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RODGERS LEASK ENVIRONMENTAL

Consulting Geotechnical & Environmental Engineers

Low Moor Road

Sutton-in-Ashfield

Phase 1 Desk Study

LOW MOOR ROAD

SUTTON-IN-ASHFIELD

PHASE 1 DESK STUDY

for

HALLAM LAND MANAGEMENT

Date: 26 January 2017

Rev : A

Job No: P16-549

RLE

Document History

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Date	:	**26 January 2016**
Document Status	:	**Final**
Revision	:	**A**

Revision	Date	Comment	Editor
A	20 Sept 17	Clarification on application area and landfill site location	RW

Summary

This presents the salient points of the report and should not be referred to in isolation.

Instruction	In November 2016, Rodgers Leask Environmental (RLE) were commissioned by Hallam Land Management to compile a Phase One Desk Study (DTS) for a proposed residential development on land at Low Moor Road, Sutton-in-Ashfield. The proposed Site is split up into four separate parcels of land consisting of Rolls Royce (RR), County Council and Clay (Treated as one – CC) and Temporal (hereafter referred to as the 'Site'.) This Phase 1 Desk Study covers all of these parcels of land located in the wider surrounding area, but the application site covers land to the south of Newark Road.
Site Location and Description	The Site is located to the southwest of Sutton-in-Ashfield, Nottinghamshire. The Site centre co-ordinates are at approximately 451556E, 357656N. The Site has an irregular outline and covers an area of approximately 87.5 hectares (ha). The Site comprises undeveloped agricultural land divided into many separate fields by hedgerows and sparse trees. Access between the fields is available via gaps in the field boundaries. At the time of the Site walkover an immature arable crop and grasses were planted across the Site area.
History	The Site has remained relatively undeveloped throughout the historical map period. A footpath and a track bisect the Site in a north to south direction but the Site has been largely set aside as farmland throughout the mapping period. In the north of the Site, within the RR parcel, it has been worked for sand pits from the earliest maps up to 1967 after which they were shown in alternative use suggesting they had been infilled
Radon	No radon protection measures are required.
Geology	One record of infilled ground comprising artificial deposits is recorded within the northern portion of the RR parcel. The Site has several lobes of superficial deposits recorded. Five areas of glaciofluvial sand and gravel deposits are marked with three further deposits of Diamicton head present. Further areas of head and glaciofluvial deposits occur to the southwest and southeast of Site with a larger area of till 24m to the south of Site. The majority of Site is underlain by the Lenton Sandstone Formation typified by red/brown with buff mottled fine to medium sandstone. To the east of Site the bedrock becomes the Nottingham Castle Sandstone Formation. This underlies two small areas of the Site at the eastern and southeast boundary.
Hydrogeology	The site is underlain by Secondary A and Principal aquifer. A Zone 3 SPZ (total catchment area) is recorded on Site.

Hydrology	Two Tertiary Rivers situated on Site, one of which is a culvert, the other is a stream observed in the north of the site fed by a spring. The River Maun is located 97m to the west of Site.
Landfills	There are three records of an EA Historic Landfills falling within the Site boundary. There is one record of EA registered landfill within 500m of the Site.
Coal Mining	Coal mining is not considered likely to have any influence on the site.
Potential Contamination Issues	The risk to human health where landfilling has taken place is considered moderate. The risk to human health in the Greenfield areas is considered low. The risk to Controlled Waters where landfilling has taken place is considered moderate. The risk to Controlled Waters in the Greenfield areas is considered low.
Gassing	The risk of ground gassing impacting the Site where landfilling taken place on or adjacent to the site would be considered moderate/high. The inert nature of the fills place in the on Site landfills pose a lesser risk than landfill where biodegradable materials were deposited. The risk of ground gassing impacting the Site in the Greenfield area is considered to be low to moderate, although the land adjacent to landfill is clearly at higher risk.
Foundations	Traditional strip/trenchfill foundations are likely to be appropriate within Greenfield areas, subject to verification by intrusive investigation. Piled foundations may be required where foundations within cohesive strata are in close proximity to trees and hedgerows or within any areas of deep made ground.
Surface Water Drainage	The site is underlain by Secondary A aquifers relating to several of superficial glaciofluvial sand and gravel deposits are marked with three further deposits of Diamicton head. These are likely to provide mixed infiltration characteristics. The solid geology is sandstone which would be expected to weather to a sand. Infiltration characteristics will depend on the grading the sand and the bedding and fracture characteristics of the rock. Infiltration testing will be needed to assess whether soakaways would be a suitable means of surface water drainage, however the geology would appear conducive. It is understood that the site and neighbouring areas experience issues with surface water run off particularly in the north of the site. Consideration of surface water management will be required.

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Appendices

1.0 Introduction

1.1 Terms of Reference

In November 2016, Rodgers Leask Environmental (RLE) were commissioned by Hallam Land Management to compile a Phase One Desk Study (DTS) for a proposed residential development on land at Low Moor Road, Sutton-in-Ashfield. The proposed Site is split up into four separate parcels of land consisting of Rolls Royce (RR), County Council and Clay (Treated as one – CC) and Temporal (hereafter referred to as the 'Site'.)

This Phase 1 Desk Study covers all of these parcels of land located in the wider surrounding area, but the application site covers land to the south of Newark Road. The application boundary is shown in Appendix J. The parcel boundaries are shown in Appendix A.

1.2 Proposed Development

A residential development with primary school and sports provision is proposed for the Site, a draft masterplan concept is included in Appendix B.

1.3 Objectives

The objectives of the investigation were to:

- Obtain desk based information to assist in the assessment of potential environmental and ground related issues that may have implications for the proposed development.
- Produce a conceptual model for the Site using the findings of the study.

1.4 Scope

In order to achieve the outlined objectives the scope of the study encompassed:

- A Site walkover.
- A study of historical maps.
- Review of geological and mining data.
- An examination of regulatory authority information.
- Production of a conceptual model.

1.5 Pernicious Plants

No assessment has been made for the presence of pernicious plant species e.g. Japanese Knotweed, Giant Hogweed, within the remit of this investigation.

1.6 Limitations and Confidentiality

All conclusions and recommendations made within this report are based upon and limited to the factual information obtained as part of this investigation. No responsibility can be taken by RLE Ltd for information obtained by third parties

and it has been assumed that all third party information provided is true and correct.

RLE Ltd has undertaken the work in accordance with our understanding of current best practice at the time of undertaking the report. Further assessment and revision of the report may be required should new information come to light or legislation/changes to best practice be introduced after the date of issue of the report.

RLE Ltd has prepared the report for the sole use and reliance of the Client. The report may not be used or relied upon by any unauthorised third party without the explicit written agreement of RLE Ltd.

The interpretive work undertaken within this report remains the intellectual property of RLE Ltd and must not be divulged to any commercial third party without prior written agreement of RLE Ltd.

2.0 Site Location and Description

2.1 Site Location

The Site is located to the southwest of Sutton-in-Ashfield, Nottinghamshire. The Site centre co-ordinates are at approximately 451556E, 357656N. A site location plan is included in Appendix A.

2.2 Site Description and Walkover Features

A site walkover was conducted by RLE on 10th January 2017. The purpose of the site walkover was to provide a general description of the Site. Detailed surveys such as wildlife or tree surveys were outside the scope of this report.

The Site has an irregular outline and covers an area of approximately 87.5 hectares (ha). The Site comprises undeveloped agricultural land divided into many separate fields by hedgerows and sparse trees. Access between the fields is available via gaps in the field boundaries. At the time of the Site walkover an immature arable crop and grasses were planted across the Site area.

The topography of the Site is very variable with several moderate to steep slopes and hummocks across the separate parcels:

RR Parcel – There is a general east to west trend in the topography as the Site slopes downhill from the bounding Coxmoor Road towards the western boundary of the parcel and the centre of the Site as a whole at an average gradient of ~1 in 9. The slope is notably steeper at a gradient of ~1 in 4 at the eastern boundary and in the southeast corner of the parcel (see photographs 2 – 9 in Appendix C). An overgrown area is present in the south eastern corner of the parcel understood to be an old quarry.

Temporal Parcel – The topography of the Temporal parcel is highly undulating. There is a moderately steep slope from the centre of the Site toward the residential area at the northern boundary at an average gradient of ~1 in 9. Further south there is a large hummock with the land falling towards the east and west. In the southern portion there are more mounds and hummock features with steep sides with gradients of up to 1 in 4. The boundary between the CC and Temporal parcel is marked by a steep bank approximately 5m high (see photographs 10 – 21 in Appendix C).

CC Parcel – This parcel is typified by slightly gentler slopes of ~ 1 in 20 although there are localised steeper slopes. There is a general slope from north to south across the western portion of the parcel with the eastern portion of the parcel appearing more domed in nature (see photographs 27-30 in Appendix C).

A public footpath was noted to cross the Site, entering from Kirkby Folly Road and running south through the CC and Temporal parcels.

An overhead electric cable was noted bisecting the Temporal parcel of the Site, trending in a rough west to east direction.

No potential sources of contamination such as old tanks, pipework, waste, drums or electricity transformers were noted on or immediately adjacent to the Site.

The boundaries of the Site consist of a mix of hedges, fences and mature trees. Boundaries are shared with roads, residential properties and some industrial land to the southwest. Access to the Site for the walkover survey was gained via a gate in the northeast corner of the Site, from Station Road.

2.3 Surrounding Area

The land beyond the Site boundaries consists of:

- Newark Road bounds the northern portion of the RR parcel with warehouses and industrial land beyond this to the north. To the north of the Temporal parcel, the Site is bordered by residential development.
- Coxmoor Road bounds the Site to the east. Undeveloped agricultural land, sparse residential development and some farm buildings are present adjacent to the Site boundary.
- Industrial Estate land, residential and agricultural bounds the southern portion of the Site.
- Residential properties, Low Moor Road and industrial land bound the western boundary of the Site.

3.0 Historical Review

3.1 Ordnance Survey Maps

Historical Ordnance Survey Maps at various scales have been obtained via an Emapsite MapInsight Report in order to obtain information on the Site. Copies of a range of these maps are contained in Appendix D.

A summary of the historical features is as follows:

Map Date	Site Feature	Adjacent Features
1878	The Site is mostly undeveloped, segregated into fields. Three sand pits are marked in the RR parcel. Windmill Hill is marked in the southern portion of the Temporal parcel. A footpath bisects the Temporal parcel running roughly southeast to northwest.	Further sand pits are marked close to the northeast boundary of the Site. Sutton flour mill, Sutton Forest bone mill and a brickyard are also marked within 500m of the northern boundary. A railway runs roughly north to south to the west of Site, passing very close to the western boundary of the CC parcel. Further sand pits and quarries are marked along the railway line corridor. The River Maun follows a similar route to that of the railway line past the west of the Site. Several water features such as fish ponds and sheepwashes are also marked to the southeast of Site. The surrounds of Site to the south and west are largely undeveloped with land mostly devoted to farmland.
1886	No significant change.	No significant change.
1898	Greenhill farm is marked just inside the Site at the northern edge of the RR parcel.	A covered reservoir is marked approximately 100m to the west of Site. A further reservoir is marked approximately 400m to the south of Site. A second branch has been added to the railway heading west away from Site. Kirkby Colliery is marked to the southwest of the Site.
1914	The sand pits in the north of the RR parcel have joined together and grown in size considerably. The sand pit marked further south in the RR parcel is now marked as Old Sand Pit.	Several tanks are marked to the north of the RR parcel, two of which are within 10m of the Site boundary.

Map Date	Site Feature	Adjacent Features
1921	No significant change.	Kirkby Colliery has increased in size and density of development, with more buildings associated with the Site and railway connections added. Allotments are marked at approximately 400m to the south of Site.
1938	A building is marked in the west of the CC parcel.	Some residential development has occurred to the south of Site with new streets such as David St and Mary St named on the map. Laxton Avenue is also marked to the northwest of Site, indicating further residential development in this area. Sutton Forest Mills are no longer marked on the map.
1955	The building mentioned above is no longer marked.	More residential development has occurred to the northwest and south with developments sprawling towards the Site boundary at the north of the CC parcel.. A structural steelworks is marked approximately 350m north of the RR parcel.
1967	The former large sand pit in the north of the RR parcel is no longer shown and is now marked as a Playing Field and Pavilion.	Residential development has filled the area between the RR and CC parcels with a factory also marked at the northern boundary of the CC parcel. Further residential development has occurred to the south of the Site. Several undefined works are marked to the north of the RR parcel on the land previously occupied by the Sutton Forest Mills. The land south of the CC parcel has a drain marked that runs close to the Site boundary.
1974	A spring is marked on the on the Temporal parcel and flows towards the northern boundary. A track is marked running parallel to the existing footpath.	All of the pits in and around the RR parcel are now marked as disused. Several works and a large factory are marked to the south of Site. Some residences are marked along Coxmoor Road.
1991	No significant change.	Lowmoor Road Industrial Estate has become more densely populated and has spread towards the boundary of Site. Additional factories are marked to the northwest of Site along the railway corridor.

Map Date	Site Feature	Adjacent Features
2002	A drain is marked close to the western boundary of the Temporal parcel. The pavilion and playing field is no longer marker on Site.	The northwest region is densely populated with houses, factories and the railway line.
2010 - present	No significant change.	Additional industrial units are now marked to the north of the RR parcel.

3.2 Summary

The Site has remained relatively undeveloped throughout the historical map period. A footpath and a track bisect the Site in a north to south direction but the Site has been largely set aside as farmland throughout the mapping period.

In the north of the Site, within the RR parcel, it has been worked for sand pits from the earliest maps up to 1967 after which they were shown in alternative use suggesting they had been infilled. There has been a farm situated on Site and more recently this area was used as a playing field with a pavilion on Site. These are no longer present and the land has returned to farmland. Other than in this area, very few changes were noted throughout the mapping period other than a single building appearing on the 1938 map in the CC parcel. This is no longer on Site.

Off site there have been significant developments within the Site surrounds.

The area to the north of Site has seen various mills, factories, sand pits, a railway line and quarries in use through history. Residential development, particularly from 1967 onwards, has built up around the Site. A further industrial estate and Kirkby Colliery have been present to the south of Site.

To the southeast, very little development has occurred. Some dwellings along Coxmoor Road appeared on the 1974 map and two reservoirs have been noted within 500m of the Site boundary.

4.0 Geology and Mining Review

4.1 Geology

Information regarding the geology of the Site has been obtained via a GroundSure GeoInsight report, a copy of which is included in Appendix E. Only the information considered pertinent to the Site has been included in this report.

4.1.1 Made Ground

One record of infilled ground comprising artificial deposits is recorded within the northern portion of the RR parcel.

A further area of infilled ground is recorded immediately adjacent to the Site along the eastern boundary and another area of infilled ground is marked immediately south of the CC border.

A worked area described as 'Void' lies 32m to the north of the RR parcel.

Undivided made ground is also marked off Site to the north and west of the Site following the route of the railway track. There are five separate areas marked between 103m and 396m.

4.1.2 Superficial Deposits

The Site has several lobes of superficial deposits recorded. Five areas of glaciofluvial sand and gravel deposits are marked with three further deposits of Diamicton head present.

Further areas of head and glaciofluvial deposits occur to the southwest and southeast of Site with a larger area of till 24m to the south of Site.

4.1.3 Solid Geology

The majority of Site is underlain by the Lenton Sandstone Formation typified by red/brown with buff mottled fine to medium sandstone.

To the east of Site the bedrock becomes the Nottingham Castle Sandstone Formation. This underlies two small areas of the Site at the eastern and southeast boundary.

To the west of Site the bedrock becomes the Edlington Formation comprising mudstone and sandstone. This formation also underlies a small area of the CC parcel at the western boundary.

The permeability of the recorded solid geology around the Site varies from high to low.

4.1.4 Structure

An inferred fault is marked across the north of Site running east to west. The type of fault and displacement is not described.

4.1.5 Radon

The Site is not within a radon affected area as less than 1% of properties are above the action level. No radon protection measures are required.

4.2 Ground Workings

4.2.1 Historical Surface Ground Working Features

Historic surface ground workings are present across the north of the Site. There is also a small quarry in the southeast corner of the RR parcel.

Further historic workings are present beyond the Site boundary to the east and north of Site and a separate area to the south of the CC parcel.

There are nineteen separate historic workings listed on Site consisting of sand pits, unspecified pits, ponds and cuttings dated between 1878 and 1991. There is also a refuse heap dated 1950 thought to have consisted of inert construction waste.

Off Site, there are in excess of fifty separate recorded surface workings within 100m of the boundary, mainly located to the northwest and to the southwest of Site. These workings consist of sand pits, ponds, heaps, cuttings and quarries.

4.2.2 Historical Underground Working Features

No historical underground working features are recorded on Site.

There are three historical underground working features occur within 250m of the Site boundary. These are associated with the Kirkby Colliery area to the southwest of the Site.

4.2.3 Current Ground Working Features

There are three marked current ground workings on Site relating to sand production. The status of the Forest Lane, Redhouse and Coxmoor Road workings are all now ceased.

Seven other workings are listed within 250m of the Site, again relating to sand production. These are also listed as ceased workings.

4.3 Mining, Extraction and Natural Cavities

4.3.1 Coal Mining

The Coal Authority Gazetteer for England and Wales indicates that the Site is in an area which may be affected by coal mining activities.

A Coal Authority Non-Residential Mining Report has been obtained for the Site, and a copy is included in Appendix F. A summary of the pertinent information is included below:

4.3.2 Summary of Coal Authority Mining Report

The Site is in a surface area that could be affected by underground mining in 5 seams of coal at 110m to 710m depth, and last worked in 1977. Any movement in the ground due to coal mining activity should have stopped.

The Site is not within a surface area that could be affected by present or future underground mining. However, reserves of coal exist in the local area which could be worked at some time in the future.

There are no known coal mine entries on Site, or within 20 metres of the Site boundaries.

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

The property is not within the boundary of a past, present or future proposed opencast coal mine.

A damage notice or claim for alleged subsidence damage was made in 2012 for a property located over 1km to the south of the boundary. The claim was rejected.

The Coal Authority has no record of mine gas emissions requiring action.

4.3.3 Historical Mining

No historical mining features are recorded on Site.

There are three historical mining features recorded within 250m of the Site including colliery works and an unspecified mine to the southwest and west of the Site.

4.3.4 Johnson Poole and Bloomer Records

Johnson Poole and Bloomer (JPB) mining areas are not recorded within 1000m of the Site.

4.3.5 Non-Coal Mining

There are no known non-coal mining areas within 1000m of the Site boundary.

4.3.6 Ground Cavities

No non-coal mining or natural cavities are recorded on Site, or within 1km of the Site boundaries.

4.3.7 Mineral Extraction

No brine or gypsum extraction is recorded on Site, or within 1km of the Site boundaries.

4.4 Natural Ground Subsidence

4.4.1 Potential for Shrinking or Swelling Clay Ground Stability Hazards

The potential for shrinking or swelling clay ground stability hazards provided by the British Geological Survey is low to negligible across the Site.

4.4.2 Potential for Landslide Ground Stability Hazards

The potential for landslide or ground stability hazards provided by the British Geological Survey is very low on the Site.

4.4.3 Potential for Ground Dissolution Stability Hazards

The potential for ground dissolution stability hazards provided by the British Geological Survey is classified as negligible for the Site.

4.4.4 Potential for Compressible Ground Stability Hazards

The potential for compressible ground stability hazards provided by the British Geological Survey is negligible across the majority of the Site.

In the northern portion of the RR parcel there is an area of land rated as moderate potential for compressible ground stability hazards.

This is defined as material that has *"Significant potential for compressibility problems...consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely..."*

4.4.5 Potential for Collapsible Ground Stability Hazards

The potential for collapsible ground stability hazards provided by the British Geological Survey is very low for the Site.

4.4.6 Potential for Running Sand Ground Stability Hazards

The potential for running sand ground stability hazards provided by the British Geological Survey is very low to negligible for the Site.

5.0 Regulatory Review

5.1 Authorisations and Consents

Data regarding EA (EA) and Local Authority authorisations and consents has been obtained via a GroundSure EnviroInsight report, a copy of this report is contained within Appendix G.

The EnviroInsight report contains factual information which is produced from a database of records which have been obtained from various sources including; Local Authorities, EA, National Radiological Protection Board, English Nature. Only the information considered pertinent to the Site has been included in this report.

The EA were also contacted with regard to requesting further details on the landfill sites recorded on and in the immediate vicinity of the Site. A copy of the correspondence from the EA is provided in Appendix H.

5.2 Potentially Contaminative Historical Land Use

5.2.1 Historical Land Use

Several potentially contaminative historical land uses are recorded on Site. Twenty four separate entries within the RR parcel are listed mainly associated with sand pits, unspecified pits and a refuse heap.

There are seventy two potentially contaminative historical land uses listed within 100m of the Site boundary. These mainly refer to the land to the north and northeast of the Site and are again associated with sand pits, unspecified pits, refuse heaps, unspecified heaps and ground workings.

Any listed to the south and southwest of Site are mainly related to railway activity and cuttings.

There are three electricity substations between 5m and 45m from the northern boundary falling within 100m of Site.

5.2.2 Potentially Infilled Land

There are twenty two records of potentially infilled land on Site, relating to a pits and sand pits with one entry for a refuse heap. These are all located in the RR parcel, mainly in the northern portion of the Site.

There are a further fifty one records of potentially infilled land listed within 100m of the Site, again including a number of sand pits, pits, refuse heaps and ponds. The majority of which are again focused around the northern boundary of the Site.

5.3 Environmental permits, incidents and registers

No records of environmental permits, incidents and registers are listed on Site.

One Part A Activity is listed within 250m of the Site. An operator surface treating metals and plastics is effective 218 to the west.

There are six Part B Activities within 250m of the Site. Three of the permits have been either revoked or classed as historical with a further three classed as current permits as shown on the following table.

Process	Address	Status	Distance from Site
Coating and Enamelling.	Palace Perma Signs Ltd, Lowmoor Ind Est, NG17 7LF.	Historical Permit	31m to the south.
Use of Waste Oil Burners.	Bramely Motor Engineer, 84 Kirkby Folly Road, NG17 5HN..	Historical Permit.	72m to the northwest
Wood coating	The Symphony Group PLC, Prospect Close, Lowmoor Rd, NG17 7LF.	Revoked.	168m to the south.
Coating manufacture	Sanglier Ltd, Lowmoor Bus. Park, Kirkby in Ashfield, NG17 7JZ.	Current	186m to the west
Wood Coating	Steve Soult Ltd, Byron Avenue, Kirkby in Ashfield, NG17 7LA.	Current	212m to the west
Spray Paint & Metal Spraying.	Fabrikat Ltd, Hamilton Rd, Sutton in Ashfield, NG17 5LN.	Current	227m to the northwest.

There are eleven EA pollution incidents recorded within 250m of the Site, three of these were detailed as having significant (Category 2) impact on water and related to oils and fuel (97m and 100m to the west) and contaminated water (158m to the north).

There are no licensed discharge consents recorded within 250m of the Site.

5.4 Landfills and other waste sites

5.4.1 EA Registered Landfill Sites

There are no EA Registered Sites on the Site.

There is one record of EA registered landfill within 500m of the Site. Sutton Quarry landfill site is marked at 13m from the north east boundary and accepts household, commercial and industrial waste.

The EA was contacted regarding this landfill, referred to as Coxmoor Road in this case, and they confirmed that a current license was issued to Midland Land Reclamation Ltd in 1990 for construction industry waste and non-hazardous industrial and commercial waste. The license was reissued in 1991 to include Waste Category A, B, C and D. This ranges from “Non-difficult waste with low polluting potential” up to “Non difficult waste with a high polluting potential”. It is noted that quantities of wastes from categories C and D are severely limited. Domestic waste is not specifically listed. Sludges or liquids were not permitted.

The landfill site is not live and it has been noted that there is housing constructed on it. The license status is not provided in the records.

Landfill gas studies at the Sutton Quarry landfill site located off-site, approximately 13m northeast, have indicated that significant levels of gas were being generated within the waste mass.

No landfill gas data has been made available for this desk study.

5.5 Historic Landfill Sites

There are three records of an EA Historic Landfills falling within the Site boundary.

Emap ref	Date	Address	Waste type	License Status
6	Unknown	Low Moor Road Industrial Estate	Industrial, Household and Inert.	No records
7	Unknown	Low Moor Road.	Unspecified – EA indicated Construction waste – no putrescible.	No records
8	1980 - 1992	Disused Sand Quarry, Coxmoor Road.	Inert.	Surrendered 1992

The two Low Moor Road sites in the west (reference 6 and 7) and beyond the western boundary of the Site, referred to in the above table, were confirmed by the EA to have received inert, household and non-hazardous industrial wastes. Landfilling occurred before The Control of Pollution Act 1974 (which imposed a requirement to apply for a license and maintain records) and as such the EA has only anecdotal details. It should be noted that the emap reference 6 entry starts at the boundary of the Site and falls largely outside of the side area.

The Coxmoor Road site (reference 8) was in operation until 1983 and accepted construction industry waste with no putrescible material or any other waste likely to cause nuisance or pollution.

There are three records of EA Historic Landfill sites recorded within 500m of the Site.

Date	Address	Waste type	Distance from Site
1990 -	Sutton Quarry/Midland Land.	Commercial, Household and Inert.	12m to northeast
Unknown	Midland Land Reclamation.	Unspecified.	15m to northeast
1983 - 1992	Sutton Tip, Cauldwell Road.	Inert.	385m to northeast

One further waste site is listed just outside the southwest boundary. This is listed as a ground working and refuse heap and dated 1959.

5.6 Current Land Use

Two potentially contaminative current land uses are recorded on Site.

Both refer to electricity poles located on Site in the central area of the Site and at the eastern boundary.

There are sixteen recorded potentially contaminative industrial sites listed within 100m of the Site, including further electrical features, metal manufacturing, haulage, unspecified engineering, industrial coatings, water pumping, hoppers and silos, medical equipment supplies and railway features.

There is one record of a petrol and fuel site (now obsolete) recorded within 500m of the Site, located 318m to the north of the Site.

5.7 Hydrogeology and Hydrology

5.7.1 Aquifer Designation

The Site is largely underlain by the Lenton Sandstone Formation which is classified as a Principal Aquifer, defined by the EA as:

"Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers."

The Bromsgrove and Edlington Mudstone Formation are underlying a small part of the north-western portion of the Site is classified as a Secondary (B) Aquifer, defined by the EA as:

> *"Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water bearing parts of the former non-aquifers."*

The superficial deposits on Site consisting of Head deposits and Glaciofluvial deposits are designated as Secondary (A) Aquifers and Secondary Aquifer – Undifferentiated Layers.

Secondary (A) Aquifers are defined by the EA as:

"Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of baseflow to rivers. These are generally aquifers formerly classified as minor aquifers."

Secondary (Undifferentiated) Aquifers are defined by the EA as:

"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 nature of the rock."

5.7.2 Abstraction Licenses

There are five surface water abstraction licenses within 1km of the Site. Three of these are active and lie between 284m and 995m from Site.

There are no potable water extraction licences within 2km of the Site.

5.7.3 Source Protection Zones

A Zone 3 SPZ (total catchment area) is recorded on Site.

5.7.4 Surface Water Features

The closest recorded river networks are two Tertiary Rivers situated on Site, one of which is a culvert, the other is a stream observed in the north of the site fed by a spring.

Three surface water features are recorded on Site. It is considered these are references to the stream, drains and spring identified in the historical mapping section of this report.

The closest recorded surface water feature is recorded 97m to the west of the Site.

The River Maun is located 97m to the west of Site and is classified as a Tertiary River.

5.8 Flooding

Detailed assessment of risk to flooding is beyond the scope of this assessment, however the following general information is provided for initial assessment purposes.

5.8.1 Fluvial Floodplain

The Site is not recorded as being within a floodplain as recorded by the EA.

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

The risk of flooding on Site from rivers and the sea is very low.

5.8.3 Groundwater Flooding Susceptibility Areas

The Site is within 50m of a BGS groundwater flooding susceptibility area. The record relates to clearwater flooding.

5.9 Designated Environmentally Sensitive Areas

The Site is designated within a Nitrate Vulnerable Zone, however this relates predominantly to agricultural use and is not relevant to this assessment.

6.0 Site Conceptual Model

This section provides a qualitative risk assessment of the risk posed from potential on and off-site contamination sources, identified by the information presented in the previous sections.

The conceptual model below has been developed based on the commonly adopted source-pathway-receptor model as recommended within CLR11 Model Procedures for the Management of Land Contamination.'

6.1 Proposed Development

It is proposed to redevelop the Site for a residential end use with gardens and landscaped areas.

6.2 Potential Sources of Soil Contamination

6.2.1 On-site

Historical mapping, geological records and regulatory data indicate that the majority of the Site has generally remained. However, the northern portion of the RR parcel has been worked as a sand pit and was later used as a landfill before being restored as a sports pitch and pavilion.

There are twenty four separate entries for historical potential contaminative uses within the RR parcel with a further seventy two within 100m of the Site boundary.

A small building or structure was noted on historic records in the southwest of the Site, the structure was not marked on any further mapping and no evidence was found on the Site walkover of any structure in the area. Any building or structure that was present is assumed demolished.

There are twenty two records of potentially infilled land on Site and the material used may pose a potential risk of localised soil contamination depending on the origin and composition.

There are three records of historic landfills on Site with a further three falling within 500m of the Site boundary. One on Site landfill is on the RR parcel and accepted inert waste. One on Site landfill is in the CC parcel and accepted construction waste. The third site is considered to be largely off Site (included on site due to boundary clash), and accepted industrial, household and inert waste.

No records of environmental permits, incidents and registers are listed on Site.

Based on the desk study information obtained to date, the majority of the land within the Site would be classed as agricultural. The risk of soil contamination being present on-Site would be considered very low. Agricultural land use is not listed within the Department of Environment (DOE) industry profiles, however some localised made ground may be present on Site in the areas of the former building and ponds.

The north of the Site has been worked for sand and used as a landfill site and would therefore pose a higher a risk of soil contamination. The same applies to the landfill in the southwest.

For confirmatory purposes, it would be considered prudent to undertake chemical testing across the Site for the following commonly occurring contaminants.

Source	Inorganic Contaminants	Organic Contaminants
Greenfield land.	Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Zinc, Sulphate, sulphide, sulphur, asbestos, pH, Free Cyanide	Poly-Aromatic Hydrocarbons (PAH), Pesticides
Landfill	Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Zinc, Sulphate, sulphide, sulphur, asbestos, pH, Free Cyanide	PAH, Total Petroleum Hydrocarbons (TPH), Volatile Organic Compounds.
Farm	Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Sulphate,	Phenol, PAH; Total Petroleum Hydrocarbons (TPH)
Electricity Substation (close to western boundary)	PCB's	

Targeted investigations and testing should be undertaken in the areas of any identified former buildings, worked and filled areas. Where made ground is identified on-Site, asbestos in soil screening should be undertaken.

6.2.2 Off-Site

There are many potentially contaminative land uses both historical and functioning mainly to the north, northeast and southwest of the Site, including landfill sites, sand pits, unspecified pits, ground workings, refuse heaps, railway sidings, cuttings and factories.

The landfill site (emap ref B) situated to the northeast of the RR parcel is an EA registered landfill site whose license allowed the deposition of varied wastes including biodegrading wastes but not Difficult Wastes. Wastes with a 'High Polluting Potential' as defined by the EA were allowed. This clearly may act as a source of contamination.

The landfill to the south west (emap ref 6) accepted Industrial, Household and Inert waste and as such may also act as a potential source of contamination.

The number and proximity of potentially contaminative land uses around the Site would suggest there is potential for soil contamination. Targeted investigations and testing should be undertaken in the appropriate areas to ascertain any effect of neighbouring activities.

6.3 Ground Gassing

6.3.1 On-Site

The Site is underlain by up to five seams of coal at 110m to 710m depth which have been worked in the past. The presence of coal workings beneath the Site may give rise to gas migration to the surface, although given the depth of the workings and the anticipated geology the risk of significant gas migration is considered very low. The Coal Authority has no record of mine gas emissions requiring action.

There are nineteen separate historic workings listed on Site consisting of sand pits, unspecified pits, ponds and cuttings dated between 1878 and 1991. There is also a refuse heap dated 1950 thought to have consisted of inert construction waste.

There are three records of landfill sites recorded on Site, although the two which are on site accepted inert wastes only, with the third adjoin the boundary accepting household, commercial, and industrial waste. Although these landfills on Site are considered to have low pollution potential due to the inert nature of the wastes deposited, confirmation of the gas regime on Site is needed as these landfills may give rise to localised gassing risk.

6.3.2 Off-Site

There are three historical landfill sites located at 12m, 15m and 345m to the northeast of the Site.

The operational site to the northeast of the Site on Coxmoor Road has been quoted by the EA as generating “significant levels of gas within the waste mass”. It is not known what control measures are in place at this site and if there are any monitoring procedures.

There is an area of potentially infilled ground to the north of the Site with further areas to the northeast, north and southwest of the Site. Depending on the composition and origin of the fill material these features may give rise to a localised gassing risk.

The landfill to the southwest (emap ref 6) is a potential source of gas due to the household nature of wastes included within the license.

There are in excess of fifty separate recorded surface workings, mainly located to the northwest and to the southwest of the Site. These workings consist of sand pits, ponds, heaps, cuttings and quarries.

These features have the potential to act as a source of ground gas depending upon the composition of any fill materials and the potential pathways available for gas to migrate to the Site. Some of these features border the Site boundary and could therefore give rise to a significant localised gassing risk.

6.3.3 Gas Monitoring Programme

Based on the desk study information obtained to date, the risk of ground gassing impacting the Site would be considered **moderate** to high where landfilling has taken place on or adjacent to the Site, and low to moderate in the Greenfield areas (higher risk adjacent to landfilled areas.

A number of potential sources have been identified, and gas monitoring will be necessary in order to quantify the gassing regime of the Site and assess the requirement for gas protection measures for the proposed development.

With reference to CIRIA C665 'Assessing risks posed by hazardous ground gasses to buildings' it is considered that the generation potential of the source/s is very low (Table 5.5a and 5.5b). Based on the proposed development the sensitivity of development is considered '**High**' (Residential with Gardens').

The duration and frequency of monitoring should be agreed with the authorities, however, a minimum of 12 gas monitoring visits is recommended over a 6 month period to establish the gassing regime of the Site. Monitoring locations should be targeted towards the on and off Site potential ground gas sources identified above.

6.4 Potential Pathways

With regard to the assessment of risk to human health, the following pathways are considered to be potential exposure routes based on the residential end-use, in accordance with the CLEA Documentation:

- Dermal contact.
- Direct ingestion of soil.
- Inhalation and ingestion of soil dust.
- Inhalation of gases.
- Ingestion of contaminated water via plastic pipes.
- Consumption of home grown produce.

With regard to Controlled Waters, the following pathways are considered applicable:

- Downward infiltration through soils and bedrock.
- Lateral migration through soils and bedrock towards the nearest surface feature.
- Newly created preferential pathways associated with the redevelopment of the Site e.g. deep boreholes/piles/sewers.

6.5 Potential Receptors

The following are considered to be potential receptors for contamination:

Receptor		Additional information
Human Health	Future Site users & Construction Workers	A female child will be regarded as the critical receptor.
Controlled Waters	Principal Aquifer	Moderate sensitivity – Source Protection Zone 3 (Total Catchment), but history of landfilling.
	Tertiary Rivers on Site.	Stream fed by spring in the north of the Site.
Other	Neighbouring buildings	
	Underground structures	
	Flora and fauna	

6.6 Pollutant linkages

Based on the information above, the following potential pollutant linkages are considered applicable to the Site. The risk classification has been qualitatively derived in accordance with CLR 11 Model Procedures for the Management of Land Contamination. The terminology used is taken from CLR 11, and a summary of the principal terms are provided in Appendix I.

Pollutant Linkage	Source	Pathway	Receptor	Probability	Consequence	Risk
1	Contaminated Soils	Ingestion of soil, dermal contact, inhalation of dust, ingestion of home grown produce	Humans – end users	Low likelihood	Medium	Moderate / Low
2	Contaminated Water Supplies	Ingestion of water, Migration of organic contaminants via plastic pipes	Humans – end users	Low likelihood	Medium	Moderate / Low
3	Contaminated Soils	Ingestion of soil, Dermal contact; Inhalation of dust.	Construction workers	Low likelihood	Medium	Moderate / Low
4	Contaminated Soils	Inhalation of soil dust	Members of the public adjacent to the Site during construction	Low likelihood	Medium	Moderate / Low
5	Ground Gasses	Migration of asphyxiant and explosive gasses	Humans – end users/construction workers	Moderate	Severe	Moderate / High
6	Contaminated Soils	Leaching to groundwater	Secondary A and Principal Aquifers	Low	Medium	Moderate / Low
7	Contaminated Soils and Groundwater	Leaching and groundwater flow to surface water	Tertiary River ~ on Site stream	Low likelihood	Mild	Low
8	Contaminated Soils	Leaching of sulphate and corrosive contaminants	Buried concrete structures and services	Low / Medium	Mild	Low
9	Contaminated Soils	Uptake of phytotoxic contaminants	Flora & Fauna	Low likelihood	Minor	Very Low

7.0 Conclusions and Recommendations

7.1 General

The majority of the Site has remained generally undeveloped greenfield land, with the current land use being agricultural arable land. The main exception to this is the RR parcel where there has been a history of ground workings and landfilling at the northern tip of the Site and a further landfilled area within the west portion of the CC parcel.

Two small buildings and a farm have been identified on Site by early historical records, however none of these are noted to be present on Site today.

A footpath runs across the Site. An assessment of the potential impact on the proposed development should be made. Right of way issues are outside the scope of this report.

An overhead electrical cable is present on Site and bisects the temporal parcel of the Site, running approximately east to west, which may impact future Site works, and the proposed development.

The Site is sloping, quite steeply in areas and therefore an earthworks exercise is likely to be needed to remodel the contours of the Site to those which suit the proposed development. Consideration of existing and proposed slope stability may be required. No evidence of slope instability was however noted during the Site walkover.

In the northern portion of the RR parcel there is an area of land rated as moderate potential for compressible ground stability hazards. This is defined as material that has *"Significant potential for compressibility problems...consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely..."*. This is considered to relate to the landfill in this area of the Site. Consideration of the effects on effects of construction, in terms of increased load and the risk of load induced settlement shall need to be given. This also applies to the landfill in the southwest in the CC parcel.

Records of quarrying on Site relate to the landfilled area to the north of the RR parcel, and a small area to the southeast of the RR parcel. Further records are present beyond the Site boundaries. Some of these quarries have been subsequently used as landfills. Given the absence of further records, although the possibility of unrecorded ground workings cannot be discounted given the suitability of the geology for aggregate production, the risk of consider low.

7.2 Qualitative Contamination Risk Assessment

Historical mapping, geological records and regulatory data indicate that the majority of the Site has generally remained undeveloped.

However, two areas of landfill are present on Site. The northern portion of the RR parcel has been worked as a sand pit and was later used as a landfill for inert waste before being restored as a sports pitch and pavilion. The other on Site

landfill is in the CC parcel and accepted construction waste. These sites are considered to present a low to moderate risk.

Landfills sites are also present adjacent to the on Site landfill sites. The site adjacent to the CC landfill accepted industrial, household and inert waste, and the site adjacent to the RR land accepted varied wastes including biodegrading wastes but not Difficult Wastes. Wastes with a 'High Polluting Potential' as defined by the EA were allowed. This clearly may act as a source of contamination.

There are twenty four separate entries for potentially historical contaminative land uses mainly associated with the sand pits on Site.

There are no records of any pollution incidents on the Site.

The risk to human health where landfilling has taken place is considered **moderate**. The risk to human health in the Greenfield areas is considered **low**.

The risk to Controlled Waters where landfilling has taken place is considered **moderate**. The risk to Controlled Waters in the Greenfield areas is considered **low**. The landfills situated adjacent to the Site are considered to present a potentially higher risk due to the nature of the materials deposited. The Site is classified as a Principal Aquifer associated with the underlying geology and is within a Zone 3 Source Protection Zone. In view of the above, the sensitivity of the Site is considered moderate.

7.3 Ground Gassing

Based on the desk study information obtained to date, the risk of ground gassing impacting the Site where landfilling taken place on or adjacent to the Site would be considered **moderate/high**. The inert nature of the fills place in the on Site landfills pose a lesser risk than landfill where biodegradable materials were deposited.

The risk of ground gassing impacting the Site in the Greenfield area is considered to be **low to moderate,** although the land adjacent to landfill is clearly at higher risk.

A number of potential sources have been identified, and gas monitoring will be necessary in order to quantify the gassing regime of the Site and assess the requirement for gas protection measures for the proposed development.

With reference to CIRIA C665, it is considered that the generation potential of the source/s is high. Based on the proposed development the sensitivity of development is also considered high.

The duration and frequency of monitoring should be agreed with the authorities, however, a minimum of 12 gas monitoring visits is recommended over a 6 month period to establish the gassing regime of the Site. Monitoring locations should be targeted towards the on and off Site potential ground gas sources.

7.4 Radon

The Site is not within a radon affected area as less than 1% of properties are above the action level. No radon protection measures are required.

7.5 Foundation Design

Intrusive works shall be required in order to identify ground conditions and provide foundation recommendations for the Site. The Site history would however suggest that undisturbed ground conditions should be present across the majority of the Site. Some areas of fill are to be expected within the areas of former sand pits / landfill in the north and southwest of the Site.

The Site is indicated to be mainly underlain by the Lenton Sandstone Formation consisting of fine to medium grained sandstone, mudstone and conglomerate. The Nottingham Castle Sandstone Formation underlies a small part of the southeast of the Site and the Edlington Formation, consisting of sandstone and mudstone, underlies the some of the western area of Site.

The topography of the Site is highly variable with several moderate to steep slopes present across the Site. Earthworks and retaining structures are likely to be required to facilitate the proposed development. Such remodelling may influence foundation design, and may require rafts or piled foundations.

The geology would suggest that traditional strip/trenchfill foundations are likely to be appropriate within Greenfield areas, subject to verification by intrusive investigation.

Piled foundations may be required where foundations within cohesive strata are in close proximity to trees and hedgerows or within any areas of deep made ground.

Piled foundations are likely to be required within the landfilled areas, subject to depth and composition of the wastes. Wastes may contain obstruction to piling.

Intrusive investigations will be needed to assess ground conditions in the vicinity of the former surface quarry in the southeast portion of the RR parcel. Piled foundations may also be required where quarrying has taken place.

Where foundations are founded within granular strata, instability may be an issue, particularly where shallow groundwater is encountered. Intrusive works should assess the potential for instability and the requirement for trench support or alternative foundation solutions if necessary.

A tree survey shall be required which extends beyond the Site boundaries for use in foundation design.

7.6 Surface Water Drainage

The Site is underlain by Secondary A aquifers relating to several of superficial glaciofluvial sand and gravel deposits are marked with three further deposits of Diamicton head. These are likely to provide mixed infiltration characteristics.

The solid geology is sandstone which would be expected to weather to a sand. Infiltration characteristics will depend on the grading the sand and the bedding and fracture characteristics of the rock.

Infiltration testing will be needed to assess whether soakaways would be a suitable means of surface water drainage, however the geology would appear conducive.

It is understood that the Site and neighbouring areas experience issues with surface water run off particularly in the north of the Site. Consideration of surface water management will be required.

7.7 Coal Mining Issues

The Coal Authority Gazetteer for England and Wales indicates that the Site is in an area which may be affected by coal mining activities.

The Site is not within a high risk development area with regards to past coal mining.

The Site is in a surface area that could be affected by underground mining in five seams of coal at 110m to 710m depth, and last worked in 1977.

The Coal Authority has indicated that any ground movements due to coal mining activity should have stopped.

No mineshafts or opencast mines are recorded on-Site, or within 20m of the Site boundaries.

Due to the depth of the recorded of coal seams and based on the comments from the Coal Authority, no further investigation or remediation is considered necessary with regard to coal mining issues.

7.8 Wildlife Issues

Wildlife surveys are outside the scope of this report. However, there are no designated sensitive sites such as SSSI's on the Site.

7.9 Site Investigation Recommendations

An intrusive site investigation to identify ground conditions to allow suitable foundation solutions and to confirm the contaminative status of the Site is recommended. The following should be incorporated into the site investigation:

- Trial pits across the Site to take samples and investigate ground conditions.
- Boreholes across the Site to take samples, to undertake geotechnical tests such as standard penetration tests (SPT's) and install gas and groundwater monitoring ancillaries in targeted locations.
- Intrusive investigations should provide suitable coverage across the Site.
- Intrusive investigation and chemical testing should target the areas of the Site where sand pits and landfills have been indicated on historical

mapping, the location of the historical on-Site buildings and where adjacent industrial land use has been indicated.

- Gas and groundwater monitoring locations should also target the historical landfill locations and where off-Site sources have been identified.
- Samples should be analysed to establish the concentrations of the contaminants within soils. Leachate analysis of the soils would also be required. Groundwater analysis may be necessary.
- Laboratory testing of topsoil is recommended to assess the options for sale/disposal of any excess.
- Appropriate geotechnical testing and analysis should be undertaken.

Appendices

Appendix A: Site Location Plan

Sutton-in-Ashfield

Ownership

Hallam Land Management

Hallam Land Management Limited
Ecclesall Road South, Banner Cross Hall
Sheffield S11 9PD
t: 0114 2555 444 www.hallamland.co.uk

N
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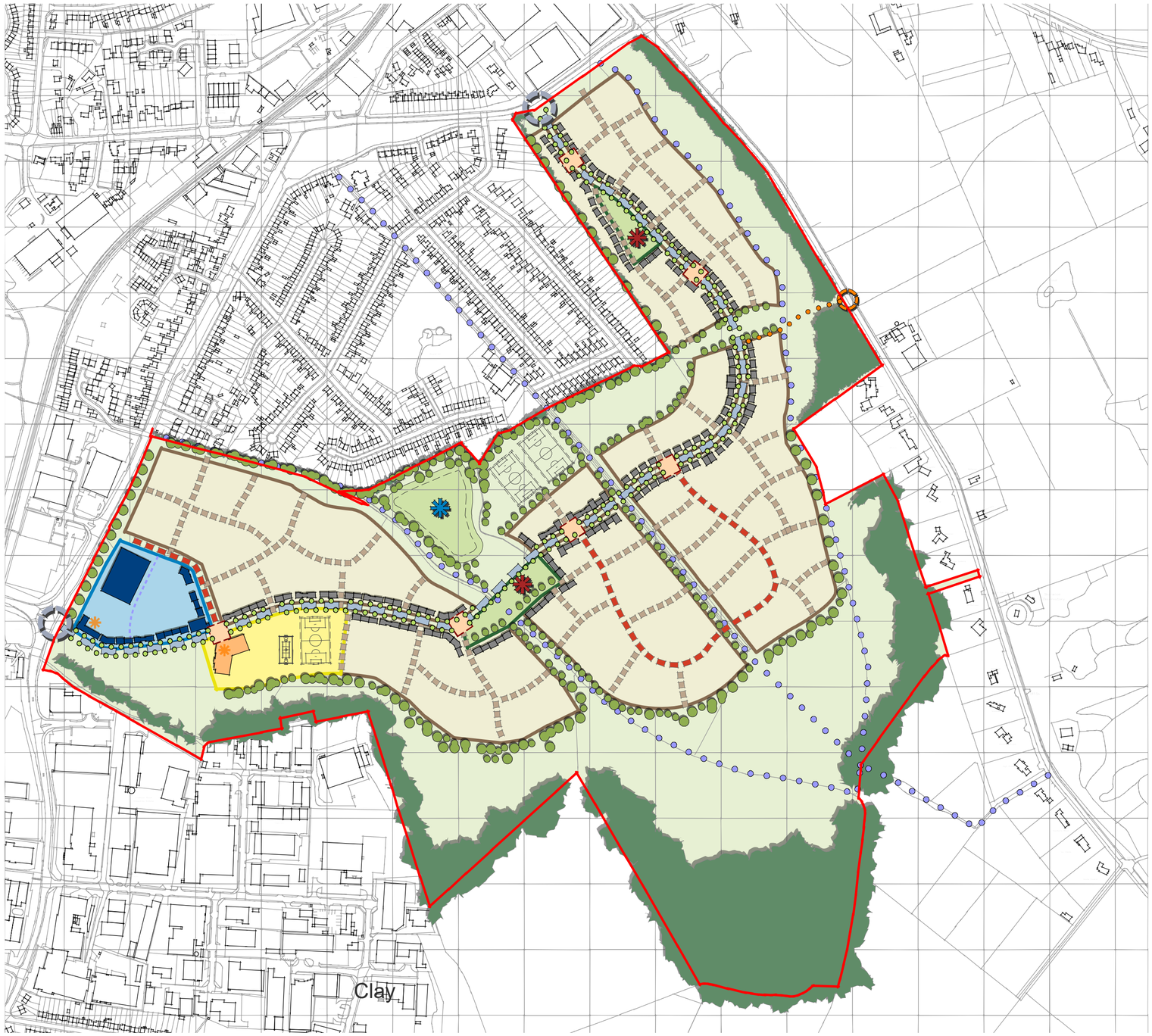
Plan not to scale @ A4

RODGERS LEASK ENVIRONMENTAL Consulting Geotechnical & Environmental Engineers	**Client: Hallam Land Management**	Title: **Site Location**
		Scale: **NTS**
	Project: Low Moor Road, Sutton-in-Ashfield, NG17 5HX. **OS 451550, 357610**	Project ref**: P16-549**

Appendix B: Development Framework Plan



Key

- Site Boundary (89.72ha)
- Residential (circa 1000 units)
- Local Centre (2.3ha)
- Primary School (2.0ha)
- Public Open Space
- Sports Provision
- Indicative Water Attenuation Area
- Indicative Tree Planting
- Main Street
- Secondary Road
- Streets/Lanes
- Public Right of Way
- Pedestrian/Cycle/Emergency Link
- Main Vehicular Access

Lowmoor Road, Sutton-in-Ashfield, Nottinghamshire - DRAFT Masterplan Concept

| T 01509 670806 | F 01509 672247 | www.pegasuspg.co.uk | Team GL/RB | 26 October 2012 | 1:5000 @ A2 | drwg. EMS.2254_09-1 | Client: Hallam Land Management |

Pegasus
Urban Design

Appendix C: Site walkover photographs

Photo 1 Access used off Station Road

Photo 2 RR Parcel looking NW.

Photo 3 RR Parcel looking west.

Photo 4 RR Parcel looking southwest.

Photo 5 RR Parcel looking north.

Photo 6 RR Parcel looking east.

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Photo 7 RR parcel loking southeast.

Photo 8 RR Parcel looking northeast along overhead power line.

Photo 9 Temporal parcel looking west.

Photo 10 Temporal Parcel lookinh north.

Photo 11 Temporal Parcel looking west.

Photo 12 Temporal parcel looking south.

Photo 13 Temporal Parcel looking southeast.

Photo 14 Temporal Parcel, track heading south.

Photo 15 temporal Parcel looking west.

Photo 16 Temporal Parcel, track heading north.

Photo 17 Temporal Parcel, Looking towards western boundary.

Photo 18 Temporal Parcel, hummocks to south of site.

Photo 19 Temporal Parcel, footpath towards the north.

Photo 20 Temporal Parcel, Slopes towards the north.

Photo 21 CC Parcel

Photo 22 CC and Temporal parcel boundary, looking south.

Photo 23 Path towards Kirkby Folly Road.

]

Photo 24 CC Parcel looking southwest.

Photo 25 CC parcel looking south.

Photo 26 CC Parcel looking southeast.

Appendix D: OS Historic maps

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Site Details:

Low Moor Rd,NG17 5JS

Client Ref: EMS_395724_529373
Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: County Series

Map date: **1878**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1878
Revised 1878
Edition N/A
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Levelled N/A

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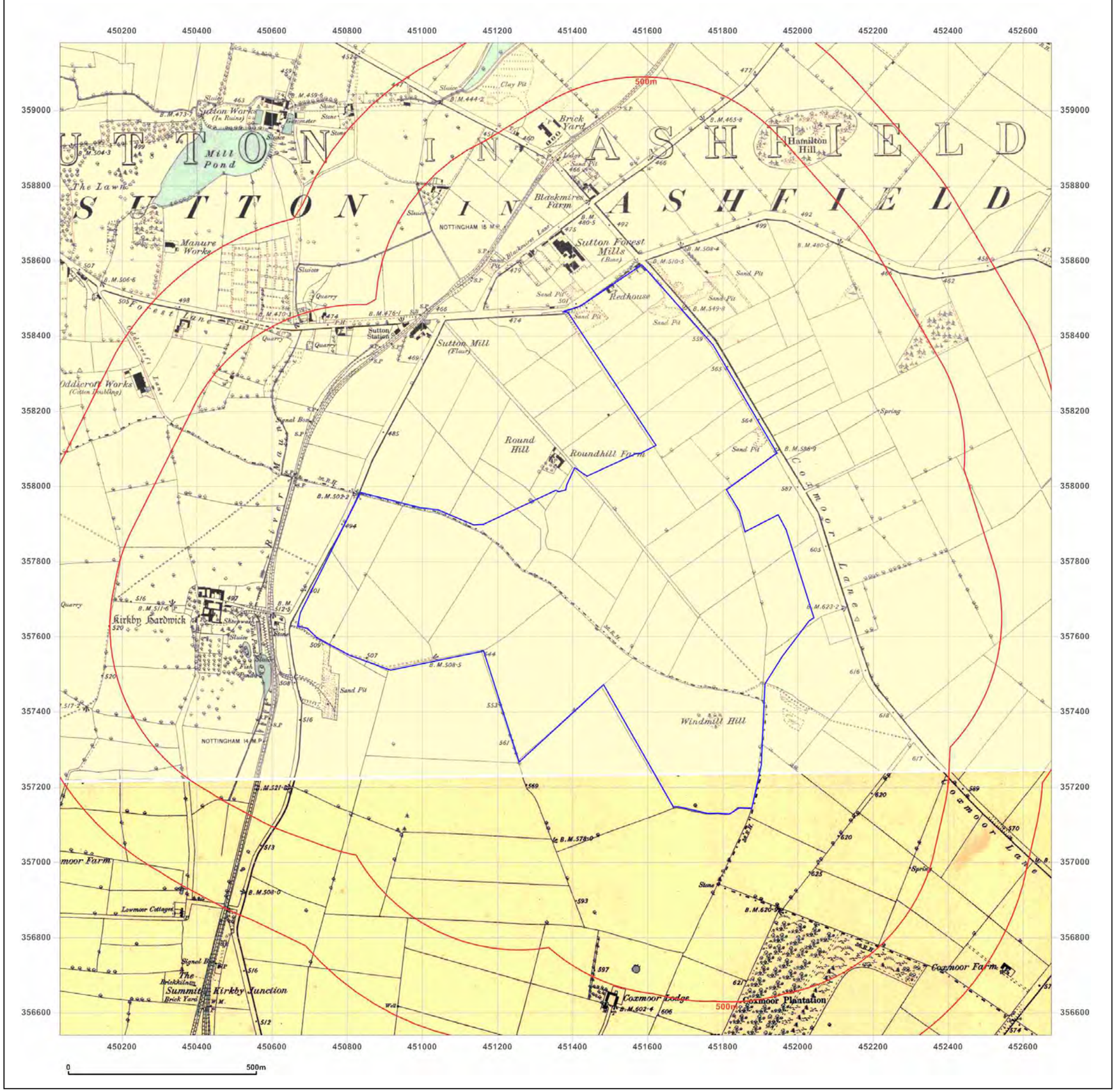

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Low Moor Rd,NG17 5JS

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Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: County Series

Map date: **1886**

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Printed at: 1:10,560

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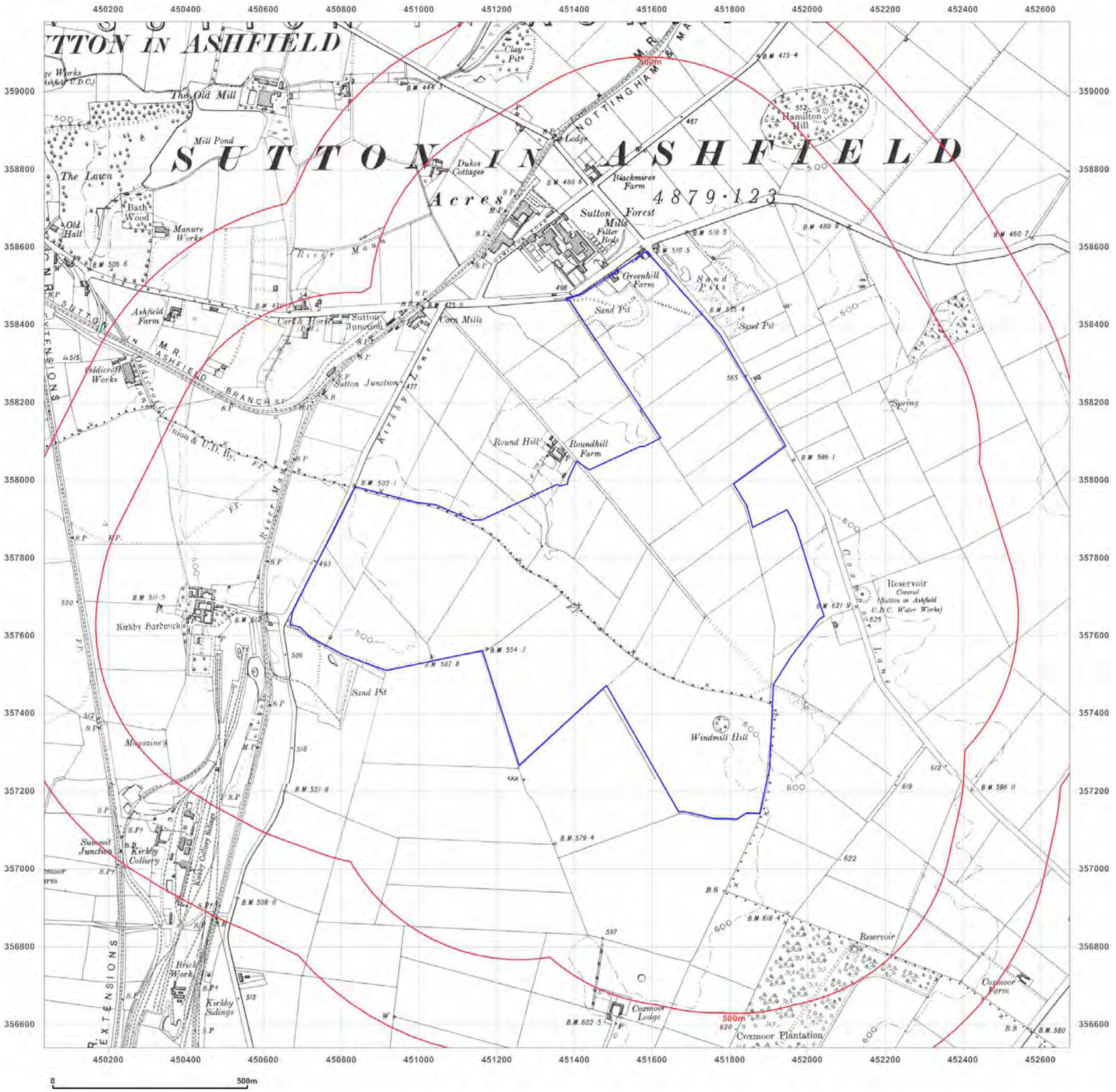

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Site Details:

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Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

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Printed at: 1:10,560

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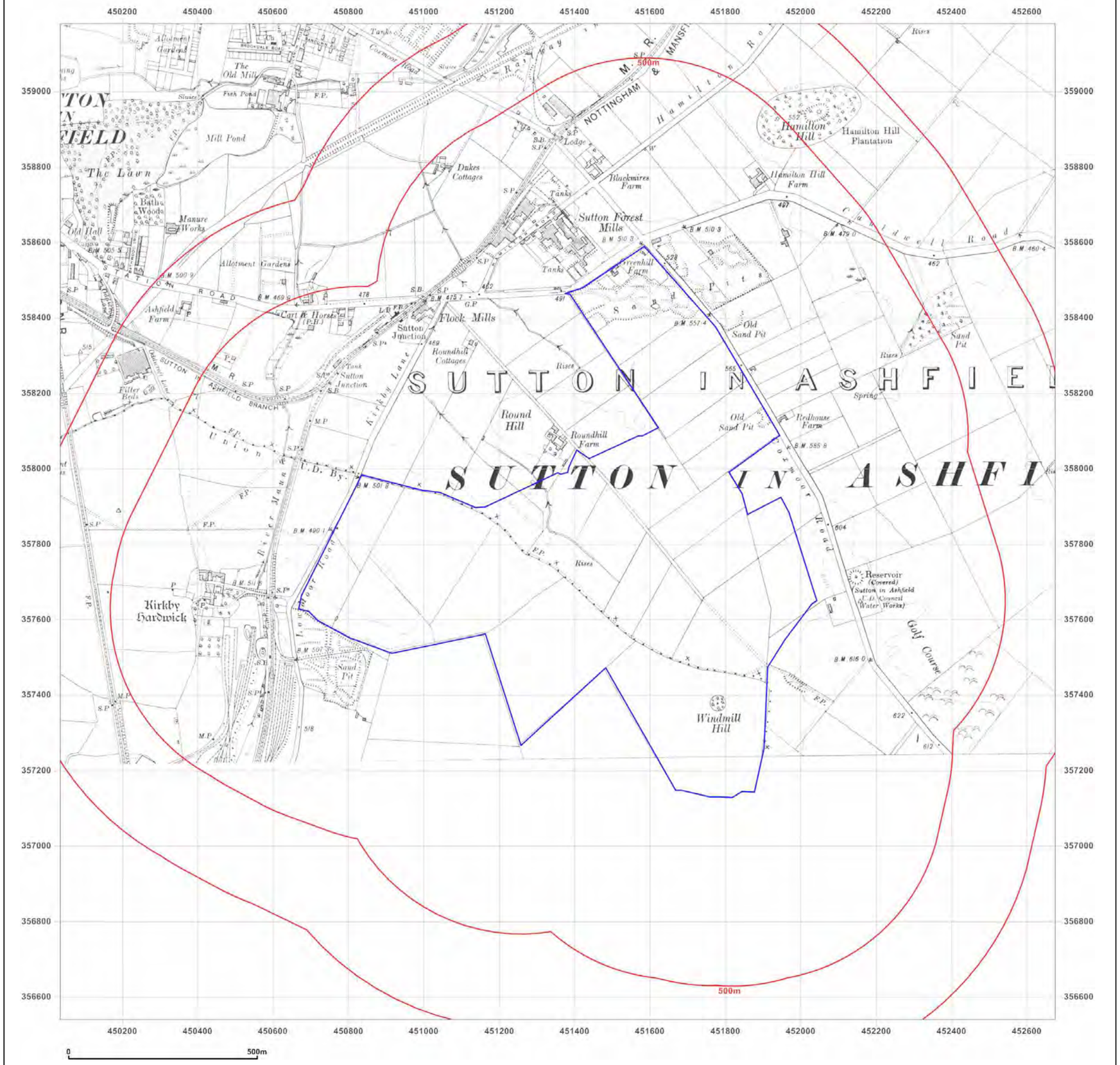

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Low Moor Rd,NG17 5JS

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Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: County Series

Map date: **1914**

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Printed at: 1:10,560

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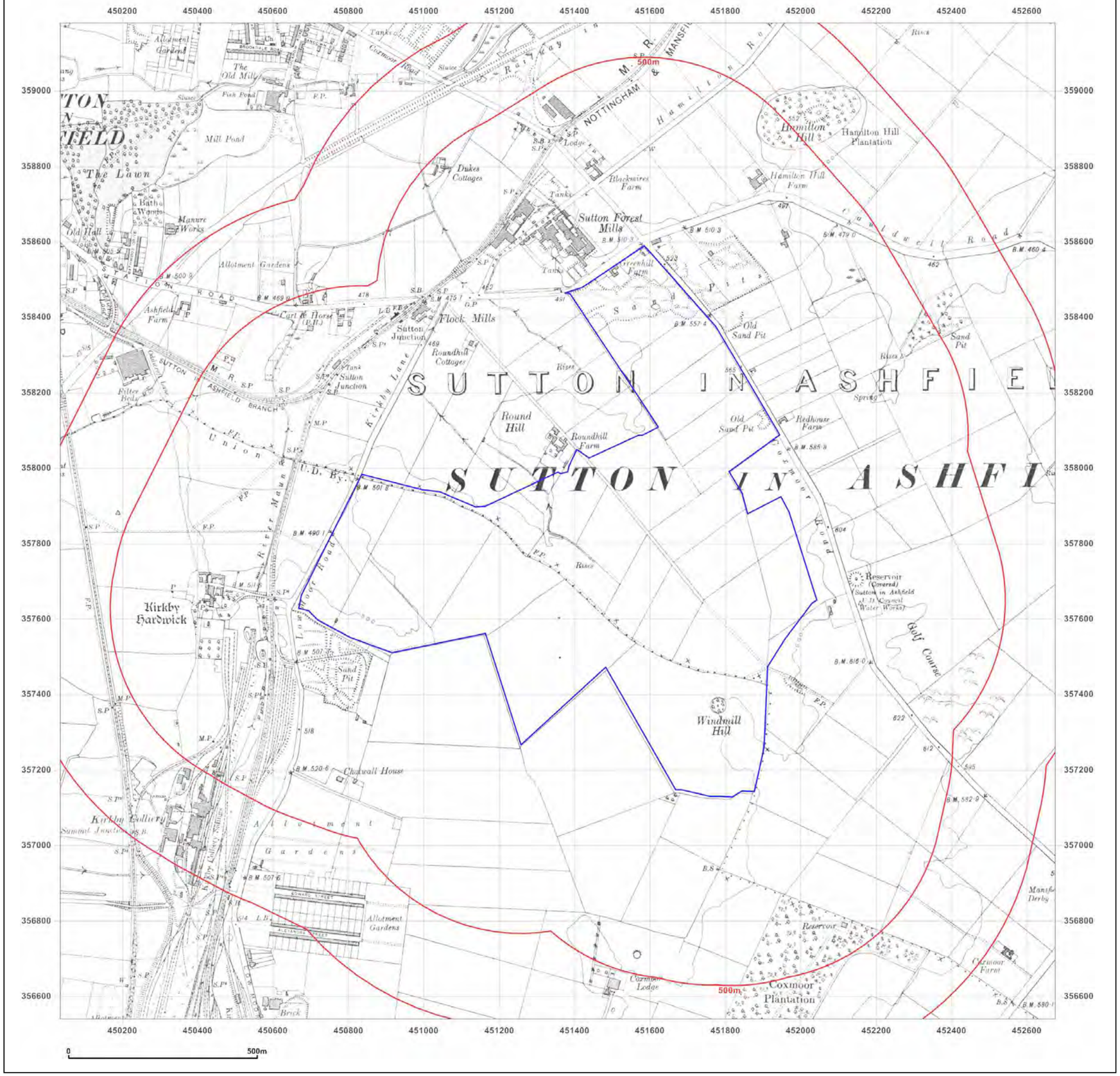

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Low Moor Rd,NG17 5JS

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Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: County Series

Map date: **1921**

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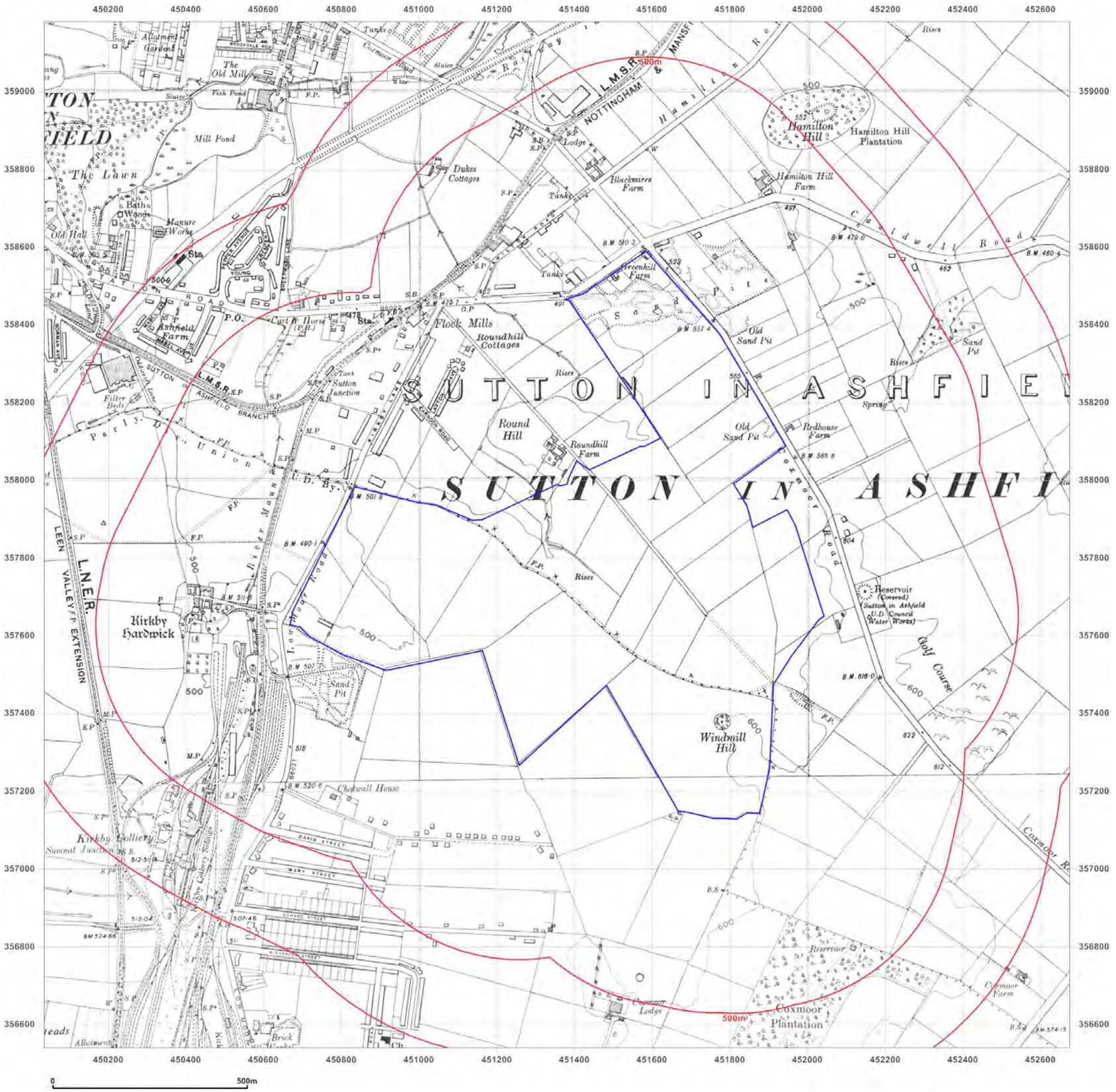

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Site Details:

Low Moor Rd,NG17 5JS

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Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: County Series

Map date: **1938**

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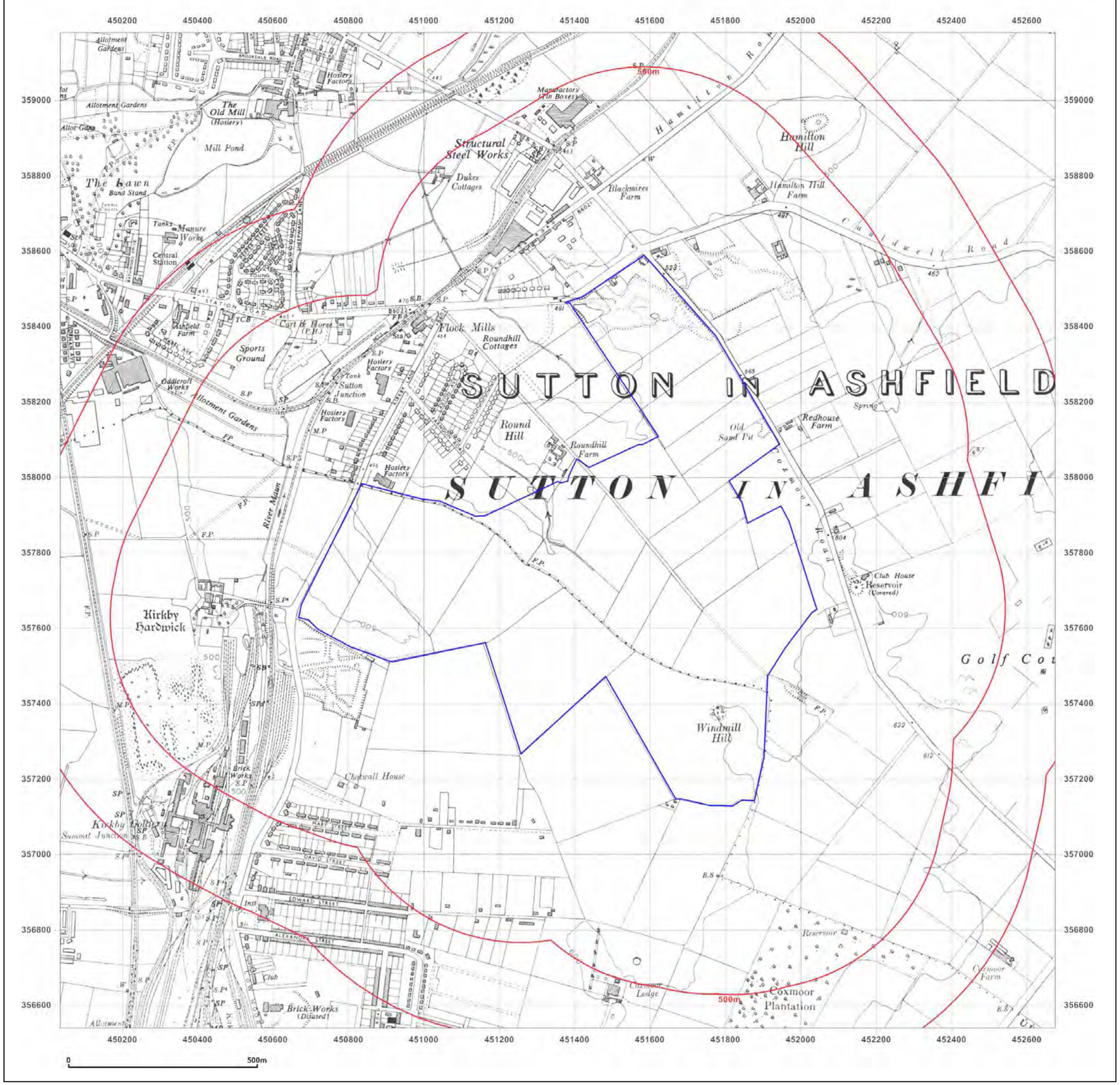

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Site Details:

Low Moor Rd,NG17 5JS

Client Ref: EMS_395724_529373
Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: Provisional

Map date: **1955**

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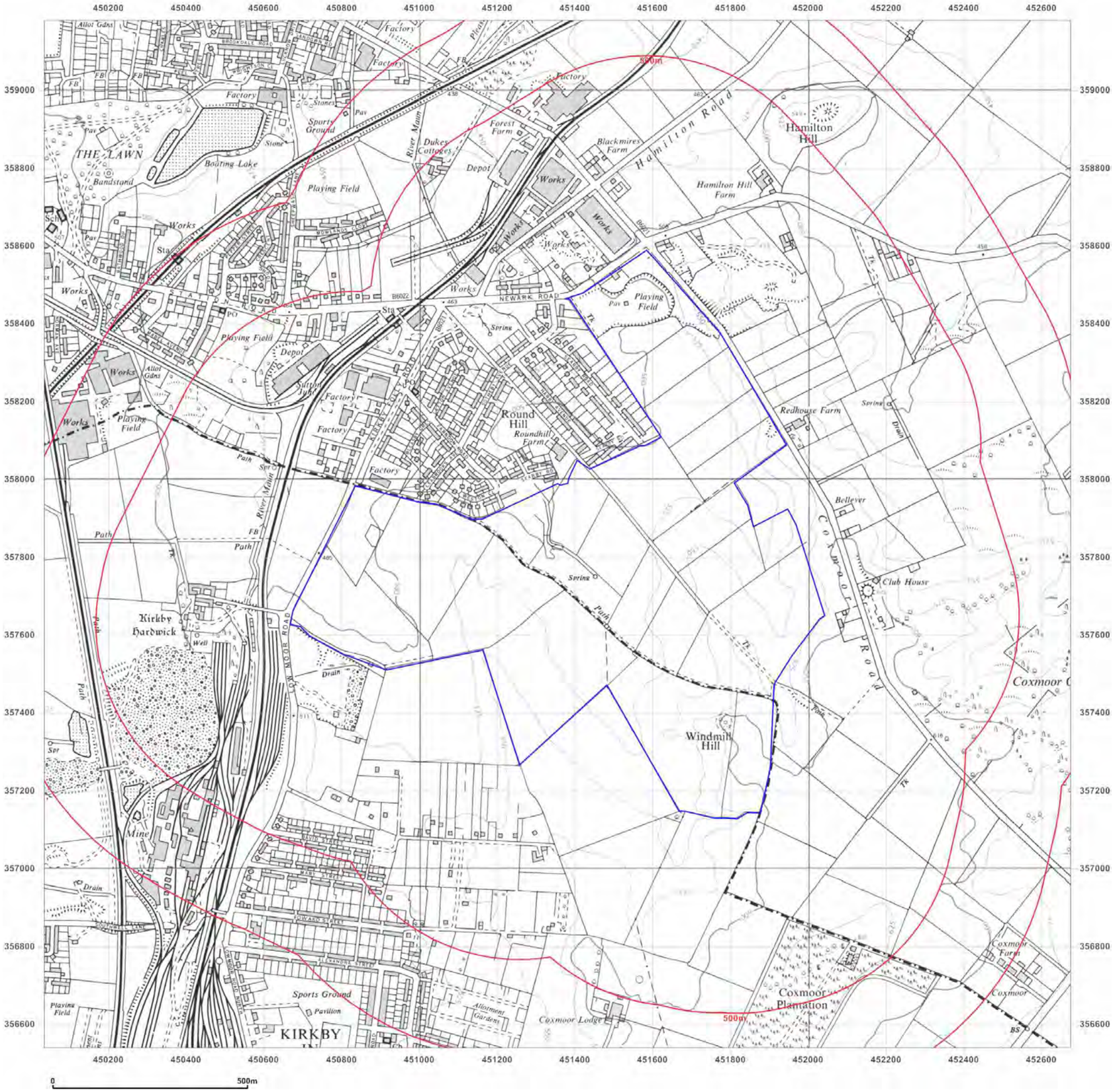
Production date: 01 December 2016

To view map legend click here *Legend*



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Site Details:

Low Moor Rd,NG17 5JS

Client Ref: EMS_395724_529373
Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: Provisional

Map date: **1967**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

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

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Production date: 01 December 2016

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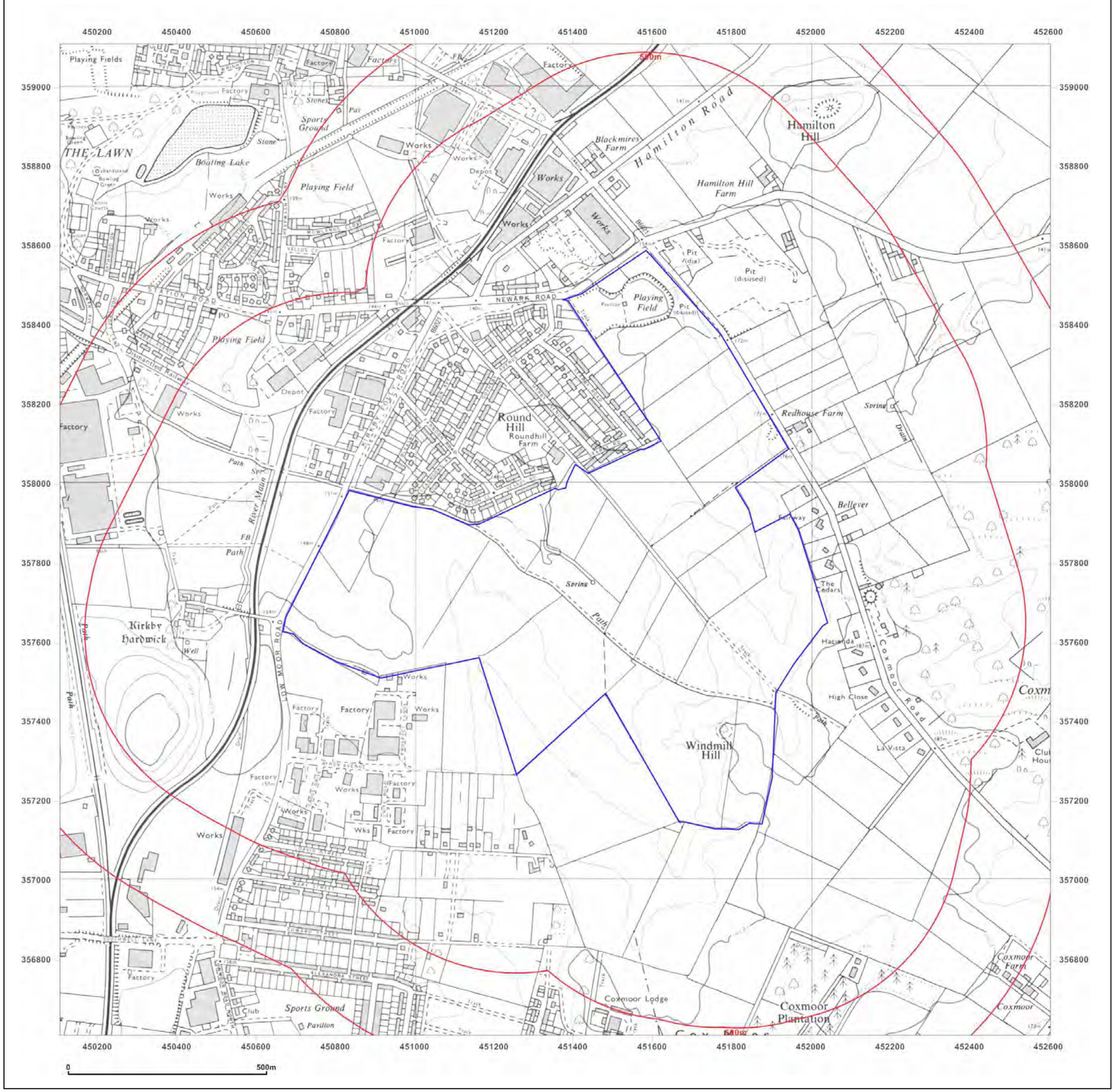

emapsite™

Site Details:

Low Moor Rd,NG17 5JS

Client Ref: EMS_395724_529373
Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: National Grid

Map date: **1974**

Scale: 1:10,000

Printed at: 1:10,000

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

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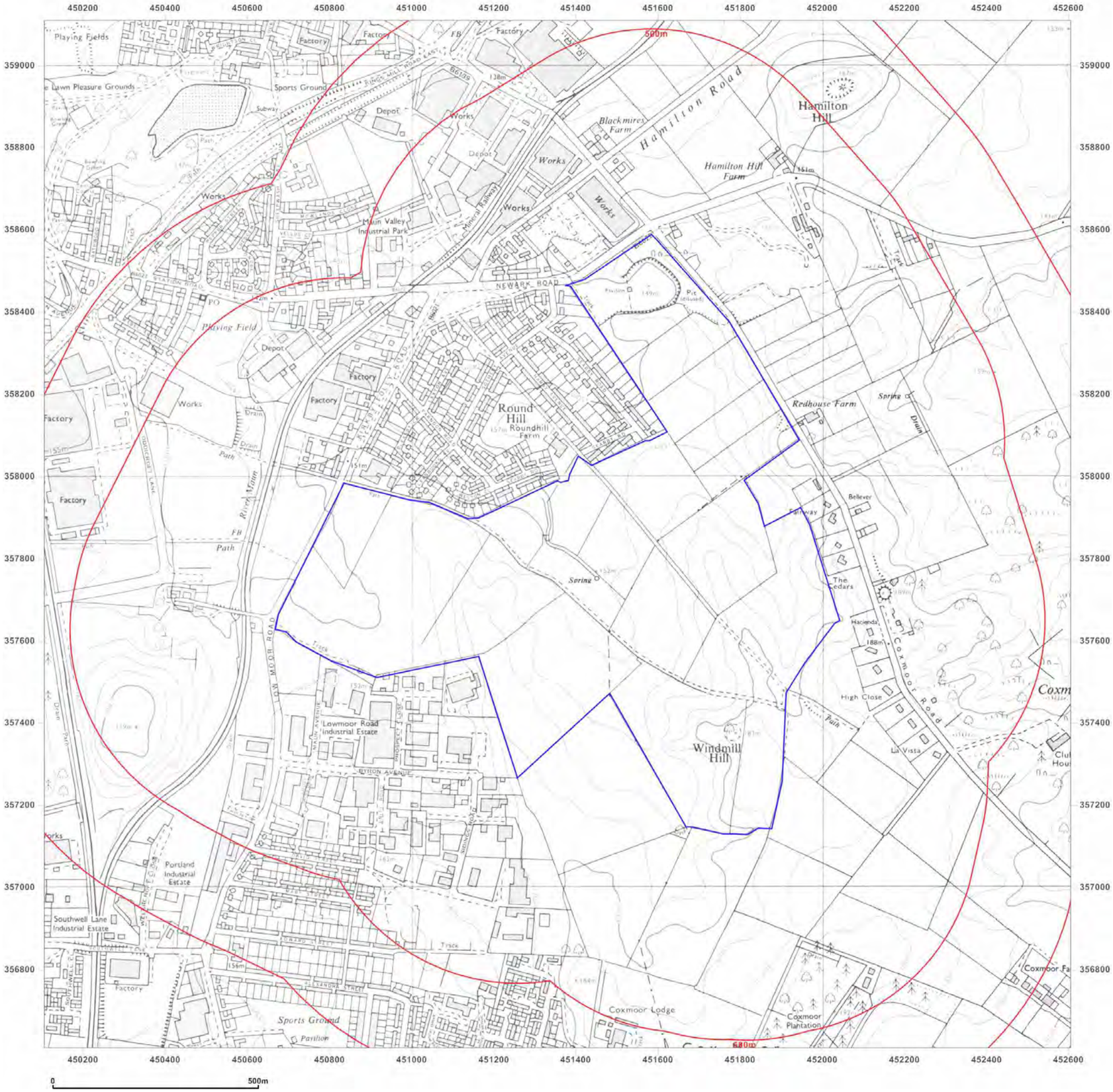
Production date: 01 December 2016

To view map legend click here *Legend*



emapsite™

Site Details:

Low Moor Rd,NG17 5JS

Client Ref: EMS_395724_529373
Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: National Grid

Map date: **1991**

Scale: 1:10,000

Printed at: 1:10,000

N
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Surveyed 1969
Revised 1991
Edition N/A
Copyright N/A
Levelled N/A

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Production date: 01 December 2016

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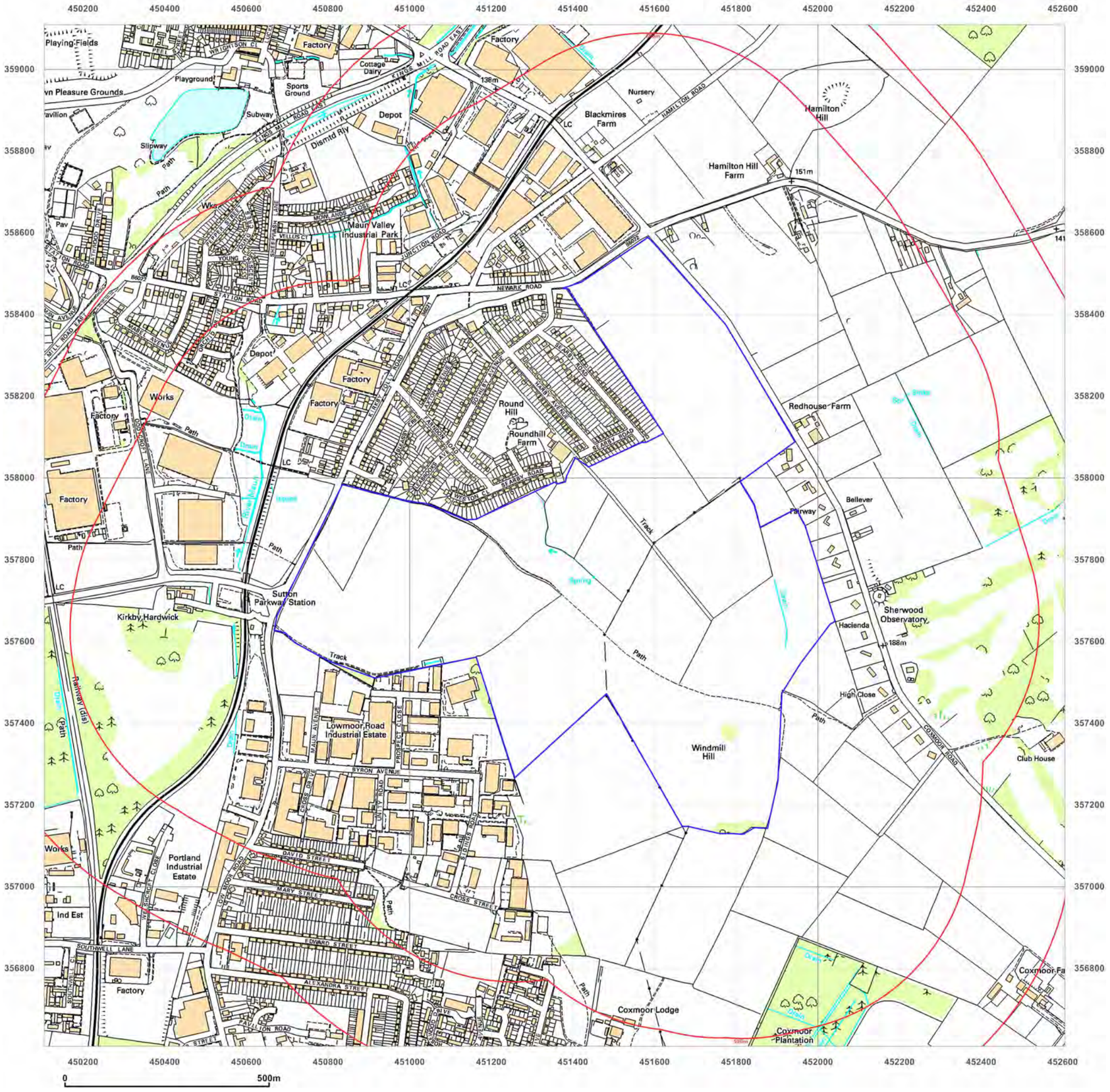

emapsite™

Site Details:

Low Moor Rd,NG17 5JS

Client Ref: EMS_395724_529373
Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: 1:10,000 Raster

Map date: **2002**

Scale: 1:10,000

Printed at: 1:10,000

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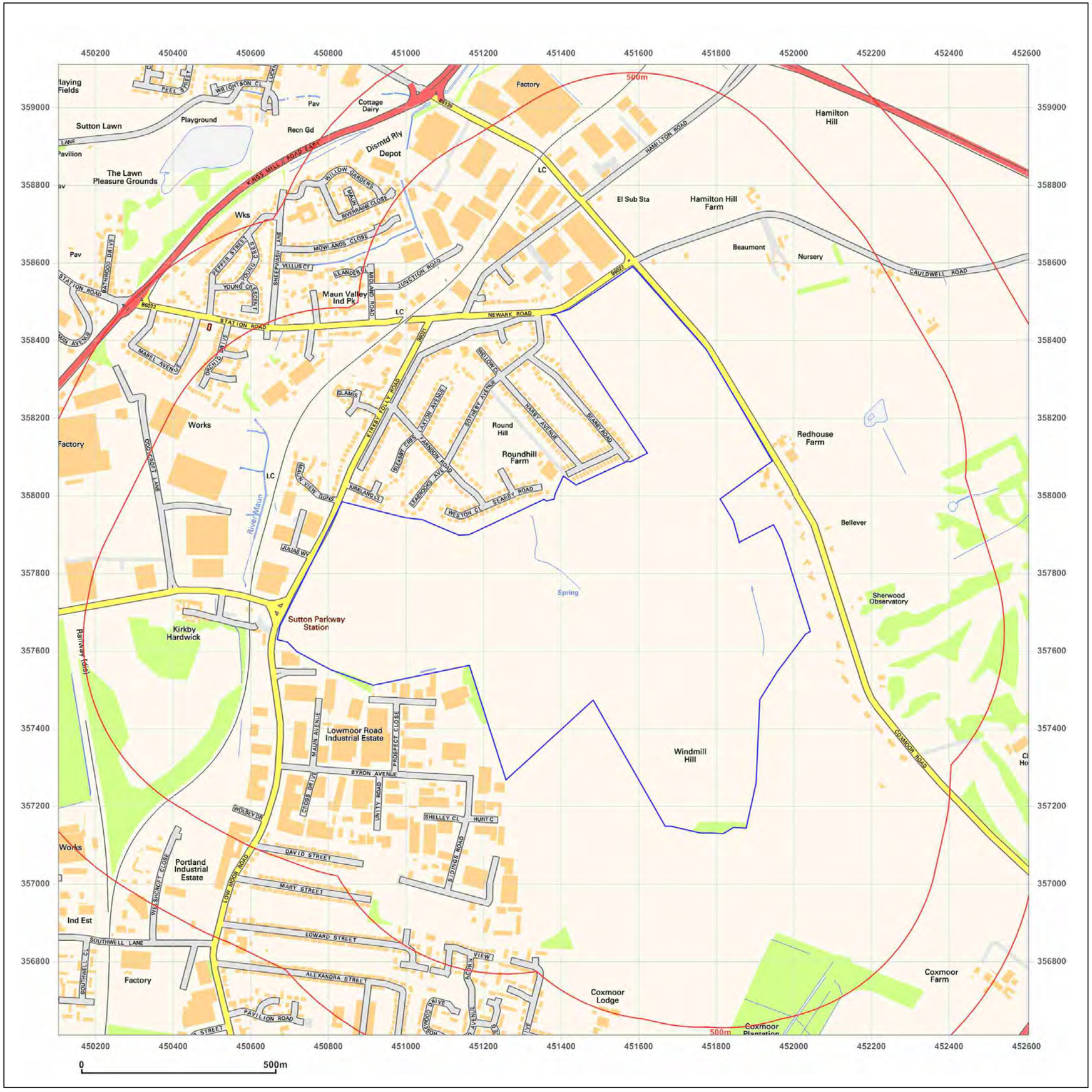
Production date: 01 December 2016

To view map legend click here *Legend*



emapsite™

Site Details:

Low Moor Rd,NG17 5JS

Client Ref: EMS_395724_529373
Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

N
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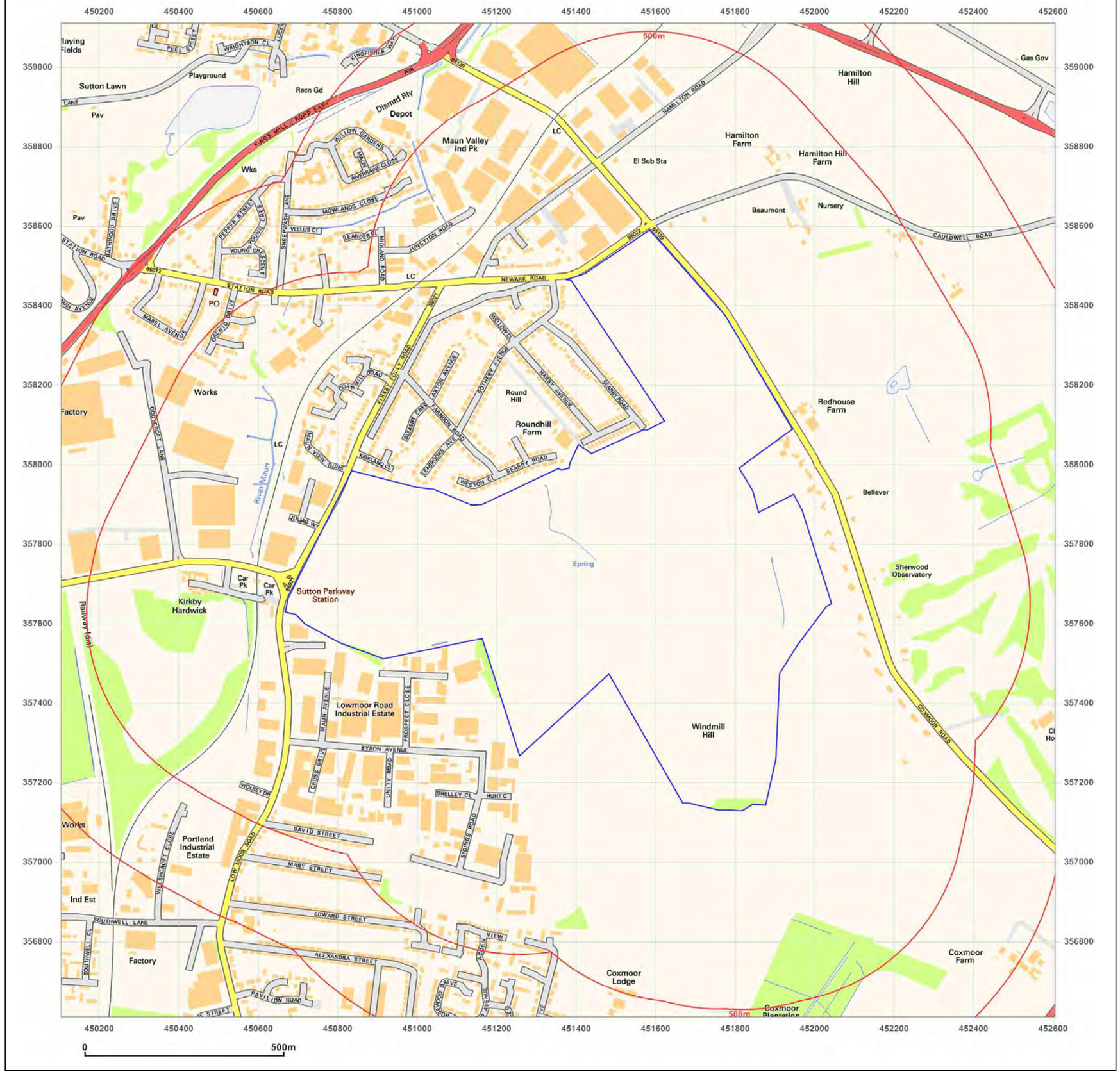
Production date: 01 December 2016

To view map legend click here *Legend*



emapsite™

Site Details:

Low Moor Rd,NG17 5JS

Client Ref: EMS_395724_529373
Report Ref: EMS-395724_529373
Grid Ref: 451354, 357859

Map Name: National Grid

Map date: **2014**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

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Production date: 01 December 2016

To view map legend click here *Legend*

Appendix E: GeoInsight Report

EmapSite

Masdar House, 1 Reading Road,
Eversley, RG27 0RP

Report Reference: EMS-395724_529374

Your Reference: EMS_395724_529374

Report Date 1 Dec 2016

Report Delivery Method: Email - pdf

Groundsure Geo Insight

Address: Low Moor Rd,NG17 5JS,

Dear Sir/ Madam,

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

If you would like further assistance regarding this report then please contact the emapsite customer services team on 0118 9736883 quoting the above report reference number.

Yours faithfully,

emapsite customer services team

Enc.
Groundsure Geoinsight

Groundsure Geo Insight

Address:	**Low Moor Rd,NG17 5JS,**
Date:	**1 Dec 2016**
Reference:	**EMS-395724_529374**
Client:	**EmapSite**

NW N NE

W E

SW S SE

Aerial Photograph Capture date:	12-Jul-2013
Grid Reference:	451479,357771
Site Size:	89.52ha

Groundsure
LOCATION INTELLIGENCE

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Contents Page

Overview of Findings

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

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

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

Section 1:Geology		
1.1 Artificial Ground	1.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	Yes
	1.1.2 Are there any records relating to permeability of artificial ground within the study site* boundary?	Yes
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?	Yes
	1.2.2 Are there any records relating to permeability of superficial geology within the study site boundary?	Yes
	1.2.3 Are there any records of landslip within 500m of the study site boundary?	No
	1.2.4 Are there any records relating to permeability of landslips within the study site boundary?	No
1.3 Bedrock, Solid Geology & Faults	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records relating to permeability of bedrock within the study site boundary?	Yes
	1.3.3 Are there any records of faults within 500m of the study site boundary?	Yes
1.4 Radon data	1.4.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level
	1.4.2 Is the property in an area where Radon Protection Measures are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary

Section 2:Ground Workings	On-site	0-50m	51-250	251-500	501-1000
2.1 Historical Surface Ground Working Features from Small Scale Mapping	19	34	30	Not Searched	Not Searched
2.2 Historical Underground Workings from Small Scale Mapping	0	2	1	2	0
2.3 Current Ground Workings	3	3	4	4	7

Section 3: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
3.1 Historical Mining	0	2	1	2	0
3.2 Coal Mining	1	0	0	0	0
3.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
3.4 Non-Coal Mining	0	0	0	0	0
3.5 Non-Coal Mining Cavities	0	0	0	0	0
3.6 Natural Cavities	0	0	0	0	0
3.7 Brine Extraction	0	0	0	0	0
3.8 Gypsum Extraction	0	0	0	0	0
3.9 Tin Mining	0	0	0	0	0
3.10 Clay Mining	0	0	0	0	0

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

Section 5: Borehole Records	On-site	0-50m	51-250
5 BGS Recorded Boreholes	0	1	18

Section 6: Estimated Background Soil Chemistry	On-site	0-50m	51-250
6 Records of Background Soil Chemistry	44	14	58

Section 7: Railways and Tunnels	On-site	0-50m	51-250	251-500
7.1 Tunnels	0	0	0	Not Searched
7.2 Historical Railway and Tunnel Features	0	9	63	Not Searched
7.3 Historical Railways	0	0	1	Not Searched
7.4 Active Railways	0	0	5	Not Searched

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

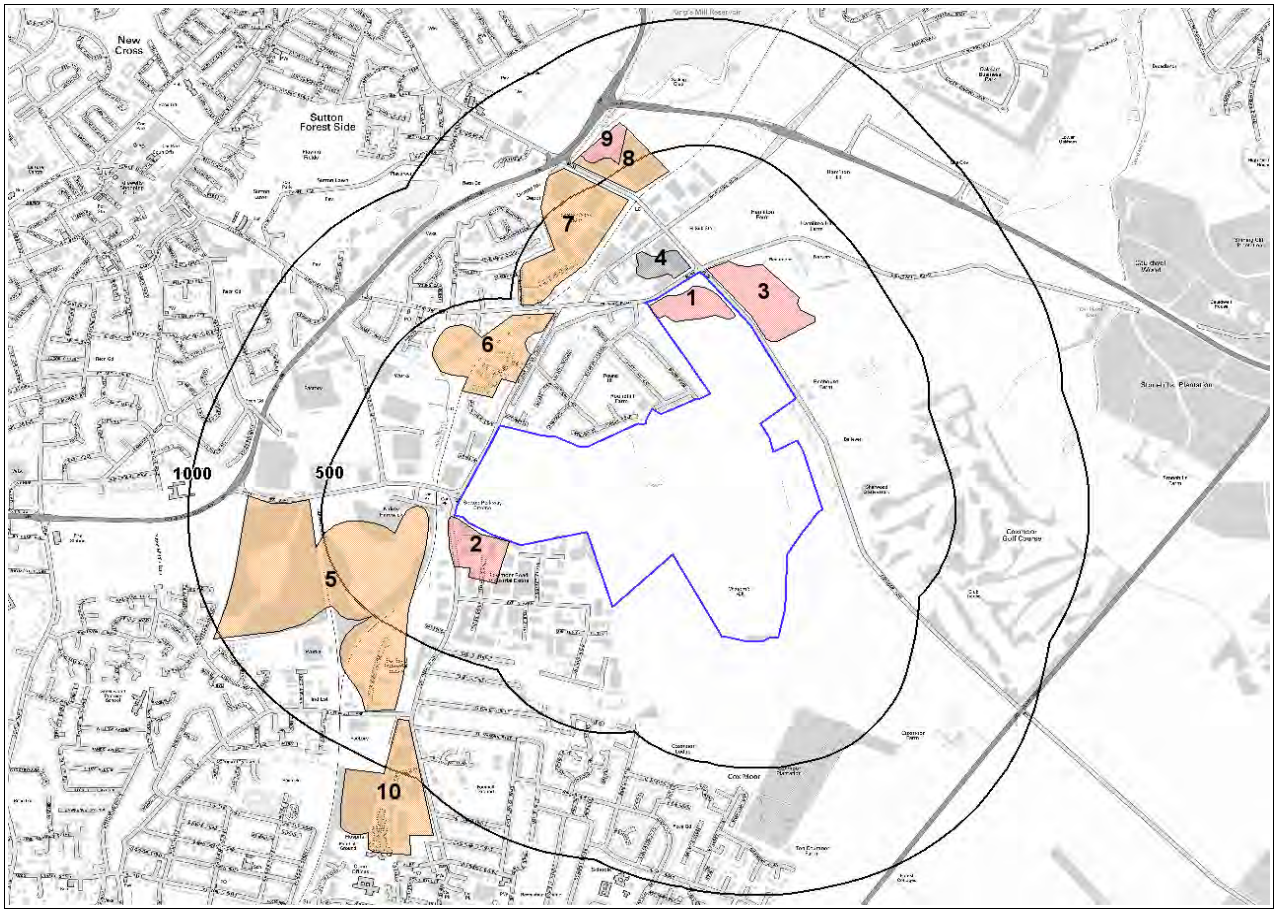
1 Geology

1.1 Artificial Ground Map

NW N NE

W E

SW S SE



Artificial Ground Legend

Site Outline

500
1000
Search Buffers (m)

Made Ground (undivided)

Worked Ground (undivided)

Infilled Ground

Disturbed Ground (undivided)

Landscaped Ground (undivided)

Reclaimed Ground

1 Geology

1.1 Artificial Ground

1.1.1 Artificial/ Made Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:112

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

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT
2	1.0	S	WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT
3	21.0	NE	WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT
4	32.0	NW	WGR-OPEN	WORKED GROUND (UNDIVIDED)	VOID
5	103.0	W	MGR-MGRD	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
6	115.0	N	MGR-MGRD	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
7	272.0	NW	MGR-MGRD	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
8	396.0	NW	MGR-MGRD	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

1.1.2 Permeability of Artificial Ground

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

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

1.2 Superficial Deposits and Landslips Map

NW N NE

W E

SW S SE

Superficial Deposits and Landslips Legend

Site Outline

500
1000
Search Buffers (m)

1.2 Superficial Deposits and Landslips

1.2.1 Superficial Deposits/ Drift Geology

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

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	HEAD	HEAD	DIAMICTON
2	0.0	On Site	GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
3	0.0	On Site	GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
4	0.0	On Site	HEAD	HEAD	DIAMICTON
5	0.0	On Site	GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
6	0.0	On Site	GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
7	0.0	On Site	GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
8	0.0	On Site	HEAD	HEAD	DIAMICTON
9	9.0	SE	GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
10	24.0	SE	TILMP	TILL, MID PLEISTOCENE	DIAMICTON
11	126.0	S	GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
12	127.0	NW	GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
13	339.0	SW	GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]

1.2.2 Permeability of Superficial Ground

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

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

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

1.2.3 Landslip

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

Database searched and no data found.

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

1.2.4 Landslip Permeability

Are there any records relating to permeability of landslips within the study site* boundary? No

Database searched and no data found.

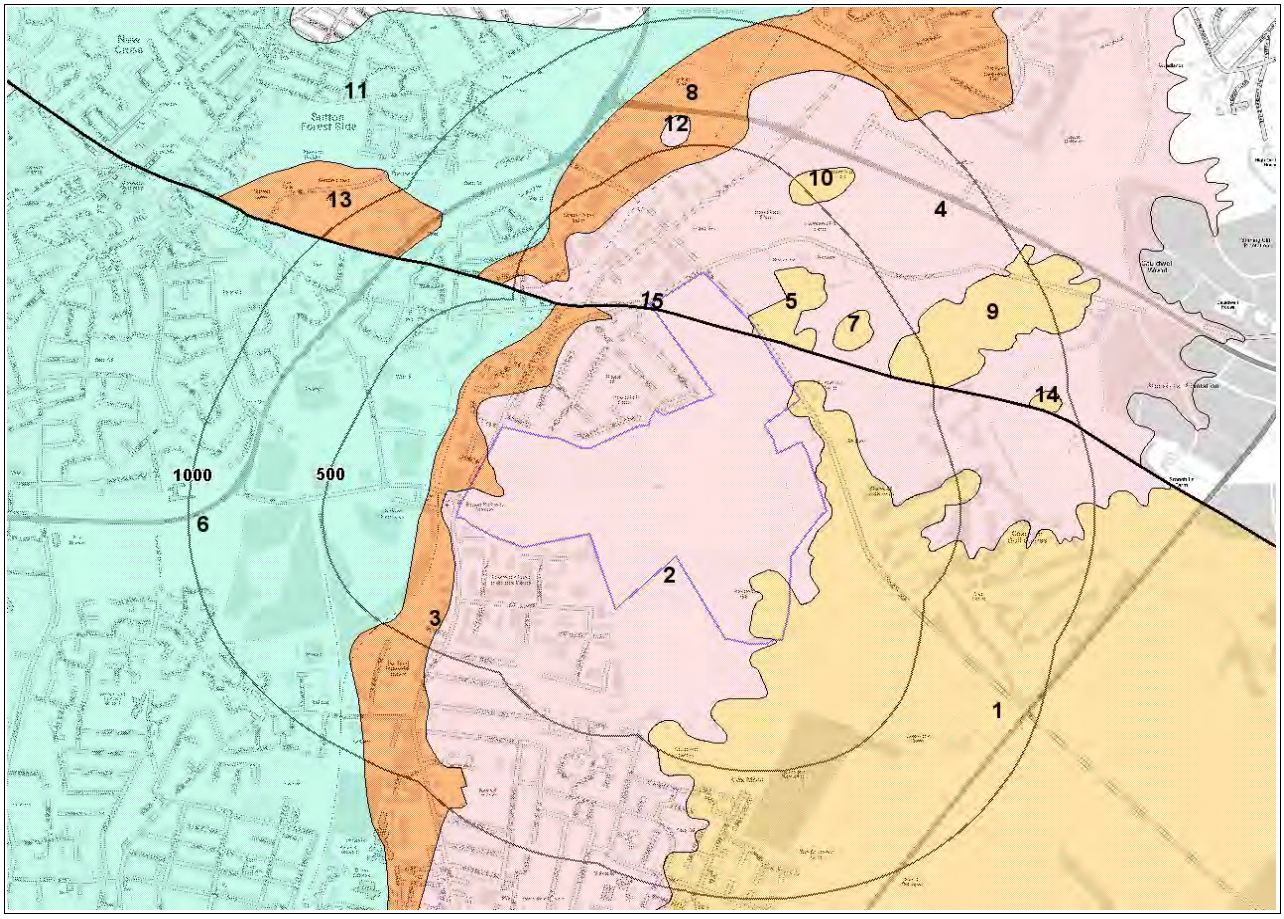
* This includes an automatically generated 50m buffer zone around the site

1.3 Bedrock and Faults Map

NW N NE

W E

SW S SE



Bedrock and Faults Legend

Site Outline

500
1000
Search Buffers (m)

1.3 Bedrock, Solid Geology & Faults

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:112

1.3.1 Bedrock/ Solid Geology

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

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
1	0.0	On Site	NTC-SDST	Nottingham Castle Sandstone Formation - Sandstone	No Details
2	0.0	On Site	LNS-SDST	Lenton Sandstone Formation - Sandstone	No Details
3	0.0	On Site	EDT-MDSD	Edlington Formation - Mudstone And Sandstone	No Details
4	0.0	On Site	LNS-SDST	Lenton Sandstone Formation - Sandstone	No Details
5	0.0	On Site	NTC-SDST	Nottingham Castle Sandstone Formation - Sandstone	No Details
6	128.0	W	CDF-DOLO	Cadeby Formation - Dolostone	No Details
7	217.0	NE	NTC-SDST	Nottingham Castle Sandstone Formation - Sandstone	No Details
8	309.0	W	EDT-MDSD	Edlington Formation - Mudstone And Sandstone	No Details
9	352.0	E	NTC-SDST	Nottingham Castle Sandstone Formation - Sandstone	No Details
10	433.0	NE	NTC-SDST	Nottingham Castle Sandstone Formation - Sandstone	No Details
11	462.0	NW	CDF-DOLO	Cadeby Formation - Dolostone	No Details

1.3.2 Permeability of Bedrock Ground

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

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

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

1.3.3 Faults

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

ID	Distance (m)	Direction	Category Description	Feature Description
15	0.0	On Site	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres

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

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

1.4 Radon Data

1.4.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level

---

1.4.2 Radon Protection

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

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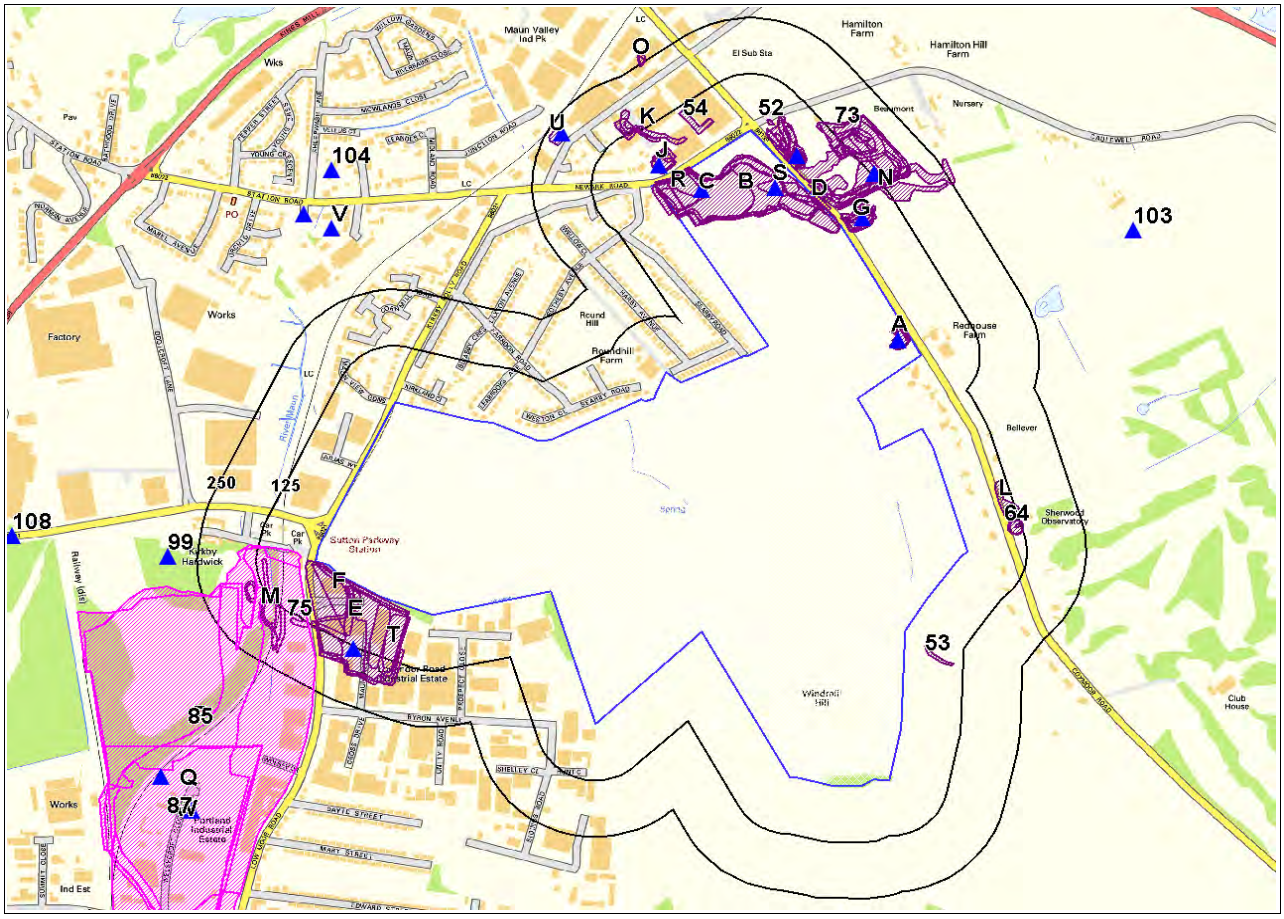
2 Ground Workings Map

NW N NE

W E

SW S SE



Ground Workings Legend

Site Outline

125
250
Search Buffers (m)

Historic Surface Ground Workings

Historic Underground Workings

Current Ground Workings

2 Ground Workings

2.1 Historical Surface Ground Working Features derived from Historical Mapping

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

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

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

ID	Distance (m)	Direction	NGR	Use	Date
1A	0.0	On Site	451897 358127	Sand Pit	1878
2A	0.0	On Site	451901 358130	Unspecified Pit	1974
3A	0.0	On Site	451901 358130	Unspecified Pit	1967
4A	0.0	On Site	451901 358130	Old Sand Pit	1950
5B	0.0	On Site	451533 358453	Unspecified Pits	1967
6B	0.0	On Site	451575 358447	Refuse Heap	1950
7B	0.0	On Site	451530 358454	Unspecified Disused Pit	1974
8B	0.0	On Site	451530 358454	Unspecified Disused Pit	1991
9C	0.0	On Site	451491 358444	Sand Pit	1898
10B	0.0	On Site	451556 358453	Sand Pits	1938
11R	0.0	On Site	451434 358447	Sand Pit	1878
12D	0.0	On Site	451729 358429	Cuttings	1878
13C	0.0	On Site	451435 358434	Pond	1950
14D	0.0	On Site	451712 358429	Sand Pit	1898
15S	0.0	On Site	451642 358465	Sand Pit	1878
16A	0.0	On Site	451900 358126	Old Sand Pit	1921
17A	0.0	On Site	451901 358130	Unspecified Pit	1991
18A	0.0	On Site	451901 358133	Old Sand Pit	1938
19C	0.0	On Site	451556 358448	Sand Pits	1921
20E	1.0	SW	450755 357499	Sand Pit	1938

ID	Distance (m)	Direction	NGR	Use	Date
21F	3.0	SW	450703 357544	Unspecified Pit	1898
22E	5.0	S	450765 357468	Unspecified Ground Workings	1950
23F	10.0	SW	450747 357547	Unspecified Heap	1967
24I	10.0	NE	451900 358517	Sand Pits	1921
25G	11.0	NE	451814 358388	Old Sand Pit	1921
26G	11.0	NE	451814 358387	Unspecified Pit	1950
27G	12.0	NE	451805 358395	Sand Pit	1898
28H	12.0	NE	451656 358533	Sand Pit	1878
29E	12.0	SW	450766 357462	Sand Pit	1921
30H	13.0	NE	451658 358553	Sand Pits	1898
31E	14.0	SW	450751 357474	Sand Pit	1878
32I	14.0	NE	451858 358471	Refuse Heap	1950
33H	14.0	NE	451752 358468	Sand Pits	1898
34H	14.0	NE	451695 358524	Unspecified Ground Workings	1921
35G	14.0	NE	451806 358407	Sand Pit	1878
36G	14.0	NE	451812 358385	Unspecified Pit	1991
37H	16.0	NE	451689 358525	Unspecified Pit	1950
38E	16.0	S	450801 357461	Sand Pit	1898
39G	17.0	NE	451840 358395	Old Sand Pit	1938
40H	17.0	NE	451663 358569	Unspecified Disused Pit	1974
41H	17.0	NE	451663 358569	Unspecified Quarry	1967
42H	18.0	NE	451657 358589	Sand Pits	1938
43I	19.0	NE	451904 358523	Sand Pits	1938
44J	19.0	N	451400 358512	Sand Pit	1878
45H	21.0	NE	451658 358571	Sand Pits	1921
46N	21.0	NE	451884 358446	Unspecified Ground Workings	1967
47J	23.0	N	451402 358522	Ponds	1898
48T	23.0	S	450834 357432	Refuse Heap	1967

ID	Distance (m)	Direction	NGR	Use	Date
49H	24.0	NE	451669 358568	Refuse Heap	1950
50P	34.0	W	450416 356873	Colliery	1950
51J	37.0	NW	451402 358538	Unspecified Pit	1950
52	37.0	NE	451627 358606	Sand Pits	1898
53	42.0	E	451968 357420	Unspecified Ground Workings	1921
54	53.0	NW	451460 358607	Filter Beds	1898
55K	57.0	NW	451318 358595	Unspecified Ground Workings	1974
56K	57.0	NW	451318 358595	Unspecified Ground Workings	1967
57K	57.0	NW	451318 358595	Unspecified Ground Workings	1991
58I	72.0	NE	451812 358532	Sand Pits	1898
59K	85.0	NW	451327 358580	Unspecified Ground Workings	1950
60L	96.0	E	452110 357770	Unspecified Pit	1950
61L	97.0	E	452142 357706	Covered Reservoir	1898
62L	97.0	E	452142 357706	Covered Reservoir	1938
63I	97.0	NE	451772 358540	Unspecified Ground Workings	1950
64	101.0	E	452145 357705	Covered Reservoir	1921
65M	104.0	W	450556 357533	Fish Ponds	1878
66M	112.0	SW	450569 357522	Pond	1938
67E	113.0	SW	450694 357472	Cuttings	1878
68L	114.0	E	452147 357709	Covered Reservoir	1950
69K	114.0	NW	451320 358592	Unspecified Pit	1878
70M	115.0	SW	450580 357487	Pond	1898
71M	119.0	SW	450568 357509	Pond	1921
72I	119.0	NE	451805 358563	Unspecified Heap	1967
73	121.0	NE	451788 358590	Cuttings	1921
74I	123.0	NE	451834 358528	Sand Pit	1878
75	124.0	SW	450631 357494	Cuttings	1878
76Q	127.0	SW	450394 356957	Colliery	1921

ID	Distance (m)	Direction	NGR	Use	Date
77M	136.0	W	450531 357566	Pond	1938
78M	139.0	SW	450531 357558	Pond	1921
79M	143.0	W	450529 357561	Pond	1878
80N	159.0	NE	451903 358495	Unspecified Heap	1967
81U	210.0	NW	451176 358573	Sand Pit	1878
82O	246.0	NW	451352 358743	Unspecified Heap	1921
83O	249.0	NW	451351 358750	Unspecified Heap	1938

2.2 Historical Underground Working Features derived from Historical Mapping

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

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

The following Historical Underground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
84P	34.0	W	450416 356873	Colliery	1950
85	37.0	W	450423 357238	Unspecified Mine	1967
86Q	127.0	SW	450394 356957	Colliery	1921
87	412.0	SW	450398 357033	Colliery	1938
88W	413.0	SW	450398 357033	Colliery	1898

2.3 Current Ground Workings

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

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

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

ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
89R	0.0	On Site	451480 358455	Sand	Forest Lane Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
90S	0.0	On Site	451635 358460	Sand	Redhouse Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
91A	0.0	On Site	451895 358120	Sand	Coxmoor Road Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
92H	32.0	NE	451680 358530	Sand	Forest Lane Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
93J	38.0	N	451390 358510	Sand	Forest Lane Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
94G	48.0	NE	451820 358392	Sand	Forest Lane Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
95N	129.0	NE	451845 358490	Sandstone	Sutton	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
96N	129.0	NE	451845 358490	Sandstone	Sutton	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
97T	131.0	SW	450745 357435	Silica Sand	Kirkby Hardwick Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
98U	221.0	NW	451185 358580	Sand	Blackmires Lane Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
99	312.0	W	450355 357640	Coal, Deep	Staple Pit	Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)	Ceased
Not shown	337.0	NW	451390 358865	Sand	Blackmires Farm Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
101V	409.0	N	450700 358370	Dolomite	Forest Lane	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
102V	459.0	NW	450640 358400	Dolomite	Forest Lane	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
103	525.0	NE	452390 358365	Sand	Caudwell Road Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased

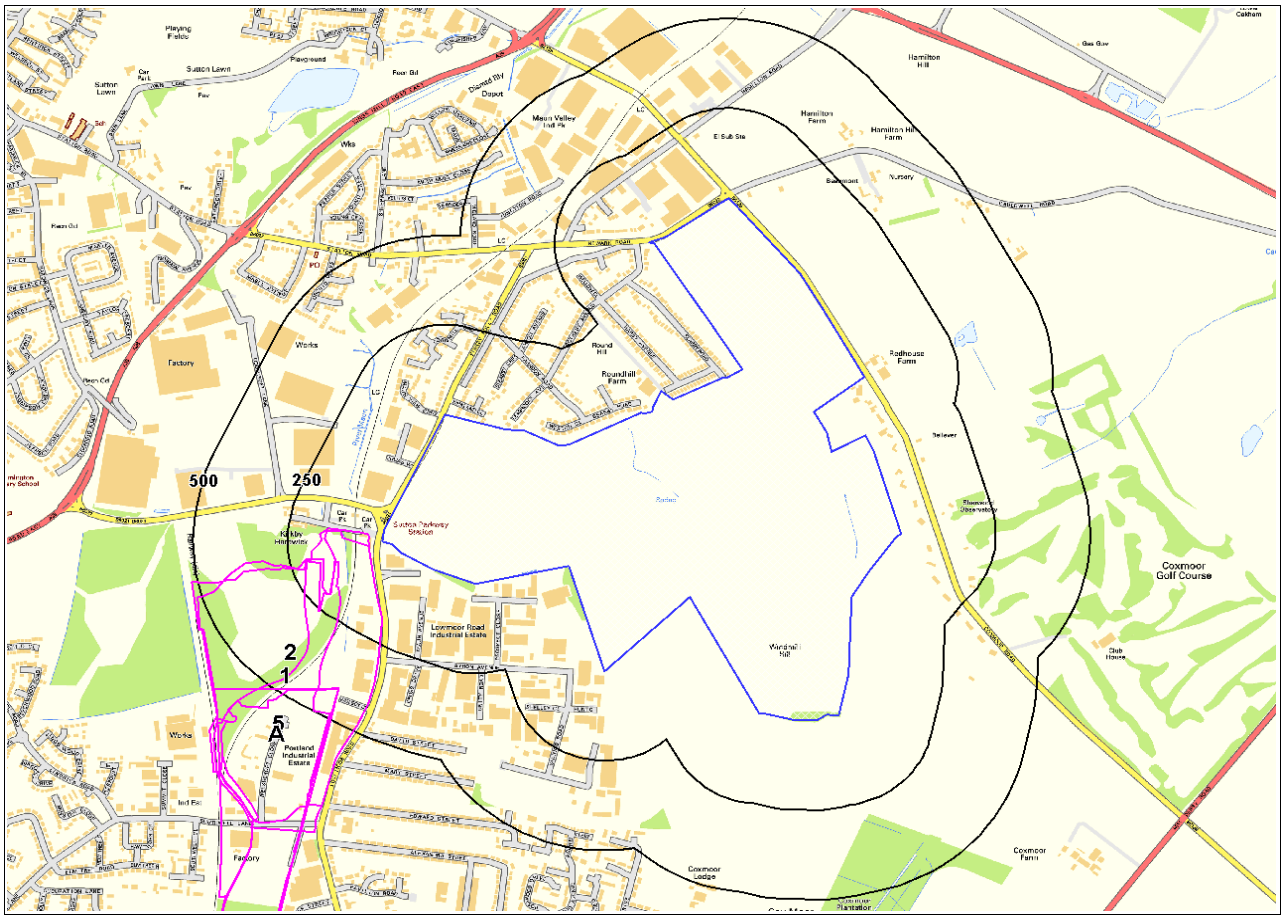
ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
104	533.0	N	450700 358500	Dolomite	Cart & Horses	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
105P	580.0	SW	450340 357150	Coal, Deep	Kirkby Colliery	Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)	Ceased
Not shown	603.0	NW	451240 359085	Clay & Shale	King's Mill Clay Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
107W	610.0	SW	450405 357075	Coal, Deep	Kirkby Colliery	Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)	Ceased
108	644.0	W	450025 357685	Dolomite	Kirkby Hardwick	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	942.0	SW	450640 356555	Clay & Shale	Low Moor Road Brickworks	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased

3 Mining, Extraction & Natural Cavities Map

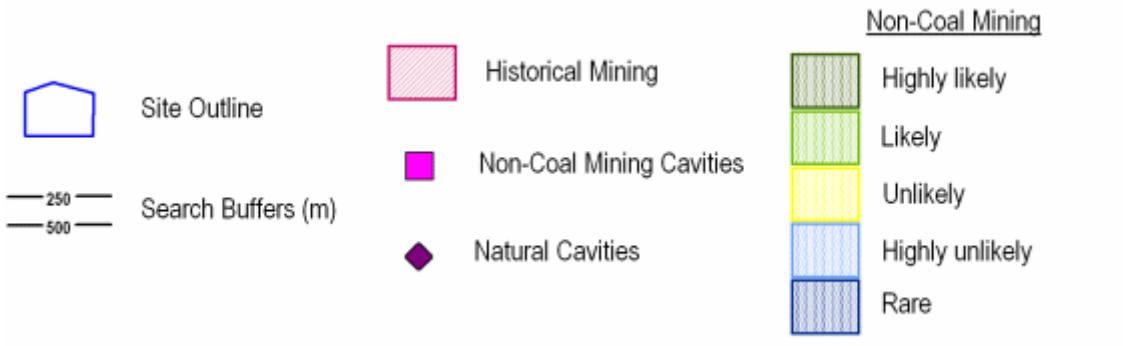
NW N NE

W E

SW S SE



Mining, Extraction and Natural Cavities Legend



3 Mining, Extraction & Natural Cavities

3.1 Historical Mining

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

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

The following Historical Mining information is provided by Groundsure:

ID	Distance (m)	Direction	NGR	Details	Date
1	34.0	W	450416 356873	Colliery	1950
2	37.0	W	450423 357238	Unspecified Mine	1967
3A	127.0	SW	450394 356957	Colliery	1921
4A	412.0	SW	450398 357033	Colliery	1938
5	413.0	SW	450398 357033	Colliery	1898

3.2 Coal Mining

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

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

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

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

3.3 Johnson Poole and Bloomer

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

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

The following information provided by JPB is not represented on mapping: Database searched and no data found.

3.4 Non-Coal Mining

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

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

Database searched and no data found.

3.5 Non-Coal Mining Cavities

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

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

Database searched and no data found.

3.6 Natural Cavities

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

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

Database searched and no data found.

3.7 Brine Extraction

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

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

Database searched and no data found.

3.8 Gypsum Extraction

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

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

Database searched and no data found.

3.9 Tin Mining

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

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

Database searched and no data found.

3.10 Clay Mining

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

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

Database searched and no data found.

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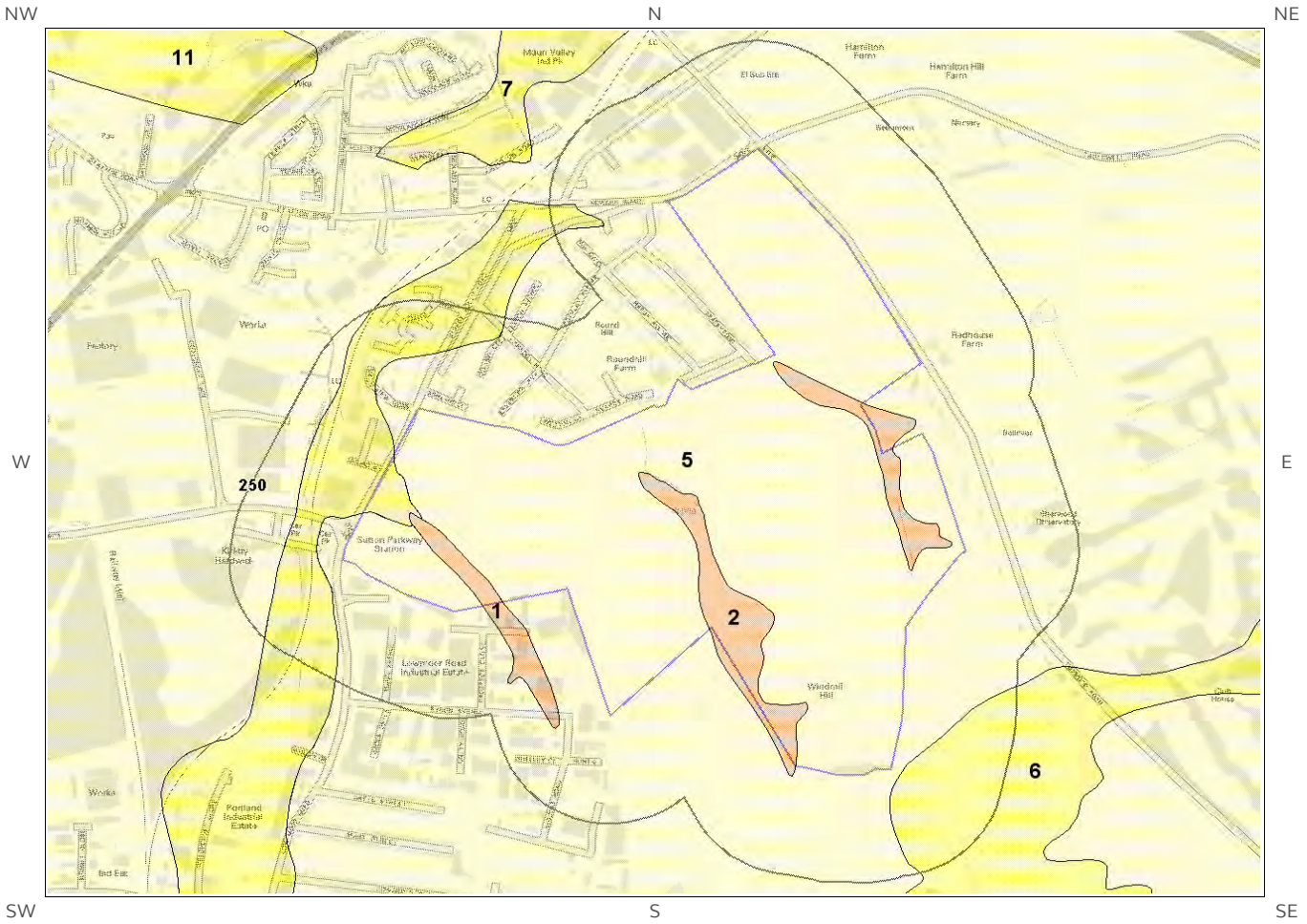
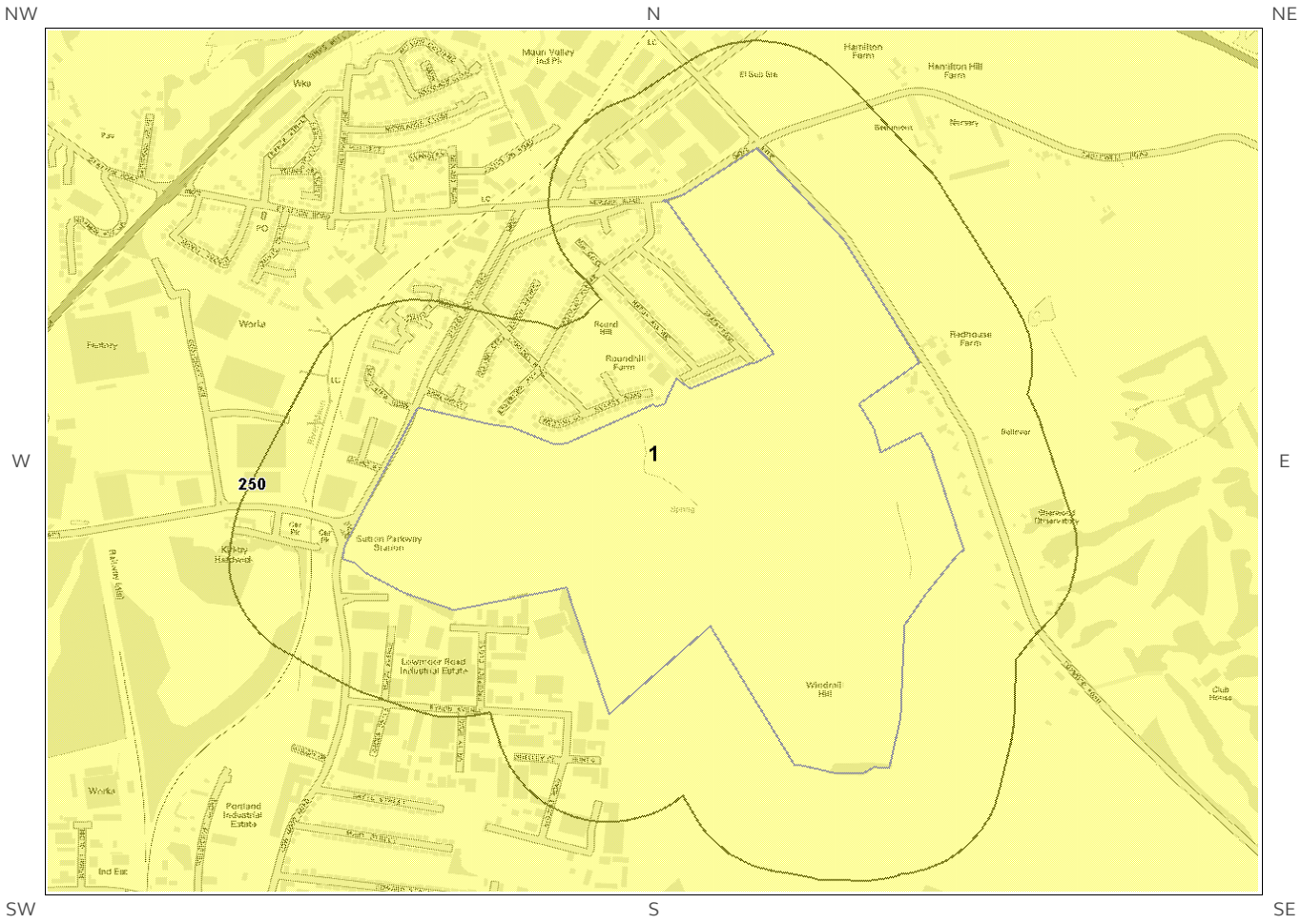
4 Natural Ground Subsidence

4.1 Shrink-Swell Clay Map



Shrink Swell Clay Legend

4.2 Landslides Map



Landslides Legend

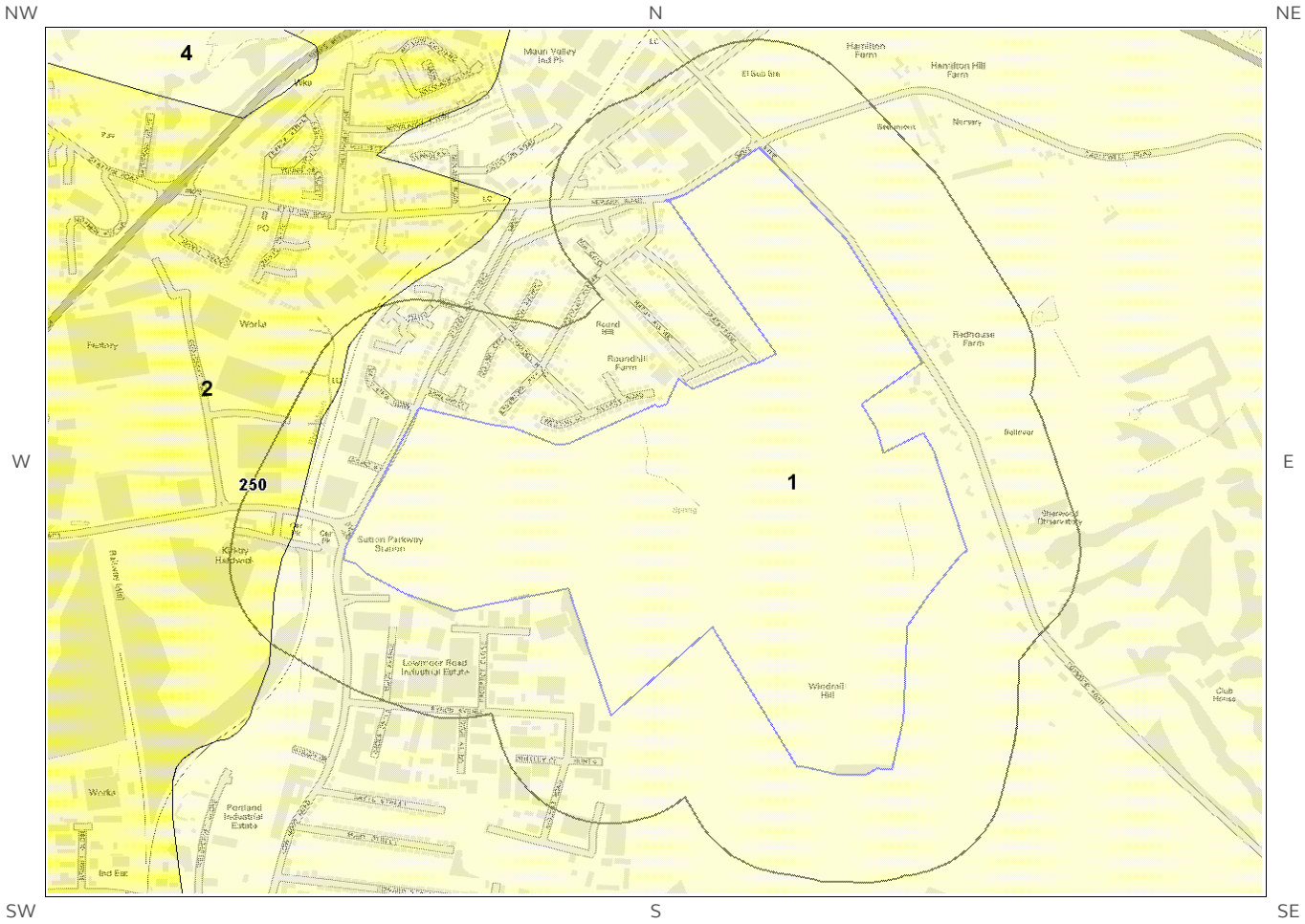
Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

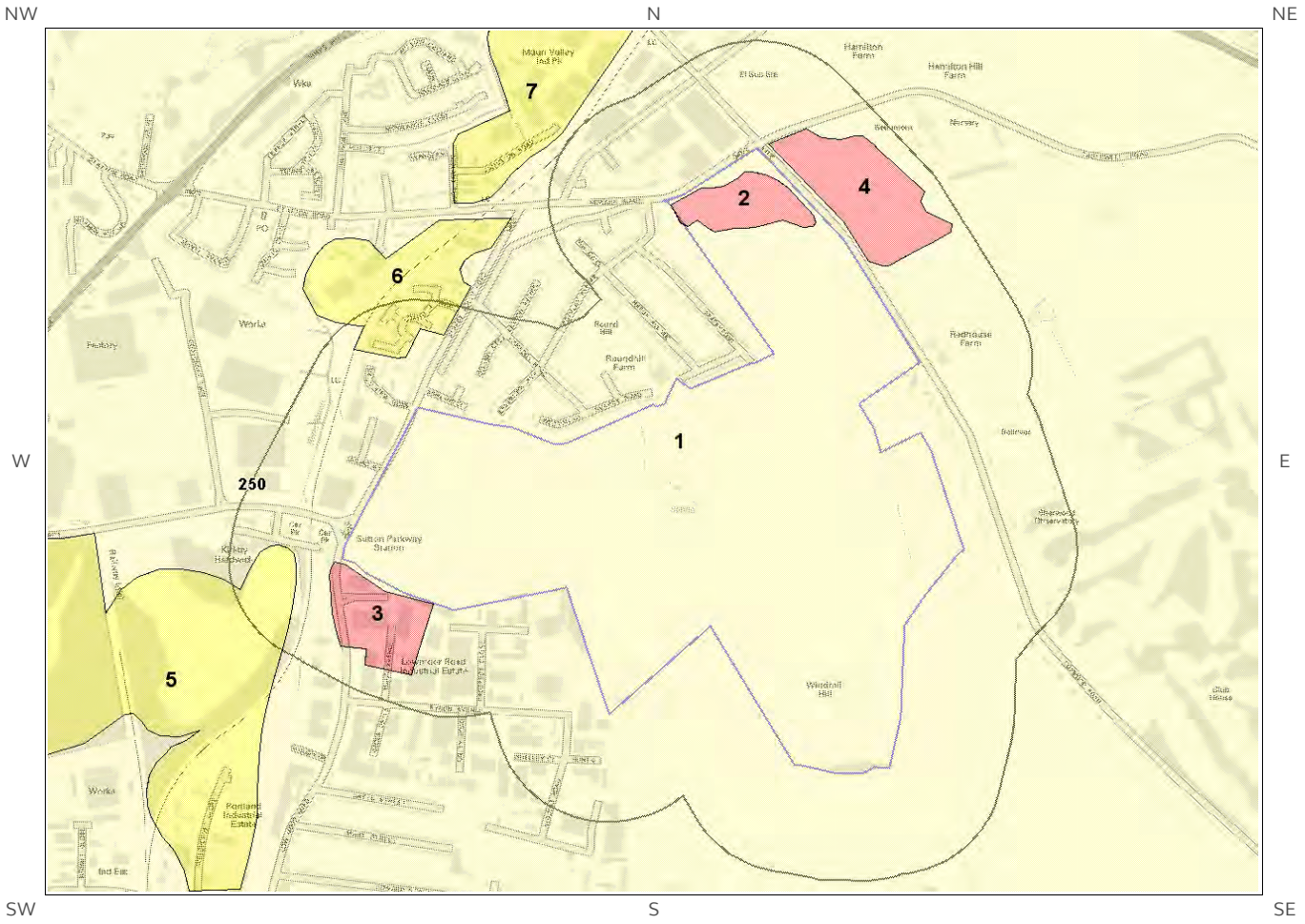
Low
Moderate
High

4.3 Ground Dissolution Soluble Rocks Map



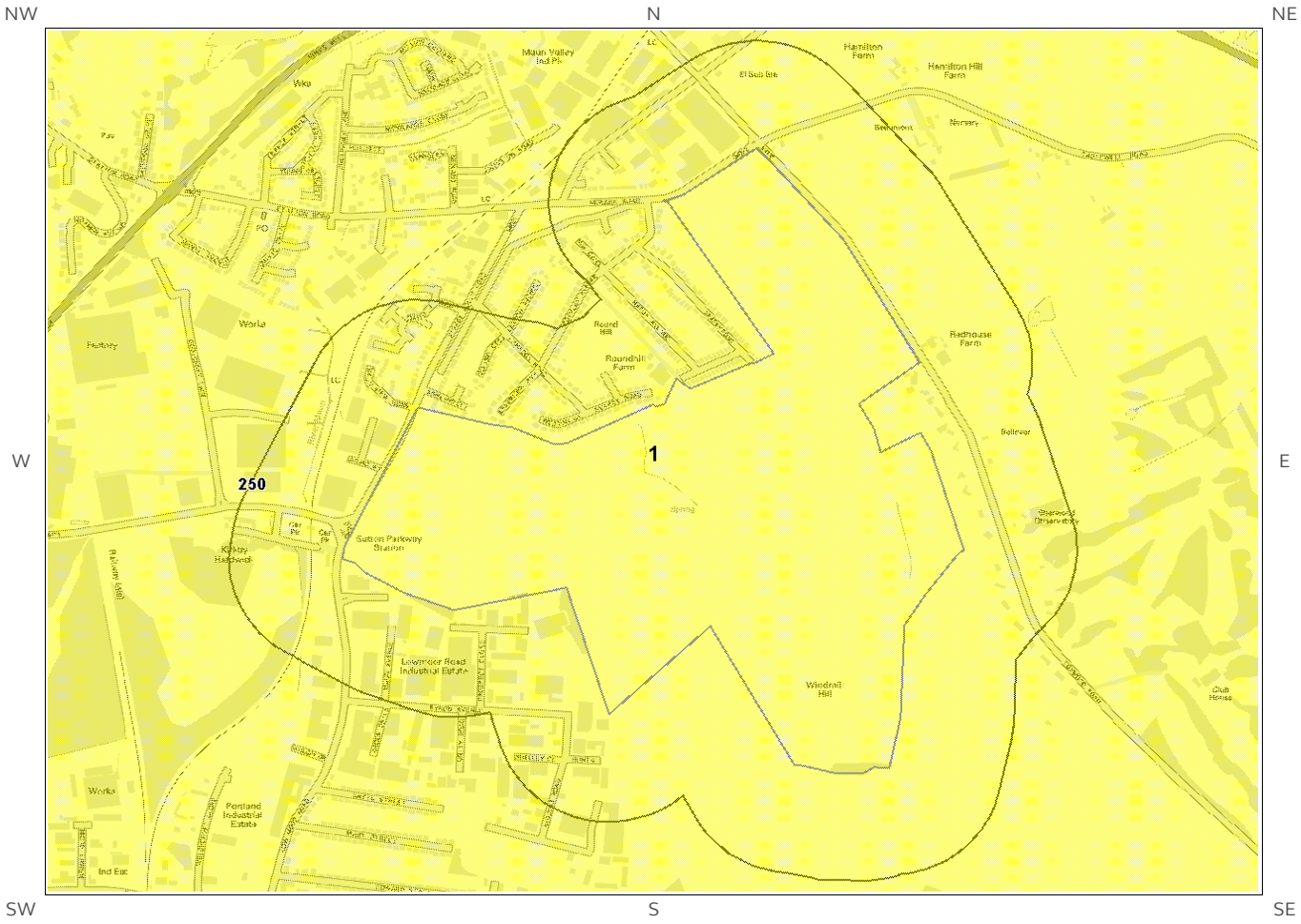
Ground Dissolution Soluble Rocks Legend

4.4 Compressible Deposits Map



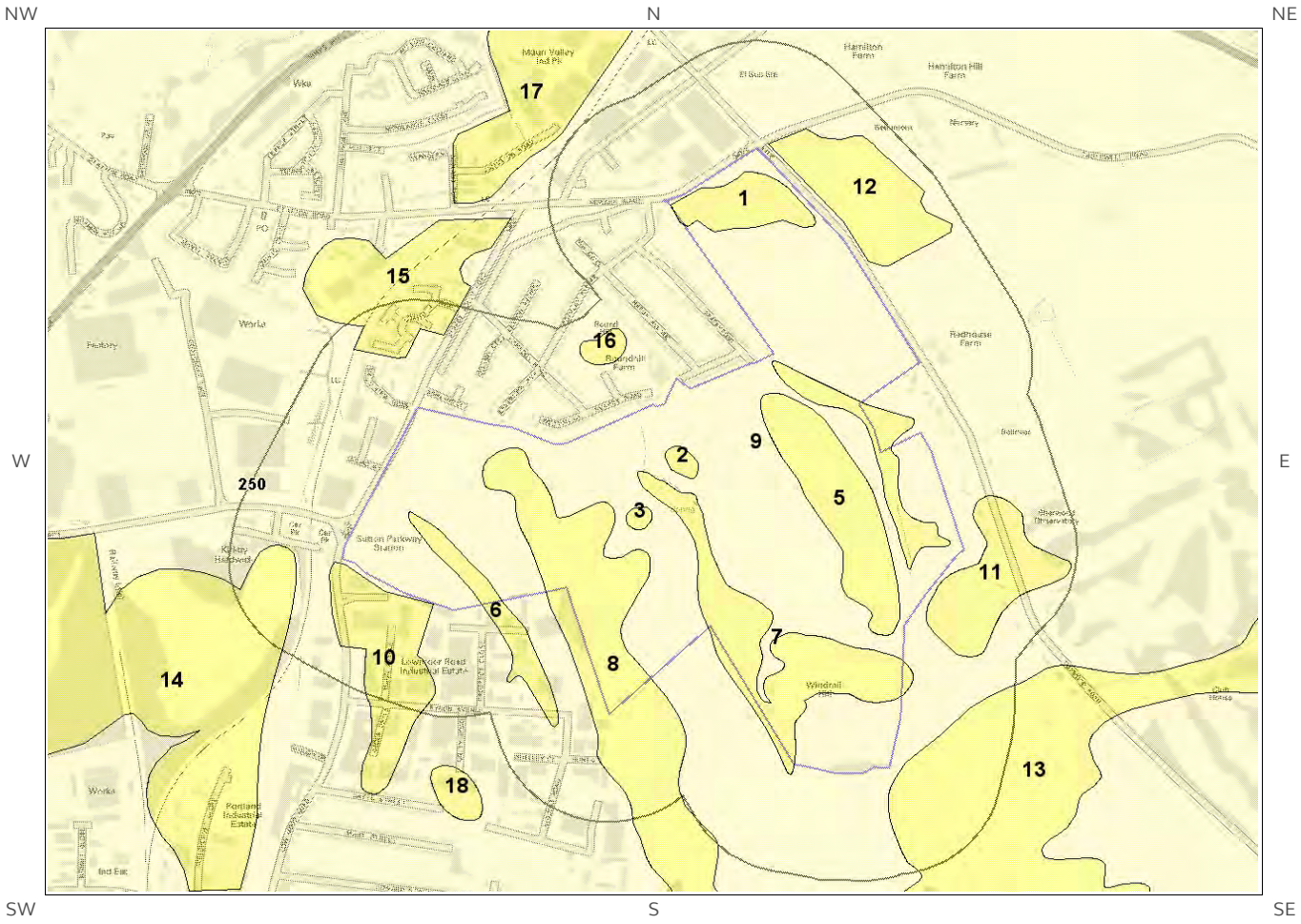
Compressible Deposits Legend

4.5 Collapsible Deposits Map



Collapsible Deposits Legend

4.6 Running Sand Map



Running Sand Legend

Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

4 Natural Ground Subsidence

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

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

What is the maximum hazard rating of natural subsidence within the study site*[*] boundary? Moderate

4.1 Shrink-Swell Clays

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

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Low	Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.
2	0.0	On Site	Low	Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.
3	0.0	On Site	Low	Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.
4	0.0	On Site	Very Low	Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.
5	0.0	On Site	Negligible	Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.
6	24.0	SE	Very Low	Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

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

4.2 Landslides

The following Landslides information provided by the British Geological Survey:

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

4.3 Ground Dissolution of Soluble Rocks

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

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

4.4 Compressible Deposits

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

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for compressible ground identified. No special actions required to avoid problems due to compressible ground. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible ground.
2	0.0	On Site	Moderate	Significant potential for compressibility problems. Do not drain, load or de-water ground near the property without technical advice. For new build, consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property, possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.
3	1.0	S	Moderate	Significant potential for compressibility problems. Do not drain, load or de-water ground near the property without technical advice. For new build, consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property, possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.
4	21.0	NE	Moderate	Significant potential for compressibility problems. Do not drain, load or de-water ground near the property without technical advice. For new build, consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property, possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.

4.5 Collapsible Deposits

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

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

4.6 Running Sands

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

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
2	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
3	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
4	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
5	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
6	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
7	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
8	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

ID	Distance (m)	Direction	Hazard Rating	Details
9	0.0	On Site	Negligible	No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
10	1.0	S	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
11	9.0	SE	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
12	21.0	NE	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
13	24.0	SE	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

5 Borehole Records Map

NW N NE

W E

SW S SE

Borehole Records Legend

Site Outline

Borehole Locations

125

250

Search Buffers (m)

5 Borehole Records

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

Records of boreholes within 250m of the study site boundary: 19

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	38.0	NW	451552 358614	SK55NW9	87.17	BRITISH GLUES & CHEMICALS BH
2	55.0	NW	451500 358600	SK55NW135	87.17	SUTTON-IN-ASHFIELD
3	110.0	E	452150 357630	SK55NW119	44.2	COXMOOR
4A	143.0	S	450800 357400	SK55NW72	5.0	LOW MOOR RD KY/2/88
5A	143.0	S	450800 357400	SK55NW73	6.0	LOW MOOR RD KY/3/88
6A	143.0	S	450800 357400	SK55NW74	5.0	LOW MOOR RD KY/4/88
7A	143.0	S	450800 357400	SK55NW71	6.0	LOW MOOR RD KY/1/88
8	163.0	NW	450560 357800	SK55NW168	0.8	ODDICROFT LANE SUTTON IN ASHFIELD 9
9B	174.0	SW	451460 357160	SK55NW139	218.21	KIRKBY COLLIERY K 5
10B	177.0	SW	451458 357158	SK55NW2	217.93	KIRKBY COLLIERY K5
11C	178.0	W	451066 357280	SK55NW130	141.43	KIRKBY COLLIERY H 2
12C	178.0	W	451066 357280	SK55NW18	141.12	KIRKBY COLLIERY H2
13	185.0	NW	450590 357910	SK55NW165	1.1	ODDICROFT LANE SUTTON IN ASHFIELD 6
14D	191.0	S	451266 357076	SK55NW352	5.0	TELECOM TOWER NOT 0014 KIRKBY IN ASHFIELD 2
15D	196.0	S	451271 357071	SK55NW351	5.0	TELECOM TOWER NOT 0014 KIRKBY IN ASHFIELD 1
16	212.0	NW	450610 358010	SK55NW162	1.0	ODDICROFT LANE SUTTON IN ASHFIELD 3
17	218.0	NW	451220 358620	SK55NW136	77.11	SUTTON-IN-ASHFIELD
18	230.0	NW	450490 357810	SK55NW167	1.1	ODDICROFT LANE SUTTON IN ASHFIELD 8
19	232.0	SE	452210 357490	SK55NW82	2.0	DIAMOND AVENUE ZONE TP DA11

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

#1: scans.bgs.ac.uk/sobi_scans/boreholes/228923
#2: scans.bgs.ac.uk/sobi_scans/boreholes/229060
#3: scans.bgs.ac.uk/sobi_scans/boreholes/229044
#4A: scans.bgs.ac.uk/sobi_scans/boreholes/228997
#5A: scans.bgs.ac.uk/sobi_scans/boreholes/228998
#6A: scans.bgs.ac.uk/sobi_scans/boreholes/228999
#7A: scans.bgs.ac.uk/sobi_scans/boreholes/228996
#8: scans.bgs.ac.uk/sobi_scans/boreholes/15933416
#9B: scans.bgs.ac.uk/sobi_scans/boreholes/229064
#10B: scans.bgs.ac.uk/sobi_scans/boreholes/228916
#11C: scans.bgs.ac.uk/sobi_scans/boreholes/229055
#12C: scans.bgs.ac.uk/sobi_scans/boreholes/228942
#13: scans.bgs.ac.uk/sobi_scans/boreholes/15933412
#14D: scans.bgs.ac.uk/sobi_scans/boreholes/19394666
#15D: scans.bgs.ac.uk/sobi_scans/boreholes/19394665
#16: scans.bgs.ac.uk/sobi_scans/boreholes/15933406
#17: scans.bgs.ac.uk/sobi_scans/boreholes/229061
#18: scans.bgs.ac.uk/sobi_scans/boreholes/15933415
#19: scans.bgs.ac.uk/sobi_scans/boreholes/229007

6 Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary: 116

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

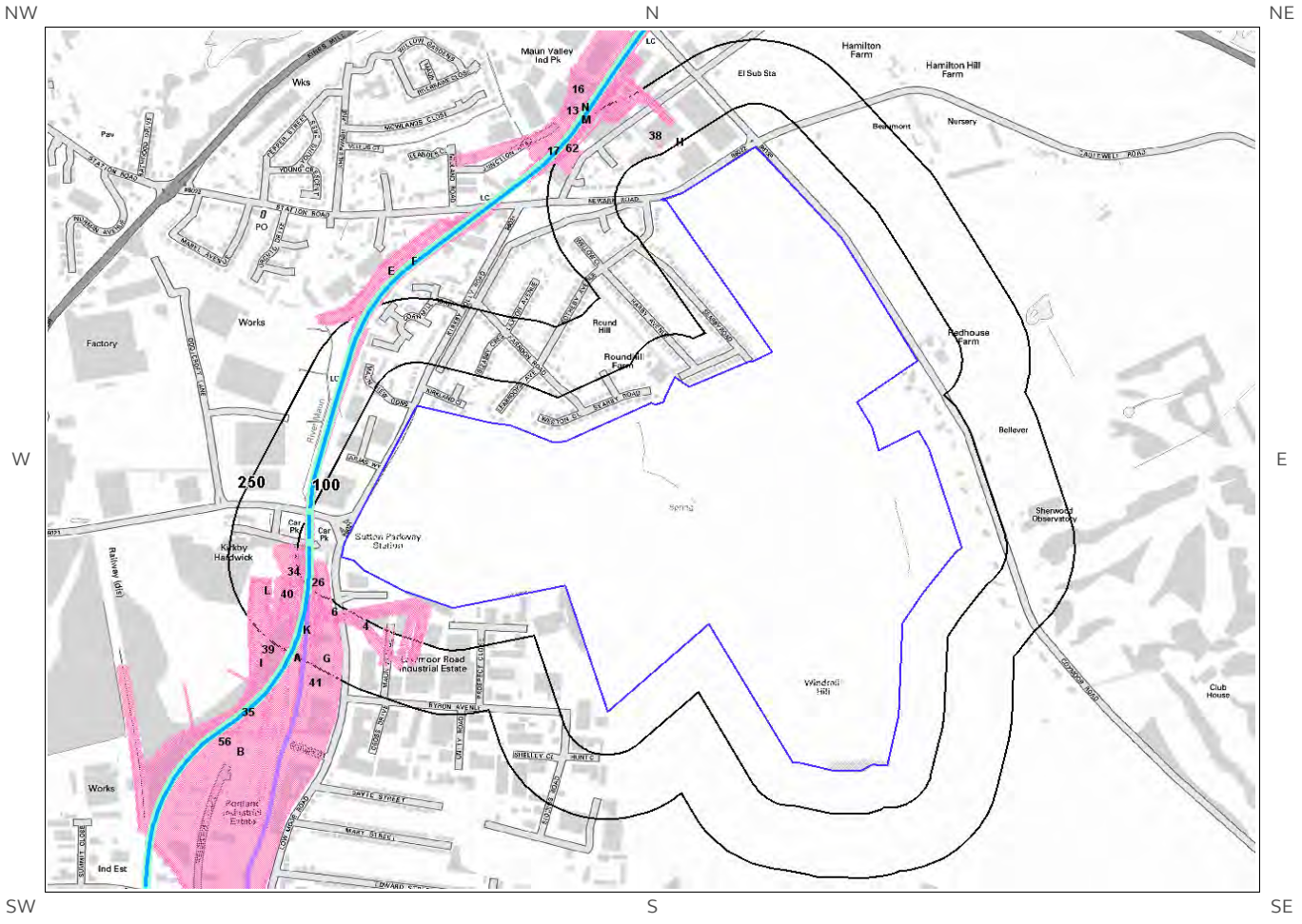
Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
0.0	On Site	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
8.0	W	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
11.0	S	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
15.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
16.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
16.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
16.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
16.0	N	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
20.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
24.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
24.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
28.0	S	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
28.0	S	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
32.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
42.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
57.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
57.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
59.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
61.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
61.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
68.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
68.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
76.0	NW	RuralSoil	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	<15 mg/kg	<100 mg/kg
86.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
87.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
87.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
88.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
89.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
91.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
91.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
91.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
91.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
94.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
94.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
95.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
101.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
101.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
120.0	W	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
121.0	SW	RuralSoil	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	<15 mg/kg	<100 mg/kg
129.0	S	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
129.0	S	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
129.0	S	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
129.0	S	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
135.0	S	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
137.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
138.0	NW	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
142.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
144.0	S	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg

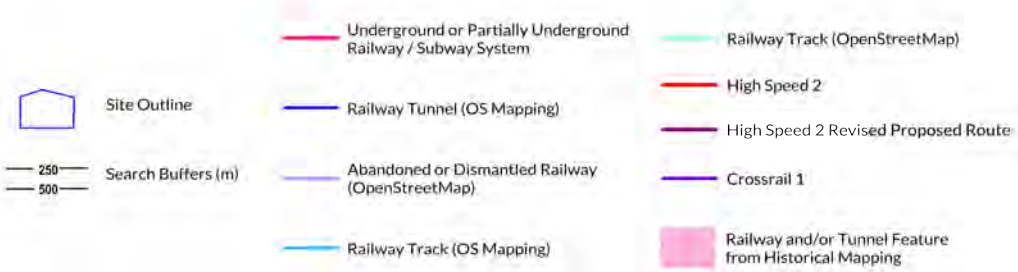
Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
144.0	S	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
149.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
149.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
156.0	W	RuralSoil	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	<15 mg/kg	<100 mg/kg
164.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
164.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
167.0	W	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
181.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
185.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
188.0	E	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
189.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
189.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
189.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
189.0	SE	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
190.0	NW	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
203.0	SW	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
211.0	SW	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
223.0	SW	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
223.0	SW	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
227.0	SW	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
227.0	SW	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
238.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
238.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
240.0	NE	RuralSoil	<15 mg/kg	<1.8 mg/kg	20 - 40 mg/kg	<15 mg/kg	<100 mg/kg
240.0	SW	RuralSoil	<15 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg

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

7 Railways and Tunnels Map



Railways and Tunnels Legend



7 Railways and Tunnels

7.1 Tunnels

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

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

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

Database searched and no data found.

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

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

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

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

Database searched and no data found.

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

7.2 Historical Railway and Tunnel Features

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

Have any historical railway or tunnel features been identified within the study site boundary? No

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

ID	Distance (m)	Direction	NGR	Details	Date
1A	8	S	450594 357413	Railway Sidings	1938
2A	13	S	450591 357413	Railway Sidings	1921
3B	17	S	450407 356836	Railway Sidings	1921
24G	17	S	450627 357409	Railway Sidings	1917
25	28	S	450748 357439	Railway Sidings	1899
4	31	S	450720 357465	Railway Sidings	1898

ID	Distance (m)	Direction	NGR	Details	Date
5B	37	W	450418 356869	Railway Sidings	1967
26	38	SW	450618 357580	Railway Sidings	1959
27G	38	SW	450608 357387	Railway Sidings	1959
28	67	W	n/a	Railway	1879
29G	73	SW	450611 357406	Railway Sidings	1938
30G	73	SW	450611 357406	Railway Sidings	1938
31	77	SW	450623 357476	Railway Sidings	1880
6	82	W	450607 357514	Railway Sidings	1878
32H	92	NW	451417 358591	Railway Sidings	1957
33H	101	NW	451413 358599	Railway Sidings	1957
7B	102	W	450418 356869	Railway Sidings	1950
34	104	W	450560 357578	Railway Sidings	1959
35	104	W	450499 357329	Mineral Railway Sidings	1959
36I	107	W	450483 357438	Colliery Railway Sidings	1938
37I	107	W	450483 357438	Colliery Railway Sidings	1938
38	114	NW	451363 358606	Railway Sidings	1900
39	122	SW	450510 357395	Railway Sidings	1899
40	123	SW	450546 357537	Mineral Railway Sidings	1959
8I	124	SW	450483 357388	Railway Sidings	1898
41	124	SW	450583 357250	Railway Sidings	1959
42I	124	SW	450503 357397	Colliery Railway Sidings	1917
9D	142	NW	451217 358666	Railway Sidings	1921
10C	147	NW	451220 358671	Railway Sidings	1921
43J	147	NW	451350 358694	Railway Sidings	1900
44J	147	NW	451350 358694	Railway Sidings	1916
11C	150	NW	451264 358671	Railway Sidings	1898
45	165	SW	450513 357309	Mineral Railway Sidings	1959
46L	166	W	450504 357539	Mineral Railway Sidings	1959
47K	169	SW	450590 357451	Railway Sidings	1959

ID	Distance (m)	Direction	NGR	Details	Date
48K	169	SW	450590 357451	Railway Sidings	1959
49K	173	SW	450588 357448	Railway Sidings	1917
50K	173	SW	450588 357448	Railway Sidings	1938
51K	173	SW	450588 357448	Railway Sidings	1938
52L	175	W	450484 357540	Mineral Railway Sidings	1965
53L	175	W	450484 357540	Mineral Railway Sidings	1959
12F	201	NW	450865 358336	Railway Sidings	1878
13	204	NW	451225 358731	Railway Sidings	1967
54E	206	NW	450765 358271	Railway Sidings	1880
55D	208	NW	451214 358657	Railway Sidings	1899
56	209	SW	450206 357250	Mineral Railway Sidings	1959
57C	210	NW	451298 358680	Railway Sidings	1917
58M	212	NW	451209 358640	Railway Sidings	1917
59D	219	NW	451245 358655	Railway Sidings	1974
60M	220	NW	451230 358638	Railway Sidings	1957
61M	220	NW	451230 358638	Railway Sidings	1957
62	222	NW	451178 358576	Railway Sidings	1957
14N	231	NW	451248 358732	Railway Sidings	1974
15D	232	NW	451221 358673	Railway Sidings	1938
63N	232	NW	451183 358750	Railway Sidings	1957
64M	232	NW	451207 358641	Railway Sidings	1957
65M	232	NW	451207 358641	Railway Sidings	1957
66M	233	NW	451205 358642	Railway Sidings	1974
67M	234	NW	451202 358635	Mineral Railway Sidings	1986
68M	234	NW	451209 358640	Railway Sidings	1938
69M	234	NW	451209 358640	Railway Sidings	1938
16	235	NW	451203 358718	Railway Sidings	1950
70C	235	NW	451273 358689	Railway Sidings	1957
71	237	NW	n/a	Railway	1870

ID	Distance (m)	Direction	NGR	Details	Date
17	238	NW	451136 358573	Railway Sidings	1878
18E	243	NW	450769 358295	Railway Sidings	1967
19E	243	NW	450769 358295	Railway Sidings	1950
72C	246	NW	451281 358702	Railway Sidings	1986
20F	247	N	450797 358306	Railway Sidings	1921
21E	247	NW	450793 358303	Railway Sidings	1898
22F	247	NW	450793 358303	Railway Sidings	1938
23F	249	NW	450819 358323	Railway Sidings	1921

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

7.3 Historical Railways

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

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

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

Distance (m)	Direction	Status
113	SW	Dismantled

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

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

7.4 Active Railways

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

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

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

Distance (m)	Direction	Name	Type
68	W	Robin Hood Line	Rail
71	W	Not given	Multi Track
73	W	Robin Hood Line	Rail
78	W	Not given	Multi Track
104	NW	Not given	Multi Track

Note: multiple sections of the same track may be listed in the detail above
Any records that have been identified are represented on the Railways and Tunnels Map.

7.5 Railway Projects

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

Is the study site within 5km of the route of the High Speed 2 rail project?	Yes
Is the study site within 500m of the route of the Crossrail 1 rail project?	No

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

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

Please note that this assessment takes account of both the original Phase 2b proposed route and the amended route proposed in 2016. As the Phase 2b route is still under consultation, Groundsure are providing information on both options until the final route is formally confirmed. Practitioners should take account of this uncertainty when advising clients.

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Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:**enquiries@bgs.ac.uk**
Web:**www.bgs.ac.uk**
BGS Geological Hazards Reports and general geological enquiries

British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

British Gypsum

British Gypsum Ltd
East Leake
Loughborough
Leicestershire
LE12 6HX

British Gypsum
SAINT-GOBAIN

The Coal Authority

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

The Coal Authority

Public Health England

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

Public Health England

Johnson Poole & Bloomer Limited

Harris and Pearson Building, Brettel Lane
Brierley Hill, West Midlands
DY5 3LH
Tel: +44 (0) 1384 262 000
Email:**enquiries.gs@jpb.co.uk**
Website: **www.jpb.co.uk**

JOHNSON POOLE & BLOOMER CONSULTANTS

Ordnance Survey

Adanac Drive, Southampton
SO16 0AS

Tel: 08456 050505
Website: http://www.ordnancesurvey.co.uk/

Data

Getmapping PLC

Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444
Website:**http://www1.getmapping.com/**

getmapping®

Contact Details

emapsite™

Peter Brett Associates

Caversham Bridge House
Waterman Place
Reading
Berkshire RG1 8DN
Tel: +44 (0)118 950 0761 E-mail:**reading@pba.co.uk**
Website:**http://www.peterbrett.com/home**

Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:
https://www.groundsure.com/terms-and-conditions-sept-2016/

Appendix F: Coal Authority Mining Report

The Coal Authority

Resolving the impacts of mining

CON29M Non-Residential Mining Report

LAND OFF LOW MOOR ROAD
NOTTINGHAMSHIRE
NG17 5HX

Date of enquiry:	03 January 2017
Date enquiry received:	03 January 2017
Issue date:	03 January 2017
Our reference:	51001342819001
Your reference:	P16-549

CON29M Non-Residential Mining Report

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

Client name

RODGERS LEASK ENVIRONMENTAL LTD

Enquiry address

LAND OFF LOW MOOR ROAD, NOTTINGHAMSHIRE, NG17 5HX

Approximate position of property

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

/company/the-coal-authority
/thecoalauthority
/coalauthority

Summary

Has the search report highlighted evidence or potential of		
1	Past underground coal mining	Yes
2	Present underground coal mining	No
3	Future underground coal mining	Yes
4	Mine entries	No
5	Coal mining geology	No
6	Past opencast coal mining	No
7	Present opencast coal mining	No
8	Future opencast coal mining	No
9	Coal mining subsidence	Yes
10	Mine gas	No
11	Hazards related to coal mining	No
12	Withdrawal of support	Yes
13	Working facilities order	Yes
14	Payments to owners of former copyhold land	No
15	Information from the Cheshire Brine Subsidence Compensation Board	No

Further recommended reports
Coal mining subsidence claims history

For detailed findings, please go to page 4.

Detailed findings

1. Past underground coal mining

The property is in a surface area that could be affected by underground mining in 5 seams of coal at 110m to 710m depth, and last worked in 1977.

Any movement in the ground due to coal mining activity should have stopped.

2. Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3. Future underground coal mining

The property is not in an area where the Coal Authority has plans to grant a licence to remove coal using underground methods.

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

The property is not in an area likely to be affected from any planned future underground coal mining.

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

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

4. Mine entries

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

5. Coal mining geology

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

6. Past opencast coal mining

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

7. Present opencast coal mining

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

8. Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

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

9. Coal mining subsidence

A damage notice or claim for alleged subsidence damage was made in December 2012 for ANNESLEY FOREST HUCKNALL ROAD, NEWSTEAD, NOTTINGHAM, NOTTINGHAMSHIRE. However, the claim was rejected.

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

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

If further subsidence damage claims information is required, please visit www.groundstability.com.

10. Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

11. Hazards related to coal mining

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

12. Withdrawal of support

The property is in an area where notices to withdraw support were given in 1946, 1976.

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

13. Working facilities order

The property is in an area for which the Sutton Area Order dated 1964 has been made under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

14. Payments to owners of former copyhold land

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

15. Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

Additional remarks

Information provided by the Coal Authority in this report is compiled in response to the Law Society's Con29M Coal Mining and Brine Subsidence Claim enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL. Please note that Brine Subsidence Claim enquiries are only relevant for England and Wales. This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority and Cheshire Brine Board's Terms and Conditions applicable at the time the report was produced.

Disclaimer

Alternative formats

If you would like this report in an alternative format, please contact our communications team.

Enquiry boundary

The map image is too large for this page and will be sent in a separate document

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

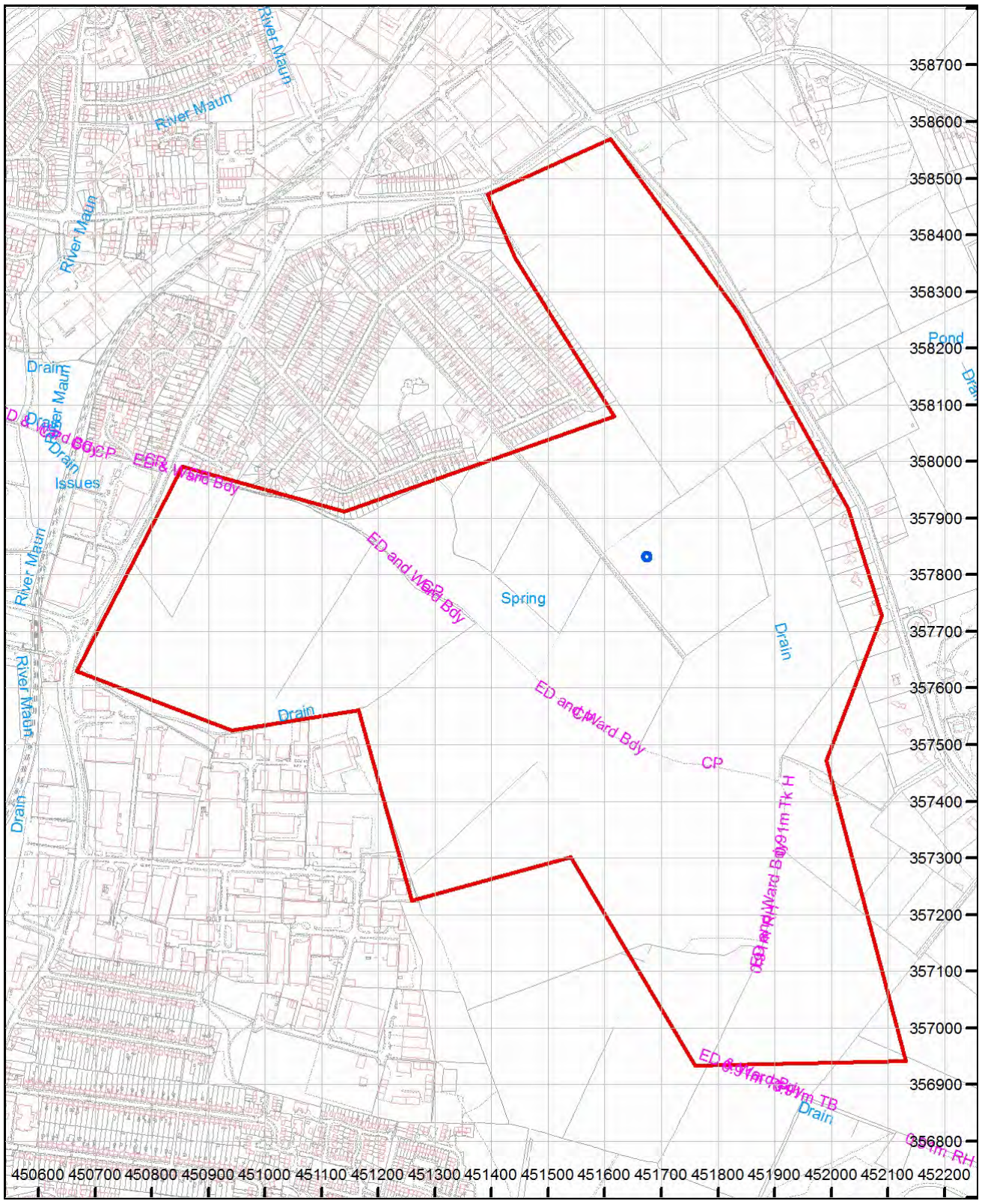
/company/the-coal-authority
/thecoalauthority
/coalauthority

Enquiry boundary

Key

Approximate position of enquiry boundary shown

Coal claims



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200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

/company/the-coal-authority
/thecoalauthority
/coalauthority

Appendix G: EnviroInsight Report

EmapSite

Masdar House, 1 Reading Road,
Eversley, RG27 0RP

Groundsure Reference:	EMS-395724_529375
Your Reference:	EMS_395724_529375
Report Date	1 Dec 2016
Report Delivery Method:	Email - pdf

Groundsure Enviro Insight

Address: Low Moor Rd,NG17 5JS,

Dear Sir/ Madam,

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

If you would like further assistance regarding this report then please contact the emapsite customer services team on 0118 9736883 quoting the above report reference number.

Yours faithfully,

emapsite customer services team

Enc.
Groundsure Enviroinsight

Groundsure Enviro Insight

Address:	**Low Moor Rd,NG17 5JS,**
Date:	**1 Dec 2016**
Reference:	**EMS-395724_529375**
Client:	**EmapSite**

NW N NE

W E

SW S SE

Aerial Photograph Capture date:	12-Jul-2013
Grid Reference:	451479,357771
Site Size:	89.52ha

Report Reference: EMS-395724_529375
Client Reference: EMS_395724_529375

Contents Page

Overview of Findings

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

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	24	58	69	95
1.2 Additional Information – Historical Tank Database	2	2	24	58
1.3 Additional Information – Historical Energy Features Database	0	3	19	12
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	0	6
1.6 Potentially Infilled Land	22	39	36	22

Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	1	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	1	5	14
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	3	6
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	1	0
2.3 Environment Agency Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	2	9	7
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency Registered Landfill Sites	0	1	0	0	0	Not searched
3.1.2 Environment Agency Historic Landfill Sites	3	2	0	1	2	2
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	1	2	1	Not searched	Not searched
3.2.2 Environment Agency Licensed Waste Sites	0	0	8	8	8	7

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	2	7	53	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	1
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

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

Section 6: Hydrogeology and Hydrology	0-500m
6.1 Are there any records of Strata Classification in the Superficial Geology within 500m of the study site?	Yes
6.2 Are there any records of Strata Classification in the Bedrock Geology within 500m of the study site?	Yes

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	7
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	1	4	0
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	1	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	3	0	1	0	Not searched	Not searched

	On-site	0-50m	51-250	251-500	501-1000	1000-1500

Section 6: Hydrogeology and Hydrology	0-500m					
6.9 Is there any Environment Agency information on river quality within 1500m of the study site?	No	No	No	No	Yes	Yes
6.10 Detailed River Network entries within 500m of the site	2	0	14	12	Not searched	Not searched
6.11 Surface water features within 250m of the study site	Yes	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding	
7.1 Are there any Enviroment Agency Zone 2 floodplains within 250m of the study site?	No
7.2 Are there any Environment Agency Zone 3 floodplains within 250m of the study site	No
7.3 What is the Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site?	Very Low
7.4 Are there any Flood Defences within 250m of the study site?	No
7.5 Are there any areas benefiting from Flood Defences within 250m of the study site?	No
7.6 Are there any areas used for Flood Storage within 250m of the study site?	No
7.7 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	Potential at Surface
7.8 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?	Low

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	0
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	1
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	4
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	2	0	1	0	3	2
8.14 Records of Green Belt land	0	0	1	0	0	1

Section 9: Natural Hazards

9.1 What is the maximum risk of natural ground subsidence?	Moderate
9.1.1 What is the maximum Shrink-Swell hazard rating identified on the study site?	Low
9.1.2 What is the maximum Landslides hazard rating identified on the study site?	Very Low
9.1.3 What is the maximum Soluble Rocks hazard rating identified on the study site?	Negligible
9.1.4 What is the maximum Compressible Ground hazard rating identified on the study site?	Moderate
9.1.5 What is the maximum Collapsible Rocks hazard rating identified on the study site?	Very Low
9.1.6 What is the maximum Running Sand hazard rating identified on the study site?	Very Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining

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

Using this report

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

1. Historical Industrial Sites

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

2. Environmental Permits, Incidents and Registers

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

3. Landfills and Other Waste Sites

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

4. Current Land Uses

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

5. Geology

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

6. Hydrogeology and Hydrology

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

7. Flooding

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

8. Designated Environmentally Sensitive Sites

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

9. Natural Hazards

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

10. Mining

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

11. Contacts

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

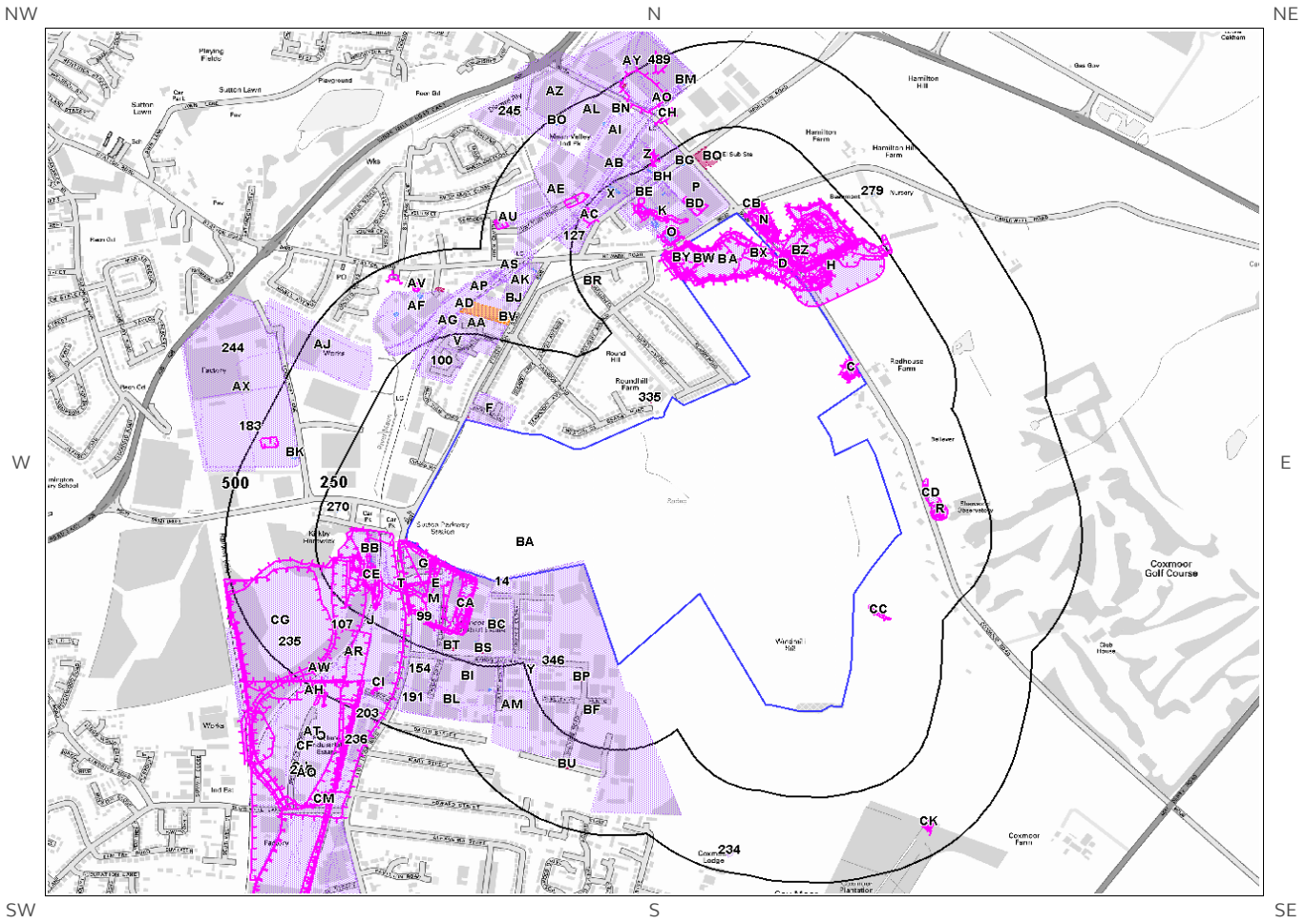
Note: Maps

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

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

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

1. Historical Land Use



Site Outline

250
500
Search Buffers (m)

Historical 1:10,000 and 1:10,560 scale mapping

Industrial Land Use

Potentially Infilled Land

Historical 1:2,500, 1:1,250 and 1:500 scale mapping

Energy Features

Petrol Stations

Tanks

Garages

1. Historical Industrial Sites

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

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

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 246

ID	Distance [m]	Direction	Use	Date
1D	0	On Site	Sand Pit	1898
2BX	0	On Site	Sand Pit	1878
3A	0	On Site	Unspecified Pits	1967
4A	0	On Site	Refuse Heap	1950
5B	0	On Site	Sand Pits	1921
6B	0	On Site	Sand Pits	1938
7B	0	On Site	Unspecified Disused Pit	1974
8B	0	On Site	Unspecified Disused Pit	1991
9BW	0	On Site	Sand Pit	1898
10BY	0	On Site	Sand Pit	1878
11C	0	On Site	Unspecified Pit	1967
12C	0	On Site	Unspecified Pit	1974
13C	0	On Site	Unspecified Pit	1991
14	0	On Site	Unspecified Works	1974
15D	0	On Site	Cuttings	1878
16H	0	On Site	Unspecified Disused Pit	1974
17C	0	On Site	Old Sand Pit	1950
18C	0	On Site	Old Sand Pit	1921
19Y	0	On Site	Industrial Estate	1991
20F	0	On Site	Hosiery Factory	1950
21C	0	On Site	Sand Pit	1878
22C	0	On Site	Old Sand Pit	1938
23A	0	On Site	Sand Pits	1921
24C	0	On Site	Old Sand Pit	1921
25E	1	SW	Sand Pit	1938
26E	3	SW	Sand Pit	1921
27G	3	SW	Unspecified Pit	1898
28BT	5	SW	Industrial Estate	1991
29E	5	S	Unspecified Ground Workings	1950
30F	7	N	Unspecified Commercial/Industrial	1991
31F	7	N	Unspecified Factory	1967
32F	7	N	Unspecified Commercial/Industrial	1974

33J	8	S	Railway Sidings	1938
34G	10	SW	Unspecified Heap	1967
35L	10	NE	Sand Pits	1921
36H	11	NE	Old Sand Pit	1921
37H	11	NE	Unspecified Pit	1950
38H	12	NE	Sand Pit	1898
39I	12	NE	Sand Pit	1878
40E	12	SW	Sand Pit	1921
41H	13	NE	Old Sand Pit	1921
42K	13	N	Unspecified Works	1967
43I	13	NE	Sand Pits	1898
44J	13	S	Railway Sidings	1921
45M	14	SW	Sand Pit	1878
46W	14	NE	Refuse Heap	1950
47BZ	14	NE	Sand Pits	1898
48I	14	NE	Unspecified Ground Workings	1921
49H	14	NE	Sand Pit	1878
50H	14	NE	Unspecified Pit	1991
51K	15	N	Unspecified Mills	1921
52L	15	NE	Sand Pits	1921
53I	16	NE	Unspecified Pit	1950
54M	16	S	Sand Pit	1898
55N	16	NE	Sand Pits	1921
56H	17	NE	Old Sand Pit	1938
57Q	17	S	Railway Sidings	1921
58N	17	NE	Unspecified Quarry	1967
59N	17	NE	Unspecified Disused Pit	1974
60K	18	N	Unspecified Mills	1898
61N	18	NE	Sand Pits	1938
62BE	18	N	Unspecified Mills	1921
63O	18	N	Unspecified Tanks	1921
64L	19	NE	Sand Pits	1938
65O	19	N	Sand Pit	1878
66N	21	NE	Sand Pits	1921
67H	21	NE	Unspecified Ground Workings	1967
68O	23	N	Unspecified Tanks	1921
69CA	23	S	Refuse Heap	1967
70N	24	NE	Refuse Heap	1950
71P	24	NW	Unspecified Works	1967
72P	24	NW	Unspecified Works	1974
73P	24	NW	Unspecified Works	1991
74O	25	N	Unspecified Tanks	1938
75M	31	S	Railway Sidings	1898
76AH	34	W	Colliery	1950

77Q	37	W	Railway Sidings	1967
78AW	37	W	Unspecified Mine	1967
79O	37	NW	Unspecified Pit	1950
80CB	37	NE	Sand Pits	1898
81BC	42	S	Unspecified Works	1974
82CC	42	E	Unspecified Ground Workings	1921
83BD	53	NW	Filter Beds	1898
84K	57	NW	Unspecified Ground Workings	1967
85K	57	NW	Unspecified Ground Workings	1974
86K	57	NW	Unspecified Ground Workings	1991
87L	72	NE	Sand Pits	1898
88K	72	NW	Bone Mills	1878
89K	76	N	Unspecified Tanks	1921
90K	81	N	Unspecified Tanks	1921
91K	82	N	Unspecified Tanks	1938
92T	82	W	Railway Sidings	1878
93K	85	NW	Unspecified Ground Workings	1950
94R	96	E	Unspecified Heap	1921
95R	96	E	Unspecified Heap	1921
96CD	96	E	Unspecified Pit	1950
97S	97	NE	Unspecified Ground Workings	1950
98Q	102	W	Railway Sidings	1950
99	104	S	Unspecified Factory	1974
100	112	N	Hosiery Factory	1950
101M	113	SW	Cuttings	1878
102K	114	NW	Unspecified Pit	1878
103V	116	N	Unspecified Factory	1974
104S	119	NE	Unspecified Heap	1967
105S	121	NE	Cuttings	1921
106L	123	NE	Sand Pit	1878
107	124	SW	Railway Sidings	1898
108T	124	SW	Cuttings	1878
109CF	127	SW	Colliery	1921
110U	142	NW	Railway Sidings	1921
111U	147	NW	Railway Sidings	1921
112U	150	NW	Railway Sidings	1898
113V	155	N	Unspecified Factory	1967
114V	155	N	Unspecified Factory	1991
115W	159	NE	Unspecified Heap	1967
116AA	188	N	Hosiery Factory	1950
117U	192	NW	Steel Works	1950

118U	194	NW	Unspecified Commercial/Industrial	1898
119U	194	NW	Unspecified Commercial/Industrial	1938
120X	194	NW	Unspecified Works	1967
121X	197	NW	Unspecified Works	1974
122X	197	NW	Unspecified Works	1991
123Z	198	NW	Unspecified Works	1967
124AD	201	NW	Railway Sidings	1878
125U	204	NW	Railway Sidings	1967
126AC	210	NW	Sand Pit	1878
127	212	W	Unspecified Works	1967
128Y	214	W	Unspecified Factory	1974
129Z	219	NW	Unspecified Works	1974
130Z	219	NW	Unspecified Works	1991
131AA	223	N	Unspecified Factory	1967
132Z	228	NW	Unspecified Tanks	1921
133Z	231	NW	Unspecified Tanks	1921
134AB	231	NW	Railway Sidings	1974
135AB	232	NW	Railway Sidings	1938
136AT	233	SW	Industrial Estate	1991
137BI	233	S	Unspecified Works	1974
138AB	235	NW	Railway Sidings	1950
139AA	235	N	Unspecified Factory	1991
140AC	238	NW	Railway Sidings	1878
141AD	243	NW	Railway Sidings	1950
142AD	243	NW	Railway Sidings	1967
143Z	245	NW	Unspecified Tanks	1938
144Z	246	NW	Unspecified Heap	1921
145Z	247	NW	Unspecified Heap	1921
146Z	247	NW	Unspecified Heap	1921
147AD	247	N	Railway Sidings	1921
148AD	247	NW	Railway Sidings	1898
149AD	247	NW	Railway Sidings	1938
150AD	249	NW	Railway Sidings	1921
151Z	249	NW	Unspecified Heap	1938
152AM	262	W	Unspecified Factory	1974
153AE	262	NW	Industrial Park	1991
154	263	S	Unspecified Factory	1974
155AE	264	NW	Cuttings	1950
156AF	268	NW	Unspecified Depot	1974
157AF	268	NW	Unspecified Depot	1991
158CG	270	W	Refuse Heap	1950
159Z	274	NW	Unspecified Tanks	1938
160AG	282	N	Unspecified Tank	1921
161AJ	283	NW	Unspecified Works	1991

162AG	283	N	Unspecified Tank	1950
163AF	284	NW	Unspecified Depot	1967
164AH	284	SW	Brick Works	1950
165AG	286	N	Unspecified Tank	1921
166AF	287	N	Junction Station	1921
167AG	288	N	Unspecified Tank	1938
168AF	288	N	Railway Building	1967
169AF	288	N	Railway Building	1950
170AG	289	N	Railway Building	1898
171AG	289	N	Railway Building	1938
172AF	290	N	Railway Building	1921
173AI	308	NW	Unspecified Depot	1991
174AI	308	NW	Unspecified Depot	1967
175AI	308	NW	Unspecified Depot	1974
176AR	311	SW	Railway Building	1938
177AJ	315	NW	Unspecified Works	1974
178CH	333	NW	Sand Pit	1878
179AK	336	W	Flour Mill	1878
180AE	340	NW	Unspecified Factory	1974
181AK	346	W	Corn Mills	1898
182AK	350	W	Flock Mills	1938
183	351	NW	Unspecified Factory	1991
184AK	353	W	Flock Mills	1921
185AK	353	W	Flock Mills	1950
186AX	353	NW	Unspecified Factory	1974
187AL	355	NW	Unspecified Works	1991
188AL	355	NW	Unspecified Works	1974
189AO	364	NW	Railway Sidings	1991
190AM	365	W	Unspecified Works	1974
191	370	SW	Unspecified Works	1974
192AN	370	NW	Railway Sidings	1921
193BK	372	NW	Unspecified Tank	1974
194AN	373	NW	Railway Sidings	1921
195AN	377	NW	Tin Boxes Factory	1950
196AO	377	NW	Railway Sidings	1878
197AP	377	N	Railway Building	1921
198AN	378	NW	Railway Sidings	1938
199AP	379	N	Railway Building	1950
200AN	379	NW	Brick Yard	1878
201AP	381	N	Railway Building	1898
202AP	381	N	Railway Building	1938
203	383	SW	Unspecified Works	1974
204AN	383	NW	Unspecified Commercial/Industrial	1938
205CI	385	SW	Unspecified Ground Workings	1938

206AN	385	NW	Unspecified Commercial/Industrial	1921
207AQ	386	SW	Railway Sidings	1921
208AN	388	NW	Unspecified Factory	1974
209AN	395	NW	Unspecified Factory	1967
210AV	398	N	Unspecified Quarry	1878
211AY	399	NW	Unspecified Factory	1991
212AP	399	N	Railway Station	1950
213AP	404	N	Railway Station	1938
214AP	404	N	Junction Station	1898
215	405	SW	Railway Sidings	1898
216AQ	405	SW	Railway Sidings	1938
217AR	406	SW	Railway Building	1938
218AR	407	SW	Railway Building	1921
219AR	411	SW	Railway Building	1898
220CJ	412	SW	Colliery	1938
221AS	412	W	Railway Building	1878
222AS	412	N	Railway Station	1921
223AT	413	SW	Colliery	1898
224AU	413	W	Railway Sidings	1974
225AS	416	N	Railway Station	1967
226AS	416	N	Junction Station	1921
227AS	419	N	Railway Buildings	1974
228AS	420	N	Railway Building	1878
229AS	427	N	Railway Station	1878
230AZ	430	NW	Unspecified Works	1974
231AU	432	W	Cuttings	1950
232AT	434	SW	Colliery	1921
233AT	434	SW	Colliery	1921
234	436	S	Unspecified Tank	1967
235	438	SW	Magazine	1898
236	440	SW	Industrial Estate	1991
237AV	447	NW	Unspecified Quarry	1878
238AW	451	SW	Railway Building	1938
239AW	453	SW	Railway Building	1921
240AX	456	W	Tin Works	1950
241AY	461	NW	Clay Pit	1878
242AZ	480	NW	Unspecified Commercial/Industrial	1991
243CL	491	SW	Refuse Heap	1898
244	492	NW	Unspecified Factory	1991
245	495	NW	Unspecified Depot	1991
246CM	498	SW	Refuse Heaps	1938

1.2 Additional Information – Historical Tank Database

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

Records of historical tanks within 500m of the search boundary: 86

ID	Distance (m)	Direction	Use	Date
247BA	0	On Site	Tanks or Troughs	1880
248BA	0	On Site	Tanks or Troughs	1880
249O	21	N	Unspecified Tank	1916
250O	24	NW	Unspecified Tank	1916
251K	79	N	Unspecified Tank	1916
252BB	99	W	Tanks	1938
253BB	99	W	Tanks	1938
254K	107	N	Unspecified Tank	1881
255BC	107	S	Tanks	1974
256BD	127	NW	Unspecified Tank	1881
257K	128	N	Unspecified Tank	1916
258K	130	NW	Unspecified Tank	1900
259K	130	NW	Unspecified Tank	1881
260BE	156	NW	Unspecified Tank	1916
261BF	159	SW	Unspecified Tank	1994
262BF	159	SW	Unspecified Tank	1985
263BF	160	SW	Unspecified Tank	1974
264BC	183	S	Unspecified Tank	1985
265BC	183	S	Unspecified Tank	1900
266BH	190	NW	Unspecified Tank	1974
267BG	196	NW	Unspecified Tank	1986
268BG	196	NW	Unspecified Tank	1986
269BG	197	NW	Unspecified Tank	1899
270	198	W	Unspecified Tank	1917
271U	214	NW	Tanks	1899
272U	214	NW	Tanks	1939
273BH	228	NW	Tanks	1916
274BH	228	NW	Tanks	1938
275AG	286	N	Unspecified Tank	1899
276AG	286	N	Unspecified Tank	1917
277AG	286	N	Unspecified Tank	1938
278AG	286	N	Unspecified Tank	1994
279	313	NE	Unspecified Tank	1985
280BI	314	S	Unspecified Tank	1974
281BI	315	S	Unspecified Tank	1974
282AM	329	SW	Unspecified Tank	1985
283AM	330	W	Unspecified Tank	1938

284AK	342	W	Unspecified Tank	1938
285AK	342	W	Unspecified Tank	1938
286AK	347	W	Tanks	1938
287AK	347	W	Tanks	1917
288AK	347	W	Tanks	1958
289AF	358	NW	Unspecified Tank	1959
290AF	359	NW	Unspecified Tank	1938
291BJ	365	N	Unspecified Tank	1938
292BJ	365	N	Unspecified Tank	1965
293BK	369	NW	Unspecified Tank	1917
294BL	374	S	Unspecified Tank	1938
295BL	374	S	Unspecified Tank	1958
296AV	377	N	Unspecified Tank	1959
297AV	377	N	Unspecified Tank	1938
298AP	381	N	Tanks	1917
299AP	381	N	Tanks	1938
300AP	381	N	Tanks	1958
301AP	384	N	Unspecified Tank	1959
302AP	385	N	Unspecified Tank	1968
303AP	385	N	Unspecified Tank	1992
304BM	401	N	Unspecified Tank	1986
305BM	401	N	Unspecified Tank	1986
306BM	401	N	Unspecified Tank	1974
307BM	401	N	Unspecified Tank	1986
308AI	413	NW	Unspecified Tank	1992
309AI	413	NW	Unspecified Tank	1994
310AI	415	N	Unspecified Tank	1994
311AI	416	N	Unspecified Tank	1974
312AI	416	N	Unspecified Tank	1986
313AI	416	N	Unspecified Tank	1994
314BN	421	NW	Unspecified Tank	1994
315BN	421	NW	Unspecified Tank	1974
316BN	422	NW	Unspecified Tank	1986
317BN	422	NW	Unspecified Tank	1992
318BN	422	NW	Unspecified Tank	1986
319BN	422	NW	Unspecified Tank	1916
320AY	473	NW	Unspecified Tank	1994
321BO	476	NW	Unspecified Tank	1994
322BO	476	NW	Unspecified Tank	1986
323BO	477	NW	Unspecified Tank	1986
324BO	477	NW	Unspecified Tank	1992
325BO	477	NW	Unspecified Tank	1974
326BO	477	NW	Unspecified Tank	1994
327AN	491	NW	Unspecified Tank	1994
328AN	491	NW	Unspecified Tank	1974
329AN	492	NW	Unspecified Tank	1992

330AN	493	NW	Unspecified Tank	1986
331AN	493	NW	Unspecified Tank	1986
332AN	493	NW	Unspecified Tank	

1.3 Additional Information – Historical Energy Features Database

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

Records of historical energy features within 500m of the search boundary: 34

ID	Distance (m)	Direction	Use	Date
333F	5	N	Electricity Substation	1995
334F	5	N	Electricity Substation	1995
335	45	N	Electricity Substation	1994
336BP	111	SW	Electricity Substation	1985
337BP	113	SW	Electricity Substation	1996
338R	119	E	Electricity Substation	1994
339BP	124	W	Electricity Substation	1974
340BG	150	NW	Electricity Substation	1992
341BG	151	NW	Electricity Substation	1986
342BG	151	NW	Electricity Substation	1986
343BG	151	NW	Electricity Substation	1994
344BQ	151	NW	Electricity Substation	1978
345BQ	165	NW	Electricity Substation	1994
346	170	W	Electricity Substation	1994
347BG	187	NW	Electricity Substation	1994
348BG	187	NW	Electricity Substation	1994
349BR	204	SW	Electricity Substation	1985
350BR	205	SW	Electricity Substation	1985
351BS	206	S	Electricity Substation	1974
352BS	206	S	Electricity Substation	1985
353BT	223	S	Electricity Substation	1974
354BT	223	S	Electricity Substation	1990
355BU	330	SW	Electricity Substation	1996
356BU	331	SW	Electricity Substation	1996
357BU	331	SW	Electricity Substation	1968
358AV	380	N	Electricity Substation	1986
359AV	380	N	Electricity Substation	1999
360AV	380	N	Electricity Substation	1994
361AN	476	NW	Electricity Substation	1994
362AN	476	NW	Electricity Substation	1992
363AN	477	NW	Electricity Substation	1986
364AN	477	NW	Electricity Substation	1986

365AN	477	NW	Electricity Substation	1974
366AN	490	NW	Electricity Substation	

1.4 Additional Information – Historical Petrol and Fuel Site Database

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

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

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

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 6

ID	Distance (m)	Direction	Use	Date
367BV	297	N	Garage	1999
368BV	297	N	Garage	1999
369BV	298	N	Garage	1986
370BV	299	N	Garage	1968
371BV	299	N	Garage	1958
372BV	299	N	Garage	1959

1.6 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 119

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

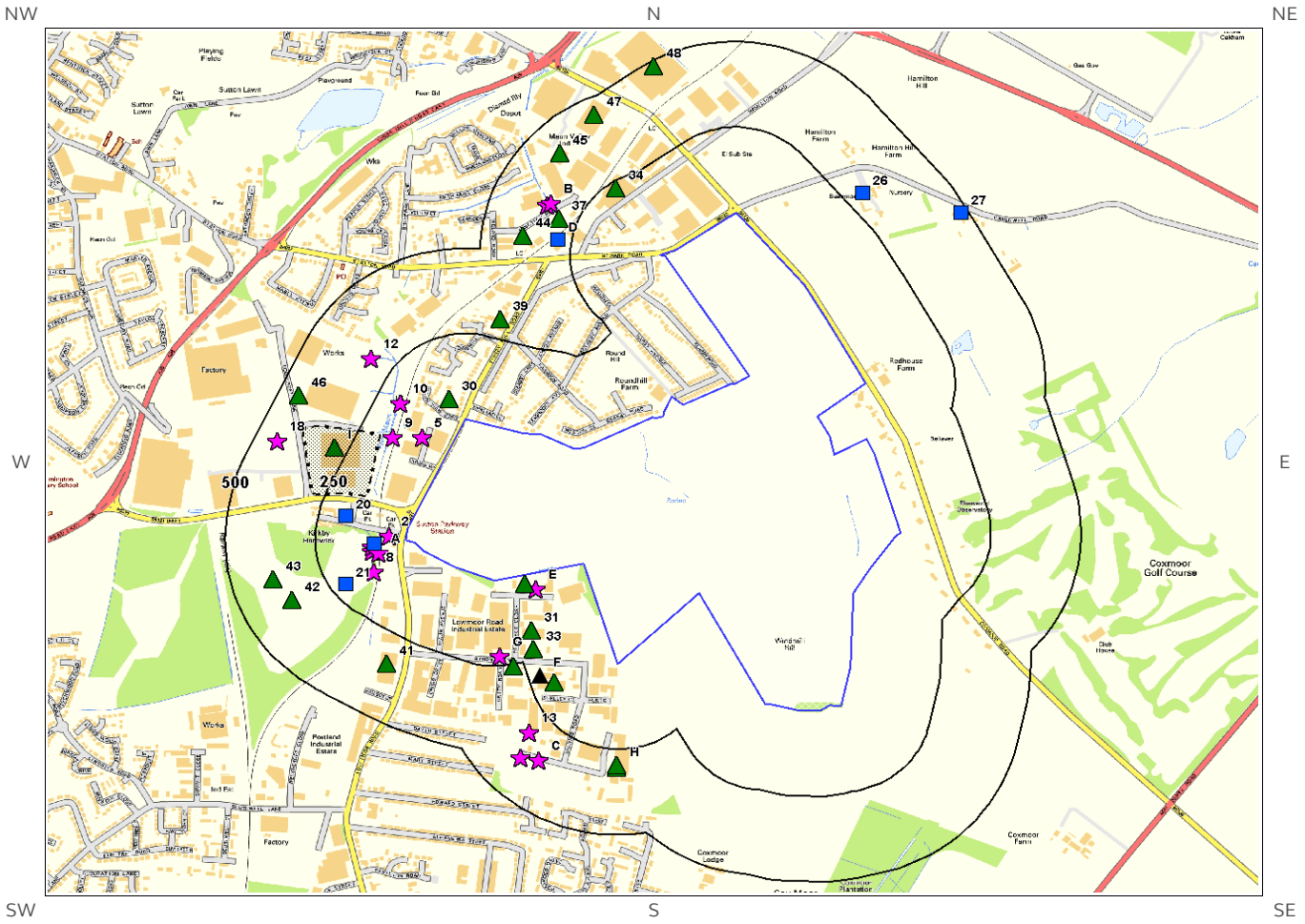
ID	Distance(m)	Direction	Use	Date
373C	0	On Site	Unspecified Pit	1967
374C	0	On Site	Unspecified Pit	1991
375C	0	On Site	Unspecified Pit	1974
376A	0	On Site	Unspecified Pits	1967
377A	0	On Site	Unspecified Disused Pit	1991
378A	0	On Site	Unspecified Disused Pit	1974
379C	0	On Site	Sand Pit	1878
380C	0	On Site	Old Sand Pit	1921
381C	0	On Site	Old Sand Pit	1950
382C	0	On Site	Old Sand Pit	1938

383A	0	On Site	Refuse Heap	1950
384D	0	On Site	Sand Pit	1898
385D	0	On Site	Cuttings	1878
386BW	0	On Site	Pond	1950
387BX	0	On Site	Sand Pit	1878
388BY	0	On Site	Sand Pit	1878
389B	0	On Site	Sand Pit	1898
390A	0	On Site	Sand Pits	1921
391A	0	On Site	Sand Pits	1938
392A	0	On Site	Sand Pits	1921
393C	0	On Site	Old Sand Pit	1921
394H	0	On Site	Unspecified Disused Pit	1974
395E	1	SW	Sand Pit	1938
396M	3	SW	Sand Pit	1921
397G	3	SW	Unspecified Pit	1898
398M	5	S	Unspecified Ground Workings	1950
399G	10	SW	Unspecified Heap	1967
400BZ	10	NE	Sand Pits	1921
401H	11	NE	Old Sand Pit	1921
402H	11	NE	Unspecified Pit	1950
403H	12	NE	Sand Pit	1898
404N	12	NE	Sand Pit	1878
405M	12	SW	Sand Pit	1921
406H	13	NE	Old Sand Pit	1921
407N	13	NE	Sand Pits	1898
408M	14	SW	Sand Pit	1878
409W	14	NE	Refuse Heap	1950
410D	14	NE	Sand Pits	1898
411N	14	NE	Unspecified Ground Workings	1921
412H	14	NE	Sand Pit	1878
413H	14	NE	Unspecified Pit	1991
414S	15	NE	Sand Pits	1921
415N	16	NE	Unspecified Pit	1950
416M	16	S	Sand Pit	1898
417N	16	NE	Sand Pits	1921
418H	17	NE	Old Sand Pit	1938
419N	17	NE	Unspecified Disused Pit	1974
420N	17	NE	Unspecified Quarry	1967
421N	18	NE	Sand Pits	1938
422S	19	NE	Sand Pits	1938
423O	19	N	Sand Pit	1878
424N	21	NE	Sand Pits	1921
425W	21	NE	Unspecified Ground Workings	1967
426O	23	N	Ponds	1898

427CA	23	S	Refuse Heap	1967
428N	24	NE	Refuse Heap	1950
429AH	34	W	Colliery	1950
430AW	37	W	Unspecified Mine	1967
431O	37	NW	Unspecified Pit	1950
432CB	37	NE	Sand Pits	1898
433CC	42	E	Unspecified Ground Workings	1921
434BD	53	NW	Filter Beds	1898
435K	57	NW	Unspecified Ground Workings	1991
436K	57	NW	Unspecified Ground Workings	1967
437K	57	NW	Unspecified Ground Workings	1974
438S	72	NE	Sand Pits	1898
439K	85	NW	Unspecified Ground Workings	1950
440R	96	E	Unspecified Heap	1921
441R	96	E	Unspecified Heap	1921
442CD	96	E	Unspecified Pit	1950
443R	97	E	Covered Reservoir	1938
444R	97	E	Covered Reservoir	1898
445S	97	NE	Unspecified Ground Workings	1950
446R	101	E	Covered Reservoir	1921
447CE	104	W	Fish Ponds	1878
448CE	112	SW	Pond	1938
449T	113	SW	Cuttings	1878
450R	114	E	Covered Reservoir	1950
451K	114	NW	Unspecified Pit	1878
452R	114	E	Covered Reservoir	1921
453CE	115	SW	Pond	1921
454CE	115	SW	Pond	1898
455CE	119	SW	Pond	1921
456S	119	NE	Unspecified Heap	1967
457S	121	NE	Cuttings	1921
458S	123	NE	Sand Pit	1878
459CE	124	SW	Cuttings	1878
460CF	127	SW	Colliery	1921
461BB	136	W	Pond	1938
462CE	139	SW	Pond	1921
463CE	143	W	Pond	1878
464W	159	NE	Unspecified Heap	1967
465AC	210	NW	Sand Pit	1878
466Z	246	NW	Unspecified Heap	1921
467Z	247	NW	Unspecified Heap	1921
468Z	247	NW	Unspecified Heap	1921

469Z	249	NW	Unspecified Heap	1938
470AE	264	NW	Cuttings	1950
471CG	270	W	Refuse Heap	1950
472AH	284	SW	Brick Works	1950
473CH	333	NW	Sand Pit	1878
474AN	379	NW	Brick Yard	1878
475CI	385	SW	Unspecified Ground Workings	1938
476AV	398	N	Unspecified Quarry	1878
477CK	410	SE	Reservoir	1921
478CJ	412	SW	Colliery	1938
479AT	413	SW	Colliery	1898
480CK	413	SE	Reservoir	1950
481CK	417	SE	Reservoir	1938
482CK	417	SE	Reservoir	1898
483CK	418	SE	Reservoir	1921
484BK	431	NW	Ponds	1974
485AU	432	W	Cuttings	1950
486AT	434	SW	Colliery	1921
487AT	434	SW	Colliery	1921
488AV	447	NW	Unspecified Quarry	1878
489	461	NW	Clay Pit	1878
490CL	491	SW	Refuse Heap	1898
491CM	498	SW	Refuse Heaps	1938

2. Environmental Permits, Incidents and Registers Map



2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

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

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

0

Database searched and no data found.

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

1

The following Part A(1) and IPPC Authorised Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
50F	218	W	451040 357230	Operator: Nottingham Zinc Group Installation Name: Kirkby Zinc Plating Works Process: SURFACE TREATING METALS AND PLASTICS; ELECTROLYTIC/CHEMICAL >30 CU M	Permit Number: CP3532PE Original Permit Number: CP3532PE EPR Reference: - Issue Date: 31/3/2005 Effective Date: 31/3/2005 Last date noted as effective: 2016-08-31 Status: Effective

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

20

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

ID	Distance (m)	Direction	NGR	Details	
29E	31	S	450997 357496	Address: Palace Perma Signs Ltd, Lowmoor Ind Est/Prospect Clo, Nottingham, NG17 7LF Process: coating & enamelling process Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
30	72	NW	450786 358038	Address: Bramley Motor Engineer, 84 Kirkby Folly Road, Sutton-in-Ashfield, Notts, NG17 5HN Process: Use Of Waste Oil Burners, Less Than 0.4mw Net Rated Thermal Input Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
31	168	S	451017 357361	Address: The Symphony Group Plc, Trading As Charles Yorke, Unit 10, Prospect Close, Lowmoor Road, Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7LF Process: Wood Coating Process Status: Revoked Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
32F	186	W	451080 357209	Address: Sanglier Ltd, Shelley Close, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7JZ Process: Coating manufacture Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
33	212	W	451022 357306	Address: Steve Soult Ltd, Byron Avenue, Kirkby-In-Ashfield, Nottinghamshire, NG17 7LA Process: Wood Coating Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
34	227	NW	451250 358655	Address: Fabrikat Ltd, Hamilton Road, Sutton-in-Ashfield, Nottinghamshire, NG17 5LN Process: Spray Paint & Metal Spraying process Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified

ID	Distance (m)	Direction	NGR	Details	
35G	261	S	450967 357255	Address: Nottingham Zinc Group, Kirby Site, 2 Byron Avenue,lowmoor Ind Est, Nottinghamshire, NG17 7LA Process: Surface treatment of metals and plastics Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
36I	288	NW	450469 357897	Address: Howitts Printers, Unit 2 Howitt Ltd, Oddicroft Lane, Sutton-In-Ashfield, Nottinghamshire, NG17 5FL Process: Printing Status: Historical Permit Permit Type: Part A2	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
37	300	W	451092 358566	Address: Hope Cement Limited, Junction Road, Sutton-in-Ashfield, Nottinghamshire, NG17 5LA Process: Readymix Concrete Plant Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
38H	301	S	451252 356966	Address: Mercury Packaging Ltd, Unit 5 and 6, Ventura Court, Lowmoor Road, Kirkby In Ashfield, NG17 7DF Process: Printing on flex pack Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
39	303	N	450930 358272	Address: Yardley's Ltd, 34 Kirkby Folly Road, Sutton-in-Ashfield, Nottinghamshire, NG17 5HN Process: Use of waste oil burners Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
40H	310	S	451251 356957	Address: Mercury Packaging, Unit 5 & 6 Ventura Court, Sidings Road, Kirkby-In-Ashfield, Nottinghamshire, NG17 7DF Process: Printing on to Flexable Packaging Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
41	345	SW	450614 357262	Address: Laminating Technology Limited, Unit 2, Wolsey Drive, Kirkby-In-Ashfield, Nottinghamshire, NG17 8EU Process: Timber activity Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
42	365	SW	450350 357449	Address: Tilcon Ltd, Holme Lane, Nottinghamshire, NG12 2LE Process: Quarry Processes/mineral/chalk process Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
43	386	W	450300 357510	Address: Doorvale Ltd, Unit A, Portland Industrial Estate, Southwell Lane, Kirkby-in-Ashfield, Nottingham, NG17 8BZ Process: Manufacture Of Timber And Woodbased Products; Wood Coating Process Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified

ID	Distance (m)	Direction	NGR	Details	
44	386	W	450991 358516	Address: Redland Readymix, Nottingham, Nottinghamshire, NG16 6NS Process: cement/lime/mortar process Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
45	405	NW	451094 358757	Address: Gkn, Sutton Plant, Coxmore Rd, Bound Brook, NG17 5LA Process: galvanizing process Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
46	444	NW	450369 358047	Address: DST Output, Oddicroft Lane, Sutton-in-Ashfield, Nottinghamshire, NG17 5FB Process: Coating Activities, Printing and Textile Treatments Status: Current Permit Permit Type: Part A2	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
47	445	NW	451189 358870	Address: Ardagh, Coxmoor Road, Sutton-In-Ashfield, Nottinghamshire, NG17 5FS Process: Surface Treatment of Metals Status: Current Permit Permit Type: Part A2	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
48	482	NW	451354 359013	Address: Lawson Mardon Ltd, Sutton-In-Ashfield, NG17 5LH Process: coating & enamelling process Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

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

9

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

ID	Distance (m)	Direction	NGR	Details	
19A	87	W	450580 357620	Address: THE LODGE, KIRKBY HARDWICK, SUTTON IN ASHFIELD, NOTTINGHAMSHIRE, N Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: WQ/72/3364 Permit Version: 1	Receiving Water: UNDERGROUND STRATA Status: PRE NRA LEGISLATION WHERE ISSUE DATE < 01-SEP-89 (HISTORIC ONLY) Issue date: 28/04/1982 Effective Date: 28-Apr-1982 Revocation Date: -

ID	Distance (m)	Direction	NGR	Details	
20	178	W	450500 357700	Address: THE COTTAGE, KIRKBY HARDWICK FARM, SUTTON-IN-ASHFIELD, NOTTINGHAMSHIRE Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 3/28/70/1759 Permit Version: 1	Receiving Water: UNDERGROUND STRATA Status: PRE NRA LEGISLATION WHERE ISSUE DATE < 01-SEP-89 (HISTORIC ONLY) Issue date: 05/11/1971 Effective Date: 05-Nov-1971 Revocation Date: -
21	211	SW	450500 357500	Address: PART 3 - LOWMOOR RD IND EST - SWS, LOWMOOR ROAD, KIRKBY IN ASHFIELD, ASHFIELD Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: T/70/03007/O Permit Version: 1	Receiving Water: RIVER MAUN (IDLE) Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 16/08/1971 Effective Date: 16-Aug-1971 Revocation Date: 02/04/2000
22D	288	W	451090 358510	Address: KIRBY FOLLY ROAD, SUTTON, KIRBY FOLLY ROAD, SUTTON, ., . Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: TSC1058 Permit Version: 1	Receiving Water: TRIB OF RIVER MAUN Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03-Sep-2010 Revocation Date: 12/08/2011
23D	288	W	451090 358510	Address: ROUNDHILL/STATION RD/PEPPER ST SSO, SUTTON IN ASHFIELD, SUTTON IN ASHFIELD, NOTTINGHAMSHIRE Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: T/70/07278/O Permit Version: 1	Receiving Water: RIVER MAUN Status: PRE NRA LEGISLATION WHERE ISSUE DATE < 01-SEP-89 (HISTORIC ONLY) Issue date: 14/01/1977 Effective Date: 14-Jan-1977 Revocation Date: -
24D	288	W	451090 358510	Address: ROUNDHILL/STATION RD/PEPPER ST SSO, SUTTON IN ASHFIELD, SUTTON IN ASHFIELD, NOTTINGHAMSHIRE Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: T/70/07278/O Permit Version: 1	Receiving Water: RIVER MAUN Status: PRE NRA LEGISLATION WHERE ISSUE DATE < 01-SEP-89 (HISTORIC ONLY) Issue date: 14/01/1977 Effective Date: 14-Jan-1977 Revocation Date: -
25D	288	W	451090 358510	Address: ROUNDHILL/STATION RD/PEPPER ST SSO, SUTTON IN ASHFIELD, SUTTON IN ASHFIELD, NOTTINGHAMSHIRE Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: T/70/07278/O Permit Version: 1	Receiving Water: RIVER MAUN Status: PRE NRA LEGISLATION WHERE ISSUE DATE < 01-SEP-89 (HISTORIC ONLY) Issue date: 14/01/1977 Effective Date: 14-Jan-1977 Revocation Date: -
26	299	NE	451934 358646	Address: BRACKENFIELD AND BEAUMONT, CAULDWELL ROAD, SUTTON-IN-ASHFIELD, NOTTINGHAMSHIRE, ., NG17 5LB Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: NPSWQD010296 Permit Version: 1	Receiving Water: GROUND WATERS VIA SOAKAWAY Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 26/01/2010 Effective Date: 26-Jan-2010 Revocation Date: -
27	482	NE	452208 358588	Address: SANCREDE, CAULDWELL ROAD, SUTTON IN ASHFIELD, NOTTINGHAMSHIRE, NOTTINGHAMSHIRE, NG17 5LB Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: NPSWQD003161 Permit Version: 1	Receiving Water: GROUNDWATER VIA SOAKAWAY Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 21/07/2008 Effective Date: 21-Jul-2008 Revocation Date: -

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

0

Database searched and no data found.

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

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site: 1

The following COMAH & NIHHS Authorisation records provided by the Health and Safety Executive are represented as polygons or buffered points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	Company	Address	Operational Status	Tier
49I	142	NW	DMW Logistics Limited	DMW Logistics Limited, Sutton in Ashfield, Unit 1, Sutton Parkway, Oddicroft Lane, Sutton-in-Ashfield, Nottinghamshire, NG17 5FB	Current COMAH Site	COMAH Lower Tier Operator

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2.3 Environment Agency Recorded Pollution Incidents

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

18

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

ID	Distance (m)	Direction	NGR	Details	
1E	48	S	451026 357485	Incident Date: 05-Dec-2002 Incident Identification: 124898 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)

ID	Distance (m)	Direction	NGR	Details	
2	48	W	450620 357640	Incident Date: 02-Jul-2001 Incident Identification: 12804 Pollutant: Contaminated Water Pollutant Description: Other Contaminated Water	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
3A	86	SW	450590 357590	Incident Date: 28-Feb-2003 Incident Identification: 140038 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)
4A	86	SW	450590 357590	Incident Date: 28-Feb-2003 Incident Identification: 140038 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)
5	87	NW	450710 357930	Incident Date: 19-Feb-2002 Incident Identification: 59310 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
6A	97	W	450572 357610	Incident Date: 24-Dec-2003 Incident Identification: 208099 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
7A	100	W	450572 357597	Incident Date: 19-Sep-2011 Incident Identification: 924019 Pollutant: Oils and Fuel Pollutant Description: Mixed/Waste Oils	Water Impact: Category 2 (Significant) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
8	129	SW	450577 357537	Incident Date: 07-Sep-2001 Incident Identification: 29546 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
9	158	NW	450630 357930	Incident Date: 20-Nov-2001 Incident Identification: 44541 Pollutant: Contaminated Water Pollutant Description: Suspended Solids	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
10	185	NW	450650 358030	Incident Date: 12-Oct-2001 Incident Identification: 36101 Pollutant: Contaminated Water Pollutant Description: Suspended Solids	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
11G	221	S	450927 357290	Incident Date: 18-Jul-2002 Incident Identification: 92600 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
12	317	NW	450570 358160	Incident Date: 07-Sep-2001 Incident Identification: 29547 Pollutant: Oils and Fuel Pollutant Description: Kerosene and Aviation Fuel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
13	321	SW	451008 357065	Incident Date: 12-Feb-2003 Incident Identification: 141780 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
14B	341	NW	451068 358615	Incident Date: 03-Sep-2003 Incident Identification: 187059 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
15B	347	NW	451059 358611	Incident Date: 24-Feb-2003 Incident Identification: 138982 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

ID	Distance (m)	Direction	NGR	Details	
16C	360	SW	451034 356984	Incident Date: 18-Sep-2002 Incident Identification: 108610 Pollutant: Specific Waste Materials Pollutant Description: Contaminated Soil	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
17C	387	SW	450984 356992	Incident Date: 11-Feb-2003 Incident Identification: 136227 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
18	440	NW	450310 357920	Incident Date: 31-Dec-2002 Incident Identification: 128328 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

0

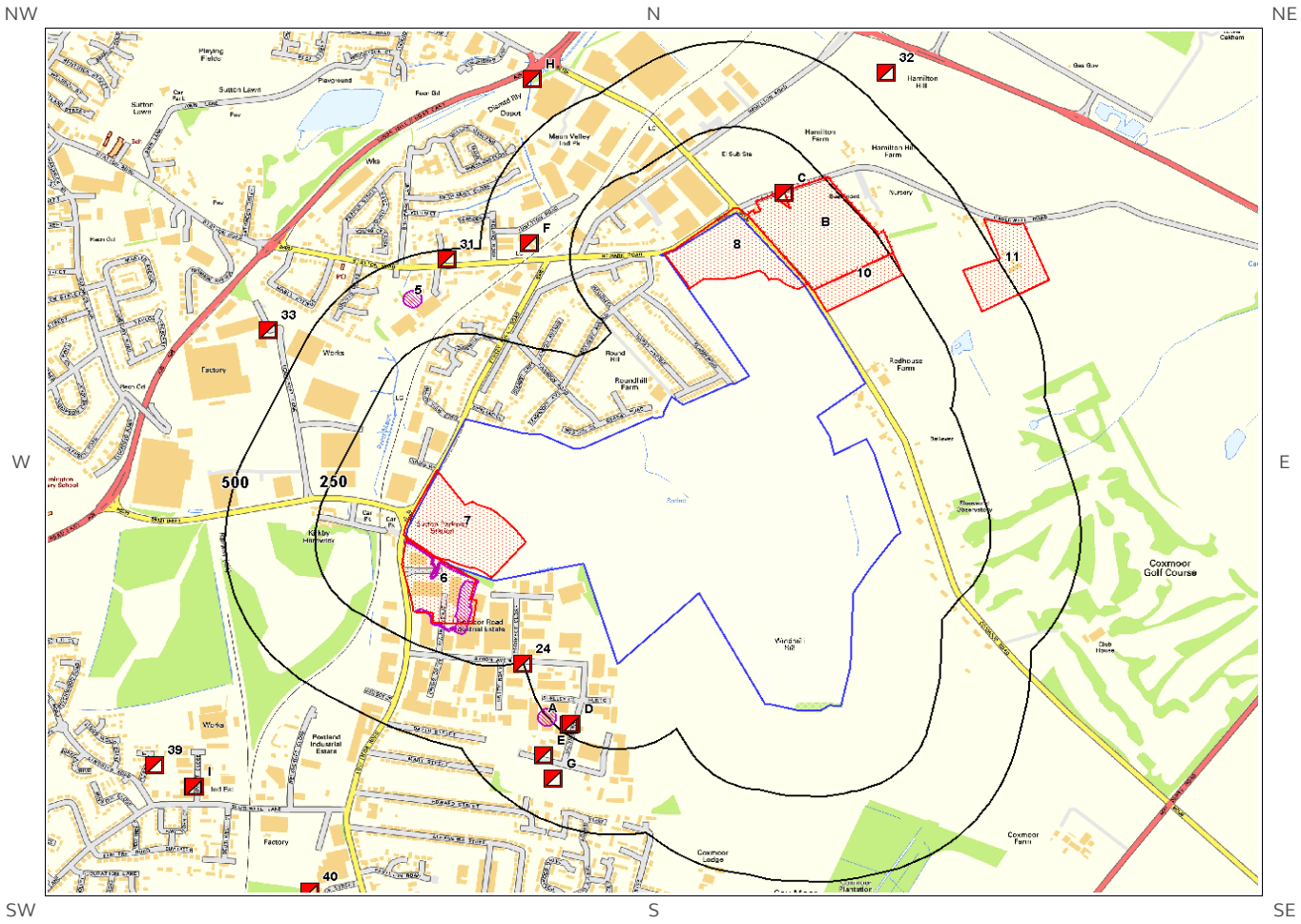
Database searched and no data found.

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

How many records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site? 0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



Site Outline

250 500 Search Buffers (m)

E.A. Active Landfill

E.A. Historic Landfill

BGS / DoE Survey Landfill

Historic and Planned Waste Sites

E.A. Licensed Waste Site

Local Authority/Historical Mapping Landfill Records

3. Landfill and Other Waste Sites

3.1 Landfill Sites

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

1

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

ID	Distance (m)	Direction	NGR	Details	
1B	13	NE	451716 358647	Address: Sutton Quarry Landfill Site, Cauldwell Road, Sutton In Ashfield, Nottinghamshire, NG17 5LB Landfill Reference: 43153.0 Environmental Permitting Regulations (Waste) Reference: MID001 Landfill Type: A04: Household, Commercial & Industrial Waste Landfill	Operator: Midland Land Reclamation Ltd Status: Modified IPPC Reference: EPR Reference:

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

10

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

ID	Distance (m)	Direction	NGR	Details	
6	0	On Site	450700 357400	Site Address: Low Moor Road, Low Moor Road Industrial Estate, Kirkby-In-Ashfield, Nottingham, Nottinghamshire Waste Licence: - Site Reference: 4/U/20/55NW Waste Type: Inert, Industrial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Sutton Urban District Council Licence Holder: - First Recorded: - Last Recorded: -
7	0	On Site	450800 357600	Site Address: Low Moor Road, Kirkby In Ashfield Waste Licence: - Site Reference: 4/U/20/55NW Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -

ID	Distance (m)	Direction	NGR	Details	
8	0	On Site	451500 358400	Site Address: Disused Sand Quarry, Coxmoor Road, Sutton in Ashfield Waste Licence: Yes Site Reference: 4/80/100/55NW Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 19-Mar-1980 Licence Surrendered: 22-Oct-1992 Licence Holder Address: Brooks Court, Stamford, Lincolnshire Operator: - Licence Holder: Stamford Waste Disposal Limited First Recorded: 31-Mar-1980 Last Recorded: 28-Nov-1983
9B	12	NE	451800 358500	Site Address: Sutton Quarry/Midland Land, Sutton in Ashfield Waste Licence: Yes Site Reference: 4/91/201/55NW, 4/94/451/55NW, 4/89/201/55NW Waste Type: Inert, Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 20-Feb-1990 Licence Surrendered: Licence Holder Address: Brooks Court, Stamford, Lincolnshire Operator: - Licence Holder: Midland Land Reclamation Limited First Recorded: 31-Dec-1990 Last Recorded: -
10	15	NE	451900 358300	Site Address: Midland Land Reclamation, Sutton Waste Licence: - Site Reference: 4/95/451/55NW Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
11	385	NE	452300 358400	Site Address: Sutton Tip, Cauldwell Road, Sutton in Ashfield Waste Licence: Yes Site Reference: 4/81/119/55NE, 4/83/137/55NW, 3000/0091 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 03-Apr-1983 Licence Surrendered: 22-Oct-1992 Licence Holder Address: Services (Midlands) Limited, 13 William Road, West Bridgford, Nottingham Operator: - Licence Holder: County Construction services First Recorded: 31-Dec-1980 Last Recorded: 31-Dec-1984
Not shown	620	N	451600 359200	Site Address: Kings Mill Cutting/Disused Railway Cutting, South East of King's Mill Reservoir, Kings Mill Lane, Sutton in Ashfield Waste Licence: Yes Site Reference: 4/84/151/55NW, 4/14/83/0490 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 25-May-1984 Licence Surrendered: 04-Oct-1990 Licence Holder Address: Brooks Court, Stamford, Lincolnshire Operator: - Licence Holder: Midland Land Reclamation Limited First Recorded: 31-Dec-1984 Last Recorded: 31-Dec-1989
Not shown	809	N	451900 359400	Site Address: Kings Mill Tip, Adjacent To Kings Mill Lane, Sutton In Ashfield Waste Licence: Yes Site Reference: 4/78/78/55KW, 4/78/78/55NW Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 02-Feb-1979 Licence Surrendered: Licence Holder Address: Nottinghamshire County Council, Trent Bridge House, Fox Road, West Brigford, Nottingham Operator: - Licence Holder: Nottinghamshire County Council, Department of Planning and Transportation First Recorded: - Last Recorded: -
Not shown	1409	SW	450400 356100	Site Address: Factory Road, Kirkby-in-Ashfield, Nottinghamshire Waste Licence: - Site Reference: 4/84/149/55NW Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -

ID	Distance (m)	Direction	NGR	Details	
Not shown	1431	S	451700 355600	Site Address: Land at Junction of Diamond Avenue, Kirkby-In-Ashfield, Nottingham, Nottinghamshire Waste Licence: Yes Site Reference: 4/77/5/55NW Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 27-Oct-1977 Licence Surrendered: 05-Apr-1984 Licence Holder Address: Bannerman Road, Kirkby in Ashfield, Nottinghamshire Operator: - Licence Holder: C Millard and Company Limited First Recorded: 31-Dec-1970 Last Recorded: 31-Dec-1983

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

0

Database searched and no data found.

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

0

Database searched and no data found.

3.2 Other Waste Sites

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

4

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

ID	Distance (m)	Direction	NGR	Details		
2	1	SW	450842 357490	Type of Site: Ground Workings and Refuse Heap Site Address: N/A	Planning Application Reference: N/A Date: 1959	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
3A	227	SW	451060 357110	Type of Site: Waste transfer facility (change of use) Site Address: Plot C,Sidings Road, Lowmoor Industrial Park, Kirkby in Ashfield, NOTTINGHAM, Nottinghamshire, NG17 7JZ	Planning Application Reference: V/2000/0831 Date: -	Further Details: Change of use of part of site from coal storage yard into non-hazardous waste treatment & transfer facility. An application (ref: V/2000/0831) for Detailed Planning permission was submitted to Ashfield D.C. on 6th December 2000. Data Source: Historic Planning Application Data Type: Point

ID	Distance (m)	Direction	NGR	Details		
4A	227	SW	451060 357110	Type of Site: Waste Tranfer Station Site Address: Plot C, Sidings Road, Kirkby in Ashfield, NOTTINGHAM, Nottinghamshire, NG17 7JZ	Planning Application Reference: 99/0517 Date: -	Further Details: An application (ref: 99/0517) for Detailed Planning permission was submitted to Ashfield D.C. on 26th August 1999. Data Source: Historic Planning Application Data Type: Point
5	356	NW	450687 358335	Type of Site: Waste Transfer Station Site Address: Northern Depot, Station Road, SUTTON-IN-ASHFIELD, Nottinghamshire, NG17 5HB	Planning Application Reference: V/2011/0048 Date: 02/07/2012	Further Details: Scheme comprises construction of Waste Transfer Station. Construction - concrete walls; steel doors; acoustic barriers, fencing site works. An application (ref: V/2011/0048) for detailed planning permission was submitted to Ashfield D.C. The start datecontract period and project value are for guideline only. Detailed plans submitted. Data Source: Historic Planning Application Data Type: Point

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

31

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

ID	Distance (m)	Direction	NGR	Details	
16C	137	NE	451716 358647	Site Address: Cauldwell Road, Sutton In Ashfield, Nottinghamshire Type: Household, Commercial & Industrial Waste Landfill Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MID001 EPR reference: - Operator: Midland Land Reclamation Ltd Waste Management licence No: 43153 Annual Tonnage: 0.0	Issue Date: 30/09/1996 Effective Date: - Modified: 30/08/2000 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Sutton Quarry Landfill Site Correspondence Address: Packington House, Packington Lane, Little Packington, Meriden Coventry, Warwickshirelin, CV7 7HN
17C	137	NE	451716 358647	Site Address: Sutton Quarry Landfill Site, Cauldwell Road, Sutton In Ashfield, Nottinghamshire, NG17 5LB Type: Household, Commercial & Industrial Waste Landfill Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MID001 EPR reference: EA/EPR/JP3597FM/V004 Operator: Midland Land Reclamation Ltd Waste Management licence No: 43153 Annual Tonnage: 118280.0	Issue Date: 30/09/1996 Effective Date: - Modified: 30/06/2016 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Sutton Quarry Landfill Site Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details	
18D	219	SW	451126 357092	Site Address: Kirkby H W R C, Sidings Road, Lowmoor Business Park, Kirkby In Ashfield, Nottinghamshire, NG17 7JZ Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO009 EPR reference: SP3993CH/T003 Operator: Veolia Environmental Services (U K) Plc Waste Management licence No: 43195 Annual Tonnage: 25000.0	Issue Date: 13/01/1993 Effective Date: 01/06/2006 Modified: 11/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Waste Recycling Centre Correspondence Address: -
19D	219	SW	451126 357092	Site Address: Kirkby Household Waste Centre, Sidings Road, Kirkby In Ashfield, Nottingham, Nottinghamshire, NG17 7JZ Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SOU003 EPR reference: - Operator: South Herts Waste Management Ltd Waste Management licence No: 43195 Annual Tonnage: 0.0	Issue Date: 13/01/1993 Effective Date: - Modified: 20/11/1997 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Kirkby Household Waste Centre Correspondence Address: 12, Barbers Road, Stratford, London, E15 2PH
20D	219	SW	451126 357092	Site Address: Kirkby Household Waste Centre, Sidings Road, Kirkby In Ashfield, Nottingham, Nottinghamshire, NG17 7JZ Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO009 EPR reference: - Operator: Veolia Environmental Services Plc Waste Management licence No: 43195 Annual Tonnage: 0.0	Issue Date: 13/01/1993 Effective Date: 01/06/2006 Modified: 11/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Waste Recycling Centre Correspondence Address: Lumbley Street, Sheffield, South Yorkshire, S4 7ZJ
21D	219	SW	451126 357092	Site Address: Kirkby H W R C, Sidings Road, Lowmoor Business Park, Kirkby In Ashfield, Nottinghamshire, NG17 7JZ Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO009 EPR reference: - Operator: Veolia Environmental Services (U K) Plc Waste Management licence No: 43195 Annual Tonnage: 25000.0	Issue Date: 1/13/1993 Effective Date: 6/1/2006 Modified: 12/11/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Waste Recycling Centre Correspondence Address: Lumbley Street Service Centre, Lumbley Street, Sheffield, South Yorkshire, S4 7ZJ
22D	224	SW	451120 357090	Site Address: Sidings Road, Lowmoor Business Park, Kirkby In Ashfield, Nottinghamshire, NG17 7JZ Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO149 EPR reference: PP3595VJ/T001 Operator: Veolia E S Nottinghamshire Ltd Waste Management licence No: 43195 Annual Tonnage: 25000.0	Issue Date: 13/01/1993 Effective Date: 24/11/2010 Modified: 11/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Kirkby H W C Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details	
23D	224	SW	451120 357090	Site Address: Sidings Road, Lowmoor Business Park, Kirkby In Ashfield, Nottinghamshire, NG17 7JZ Type: 75kte Non-hazardous & hazardous HWA Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO149 EPR reference: EA/EPR/PP3595VJ/V002 Operator: Veolia E S Nottinghamshire Ltd Waste Management licence No: 43195 Annual Tonnage: 74999.0	Issue Date: 13/01/1993 Effective Date: 24/11/2010 Modified: 02/06/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Kirkby H W C Correspondence Address: -
24	252	W	450992 357267	Site Address: Wolsey Drive, Lowmoor Road, Kirkby-in- Ashfield, Nottinghamshire, NG17 7JR Type: Vehicle Depollution Facility <5000 tps Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MAU006 EPR reference: EA/EPR/AB3604CQ/A001 Operator: Maurice Hill Transport Limited Waste Management licence No: 400742 Annual Tonnage: 4999.0	Issue Date: 03/02/2014 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Maurice Hill Transport Ltd Correspondence Address: -
25E	338	SW	451049 357001	Site Address: Plot C, Sidings Road, Lowmoor Road Ind Estate, Kirkby In Ashfield, Nottinghamshire, NG17 7JZ Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ROG001 EPR reference: - Operator: Roger Syson Transport Limited Waste Management licence No: 43501 Annual Tonnage: 25000.0	Issue Date: 22/08/2001 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Roger Syson Transport Correspondence Address: The Borders, 4, Borders Avenue, Kirkby In Ashfield, Nottinghamshire, NG17 8HS
26E	338	SW	451049 357001	Site Address: Plot C, Sidings Road, Lowmoor Road Ind Est, Kirkby In Ashfield, Nottinghamshire, NG17 7JZ Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ROG001 EPR reference: EA/EPR/UP3290CV/S003 Operator: Roger Syson Transport Ltd Waste Management licence No: 43501 Annual Tonnage: 0.0	Issue Date: 22/08/2001 Effective Date: - Modified: 11/12/2003 Surrendered Date: 04/08/2014 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Roger Syson Transport Correspondence Address: -
27F	366	W	451010 358500	Site Address: Land/ Premises At, Station Road, Maun Valley Ind Park, Sutton In Ashfield, Nottinghamshire, NG17 5GB Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SMI005 EPR reference: EA/EPR/FP3590CG/A001 Operator: T R Smith & Sons Builders Ltd Waste Management licence No: 43574 Annual Tonnage: 25000.0	Issue Date: 30/04/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: T R Smith & Sons Correspondence Address: -

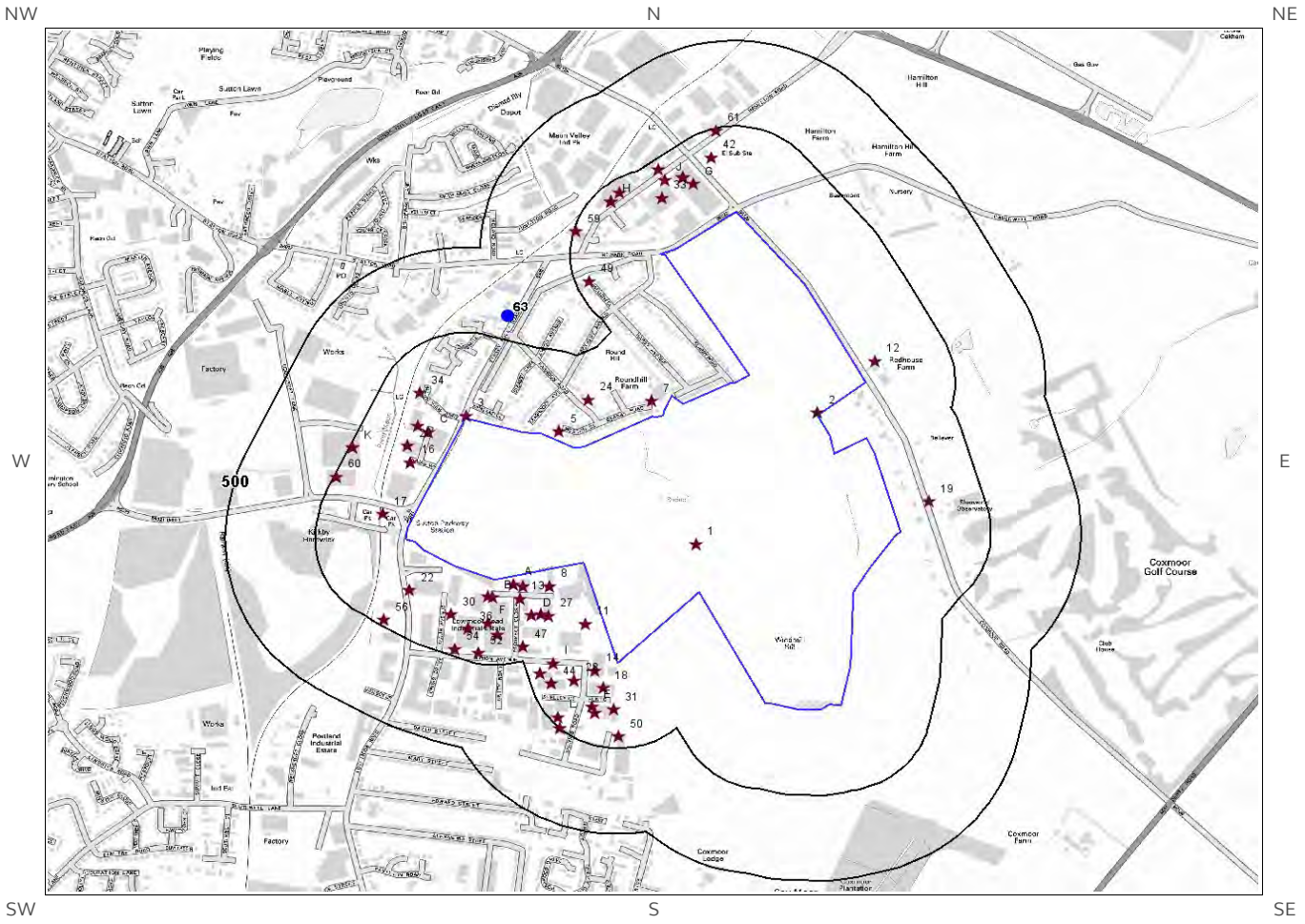
ID	Distance (m)	Direction	NGR	Details	
28F	366	W	451010 358500	Site Address: Maun Valley Industrial Park, Station Road, Sutton In Ashfield, Nottingham, Nottinghamshire, NG17 5EB Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SMI005 EPR reference: - Operator: T R Smith And Sons Builders Limited Waste Management licence No: 43574 Annual Tonnage: 0.0	Issue Date: 30/04/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: T R Smith & Sons Correspondence Address: Tradcel House, 28, Grange Avenue, Mansfield, Nottingham, Nottinghamshire, NG18 5EY
29G	380	SW	451075 356933	Site Address: Land/premises At, Sidings Road, Lowmoor Business Park, Kirkby In Ashfield, Nottinghamshire, NG17 7JZ Type: ELV Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHA005 EPR reference: EA/EPR/RP3990CL/T002 Operator: Charles Trent Ltd Waste Management licence No: 43689 Annual Tonnage: 2500.0	Issue Date: 23/08/2006 Effective Date: 14/11/2006 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Charles Trent Ltd Correspondence Address: -
30G	380	SW	451075 356933	Site Address: Sidings Road, Lowmoor Bursiness Park, Kirkby In Ashfield, Nottingham, NG17 7JZ Type: ELV Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CEN003 EPR reference: - Operator: Century Salvage Sales Limited Waste Management licence No: 43689 Annual Tonnage: 0.0	Issue Date: 23/08/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Century Salvage Sales Ltd Correspondence Address: H A N House, Harvey Road, Burnt Mills, Basildon, Essex, SS13 1EP
31	472	N	450783 358453	Site Address: Northern Depot, Station Road, Sutton In Ashfield, Nottinghamshire, NG17 5HB Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ASH001 EPR reference: EA/EPR/PP3893CU/V003 Operator: Ashfield District Council Waste Management licence No: 43176 Annual Tonnage: 24999.0	Issue Date: 29/04/1994 Effective Date: - Modified: 11/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Environmental Health & Housing Services Correspondence Address: -
32	585	NE	452000 359000	Site Address: Hermitage Lane Depot, Maunside, Mansfield, Nottinghamshire, NG18 5GU Type: - Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MAN004 EPR reference: - Operator: Mansfield District Council Waste Management licence No: 43731 Annual Tonnage: 0.0	Issue Date: 15/01/2008 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: - Correspondence Address: Civic Centre, Chesterfield Road Sout, Mansfield, Nottinghamshire, NG19 7BH

ID	Distance (m)	Direction	NGR	Details	
33	607	NW	450286 358245	Site Address: Oddicroft Lane, Sutton In Ashfield, Nottinghamshire, NG17 5FS Type: In-House Storage Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAR001 EPR reference: EA/EPR/PP3393CR/S002 Operator: Carnauld Metal Box Aerosols (U K) Plc Waste Management licence No: 43172 Annual Tonnage: 2499.0	Issue Date: 29/07/1992 Effective Date: - Modified: - Surrendered Date: 28/09/2005 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: C M B Aerosols (U K) Plc Correspondence Address: -
34H	627	NW	451018 358981	Site Address: Fascia Mania House, Coxmoor Road, Coxmoor Ind Est, Sutton In Ashfield, Nottinghamshire, NG17 5LA Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FAS006 EPR reference: EA/EPR/RP3590CR/A001 Operator: Fascia Mania Limited Waste Management licence No: 43690 Annual Tonnage: 50000.0	Issue Date: 14/07/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Fascia Mania Limited - Depot Correspondence Address: -
35H	627	NW	451018 358981	Site Address: Fascia Mania House, Coxmoor Road, Coxmoor Industrial Estate, Sutton In Ashfield, Nottinghamshire, NG17 5LA Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FAS006 EPR reference: - Operator: Fascia Mania Ltd Waste Management licence No: 43690 Annual Tonnage: 0.0	Issue Date: 14/07/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Fascia Mania Depot Correspondence Address: Fascia Mania House, Market Place, Hucknall, Nottingham, Nottinghamshire, NG15 7FR
36I	929	SW	450080 356909	Site Address: Mark Hill Salvage, Summit Close, Southwell Road Ind Estate, Kirkby In Ashfield, Nottinghamshire, NG17 8GJ Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHA004 EPR reference: - Operator: Charles Trent Limited Waste Management licence No: 43157 Annual Tonnage: 0.0	Issue Date: 15/01/1996 Effective Date: 22/11/2005 Modified: 15/03/2000 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Mark Hill Salvage Correspondence Address: Trent House, 8, S T Georges Avenue, Parkstone, Poole, Dorset, BH12 4ND
37I	929	SW	450080 356909	Site Address: Mark Hill Salvage, Summit Close, Southwell Road Ind Estate, Kirkby In Ashfield, Nottinghamshire, NG17 8GJ Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHA004 EPR reference: EA/EPR/JP3297FJ/T003 Operator: Charles Trent Ltd Waste Management licence No: 43157 Annual Tonnage: 0.0	Issue Date: 15/01/1996 Effective Date: 22/11/2005 Modified: 15/03/2000 Surrendered Date: 15/06/2015 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Mark Hill Salvage Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details	
38I	930	SW	450079 356908	Site Address: Mark Hill Salvage, Summit Close, Southwell Road Ind Estate, Kirkby In Ashfield, Nottinghamshire, NG17 8FN Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HIL001 EPR reference: - Operator: Mark Rowland Hill Waste Management licence No: 43157 Annual Tonnage: 0.0	Issue Date: 15/01/1996 Effective Date: - Modified: 15/03/2000 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Mark Hill Salvage Correspondence Address: Summit Close, Southwell Road Ind Estate, Kirkby In Ashfield, Nottinghamshire, NG17 8FN
39	958	SW	449971 356971	Site Address: Lowmoor Farm, Southwell Lane, Kirkby In Ashfield, Nottinghamshire, NG17 8FN Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BOO001 EPR reference: EA/EPR/JP3797FK/A001 Operator: Booth Timothy Waste Management licence No: 43161 Annual Tonnage: 30000.0	Issue Date: 07/11/1997 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: A Booth & Sons Correspondence Address: -
40	1034	SW	450400 356600	Site Address: Distribution Centre, Clover Street, Field Industrial Estate, Kirkby In Ashfield, Nottinghamshire, NG17 7LH Type: Asbestos Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SMH001 EPR reference: EA/EPR/ZP3394VS/A001 Operator: S M H Products Limited Waste Management licence No: 102900 Annual Tonnage: 3650.0	Issue Date: 19/07/2011 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: S M H Products Ltd (Nottingham Branch) Correspondence Address: -
Not shown	1444	NE	452615 359599	Site Address: Kestral Road, Mansfield, Nottingham, Nottinghamshire Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO007 EPR reference: - Operator: Veolia Environmental Services Plc Waste Management licence No: 43206 Annual Tonnage: 0.0	Issue Date: 10/06/1996 Effective Date: 01/06/2006 Modified: 11/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Kestral Park Household Waste & Recycling Centre Correspondence Address: Lumbley Street, Sheffield, South Yorkshire, S4 7ZJ
Not shown	1444	NE	452615 359599	Site Address: Kestral Road, Mansfield, Nottingham, Nottinghamshire Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SOU002 EPR reference: - Operator: South Herts Waste Management Ltd Waste Management licence No: 43206 Annual Tonnage: 0.0	Issue Date: 10/06/1996 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Kestral Park Household Waste & Recycling Centre Correspondence Address: 12, Barbers Road, Stratford, London, E15 2PH

ID	Distance (m)	Direction	NGR	Details	
Not shown	1444	NE	452615 359599	Site Address: Kestral Park H W R C, Kestral Road, Kestral Park Ind Est, Mansfield, Nottinghamshire, NG18 5FT Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO007 EPR reference: - Operator: Veolia Environmental Services (U K) Plc Waste Management licence No: 43206 Annual Tonnage: 25000.0	Issue Date: 6/10/1996 Effective Date: 6/1/2006 Modified: 12/11/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Kestral Park Household Waste & Recycling Centre Correspondence Address: Lumbley Street Service Centre, Lumbley Street, Sheffield, South Yorkshire, S4 7ZJ
Not shown	1444	NE	452615 359599	Site Address: Kestral Park H W R C, Kestral Road, Kestral Park Ind Est, Mansfield, Nottinghamshire, NG18 5FT Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO007 EPR reference: LP3093CT/T003 Operator: Veolia Environmental Services (U K) Plc Waste Management licence No: 43206 Annual Tonnage: 25000.0	Issue Date: 10/06/1996 Effective Date: 01/06/2006 Modified: 11/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Kestral Park Household Waste & Recycling Centre Correspondence Address: -
Not shown	1444	NE	452615 359599	Site Address: Kestral Park H W R C, Kestral Road, Kestral Park Ind Est, Mansfield, Nottinghamshire, NG18 5FT Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO155 EPR reference: PP3793VJ/T001 Operator: Veolia E S Nottinghamshire Ltd Waste Management licence No: 43206 Annual Tonnage: 25000.0	Issue Date: 10/06/1996 Effective Date: 24/11/2010 Modified: 11/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Kestral Park Household Waste & Recycling Centre Correspondence Address: -
Not shown	1444	NE	452615 359599	Site Address: Kestral Park H W R C, Kestral Park Ind Est, Kestral Road, Mansfield, Nottinghamshire, NG18 5FT Type: 75kte Non-hazardous & hazardous HWA Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO155 EPR reference: EA/EPR/PP3793VJ/V002 Operator: Veolia E S Nottinghamshire Ltd Waste Management licence No: 43206 Annual Tonnage: 74999.0	Issue Date: 10/06/1996 Effective Date: 24/11/2010 Modified: 02/06/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Kestral Park Household Waste & Recycling Centre Correspondence Address: -

4. Current Land Use Map



Site Outline

Search Buffers (m)
250
500

Current Industrial Sites

Petrol & Fuel Sites

Electricity Transmission Cables

Gas Transmission Pipelines

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 62

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	0	On Site	Electricity Poles	451473 357617	NG17	Electrical Features	Infrastructure and Facilities
2	0	On Site	Electricity Poles	451809 358001	NG17	Electrical Features	Infrastructure and Facilities
3	8	N	Electricity Sub Station	450835 357992	NG17	Electrical Features	Infrastructure and Facilities
4A	23	S	Metalcraft	450966 357498	Prospect Close, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7LF	Metals Manufacturers, Fabricators and Stockholders	Industrial Products
5	27	NE	Ashfield Hauliers Ltd	451090 357946	13, Weston Close, Sutton-in-Ashfield, NG17 5HS	Distribution and Haulage	Transport, Storage and Delivery
6A	33	S	Castle Engineering Co Bolsover Ltd	450991 357493	Prospect Close, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7LF	Precision Engineers	Engineering Services
7	46	NW	Electricity Sub Station	451348 358036	NG17	Electrical Features	Infrastructure and Facilities
8	48	S	Palace Perma Signs Ltd	451064 357492	Prospect Close, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7LF	Industrial Coatings and Finishings	Industrial Products
9B	50	S	Electricity Sub Station	450907 357461	NG17	Electrical Features	Infrastructure and Facilities
10B	51	S	Pumping Station	450894 357464	NG17	Water Pumping Stations	Industrial Features
11	51	W	Lowmoor Road Industrial Estate	451166 357383	NG17	Business Parks and Industrial Estates	Industrial Features
12	55	NE	Silo	451969 358153	NG17	Hoppers and Silos	Farming
13	67	S	Electricity Sub Station	450985 357457	NG17	Electrical Features	Infrastructure and Facilities
14	69	W	Brightwake Ltd	451191 357246	Sidings Road, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7JZ	Medical Equipment, Supplies and Pharmaceuticals	Industrial Products
15C	76	NW	Electricity Sub Station	450729 357945	NG17	Electrical Features	Infrastructure and Facilities

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
16	81	NW	Electricity Sub Station	450679 357856	NG17	Electrical Features	Infrastructure and Facilities
17	82	NW	Sutton Parkway Rail Station	450603 357705	NG17	Railway Stations, Junctions and Halts	Public Transport, Stations and Infrastructure
18	84	SW	Kirton Tube & Components Ltd	451214 357194	Hunt Close, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7ER	Metals Manufacturers, Fabricators and Stockholders	Industrial Products
19	101	E	Electricity Sub Station	452119 357742	NG17	Electrical Features	Infrastructure and Facilities
20	110	NW	Clothing Management Technology Ltd	450671 357903	2, Julias Way, Kirkby-in-Ashfield, Nottingham, NG17 7RB	Clothing, Components and Accessories	Consumer Products
21C	110	NW	S & S Plastics	450699 357962	Julias Way, Kirkby-in-Ashfield, Nottingham, NG17 7RB	Rubber, Silicones and Plastics	Industrial Products
22	121	SW	Electricity Sub Station	450678 357482	NG17	Electrical Features	Infrastructure and Facilities
23D	122	S	Bapp	451016 357407	Prospect Close, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7LF	General Construction Supplies	Industrial Products
24	122	NW	Caravan Man Repairs	451172 358039	23, Farndon Road, Sutton-in-Ashfield, NG17 5HR	Sports and Leisure Equipment Repair	Repair and Servicing
25D	124	S	Techmax	451041 357411	Unit K2 Prospect Close, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7LF	Clothing, Components and Accessories	Consumer Products
26F	127	S	Tank	450894 357386	NG17	Tanks (Generic)	Industrial Features
27	133	S	A N S Machining Services Ltd	451064 357406	Unit 4 Prospect Court, Prospect Close Lowmoor Business Park, Kirkby-In-Ashfield, Nottingham, NG17 7LF	Precision Engineers	Engineering Services
28	133	W	Electricity Sub Station	451133 357218	NG17	Electrical Features	Infrastructure and Facilities
29G	134	NW	Works	451464 358671	NG17	Unspecified Works Or Factories	Industrial Features
30	136	S	I K Allsop	450793 357410	Byron Avenue, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7LA	Precision Engineers	Engineering Services
31	136	S	Tyler Bros Sutton in Ashfield Ltd	451244 357132	Hunt Close, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7ER	Precision Engineers	Engineering Services
32E	147	SW	Taylors Transport	451183 357140	Sidings Road, Lowmoor Business Park, Kirkby-In-Ashfield, Nottingham, NG17 7JZ	Distribution and Haulage	Transport, Storage and Delivery
33	149	NW	Bonds Confectionary	451377 358631	Unit A, Hamilton Road, Sutton-in-Ashfield, NG17 5LD	Baking and Confectionery	Foodstuffs

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
34	150	NW	Bill Horan	450704 358059	17, Maun View Gardens, Sutton-in-Ashfield, NG17 5HL	Electrical Equipment Repair and Servicing	Repair and Servicing
35E	158	SW	Tank	451192 357123	NG17	Tanks (Generic)	Industrial Features
36	160	S	Roger Syson & Sons Ltd	450839 357368	Unit 3 Byron Avenue, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7LA	Fuel Distributors and Suppliers	Household, Office, Leisure and Garden
37F	161	S	G D C	450922 357350	Unit 2 Byron Avenue, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7LA	Cutting, Drilling and Welding Services	Construction Services
38G	165	NW	Pirtek Ltd	451435 358689	Unit 4, Hamilton Road, Sutton-in-Ashfield, NG17 5LD	Industrial Repairs and Servicing	Repair and Servicing
39G	166	NW	J K P Tins	451435 358689	Unit C, Hamilton Road, Sutton-in-Ashfield, NG17 5LD	Packaging	Industrial Products
40G	166	NW	Stal Ltd	451435 358689	Unit 4, Hamilton Road, Sutton-in-Ashfield, NG17 5LD	Special Purpose Machinery and Equipment	Industrial Products
41I	171	W	Electricity Sub Station	451077 357268	NG17	Electrical Features	Infrastructure and Facilities
42	173	NW	Electricity Sub Station	451514 358748	NG17	Electrical Features	Infrastructure and Facilities
43J	188	NW	King Storage	451386 358683	Unit 9, Hamilton Road, Sutton-in-Ashfield, NG17 5LD	Container and Storage	Transport, Storage and Delivery
44	194	W	Sanglier Ltd	451072 357209	Shelley Close, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7ET	Packaging	Industrial Products
45H	207	NW	Fabrikat	451236 358620	Hamilton Road, Sutton-in-Ashfield, NG17 5LN	Fences, Gates and Railings	Industrial Products
46H	207	NW	P R Kyte Engineering	451236 358620	Hamilton Road, Sutton-in-Ashfield, NG17 5LD	Industrial Engineers	Engineering Services
47	207	S	Global E M C	450992 357315	Prospect Close, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7LF	Measurement and Inspection Equipment	Industrial Products
48H	213	NW	Works	451260 358645	NG17	Unspecified Works Or Factories	Industrial Features
49	213	W	Electricity Sub Station	451176 358386	NG17	Electrical Features	Infrastructure and Facilities
50	214	S	A B S	451257 357053	Unit 1 Ventura Court, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7DF	Metals Manufacturers, Fabricators and Stockholders	Industrial Products
51I	216	W	Nottingham Zinc Group	451039 357237	Byron Avenue, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7LA	Industrial Coatings and Finishings	Industrial Products
52	218	S	Electricity Sub Station	450869 357298	NG17	Electrical Features	Infrastructure and Facilities
53J	223	NW	Border Plastics	451368 358713	Unit 13, Hamilton Road, Sutton-in-Ashfield, NG17 5LD	Rubber, Silicones and Plastics	Industrial Products

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
54	227	S	Electricity Sub Station	450803 357310	NG17	Electrical Features	Infrastructure and Facilities
55L	231	SW	Recycling Centre	451088 357110	NG17	Recycling Centres	Infrastructure and Facilities
56	232	SW	Maurice Hill Transport Ltd	450607 357394	Wolsey Drive, Kirkby-in-Ashfield, Nottingham, NG17 7JR	Distribution and Haulage	Transport, Storage and Delivery
57K	243	NW	Eaton M E D C Ltd	450519 357898	Unit B Sutton Parkway, Oddicroft Lane, Sutton-in-Ashfield, NG17 5FB	Electronic Equipment	Industrial Products
58K	243	NW	Cooper M E D C	450519 357898	Unit B Sutton Parkway, Oddicroft Lane, Sutton-in-Ashfield, NG17 5FB	Special Purpose Machinery and Equipment	Industrial Products
59	243	W	Works	451140 358532	NG17	Unspecified Works Or Factories	Industrial Features
60	245	NW	Chicco	450475 357814	Unit C, Oddicroft Lane, Sutton-in-Ashfield, NG17 5FB	Baby, Nursery and Playground Equipment	Consumer Products
61	245	N	Electricity Sub Station	451527 358828	NG17	Electrical Features	Infrastructure and Facilities
62L	250	SW	G K Precision 96	451094 357077	Sidings Road, Lowmoor Business Park, Kirkby-in-Ashfield, Nottingham, NG17 7JZ	Precision Engineers	Engineering Services

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: 1

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
63	318	N	450950 358283	Unbranded	Kirkby Folly Service Station, Kirkby Folly Road, Sutton-In-Ashfield, Nottinghamshire, NG17 5HN	Not Applicable	Obsolete

4.3 National Grid High Voltage Underground Electricity Transmission Cables

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

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site: 0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

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

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

Database searched and no data found.

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5. Geology

5.1 Artificial Ground and Made Ground

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

Lex Code	Description	Rock Type
WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT
WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT
WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT
WGR-OPEN	WORKED GROUND (UNDIVIDED)	VOID

5.2 Superficial Ground and Drift Geology

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

Lex Code	Description	Rock Type
HEAD	HEAD	DIAMICTON
GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
HEAD	HEAD	DIAMICTON
GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
HEAD	HEAD	DIAMICTON
GFDMP	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
TILMP	TILL, MID PLEISTOCENE	DIAMICTON

5.3 Bedrock and Solid Geology

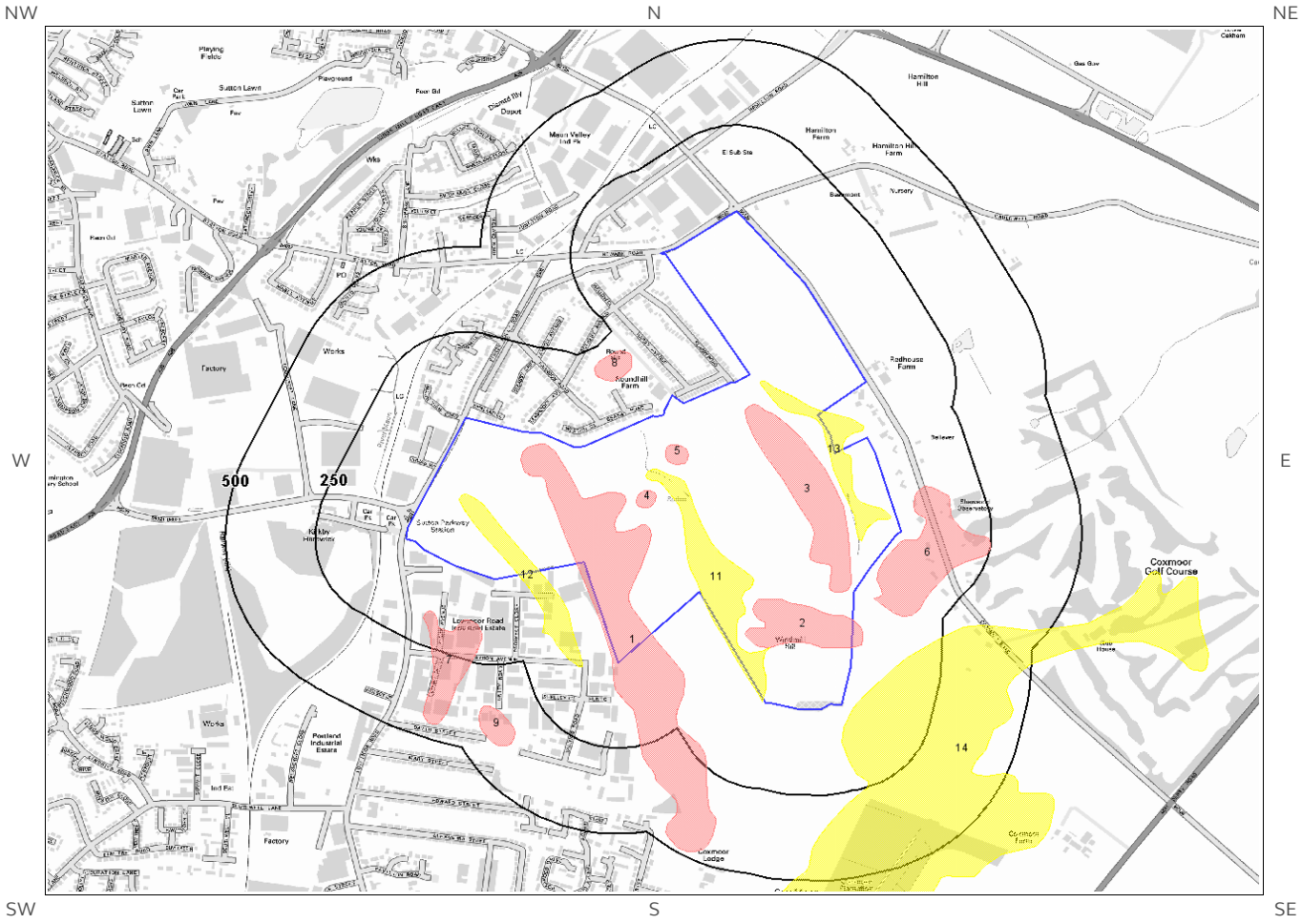
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
NTC-SDST	NOTTINGHAM CASTLE SANDSTONE FORMATION	SANDSTONE
LNS-SDST	LENTON SANDSTONE FORMATION	SANDSTONE
EDT-MDSD	EDLINGTON FORMATION	MUDSTONE AND SANDSTONE
LNS-SDST	LENTON SANDSTONE FORMATION	SANDSTONE
NTC-SDST	NOTTINGHAM CASTLE SANDSTONE FORMATION	SANDSTONE

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

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology



Site Outline

250

500

Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

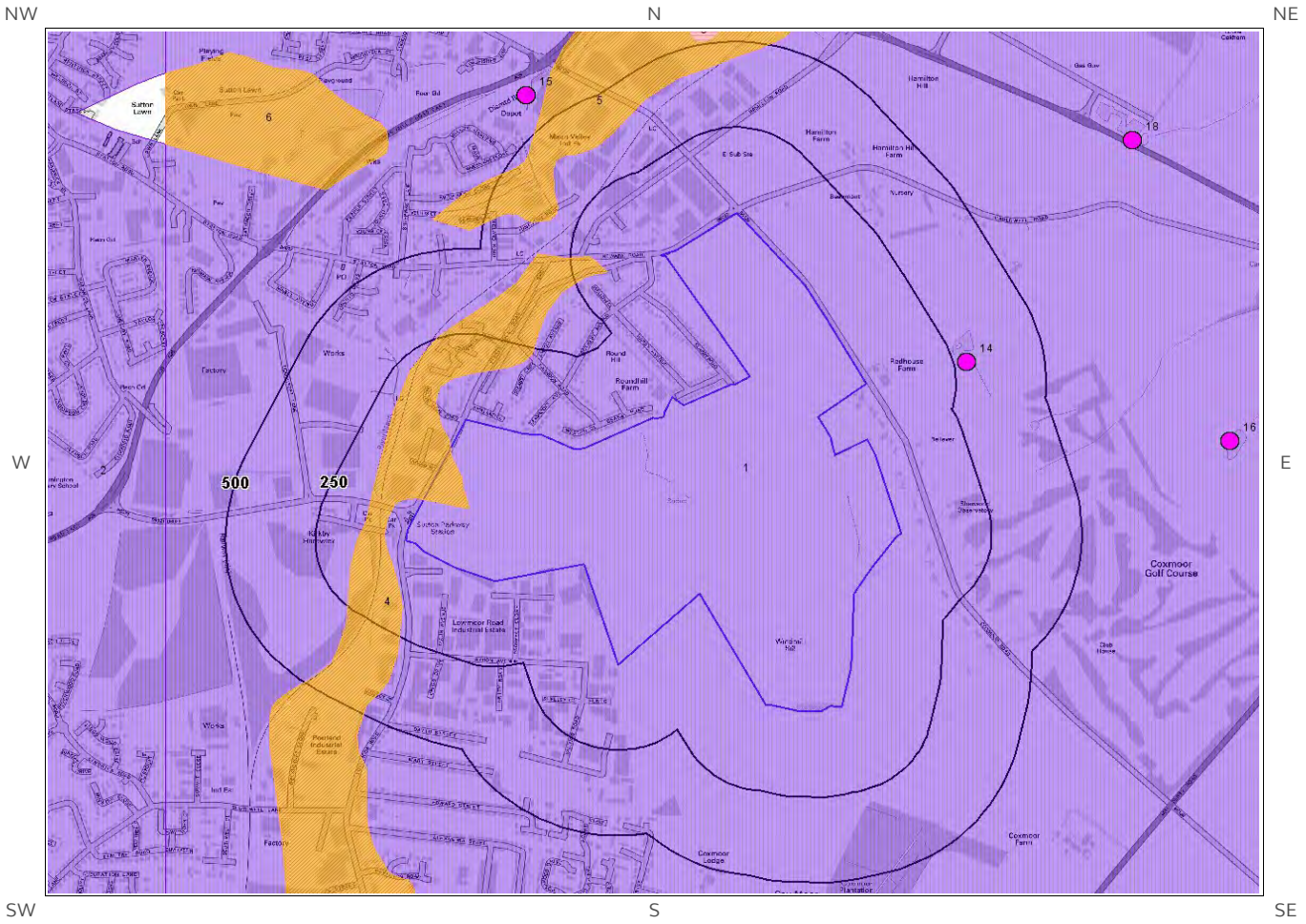
Secondary (B) Aquifer - Lower Permeability Layers

Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

6b. Aquifer Within Bedrock Geology and Abstraction Licenses



Site Outline

250
500
Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

Secondary (B) Aquifer - Lower Permeability Layers

Groundwater Abstraction Licence

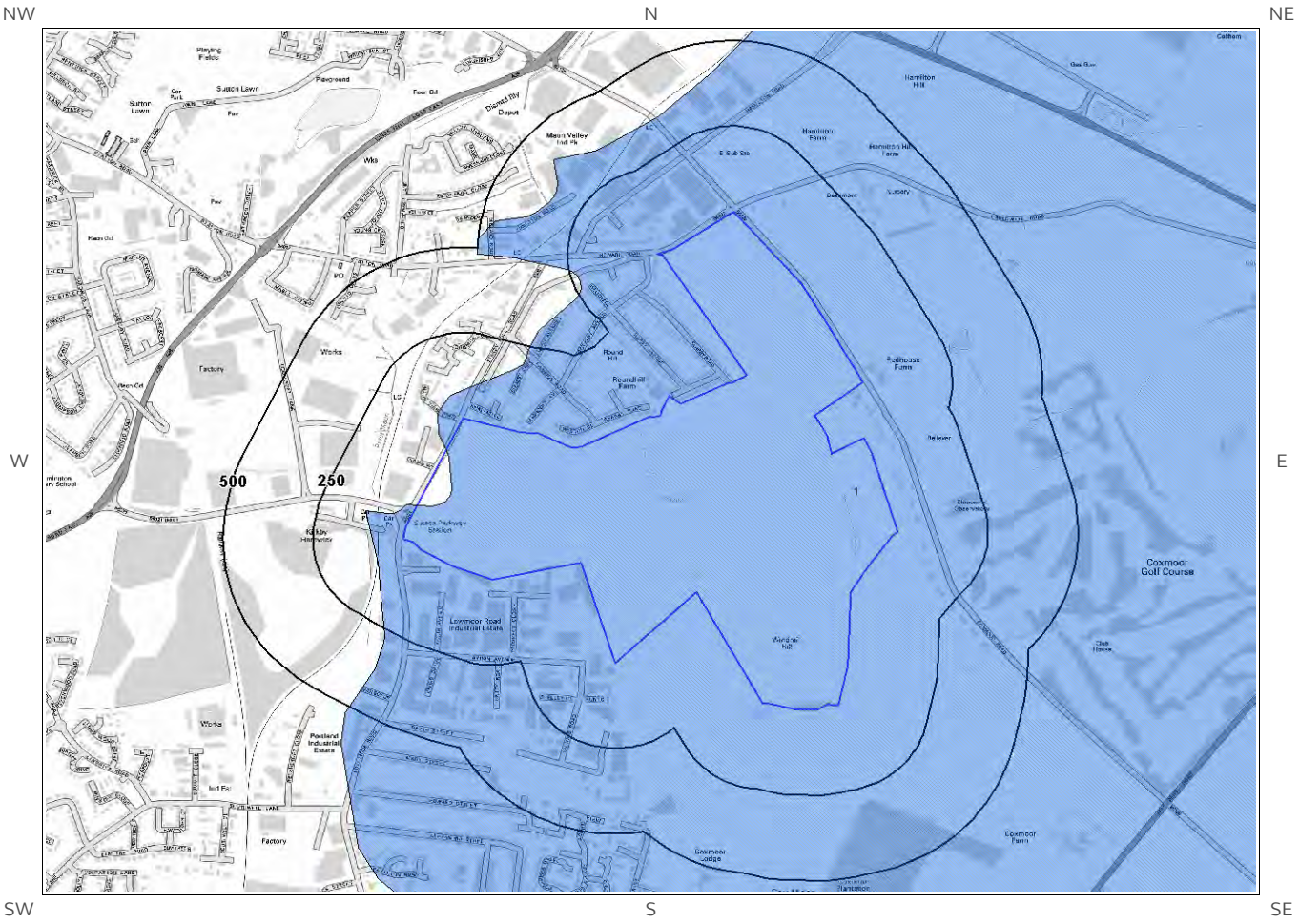
Secondary Aquifer - Undifferentiated Layers

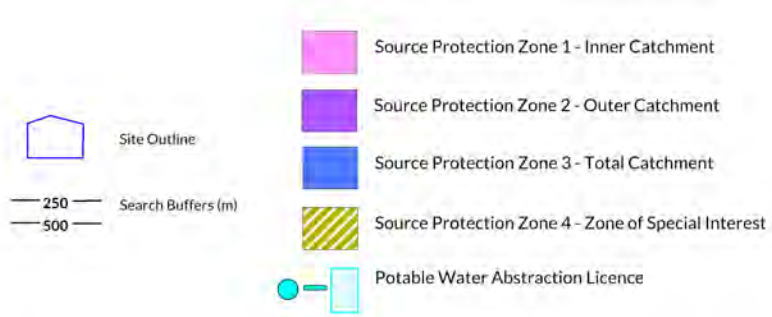
Unproductive

Unknown (lakes and landslip)

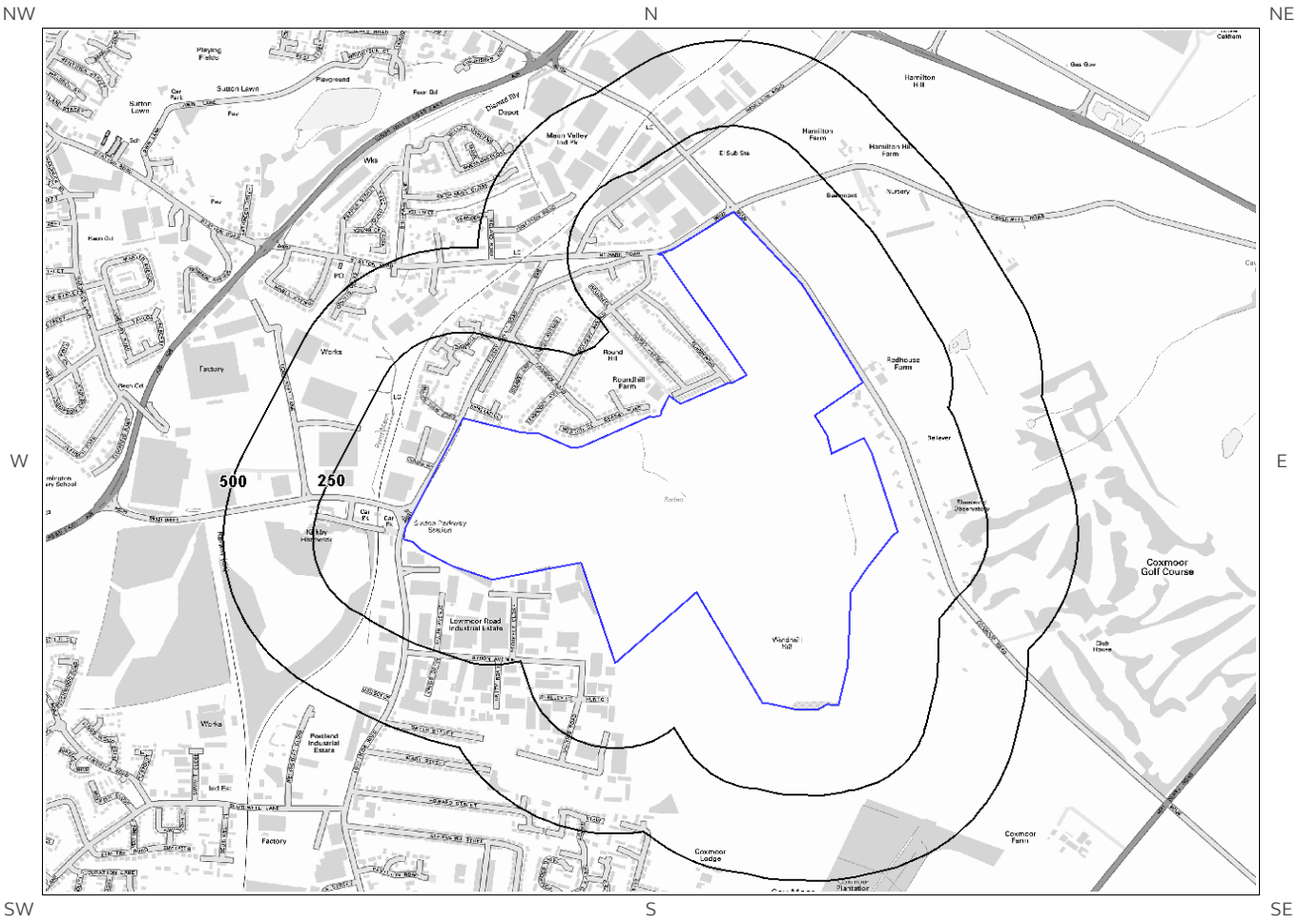
Surface Water Abstraction Licence

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





6d. Hydrogeology – Source Protection Zones within confined aquifer



Source Protection Zone 1 - Inner Catchment

Source Protection Zone 2C - Outer Catchment within Confined Aquifer

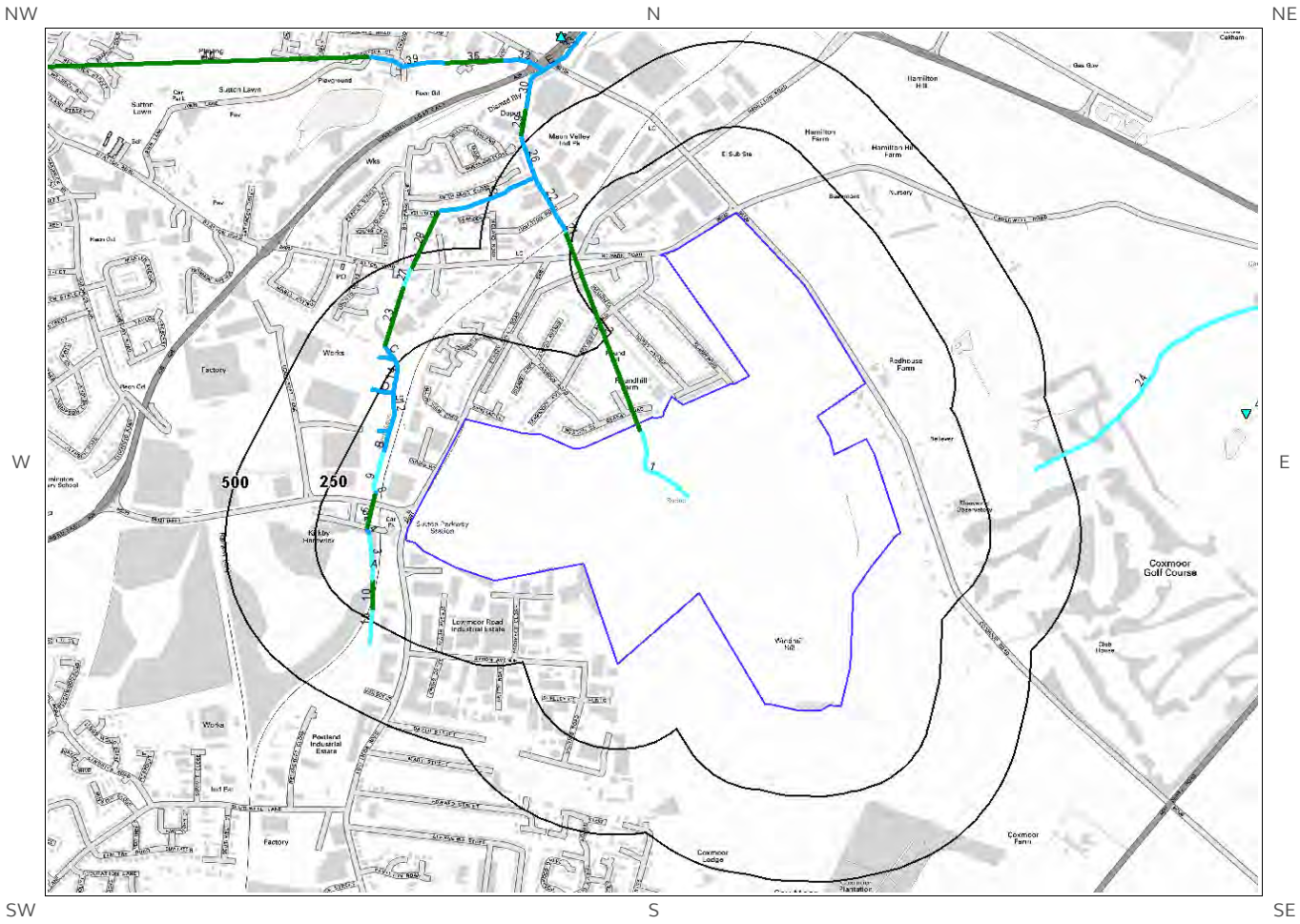
Source Protection Zone 3C - Total Catchment within Confined Aquifer

Site Outline

Potable Water Abstraction Licence

250 — 500 — Search Buffers (m)

6e. Hydrology – Detailed River Network and River Quality



Site Outline

250 Search Buffers (m)
500

Primary River
Secondary River
Tertiary River
Lake/Reservoir
Underground River (inferred)
General Quality Assessment: Biology
General Quality Assessment: Chemistry

Canal
Canal Tunnel
Culvert
Multiple Channel Culvert
Underground River (Potential Sewer)
Underground River (local knowledge)

6.Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

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

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

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

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
3	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
5	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
11	0	On Site	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
12	0	On Site	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
13	0	On Site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	15	SE	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
14	32	SE	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
7	135	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
8	138	NW	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
9	347	SW	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

6.2 Aquifer within Bedrock Deposits

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

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

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

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
4	0	On Site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers
5	314	NW	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

6.3 Groundwater Abstraction Licences

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

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

ID	Distance (m)	Direction	NGR	Details	
Not shown	1415	N	451880 360010	Status: Historical Licence No: 03/28/70/0099 Details: Pollution Remediation Direct Source: Groundwater Midlands Region Point: King's Mill Service Station - Borehole Data Type: Region Name: TOTALFINAELF UK LIMITED	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: A/28/70/54 Original Start Date: 20/9/2001 Expiry Date: - Issue No: 1 Version Start Date: 20/9/2001 Version End Date:
Not shown	1685	NE	453220 359240	Status: Historical Licence No: 03/28/70/0077 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: Lower Oakham - Lagoon Data Type: Point Name: JOHN BALL LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 26/3/1993 Expiry Date: 37560 Issue No: 100 Version Start Date: 14/3/1997 Version End Date:
Not shown	1685	NE	453220 359240	Status: Historical Licence No: 03/28/70/0102 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: Lower Oakham - Lagoon Data Type: Point Name: ANTHONY SALATA	Annual Volume (m^3): 10000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 2/1/2003 Expiry Date: 31/3/2009 Issue No: 2 Version Start Date: 31/3/2005 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1951	E	453793 356776	Status: Historical Licence No: 03/28/70/0097/1/R01 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: Borehole 'c' At Two Oaks Farm, Derby Road, Mansfield Data Type: Point Name: Mansfield Sand Company Limited	Annual Volume (m^3): 200000 Max Daily Volume (m^3): 2640 Original Application No: NPS/WR/014598 Original Start Date: 8/11/2013 Expiry Date: 31/3/2020 Issue No: 1 Version Start Date: 8/11/2013 Version End Date:
Not shown	1951	E	453793 356776	Status: Historical Licence No: 03/28/70/0097/1/R01 Details: Mineral Washing Direct Source: Groundwater Midlands Region Point: Borehole 'd' At Two Oaks Farm, Derby Road, Mansfield Data Type: Point Name: Mansfield Sand Company Limited	Annual Volume (m^3): 5390000 Max Daily Volume (m^3): 19600 Original Application No: NPS/WR/019731 Original Start Date: 8/11/2013 Expiry Date: 31/3/2020 Issue No: 3 Version Start Date: 4/12/2015 Version End Date:
Not shown	1963	E	453800 356750	Status: Historical Licence No: 03/28/70/0097 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: Borehole At Two Oaks Farm, Derby Road, Mansfield Data Type: Point Name: ROBERT THOMAS FARMS	Annual Volume (m^3): 200000 Max Daily Volume (m^3): 2640 Original Application No: - Original Start Date: 5/6/2001 Expiry Date: 31/3/2009 Issue No: 4 Version Start Date: 12/3/2008 Version End Date:
Not shown	1963	E	453800 356750	Status: Historical Licence No: 03/28/70/0097/1 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: Borehole At Two Oaks Farm, Derby Road, Mansfield Data Type: Point Name: Mansfield Sand Company Limited	Annual Volume (m^3): 200000 Max Daily Volume (m^3): 2640 Original Application No: NPS/WR/013233 Original Start Date: 1/4/2009 Expiry Date: 31/3/2015 Issue No: 101 Version Start Date: 16/5/2013 Version End Date:

6.4 Surface Water Abstraction Licences

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

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

ID	Distance (m)	Direction	NGR	Details	
14	284	E	452220 358150	Status: Active Licence No: 03/28/70/0084 Details: Spray Irrigation - Storage Direct Source: Surface Water Midlands Region Point: Coxmoor Golf Club - Tributary Of Cauldwell Brook Data Type: Point Name: COXMOOR GOLF CLUB	Annual Volume (m^3): 5500 Max Daily Volume (m^3): 37 Application No: - Original Start Date: 13/3/1997 Expiry Date: - Issue No: 100 Version Start Date: 1/4/2008 Version End Date:
15	597	NW	451000 358930	Status: Historical Licence No: 03/28/70/0083 Details: Process water Direct Source: Surface Water Midlands Region Point: Sutton In Ashfield - River Maun Data Type: Point Name: EVE TRAKWAY LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 30/9/1996 Expiry Date: - Issue No: 100 Version Start Date: 1/4/2000 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
16	947	E	452950 357920	Status: Active Licence No: 03/28/70/0078 Details: Spray Irrigation - Direct Direct Source: Surface Water Midlands Region Point: Stonehills Farm - Cauldwell Brook (reservoir) Data Type: Point Name: Mr Anthony Gene Salata & Mr Anthony Mervyn Jorden	Annual Volume (m^3): 10000 Max Daily Volume (m^3): 2000 Application No: NPS/WR/018055 Original Start Date: 30/11/1993 Expiry Date: - Issue No: 103 Version Start Date: 1/12/2014 Version End Date:
Not shown	966	S	438620 356350	Status: Historical Licence No: 03/28/41/0075 Details: Spray Irrigation - Direct Direct Source: Surface Water Midlands Region Point: Lane Farm Data Type: Line Name: WHITE	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 8/5/1985 Expiry Date: - Issue No: 100 Version Start Date: 8/5/1985 Version End Date:
18	995	NE	452680 358800	Status: Active Licence No: 03/28/70/0076 Details: Spray Irrigation - Storage Direct Source: Surface Water Midlands Region Point: Lower Oakham - Drain Tributary Of Cauldwell Brook Data Type: Point Name: Mr Anthony Gene Salata & Mr Anthony Mervyn Jorden	Annual Volume (m^3): 30000 Max Daily Volume (m^3): 0 Application No: NPS/WR/018053 Original Start Date: 26/3/1993 Expiry Date: - Issue No: 103 Version Start Date: 1/12/2014 Version End Date:

6.5 Potable Water Abstraction Licences

Are there any Potable Water Abstraction Licences within 2000m of the study site? No

Database searched and no data found.

6.6 Source Protection Zones

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

The following Source Protection Zones records are represented on the SPZ and Potable Water Abstraction Map (6c):

ID	Distance (m)	Direction	Zone	Description
1	0	On Site	3	Total catchment

6.7 Source Protection Zones within Confined Aquifer

Are there any Source Protection Zones within the Confined Aquifer within 500m of the study site? No

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

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

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

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Major Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
0	On Site	Major Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
0	On Site	Major Aquifer/High Leaching Potential	H2	Deep, permeable, coarse textured soils which readily transmit a wide range of pollutants because of their rapid drainage and low attenuation potential.
112	W	Major Aquifer/High Leaching Potential	H2	Deep, permeable, coarse textured soils which readily transmit a wide range of pollutants because of their rapid drainage and low attenuation potential.

6.9 River Quality

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

6.9.1 Biological Quality:

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

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

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
41F	692	NW	451100 359100	River Name: Maun Reach: I/l Kingsmill Res. To O/l Kingsmill Res. End/Start of Stretch: Start of Stretch NGR	D	D	D	D	C
42F	692	NW	451100 359100	River Name: Maun Reach: Sutton Woodhouse To I/l Kingsmill Res. End/Start of Stretch: End of Stretch NGR	D	D	D	E	E
43	1019	E	453000 358000	River Name: Cauldwell Brook Reach: Stonehills Farm Bridge To Conf. R. Maun End/Start of Stretch: Start of Stretch NGR	C	C	C	B	B
Not shown	1155	N	451900 359700	River Name: Maun Reach: O/l Kingsmill Res. To Mansfield Stw End/Start of Stretch: Start of Stretch NGR	E	E	E	E	E
Not shown	1155	N	451900 359700	River Name: Maun Reach: I/l Kingsmill Res. To O/l Kingsmill Res. End/Start of Stretch: End of Stretch NGR	D	D	D	D	C

6.9.2 Chemical Quality:

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

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

					Chemical Quality Grade				
ID	Distance (m)	Direction	NGR	River Quality Grade	2005	2006	2007	2008	2009
46F	692	NW	451100 359100	River Name: Maun R Reach: Il Kingsmill Res To Ol Kingsmill Res End/Start of Stretch: Start of Stretch NGR	C	C	C	C	C
47F	692	NW	451100 359100	River Name: Maun R Reach: Sutton Woodhouse To Il Kingsmill Res End/Start of Stretch: End of Stretch NGR	A	A	A	A	A
Not shown	760	NW	451290 359290	River Name: Maun R Reach: Sutton Woodhouse To Il Kingsmill Res End/Start of Stretch: Sample Point NGR	A	A	A	A	A
Not shown	1155	N	451900 359700	River Name: Maun R Reach: Il Kingsmill Res To Ol Kingsmill Res End/Start of Stretch: End of Stretch NGR	C	C	C	C	C
Not shown	1155	N	451900 359700	River Name: Maun R Reach: Ol Kingsmill Res To Mansfield Stw End/Start of Stretch: Start of Stretch NGR	C	C	C	C	C
Not shown	1193	N	451930 359730	River Name: Maun R Reach: Il Kingsmill Res To Ol Kingsmill Res End/Start of Stretch: Sample Point NGR	C	C	C	C	C

6.10 Detailed River Network

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

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

ID	Distance (m)	Direction	Details	
1	0	On Site	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
2	0	On Site	River Name: - Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined

ID	Distance (m)	Direction	Details	
3	97	W	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
4	100	W	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
5	111	W	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined
6A	123	SW	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
7A	124	SW	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
8	125	NW	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
9	130	NW	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
10	146	SW	River Name: - Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined
11B	160	NW	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
12	172	NW	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
13B	172	NW	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
14	214	NW	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
15D	214	NW	River Name: Drain Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
16	225	SW	River Name: Drain Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
17C	264	NW	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
18C	264	NW	River Name: Drain Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
19D	267	NW	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
20D	267	NW	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
21	269	W	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined

ID	Distance (m)	Direction	Details	
22	272	W	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
23	309	NW	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined
24	409	E	River Name: Drain Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
25	417	NW	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
26	419	NW	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
27	426	NW	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
28	464	N	River Name: River Maun Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined

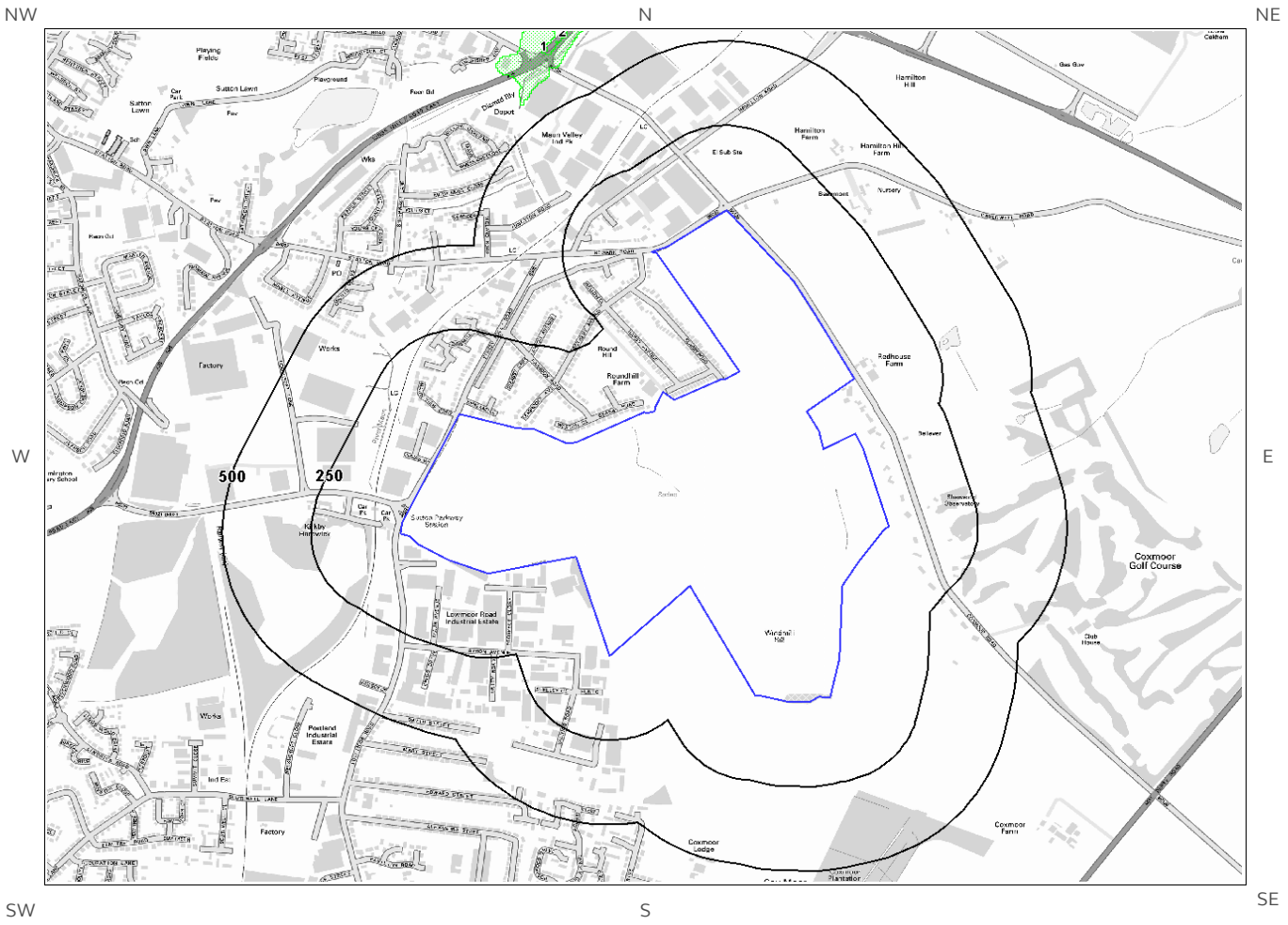
6.11 Surface Water Features

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

The following surface water records are not represented on mapping:

Distance (m)	Direction
0	On Site
0	On Site
0	On Site
97	W
124	SW
130	NW
140	NW
151	NW
159	NW
167	W
202	NW
225	SW

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



Site Outline

100
250
Search Buffers (m)

Zone 2 Floodplain

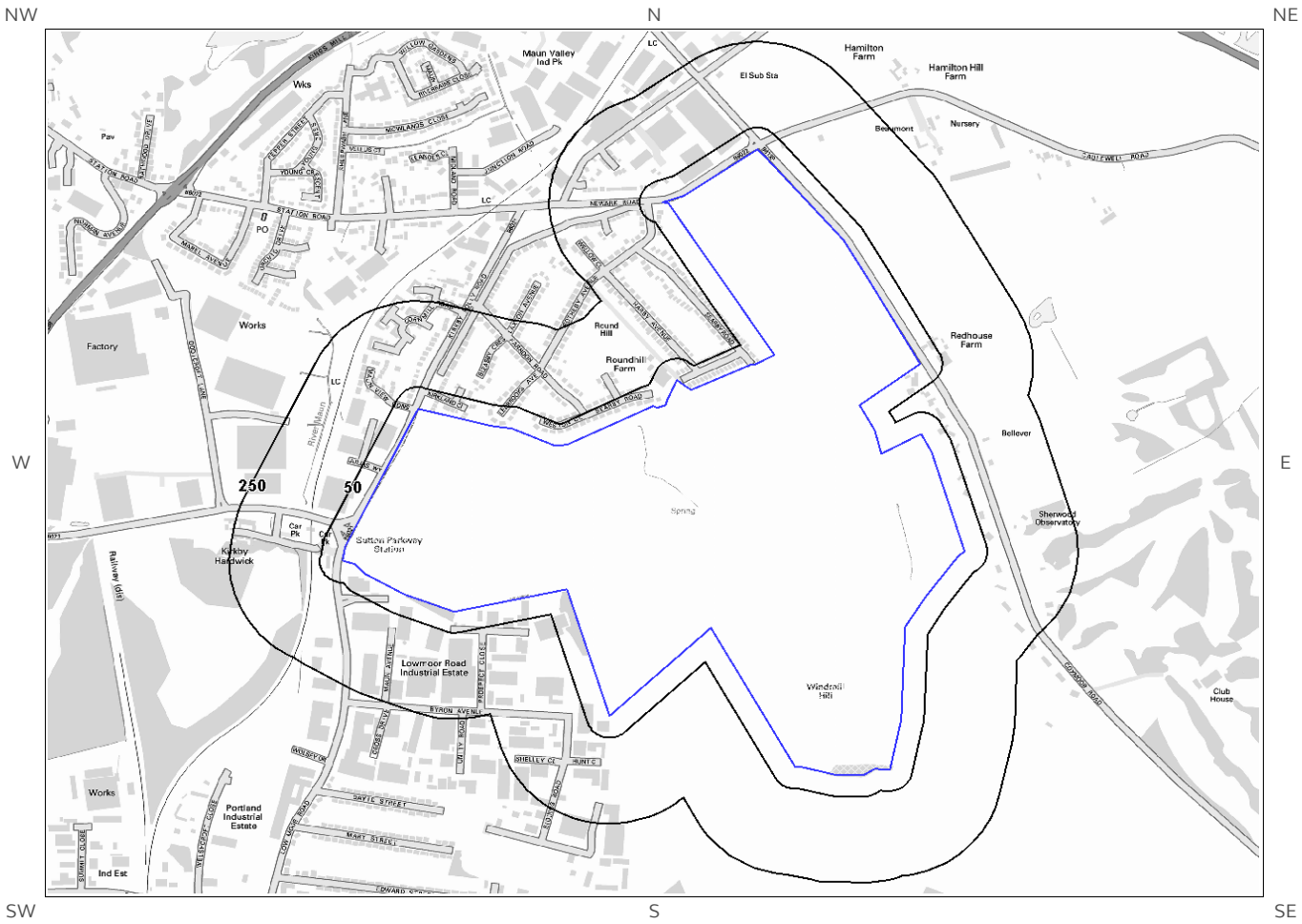
Zone 3 Floodplain

Flood Defences

Area used for Flood Storage

Area Benefiting from Flood Defences

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



Site Outline

100 Search Buffers (m)
250

RoFRaS Rating
Very Low
Low
Medium
High

7 Flooding

7.1 River and Coastal Zone 2 Flooding

Is the site within 250m of an Environment Agency Zone 2 floodplain? No

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

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

Is the site within 250m of an Environment Agency Zone 3 floodplain? No

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

Database searched and no data found.

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

What is the highest risk of flooding onsite? Very Low

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

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

7.4 Flood Defences

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

Database searched and no data found.

7.5 Areas benefiting from Flood Defences

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

7.6 Areas benefiting from Flood Storage

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

7.7 Groundwater Flooding Susceptibility Areas

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

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

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

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

Potential at Surface

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

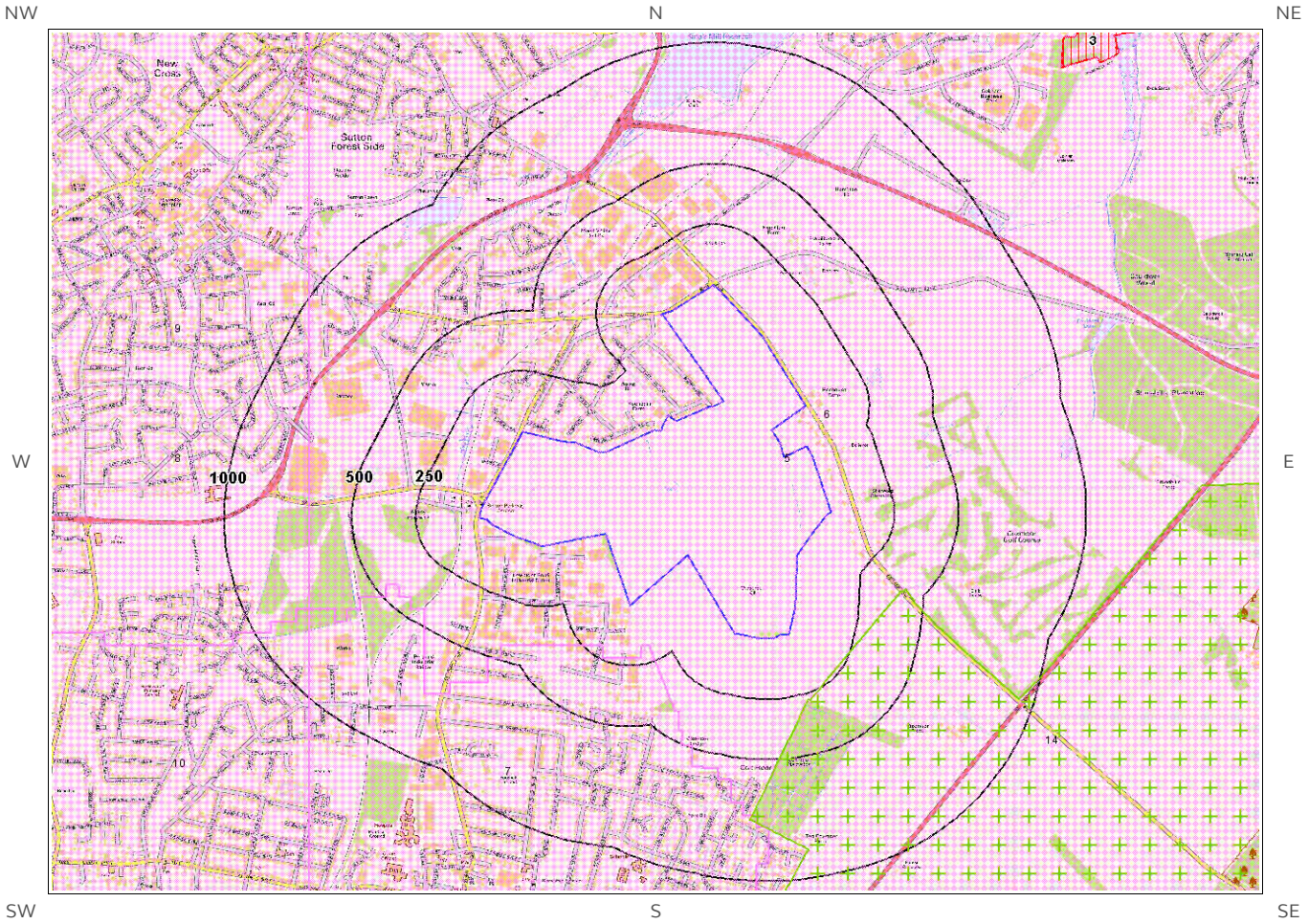
7.8 Groundwater Flooding Confidence Areas

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

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

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

8. Designated Environmentally Sensitive Sites Map



Site Outline

100 250 Search Buffers (m)

AONB

National Park

SSSI

Special Protection Areas

Nitrate Vulnerable Zones

Green Belt

Environmentally Sensitive Areas

Special Areas of Conservation

World Heritage Sites

Nitrate Sensitive Areas

Ancient Woodland

National Nature Reserve

Local Nature Reserves

Ramsar Sites

8. Designated Environmentally Sensitive Sites

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

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

1

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
13	1644	E	UNKNOWN	Ancient Replanted Woodland

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

4

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

ID	Distance (m)	Direction	LNR Name	Data Source
Not shown	1241	N	The Hermitage	Natural England
Not shown	1523	NE	Oakham	Natural England
3	1614	NE	Oakham	Natural England
Not shown	1950	NE	Quarry Lane	Natural England

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

8

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

ID	Distance (m)	Direction	NVZ Name	Data Source
5	0	On Site	Existing	DEFRA
6	0	On Site	Existing	DEFRA
7	172	S	Existing	DEFRA
8	667	W	Existing	DEFRA
9	667	W	Existing	DEFRA
10	767	SW	Existing	DEFRA
Not shown	1411	N	Existing	DEFRA
Not shown	1411	N	Existing	DEFRA

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

2

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

ID	Distance	Direction	Green Belt Name	Local Authority Name
14	232	SE	Derby and Nottingham Greenbelt	Ashfield District
Not shown	1966	SW	Derby and Nottingham Greenbelt	Ashfield District

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

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

9.1.1 Shrink Swell

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

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

Hazard
Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

9.1.2 Landslides

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

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

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

9.1.3 Soluble Rocks

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

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

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

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

9.1.4 Compressible Ground

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

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

Hazard
Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.

9.1.5 Collapsible Rocks

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

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

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

9.1.6 Running Sand

What is the maximum Running Sand*[*] hazard rating identified on the study site? Very Low

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

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

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

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

9.2.2 Radon Protection

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

10. Mining

10.1 Coal Mining

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

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

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

10.2 Non-Coal Mining

Are there any Non-Coal Mining areas within 50m of the study site boundary? No

Database searched and no data found.

10.3 Brine Affected Areas

Are there any brine affected areas within 75m of the study site? No
Guidance: No Guidance Required.

Contact Details

EmapSite
Telephone: 0118 9736883
sales@emapsite.com

British Geological Survey Enquiries
Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:
Web:**www.bgs.ac.uk**
BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk

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

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

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

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

Local Authority
Authority: Ashfield District Council
Phone: 01623 450 000
Web: http://www.ashfield-dc.gov.uk/
Address: Council Offices, Urban Road, Kirkby in Ashfield,

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

Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:
https://www.groundsure.com/terms-and-conditions-sept-2016

Appendix H: EA Correspondence

Robert Woodhouse
Rogers Leask Environmental
St. James House
St. Mary's Wharf
Mansfield Road
Derby
DE1 3TQ

Our Ref: EMD-34601

Your Ref:

Date: 25/01/2017

Dear Robert

Enquiry regarding info on 3 capped landfills provided on map

Thank you for your enquiry which was received on 11/01/2017.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004.

I enclose the attached map and following comments;

With regard to the landfill sites highlighted in your recent enquiry to the Environment Agency, please note the following:-

1. **The site known as Low Moor Road Kirkby in Ashfield (reference number 4/U/020/55NW SK5076557586) is labelled 6 and 7 on the enquiry map. Any operations on this site would have ceased prior to the implementation of licensing under the Control of Pollution Act 1974 and as such the Environment Agency has only limited anecdotal details. The site is thought to have been operated by Sutton Urban District Council (now part of Ashfield District Council). It is understood that the disposal of inert, household and non-hazardous industrial wastes took place. No further information is held by the Agency. It should be noted that extensive mining has taken place in this location and that the colliery spoil heaps to the west have been reclaimed.**

2. The site known as Coxmoor Road/Newark Road, Sutton in Ashfield, located at NGR SK5153958471 is labelled as site 8 on the enquiry map. A Waste Disposal Licence (reference 4/80/100/55NW) was issued to Stamford Waste Disposal Ltd in March 1980 for the disposal of:

   Construction industry waste (consisting of soil, spoil, rubble, excavation materials and demolition material)

   None of the above was to contain any putrescible material or other waste likely to cause nuisance or pollution.

The site was in operation until 1983, although the licence was not formally surrendered until 1992. The Environment Agency is not aware of any landfill gas monitoring having been carried out at this location.

3. The site known as Coxmoor Road lies is labelled B and 10 on the enquiry map and is located at Grid Ref SK51855 58499. A Waste Disposal Licence (reference 4/89/201/55NW) was issued to Midland Land Reclamation Ltd in 1990 for the disposal of:

   Construction industry waste (consisting of soil, spoil, rubble, excavation materials and demolition material)

   Non-hazardous industrial and commercial waste

   The licence was reissued, to the same licence holders, in 1991 (reference 4/91/201/55NW). The allowable waste types have since been modified further to include:

   WASTE CATEGORY A:
   NON DIFFICULT WASTE WITH A LOW POLLUTING POTENTIAL

   Uncontaminated solid wastes, which do not decompose or decompose only very slowly and are virtually insoluble in water, consisting of any or all of the following.

   Subsoil
   Topsoil
   Rock
   Stone
   Clay
   Sand (excluding foundry sand or silica)
   Tiles and Slate

   Note: Uncontaminated means the waste does not contain and is not mixed with any noxious, poisonous or polluting substance.

   EXCLUSIONS

   The following wastes are not permitted:

   Waste which contains putrescible or biodegradable matter.

   Any sludges or liquids.

   Any waste types not listed above.

   WASTE CATEGORY B:
   NON DIFFICULT WASTE WHICH IS NOT BIODEGRADABLE

Uncontaminated solid wastes, which do not decompose or decompose only very slowly and are virtually insoluble in water, consisting of any or all of the following and waste within Category A.

Brickwork and concrete (hardcore)
Silica (excluding finely powdered waste)
Glass, pottery, china, enamels, ceramics, mica and abrasives
Cement and cement products (excluding asbestos cement products)
Nontoxic and insoluble stable chemical compounds (including oxides, hydroxides, carbonates, chlorides and calcium sulphate (gypsum))
Plastics as finished products or manufacturing scrap only (including thermoplastics and thermosetting plastics)
Foundry sand and moulding sand not containing any significant soluble organic or phenolic binders or other potentially polluting material (subject to individual approval)
Metal (iron, steel, aluminium, brass, copper, tin and zinc) in solid form only

Note: Uncontaminated means the waste does not contain and is not mixed with any noxious, poisonous or polluting substance.

EXCLUSIONS

The following wastes are not permitted:

Metal in the form of swarf, dusts, or particulate scrap

Any sludges or liquids.

Waste which contains putrescible or biodegradable matter.

WASTE CATEGORY C:
NON DIFFICULT WASTE WITH A MEDIUM POLLUTING POTENTIAL

Solid, granular or broken materials which decompose slowly or are only slightly soluble in water, consisting of any or all of the following and waste within Categories A and B.

Plaster from construction industry sources only (excluding plasterboard)
Cork, ebonite, kapok
Untreated wood (excluding sawdust and sanderdust)
Shot blasting residues
Silicate slag (toxic metal slags excluded)
Boiler scale
Non toxic incinerator residues
Ash, clinker
Coal, coke
Excavated Road Metal (well weathered)

EXCLUSIONS

The following wastes are not permitted:

Waste which contains putrescible material

Any sludges or liquids

WASTE CATEGORY D:
NON DIFFICULT WASTE WITH A HIGH POLLUTING POTENTIAL

Materials which are putrescible or decompose relatively quickly or contain matter which is readily soluble in water and could cause pollution of any water course, either surface water or groundwater, which it might enter.

Vegetable matter, trees and bushes
Wood products (hardboard, chipboard etc and including sawdust and sanderdust)
Paper (including oiled and tarred paper)
Cardboard and fibreboard
Garden and horticultural waste (excluding horticultural chemicals)
Plasterboard
Leather (excluding leather processing waste)
Wool, cotton, linen, hemp, sisal, hessian, string, rope, and any other natural or man-made fibre
Furniture, including foam products.

EXCLUSIONS

The following wastes are not permitted:

Any sludges or liquids

It should be noted that the quantities of waste from categories C and D are severely limited.

Landfill gas studies have indicated that significant levels of gas are being generated within the waste mass.

Please get in touch if you have any further queries or contact us within two months if you'd like us to review the information we have sent.

Yours sincerely

Ray Gallagher
Customers & Engagement Officer
East Midlands

Appendix I: CLR11 Terminology

The likelihood of an event can be classified on a four-point system using the following terms and definitions based on CIRIA C552:

- Highly likely: the event appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution;
- Likely: it is probable that an event will occur or circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term;
- Low likelihood; circumstances are possible under which an event could occur, but it is not certain even in the long term that an event would occur and it is less likely that in the short term; and
- Unlikely: circumstances are such that it is improbable the event would occur even in the long term

The severity can be classified using a similar system also based on CIRIA C552. The terms and definitions relating to severity are:

- Severe: short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part 11A. Short term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. Short-term risk to an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land' DETR 2000);
- Medium; chronic damage to human health ('significant harm' as defined in Draft Circular on Contaminated Land', DETR 2000), pollution of sensitive water resources, significant change in an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in Draft Circular on Contaminated Land', DETR 2000);
- Mild: pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures or the environment; and
- Minor: harm, not necessarily significant, but that could result in financial loss or expenditure to resolve. Non-permanent human health effects easily prevented by use of personal protective clothing. Easily repairable damage to buildings, structures and services.

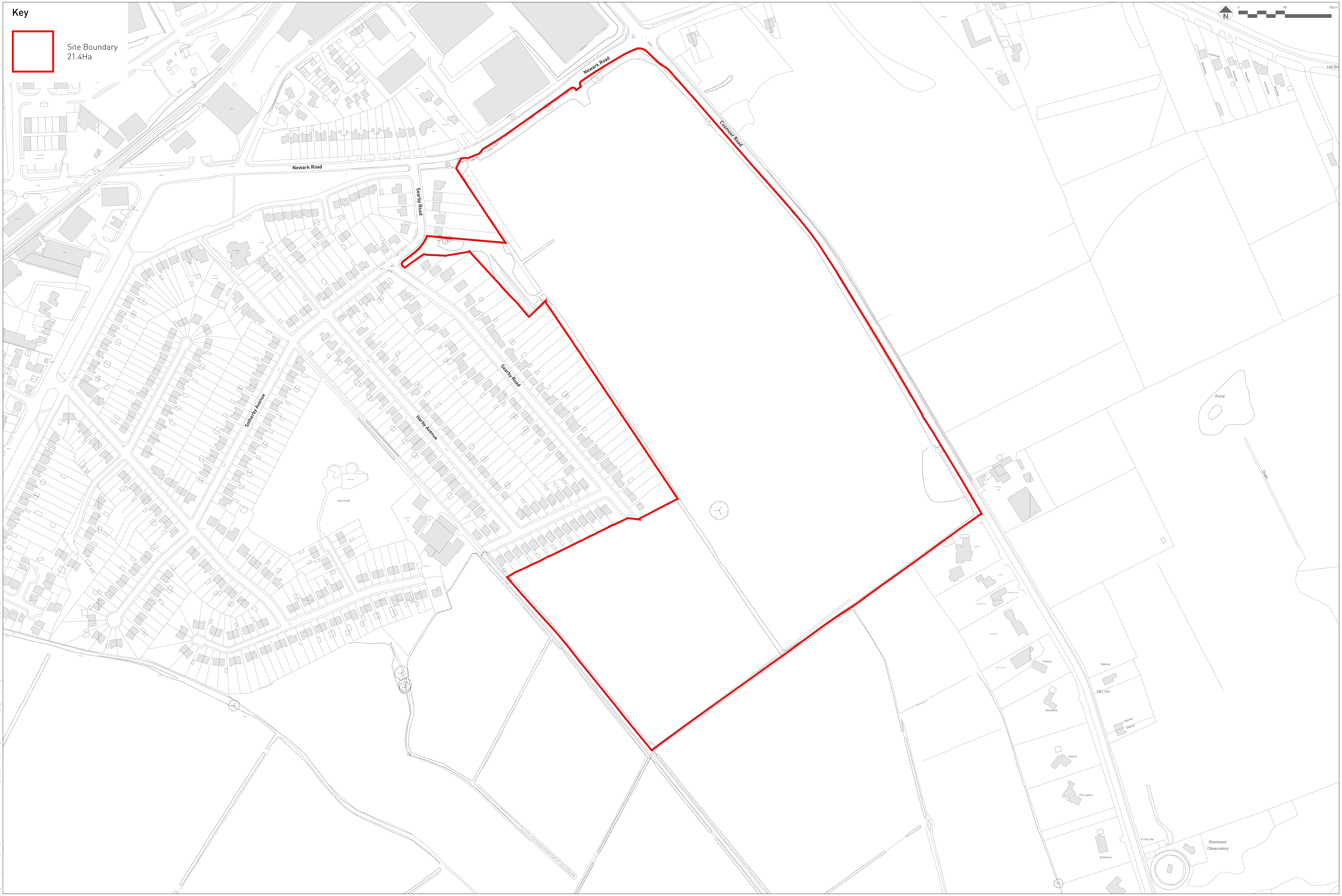
Once the likelihood of an event occurring and its severity have been classified, a risk category can be assigned from the table below:

		Consequences			
		Severe	**Medium**	**Mild**	**Minor**
Probability	**Highly likely**	Very high	high	Moderate	Moderate / low
	Likely	High	Moderate	Moderate / low	Low
	Low likelihood	Moderate	Moderate / low	Low	Very low
	Unlikely	Moderate / low	Low	Very low	Very low

Definitions of these risk categories are as shown below with an assessment of the further work that might be required:

- Very high: there is a high probability that severe harm could occur or there is evidence harm is currently happening. This risk, if realised, could result in substantial liability and urgent investigation and remediation are likely to be required;
- High: harm is likely to occur. Realisation of the risk is likely to present a substantial liability and urgent investigation is required and remedial works may be necessary in the short term and are likely over the long term;
- Moderate: it is possible that harm could arise, but it is unlikely that the harm would be severe and it is more likely that harm would be relatively mild. Investigation is normally required to clarify the risk and determine the liability. Some remedial works may be required in the longer term;
- Low: it is possible that harm could occur, but it is likely that if realised this harm would at worst normally be mild; and
- Very Low: there is a low possibility that harm could occur and if realised the harm is likely to be sever.

Appendix J: Application Red Line Plan



Planning | Design | Environment | Economics
East Midlands
www.pegasuspg.co.uk

Newark Road, Sutton-in-Ashfield - **Site Location Plan**

| Drawn by: JF | Approved by: MG | Date: 04/05/17 | Scale: 1:2500 @ A2 | DRG: EMS2254_018 Sheet No: 01 Rev: B | Client: Hallam Land Management |

Pegasus
Design

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