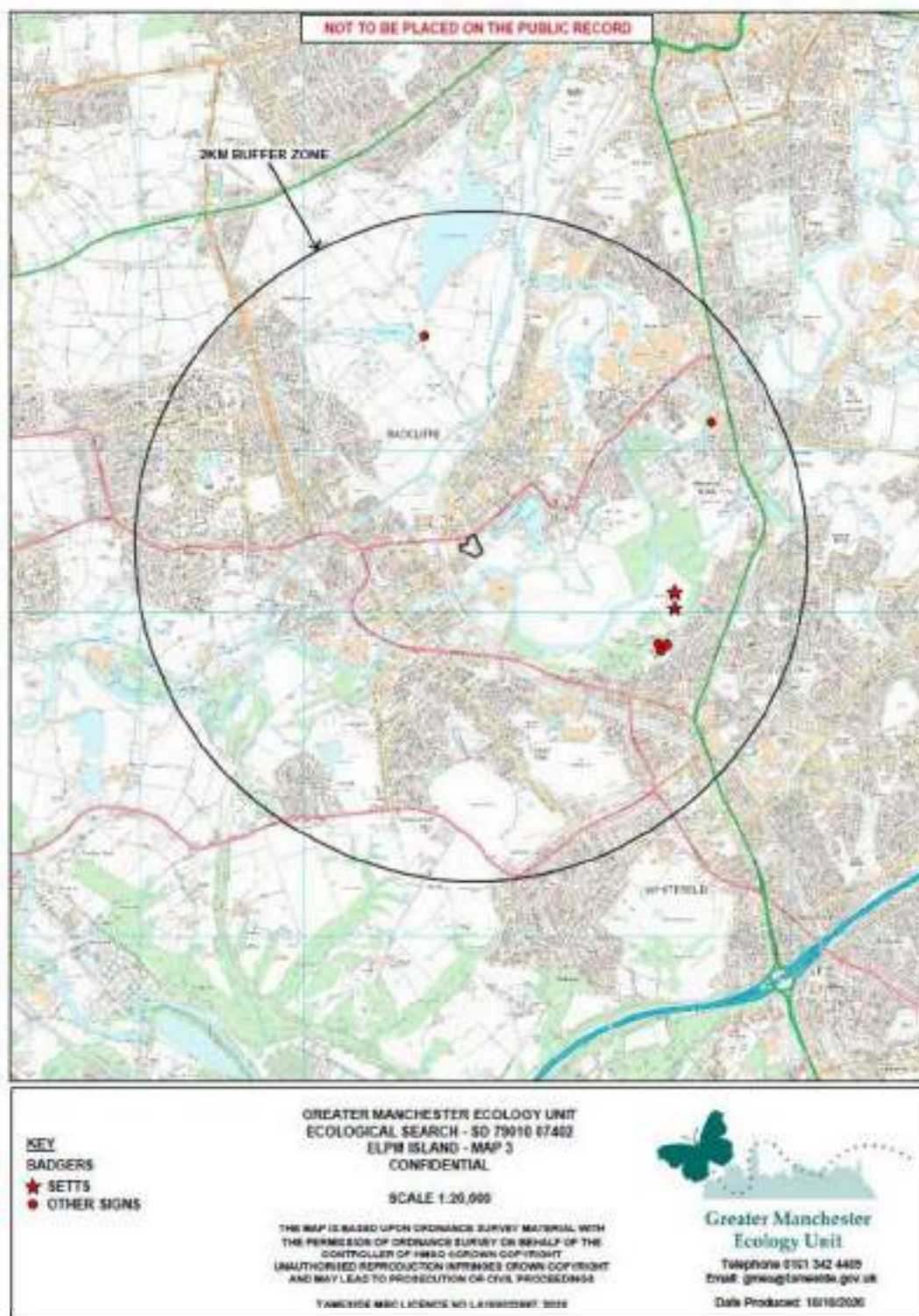


Figure 10: Badger records

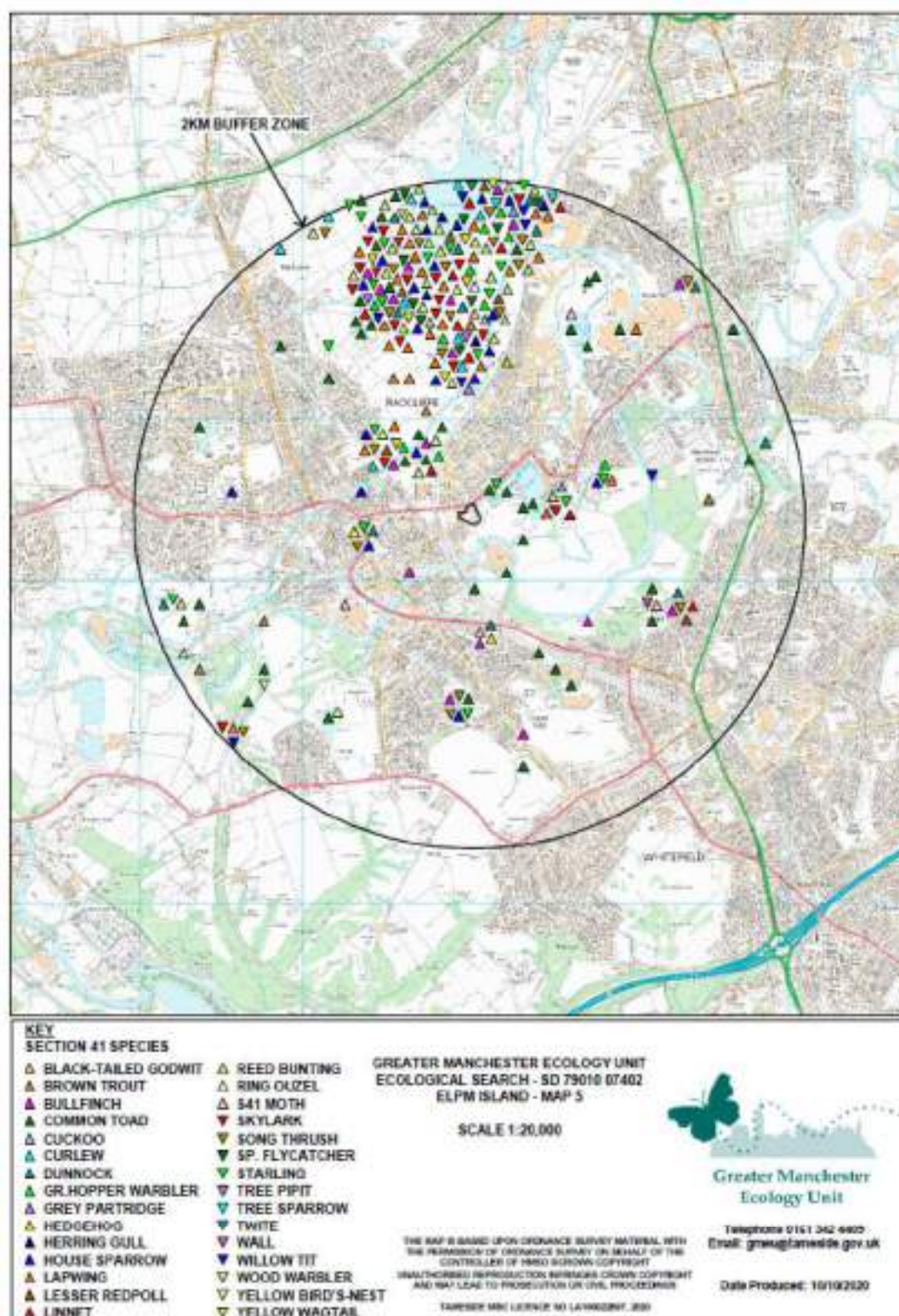


Figure 11: Section 41 and LBAP species

Natural England Mitigation Licences

- 6.3 No Natural England mitigation licences have been identified within 2km of the site.

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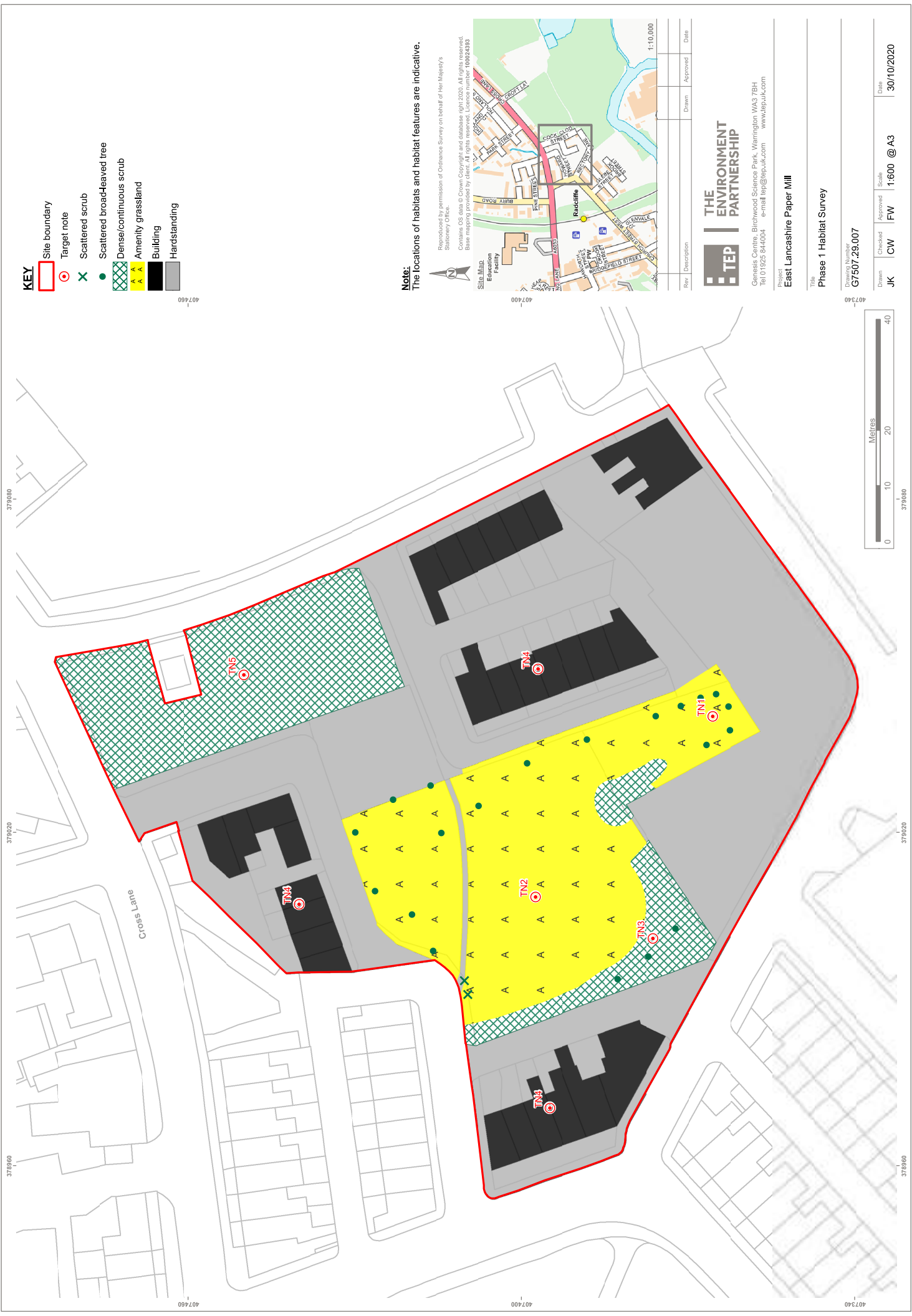
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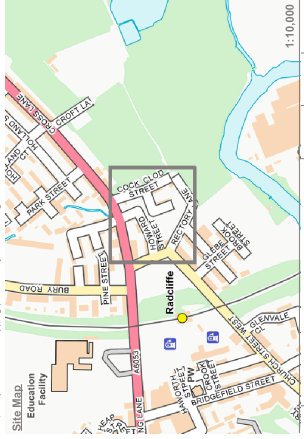
DRAWINGS

G 7507.29.007 Phase 1 Habitat Survey - ELPM The Island Site



Note:
The locations of habitats and habitat features are indicative.

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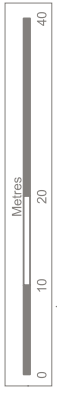
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Project
East Lancashire Paper Mill

Title
Phase 1 Habitat Survey

Drawing Number
G7507.29.007

Drawn	Checked	Approved	Scale	Date
JK	CW	FW	1:500 @ A3	30/10/2020





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