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CONSULTING

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SUMMARY

Site Details	
Site Location	*The site is located circa 3.4 miles west of Swadlincote Town Centre and is approximately centred on National Grid Reference 426947, 319035.*
Site Area	*The site is almost rectangular in shape covering an area of c.2.0Ha. The site is covered in dense vegetation and woodland.*

Preliminary Risk Assessment		
History		*According to the historical maps, the site has always been occupied by woodland. However, railway sidings and a sewage farm were present to the north.*
Geology/Hydrogeology		*The superficial deposits consist of Alluvium deposits in the north part of site. The solid geology is the Chester Formation (sandstone and conglomerate) and the western part is the Helsby Sandstone Formation (mudstone).* *The superficial deposits are classified as a Secondary A Aquifer and the bedrock is classed as a Principal Aquifer.*
Mining		*The property is in a surface area that could be affected by underground mining in 5 seams of coal at 130m to 260m depth, and last worked in 1956.* *The site is not affected by a legacy of shallow coal mine workings.*
Environmental Setting		*Sewage works have been located to the north of site.* *The nearest named watercourse is the River Trent c.3km north of site.* *Watercourses are present to the immediate north east and 10m west.* *The site is not located in a groundwater Source Protection Zone.* *There are no landfills present within 250m of site.* *The western extent of the site is in an area potentially affected by flooding.*
Pollution Linkage (PL) Assessment	Human Health	*Low risk as no significant onsite sources of contamination identified and mobile contamination from offsite sources unlikely to have migrated onto site.*
	Controlled Waters	*Significant mobile contamination not anticipated onsite. Risk to controlled waters is considered to be low.*
	Permanent Ground Gas	*Limited Made Ground expected to be present beneath the site. Offsite sources include an old sand pit, infilled ponds and the sewage farm. Risk considered to be Moderate to Low.* *Radon precautions not required.*

Ground Model	
Made Ground Soils	*Made Ground was encountered in three exploratory holes across the northern boundary of the site (WS05, WS07, and WS09) to depths of between 0.55m bgl and 2.6m bgl.*
Topsoil	*Brown variably silty sandy gravelly topsoil was encountered at the surface of the remaining boreholes to depths of between 0.1m and 0.45m bgl.*
Natural Soils	*Light brown, brown and red brown clayey gravelly Sand was encountered in WS04, WS05, WS07, WS08, WS09, WS11, WS12 and WS15 to depths of between 0.65m bgl and 2.45m bgl.* *Firm to stiff, stiff grey mottled orange variably gravelly sandy Clay was observed in WS04, WS05, WS06, WS07, WS08, WS09, WS11, WS12, WS13, WS14 and WS15 to depths of between 0.9m bgl and 3.0m bgl.* *Light brown, brown, red brown clayey Sand and Gravel was present in WS01, WS02, WS07 to WS11, and WS13 to depths of 0.7m bgl and 3.0m bgl.*
Bedrock	*Extremely weak to weak Mudstone was encountered in WS03 at 2.5m bgl to 2.6m bgl and in WS10 between depths of 0.95m bgl and 2.0m bgl in the southern part of the site.* *Residually weathered brown Sandstone was present in WS03 from depths of 2.6m to 2.7m bgl, WS11 from 2.1m to 2.2m bgl, and WS14 from 2.0m to 2.4m bgl. This was observed in the southern and western areas.*
Groundwater	*Groundwater strikes were observed in WS01 at 2.7m bgl, WS04 at 2.1m bgl and WS06 at 2.1m bgl within natural sand and sandy clay deposits.*
Tier 1 (GQRA) Assessment and Revised (PL) Assessment	
Human Health	*Limited Made Ground encountered and no elevated Contaminants of Concern recorded. Risk is Low.*
Controlled Waters	*Limited Made Ground encountered and no mobile contamination encountered. Risk is Low.*
Permanent Ground Gas	*Initial ground gas results currently place the site within CS1 and gas precaution measures are not deemed necessary at present. This will be reviewed upon completion of the gas monitoring programme.* *This site is not in an area requiring radon precaution measures.*
Final Appraisal	

The following further work is considered necessary to progress the site to construction phase:

- *Completion of gas monitoring programme.*
- *Issue gas assessment.*
- *Confirmation of recommendations made within this appraisal with the Local Authority, if required.*

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Plans		
Plan Reference	*Revision*	*Title*
GRO-20195-P01	-	*Project Location Plan*
GRO-20195-P02	-	*Preliminary Findings and Constraints Plan*
GRO-20195-P03	-	*Illustrative Preliminary CSM*
GRO-20195-P04	-	*Exploratory Hole Location Plan*
GRO-20195-P05	-	*Illustrative Revised CSM*

1.0 INTRODUCTION

1.1 Project Objectives

Groundtech Consulting Limited have been instructed by Willshee's Waste & Recycling to undertake a Preliminary Risk Assessment and Geo-Environmental Appraisal for a site in Cadley Hill, Swadlincote.

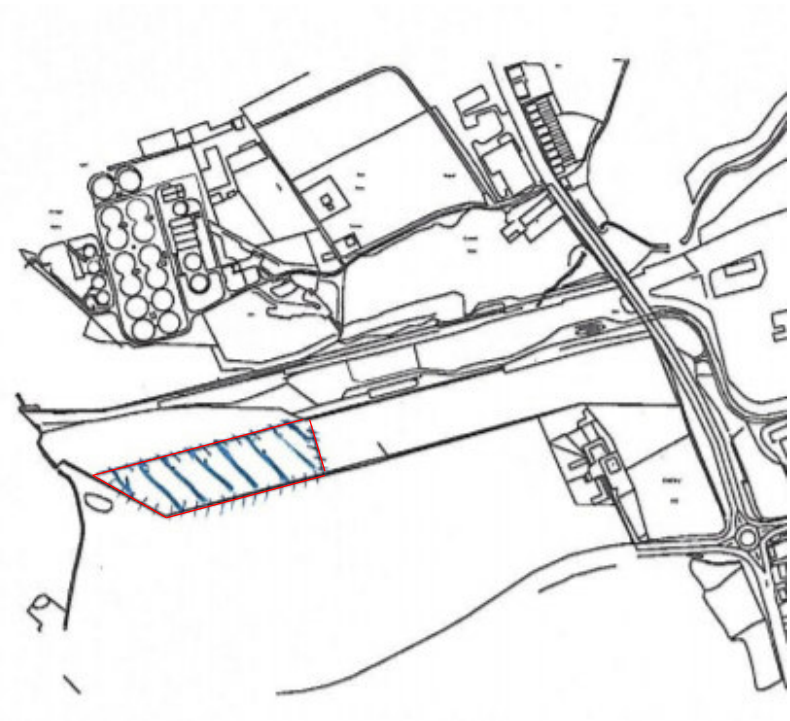
The objectives of the Preliminary Risk Assessment were to establish the sites environmental and geotechnical background in order to generate a Conceptual Site Model to identify any potential constraints and linkages which may affect the redevelopment of the site.

A main investigation was undertaken in accordance with BS 5930:2015, BS 10175:2013, BS 8576 and BS 22475 to revise the CSM and quantify the level of risk identified in the PRA. The Appraisal has been prepared in accordance with current UK Legislation and to discharge Land Quality pre-commencement planning conditions.

The report has been undertaken to fulfil the requirements of a preliminary risk assessment in accordance with CLR11 "Model Procedures for the Management of Land Contamination".

1.2 Proposed Development

The proposed development comprises the redevelopment of the land commercially however exact details are unknown at present.



Proposed Development

1.3 Limitations

This Preliminary Risk Assessment is based on information obtained from a number of sources, and the information is assumed to be correct.

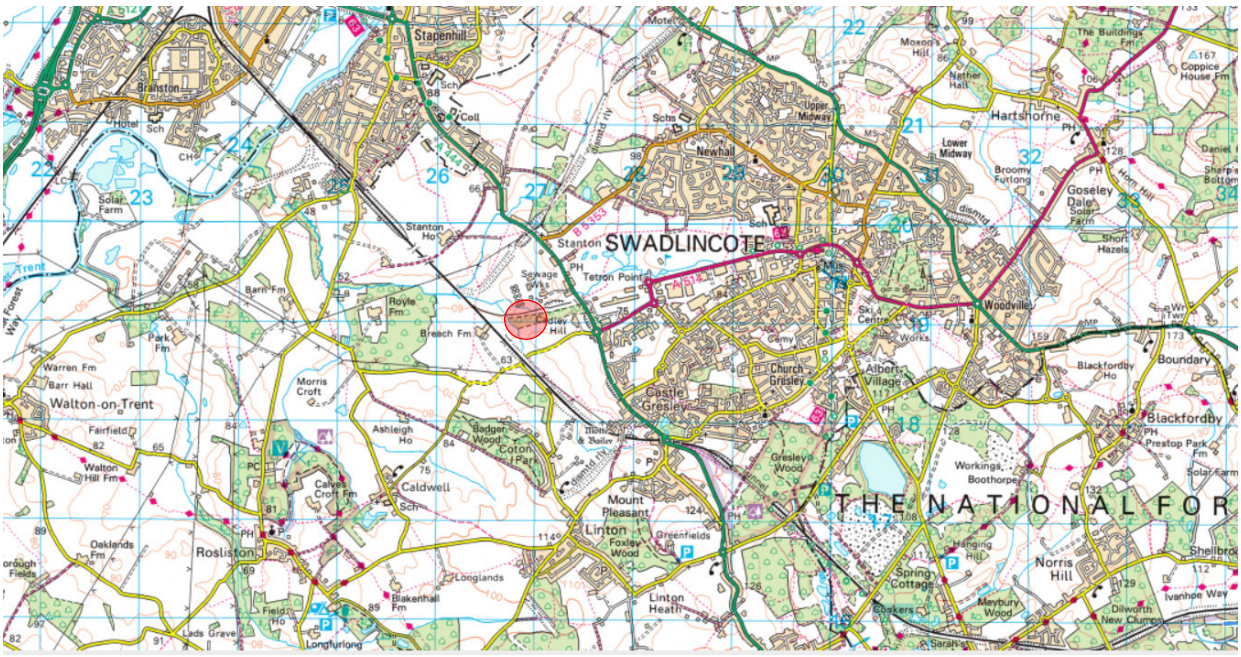
Other conditions may exist on the site that have not been taken into account in this assessment as they are outside the scope of works. Groundtech Consulting are not responsible for these circumstances that are not outlined in the report.

The assessment has been prepared for the exclusive use of the client. No third parties may rely on or reproduce the contents of the report without the written permission of Groundtech Consulting Limited. If any unauthorised third party comes into possession of the report, they rely on it at their own risk and Groundtech Consulting Limited will not be obliged to provide a duty of care.

2.0 SITE SETTING

2.1 Location

The site is located circa 3.4 miles west of Swadlincote Town Centre, as shown on the Project Location Plan *GRO-20195-P01* and is approximately centred on National Grid Reference 426947, 319035.



Project Location

Access to the site is gained off Cadley Hill Road to the east of site.

2.2 Site Description

The site area is almost rectangular in shape covering an area of approximately 2.0 hectares and the topography across the site gently slopes towards the south west.

The site currently consists of a densely vegetated wooded area throughout. The southern section of site is populated by mature trees with heavily overgrown vegetation present in the northern and western areas. The vegetation has been cut back in parts of the proposed development area to allow the ground investigation to take place.

There are small spoil heaps present in the northern section of site associated with Willshee's Waste and Recycling yard.

An underground electricity cable passes beneath the western area leading from a wooden pylon along the southern boundary to an electricity substation beyond the northern boundary.

The southern and western boundaries of the site are formed by fencing. The eastern and northern boundary is not fully distinguishable.

- North - Waste recycling yard and agricultural land.

- East - Inland river which becomes culverted and woodland.
- South - Agricultural land.
- West - Agricultural land.

Site photographs are presented in *Appendix 2* and any relevant features are recorded on the Preliminary Development Constraints Plan *GRO-20195-P02.*

3.0 ENVIRONMENTAL SETTING

3.1 Site History

Available historical maps have been obtained, a list of dates and scale are listed in the table below:

Scale	Date
1:1,250	*2003.*
1:2,500	*1883, 1901, 1923, 1959/60, 1960, 1970, 1969/74, 1974/76, 1977, 1989, 1993, 1991/93, 1993, 1994.*
1:10,000/10,560	*1882, 1900, 1902, 1925, 1938, 1955, 1967, 1976/80, 1989/90, 2001, 2010, 2020.*

The plans were examined and potential issues have been identified and summarised in the table below:

Date	Site	Surrounding Area
1883	*Formed by fields.*	*Generally surrounded by fields.* ***Railway line*** *located 80m north and 200m west.* ***Pond*** *situated 150m east and southwest.* *Watercourses present off north east corner and c.20m west.*
1900	*No change.*	***Sand pit*** *c.300m north east.* ***Sewage farm*** *400m north.*
1923	*No change.*	*Pond to north east no longer visible, possibly* ***infilled****.*
1925	*No change.*	***Sewage farm*** *located c.325m north.* ***Allotment gardens*** *c.500m north east.*
1955	*No change.*	***Sewage works*** *located c.20m north.*
1959/60	*No change.*	*Further development associated with sewage works up to c.100m north of site, including* ***tanks*** *and* ***filter beds****.*
1969/74	*No change.*	*Numerous* ***railway sidings*** *c.20m north east of the site.*
1989/93	*No change.*	*Railway sidings to the north east no longer shown.*
1991/93	*No change.*	*Railway to north dismantled.*
2001	*No change.*	*Sewage works to the north no longer shown.*
2020	*Woodland.*	*No significant change.*

The historical plans are presented in *Appendix 3.*

3.2 Geology

The following British Geological Survey (BGS) records and other available information were inspected to accurately determine the geology underlying the site:

- 1:50,000 Scale Geological Sheet 141, Loughborough – Solid and Drift Edition.
- BGS Records.

Made Ground

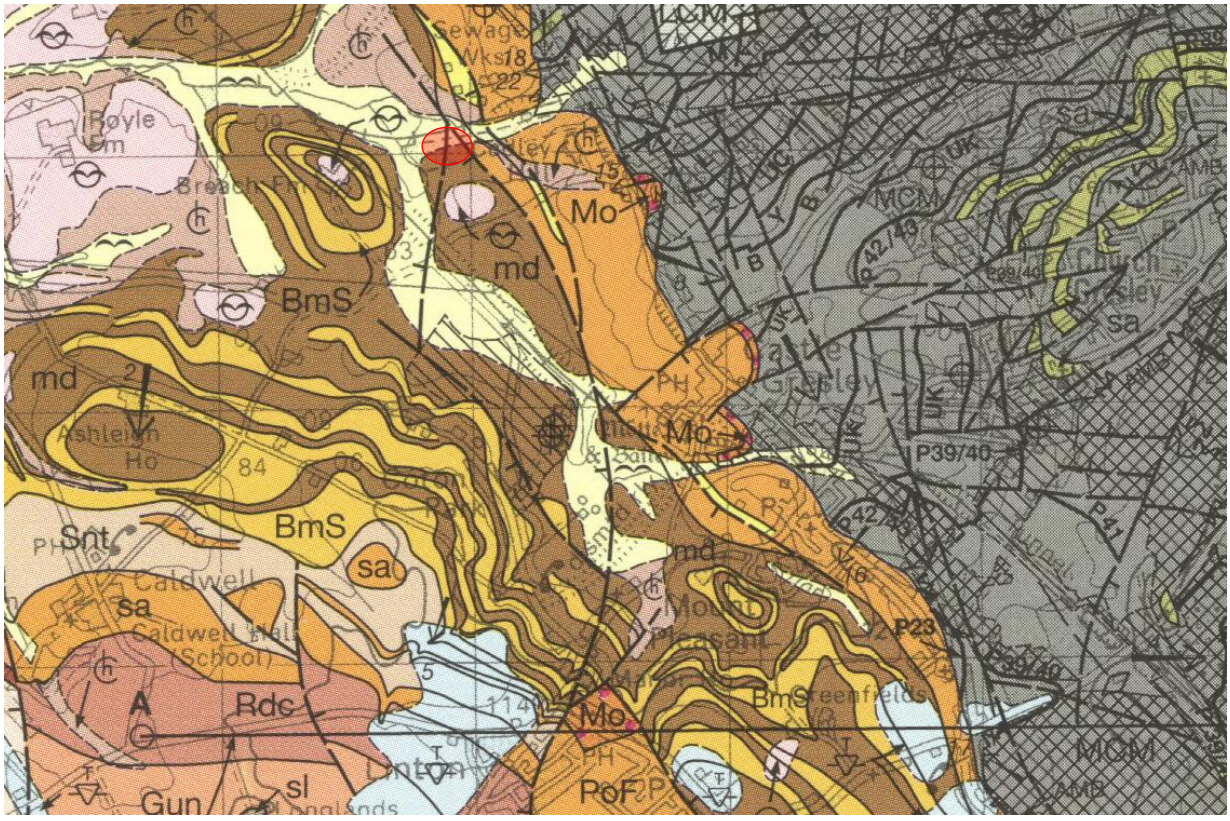
Made Ground is not anticipated to be present on site based upon historical maps. In addition, limited development has taken place on site.

Superficial Deposits

The northern part of the site is indicated to be underlain by Alluvium deposits, this stratum characteristically comprises a mixture of sand, gravel, clay and silt.

Solid Geology

The solid geology beneath the eastern area is the Chester Formation (sandstone and conglomerate) and the western part is the Helsby Sandstone Formation (mudstone).



Geological Map – Superficial and Solid Geology

Solid Geology

A fault is shown crossing the site in an approximate north to south direction with strata downthrown to the west. A second fault is close to the eastern boundary trending south east to north west with strata downthrown to the south west.

BGS Records

BGS records are present within the site boundary on the western border and c.200m south east of site. The records are presented in *Appendix 4.*

Previous onsite borehole records indicate no Made Ground was encountered. Red sands were encountered up to 2.1m bgl with sandstone and siltstone present beneath.

3.3 Hydrogeology

The superficial Alluvium deposits in this area are classified by the Environment Agency as Secondary A Aquifer. These are 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.

The bedrock is classified as a Principal Aquifer. This is 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 site does not lie within 500m of a Source Protection Zones.

The nearest groundwater abstraction licence is located 1017m north west of site at Stanton House Farm.

3.4 Hydrology

The nearest named watercourse is the River Trent located approximately 3km north west of site.

There is an inland tributary situated to the immediate north east and approximately 10m west from the site boundary, associated with the Darklands Brook catchment.

Environment Agency information indicates that the Risk of Flooding from Rivers and Sea (RoFRaS) is high at the western boundary of site. Environment Agency information indicates that the western boundary of site is located within and flood risk zone 2 and 3 indicating a high flood risk. The RoFRaS across the remainder of the site is very low.

There is an active surface water abstraction present 234m south west of site associated with Breach Farm – Dark lands Brook. Any other surface abstractions are located over 750m away from site.

3.5 Environmental Consultations

A request has been submitted to the Contaminated Land Officer at South Derbyshire District Council for information pertaining to the site. A summary of the relevant findings will be presented upon receipt.

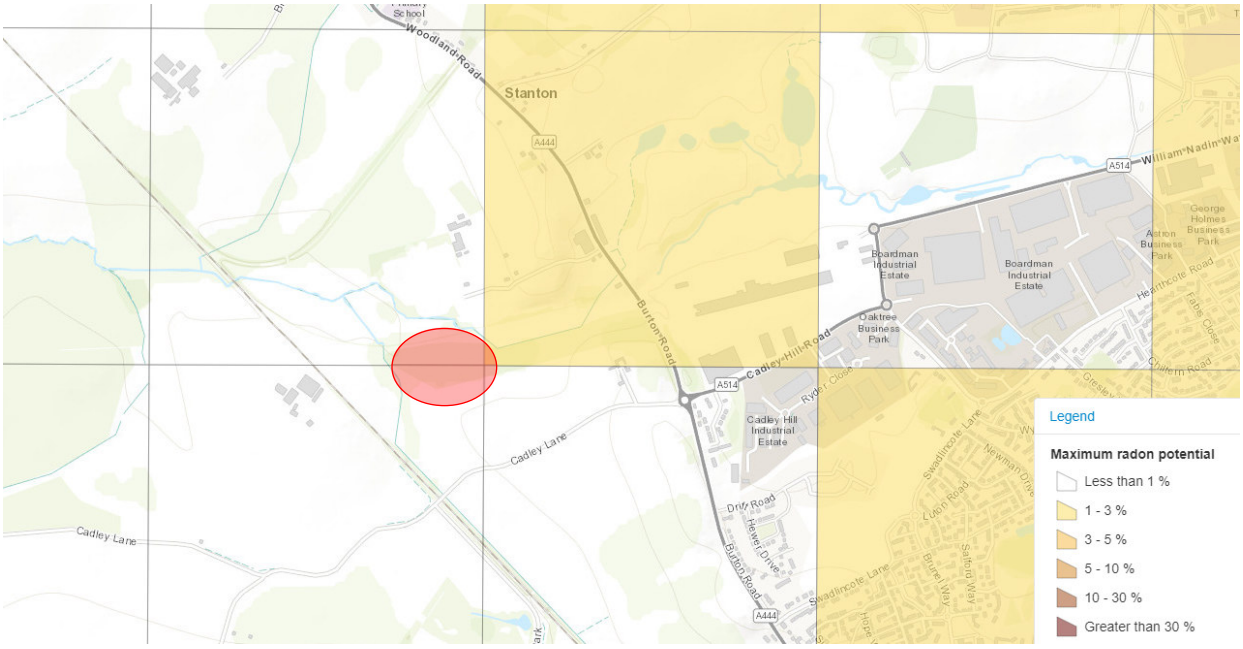
An environmental consultation has been conducted through Groundsure, which accesses British Geological Survey and Environment Agency databases. The complete Groundsure Report can be found in *Appendix 5*, a summary of the more relevant points is presented in the table below.

Record	<250m	250 – 500m	Description
Dangerous Substances	*10*	*1*	*B.C. Nadins onsite at Occs Outlet 3 and iron/pH.*
Pollution Incidents	*4*	*4*	*10m north west, metals caused a minor impact to waters in 2003.* *28m east, paints and varnishes caused a minor impact to water, land and air in 2003.* *50m north, chemicals caused a minor impact to water and land.*
Landfill and Waste Treatment	0	6	*Previous refuse tips located 431m and 432m north east of site. Stanton refuse tip located c.435m north east of site and UK coal mining opencast coal site located c.433m north east.* *Licensed waste site present 56m and 65m north east of site (Willshee's Skip Hire Ltd), and 342m south west of site.*

Discharge Consents	*2*	*25*	*The nearest is 233m north relating to sewage discharges into Darklands Brook.*
Petrol Filling Stations	*1*	*1*	*The nearest is 225m north of the site.*
Historical garages	*-*	*3*	*These listings are associated with a former garage c.360m to the north east of site.*
Current industrial Uses	*13*	*-*	*Six electricity substations within 250m, the nearest being 114m north west.*

3.6 Radon

Map 14 'Derbyshire, Leicestershire and Nottinghamshire' from BRE 211 and HPA were examined which defines areas which require radon protective measures. The probability is less than 3% and Cadley Hill is not an area requiring radon precautions in foundations in accordance with BRE Report 211 'Radon – Guidance on protective measures for new dwellings' 2015 Edition.



Radon Map

The radon data in the Groundsure report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland, the Groundsure report confirms the classification of less than 3% on the radon maps. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supersede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square.

3.7 Coal Authority Consultation

The site lies in an area where the Law Society and Coal Authority recommends a mining consultation is undertaken due to past or current mining possible affecting the site.

A consultation was carried out with the Coal Authority, which is presented in *Appendix 6*, the main findings are outlined below.

Past Mining
The property is in a surface area that could be affected by underground mining in 5 seams of coal at 130m to 260m depth, and last worked in 1956.

Any ground movement from these workings should have now stopped.

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

Future Mining
The property is not in an area where the Coal Authority has received an application for and is currently considering whether to grant a licence to remove or work coal by 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.

Mine Entries
There are no records of any mine entries on or within 20m of site boundary.

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.

Opencast Coal Mining
The property is not in an area affected by past or present coal mining extracted by opencast methods. The property is also not in an area affected by a proposed opencast coal mine.

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

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

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

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

Hazards Related to Coal Mining

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

Withdrawal of Support

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

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

4.0 CONCEPTUAL SITE MODEL AND RISK ASSESSMENT

4.1 Introduction

The potential level of risk posed by contaminants in soil and/or groundwater will be influenced by the type and concentration of the contamination at source, the likelihood of exposure occurring, the potential pollution linkages and the likely chronic or acute effects on the receptors.

A contaminant is defined as a substance that has the potential to cause harm, a risk is considered to exist if such a substance is present at sufficient concentrations to cause harm and if a pathway is present a receptor could be exposed to the contaminant.

Section 4.0 compiles the information from the previous sections to assemble a Conceptual Site Model to inform the risk assessment process. The potential sources identified on the site and off the site that are within influencing distance are assessed to determine if pollution linkages exist and an unacceptable risk is posed to human health and controlled waters. The assessment has been carried out on a qualitative basis and aims to produce a complete and comprehensive Preliminary Conceptual Site Model, the potential pollution linkages are displayed on *GRO-20195-P03* - Illustrative Preliminary CSM.

Three potential types of impacts exist for a site and all three need to be considered in the qualitative preliminary risk assessment:

- Impacts from sources on the subject site.
- Impacts to the surrounding area from the subject site.
- Impacts to the subject site from the surrounding area.

4.2 Potential Contamination Sources

Onsite Sources and Associated Contaminants

From the information obtained during the Preliminary Risk Assessment there are no potential onsite sources of contamination which may affect the redevelopment of the site for commercial end use. The site has generally remained undeveloped and Made Ground is not anticipated to be present.

Offsite Sources and Associated Contaminants

Several offsite sources of contamination have been identified, and include:

- Railway track/sidings
- Sewage farm/works
- Garages
- Refuse heaps
- Electricity substations
- Former sand pit
- Former ponds

Potential sources of contamination with Department of Environment Industry Profiles are detailed in the table below.

Industry Profile	Associated Contaminants of Concern	Required Testing
Railway Land	*Fuel, oils, lubricant oils, PCBs, PAHs, ethylene glycol, creosote, herbicides, ferrous residues, metal fines, ash and sulphate.*	*Metals, sulphate, TPH CWG, PAHs and asbestos.*
Sewage Works	*Metals, inorganic compounds, acids/alkalis, asbestos and organic compounds.*	*Metals, PAHs, TPH CWG and asbestos.*

Garages could contain contaminants in the form of fuels/oils, metals, hydrocarbons and PAHs depending on usage of the garage.

Contaminants associated with electricity substations built before 1980 include Polychlorinated biphenyls (PCBs) used as cooling agents in transformers. There is one electricity substation built before 1980 present, located c.436m north east of site.

The former sand pit, backfilled ponds, refuse heap and sewage works could be sources of permanent ground gases, such as carbon dioxide and methane.

4.3 Pollution Linkages

The definition of a pollution linkage is a medium which allows a contaminant to impact a receptor. Potential pollution linkages have been recognised for the proposed commercial development from the identified contamination sources that exist.

At this stage, the potential contaminants identified above are considered to pose an unacceptable risk to human health and controlled waters through the following pollution linkages:

- Direct soil and dust ingestion.
- Dermal contact with soil both indoors and outdoors.
- Indoor air inhalation from soil and vapour.
- Outdoor inhalation of soil and vapour.
- Migration and accumulation of ground gas into internal spaces.
- Impaction of groundwater from soil contamination (diffuse and point).
- Impaction of groundwater from groundwater plume.
- Migration of soil and groundwater contamination impacting surface waters.

4.4 Receptors

Receptors generally fall into the categories of human health or controlled waters within the river basin system. The recognised receptors are listed below:

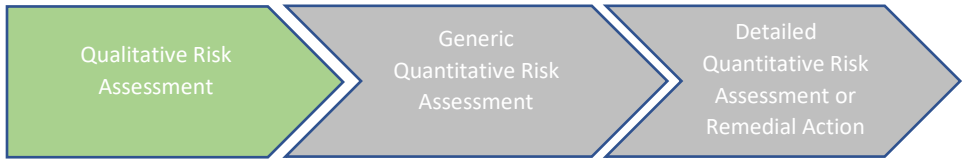
- End site users.
- Nearby watercourses to the immediate north east and c.10m west.
- The superficial Secondary A Aquifer and Principal Aquifer within the bedrock.
- Clean potable water supply pipe.

4.5 Preliminary Conceptual Site Model (CSM)

The factual information obtained from the searches and summarised in Section 2.0 and 3.0 has been used to compile a Preliminary CSM. Using Source-Pathway-Receptor assessment criteria that is applicable in the UK, a risk assessment has been completed to determine if a plausible pollution linkage exists between the

identified contaminants and receptors. The risk classification has been estimated in accordance with the CIRIA C552 assessment criteria outlined in *Appendix 7*.

mAHuman Health Pollution Linkage Assessment



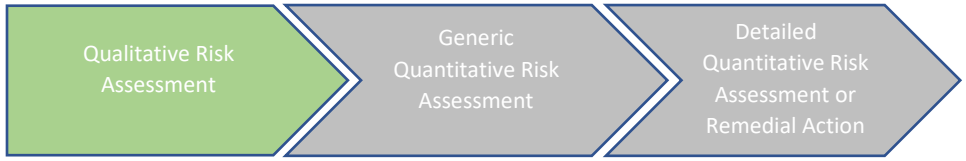
- The table below represents the first stage in the land quality risk assessment process - **the Qualitative Risk Assessment**.
- In order for a development site to be deemed 'suitable for use' the level of risk needs to be reduced to an acceptable level - low to negligible risk. The purpose of each stage of risk assessment is to establish if there is a requirement for additional stages of assessment in order to have sufficient confidence to support a risk characterisation or remedial action.

Conceptual Site Model						*Qualitative Risk Assessment*
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	*Rationale and Action*
PL1	Contaminated Soils	Ingestion of soil and dust. Dermal contact with soil.	Unlikely	Medium	Low	*Pollution Linkage 1 refers to proposed site users coming into contact with contaminated soils on the site. The site is currently unoccupied consisting mainly of woodland.* *Made Ground is not likely to be present on site according to historical maps as there is not a change in land use from wooded area. However, railway sidings are indicated to have been to the immediate north east of the site and some Made Ground may be present.* *A sewage works was located c.100m north of site and is likely to be source of contamination. Ground gases, metals, inorganic compounds, acids/alkalis, asbestos, and organic compounds are all potential associated contaminants. However, given the distance and the lack of a pathway it is unlikely any contaminants have migrated to site.*

Conceptual Site Model						*Qualitative Risk Assessment*
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	*Rationale and Action*
						The proposed development is commercial and the purpose of the Ground Investigation is to determine if any remedial works are deemed necessary preconstruction. The proposed development is likely to be covered in hardsurfacing which will break the pathway to any potentially contaminated soils. *A plausible linkage is not considered to exist present at this stage.*
PL2	Contaminated Soils	Inhalation of vapour.	Unlikely	Medium to Severe	Low	*This pollution linkage refers to hydrocarbon vapours migrating into confined spaces within the proposed development.* *Significant hydrocarbon contamination is not anticipated to be present beneath the site and a plausible pollution linkage is not considered to exist.*
PL3	Contaminated Soils	Inhalation of soil dust by adjacent site users.	Unlikely	Medium	Low	*Contamination on the subject site affecting adjacent site users is considered in pollution linkage 3. Significant onsite sources of contamination have not been identified and there is a low risk of contaminating the surrounding areas.* *Therefore, no pollution linkage is considered to exist.*
PL4	Contaminated Soils	Attacking potable water supply pipe.	Unlikely	Medium	Low	*Pollution Linkage 4 refers to the possible contaminants permeating potable water pipes and consumption by the future site end users of the tainted water supply.*

Conceptual Site Model						*Qualitative Risk Assessment*
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	*Rationale and Action*
						Significant Made Ground thicknesses are not anticipated to be present beneath the site and new water pipes are likely to be laid within natural ground. *A plausible linkage Is not considered to exist at this stage.*
PL5	Ground Gas	Migration and accumulation of ground gas in internal spaces.	Low Likelihood	Medium to Severe	Moderate	*Shallow Made Ground may be present locally in areas of the site close to the previous railway sidings.* *The historic sewage farm, former sand pit, refuse heap and backfilled ponds are considered to be potential offsite sources of permanent ground gases.* *A plausible linkage is considered to exist at present.* *The site is not within an area requiring radon precautions within foundations.*

GrounControlled Waters Pollution Linkage Assessment



- The table below represents the first stage in the land quality risk assessment process – **Qualitative Risk Assessment**.
- In order for a development site to be deemed 'suitable for use' the level of risk needs to be reduced to an acceptable level - low to negligible risk. The purpose of each stage of risk assessment is to establish if there is a requirement for additional stages of assessment in order to have sufficient confidence to support a risk characterisation or remedial action.

Conceptual Site Model						*Qualitative Risk Assessment*
PL	Potential source	Pollution linkage	Likelihood	Severity	Level of risk	*Rationale*
PL6	Contaminated Soils	Impaction of groundwater from soil contamination (diffuse and point). Impaction of groundwater from groundwater plume.	Unlikely	Medium	Low	*The site land use has not changed from a wooded area since the late 1800s.* *Geological maps indicate that the northern part of the site is underlain by Alluvium deposits. The bedrock underlying the eastern area is the Chester Formation (sandstone and conglomerate) and the western part is the Helsby Sandstone Formation (mudstone).* *The superficial deposits are classified as a Secondary A Aquifer. The bedrock is classified as a Principal Aquifer. No SPZs are located within 500m of site and there are no groundwater abstraction licences within 1km. Therefore, the groundwater is not considered to be a sensitive resource beneath the site.* *As no significant sources of contamination have been identified onsite, a plausible pollution linkage is not considered to exist.*

Conceptual Site Model						*Qualitative Risk Assessment*
PL	Potential source	Pollution linkage	Likelihood	Severity	Level of risk	*Rationale*
PL7	Contaminated Soils	Migration of soil and groundwater contamination impacting surface waters.	Unlikely	Medium	Low	*Pollution Linkage 7 refers to the impaction of the inland tributaries associated with Darklands Brook catchment located on site in the north east area and 10m west of site from contaminated soils and groundwater.* *No significant sources of contamination have been identified on site and significant mobile contamination is not anticipated. A plausible pollution linkage is not considered to exist.*

5.0 SCOPE OF INVESTIGATION AND RATIONALE

5.1 Project Objectives

The aim of the fieldwork was to:

Determine the stratification beneath the site.
Maintain a watching brief for visual and olfactory evidence of contamination.
Obtain samples using methodology in current guidance for contamination analysis.
Identify realistic pollution linkages to groundwater.
Determine if targeted supplementary investigation in areas of concern is required and for remedial design.
Install monitoring standpipes for gas and groundwater monitoring.
Assess the identified pollution linkages in the CSM.

5.2 Scope of Works

The following scope of works was completed between the dates of Monday 27th and Wednesday 29th August 2020.

- Fifteen windowless sample boreholes (WS01 to WS15) were drilled to depths between 1.2m bgl and 3.0m bgl.

The exploratory hole locations are presented on Groundtech Plan *GRO-20195-P04* and the exploratory hole logs are presented in *Appendix 8.*

The boreholes were positioned to establish the stratification beneath the site and target any areas of concern as summarised in the table below:

Location	Target Rationale
WS01 to WS15	*Site coverage*

The exploratory holes were logged by a suitably experienced geo-environmental engineer in general accordance with the following current guidance:

- BS 5930 'Code of Practice for Site Investigations' 2015.
- BS EN 14688-1:2002 'Geotechnical Investigation and Testing – Identification and classification of soil'.
- BS EN ISO 14689:2002 'Geotechnical investigation and testing – Identification and classification of rock'.

5.3 Soil Sampling

During the intrusive investigation, representative samples were taken at regular intervals, changes of strata and where evidence of contamination existed. Laboratory analysis was scheduled on the samples obtained.

The samples obtained are summarised in the table below:

Soil Sample	Number
Environmental	*51*

The samples have been obtained in accordance with current environmental and geotechnical guidance. The sampling plan has been designed to obtain samples from all required strata using the correct methodology.

Disturbed samples of soil for chemical analysis were placed in the correct sampling containers as required by the laboratory in accordance with their MCERTS and UKAS Accreditation. Transportation was arranged in a timely manner and the samples were at the correct temperature.

The sample locations and depths are recorded on the exploratory logs.

5.4 Geo-Environmental Analysis

To inform the Tier I Generic Quantitative Risk Assessment, the following geo-environmental testing was scheduled to assess the risk from contamination on the site. The testing is based on the potential sources identified in the PRA and observations during the ground investigation.

Contaminant of Concern	Matrix	Number
Arsenic, cadmium, chromium (total and hexavalent), copper, lead, mercury, nickel, selenium, zinc and pH value.	*Soil*	*15*
TPH CWG, BTEX and MTBE	*Soil*	*5*
VOCs/SVOCs	*Soil*	*5*
Asbestos Screening	*Soil*	*15*
Waste Acceptance Criteria (WAC)	*Soil*	*3*

The Geo-Environmental Laboratory Testing Results are presented in *Appendix 9*.

5.5 Gas and Groundwater Monitoring

Gas and groundwater monitoring installations were constructed in the boreholes. The standpipes consisted of polyvinyl chloride (PVC) pipe - a bentonite seal was placed around the plain pipe and a clean gravel pack was placed around the slotted pipe. A summary of the installation construction is presented in the table below:

Location	Depth (m bgl)	Response Zone (m bgl)	Targeted Strata	Reason
WS05	*2.60*	*1.00 – 2.60*	*Made Ground*	*Ground Gas*
WS06	*2.60*	*1.00 – 2.60*	*Natural Strata*	*Ground Gas*
WS14	*2.40*	*2.00 – 2.40*	*Natural Strata*	*Ground Gas*

Permanent gas and flow rate monitoring was carried out using a GFM 436 infrared gas monitor with integral electronic flow analyser. The measurements taken are listed below:

- Oxygen (O_2), carbon dioxide (CO_2) and methane (CH_4) as the percentage volume in air (%v/v).
- Hydrogen sulphide (H_2S) and carbon monoxide (CO) as the percentage volume in air (%v/v).
- Lower Explosive Limit (%LEL) of methane.
- Atmospheric and borehole pressure, including pressure trend.
- Flow measurements (l/hr).
- Weather and ground surface conditions.

Both peak and steady state conditions were monitored to understand the behaviour of the permanent ground gas, the steady state conditions were recorded by allowing the gas monitor to run for a minimum of 3 minutes.

Interim gas and groundwater monitoring results are presented in *Appendix 10*.

6.0 GROUND MODEL

6.1 Made Ground

Made Ground was encountered in three exploratory holes across the site (WS05, WS07, and WS09) to depths of between 0.55m bgl and 2.6m bgl.

Within WS05 where Made Ground was encountered to a depth of 2.6m bgl, it consisted of a mixture of topsoil over bands of gravelly sand and gravelly sandy clay. The gravel content was of mixed lithology and included brick and concrete.

In WS07, the Made Ground consisted of topsoil overlying sandy gravelly clay with brick fragments to 0.55m bgl.

In WS09, topsoil over gravelly sand with brick was observed to 0.8m bgl.

Exploratory Hole Locations

The Made Ground was encountered along the northern boundary of the proposed development area.

6.2 Topsoil

Brown variably silty sandy gravelly topsoil was encountered at the surface of the remaining boreholes to depths of between 0.1m and 0.45m bgl.

6.3 Natural Ground

The natural strata encountered generally confirmed the published geological records.

Three main natural stratification encountered during the investigation and are described below:

- Light brown, brown and red brown clayey gravelly Sand was encountered in WS04, WS05, WS07, WS08, WS09, WS11, WS12 and WS15 to depths of between 0.65m bgl and 2.45m bgl.
- Firm to stiff and stiff grey mottled orange variably gravelly sandy Clay was observed in WS04 to WS09 and WS11 to WS15 to depths of between 0.9m bgl and 3.0m bgl.
- Light brown, brown, red brown clayey Sand and Gravel was present in WS01, WS02, WS07 to WS11, and WS13 to depths of 0.7m bgl and 3.0m bgl.

6.4 Bedrock

A summary of the bedrock encountered during the investigation is presented below:

- Extremely weak to weak Mudstone was encountered in WS03 at 2.5m bgl to 2.6m bgl and in WS10 between depths of 0.95m bgl and 2.0m bgl in the southern part of the site.
- Residually weathered brown Sandstone was present in WS03 from depths of 2.6m to 2.7m bgl, WS11 from 2.1m to 2.2m bgl, and WS14 from 2.0m to 2.4m bgl. This was observed in the southern and western areas.

6.5 Groundwater

Groundwater strikes were observed in WS01 at 2.7m bgl, WS04 at 2.1m bgl, and WS06 at 2.1m bgl within natural sand and sandy clay deposits.

6.6 Watching Brief

A watching brief was maintained during the ground investigation for visual and olfactory evidence of contamination.

No visual or olfactory evidence of contamination was noted during the investigation.

6.7 Borehole Progress

Slow progress was generally not observed until hole termination occurred due to bedrock obstructions being encountered.

7.0 LAND QUALITY

7.1 Geo-Environmental Testing Results - Soils

Samples of Made Ground and natural strata have been tested for a range of relevant Contaminants of Concern (CoC). In accordance with CLR11 (DEFRA & EA, 2004), a Generic Quantitative Risk Assessment (GQRA) has been undertaken to determine the significance of the concentrations as derived through Geo-Environmental analysis.

The GQRA process comprises the comparison of the actual concentrations measured on site with Generic Assessment Criteria (GACs) for the protection of human health.

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The GACs used for the assessment of soil concentrations have been derived using the CLEA model. The GACs used and their ranking of importance are listed below:

- Soil Guideline Values (SGVs) which demonstrate minimal risk.
- LQM/CIEH S4ULs which use the same toxicological data as the SGVs but different exposure criteria.
- C4SLs which demonstrate low risk.

In deriving the GACs for use on Brownfield sites, we have assumed a 1.0% Soil Organic Matter, unless the results indicate otherwise.

The proposed end-use for the site is to redevelop the land commercially and the purpose of the Ground Investigation is to determine if any remedial works are deemed necessary preconstruction. We have therefore undertaken the GQRA on the basis that the proposed development site falls under the Commercial land-use scenario as defined in SR3 (EA, 2009b).

The strata or sources of contamination targeted by the laboratory testing scheduled is summarised in the table below:

Strata	Number of Samples Tested	Locations
Granular Made Ground	*3*	*WS05, WS07 and WS09.*
Cohesive Made Ground	*2*	*WS05.*
Natural Clay	*3*	*WS03, WS06 and WS12.*
Natural Sand	*5*	*WS02, WS08, WS11, WS13 and WS15.*
Natural Topsoil	*2*	*WS04 and WS10.*

A summary of the Geo-Environmental Testing results is presented below and the GQRA Tier I screening Values are presented in *Appendix 11*:

	Metals			
Contaminant	Range of Results (mg/kg unless stated)	Screening values	Number of Exceedances	Locations of Exceedances
Arsenic	*5.4 – 36*	*640*	*0*	-
Cadmium	*<0.1 – 0.5*	*230*	*0*	-
Chromium	*12 – 24*	*8600*	*0*	-
Hexavalent Chromium	*<0.1*	*49*	*0*	-
Copper	*19 – 46*	*68000*	*0*	-

Lead	*16 – 350*	*2300*	*0*	-
Mercury	*<0.05 – 0.11*	*26*	*0*	-
Nickel	*8.1 – 39*	*1800*	*0*	-
Selenium	*<0.5 – 0.8*	*23000*	*0*	-
Zinc	*59 – 180*	*730000*	*0*	-
Polycyclic Aromatic Hydrocarbons (PAHs)				
Contaminant	Range of Results (mg/kg unless stated)	Screening values	Number of Exceedances	Locations of Exceedances
Naphthalene	*<0.03*	*190*	*0*	-
Acenaphthylene	*<0.03*	*83000*	*0*	-
Acenaphthene	*<0.03*	*84000*	*0*	-
Fluorene	*<0.03*	*63000*	*0*	-
Phenanthrene	*<0.03 – 0.05*	*22000*	*0*	-
Anthracene	*<0.03*	*520000*	*0*	-
Fluoranthene	*<0.03 – 0.10*	*23000*	*0*	-
Pyrene	*<0.03 – 0.09*	*54000*	*0*	-
Benzo(a)anthracene	*<0.03 – 0.04*	*170*	*0*	-
Chrysene	*<0.03 – 0.04*	*350*	*0*	-
Benzo(b)fluoranthene	*<0.03 – 0.03*	*44*	*0*	-
Benzo(k)fluoranthene	*<0.03*	*1200*	*0*	-
Benzo(a)pyrene	*<0.03*	*35*	*0*	-
Indeno(123cd)pyrene	*<0.03*	*500*	*0*	-
Dibenzo(ah)anthracene	*<0.03*	*3.5*	*0*	-
Benzo(ghi)perylene	*<0.03*	*3900*	*0*	-

TPH CWG - Aliphatics				
Contaminant	Range of Results (mg/kg unless stated)	Screening values	Number of Exceedances	Locations of Exceedances
>C5-C6	*<0.01*	*3200*	*0*	-
>C6-C8	*<0.01*	*7800*	*0*	-
>C8-C10	*<0.01*	*2000*	*0*	-
>C10-C12	*<1.5*	*9700*	*0*	-
>C12-C16	*<1.2*	*59000*	*0*	-
>C16-C35	*<1.5 - 18*	*1600000*	*0*	-
				-
Total aliphatics C5-35	*<10 - 19*	-	-	-
TPH CWG - Aromatics				
Contaminant	Range of Results (mg/kg unless stated)	Screening values	Number of Exceedances	Locations of Exceedances
>C5-EC7	*<0.01*	*26000*	*0*	-
>EC7-EC8	*<0.01*	*56000*	*0*	-
>EC8-EC10	*<0.01*	*3500*	*0*	-
>EC10-EC12	*<0.9*	*16000*	*0*	-

>EC12-EC16	*<0.5*	*36000*	*0*	*-*
>EC16-EC21	*<0.6*	*28000*	*0*	*-*
>EC21-EC35	*<1.4*	*28000*	*0*	*-*
Total aromatics C5-35	*<10.0*	*-*	*-*	*-*
Total aliphatics and aromatics(C5-35)	*<10 – 19*	*-*	*-*	*-*
MTBE	*<0.01*	*7900*	*0*	*-*
Benzene	*<0.01*	*95*	*0*	*-*
Toluene	*<0.01*	*4400*	*0*	*-*
Ethylbenzene	*<0.01*	*2800*	*0*	*-*
m/p-Xylene	*<0.01*	*7700*	*0*	*-*
o-Xylene	*<0.01*	*2600*	*0*	*-*
Others				
Organic Matter	*0.2 – 3.9%*			

Asbestos Screen			
Position	Depth (m bgl)	Asbestos type	Quantity (mass%)
WS02	*0.50*	*None Detected*	*N/A*
WS03	*0.45*	*None Detected*	*N/A*
WS05	*0.35*	*None Detected*	*N/A*
WS05	*2.50*	*None Detected*	*N/A*
WS05	*1.20*	*None Detected*	*N/A*
WS06	*0.30*	*None Detected*	*N/A*
WS07	*0.05*	*None Detected*	*N/A*
WS08	*0.60*	*None Detected*	*N/A*
WS09	*0.45*	*None Detected*	*N/A*
WS10	*0.05*	*None Detected*	*N/A*
WS11	*0.50*	*None Detected*	*N/A*
WS12	*0.90*	*None Detected*	*N/A*
WS13	*0.60*	*None Detected*	*N/A*
WS15	*0.50*	*None Detected*	*N/A*

Laboratory testing for Semi Volatile Organic Compounds (SVOCs) and Volatile Organic Compounds (VOCs) has been undertaken. All SVOCs and VOCs were recorded at concentrations below laboratory detection limits.

7.2 Tier I Generic Quantitative Risk Assessment - Soils

Made Ground was encountered locally across the northern boundary of the proposed development area in WS05, WS07 and WS09 to depths of between 0.55m bgl and 2.5m bgl and was predominantly cohesive consisting of soft to firm slightly gravelly slightly sandy clay. Minor constituents included brick and concrete. The Made Ground encountered is assumed to be associated with Wilshee's Waste and Recycling yard located immediately north of site, as well as previous land use in the form of railway sidings to the north.

Geo-Environmental testing of samples of the Made Ground indicates that no elevated Contaminants of Concern have been recorded based on the site having a commercial end use.

Asbestos screening was undertaken on fourteen samples taken from across the development area and no asbestos was encountered in any of these samples.

Based on the site reconnaissance, no visual evidence of contamination was noted.

7.3 Tier I Generic Quantitative Risk Assessment - Groundwater

Groundwater was generally not encountered during the Ground Investigation and limited Made Ground was observed within the exploratory holes.

In addition, groundwater was generally not encountered within the standpipes during the first monitoring visit.

Therefore, groundwater has not been recovered and tested as part of this investigation.

7.4 Permanent Ground Gases

Gas Monitoring Results

A single gas monitoring visit has been carried out to date on 1st September 2020. A further three monitoring visits are scheduled to be carried out. Methane has not been detected within any of the standpipes during the visit. Detectable levels of carbon dioxide (CO_2) were recorded in all gas monitoring wells (WS05, WS06, WS14) up to a maximum level of 7.3%v/v together with depleted oxygen (O_2) concentrations of 5.2%v/v.

No positive flow rates were recorded during the monitoring.

The atmospheric pressure recorded was 1008mb to 1009mb and the monitoring visit was carried out during a period of rising barometric pressure.

Groundwater was recorded at depths of between 1.9m and 2.35m bgl.

Characterisation of the Gas Screening Value (GSV)

Based upon the results recorded, in accordance with CIRIA Report C665, the risk to the site from ground gases has been assessed by converting the results to gas screening values (GSVs), calculated by multiplying the typical maximum gas concentrations with the recorded maximum positive flow rates. In addition, individual "hazardous gas flow rates" (Qhg) have been derived for each monitoring point.

GSV (l/hr) = max borehole flow rate (l/hr) x max gas concentration (%)

For this assessment, the maximum recorded concentration of carbon dioxide (7.3%v/v) has been used. No positive gas flow rates have been detected therefore the limit of detection of the gas analyser of 0.1/hr has been adopted to calculate the GSV. This is the worst case at this stage and the scenario may be altered on completion of the gas monitoring programme.

Carbon Dioxide GSV = 0.073 (7.3%) x 0.1 = 0.0073 l/hr

In order to assess the ground gas regime beneath the site and the need to incorporate ground gas precautions, guidance was taken from CIRIA C665 'Assessing risks posed by hazardous ground gases to buildings'. Based on the site being developed with a commercial end use, the Wilson and Card method has been used to carry out the assessment.

When considering the results, in accordance with CIRIA C665 (Section A Development and Table 8.5 – Modified Wilson and Card Classification) it can be seen that the GSV for carbon dioxide is 0.0073l/hr. The GSV places the site within CS1 at present and gas protection measures are not deemed necessary at present.

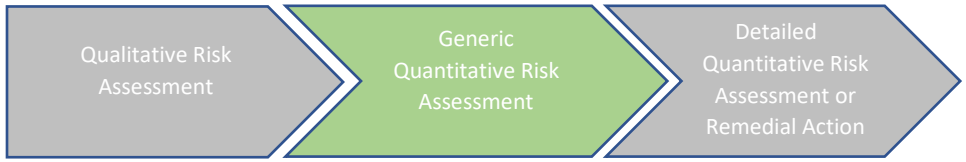
A full gas assessment will be carried out on completion of the gas monitoring programme.

In addition, radon precautions will not need to be incorporated within any proposed development.

7.5 Revised Pollution Linkage Assessment

A revised pollution linkage assessment has been undertaken in accordance with CLR11 and CIRIA C552 to identify any realistic pollution linkages in order to quantify the risks to human health and controlled waters. An Illustrative Revised CSM is presented on Plan *GRO-20195-P05*.

Human Health Pollution Linkage Assessment



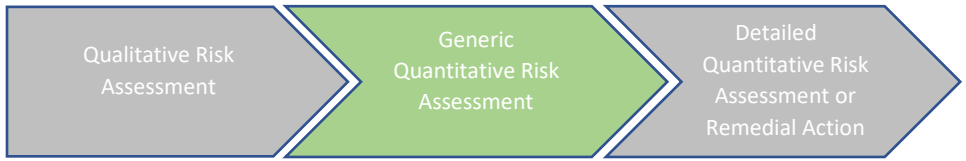
- The table below represents the second stage in the land quality risk assessment process - **the Generic Quantitative Risk Assessment.**
- In order for a development site to be deemed 'suitable for use' the level of risk needs to be reduced to an acceptable level - low to negligible risk. The purpose of each stage of risk assessment is to establish if there is a requirement for additional stages of assessment in order to have sufficient confidence to support a risk characterisation or remedial action.

Conceptual Site Model					*Qualitative Risk Assessment*	
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	*Rationale and Action*
PL1	Contaminated Soils	Ingestion of soil and dust. Dermal contact with soil.	Unlikely	Medium	Low	*Pollution Linkage 1 refers to proposed site users coming into contact with contaminated soils on the site.* *Made Ground has been encountered locally in three boreholes along the northern extent of the proposed development area up to a maximum depth of 2.6m bgl and is likely to be associated with the raising of site levels in this part of the site.* *The site is predominantly occupied by woodland.* *No elevated Contaminants of Concern were recorded and no asbestos was detected within the soil samples that were screened.* *It is proposed to develop the site commercially and will therefore be predominantly covered in hardsurfacing breaking the pathway to potentially contaminated soils.* *No sources of contamination have been identified and a pluasible pollution linkage is not considered to exist.*

Conceptual Site Model						*Qualitative Risk Assessment*
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	*Rationale and Action*
PL2	Contaminated Soils	Inhalation of vapour.	Unlikely	Medium to Severe	Low	*Made Ground was only encountered in three of the boreholes and no visual or olfactory evidence of volatile contamination has been encountered during the investigation.* *All hydrocarbons, VOCs and SVOCs tested for have been generally been recorded at levels below laboratory detection limits.* *Without a source no plausible pollution linkage is considered to exist.*
PL3	Contaminated Soils	Inhalation of soil dust by adjacent site users.	Unlikely	Medium	Low	*Laboratory testing has indicated that elevated contamination is not present on the site. In addition, mobile contamination has not been encountered.* *No realistic pollution linkage is considered to be present.*
PL4	Contaminated Soils	Attacking potable water supply pipe.	Unlikely	Medium	Low	*Pollution Linkage 4 refers to the possible contaminants permeating potable water pipes and consumption by the future site end users of the tainted water supply. Made Ground was only observed in three exploratory holes throughout the site (WS05, WS07, and WS09) to a maximum depth of 2.6m bgl.* *In addition, no organic contamination has been identified.* *Any proposed water supply pipes are unlikely to be affected by potentially contaminated soils and the risk is considered to be low.*

Conceptual Site Model						*Qualitative Risk Assessment*
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	*Rationale and Action*
PL5	Ground Gas	Migration and accumulation of ground gas in internal spaces.	Unlikely to Low Likelihood	Medium to Severe	Low to Moderate	*Localised Made Ground that was encountered was generally shallow with the exception of WS05 where it was observed to a depth of 2.6m bgl.* *Possible offsite sources include an old sand pit, refuse heap, backfilled ponds and a sewage farm.* *Interim gas monitoring has not detected any methane and a maximum concentration of carbon dioxide of 7.3%v/v. No positive gas flow rates were recorded.* *Based on the interim gas monitoring results, the GSV for carbon dioxide places the site in CS1. A full assessment will be carried out on completion of the gas monitoring programme.* *The site is not in an area requiring radon precaution measures.*

Controlled Waters Pollution Linkage Assessment



- The table below represents the second stage in the land quality risk assessment process – **Generic Quantitative Risk Assessment.**
- In order for a development site to be deemed 'suitable for use' the level of risk needs to be reduced to an acceptable level - low to negligible risk. The purpose of each stage of risk assessment is to establish if there is a requirement for additional stages of assessment in order to have sufficient confidence to support a risk characterisation or remedial action.

Conceptual Site Model					*Qualitative Risk Assessment*	
PL	Potential source	Pollution linkage	Likelihood	Severity	Level of risk	*Rationale*
PL6	Contaminated Soils	Impaction of groundwater from soil contamination (diffuse and point). Impaction of groundwater from groundwater plume.	Unlikely	Medium	Low	*Significant onsite sources of contamination were not identified during the PRA.* *Made Ground is not typically present across the site with the exception of exploratory holes WS05, WS06 and WS09 along the north of the proposed development area. These exploratory holes were targeted during laboratory testing and no elevated Contaminants of Concern were detected.* *Groundwater was encountered between depths of 2.1m bgl and 2.7m bgl within the natural sand and clay deposits.* *The groundwater beneath the site is not considered to be a valuable resource* *No mobile contamination has been identified therefore the risk to groundwater is considered low.*

Conceptual Site Model						*Qualitative Risk Assessment*
PL	Potential source	Pollution linkage	Likelihood	Severity	Level of risk	*Rationale*
PL7	Contaminated Soils	Migration of soil and groundwater contamination impacting surface waters.	Unlikely	Medium	Low	*Pollution Linkage 7 refers to the impaction of the two inland tributaries located on and to the immediate west of site from contaminated soils and groundwater.* *Made Ground is only present locally beneath the site however, no elevated CoC have been detected by the laboratory testing.* *In the absence of a source, no plausible pollution linkage is considered to exist.*

7.6 Outline Remedial Strategy

Limited Made Ground is present beneath the proposed development area and no elevated Contaminants of Concern have been detected as part of this Ground Investigation. In addition, no evidence of mobile contamination has been recorded.

Based on the results of the investigation, no specific remedial measures are required with respect to contaminated soils or groundwater.

Testing indicates that the topsoil that will be stripped from the site may be reused in any proposed soft landscaping areas intended as part of the redevelopment. Alternatively, it could be recycled.

Ground gas results currently place the site within CS1 and based on the initial gas monitoring, gas precaution measures are not deemed necessary within the proposed commercial development. This will be reviewed upon completion of the gas monitoring programme.

The site is also in an area not requiring radon protective measures.

A watching brief should be in place during ground works and construction. If previously unidentified contamination is encountered, work should cease in that area and Groundtech Consulting contacted for advice.

Approval from the regulators should be obtained prior to any development commencing to avoid any delays at the construction stage.

7.7 Asbestos in Soils

Asbestos was not detected in any of the fourteen soil samples that were screened.

7.8 Health and Safety - Construction and Ground Workers

During the reclamation and construction phases of the site development it will be necessary to protect the health and safety of site personnel. The risk to construction and ground workers is assessed in the table below:

Pollution Linkage Ref	Potential Source	Pollution Linkage	Likelihood	Severity	Level of Risk
PL8	*Made Ground*	*Ingestion, direct contact, inhalation of dusts.*	*Unlikely*	*Medium*	***Low***

Limited Made Ground has been identified on site and no elevated contaminants have been identified. The risk to Construction and Ground Workers is considered to be low.

General guidance on these matters is given in the Health and Safety Executive (HSE) document “Protection of Workers and the General Public during the Redevelopment of Contaminated Land”. In summary, the following measures are suggested to provide a minimum level of protection:

- All ground workers should be issued with the relevant protective clothing, footwear and gloves. These protective items should not be removed from the site and personnel should be instructed as to why and how they are to be used.
- Hand-washing and boot-washing facilities should be provided.
- Care should be taken to minimise the potential for off-site migration of contamination by the provision of dust suppression control and wheel cleaning equipment during the construction works.
- Good practices relating to personal hygiene should be adopted on the site.
- The contractor shall satisfy the Health and Safety Executive with regard to any other matters concerning the health, safety and welfare of persons on the site.

7.9 Waste Classification by Assessment

We have reviewed the testing results and inputted them into the HazWasteOnline model which allows users to code and classify waste as defined in the EWC (European Waste Catalogue 2002) based on EC Regulation 1272/2008 on the Classification, labelling and packaging of substances and mixtures (CLP) and latest Environment Agency guidance (WM3 "Guidance on the classification and assessment of waste (1st edition 2015)-Technical Guidance").

This is a useful tool as waste producers have the legal responsibility to classify any waste they produce.

Fourteen samples were tested to assess whether they contained any contaminants in the hazardous range when screened against assessment criteria within WM3. The results are in the Waste Classification Report presented in *Appendix 12.*

Based on the HazWasteOnline assessment tool, the Made Ground soils have been classified as ***Non-Hazardous.***

It is envisaged that a considerable amount of topsoil and natural soil will need to be removed off-site due to the cut in exercise to create a platform on which to construct the proposed commercial property.

7.10 Waste Acceptance Criteria (WAC) Results

The Landfill Directive (Directive 1999/31/EC on the landfilling of waste) led to the establishment of a methodology for classifying wastes. Wastes can only be accepted at a landfill if they meet the relevant Waste Acceptance Criteria (WAC) for that type of landfill. There are three different WAC, these are for:

- Inert waste
- Non–hazardous waste
- Hazardous waste

Wastes should first be classified based on their total concentrations as detailed in the previous section. WAC testing is then required if the end disposal route is a landfill.

Solid and eluate WAC analysis was undertaken on three samples, the findings of which are presented in the table below.

Reference	Depth (m)	Strata Type	Classification by Assessment	WAC Analysis	Landfill Disposal
WS05	*0.35*	*MG: Gravelly Sandy Clay.*	*Non-Hazardous*	*Inert*	*Inert*

WS05	*2.5*	*MG: Sandy Gravel.*	*Non-Hazardous*	*Inert*	*Inert*
WS05	*1.2*	*MG: Gravelly Sandy Clay.*	*Non-Hazardous*	*Inert*	*Inert*

The WAC testing has revealed that if the end disposal route of the Made Ground is landfill the material would be accepted at a Non-Hazardous landfill.

The possibility of automatic inert classification of the natural soils should be explored in accordance with Section 4.3 of the EA guidance document. The Council Decision includes a list of wastes in Section 2.1.1 of the document that are assumed to be inert and therefore acceptable at a landfill for inert waste without testing, this is the case if:

- *They are single stream waste of a single waste type (although different waste types from the list may be accepted together if they are from a single source) and*
- *There is no suspicion of material or substances such as metals, asbestos, plastics, chemicals, etc to an extent which increases the risk associated with the waste sufficiently to justify contamination and they do not contain other their disposal in other classes of landfill.*

It is recommended that where possible, the natural soils recovered as part of the cut exercise should be recycled at a suitable local waste treatment plant or transfer station rather than a landfill disposal route.

Materials should be segregated and where necessary sufficient time is allowed to further classify the material properly, including discussion with landfill sites and waste transfer stations to find the best disposal route. It is recommended that where possible that the soils could be recycled at a suitable local waste treatment plant or transfer station rather than a landfill disposal route.

The reuse of soils on the site this should be done in accordance with the CL:AIRE "Development Industry Code of Practice for the Definition of Waste" (CL:AIRE CoP). Any re-use scheme should be designed to minimise disposal costs.

After a cut and fill balance plan/volume calculation has been carried out, a U1 and T5 exemption could be registered. This will allow the use of the following soils without a waste permit or under Dow CoP MMP:

- 1,000 tonnes (*c.* 600m^3) of non-hazardous soil
- 5,000 tonnes (*c.* 3,000m^3) of natural sand and gravels.
- 50,000 tonnes (*c.* 25,000m^3) of bituminous material to be used in roadways.
- 5,000 tonnes (*c.* 3,000m^3) of crushed concrete / stone.

8.0 FINAL APPRAISAL

8.1 Land Quality

Localised Made Ground has been encountered to depths of up to 2.6m bgl along the northern boundary of the proposed development area and generally comprised gravelly sandy clay including brick.

Based on the site having a commercial end use, no elevated Contaminants of Concern have been recorded, and therefore, the human health risk is considered to be *low*.

The groundwater beneath the site is not considered to be a sensitive resource and no significant mobile contamination has been identified onsite by the laboratory testing. The risk to controlled waters is *low.*

The risk from vapours has been assessed as *low.*

Initial ground gas results currently place the site within CS1 and gas precaution measures are not deemed necessary at present. This will be reviewed upon completion of the gas monitoring programme.

This site is not in an area requiring radon precaution measures.

The Made Ground has been classified as Non-hazardous and WAC testing results indicate it is classified as inert waste.

8.2 Required Supplementary Investigation

The following further work is considered necessary to progress the site to construction phase:

Completion of gas monitoring programme.
Issue gas assessment.
Confirmation of recommendations made within this appraisal with the Local Authority, if required.

9.0 RELEVANT INDUSTRY REFERENCES

British Standards Institution. *Investigation of Potentially Contaminated sites - code of practice*. BS 10175:2013.

British Standards Institution '*Code of Practice for Site Investigations*' BS 5930:2015

British Standards Institution "*Geotechnical investigation and testing – Identification and classification of soil*" BS EN ISO 14688:2002.

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BS 8485:2015 '*Code of practise for the design of protective measures for methane and carbon dioxide ground gases for new buildings'*

The Hazardous Waste (England) Regulations 2005.

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DETR. Circular 02/2000 Contaminated Land.

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Environment Agency "Guidance on the classification and assessment of waste (1st edition 2015) Technical Guidance WM3"

CL:AIRE "*The Definition of Waste: Development Industry Code of Practice*" Version 2 March 2011.

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Harris, M R, Herbert, S. M, Smith, M A 'Remedial Treatment for Contaminated Land' (twelve volumes), special publications 101-112, CIRIA 1996.

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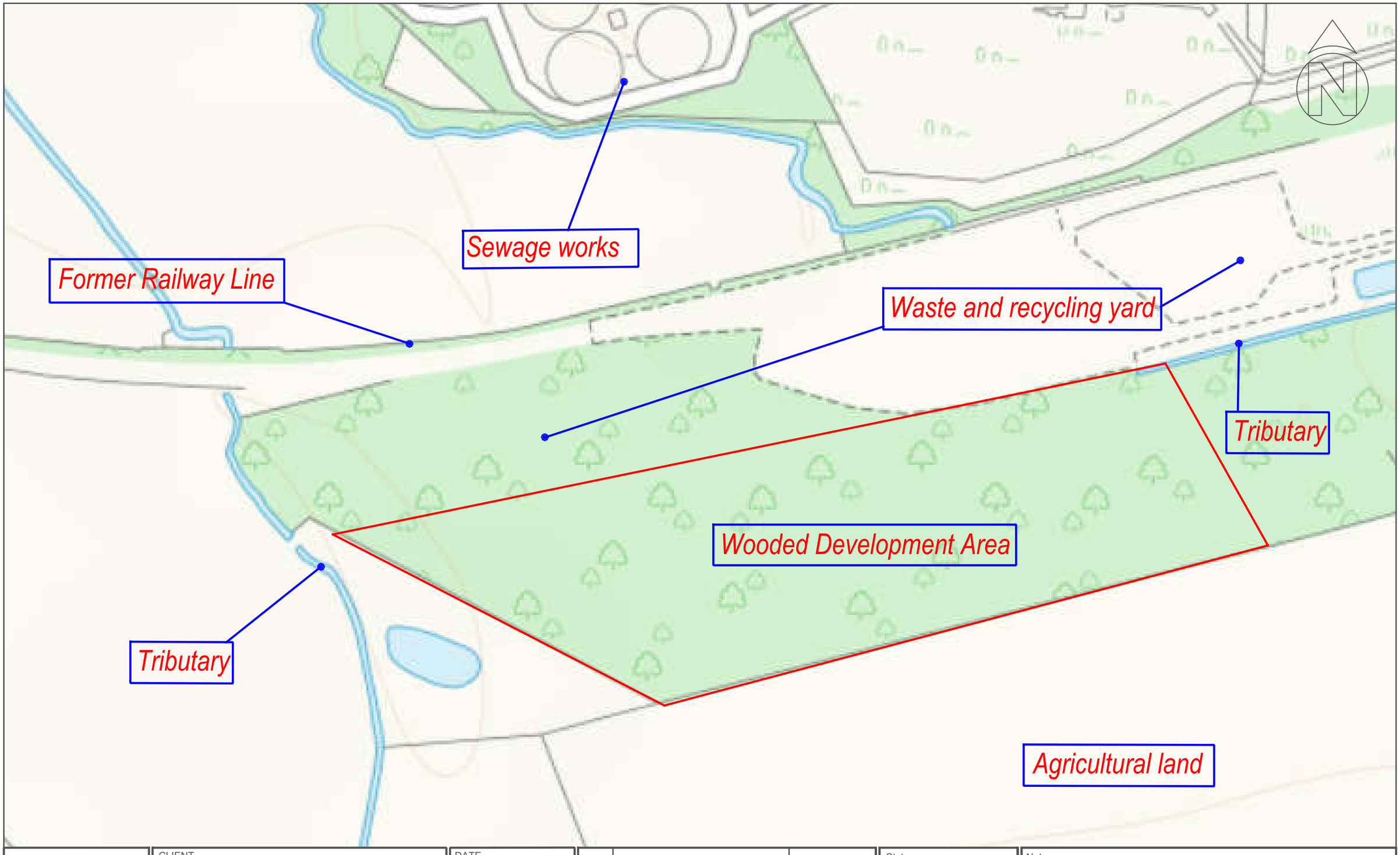
Specification for Highways Works – Series 600 Earthworks November 2006.

APPENDIX 1 - Plans

GROUNDTECH CONSULTING	CLIENT	DATE				Status
	WILSHEE'S WASTE & RECYCLING	SEPTEMBER 2020				Preliminary
	PROJECT TITLE	SCALE				Draft
	CADLEY HILL	NTS				Issued ●
	PLAN TITLE	PLAN NUMBER				For Comment
	PROJECT LOCATION PLAN	GRO-20195-P01	Rev.	Details	Date	Approved

Notes

Location of the site



GROUNDTECH CONSULTING

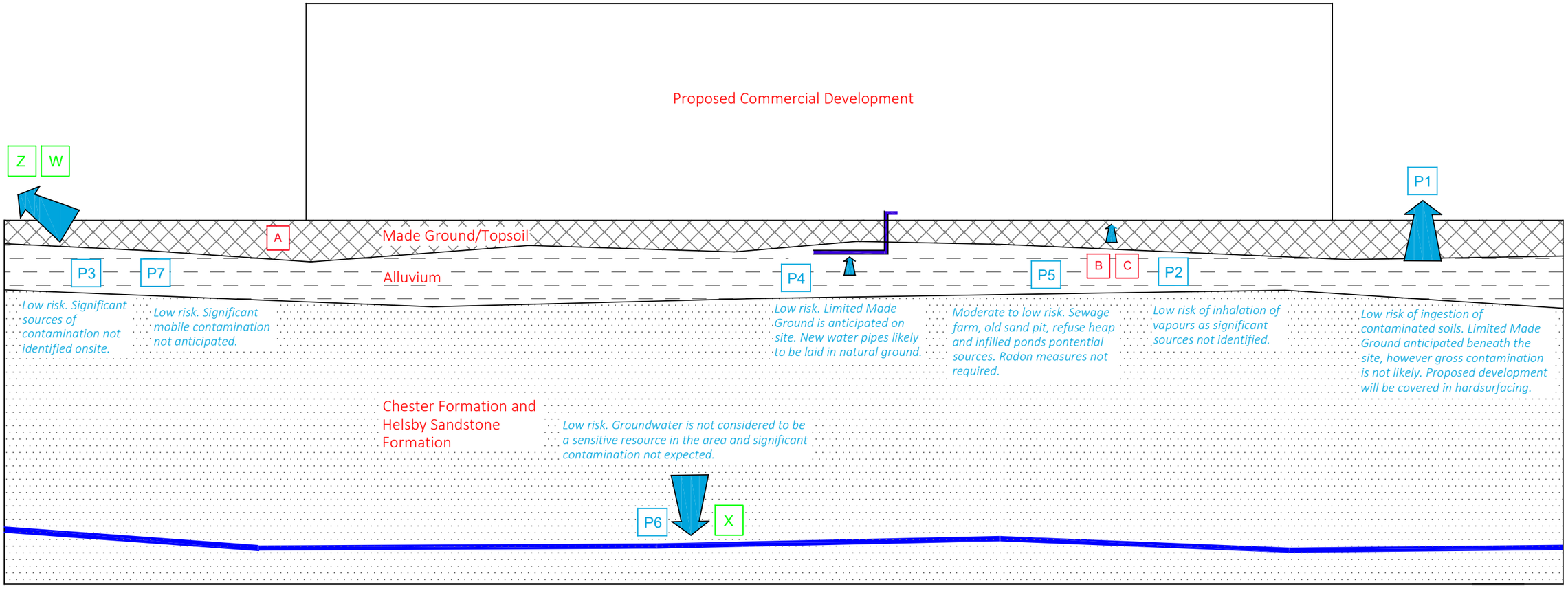
CLIENT	WILSHEE'S WASTE & RECYCLING
PROJECT TITLE	CADLEY HILL
PLAN TITLE	PRELIMINARY DEVELOPMENT CONSTRAINTS PLAN
DATE	SEPTEMBER 2020
SCALE	NTS
PLAN NUMBER	GRO-20195-P02

Rev.	Details	Date

Status	
Preliminary	
Draft	
Issued	●
For Comment	
Approved	

Notes

SOURCES	POLLUTION LINKAGES	RECEPTORS
A. Contaminated Soils / Made Ground. B. Permanent Ground Gas.	P1. Ingestion of soil and dust. P2. Inhalation of vapour. P3. Inhalation of soil dust by adjacent site users. P4. Attacking of potable water supply pipe. P5. Migration and accumulation of ground gas in internal places. P6. Impaction of groundwater from soil contamination. P7. Migration of soil and groundwater contamination impacting surface waters.	W. Watercourse to immediate north east and west. X. Groundwater within the Secondary A and Principal Aquifer. Y. Site end users. Z. Adjacent site users.



GROUNDTECH CONSULTING

CLIENT	WILSHEE'S WASTE & RECYCLING
PROJECT TITLE	CADLEY HILL
PLAN TITLE	ILLUSTRATIVE PRELIMINARY CSM
DATE	SEPTEMBER 2020
SCALE	NTS
PLAN NUMBER	GRO-20195-P03

Rev.	Details	Date

Status	
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Draft	
Issued	●
For Comment	
Approved	

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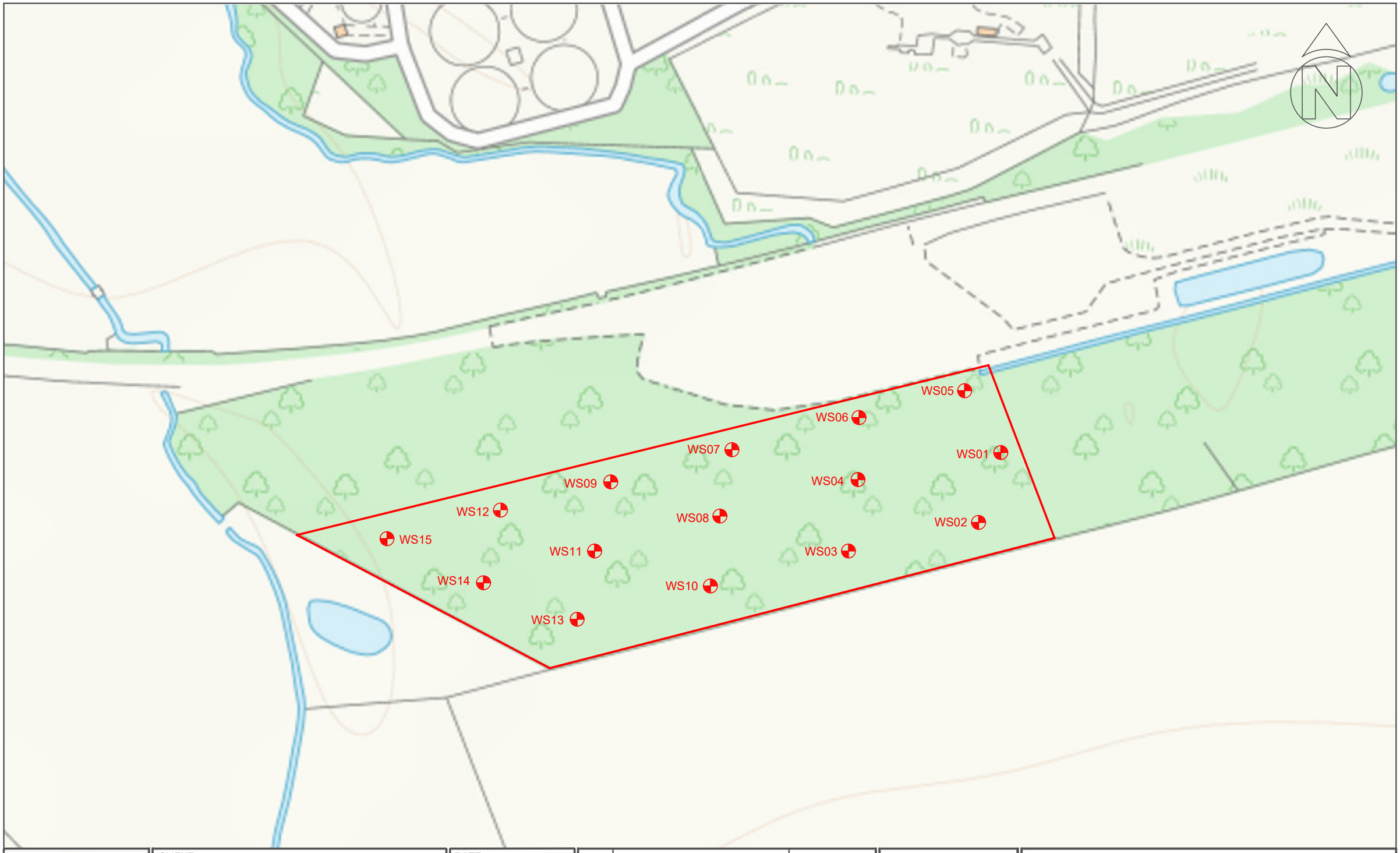


GROUNDTECH CONSULTING

CLIENT	WILSHEE'S WASTE & RECYCLING
PROJECT TITLE	CADLEY HILL
PLAN TITLE	EXPLORATORY HOLE LOCATION PLAN
DATE	SEPTEMBER 2020
SCALE	NTS
PLAN NUMBER	GRO-20195-P04

Rev.	Details	Date

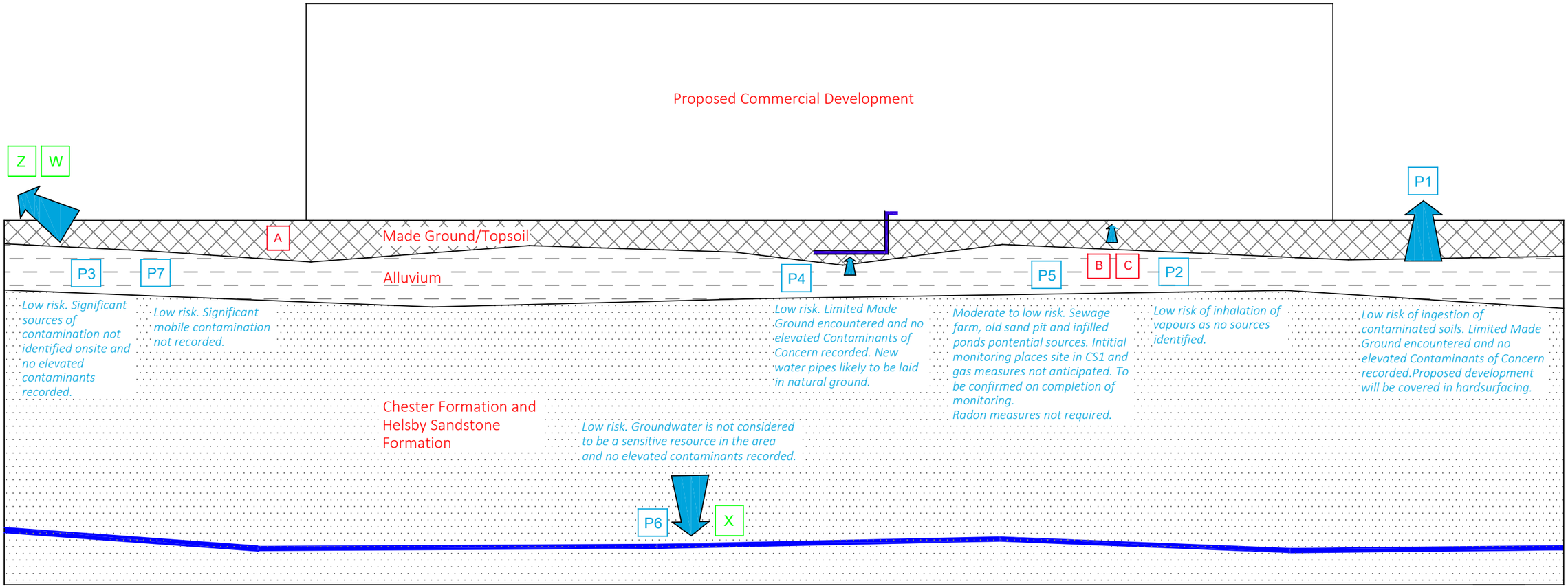
Status	
Preliminary	
Draft	
Issued	●
For Comment	
Approved	

Notes

Approximate Location of Windowless Sample Borehole

Approximate Site Boundary

SOURCES	POLLUTION LINKAGES	RECEPTORS
A. Contaminated Soils / Made Ground. B. Permanent Ground Gas.	P1. Ingestion of soil and dust. P2. Inhalation of vapour. P3. Inhalation of soil dust by adjacent site users. P4. Attacking of potable water supply pipe. P5. Migration and accumulation of ground gas in internal places. P6. Impaction of groundwater from soil contamination. P7. Migration of soil and groundwater contamination impacting surface waters.	W. Watercourse to immediate north east and west. X. Groundwater within the Secondary A and Principal Aquifer. Y. Site end users. Z. Adjacent site users.



GROUNDTECH CONSULTING

CLIENT	WILSHEE'S WASTE & RECYCLING
DATE	SEPTEMBER 2020
PROJECT TITLE	CADLEY HILL
SCALE	NTS
PLAN TITLE	ILLUSTRATIVE REVISED CSM
PLAN NUMBER	GRO-20195-P05

Rev.	Details	Date

Status	
Preliminary	
Draft	
Issued	●
For Comment	
Approved	

Notes

APPENDIX 2 - Site Photographs

Photograph 1 – WS09 location facing towards north east of site.

Photograph 2 – Clear vegetated area to access exploratory holes to the west of site.

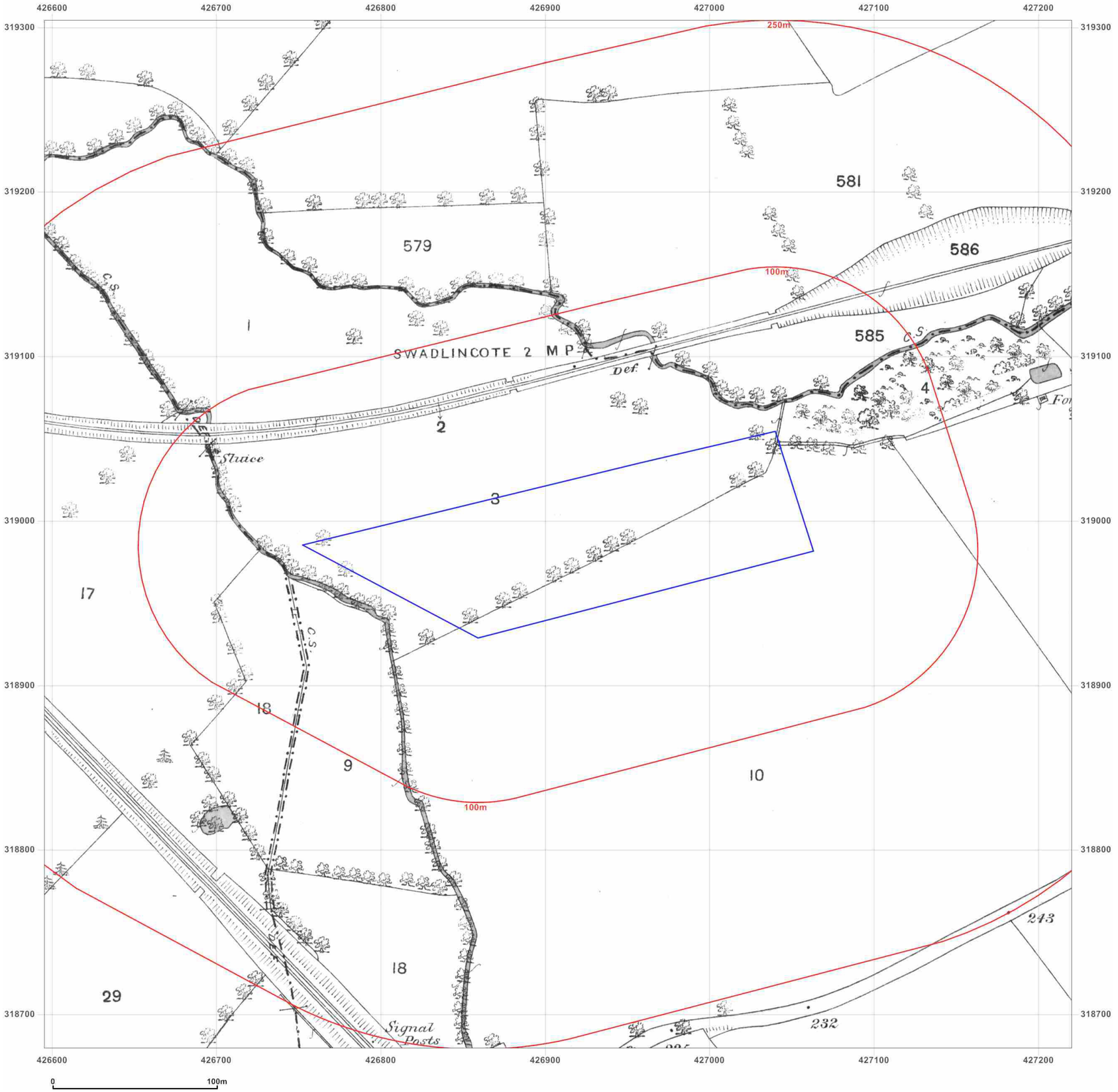
Photograph 3 – Spoil heap deposits north of site near WS06.

Photograph 4 - Inland tributary located to the north east of site.

Photograph 5 – Access route to south eastern areas of site via site centre.

Photograph 6 – Location of WS01 at easternmost point of site.

APPENDIX 3 - Historical Plans



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Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: County Series

Map date: **1883**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1883
Revised 1883
Edition N/A
Copyright N/A
Levelled N/A

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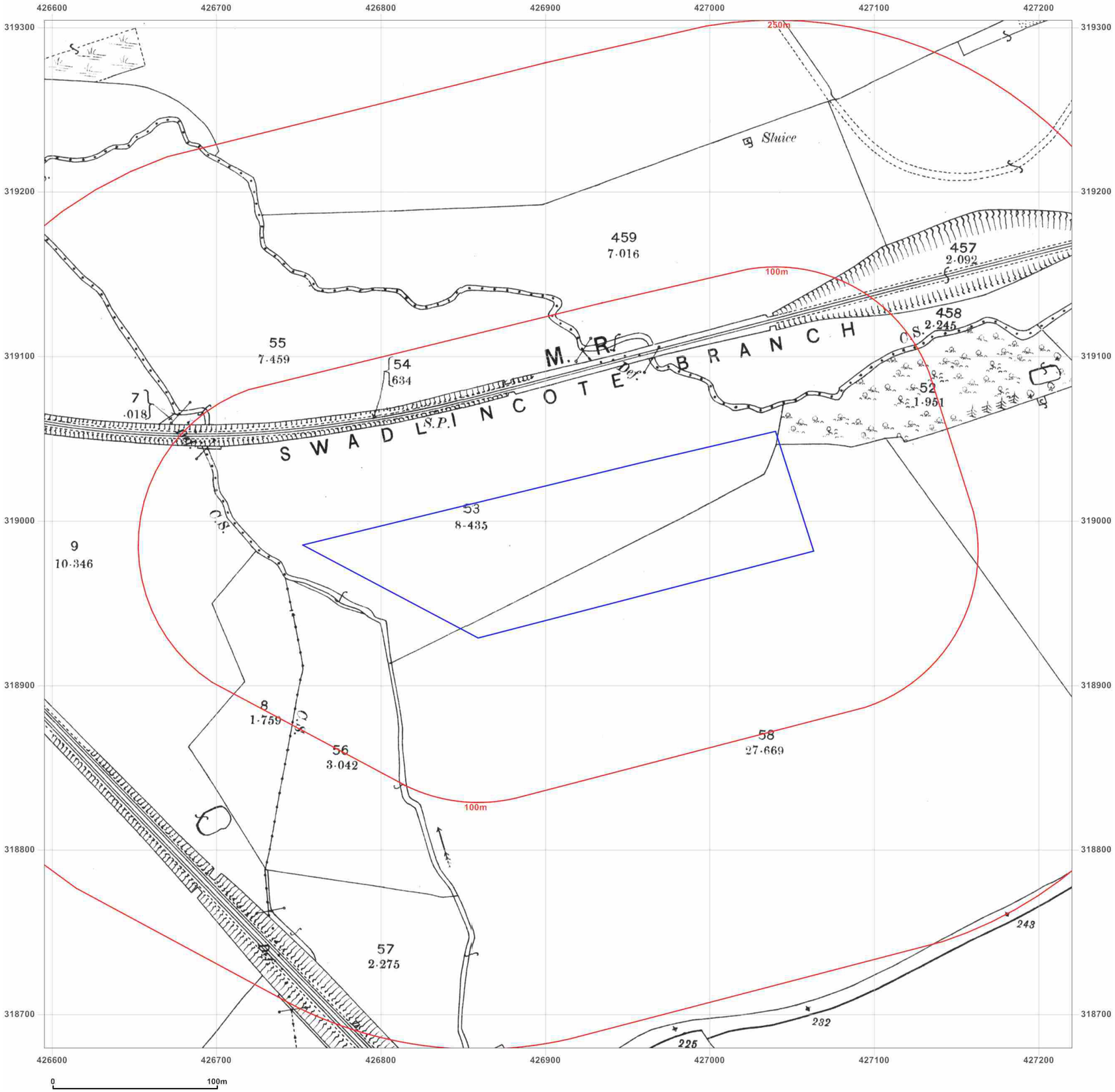

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Map Name: County Series

Map date: **1901**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1901
Revised 1901
Edition N/A
Copyright N/A
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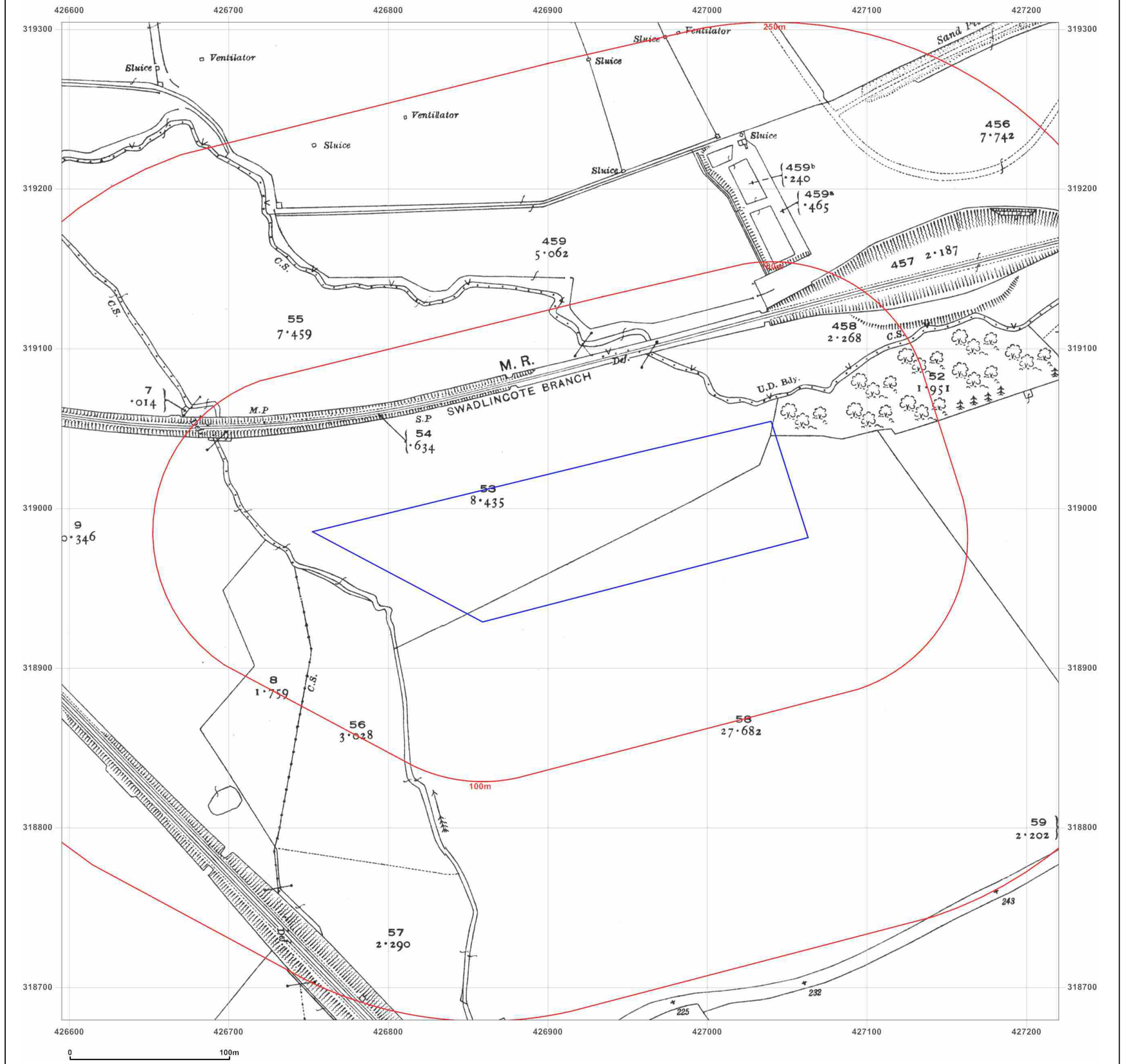

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Surveyed 1923
Revised 1923
Edition N/A
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Revised 1959
Edition N/A
Copyright 1960
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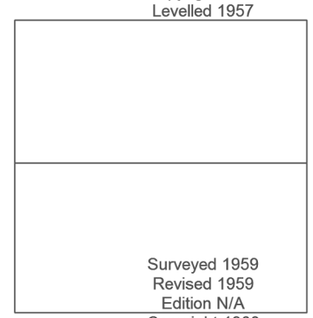

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Edition N/A
Copyright 1960
Levelled 1957

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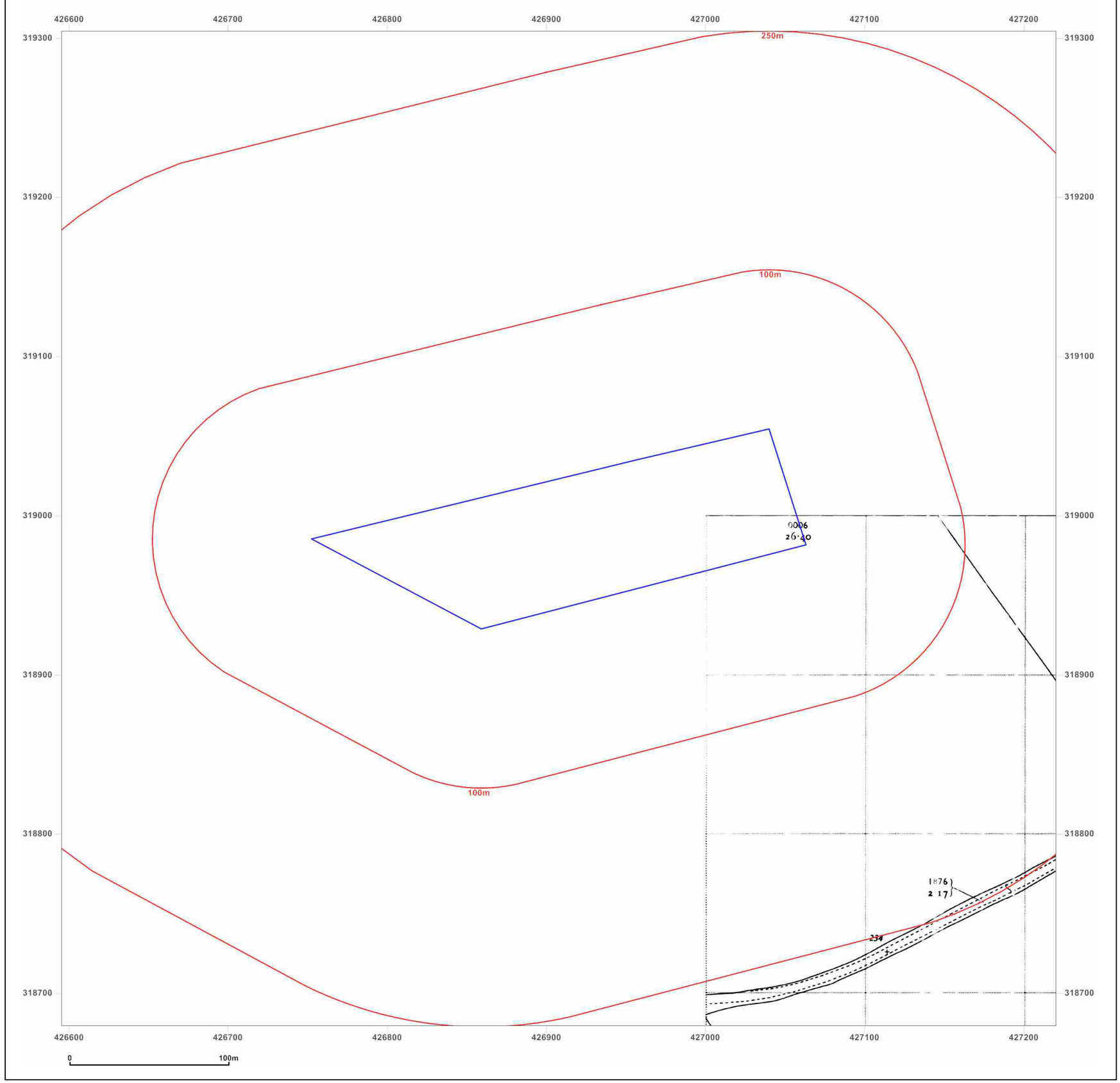

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Map Name: National Grid

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Printed at: 1:2,500

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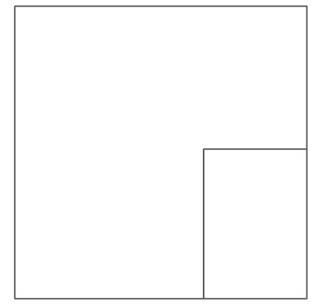

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Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

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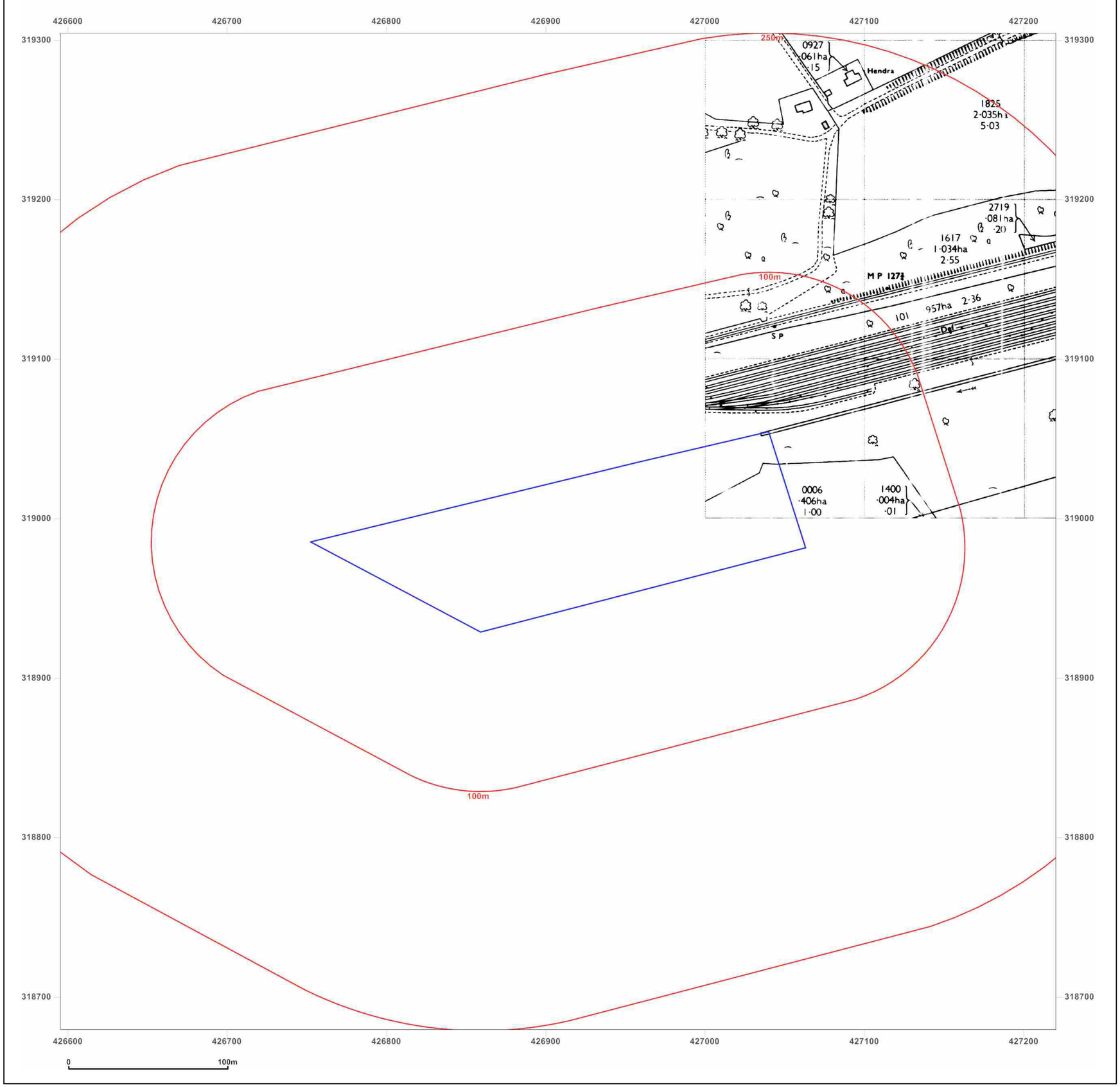

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Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: National Grid

Map date: **1970**

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Printed at: 1:2,500

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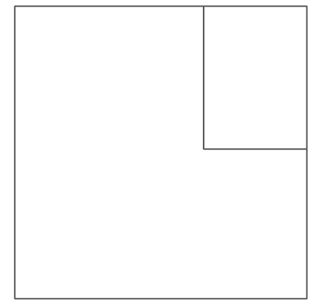
Surveyed N/A
Revised N/A
Edition N/A
Copyright 1970
Levelled N/A



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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
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Map Name: National Grid

Map date: **1969-1974**

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Printed at: 1:2,500

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Surveyed N/A
Revised 1969
Edition N/A
Copyright 1970
Levelled 1963

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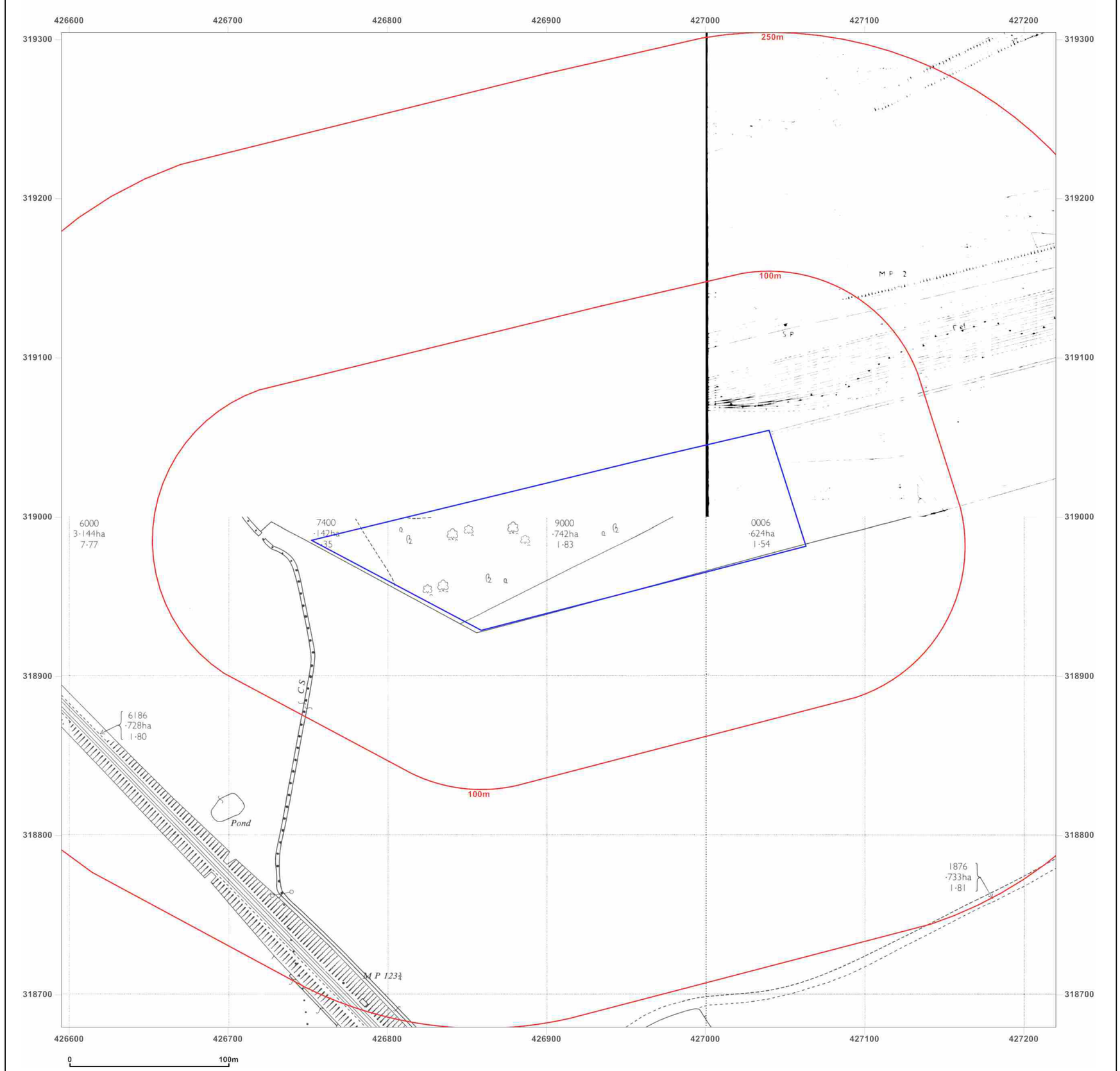

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Map Name: National Grid

Map date: **1974-1976**

Scale: 1:2,500

Printed at: 1:2,500

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

Surveyed 1976
Revised 1976
Edition N/A
Copyright 1977
Levelled 1963

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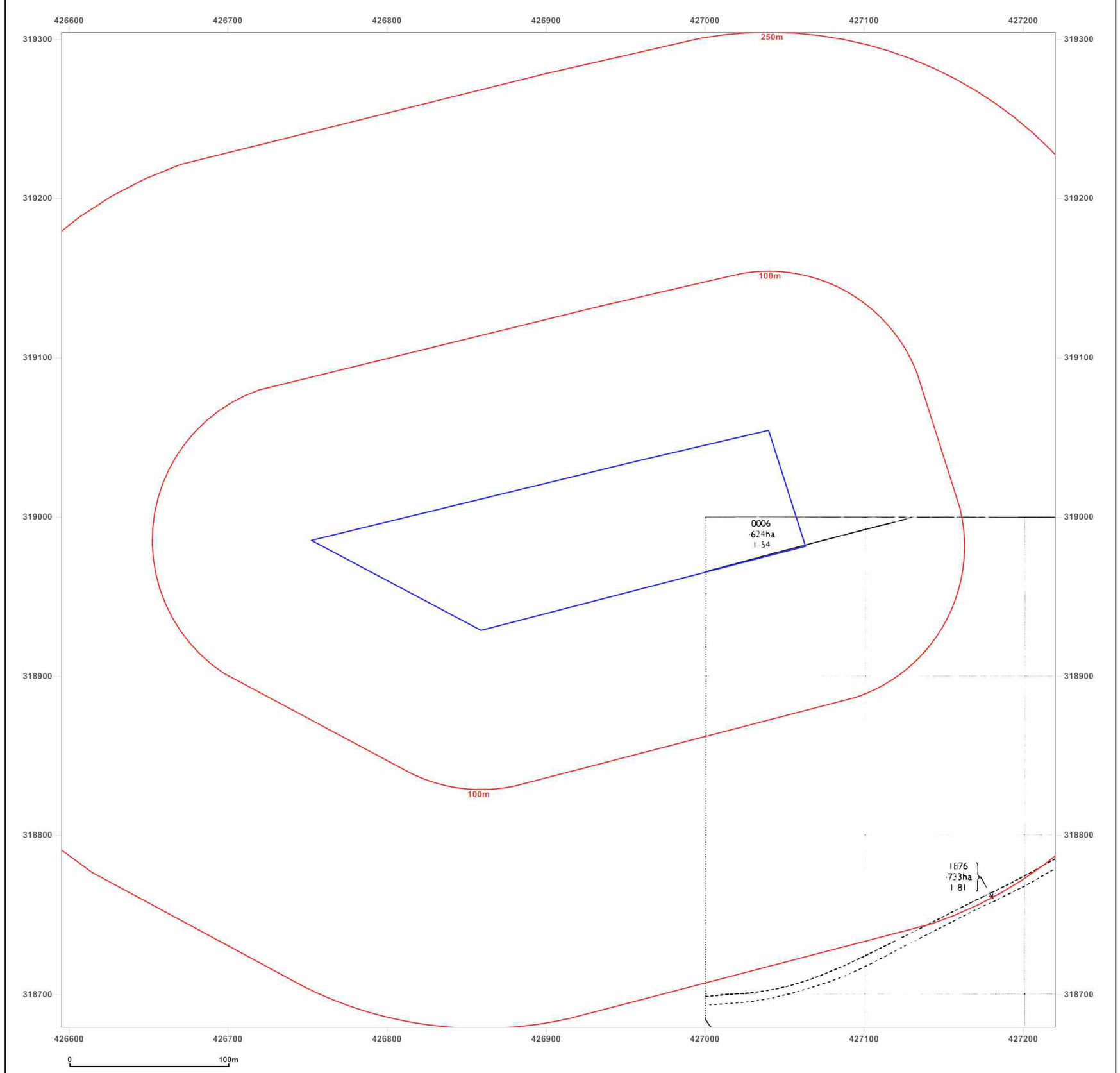

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
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Map Name: National Grid

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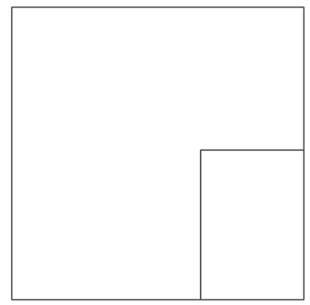

Surveyed N/A
Revised 1976
Edition N/A
Copyright 1977
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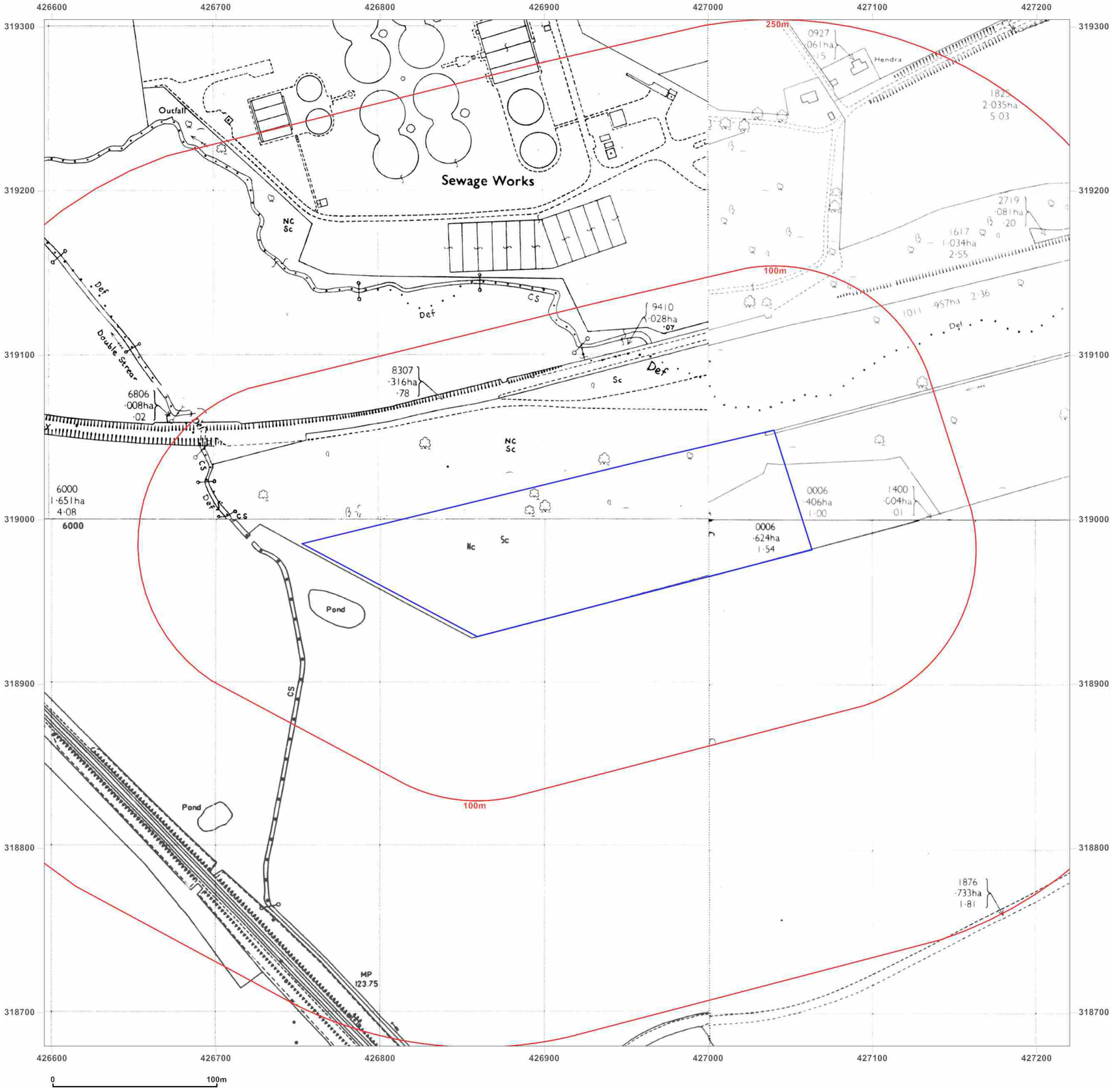

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Map Name: National Grid

Map date: **1989-1993**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1963
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Edition N/A
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Copyright 1990
Levelled 1963

Surveyed 1993
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Levelled N/A

Surveyed 1963
Revised 1989
Edition N/A
Copyright 1989
Levelled 1963

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: National Grid

Map date: **1991-1993**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

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

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

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Production date: 07 August 2020

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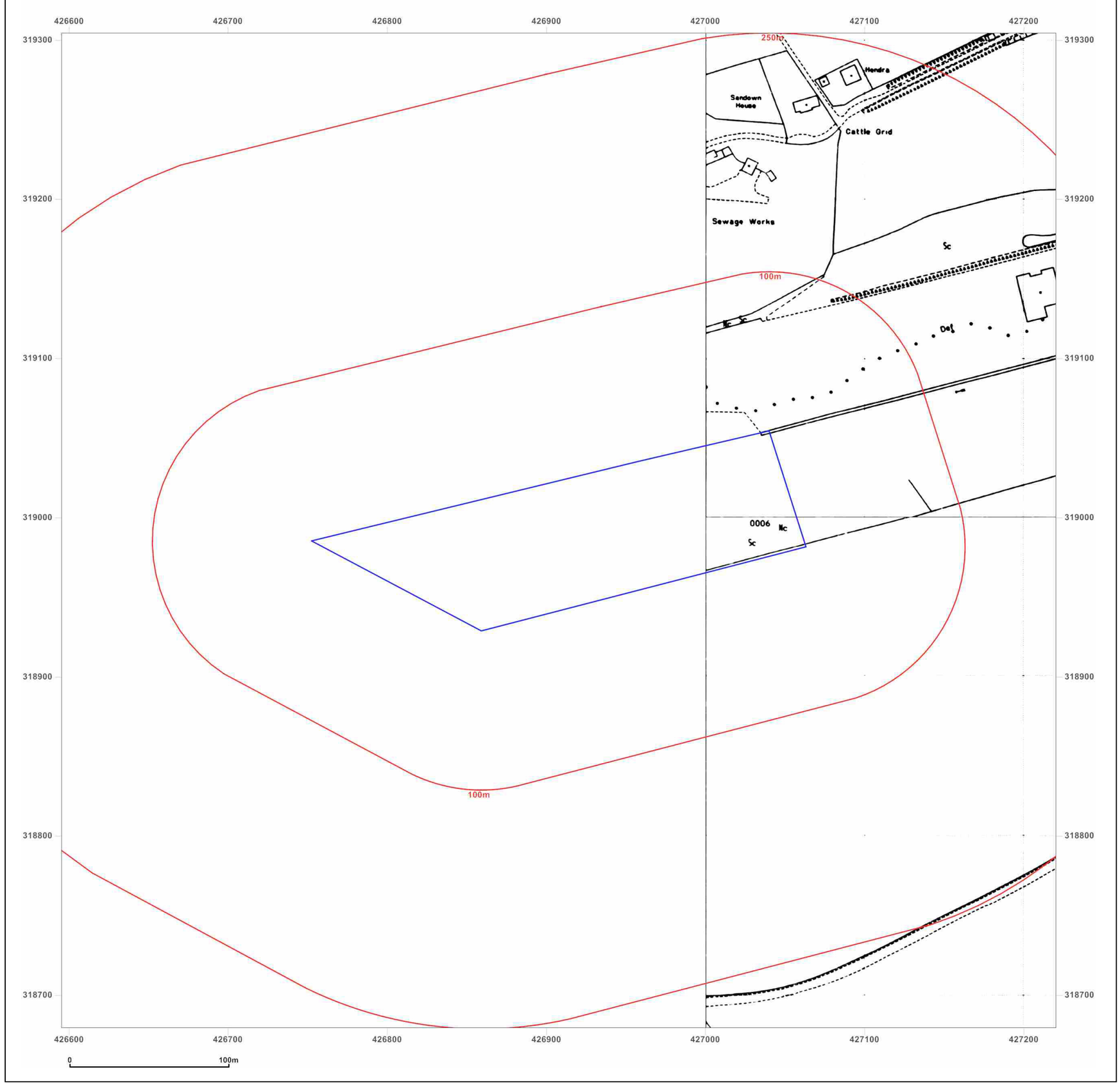

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: National Grid

Map date: **1993**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
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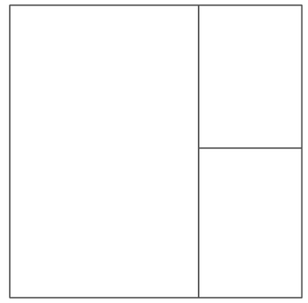
Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A



Surveyed N/A
Revised N/A
Edition N/A
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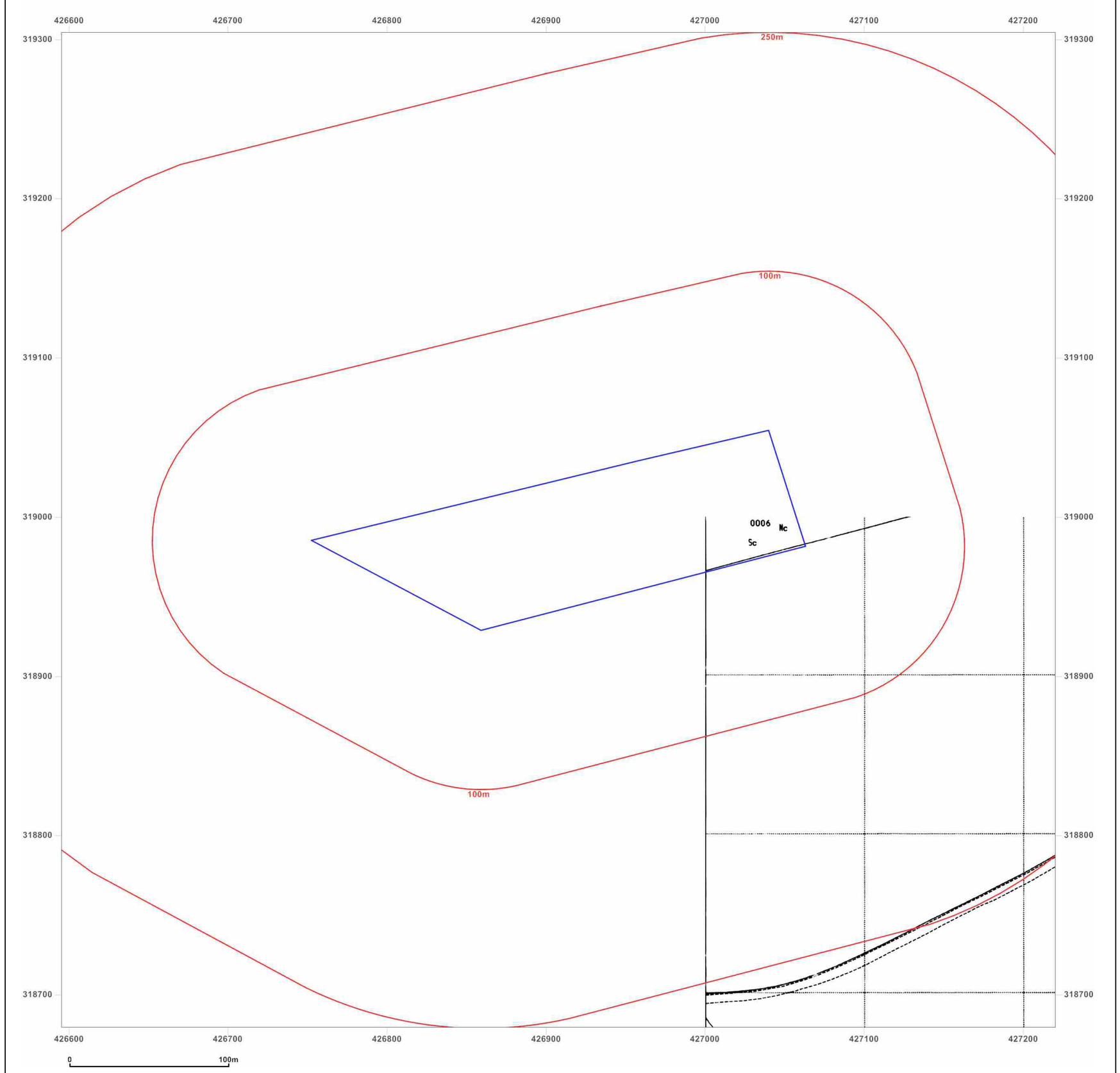

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: National Grid

Map date: **1994**

Scale: 1:2,500

Printed at: 1:2,500

N
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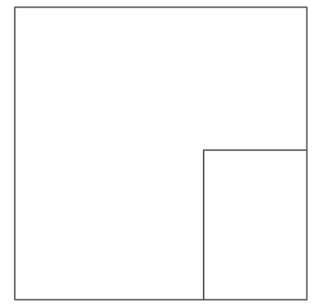

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1994
Levelled N/A

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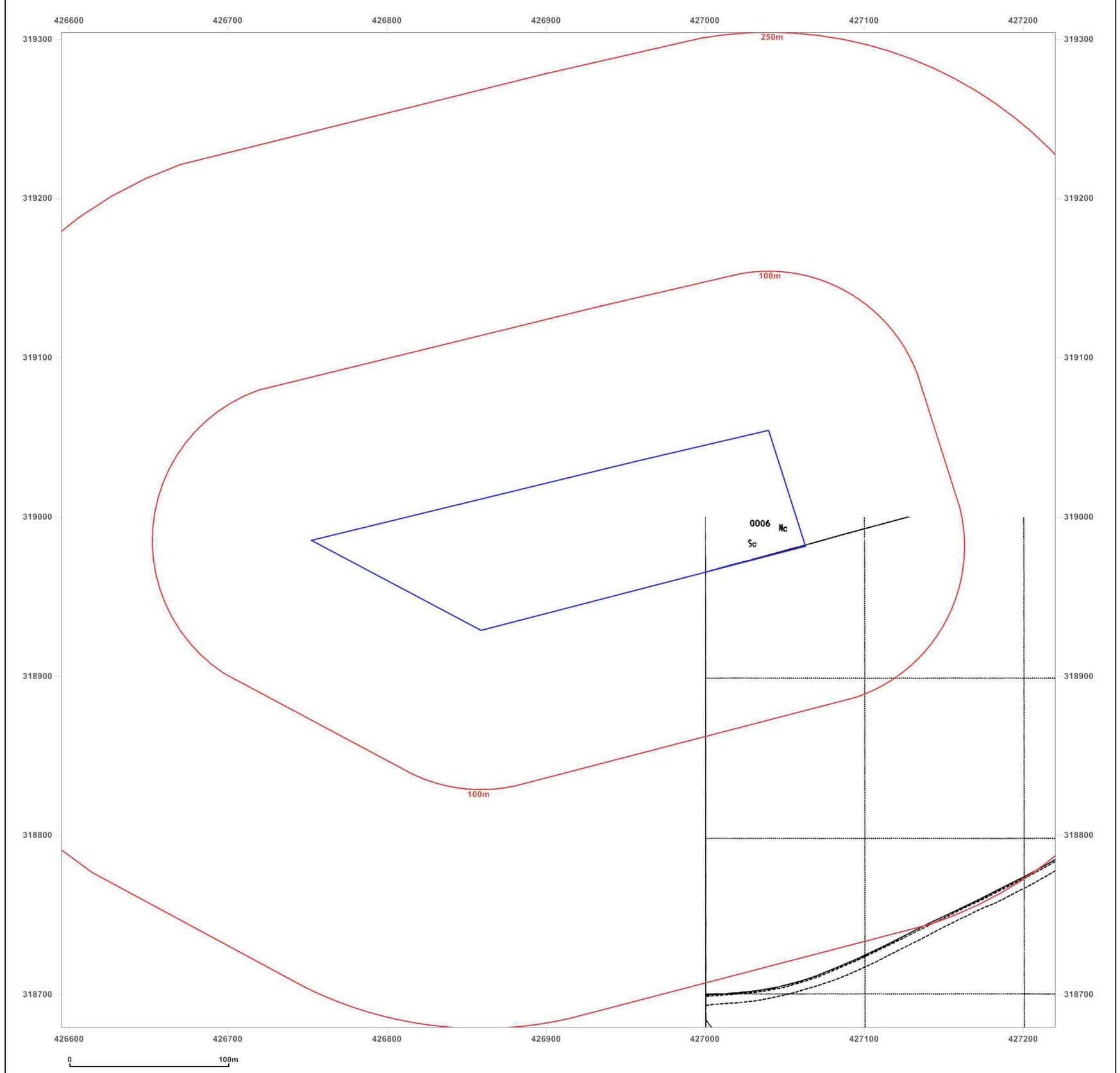

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: National Grid

Map date: **1994**

Scale: 1:2,500

Printed at: 1:2,500

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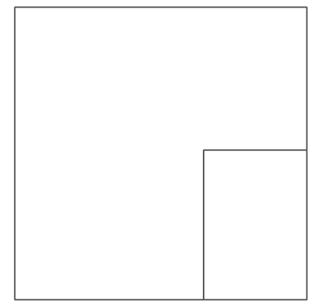

Surveyed 1994
Revised N/A
Edition N/A
Copyright N/A
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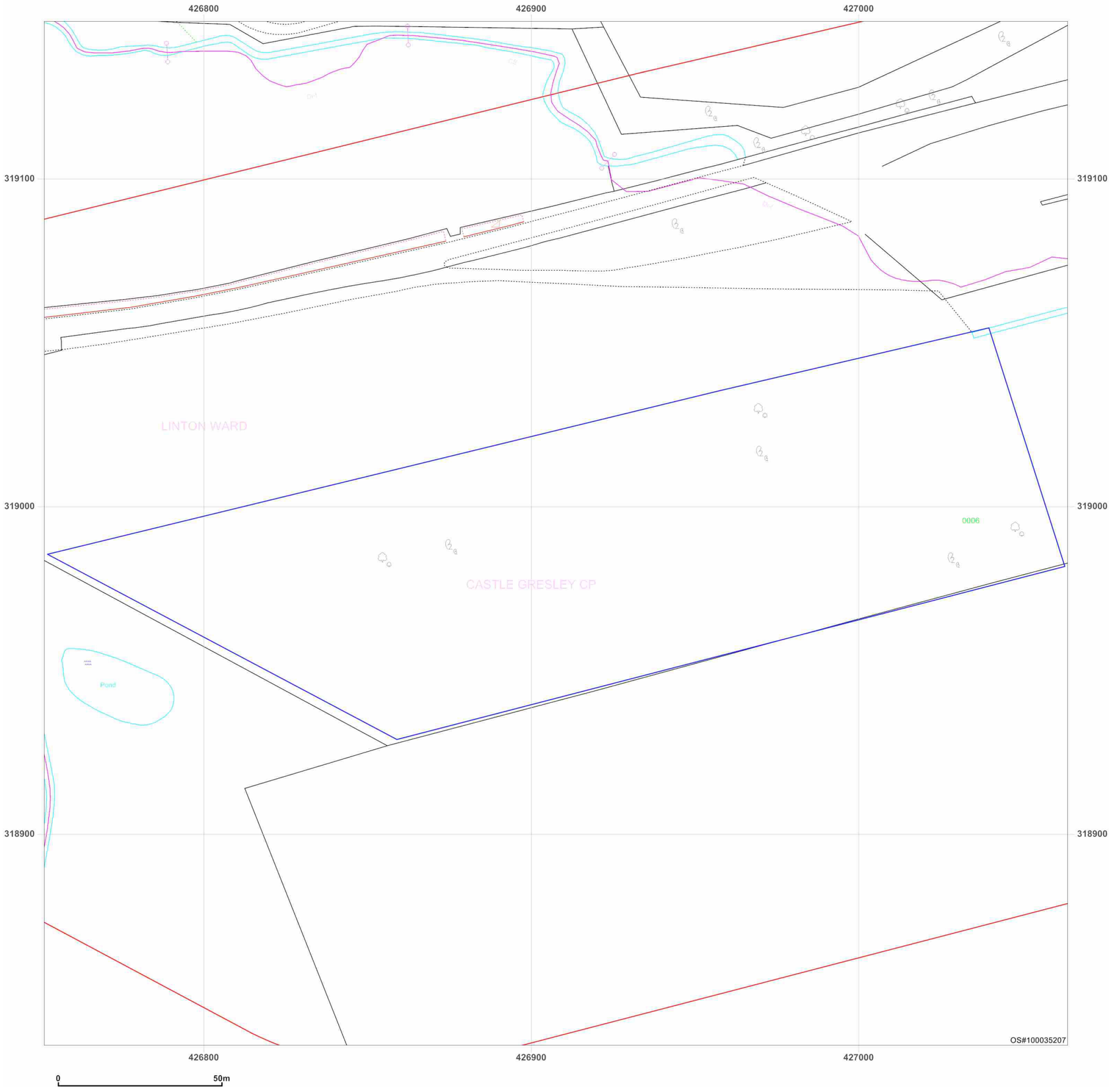

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

N
W E
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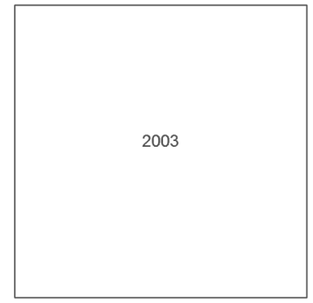

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: County Series

Map date: **1882**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1882
Revised 1882
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1882
Revised 1882
Edition N/A
Copyright N/A
Levelled N/A

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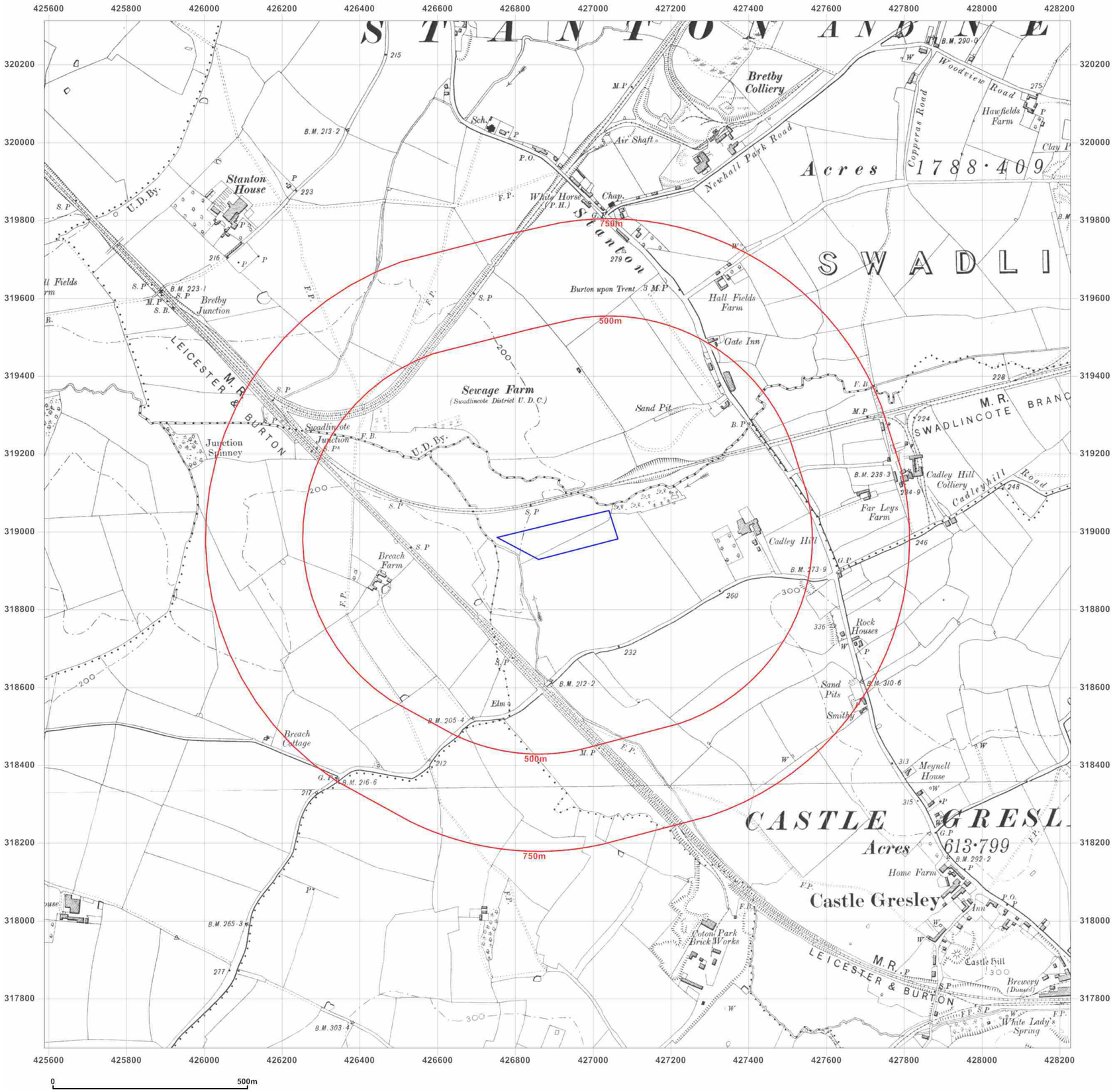

emapsite™

Site Details:

Wilshee's,Burton Road,Swadlincote,DE11 9EL

Client Ref:	EMS_626310_833859
Report Ref:	EMS-626310_833859
Grid Ref:	426908, 318992

Map Name:	County Series
Map date:	**1900**
Scale:	1:10,560
Printed at:	1:10,560

N
W E
S

Surveyed 1882
Revised 1900
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1882
Revised 1900
Edition N/A
Copyright N/A
Levelled N/A

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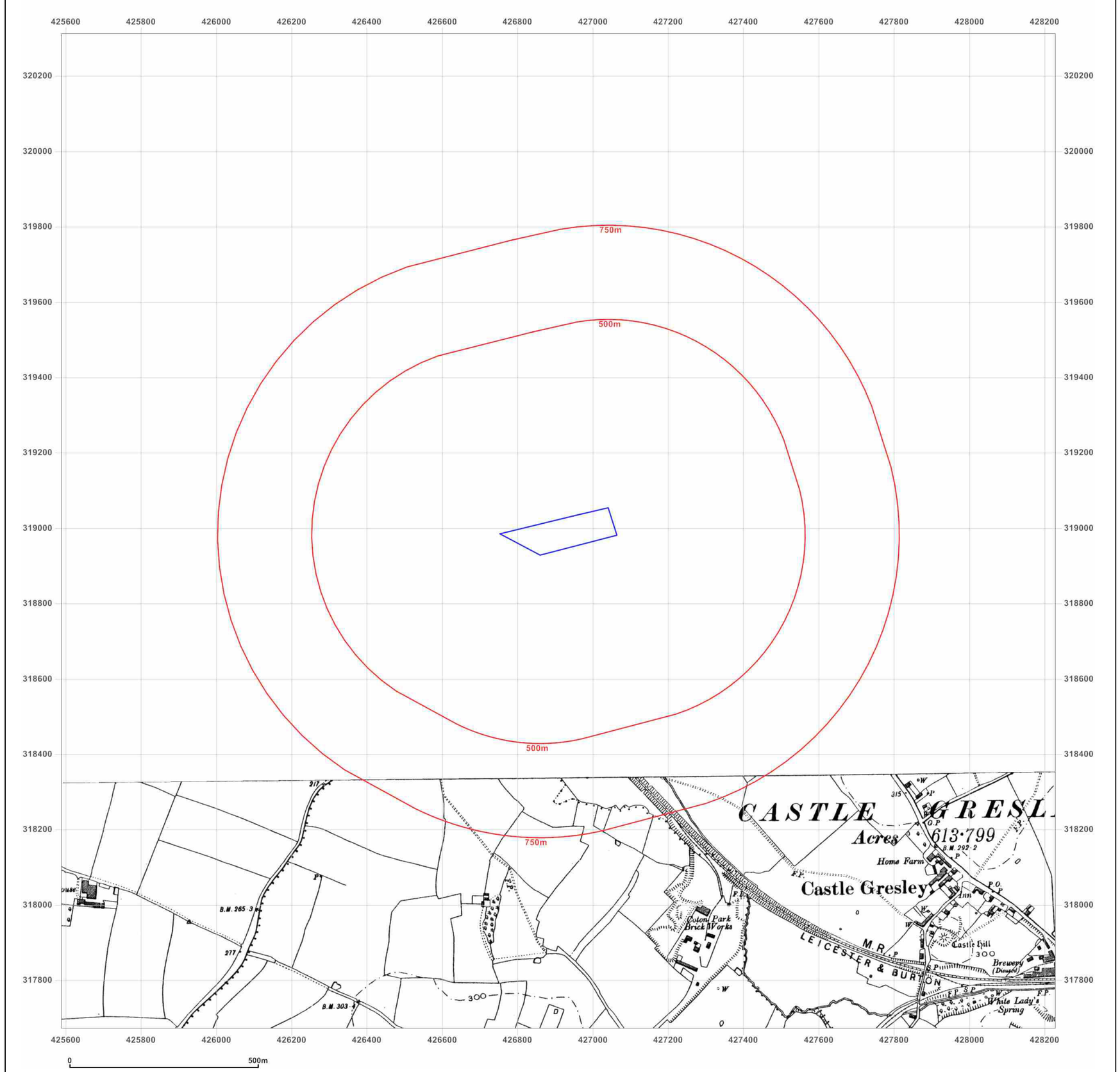

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: County Series

Map date: **1902**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
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Surveyed 1882
Revised 1900
Edition 1902
Copyright N/A
Levelled N/A

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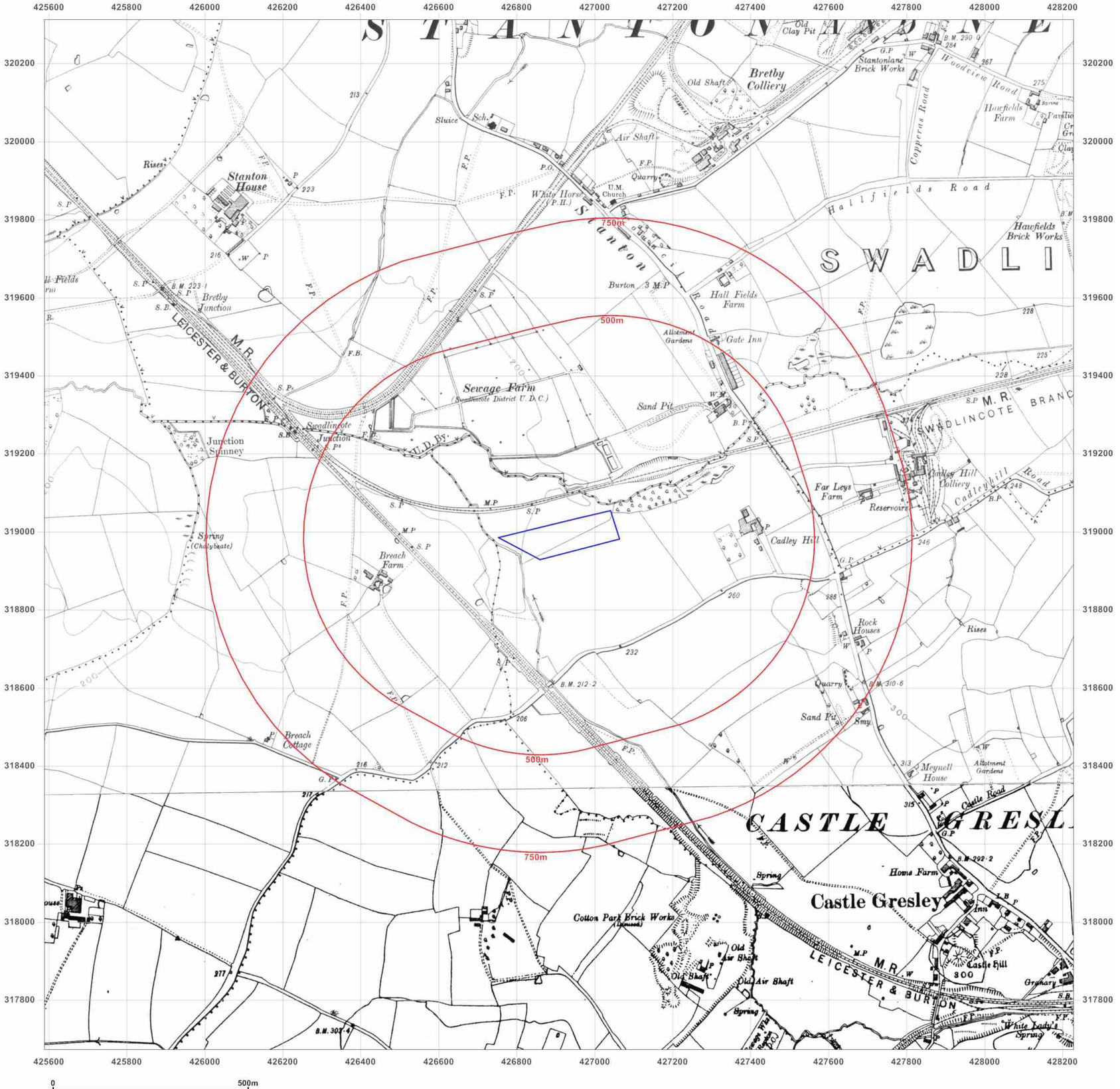

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: County Series

Map date: **1925**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
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Surveyed 1882
Revised 1925
Edition 1925
Copyright N/A
Levelled N/A

Surveyed N/A
Revised N/A
Edition 1925
Copyright N/A
Levelled N/A

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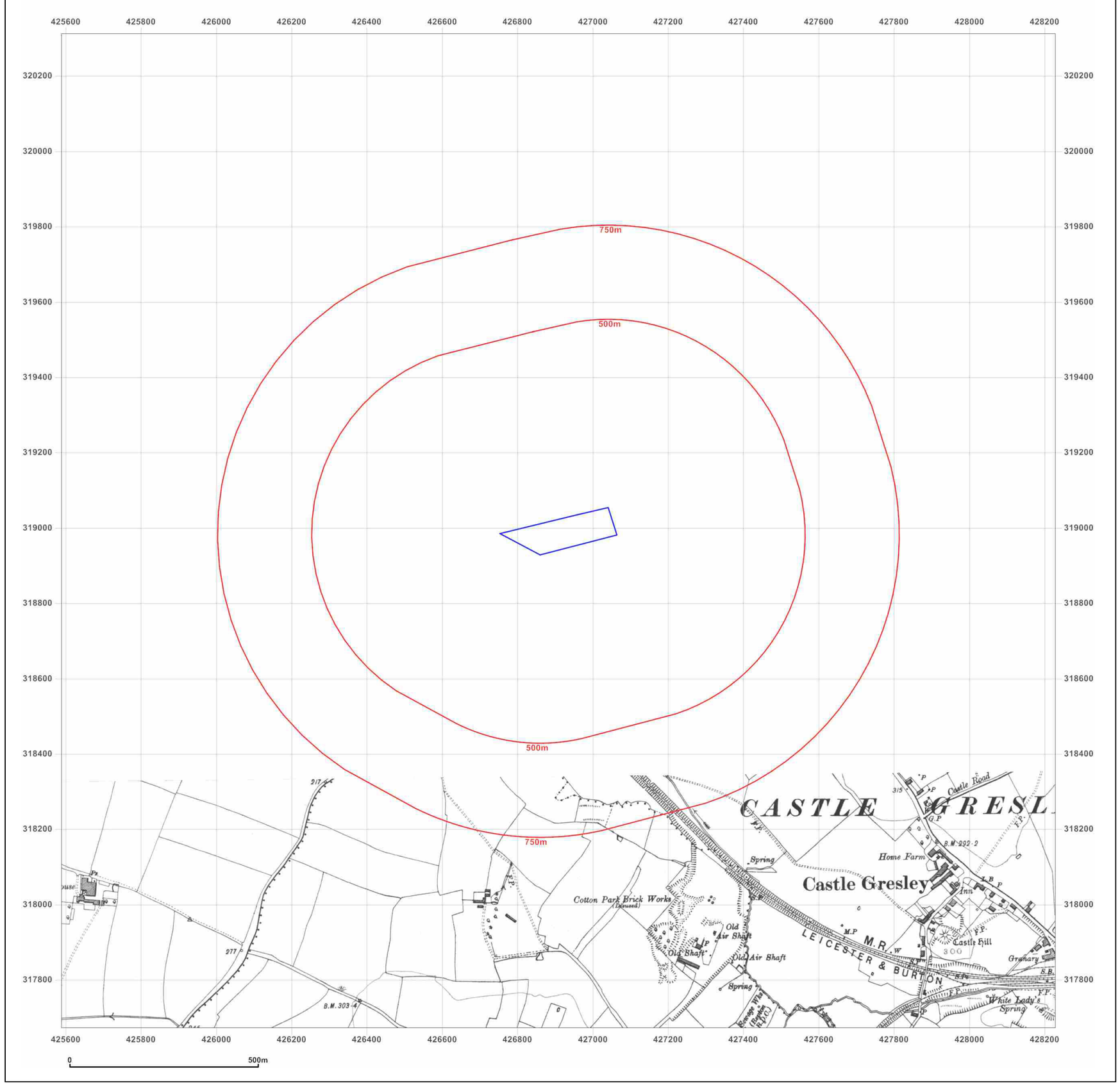

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: County Series
Map date: **1925**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
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Surveyed 1881
Revised 1925
Edition 1925
Copyright N/A
Levelled N/A

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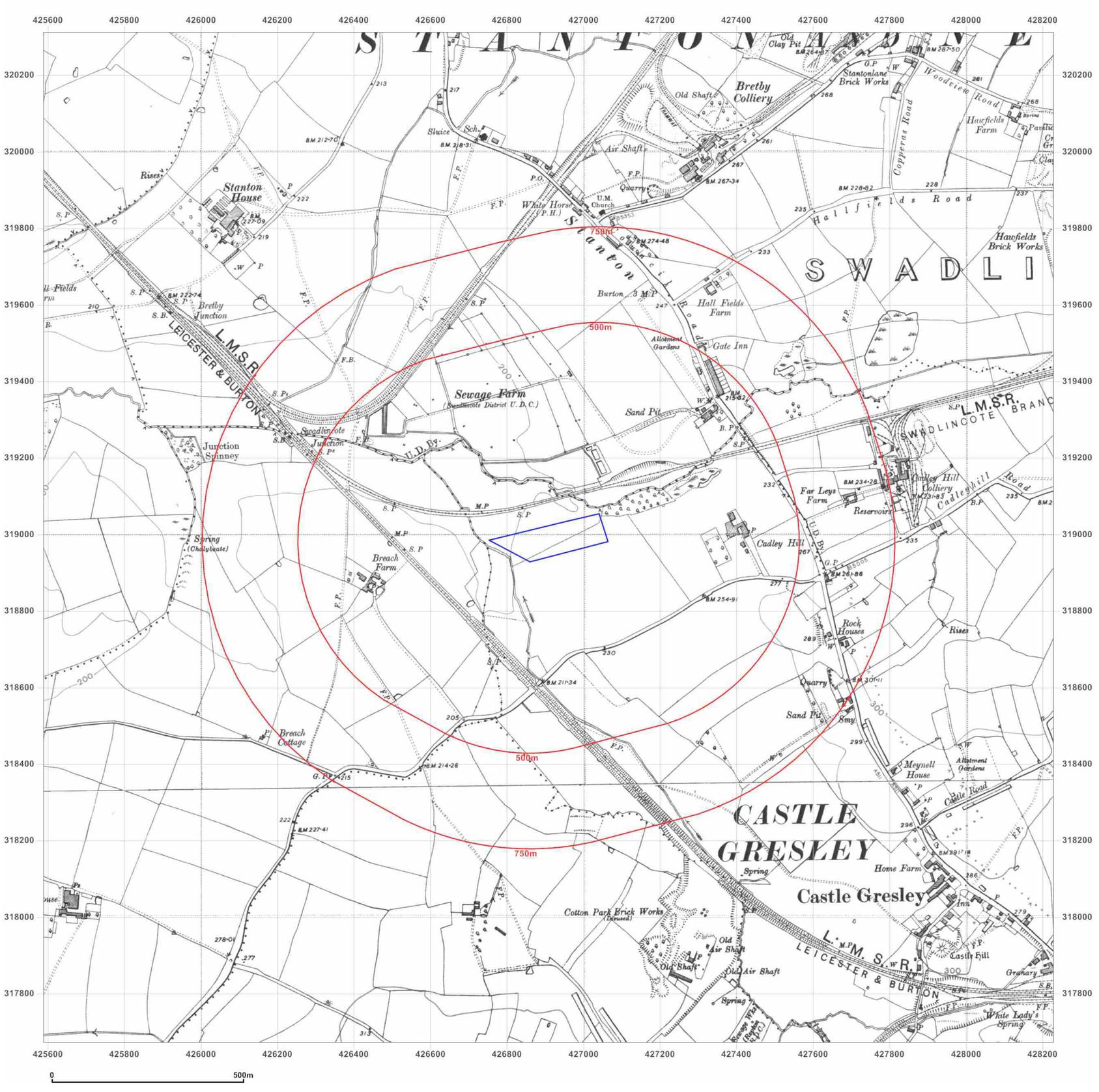

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: County Series

Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
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Surveyed 1882
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1881
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

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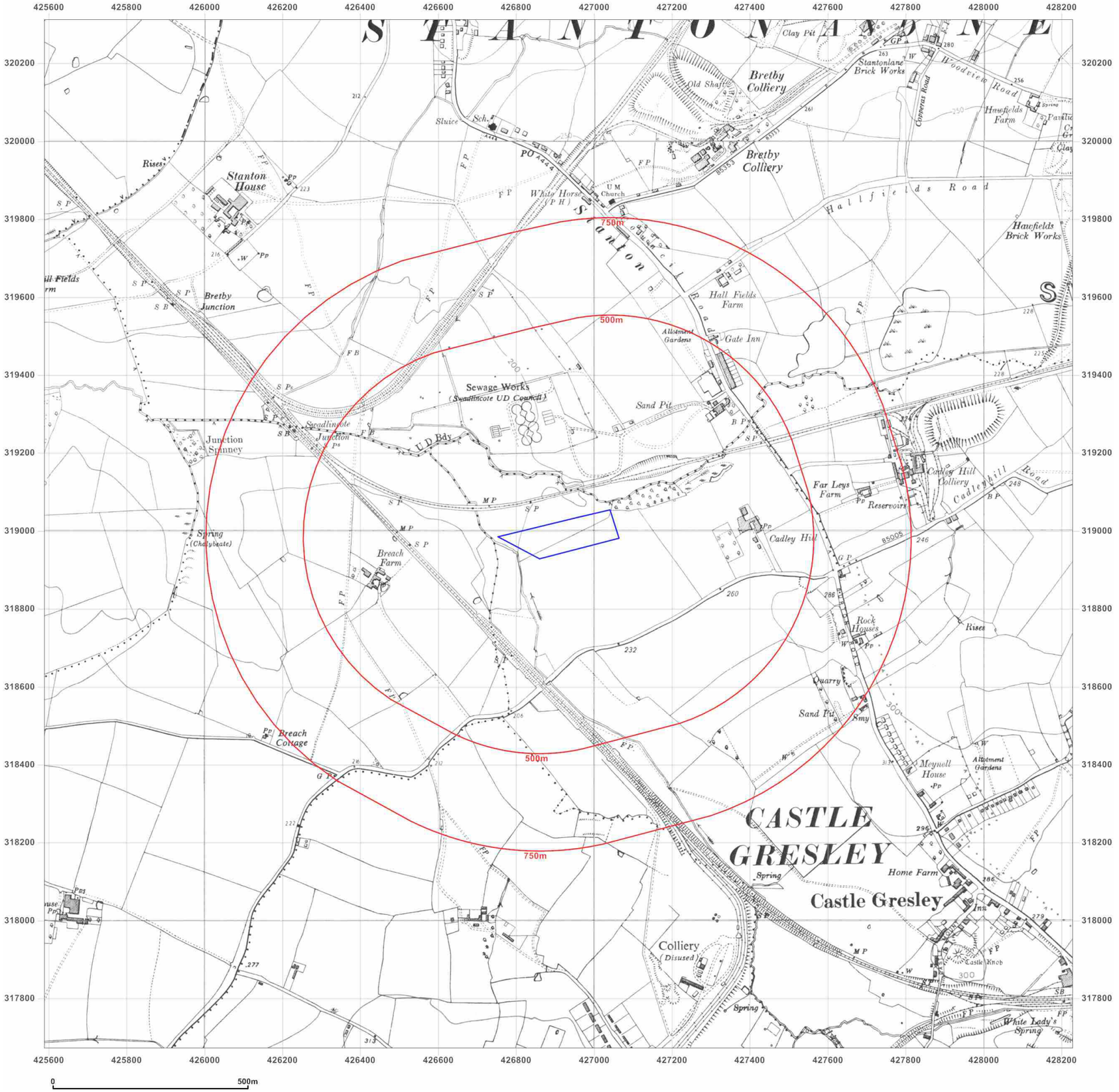

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: Provisional

Map date: **1955**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed N/A
Revised 1954
Edition N/A
Copyright 1955
Levelled N/A

Surveyed N/A
Revised 1954
Edition N/A
Copyright 1955
Levelled N/A

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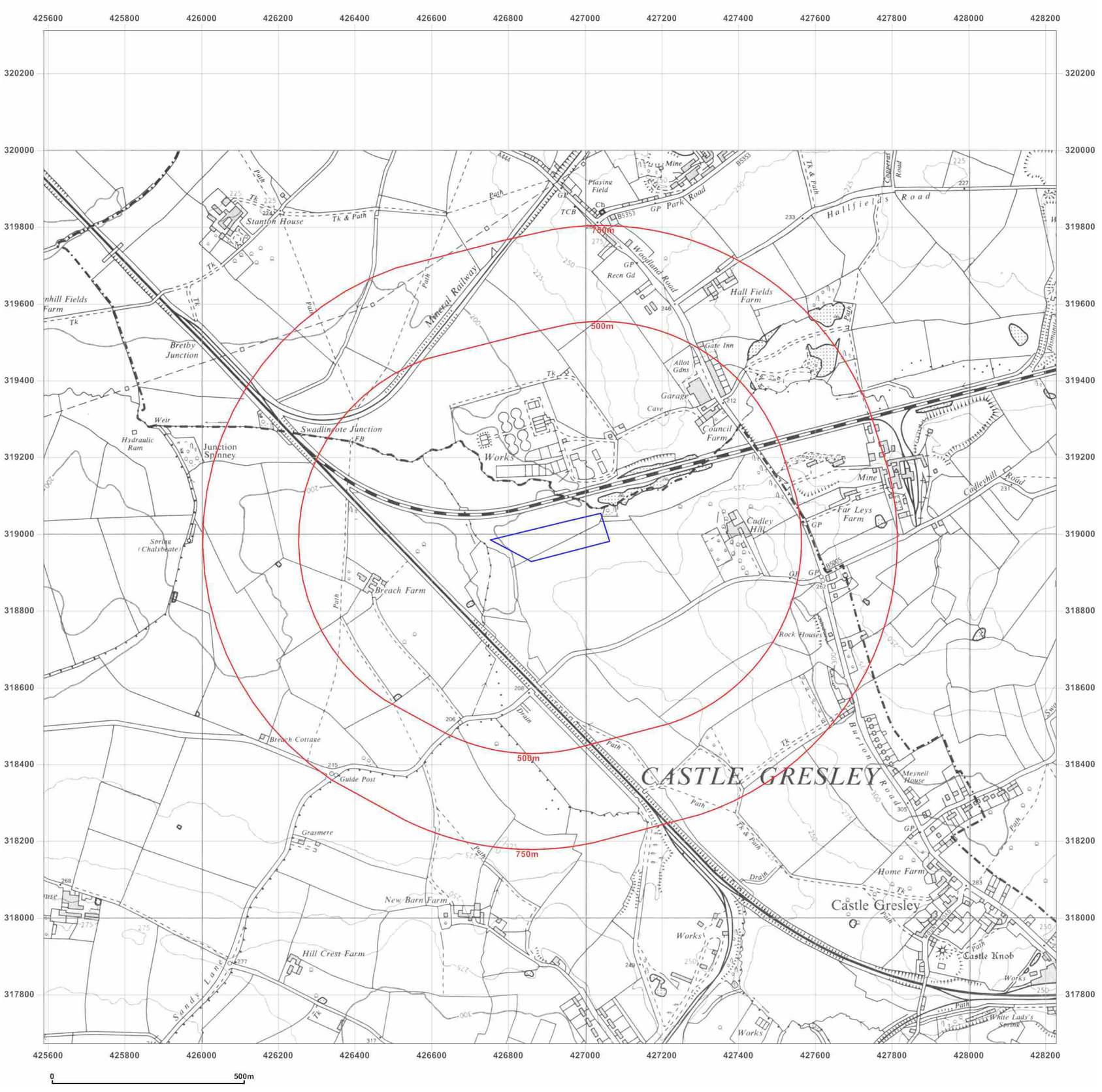

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: Provisional

Map date: **1967**

Scale: 1:10,560

Printed at: 1:10,560

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

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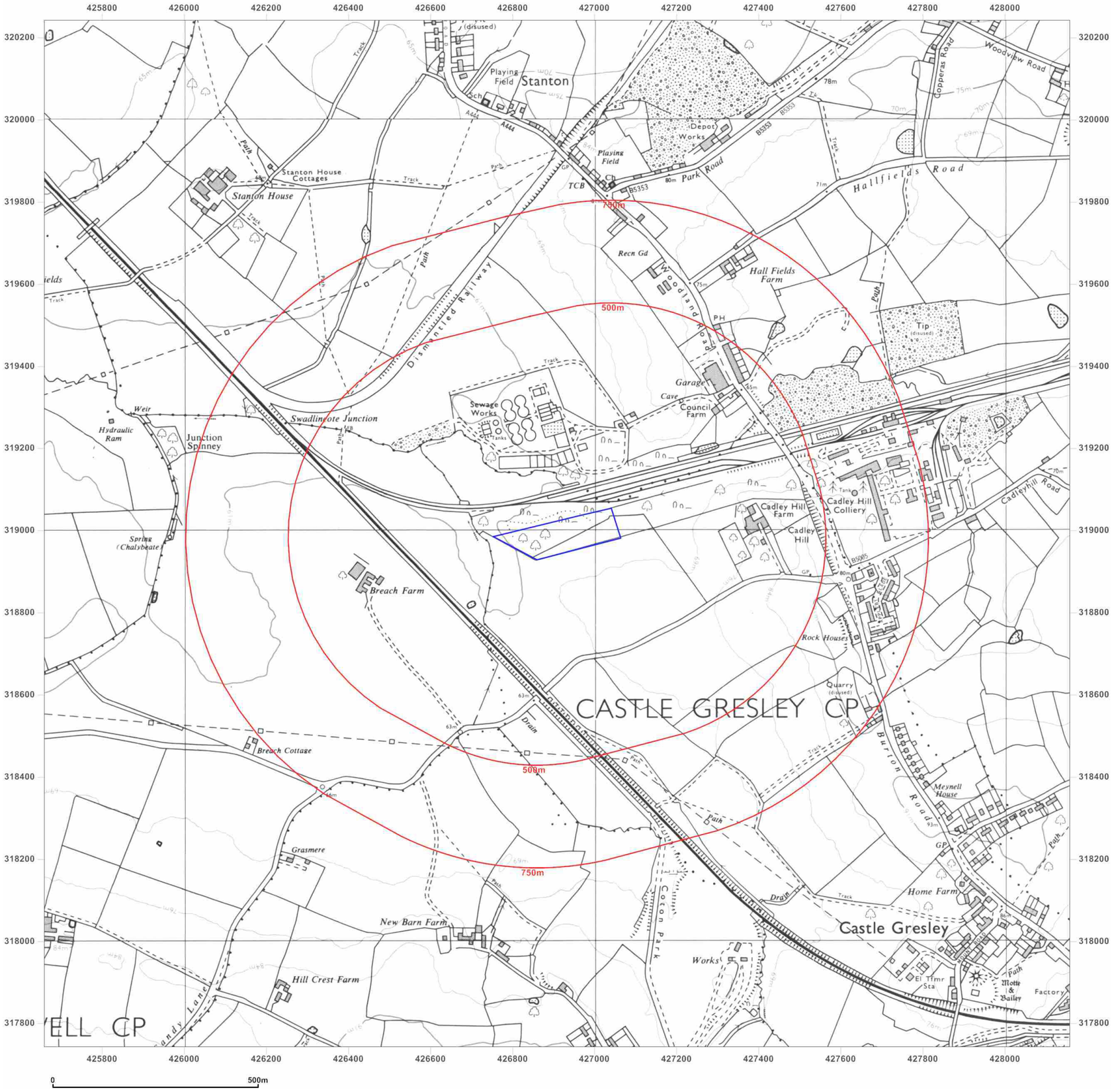

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: National Grid

Map date: **1976-1980**

Scale: 1:10,000

Printed at: 1:10,000

N
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Surveyed 1975
Revised 1980
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1971
Revised 1976
Edition N/A
Copyright 1976
Levelled 1965

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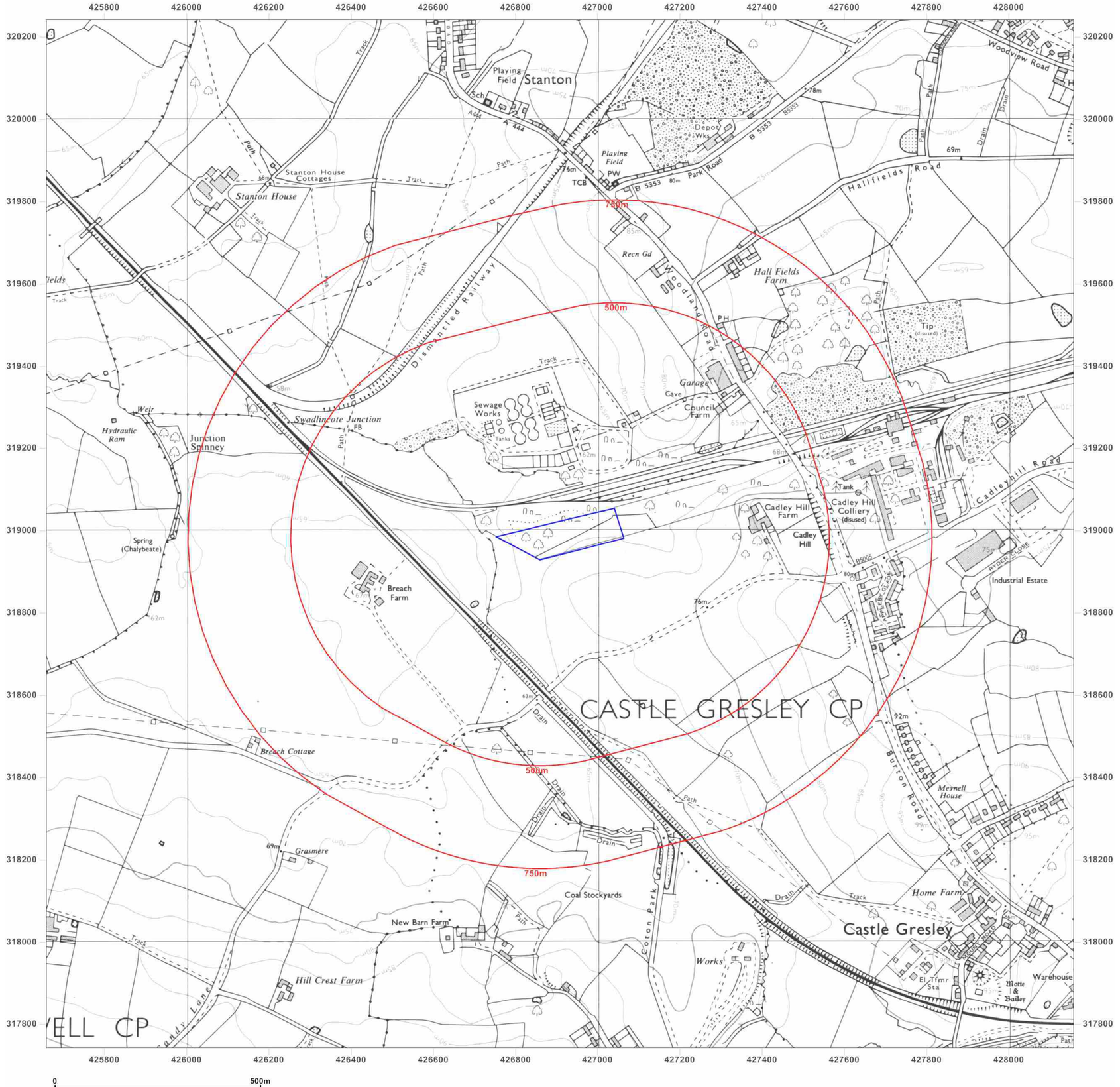

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: National Grid

Map date: **1989-1990**

Scale: 1:10,000

Printed at: 1:10,000

N
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Surveyed 1987
Revised 1990
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1984
Revised 1989
Edition N/A
Copyright N/A
Levelled N/A

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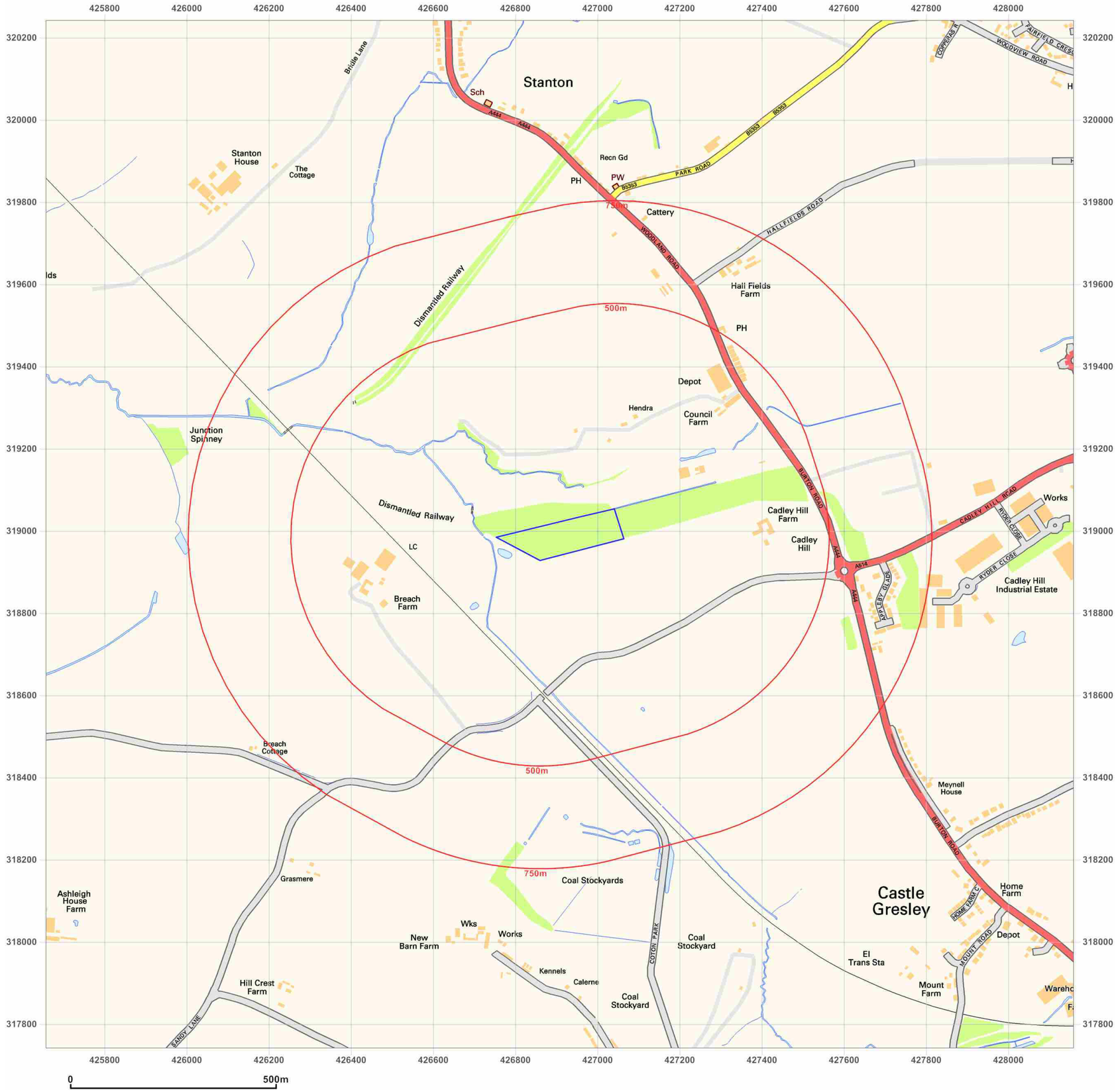

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Site Details:

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Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

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2001

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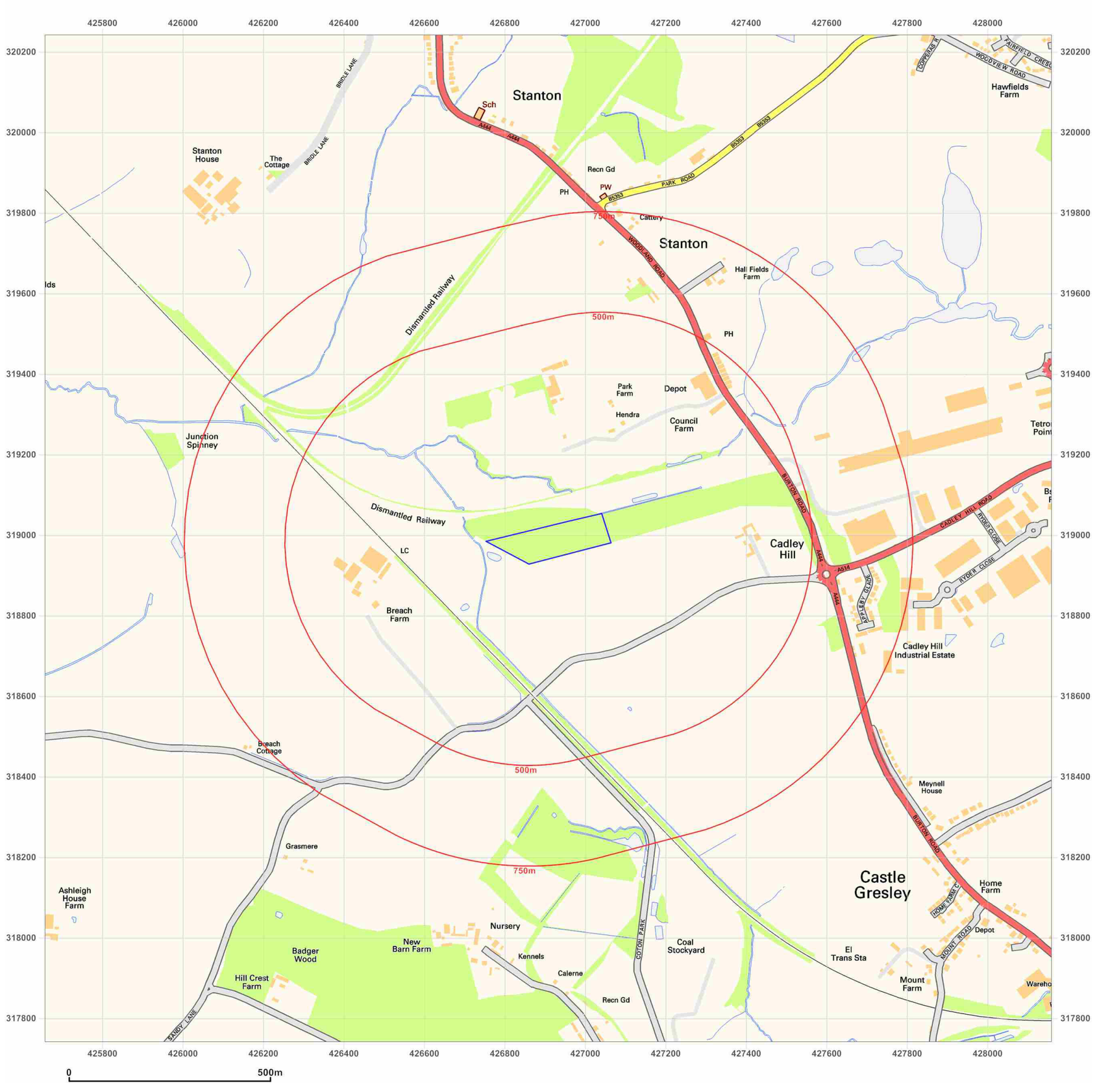

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Site Details:

Wilshee's,Burton Road,Swadlincote,DE11 9EL

Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
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2010

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Production date: 07 August 2020

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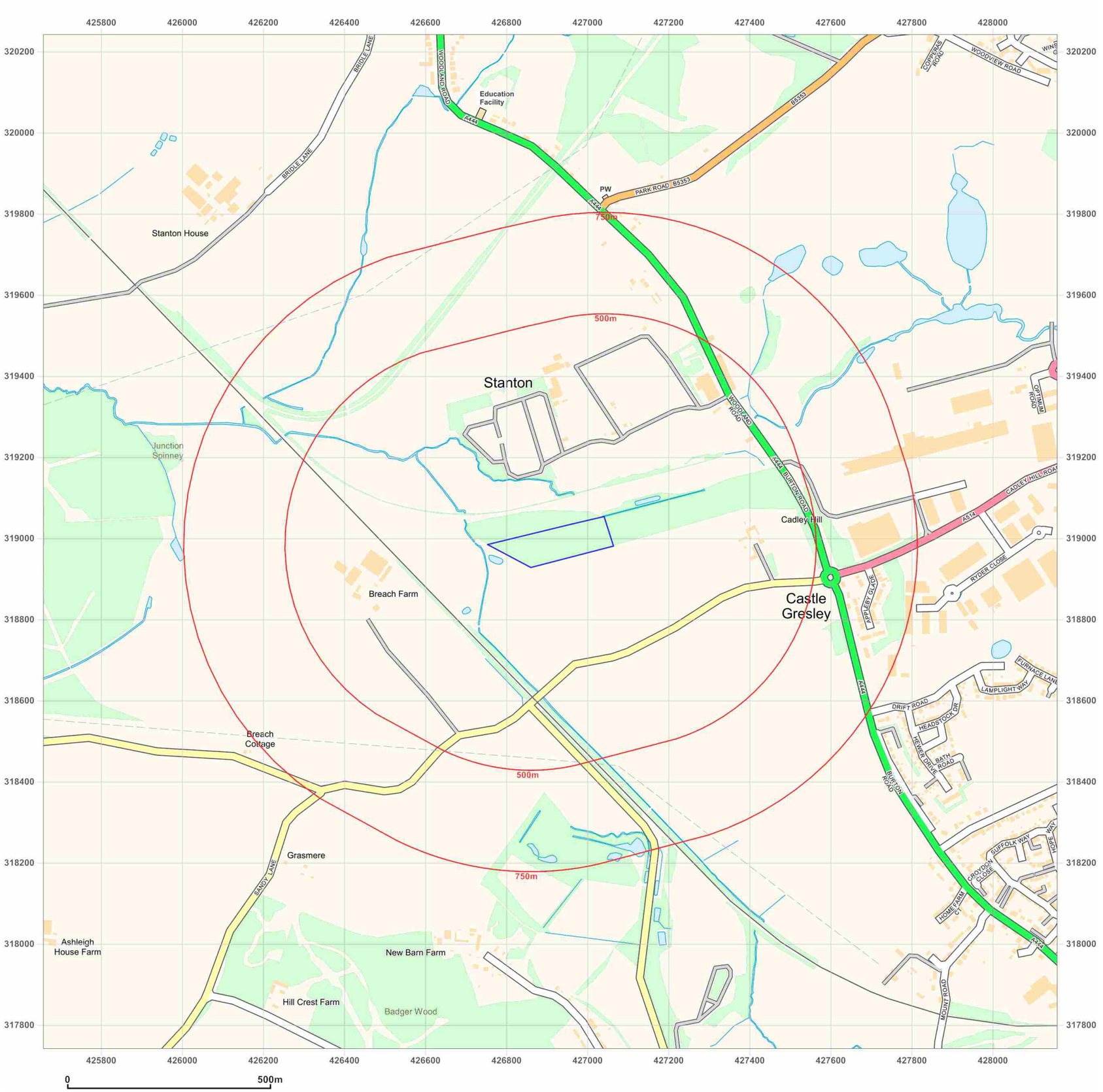

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Site Details:

Wilshee's,Burton Road,Swadlincote,DE11 9EL

Client Ref: EMS_626310_833859
Report Ref: EMS-626310_833859
Grid Ref: 426908, 318992

Map Name: National Grid

Map date: **2020**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
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2020

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APPENDIX 4 – BGS Borehole Records

1063 Wt. 22438/0384 10m 7/45 (51) F.&S.

RECORD OF SHAFT OR BORE FOR MINERALS

(For Survey use only) SK 21 NE/4

1-inch Map Registered No. 141 141/213 N 2603-1896

Name and Number of Shaft or Bore: Sand Pit Sandpit (1952) B.H.

6-inch Map Registered No. 213

For Messrs. N.C.B.

Town or Village

County Derbyshire Six-inch quarter sheet 60 N.W.

Exact site 1,230 yds. S.E. of Stanton House; 600 yds. W. by S. of Cadley Hill, Castle Gresley

Attach a tracing from a map, or a sketch-map, if possible.

Purpose for which made Mineral bore

Level at which shaft bore commenced relative to O.D. 201.25 (613 m) State if shaft bore is up, down, horizontal or inclined; in latter cases give angle of inclination and direction

Made by Foraky

Information from Examination of samples and cores Date of Sinking 1952

Specimens

Additional Notes in Space Overleaf

(For Survey use only) Geological Classification	Nature of Strata	Thickness			Depth	
	Chiselled to				388	5
	Samples at 5 ft. intervals show fine-grained red sands					
	Red marly mudstone		2		388	7
	Grey, micaceous, medium to coarse sandstone with slight pink colour	3	1		391	8
	Grey shaly mudstone with red areas		1		391	9
	Red shaly mudstone		3		392	0
	Light grey siltstone with red marly mudstone bands		4		392	4
	Light grey siltstone, current-bedded with green bands		6		392	10
	Red marly shaly mudstone mingled with grey		9		393	7
	Red marly mudstone		7		394	2
	Light grey siltstone some red colour	1	0		395	2
	Missing between 388' 5" and 398' 10"	3	8		398	10
	Light grey fine-grained sandstone	1	6		400	4
	Red silty and sandy mudstone with grey patches		7		400	11
	Light grey medium grained sandstone, green patches		3		401	2
	Red shaly marly mudstone		6		401	8
	Red banded siltstone and coarse sandstone		1		401	9
	Red marly mudstone surrounding pieces of sandstone including a grey fine-grained sandstone 5" across - ? Fault		7		402	4
	Light grey fine-grained sandstone with green fragments		11		403	3

Continued Overleaf

Geological Survey and Museum, South Kensington, London, S.W.7.	Date received	Correspondence File No.	1" N.S. Map No.	1" O.S. Map No.	Site marked (use symbol) on 1" Map	on 6" Map

(*40549) Wt.10130/4181 8,000 4/50 A.& E.W.Ltd Op.668

DEPTH

Name and Number of Shaft or Bore given by Geological Survey:
Sandpits (1952) B.H.

County Derbyshire
6" Quarter Sheet 64 NW

SK 21 NE / 4

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS			DEPTH	
	Brought forward				403	5
	Light grey coarse sandstone	1	2		404	7
	Light grey coarse sandstone with pebbles of green grit, quartzite and ? limestone and green marl		2		404	7
	Medium to coarse grey sandstone with green marl pellets	5	0		409	7
	Missing between 398' 10" and 410' 4"		9		410	4
	Medium to coarse grey sandstone with green marl pellets	3	0		413	4
	BASE OF NEW RED SANDSTONE					
	Core grinding badly - probably appreciable loss here					
	Fine-grained, wavy-bedded grey sandstone puce staining	1	0		414	4
	Puce, well banded silty mudstone	2	7		416	11
	Yellow stained, wavy bedded, silty mudstone		8		417	7
	Light grey, wavy bedded siltstone		4		417	11
	Missing between 410' 4" and 426' 8"	8	9		426	8
	Light grey, medium grained sandstone	1	4		428	0
	Red, yellow and grey, hard, fine-grained siltstone		8		428	8
	Missing between 426' 8" and 429' 7"		11		429	7
	Yellow to puce stained, grey banded mudstone and silty mudstone	11	10		441	5
	Red-brown ironstone		4		441	9
	Missing between 429' 7" and 443' 5"	1	8		443	5
	Grey laminated mudstone with puce and yellow bands and thin yellow ironstone bands	2	1		445	6
	Brown mudstone with ironstone		2		445	8
	Black shaly mudstone with mussels, some beds brown	1	5		447	1
	Dark grey shaly mudstone		7		447	8
	Black shale		7		448	3
	COAL (about 9" recovered; 1' 2" reported)	1	2		449	5
	Medium grey mudstone, laminated with lighter grey siltstone; plant fragments, turbulent bedding and ironstone nodules in lower part	8	0		457	5
	Ditto - passing into	2	0		459	5
	Grey laminated mudstone with ironstone nodules passing into	5	6		464	11
	Grey laminated mudstone with ironstone and mussels passing into	2	8		467	7
	Black laminated mudstone	2	3		469	10
	Dirty COAL		2		470	0
	Black laminated mudstone	1	4		471	4
	Very dark grey siltstone banded with light grey siltstone; passing into		2		471	6
	Dark and light grey banded silty mudstone with rootlets		5		471	11
	Dark and light grey banded mudstone and silty mudstone with ironstone nodules and bands, delicately					

Wt.10120/4161 6,000 4/50 A.& E.W Ltd. Gp.685

SK 21 NE/ N

Name and Number of Shaft or Bore given by Geological Survey: Sandpits (1952) B.H.

County Derbyshire

6" Quarter Sheet 60 N.W.

141/213

Geological Classification	Description	Thickness		Depth	
	Brought forward			471	11
	bedded, becoming finer downwards; rootlets in places	9	6	481	5
	Dark grey shaly mudstone with ironstone and mussels	1	6	482	11
	Black fissile mudstone with poor mussels, fucoids and plants; brown ironstone bands	1	10	484	9
	COAL (Poor)		4	485	1
	Medium grey seatclay		10	485	11
	Light grey banded fine-grained sandstones and mudstone, turbulent bedding	3	9	489	8
	Medium grey siltstone with plants and ironstone	3	0	492	8
	Well bedded, alternating fine bands of light grey siltstone and darker mudstone	1	5	494	1
	Wavy bedded light grey sandstone with micaceous and carbonaceous partings		8	494	9
	Missing between 483' 8" and 496' 6"	1	9	496	6
	Well bedded fine-grained siltstone wavy bedded and interbedded ironstone	5	10	502	4
	Missing between 496' 6" and 504' 1"	1	9	504	1
	Grey laminated mudstone with ironstone	7	9	511	10
	Dark grey shaly mudstone with mussels		3	512	1
	Black cannelly shale		8	512	9
	Dark grey fine grained sandstone with black carbonaceous streaks and plant remains. Also coal jumbled in broken and badly ground core	1	0	513	9
	Dark grey silty mudstone, fine-grained downwards	1	6	515	3
	Light grey laminated mudstone with thin lighter grey siltstone bands, passing into	2	0	517	3
	Light and dark grey well bedded wavy laminated sandstone and siltstone	3	3	520	6
	Grey laminated mudstone with silty bands	5	3	525	9
	Well laminated grey mudstones, occasional lighter siltstone bands, ironstone nodules, many ironstone bands in bottom 8", occasional mussels	8	8	534	5
	Dark grey laminated mudstones with ironstones	2	1	536	6
	Grey seatclay with ironstone nodules	2	0	538	6
	Missing between 504' 1" and 540' 7"	2	1	540	7
	Grey seatclay, ironstone nodules	2	0	542	7
	Grey laminated mudstone with ironstone and plants.	3	8	546	3
	Well banded dark and light grey siltstone and mudstone, small faults probably due to slumping		8	546	11
	Missing between 540' 7" and 547' 6"		7	547	6

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Name and Number of Shaft or Bore given by Geological Survey: Sandpits (1952) B.H.

County Derbyshire SK21NE 14

Quarter Sheet 60 NW.

213

Geological Classification	Description	Thickness		Depth	
	Brought forward			547	6
	Light grey sandstone turbulent bedding, delicately bedded with mudstone bands	9	11	557	5
	Faulted junction - breccia		6	557	11
	Well banded laminated grey mudstone with lighter siltstone bands and ironstone bands	4	0	561	11
	Light grey sandstone		10	562	9
	Missing between 547' 6" and 563' 1"		4	563	1
	Light grey sandstone, well bedded with darker mudstone bands, turbulent bedding, wavy bedding, micaceous and carbonaceous partings	7	7	570	8
	Light grey fine grained sandstone wavy bedding in lower part with dark micaceous and carbonaceous partings	2	6	573	2
	Well laminated dark grey mudstone with ironstone	3	4	576	6
	Missing between 563' 1" and 580' 0"	3	6	580	0
	COAL (about 1' 10" recovered) Borer's record	2	4	582	4
	Very dark grey seatclay with yellow ironstone nodules	2	8	585	0
	Medium grey seatclay with ironstone nodules passing into	6	0	591	0
	Well laminated grey mudstone with ironstone nodules and listric surfaces	2	0	593	0
	Light grey sandy seatearth with dark bands		6	593	6
	Fault Breccia - bottom running across cores for 9" (cores diameter 7")		4	593	10
	Well laminated light grey siltstone with carbonaceous and micaceous layers, ironstone nodules, shale parting (4") 2' 2" down, turbulent bedding	4	8	598	6
	Missing between 580' and 604' 2"	5	8	604	2
	Well laminated dark and light grey siltstone and mudstone, passing into	5	0	609	2
	Well laminated grey mudstone	3	6	612	8
	Missing between 604' 2" and 616' 3"	3	7	616	3
	Grey sandstone		5	616	8
	Grey seatclay silty downwards, much broken with listric surfaces and Fault breccia	2	9	619	5
	Dark grey siltstone, banded, with carbonaceous films		10	620	3
	Grey seatclay		5	620	8
	Very dark grey shaly mudstone, listric surfaces		4	621	0
	Grey seatclay - marked listric surfaces dip 45°	1	8	622	8
	Light grey sandstone disturbed top	2	2	624	10
	Missing between 616' 3" and 637'	12	2	637	0
	Grey sandstone and mudstone breccia running full length of core - probably fault	2	0	639	0

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SK21 NE/14

…and Number of Shaft or Bore given by Geological Survey: **Sandpits (1952) B.H.**

County: Derbyshire

Quarter Sheet: 63 NW

141/213

Geological Classification	Description	Thickness (ft)	Thickness (in)	Depth (ft)	Depth (in)
	Brought forward			639	0
	Grey mudstone, some plants	9	2	648	2
	Very dark grey seatclay		2	648	4
	Grey mudstone with ironstone	2	0	650	4
	Missing between 637' and 652' 7"	2	3	652	7
	Grey silty banded mudstone with ironstone	7	0	659	7
	Fine-grained grey sandstone with darker laminations	6	8	666	3
	Fine-grained grey sandstone, lustre mottling	8	0	674	3
	Well laminated dark and light grey silty mudstone passing into	2	0	676	3
	Grey mudstone	4	3	680	6
	Missing between 652' 7" and 681' 10"	1	4	681	10
	Grey mudstone with ironstone bands	7	2	689	0
	Grey mudstone with ironstone bands; bottom 1' 6" black with mussels (1 ft. core missing) between 689' and 698'	9	0	698	0
	Black shales with mussels, some listric surfaces	2	0	700	0
	Dull black shale with ironstone, mussels, dip 5°	8	0	708	0
	Crushed dark grey to black shale; many listric surfaces		6	708	6
	Dark grey shale, listric surfaces, ironstone bands and mussels. Core reduced from 7" to 6" at 731' 1"; 1 ft. core missing between 698' 4" and 714' 11"	22	6	731	0
Molyneux Marine Band	Dark grey shale with occasional mussels to 736'; fucoids thence to 737' 9" and one *Lingula* at 736' 6" (approx.); ironstone bands throughout; pyritous and fucoids in bottom 8"; *Lingula* broken and worn in bottom 4"	11	2	742	2
Stinking or Ryder Coal	COAL with about 1" dirt 8½" down	2	6	744	8
	Black shaly seatclay with coal streaks about 10" recovered)	2	5	747	1
OVER MAIN	COAL (about 6' 2" recovered)	6	9	753	10
	Dark grey seatclay, listric surfaces 1.7 } COAL 2 } recovered Dark shaly seatclay 5 } (recorded)	1	10	755	8
NETHER MAIN	COAL (full recovery) dip 10°	7	9	763	5
	Brownish grey seatclay	2	7	766	0
	COAL, ankerite and pyrites		8	766	8
	Grey seatclay, many listric surfaces	4	7	771	3
	Grey shaly mudstone with roots and plant debris	1	9	773	0
	Light and dark grey well-banded mudstone and silty mudstone; ironstone and plant remains	4	5	777	5
	Grey banded mudstone and sandstone, turbulent bedding	5	7	783	0

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Number of Shaft or Bore given by Geological Survey: Sandpits (1952) B.H.

County Derbyshire SK 21

6" Quarter Sheet 60 N.W.

141

213

Geological Classification	Description	Thickness ft.	Thickness in.	Depth ft.	Depth in.
	Brought forward			783	0
	Light grey sandstone passing into	3	9	786	9
	Grey banded light grey sandstone and grey mudstone, turbulent bedding	2	3	788	3
	Grey mudstone with light grey sandstone wisps and bands	2	6	790	9
	Light grey sandstone with grey mudstone bands and ironstone bands	3	4	794	1
	Grey mudstone with ironstone bands	3	10	797	11
	COAL		4	798	3
	Dark grey seatclay, listric surfaces, bottom foot shaly	2	3	800	6
	Grey seatclay	2	0	802	6
	Grey sandy seatearth		10	803	4
	Banded sandy shale with ironstone nodules	1	6	804	10
	Grey seatclay with ironstone nodules passing into	4	0	808	10
	Grey mudstone with ironstone nodules	2	2	811	0
	Grey seatclay	1	0	812	0
	Light grey fine-grained sandstone		10	812	10
	Missing between 798' 6" and 816' 10"	4	0	816	10
	Grey, fine-grained sandstone with bands of mudstone and ironstone; finer banded below	11	2	828	0
	Grey banded mudstone	6	0	834	0
	Light grey sandstone with dark carbonaceous and micaceous wisps	7	4	841	4
	Dark grey mudstone with ironstone bands	2	8	844	0
	Dark grey mudstone with ironstone bands	15	6	859	6
	Dark grey to black shale with mussels preserved in ironstone	4	3	863	9
	Grey mudstone with ironstone	4	5	868	2
	~~Dark grey to black shale with mussels~~	~~4~~	~~8~~	~~872~~	~~8~~
	~~2 ft. core still down hole~~				
	COAL ankerite veins, dip 20°		6	868	8
	Hard black shaly mudstone, listric surfaces, plants, traces of mussels preserved in brown ironstone, coal laminae, brown macrospores, pyritous on joints	1	10	870	6
	Black clunchy mudstone, listric surfaces, rare clay-ironstone nodules, coal laminae	2	0	872	6
	Missing	2	2	874	8
	Black clunchy mudstone, pyritous films		4	875	0
	Grey seatclay with ironstone nodules	1	8	876	8
	Grey banded mudstone with ironstone nodules and 2" ironstone band, passing into	2	0	878	8
	Dark and light grey well banded silt-stone and micaceous mudstone, turbulent bedding	8	5	887	1
	Light grey fine grained banded current and wavy bedded sandstone, micaceous laminae, some bands richly iron-cemented	3	8	890	9

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SK 21 NE 141

and Number of Shaft or Bore given by Geological Survey: Sandpit (1952) B.H.

County Derbyshire

Quarter Sheet 60 NW

141/213

Geological Classification	Description	Thickness			Depth	
	Brought forward				894	7
	~~Grey mudstone with ironstone b nds~~ Missing		1	3	894	7
	~~Grey mudstone with ironstone bands and nodules with ankerite veining~~		8	9	903	4
	Missing		3	5	906	9
	Bottom of Hole					

Cfy & H.B.S. 6.XII.52

Accepted

CADLEY HILL COLLIERY No 4 BOREHOLE 141/97 Derby. 60 N.W.-W.

SK21NE/11

70M AOD

Information from Messrs Stalls Collieries Ltd. Swadlincote.

SK2723 1897

		THICKNESS Feet	THICKNESS Inches	DEPTH Feet	DEPTH Inches
	Soil & loamy clay	5	0	5	0
Bunter Pebble Beds	Pebble Beds	56	6	61	6
	Grey sandstone	19	0	80	6
113' 6" +	Gravel	13	6	94	0 ← Pebble Beds ?
	Grey sandstone	19	6	113	6
	Band	2	0	115	6
	Sandstone	12	0	127	6
Keuper 74' 0"	Variegated marl with sand beds	16	6	144	0
	Red marl	12	6	156	6
	Blue shale with bands	12	0	168	6
	Variegated marls	10	0	178	6
	Marls with soft beds	9	0	187	6

Coal measures were proved below this to a depth of 434' 1" but the boring is evidently unreliable for thicknesses of coals proved were later shown in workings to be very unreliable.

[? base of New Red is at 94 ft. This agrees with my reading (see note) of 141/94, giving base of New Red at 91.3. In 141/95 the New Red appears to be 365+ thick & in 141/96 it is 375.2. Is there a pre-Triassic fault between the 2 pairs of borings? The second pair (95–96) have also a lower O.D. than the 1st pair which the difference in thickness of New Red (Trias) in the 2 pairs more striking. The note on Derby. 60 S.W. marginal well is doubtful but it tends to make the difference between 2 pairs of borings more marked. There seems to be no reason for separating Keuper, Bunter, & Permian in this part of the map, the divisions are mere fake. R. L. S. May 28, 40]

CADLEY HILL COLLIERY No 4 BOREHOLE 141/97 Derby. 60 N.W. - W

Information from Messrs Halls Collieries Ltd. Swadlincote. SK21/32

SK2723 1897

	Thickness Feet	Thickness Inches	Depth Feet	Depth Inches
Soil & loamy clay	5	0	5	0
Pebble Beds	56	6	61	6
Grey sandstone	19	0	80	6
Gravel	13	6	94	0
Grey sandstone	19	6	113	6
Bind	2	0	115	6
Sandstone	12	0	127	6
Variegated marl with hard beds	16	6	144	0
Red marl	12	6	156	6
Blue shale with bands	12	0	168	6
Variegated marls	10	0	178	6
Marls with soft beds	9	0	187	6

Margin notes: Bunter Pebble Beds 113' 6" +; Keuper 74' 0"; Pebble Beds 94 ft (at Gravel)

Coal measures were proved below this to a depth of 434' 1" but the boring is evidently unreliable for thicknesses of coals proved were later shown in workings to be very unreliable.

[? base of New Red is at 94 ft. This agrees with my reading (see note) of 141/94, giving base of New Red at 91.3. In 141/95 the New Red appears to be 365+ thick & in 141/96 it is 375.2. Is there a pre-Triassic fault between the 2 pairs of borings? The second pair (95–96) have also a lower O.D. than the 1st pair which the difference in thickness of New Red (Trias) in the 2 pairs more striking. The note on Derby 63 S.W. marginal well is doubtful but it tends to make the difference between 2 pairs of borings more marked. There seems to be no reason for separating Keuper, Bunter, & Permian in this part of the map, the divisions are mere fake. R.C.S. May 29, 40]

141/97.

SK 21/32

SK 21 NE
SK 2723 1897.
227 ft AOD.

Filled.
No RWL data.

Cooley Hill No 4 B.H.

Information from NCB Coleorton Hall, Leicestershire.

26.79 VC.

APPENDIX 5 - Groundsure Report

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

Wilshee's, Burton Road, Swadlincote, DE11 9EL,

Order Details

Date: 07/08/2020

Your ref: EMS_626310_833860

Our Ref: EMS-626310_833860

Client: emapsite

Site Details

Location: 426925 318989

Area: 1.99 ha

Authority: South Derbyshire District Council

Summary of findings p. 2

OS MasterMap site plan p.13

Aerial image p. 8

groundsure.com/insightuserguide

Contact us with any questions at:
info@groundsure.com
08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	Historical industrial land uses	2	0	17	22	-
16	1.2	Historical tanks	0	0	3	2	-
17	1.3	Historical energy features	0	0	0	5	-
17	1.4	Historical petrol stations	0	0	0	0	-
17	1.5	Historical garages	0	0	0	3	-
18	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
19	2.1	Historical industrial land uses	2	0	21	24	-
21	2.2	Historical tanks	0	0	3	2	-
22	2.3	Historical energy features	0	0	0	7	-
22	2.4	Historical petrol stations	0	0	0	0	-
23	2.5	Historical garages	0	0	0	3	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
24	3.1	Active or recent landfill	0	0	0	0	-
24	3.2	Historical landfill (BGS records)	0	0	0	0	-
25	3.3	Historical landfill (LA/mapping records)	0	0	0	3	-
25	3.4	Historical landfill (EA/NRW records)	0	0	0	2	-
26	3.5	Historical waste sites	0	0	1	0	-
26	3.6	Licensed waste sites	0	0	2	1	-
27	3.7	Waste exemptions	0	0	15	47	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
33	4.1	Recent industrial land uses	0	0	1	-	-
34	4.2	Current or recent petrol stations	0	0	0	0	-
34	4.3	Electricity cables	0	0	0	0	-
34	4.4	Gas pipelines	0	0	0	0	-
34	4.5	Sites determined as Contaminated Land	0	0	0	0	-

34	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
35	4.7	Regulated explosive sites	0	0	0	0	-
35	4.8	Hazardous substance storage/usage	0	0	0	0	-
35	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
35	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
35	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
36	4.12	Radioactive Substance Authorisations	0	0	0	0	-
36	**4.13**	**Licensed Discharges to controlled waters**	0	0	2	25	-
40	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
40	4.15	Pollutant release to public sewer	0	0	0	0	-
41	**4.16**	**List 1 Dangerous Substances**	0	0	6	0	-
41	**4.17**	**List 2 Dangerous Substances**	1	0	3	1	-
42	**4.18**	**Pollution Incidents (EA/NRW)**	0	0	0	1	-
42	4.19	Pollution inventory substances	0	0	0	0	-
42	4.20	Pollution inventory waste transfers	0	0	0	0	-
43	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
44	**5.1**	**Superficial aquifer**	Identified (within 500m)				
46	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
48	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
50	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
50	5.5	Groundwater vulnerability- local information	None (within 0m)				
51	**5.6**	**Groundwater abstractions**	0	0	0	0	3
52	**5.7**	**Surface water abstractions**	0	0	1	0	5
54	5.8	Potable abstractions	0	0	0	0	0
54	5.9	Source Protection Zones	0	0	0	0	-
54	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
55	**6.1**	**Water Network (OS MasterMap)**	2	1	3	-	-

56	6.2	Surface water features	1	3	4	-	-
56	6.3	WFD Surface water body catchments	1	-	-	-	-
57	6.4	WFD Surface water bodies	1	0	0	-	-
57	6.5	WFD Groundwater bodies	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
58	7.1	Risk of Flooding from Rivers and Sea (RoFRaS)	High (within 50m)				
59	7.2	Historical Flood Events	0	0	0	-	-
59	7.3	Flood Defences	0	0	0	-	-
59	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
59	7.5	Flood Storage Areas	0	0	0	-	-
60	7.6	Flood Zone 2	Identified (within 50m)				
61	7.7	Flood Zone 3	Identified (within 50m)				
Page	Section	Surface water flooding					
62	8.1	Surface water flooding	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding					
64	9.1	Groundwater flooding	High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
65	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
66	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
66	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
66	10.4	Special Protection Areas (SPA)	0	0	0	0	0
66	10.5	National Nature Reserves (NNR)	0	0	0	0	0
67	10.6	Local Nature Reserves (LNR)	0	0	0	0	1
67	10.7	Designated Ancient Woodland	0	0	0	0	1
67	10.8	Biosphere Reserves	0	0	0	0	0
68	10.9	Forest Parks	0	0	0	0	0
68	10.10	Marine Conservation Zones	0	0	0	0	0
68	10.11	Green Belt	0	0	1	0	1
68	10.12	Proposed Ramsar sites	0	0	0	0	0

69	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
69	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
69	10.15	Nitrate Sensitive Areas	0	0	0	0	0
69	**10.16**	**Nitrate Vulnerable Zones**	2	0	0	0	0
71	**10.17**	**SSSI Impact Risk Zones**	1	-	-	-	-
72	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
73	11.1	World Heritage Sites	0	0	0	-	-
73	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
73	11.3	National Parks	0	0	0	-	-
73	11.4	Listed Buildings	0	0	0	-	-
74	11.5	Conservation Areas	0	0	0	-	-
74	11.6	Scheduled Ancient Monuments	0	0	0	-	-
74	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
75	**12.1**	**Agricultural Land Classification**	Grade 3 (within 250m)				
76	12.2	Open Access Land	0	0	0	-	-
76	12.3	Tree Felling Licences	0	0	0	-	-
76	12.4	Environmental Stewardship Schemes	0	0	0	-	-
77	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
78	**13.1**	**Priority Habitat Inventory**	1	2	2	-	-
79	13.2	Habitat Networks	0	0	0	-	-
79	13.3	Open Mosaic Habitat	0	0	0	-	-
79	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
80	**14.1**	**10k Availability**	Identified (within 500m)				
81	**14.2**	**Artificial and made ground (10k)**	1	0	4	9	-
83	**14.3**	**Superficial geology (10k)**	2	0	3	0	-

84	14.4	Landslip (10k)	0	0	0	0	-
85	14.5	Bedrock geology (10k)	4	1	5	3	-
86	14.6	Bedrock faults and other linear features (10k)	2	1	0	6	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
88	15.1	50k Availability	Identified (within 500m)				
89	15.2	Artificial and made ground (50k)	0	0	1	1	-
90	15.3	Artificial ground permeability (50k)	0	0	-	-	-
91	15.4	Superficial geology (50k)	2	0	3	0	-
92	15.5	Superficial permeability (50k)	Identified (within 50m)				
92	15.6	Landslip (50k)	0	0	0	0	-
92	15.7	Landslip permeability (50k)	None (within 50m)				
93	15.8	Bedrock geology (50k)	4	1	5	2	-
94	15.9	Bedrock permeability (50k)	Identified (within 50m)				
94	15.10	Bedrock faults and other linear features (50k)	2	1	0	3	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
96	16.1	BGS Boreholes	1	4	14	-	-
Page	Section	Natural ground subsidence					
98	17.1	Shrink swell clays	Very low (within 50m)				
99	17.2	Running sands	Low (within 50m)				
101	17.3	Compressible deposits	Moderate (within 50m)				
103	17.4	Collapsible deposits	Very low (within 50m)				
104	17.5	Landslides	Low (within 50m)				
106	17.6	Ground dissolution of soluble rocks	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
108	18.1	Natural cavities	0	0	0	0	-
109	18.2	BritPits	0	0	0	1	-
109	18.3	Surface ground workings	0	1	21	-	-
110	18.4	Underground workings	0	0	0	2	17
111	18.5	Historical Mineral Planning Areas	0	0	0	1	-

111	**18.6**	**Non-coal mining**	0	0	1	0	1
112	18.7	Mining cavities	0	0	0	0	0
112	**18.8**	**JPB mining areas**	Identified (within 0m)				
112	**18.9**	**Coal mining**	Identified (within 0m)				
113	18.10	Brine areas	None (within 0m)				
113	18.11	Gypsum areas	None (within 0m)				
113	18.12	Tin mining	None (within 0m)				
113	18.13	Clay mining	None (within 0m)				

Page	Section	Radon	
114	**19.1**	**Radon**	Less than 1% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
115	**20.1**	**BGS Estimated Background Soil Chemistry**	16	4	-	-	-
116	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
116	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
117	21.1	Underground railways (London)	0	0	0	-	-
117	21.2	Underground railways (Non-London)	0	0	0	-	-
118	21.3	Railway tunnels	0	0	0	-	-
118	**21.4**	**Historical railway and tunnel features**	2	1	3	-	-
118	21.5	Royal Mail tunnels	0	0	0	-	-
119	**21.6**	**Historical railways**	0	1	2	-	-
119	**21.7**	**Railways**	0	0	7	-	-
120	21.8	Crossrail 1	0	0	0	0	-
120	21.9	Crossrail 2	0	0	0	0	-
120	21.10	HS2	0	0	0	0	-

Recent aerial photograph

Capture Date: 20/04/2019

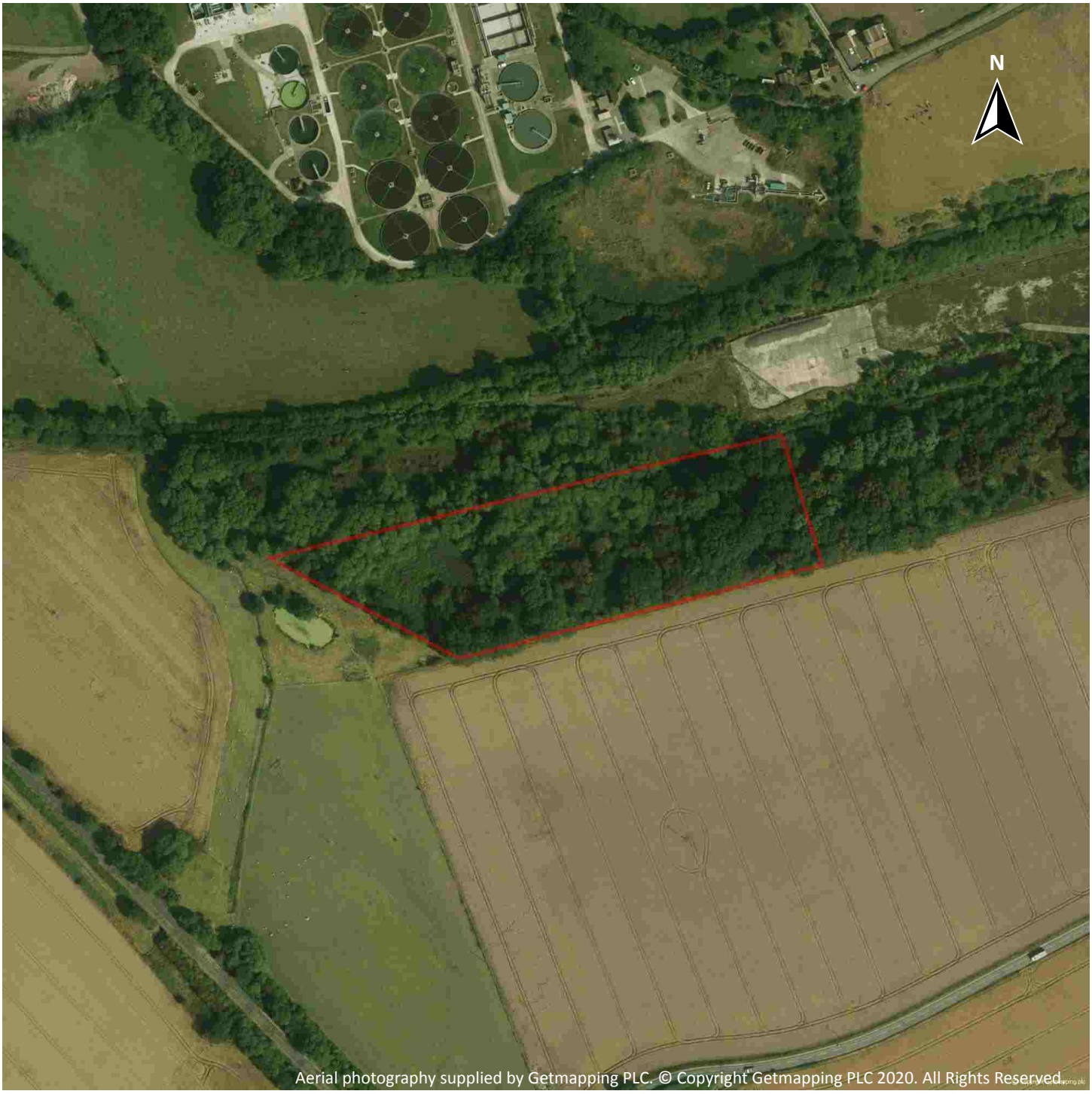
Site Area: 1.99ha

Recent site history - 2018 aerial photograph

Capture Date: 01/07/2018

Site Area: 1.99ha

Recent site history - 2015 aerial photograph



Capture Date: 12/08/2015

Site Area: 1.99ha

Recent site history - 2010 aerial photograph

Capture Date: 24/04/2010

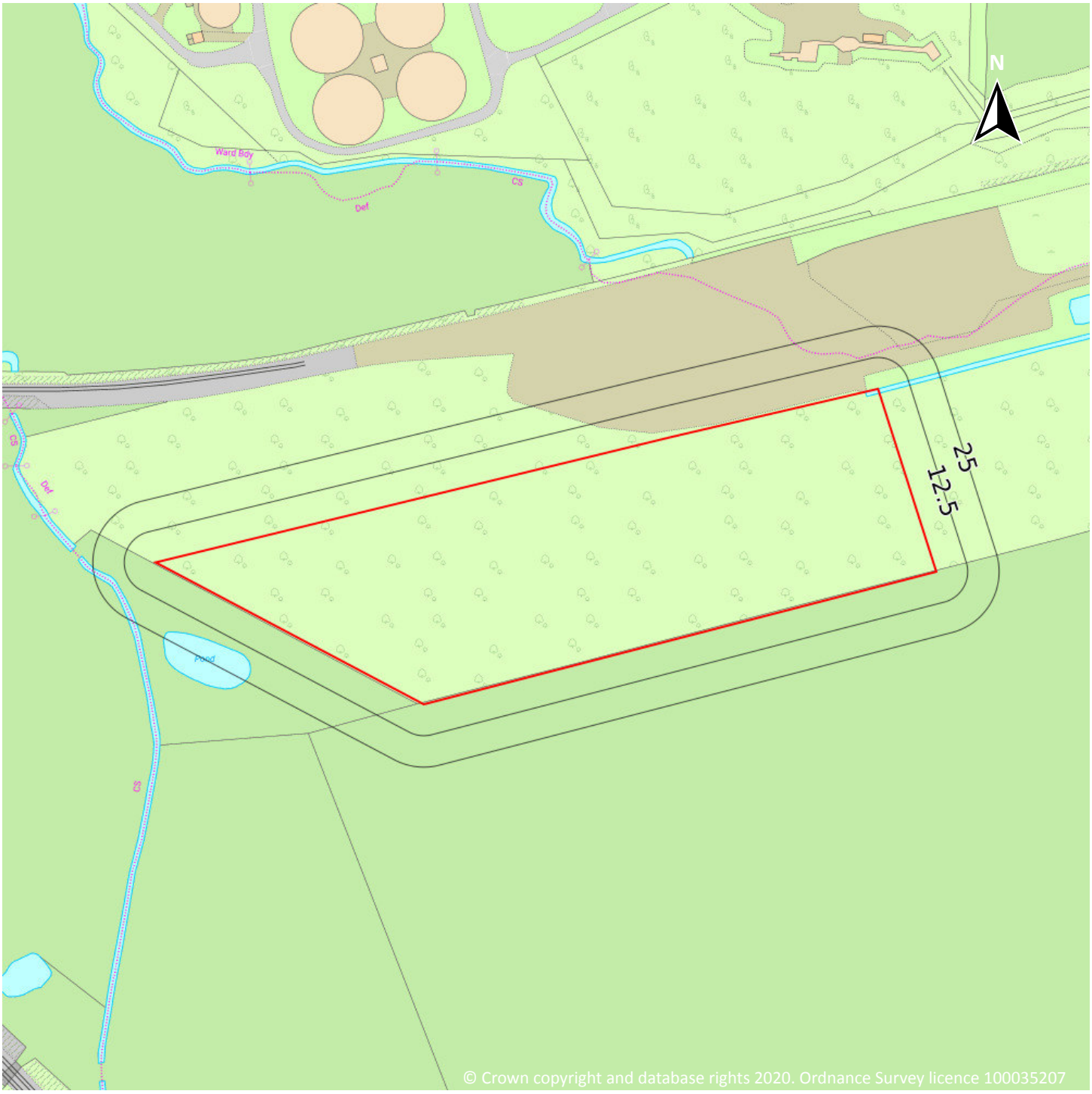
Site Area: 1.99ha

Recent site history - 1999 aerial photograph

Capture Date: 17/11/1999

Site Area: 1.99ha

OS MasterMap site plan



Site Area: 1.99ha

1 Past land use

Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	41

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

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Railway Sidings**	**1974**	**1730797**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Railway Sidings**	**1989**	**1735720**
A	66m N	Cuttings	1882 - 1900	1669705
A	66m N	Cuttings	1938	1745139
B	73m N	Unspecified Works	1967	1598172
B	73m N	Sewage Works	1989	1670951
B	73m N	Sewage Works	1974	1729890
A	86m NE	Cuttings	1925	1698331
A	86m NE	Cuttings	1950	1632391
C	138m N	Sewage Farm	1900	1706629
C	171m N	Sewage Farm	1925	1688459
B	174m N	Sewage Works	1950	1685920
B	199m N	Unspecified Tanks	1989	1642983
B	199m N	Unspecified Tanks	1967 - 1974	1716357
B	209m N	Unspecified Tanks	1950	1638062
D	233m N	Unspecified Pit	1989	1667340
D	233m N	Unspecified Pit	1967 - 1974	1741423
D	238m N	Unspecified Tanks	1974	1643987
D	238m N	Unspecified Tanks	1989	1680453
E	264m NW	Refuse Heap	1974	1623986
E	264m NW	Refuse Heap	1989	1642445
F	290m NE	Sand Pit	1900	1644457
F	297m NE	Sand Pit	1925	1695551
F	299m NE	Sand Pit	1938	1745362
F	299m NE	Sand Pit	1950	1746837
G	308m NW	Sewage Farm	1938	1635516
1	336m NE	Cuttings	1882	1561428
H	363m NE	Garage	1974	1615234
H	363m NE	Garage	1989	1706221

ID	Location	Land use	Dates present	Group ID
H	365m NE	Garage	1967	1725703
G	396m NW	Unspecified Tanks	1938	1580230
I	437m NE	Refuse Heap	1974	1621916
I	437m NE	Refuse Heap	1989	1663029
3	442m NE	Cuttings	1882	1561427
J	459m E	Disused Colliery	1989	1589353
J	459m E	Colliery	1974	1637966
K	473m E	Unspecified Ground Workings	1950	1564830
K	473m E	Unspecified Pit	1882 - 1900	1719251
K	473m E	Unspecified Pit	1938	1748187
K	477m E	Unspecified Pit	1925	1654961
6	483m E	Refuse Heap	1967	1596258

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**5**

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

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
B	187m N	Tanks	1992	259813
D	239m N	Tanks	1992	259818
D	240m N	Unspecified Tank	1969	251338
D	260m N	Unspecified Tank	1969	251337
B	265m N	Unspecified Tank	1959	251359

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	5

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

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
C	361m N	Electricity Substation	1982	147964
G	366m NW	Electricity Substation	1982	147967
2	434m NE	Electricity Substation	1969 - 1992	161135
4	445m N	Electricity Substation	1982	147965
5	477m N	Electricity Substation	1982	147962

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	3

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

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
H	363m NE	Garage	1990	49344
H	364m NE	Garage	1969	48455
H	366m NE	Garage	1959	49230

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m	**0**

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

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

2 Past land use - un-grouped

Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

2.1 Historical industrial land uses

Records within 500m	47

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

Features are displayed on the Past land use - un-grouped map on **page 19**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Railway Sidings**	**1989**	**1735720**
A	**On site**	**Railway Sidings**	**1974**	**1730797**
A	66m N	Cuttings	1938	1745139

ID	Location	Land Use	Date	Group ID
A	66m N	Cuttings	1900	1669705
A	66m N	Cuttings	1882	1669705
B	73m N	Sewage Works	1989	1670951
B	73m N	Sewage Works	1974	1729890
B	73m N	Unspecified Works	1967	1598172
A	86m NE	Cuttings	1925	1698331
A	86m NE	Cuttings	1950	1632391
C	138m N	Sewage Farm	1900	1706629
C	171m N	Sewage Farm	1925	1688459
C	171m N	Sewage Farm	1925	1688459
B	174m N	Sewage Works	1950	1685920
B	199m N	Unspecified Tanks	1989	1642983
B	199m N	Unspecified Tanks	1974	1716357
B	199m N	Unspecified Tanks	1967	1716357
B	209m N	Unspecified Tanks	1950	1638062
D	233m N	Unspecified Pit	1989	1667340
D	233m N	Unspecified Pit	1974	1741423
D	233m N	Unspecified Pit	1967	1741423
D	238m N	Unspecified Tanks	1989	1680453
D	238m N	Unspecified Tanks	1974	1643987
E	264m NW	Refuse Heap	1989	1642445
E	264m NW	Refuse Heap	1974	1623986
F	290m NE	Sand Pit	1900	1644457
F	297m NE	Sand Pit	1925	1695551
F	299m NE	Sand Pit	1938	1745362
F	299m NE	Sand Pit	1950	1746837
G	308m NW	Sewage Farm	1938	1635516
1	336m NE	Cuttings	1882	1561428

ID	Location	Land Use	Date	Group ID
H	363m NE	Garage	1989	1706221
H	363m NE	Garage	1974	1615234
H	365m NE	Garage	1967	1725703
G	396m NW	Unspecified Tanks	1938	1580230
J	437m NE	Refuse Heap	1989	1663029
J	437m NE	Refuse Heap	1974	1621916
2	442m NE	Cuttings	1882	1561427
K	459m E	Disused Colliery	1989	1589353
K	459m E	Colliery	1974	1637966
L	473m E	Unspecified Ground Workings	1950	1564830
L	473m E	Unspecified Pit	1938	1748187
L	473m E	Unspecified Pit	1900	1719251
L	473m E	Unspecified Pit	1882	1719251
L	477m E	Unspecified Pit	1925	1654961
L	477m E	Unspecified Pit	1925	1654961
5	483m E	Refuse Heap	1967	1596258

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**5**

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

Features are displayed on the Past land use - un-grouped map on **page 19**

ID	Location	Land Use	Date	Group ID
B	187m N	Tanks	1992	259813
D	239m N	Tanks	1992	259818
D	240m N	Unspecified Tank	1969	251338
D	260m N	Unspecified Tank	1969	251337

ID	Location	Land Use	Date	Group ID
B	265m N	Unspecified Tank	1959	251359

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**7**

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

Features are displayed on the Past land use - un-grouped map on **page 19**

ID	Location	Land Use	Date	Group ID
C	361m N	Electricity Substation	1982	147964
G	366m NW	Electricity Substation	1982	147967
I	434m NE	Electricity Substation	1992	161135
I	434m NE	Electricity Substation	1990	161135
I	436m NE	Electricity Substation	1969	161135
3	445m N	Electricity Substation	1982	147965
4	477m N	Electricity Substation	1982	147962

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	**0**

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	3

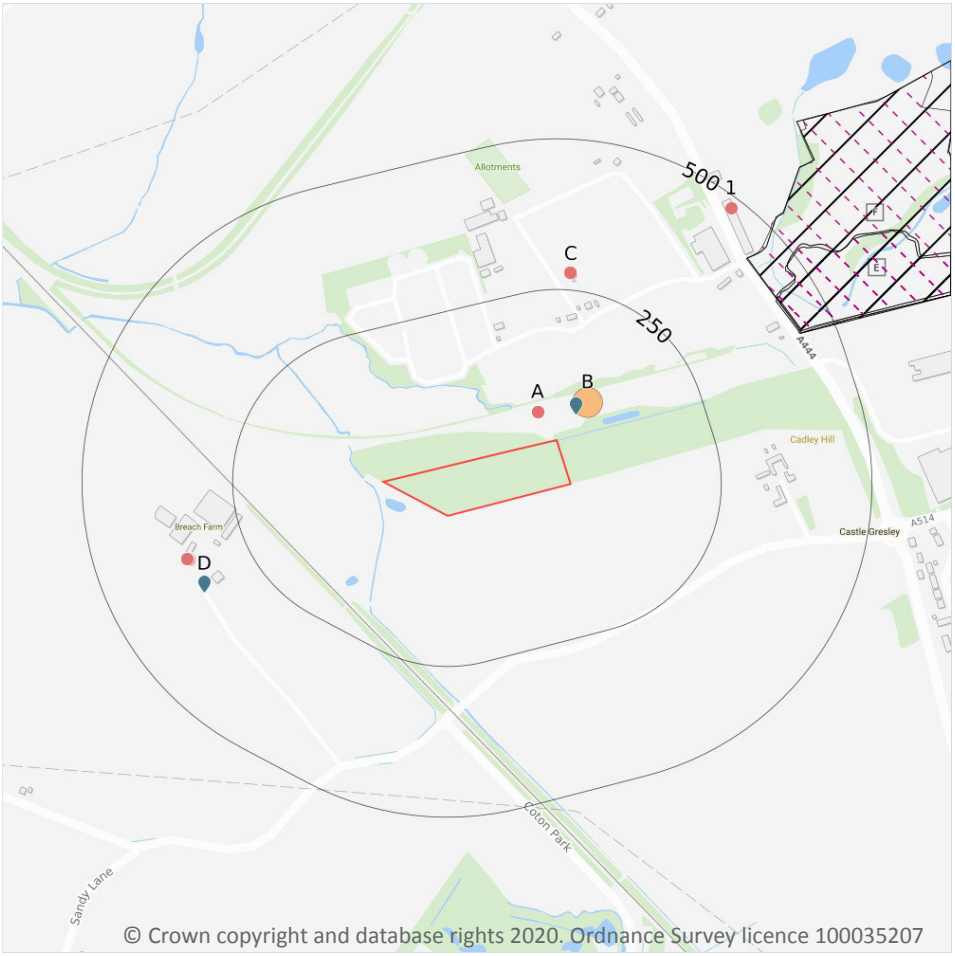
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 19**

ID	Location	Land Use	Date	Group ID
H	363m NE	Garage	1990	49344
H	364m NE	Garage	1969	48455
H	366m NE	Garage	1959	49230

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Historical landfill (EA/NRW)

Historical landfill (LA/OS)

Historical waste sites

Licensed waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	3

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

Features are displayed on the Waste and landfill map on **page 24**

ID	Location	Site address	Source	Data type
E	431m NE	Refuse Tip	1990 mapping	Polygon
E	431m NE	Refuse Tip	1990 mapping	Polygon
F	432m NE	Refuse Tip	1969 mapping	Polygon

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	2

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

Features are displayed on the Waste and landfill map on **page 24**

ID	Location	Details		
F	433m NE	Site Address: U K Coal Mining Ltd Nadins Opencast Coal Site, William Nadin Way, Swadlingcote, Derbyshire Licence Holder Address: Blyth Road, Doncaster, Harworth, South Yorkshire	Waste Licence: Yes Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 07/09/1988 Licence Surrender: -	Operator: U K Coal Mining Ltd Nadins Opencast Coal Site Licence Holder: U K Coal Mining Ltd Nadins Opencast Coal Site First Recorded - Last Recorded: -
E	435m NE	Site Address: Stanton Refuse Tip, Woolland Road, Stanton, Staffordshire Licence Holder Address: -	Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded - Last Recorded: -

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

3.5 Historical waste sites

Records within 500m	1

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

Features are displayed on the Waste and landfill map on **page 24**

ID	Location	Address	Further Details	Date
B	56m NE	Site Address: Willshee's Skip Hire Ltd, 22 Wetmore Road, Burton-On-Trent, Staffordshire, DE14 1DU	Type of Site: Waste Transfer Station Planning application reference: CW9/1018/63 Description: Scheme comprises proposed extension to the site and construction of a waste handling building for the storage, treatment and processing of refuse derived fuel (rdf). Data source: Historic Planning Application Data Type: Point	26/10/2018

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

3.6 Licensed waste sites

Records within 500m	3

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

Features are displayed on the Waste and landfill map on **page 24**

ID	Location	Details		
B	65m NE	Site Name: Depot 3 Site Address: Depot 3, Burton Road, Cadley Hill, Swadlincote, Derbyshire, DE11 9EL Correspondence Address: -	Type of Site: Physical Treatment Facility Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WIL001 EPR reference: EA/EPR/FB3707GV/A001 Operator: Willshee's Skip Hire Limited Waste Management licence No: 404476 Annual Tonnage: 74999	Issue Date: 22/03/2018 Effective Date: - Modified:: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
B	65m NE	Site Name: Depot 3 Site Address: Depot 3, Burton Road, Cadley Hill, Swadlincote, Derbyshire, DE11 9EL Correspondence Address: -	Type of Site: Physical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WIL001 EPR reference: EA/EPR/FB3707GV/V002 Operator: Willshees Waste & Recycling Limited Waste Management licence No: 404476 Annual Tonnage: 189999	Issue Date: 22/03/2018 Effective Date: - Modified:: 06/03/2020 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
D	342m SW	Site Name: R Hodson Walker Ltd Site Address: Breach Farm, Cadley Lane, Caldwell, Swadlincote, Derbyshire, DE12 6RJ Correspondence Address: -	Type of Site: Incinerator Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HOD001 EPR reference: EA/EPR/LP3092FH/V002 Operator: R Hodson Walker Ltd Waste Management licence No: 40037 Annual Tonnage: 100	Issue Date: 25/10/2000 Effective Date: - Modified:: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired

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

3.7 Waste exemptions

Records within 500m	**62**

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

Features are displayed on the Waste and landfill map on **page 24**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	53m N	-	WEX216379	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	53m N	-	WEX216379	Using waste exemption	Not on a farm	Use of waste in construction
A	53m N	-	WEX110151	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	53m N	-	WEX110151	Treating waste exemption	Not on a farm	Sorting mixed waste

ID	Location	Site	Reference	Category	Sub-Category	Description
A	53m N	-	WEX110151	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
A	53m N	-	WEX110151	Treating waste exemption	Not on a farm	Recovery of scrap metal
A	53m N	-	WEX216379	Storing waste exemption	Not on a farm	Storage of waste in secure containers
A	53m N	-	WEX110151	Storing waste exemption	Not on a farm	Storage of waste in secure containers
A	53m N	-	WEX110151	Treating waste exemption	Not on a farm	Manual treatment of waste
A	53m N	-	WEX110151	Treating waste exemption	Not on a farm	Screening and blending of waste
A	53m N	-	WEX110151	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	53m N	-	WEX110151	Using waste exemption	Not on a farm	Use of waste in construction
A	53m N	-	WEX070499	Storing waste exemption	Not on a farm	Storage of waste in secure containers
A	53m N	-	WEX070499	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	53m N	-	WEX070499	Using waste exemption	Not on a farm	Use of waste in construction
C	277m N	UNIT U, ROBIAN WAY, SWADLINCOTE, DE11 9DH	WEX097807	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX062732	Disposing of waste exemption	On a farm	Burning waste in the open
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX062732	Treating waste exemption	On a farm	Treatment of waste food
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX062732	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

ID	Location	Site	Reference	Category	Sub-Category	Description
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX062732	Using waste exemption	On a farm	Use of waste in construction
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX000750	Disposing of waste exemption	On a farm	Burning waste in the open
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX000750	Treating waste exemption	On a farm	Screening and blending of waste
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX000750	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX000750	Using waste exemption	On a farm	Use of waste in construction
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX000750	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX000750	Using waste exemption	On a farm	Use of mulch
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX000750	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
C	277m N	PARK FARM, WOODLAND ROAD, STANTON, BURTON-ON-TRENT, DE15 9TN	WEX000750	Using waste exemption	On a farm	Incorporation of ash into soil
C	278m N	Park Farm Woodland Road BURTON-ON-TRENT Staffordshire DE15 9TN	EPR/FF0238BF/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Burning waste in the open
C	278m N	Park Farm Woodland Road BURTON-ON-TRENT Staffordshire DE15 9TN	EPR/FF0238BF/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste food

ID	Location	Site	Reference	Category	Sub-Category	Description
C	278m N	Park Farm Woodland Road BURTON-ON-TRENT Staffordshire DE15 9TN	EPR/FF0238BF/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	278m N	Park Farm Woodland Road BURTON-ON-TRENT Staffordshire DE15 9TN	EPR/FF0238BF/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
D	346m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX170990	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
D	346m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX170990	Treating waste exemption	On a farm	Crushing and emptying waste vehicle oil filters
D	346m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX170990	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
D	346m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX170990	Disposing of waste exemption	On a farm	Burning waste in the open
D	346m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX170990	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
D	346m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX170990	Storing waste exemption	On a farm	Storage of waste in secure containers
D	346m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX170990	Using waste exemption	On a farm	Use of waste in construction
D	346m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX170990	Storing waste exemption	On a farm	Storage of waste in a secure place
D	346m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX170990	Using waste exemption	On a farm	Use of waste for a specified purpose
D	348m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX009715	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters

ID	Location	Site	Reference	Category	Sub-Category	Description
D	348m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX009715	Disposing of waste exemption	On a farm	Burning waste in the open
D	348m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX009715	Storing waste exemption	On a farm	Storage of waste in secure containers
D	348m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX009715	Storing waste exemption	On a farm	Storage of waste in a secure place
D	348m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX009715	Treating waste exemption	On a farm	Crushing and emptying waste vehicle oil filters
D	348m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX009715	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
D	348m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX009715	Using waste exemption	On a farm	Use of waste in construction
D	348m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX009715	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
D	348m W	BREACH FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DE12 6RJ	WEX009715	Using waste exemption	On a farm	Use of waste for a specified purpose
D	351m W	Breach Farm Cadley Lane Swadlincote Derbyshire DE12 6RJ	EPR/EH0279MG/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Deposit of waste from dredging of inland waters
D	351m W	Breach Farm Cadley Lane Swadlincote Derbyshire DE12 6RJ	EPR/EH0279MG/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Burning waste in the open
D	351m W	Breach Farm Cadley Lane Swadlincote Derbyshire DE12 6RJ	EPR/EH0279MG/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in secure containers

ID	Location	Site	Reference	Category	Sub-Category	Description
D	351m W	Breach Farm Cadley Lane Swadlincote Derbyshire DE12 6RJ	EPR/EH0279MG/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in a secure place
D	351m W	Breach Farm Cadley Lane Swadlincote Derbyshire DE12 6RJ	EPR/EH0279MG/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Crushing and emptying waste vehicle oil filters
D	351m W	Breach Farm Cadley Lane Swadlincote Derbyshire DE12 6RJ	EPR/EH0279MG/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Preparatory treatments (baling, sorting, shredding etc)
D	351m W	Breach Farm Cadley Lane Swadlincote Derbyshire DE12 6RJ	EPR/EH0279MG/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
D	351m W	Breach Farm Cadley Lane Swadlincote Derbyshire DE12 6RJ	EPR/EH0279MG/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
D	351m W	Breach Farm Cadley Lane Swadlincote Derbyshire DE12 6RJ	EPR/EH0279MG/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading waste on agricultural land to confer benefit
D	351m W	Breach Farm Cadley Lane Swadlincote Derbyshire DE12 6RJ	EPR/EH0279MG/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of baled end-of-life tyres in construction
D	351m W	Breach Farm Cadley Lane Swadlincote Derbyshire DE12 6RJ	EPR/EH0279MG/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste for a specified purpose
1	481m NE	Cadley Park, Swadlincote, Derbyshire, DE15 9TH	WEX156102	Using waste exemption	Not on a Farm	Use of waste in construction

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

4 Current industrial land use

Site Outline

Search buffers in metres (m)

Recent industrial land uses

Licensed Discharges to controlled waters

List 1 Dangerous Substances

List 2 Dangerous Substances

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	1

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 33**

ID	Location	Company	Address	Activity	Category
2	185m N	Sewage Works	Derbyshire, DE15	Waste Storage, Processing and Disposal	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	27

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

Features are displayed on the Current industrial land use map on **page 33**

ID	Location	Address	Details	
A	233m N	STANTON SEWAGE TREATMENT WORKS, STANTON	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: T/24/21733/R Permit Version: 1 Receiving Water: DARKLANDS BROOK	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 29/07/1992 Effective Date: 01/10/1992 Revocation Date: 30/12/2000
A	233m N	STANTON SEWAGE TREATMENT WORKS, STANTON	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: T/24/21733/R Permit Version: 2 Receiving Water: DARKLANDS BROOK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 19/12/2000 Effective Date: 31/12/2000 Revocation Date: 24/03/2002
A	252m N	STANTON SEWAGE TREATMENT WORKS, STANTON	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: T/24/35626/R Permit Version: 1 Receiving Water: DARKLANDS BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 25/03/2002 Effective Date: 25/03/2002 Revocation Date: 31/12/2009
A	252m N	STANTON SEWAGE TREATMENT WORKS, STANTON	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: T/24/35626/R Permit Version: 2 Receiving Water: DARKLANDS BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 24/09/2009 Effective Date: 01/01/2010 Revocation Date: 30/03/2013

ID	Location	Address	Details	
A	252m N	STANTON WASTEWATER TREATMENT WORKS, NEAR SANDOWN HOUSE, WOODLAND ROAD, STANTON, DERBYSHIRE, DE15 9TN	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: EPRWB3535AJ Permit Version: 1 Receiving Water: RIVER TRENT & DARKLANDS BROOK	Status: NEW ISSUED UNDER EPR 2010 Issue date: 06/02/2013 Effective Date: 31/03/2013 Revocation Date: 03/04/2014
A	252m N	STANTON WASTEWATER TREATMENT WORKS, NEAR SANDOWN HOUSE, WOODLAND ROAD, STANTON, DERBYSHIRE, DE15 9TN	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: EPRWB3535AJ Permit Version: 2 Receiving Water: RIVER TRENT & DARKLANDS BROOK	Status: VARIED UNDER EPR 2010 Issue date: 04/04/2014 Effective Date: 04/04/2014 Revocation Date: 30/05/2016
A	252m N	STANTON WASTEWATER TREATMENT WORKS, NEAR SANDOWN HOUSE, WOODLAND ROAD, STANTON, DERBYSHIRE, DE15 9TN	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: EPRWB3535AJ Permit Version: 3 Receiving Water: RIVER TRENT & DARKLANDS BROOK	Status: VARIED UNDER EPR 2010 Issue date: 31/05/2016 Effective Date: 31/05/2016 Revocation Date: -
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999

ID	Location	Address	Details	
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999

ID	Location	Address	Details	
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: T/24/20832/T Permit Version: 1 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/10/1991 Effective Date: 23/10/1991 Revocation Date: 11/11/1999
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: T/24/20832/T Permit Version: 2 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 11/11/1999 Effective Date: 12/11/1999 Revocation Date: 22/02/2000
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: T/24/20832/T Permit Version: 2 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 11/11/1999 Effective Date: 12/11/1999 Revocation Date: 22/02/2000
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: T/24/20832/T Permit Version: 2 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 11/11/1999 Effective Date: 12/11/1999 Revocation Date: 22/02/2000
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: T/24/20832/T Permit Version: 2 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 11/11/1999 Effective Date: 12/11/1999 Revocation Date: 22/02/2000
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: T/24/20832/T Permit Version: 2 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 11/11/1999 Effective Date: 12/11/1999 Revocation Date: 22/02/2000

ID	Location	Address	Details	
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: T/24/20832/T Permit Version: 2 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 11/11/1999 Effective Date: 12/11/1999 Revocation Date: 22/02/2000
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: T/24/20832/T Permit Version: 2 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 11/11/1999 Effective Date: 12/11/1999 Revocation Date: 22/02/2000
B	490m NE	NADINS OPEN CAST COAL SITE, CADLEY ROAD, SWADLINCOTE	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: T/24/20832/T Permit Version: 2 Receiving Water: DARKLANDS BROOK & TRIB	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 11/11/1999 Effective Date: 12/11/1999 Revocation Date: 22/02/2000

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	6

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

Features are displayed on the Current industrial land use map on **page 33**

ID	Location	Name	Status	Receiving Water	Authorised Substances
A	233m N	British Coal Bretby Reasearch,ashby Rd,stanhope,bretby,burto	Not Active	-	-
A	233m N	Yule Catto,church Gres.ind.est.church St,church Gresley,burt	Not Active	-	-
A	233m N	Plough Eng.services Ltd,unit3,boardman Ind.est.swadlincote,b	Not Active	-	-
A	233m N	Qualcast Ceramics,hartshorne Rd,woodville,burton On Trent	Not Active	-	-
A	233m N	Suma Containers,rubian Way,swadlincote	Not Active	-	-
A	233m N	Stanton Stw (drakelow Brook Outfall)	Not Active	Drakelow Brook, Darklands Brook, River Trent	Cadmium

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

4.17 List 2 Dangerous Substances

Records within 500m	5

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

Features are displayed on the Current industrial land use map on **page 33**

ID	Location	Name	Status	Receiving Water	Authorised Substances
1	**On site**	**B.c. Nadins Occs Outlet 3**	**Not Active**	**Darklands BrookRiver Trent**	**Iron, pH**
A	233m N	Plough Engineering Services Limited	Active	-	Zinc
A	233m N	Stanton Sewage Treatment Works	Not Active	-	-
A	250m N	Stanton Stw (discharge 1) Fe	Not Active	-	-

ID	Location	Name	Status	Receiving Water	Authorised Substances
B	491m NE	B.c. Nadins Occs Outlet 1	Not Active	Darklands BrookRiver Trent	Iron, pH

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	**1**

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

Features are displayed on the Current industrial land use map on **page 33**

ID	Location	Details	
3	362m S	Incident Date: 26/03/2002 Incident Identification: 66820 Pollutant: Specific Waste Materials Pollutant Description: Vehicles and Vehicle Parts	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	**0**

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

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

4.20 Pollution inventory waste transfers

Records within 500m	**0**

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

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

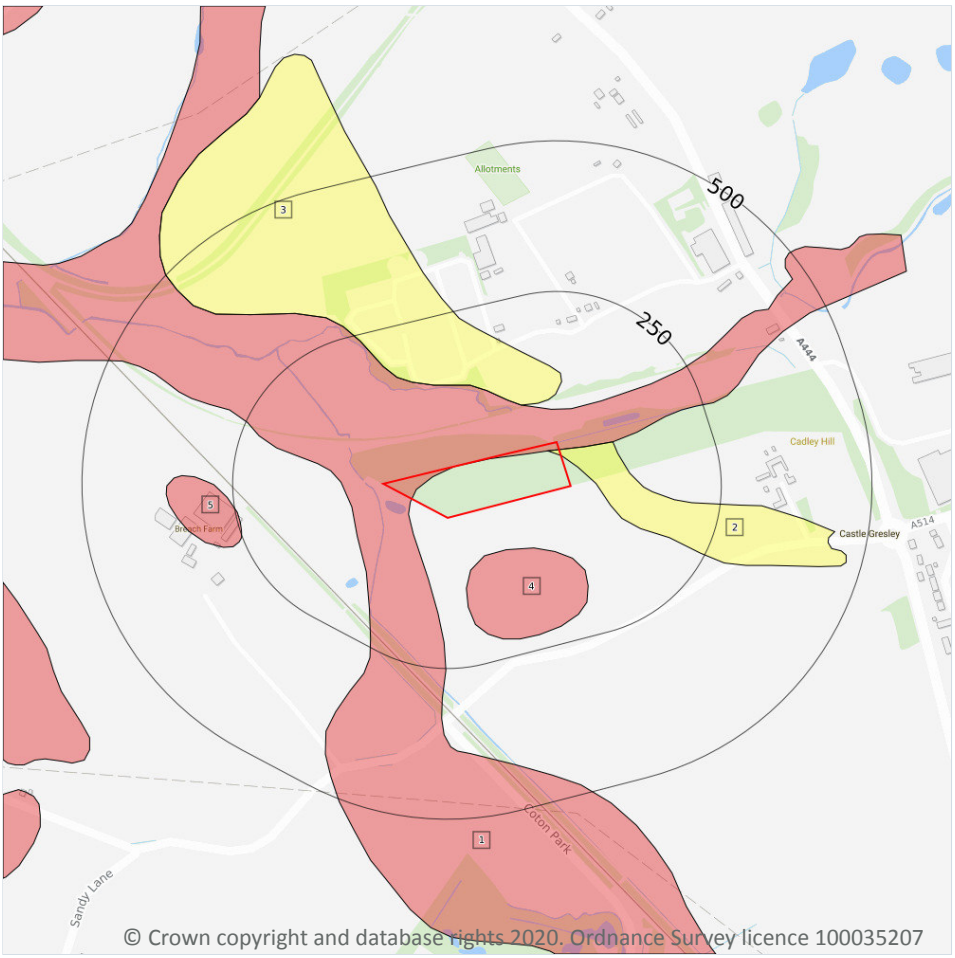
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

5.1 Superficial aquifer

Records within 500m	5

Aquifer status of groundwater held within superficial geology.

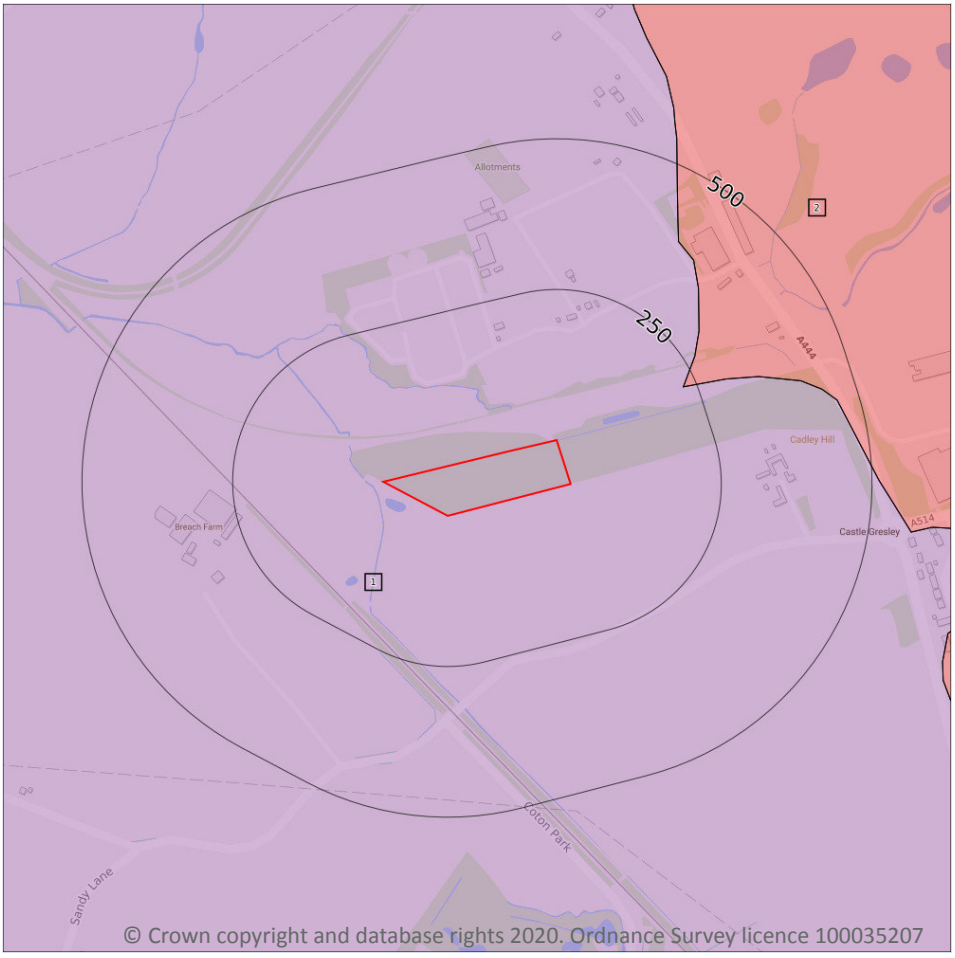
Features are displayed on the Hydrogeology map on **page 44**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	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

ID	Location	Designation	Description
3	70m N	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	76m 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
5	246m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	2

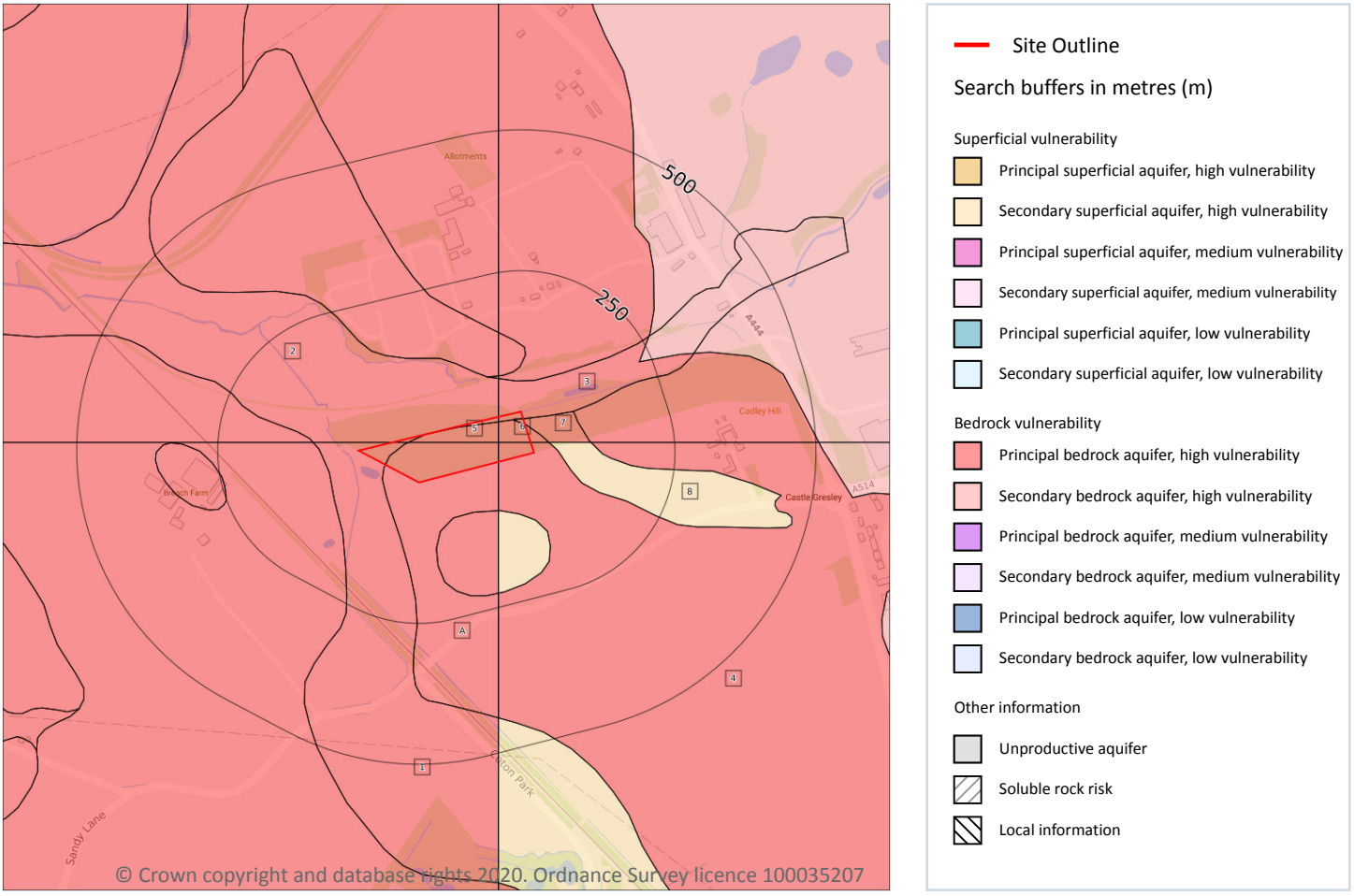
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 46**

ID	Location	Designation	Description
1	**On site**	**Principal**	**Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers**
2	228m NE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m	9

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

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

Features are displayed on the Groundwater vulnerability map on **page 48**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
2	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
3	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
4	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
5	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
6	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
7	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
A	**On site**	**Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures**
8	30m E	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	**0**

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

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

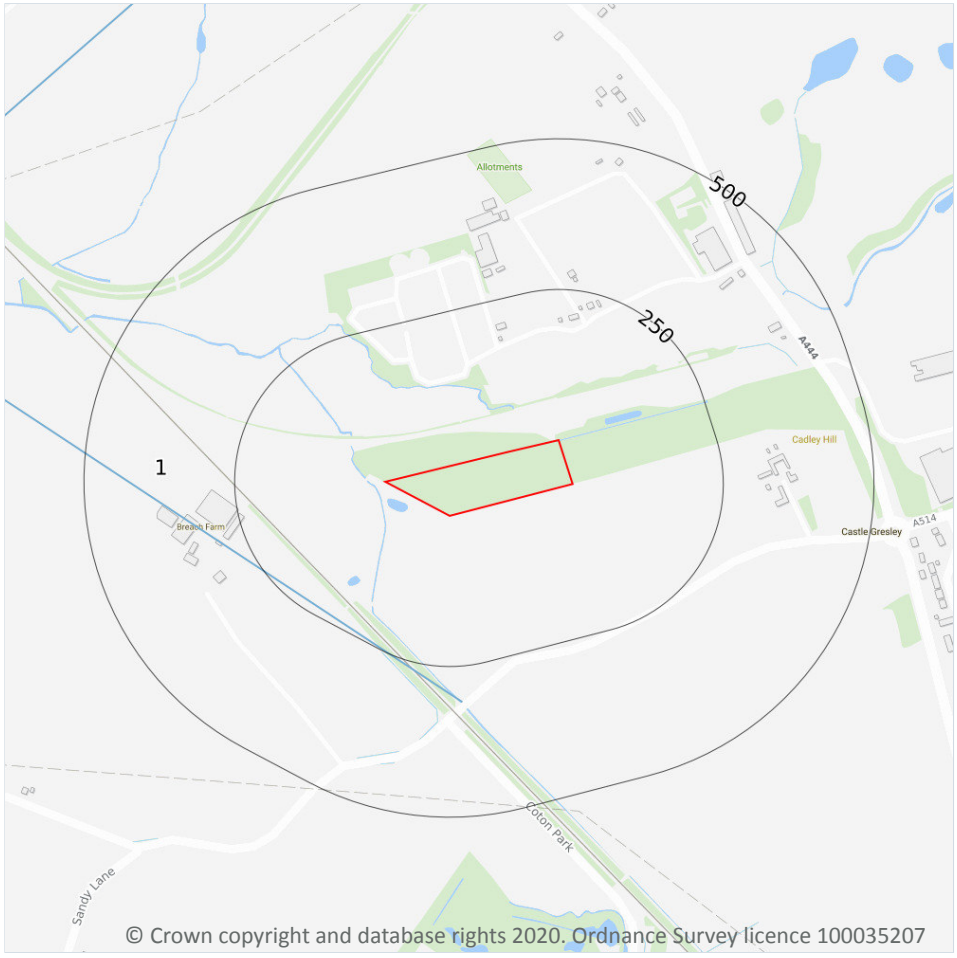
5.5 Groundwater vulnerability- local information

Records on site	**0**

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

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

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	3

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 51**

ID	Location	Details	
-	1017m NW	Status: Historical Licence No: 03/28/24/0115 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: STANTON HOUSE FARM, STANTON, BURTON ON TRENT, STAFFORDSHIRE Data Type: Point Name: E H KINSTON AND SON Easting: 426130 Northing: 319790	Annual Volume (m^3): 21000 Max Daily Volume (m^3): 80 Original Application No: - Original Start Date: 11/01/2003 Expiry Date: 31/03/2014 Issue No: 4 Version Start Date: 01/04/2008 Version End Date: -
-	1017m NW	Status: Active Licence No: MD/028/0024/004 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: STANTON HOUSE FARM, STANTON, BURTON ON TRENT, STAFFORDSHIRE Data Type: Point Name: E H KINSTON AND SON Easting: 426130 Northing: 319790	Annual Volume (m^3): 21,000 Max Daily Volume (m^3): 80 Original Application No: - Original Start Date: 01/04/2014 Expiry Date: 31/03/2026 Issue No: 1 Version Start Date: 01/04/2014 Version End Date: -
-	1762m W	Status: Historical Licence No: 03/28/24/0059/G Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: ROYLE FARM,DRAKELOW - WELL Data Type: Point Name: MOUNTFORD PARTNERS Easting: 425000 Northing: 318800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/06/1993 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**6**

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 51**

ID	Location	Details	
1	234m SW	Status: Active Licence No: 03/28/24/0087 Details: Spray Irrigation - Direct Direct Source: Surface Water Midlands Region Point: BREACH FARM - DARKLANDS BROOK Data Type: Line Name: R HODSON WALKER LTD Easting: 426880 Northing: 318620	Annual Volume (m^3): 30,836 Max Daily Volume (m^3): 545 Original Application No: - Original Start Date: 25/11/1980 Expiry Date: - Issue No: 100 Version Start Date: 25/11/1980 Version End Date: -
-	772m W	Status: Active Licence No: 03/28/24/0088 Details: Spray Irrigation - Direct Direct Source: Surface Water Midlands Region Point: DARKLANDS BROOK - SPRING TRIBUTARY Data Type: Point Name: R HODSON WALKER LTD Easting: 425980 Northing: 318980	Annual Volume (m^3): 30,836 Max Daily Volume (m^3): 545 Original Application No: - Original Start Date: 25/11/1980 Expiry Date: - Issue No: 100 Version Start Date: 25/11/1980 Version End Date: -
3	873m NW	Status: Active Licence No: 03/28/24/0044 Details: Spray Irrigation - Direct Direct Source: Surface Water Midlands Region Point: DARKLANDS BROOK Data Type: Line Name: E H KINSTON AND SON Easting: 426700 Northing: 320100	Annual Volume (m^3): 37,368 Max Daily Volume (m^3): 690.90 Original Application No: - Original Start Date: 09/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 25/02/2008 Version End Date: -
-	1098m W	Status: Active Licence No: 03/28/24/0059/S Details: Spray Irrigation - Direct Direct Source: Surface Water Midlands Region Point: ROYLE FARM,DRAKELOW - DARKLANDS BROOK (C) Data Type: Point Name: MOUNTFORD PARTNERS Easting: 425700 Northing: 319300	Annual Volume (m^3): 36,368 Max Daily Volume (m^3): 454.60 Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/06/1993 Version End Date: -
-	1485m W	Status: Active Licence No: 03/28/24/0059/S Details: Spray Irrigation - Direct Direct Source: Surface Water Midlands Region Point: ROYLE FARM,DRAKELOW - DARKLANDS BROOK (B) Data Type: Point Name: MOUNTFORD PARTNERS Easting: 425300 Northing: 319300	Annual Volume (m^3): 36,368 Max Daily Volume (m^3): 454.60 Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/06/1993 Version End Date: -

ID	Location	Details	
-	1809m W	Status: Historical Licence No: 03/28/24/0052 Details: Spray Irrigation - Direct Direct Source: Surface Water Midlands Region Point: UNNAMED TRIBUTARY OF RIVER TRENT AT FLINT MILL FARM Data Type: Point Name: G, D H & L E MYCOCK Easting: 424970 Northing: 319300	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 22/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 28/04/1995 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	0

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

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

5.9 Source Protection Zones

Records within 500m	0

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

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

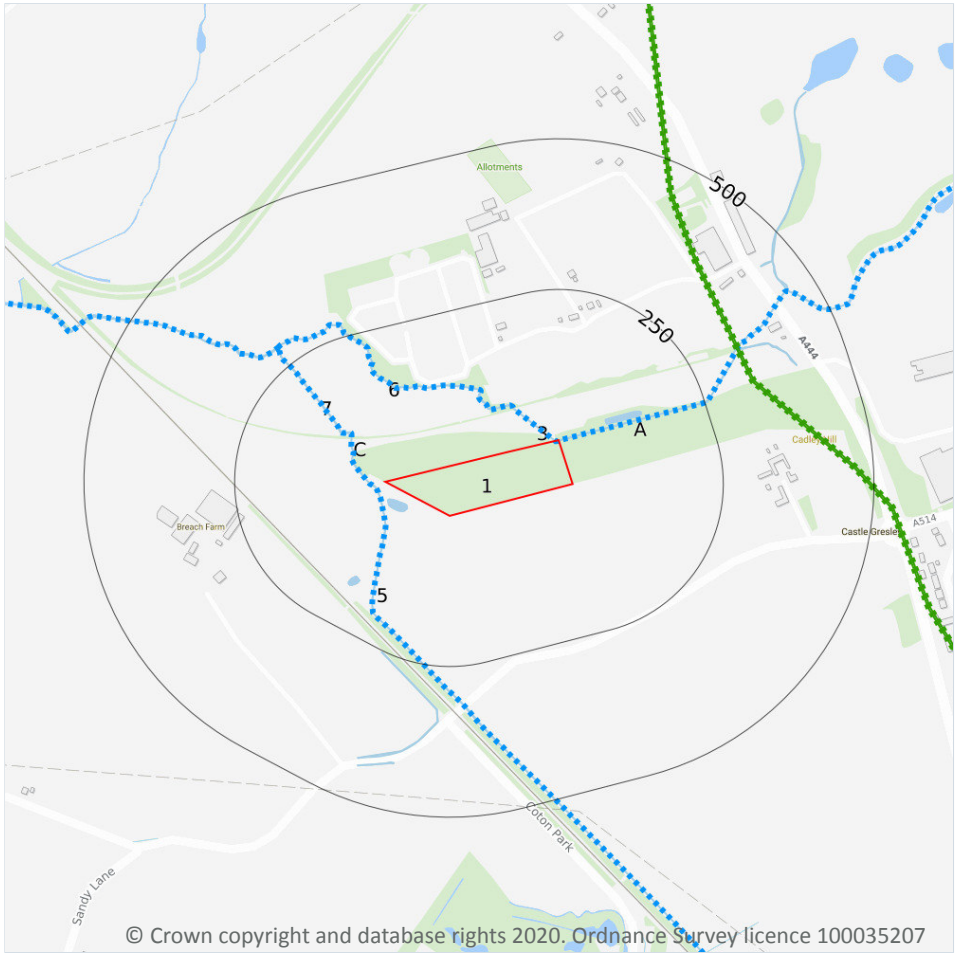
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	**6**

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

Features are displayed on the Hydrology map on **page 55**

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

ID	Location	Type of water feature	Ground level	Permanence	Name
A	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
5	19m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	67m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	81m NW	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
7	94m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**8**

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

Features are displayed on the Hydrology map on **page 55**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	**1**

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

Features are displayed on the Hydrology map on **page 55**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River WB catchment**	**Darklands Brook Catchment (trib of Trent)**	**GB104028047310**	**Trent - Tame to Dove Rivers**	**Tame Anker and Mease**

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

6.4 WFD Surface water bodies

Records identified	**1**

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

Features are displayed on the Hydrology map on **page 55**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
2	**On site**	**River**	**Darklands Brook Catchment (trib of Trent)**	**GB104028047310**	**Moderate**	**Fail**	**Moderate**	**2016**

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

6.5 WFD Groundwater bodies

Records on site	**1**

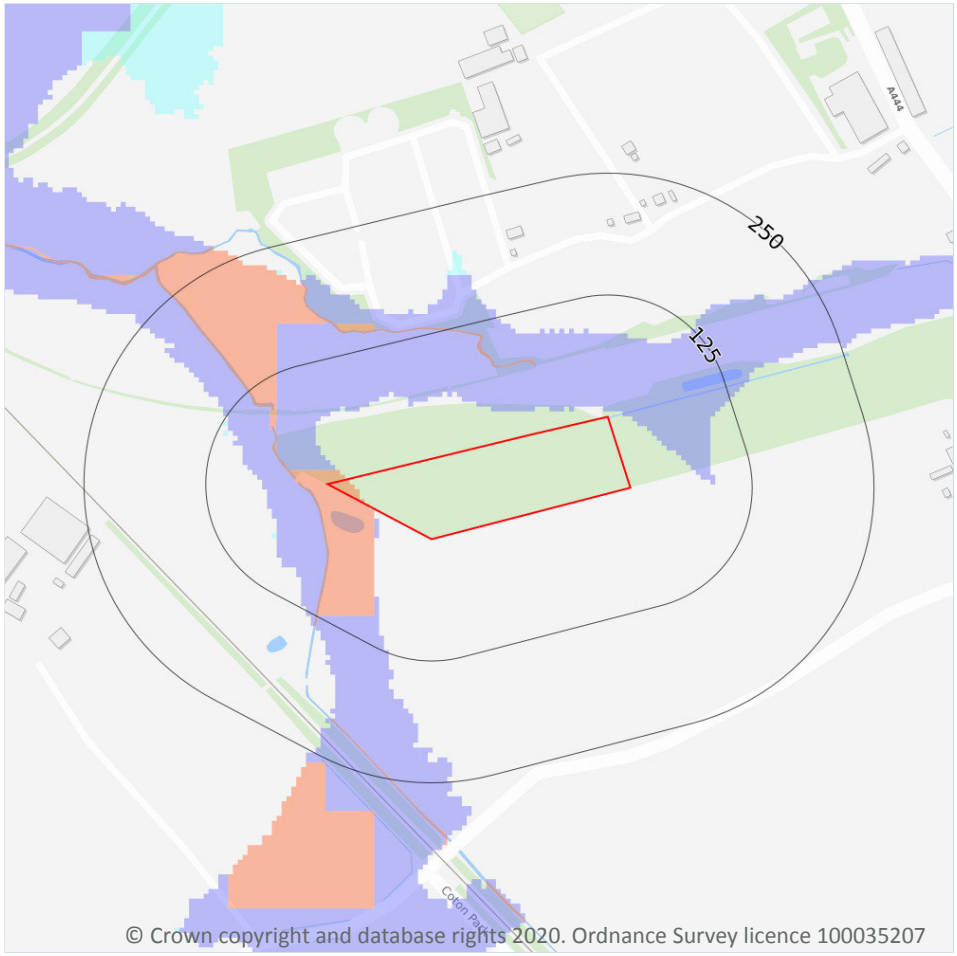
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 55**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
B	**On site**	**Tame Anker Mease - PT Sandstone Burton**	**GB40401G301200**	**Poor**	**Poor**	**Good**	**2015**

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

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

Environment Agency river and coastal flooding:

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

7.1 Risk of Flooding from Rivers and Sea (RoFRaS)

Records within 50m	**4**

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on **page 58**

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

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

7.2 Historical Flood Events

Records within 250m	0

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

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

7.3 Flood Defences

Records within 250m	0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

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

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

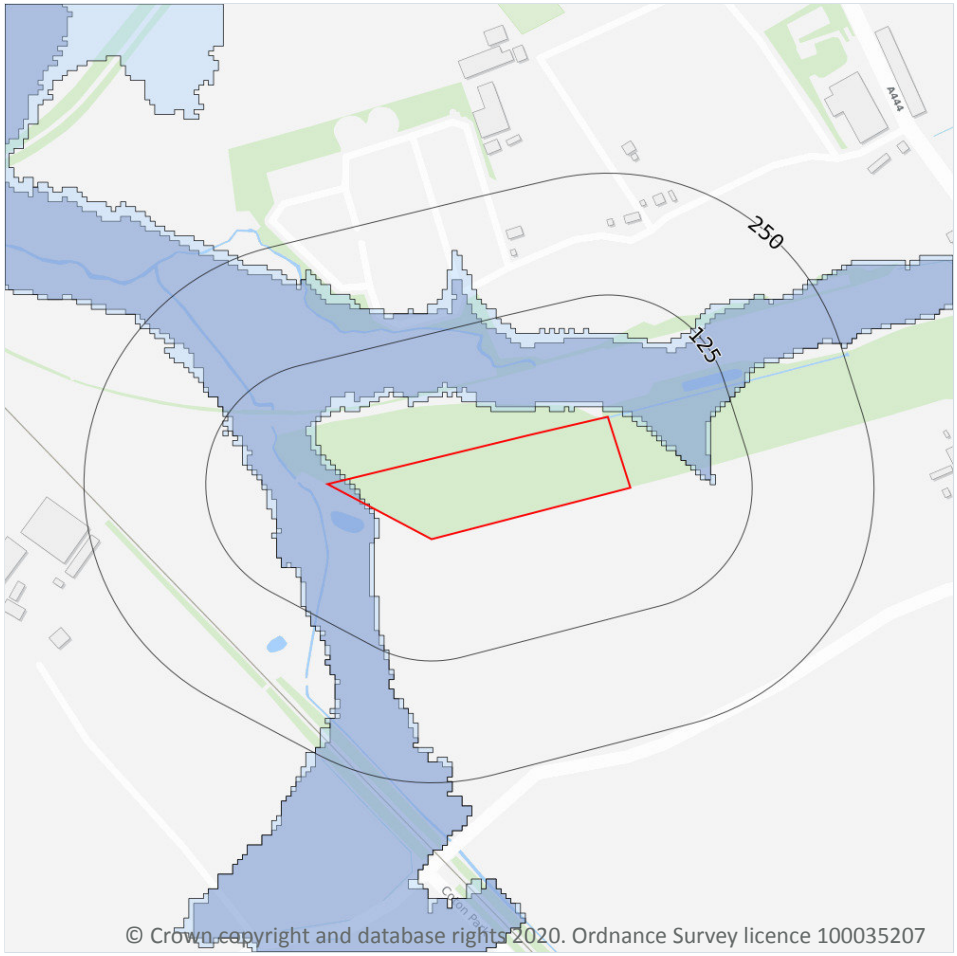
7.5 Flood Storage Areas

Records within 250m	0

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

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

River and coastal flooding - Flood Zones



Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

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

Features are displayed on the River and coastal flooding map on **page 58**

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

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

7.7 Flood Zone 3

Records within 50m	1

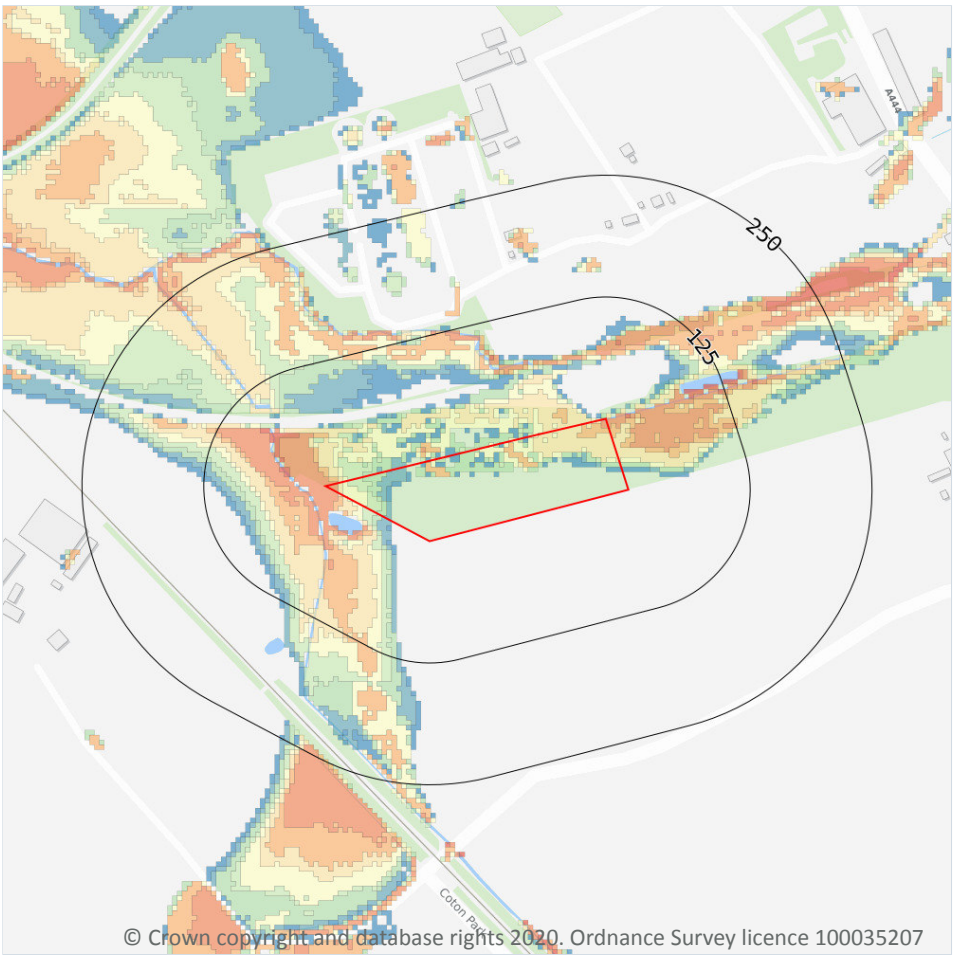
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 58**

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

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

8 Surface water flooding



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.3m - 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 1.0m**

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

Features are displayed on the Surface water flooding map on **page 62**

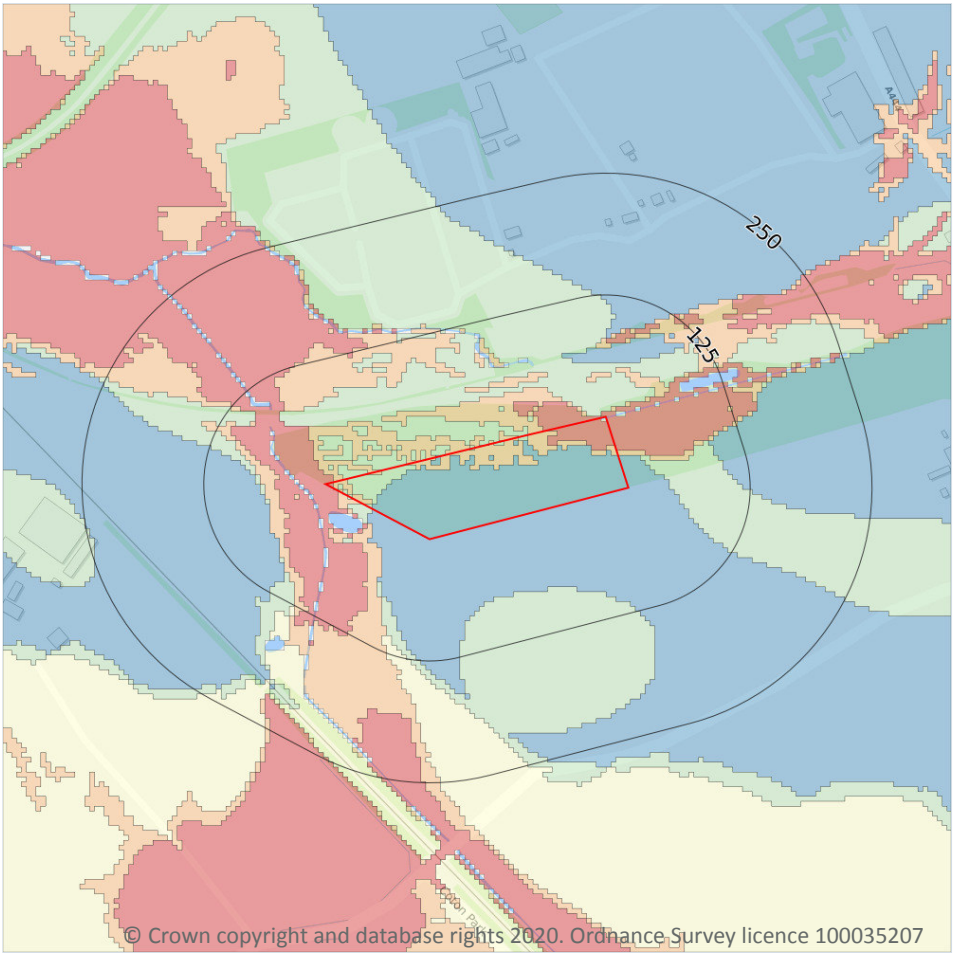
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

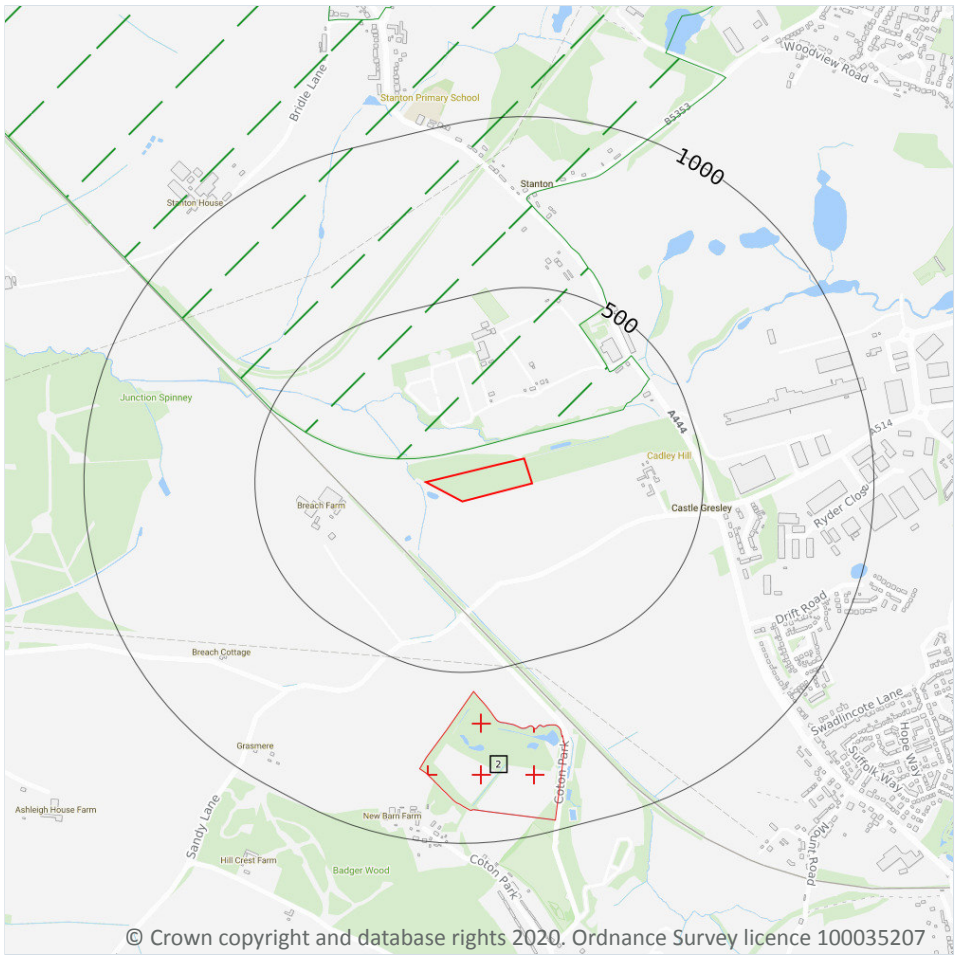
Highest risk on site	**High**
Highest risk within 50m	**High**

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

Features are displayed on the Groundwater flooding map on **page 64**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Local Nature Reserves (LNR)

Designated Ancient Woodland

Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	1

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

Features are displayed on the Environmental designations map on **page 65**

ID	Location	Name	Data source
2	557m S	Badgers Hollow, Coton Park	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m	1

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

Features are displayed on the Environmental designations map on **page 65**

ID	Location	Name	Woodland Type
-	1557m E	HALL WOOD	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	2

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

Features are displayed on the Environmental designations map on **page 65**

ID	Location	Name	Local Authority name
1	64m N	Burton-on-Trent	South Derbyshire
-	1574m N	Burton-on-Trent	East Staffordshire

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	2

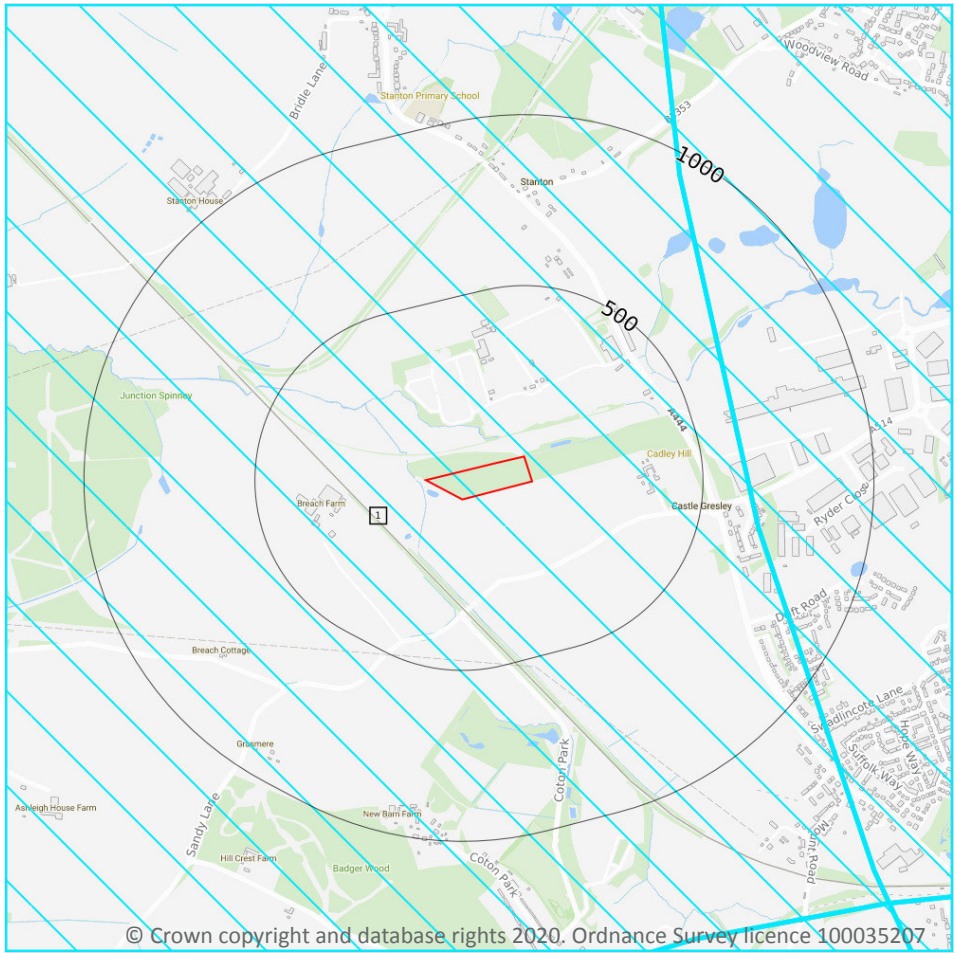
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	**River Trent (source to confluence with Derwent)**	**Surface Water**	**S308**	**Changed**

Location	Name	Type	NVZ ID	Status
On site	**Burton**	**Groundwater**	**G34**	**Existing**

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

SSSI Impact Zones and Units



Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site	**1**

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

Features are displayed on the SSSI Impact Zones and Units map on **page 71**

ID	Location	Type of developments requiring consultation
1	**On site**	**Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons > 4000m². Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

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

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

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	0

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

This data is sourced from English Heritage, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	0

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

This data is sourced from English Heritage, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	0

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

This data is sourced from English Heritage, Cadw and Historic Environment Scotland.

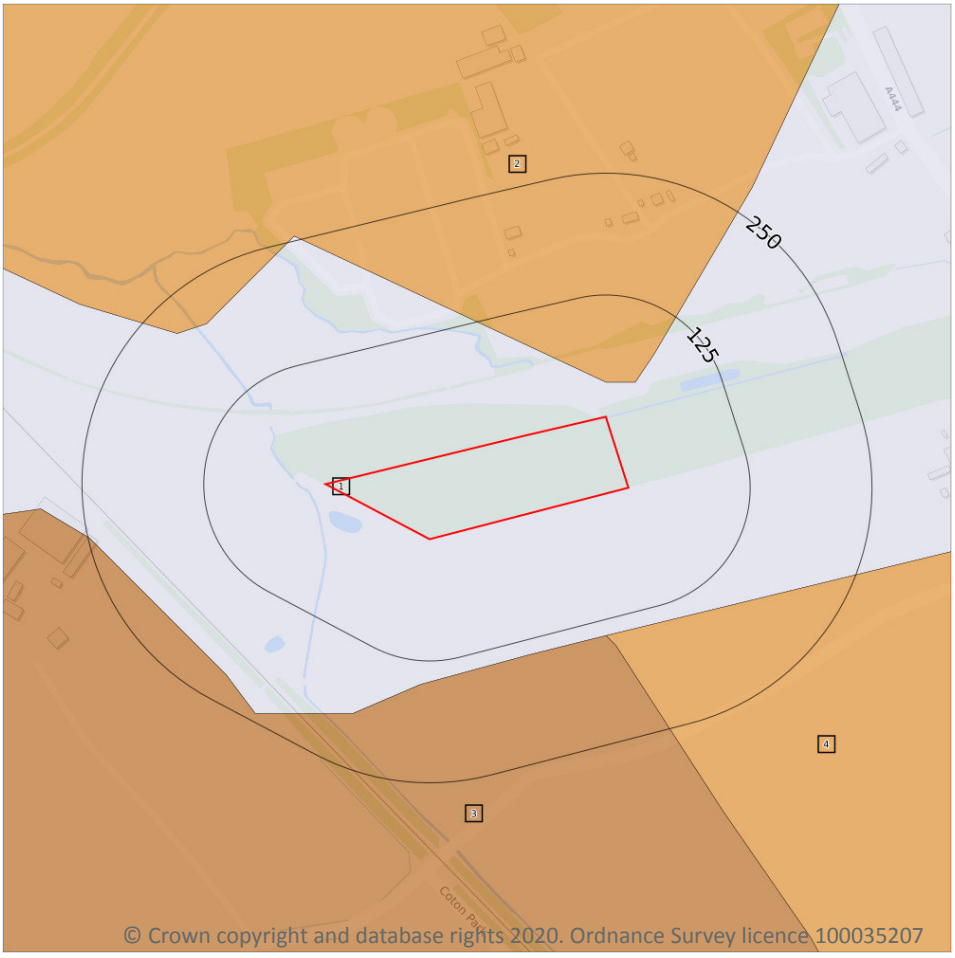
11.7 Registered Parks and Gardens

Records within 250m	0

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

This data is sourced from English Heritage, Cadw and Historic Environment Scotland.

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	4

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

Features are displayed on the Agricultural designations map on **page 75**

ID	Location	Classification	Description
1	On site	Grade 4	**Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.**

ID	Location	Classification	Description
2	36m N	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
3	141m S	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.
4	141m S	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	**0**

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

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

12.3 Tree Felling Licences

Records within 250m	**0**

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	**0**

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment.

This data is sourced from Natural England.

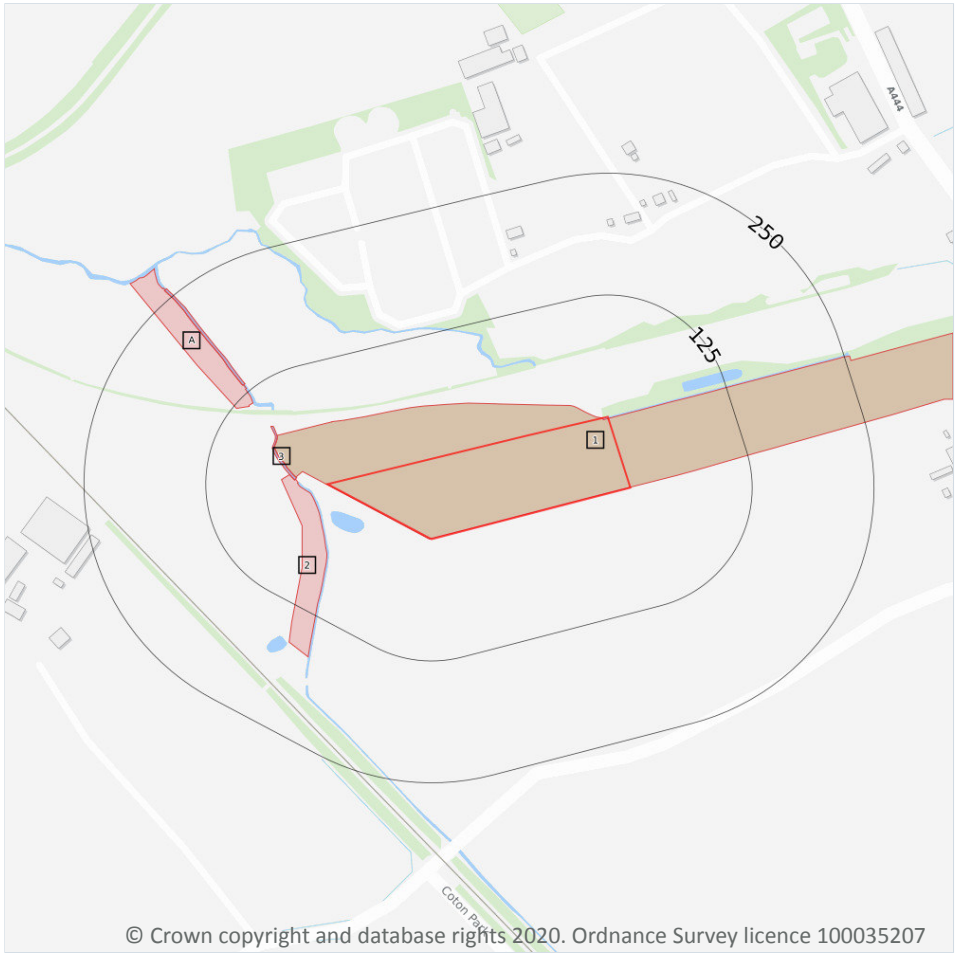
12.5 Countryside Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

13 Habitat designations



Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks

Primary Habitat
Restorable Habitat
Associated Habitats
Habitat Restoration-Creation
Network Enhancement Zone 1
Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m	**5**

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

Features are displayed on the Habitat designations map on **page 78**

ID	Location	Main Habitat	Other habitats
1	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
2	20m SW	Lowland fens	Main habitat: LFENS (INV > 50%)
3	32m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	113m NW	Lowland fens	Main habitat: LFENS (INV > 50%)

ID	Location	Main Habitat	Other habitats
A	133m NW	Lowland fens	Main habitat: LFENS (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0

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

This data is sourced from Natural England.

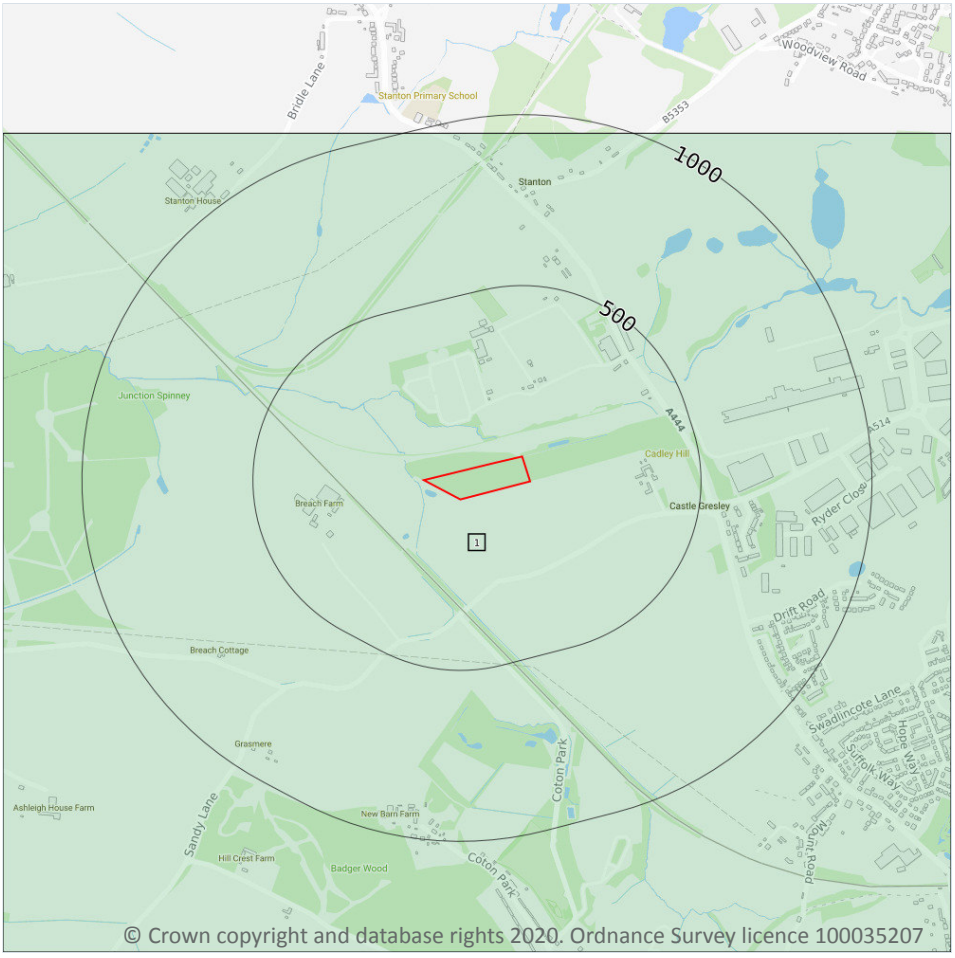
13.4 Limestone Pavement Orders

Records within 250m	0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

14.1 10k Availability

Records within 500m	1

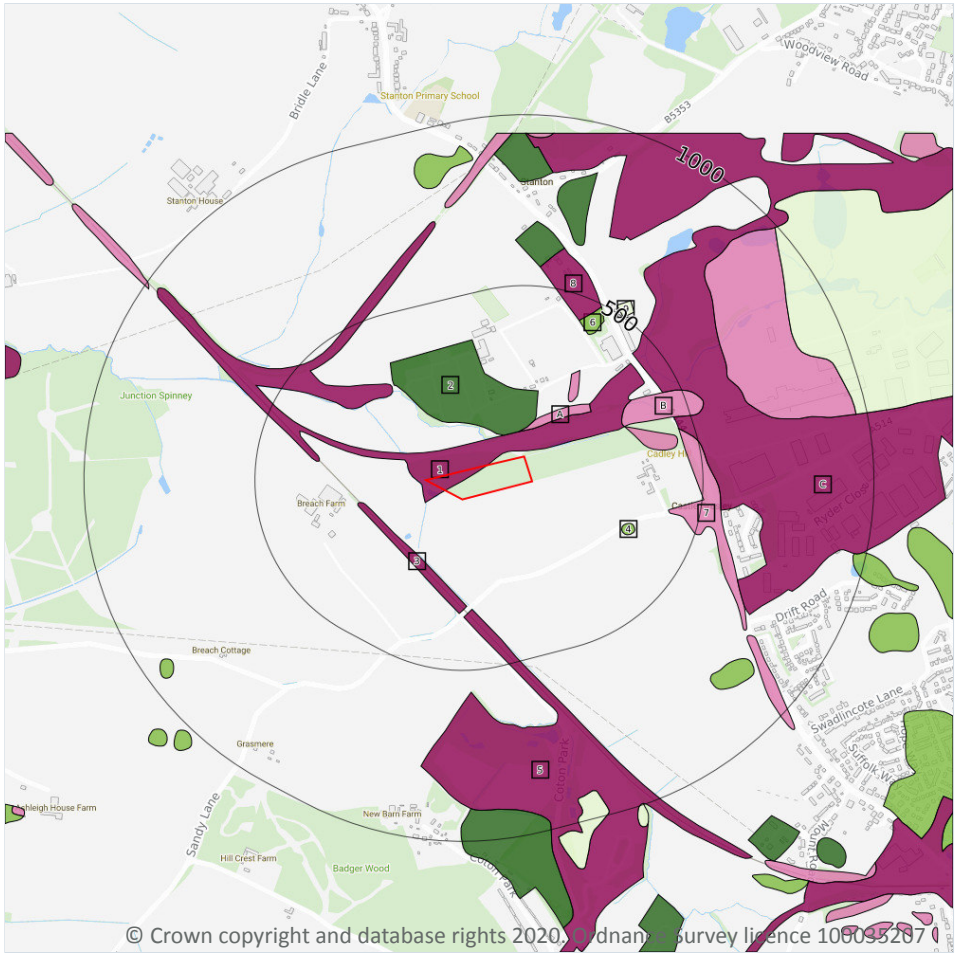
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 80**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**SK21NE**

This data is sourced from the British Geological Survey.

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



Site Outline

Search buffers in metres (m)

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

14.2 Artificial and made ground (10k)

Records within 500m	14

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

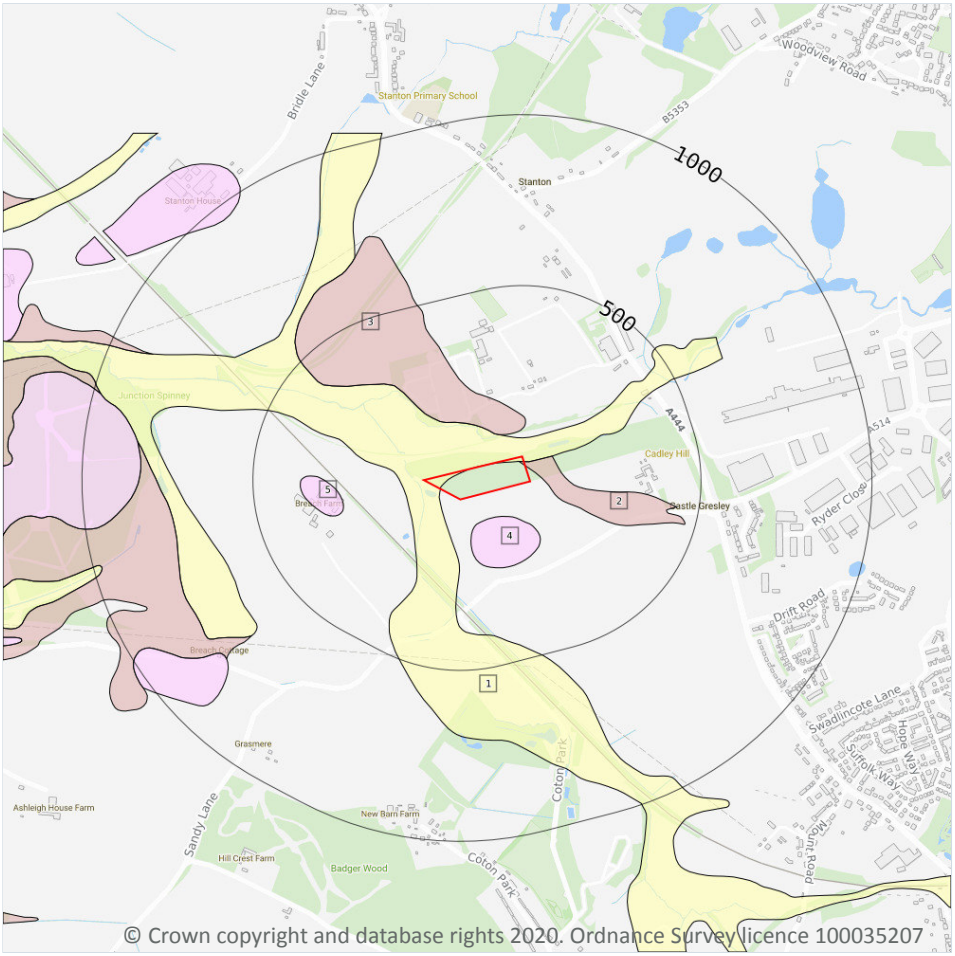
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 81**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**Made Ground (Undivided)**	**Artificial Deposit**
2	74m N	LSGR-UKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
A	75m N	WGR-VOID	Worked Ground (Undivided)	Void
3	175m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

ID	Location	LEX Code	Description	Rock description
A	208m NE	WGR-VOID	Worked Ground (Undivided)	Void
4	295m SE	DDGR-UKNOWN	Disturbed Ground (Undivided)	Unknown/unclassified Entry
B	302m E	WGR-VOID	Worked Ground (Undivided)	Void
B	306m E	WGR-VOID	Worked Ground (Undivided)	Void
5	323m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	404m NE	DDGR-UKNOWN	Disturbed Ground (Undivided)	Unknown/unclassified Entry
7	408m E	WGR-VOID	Worked Ground (Undivided)	Void
8	429m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
C	434m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
9	500m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m **5**

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 83**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCZSV**	**Alluvium - Clay, Silt, Sand And Gravel**	**Clay, Silt, Sand And Gravel**
2	**On site**	**HEAD-XCZSV**	**Head - Clay, Silt, Sand And Gravel**	**Clay, Silt, Sand And Gravel**
3	73m N	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel

ID	Location	LEX Code	Description	Rock description
4	75m S	GFDMP-XSV	Glaciofluvial Deposits, Mid Pleistocene - Sand And Gravel	Sand And Gravel
5	245m W	GFDMP-XSV	Glaciofluvial Deposits, Mid Pleistocene - Sand And Gravel	Sand And Gravel

This data is sourced from the British Geological Survey.

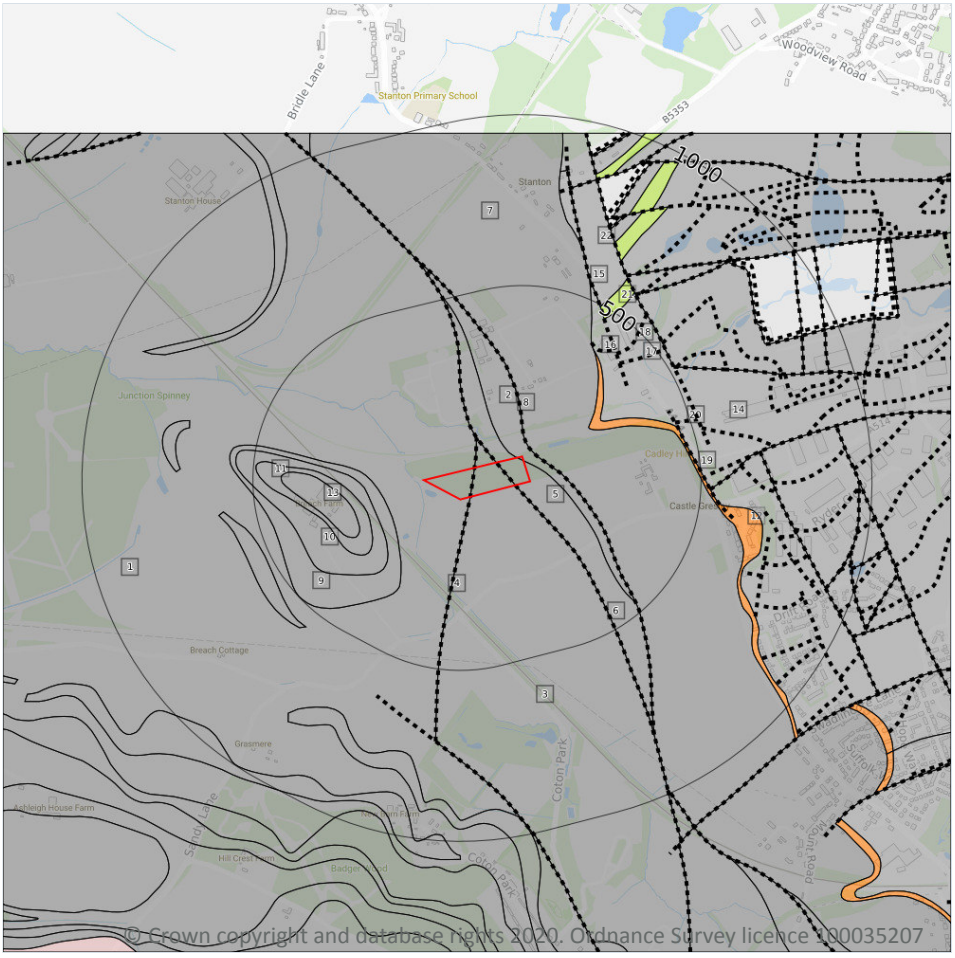
14.4 Landslip (10k)

Records within 500m	**0**

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m	13

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 85**

ID	Location	LEX Code	Description	Rock age
1	On site	BMS-MDST	Bromsgrove Sandstone Formation - Mudstone	Anisian Age - Early Triassic Epoch
2	On site	PLWF-MDST	Polesworth Formation - Mudstone	Early Triassic Epoch
3	On site	BMS-MDST	Bromsgrove Sandstone Formation - Mudstone	Anisian Age - Early Triassic Epoch

ID	Location	LEX Code	Description	Rock age
5	**On site**	**PLWF-SCON**	**Polesworth Formation - Interbedded Sandstone And Conglomerate**	**Early Triassic Epoch**
7	32m NE	PLWF-SCON	Polesworth Formation - Interbedded Sandstone And Conglomerate	Early Triassic Epoch
9	129m SW	BMS-SDST	Bromsgrove Sandstone Formation - Sandstone	Anisian Age - Early Triassic Epoch
10	167m SW	BMS-MDST	Bromsgrove Sandstone Formation - Mudstone	Anisian Age - Early Triassic Epoch
11	191m SW	BMS-SDST	Bromsgrove Sandstone Formation - Sandstone	Anisian Age - Early Triassic Epoch
12	213m NE	MOI-BREC	Moira Formation - Breccia	Anisian Age - Late Permian Epoch [Obsolete name]
13	223m SW	BMS-MDST	Bromsgrove Sandstone Formation - Mudstone	Anisian Age - Early Triassic Epoch
14	254m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
21	468m NE	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
22	494m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	**9**

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

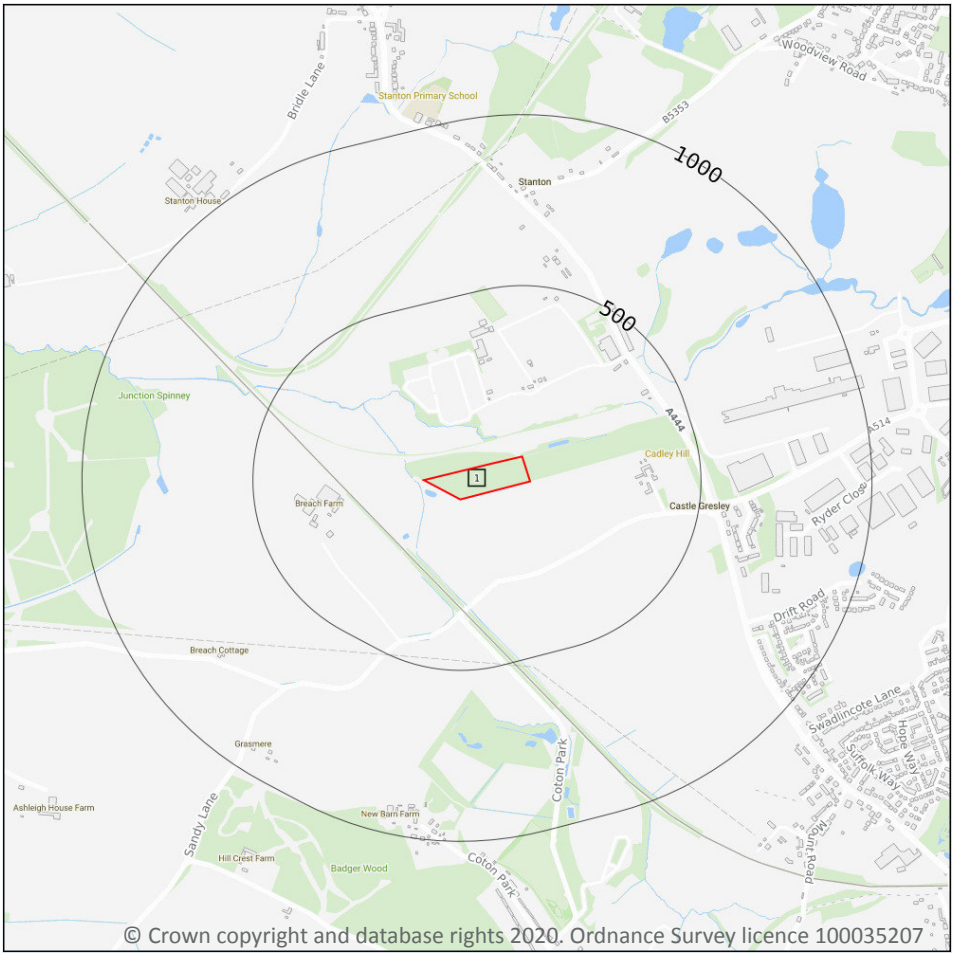
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 85**

ID	Location	Category	Description
4	**On site**	**FAULT**	**Normal fault, inferred; crossmarks on downthrow side**
6	**On site**	**FAULT**	**Normal fault, inferred; crossmarks on downthrow side**
8	32m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
15	370m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
16	383m NE	ROCK	Coal seam, observed (LITTLE)
17	394m NE	ROCK	Coal seam, inferred (LITTLE)

ID	Location	Category	Description
18	408m NE	ROCK	Coal seam, inferred (LITTLE KILBURN)
19	448m E	FAULT	Normal fault, inferred; crossmarks on downthrow side
20	456m E	ROCK	Coal seam, inferred (UPPER CANNEL)

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

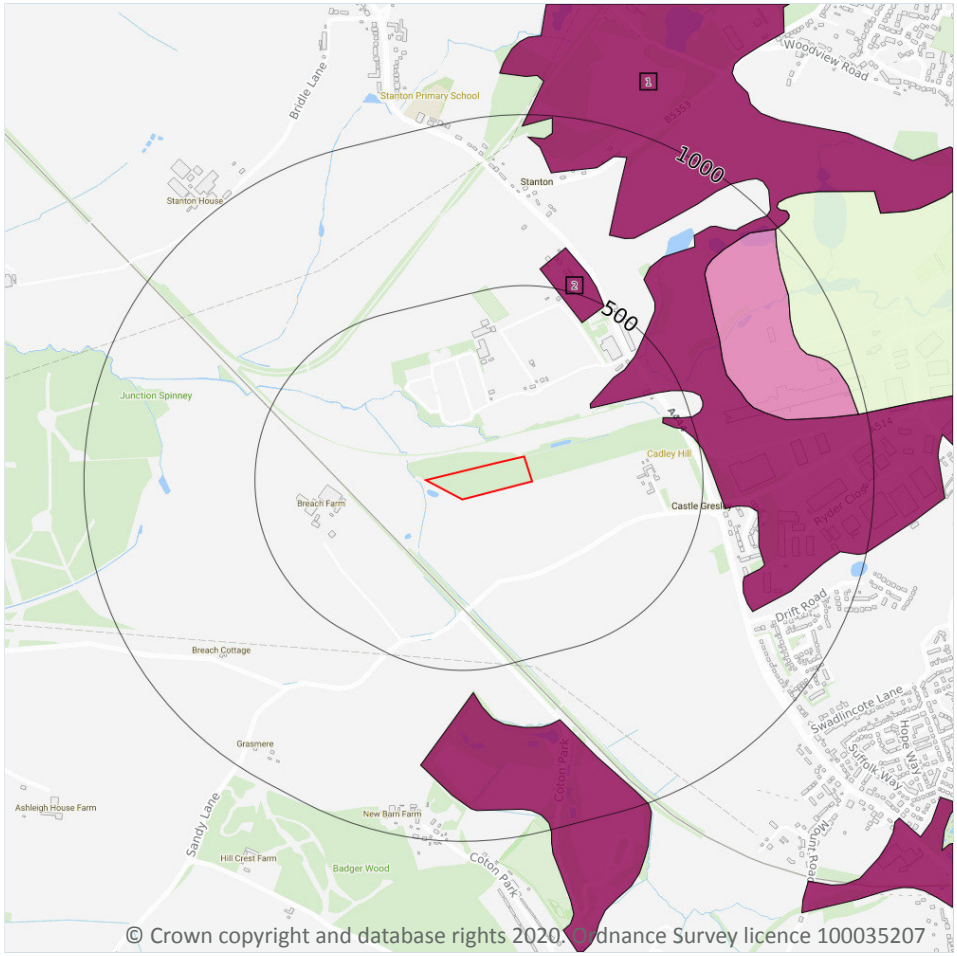
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 88**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW141_loughborough_v4**

This data is sourced from the British Geological Survey.

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



Site Outline

Search buffers in metres (m)

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

15.2 Artificial and made ground (50k)

Records within 500m	2

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

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 89**

ID	Location	LEX Code	Description	Rock description
1	240m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	427m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

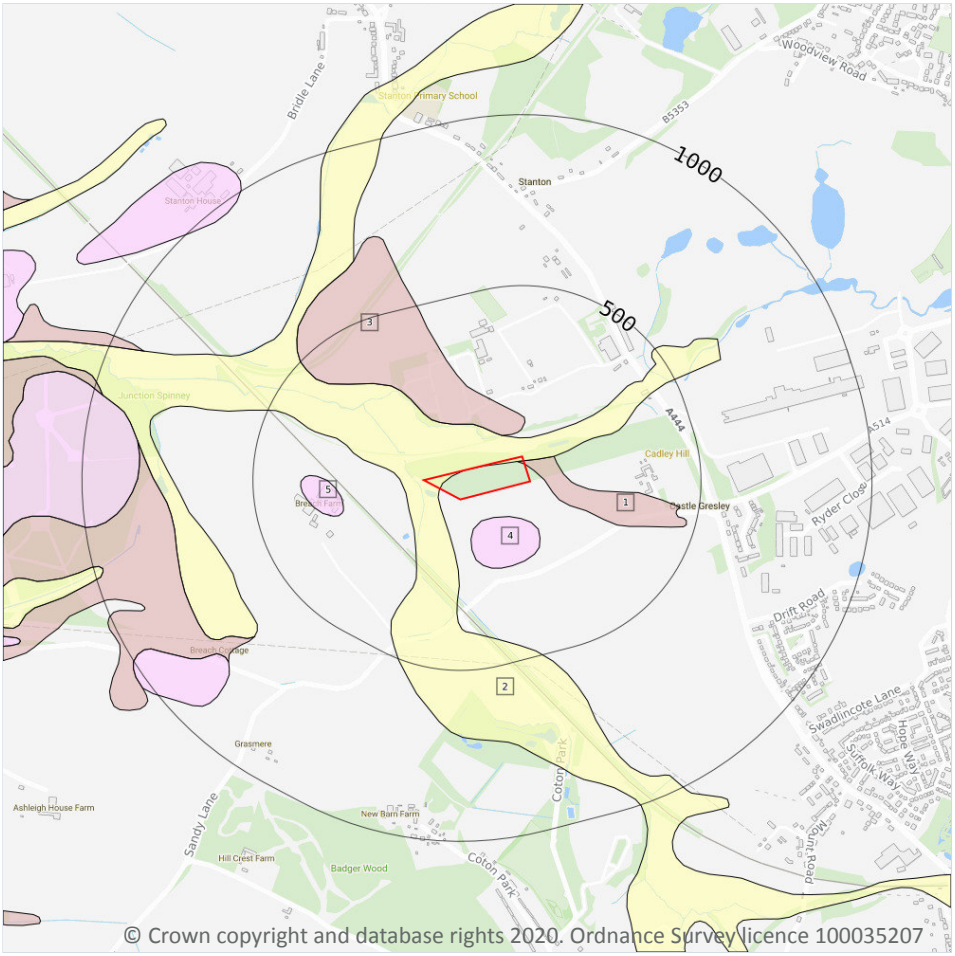
15.3 Artificial ground permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m	5

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 91**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**HEAD-XCZSV**	**HEAD**	**CLAY, SILT, SAND AND GRAVEL**
2	**On site**	**ALV-XCZSV**	**ALLUVIUM**	**CLAY, SILT, SAND AND GRAVEL**
3	70m N	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

ID	Location	LEX Code	Description	Rock description
4	76m S	GFDMP-XSV	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL
5	246m W	GFDMP-XSV	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	**2**

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**High**	**Very Low**
On site	**Intergranular**	**High**	**Very Low**

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	**0**

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

This data is sourced from the British Geological Survey.

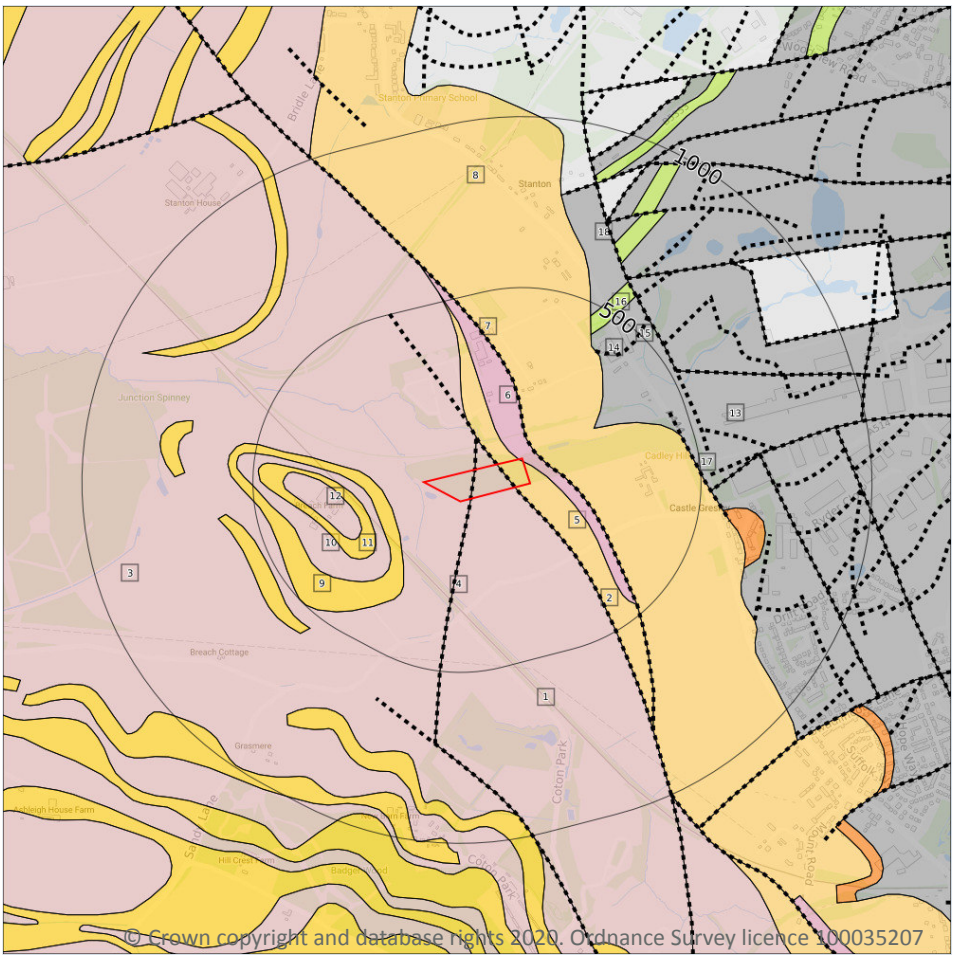
15.7 Landslip permeability (50k)

Records within 50m	**0**

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m **12**

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 93**

ID	Location	LEX Code	Description	Rock age
1	On site	HEY-MDST	HELSBY SANDSTONE FORMATION - MUDSTONE	ANISIAN
3	On site	HEY-MDST	HELSBY SANDSTONE FORMATION - MUDSTONE	ANISIAN
5	On site	CHES-SCON	CHESTER FORMATION - SANDSTONE AND CONGLOMERATE, INTERBEDDED	OLENEKIAN

ID	Location	LEX Code	Description	Rock age
6	**On site**	**CHES-MDST**	**CHESTER FORMATION - MUDSTONE**	**OLENEKIAN**
8	41m NE	CHES-SCON	CHESTER FORMATION - SANDSTONE AND CONGLOMERATE, INTERBEDDED	OLENEKIAN
9	119m SW	HEY-SDST	HELSBY SANDSTONE FORMATION - SANDSTONE	ANISIAN
10	161m W	HEY-MDST	HELSBY SANDSTONE FORMATION - MUDSTONE	ANISIAN
11	189m SW	HEY-SDST	HELSBY SANDSTONE FORMATION - SANDSTONE	ANISIAN
12	217m SW	HEY-MDST	HELSBY SANDSTONE FORMATION - MUDSTONE	ANISIAN
13	228m NE	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
16	415m NE	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
18	463m NE	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m **3**

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**Low**	**Low**
On site	**Fracture**	**Low**	**Low**
On site	**Mixed**	**High**	**Moderate**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m **6**

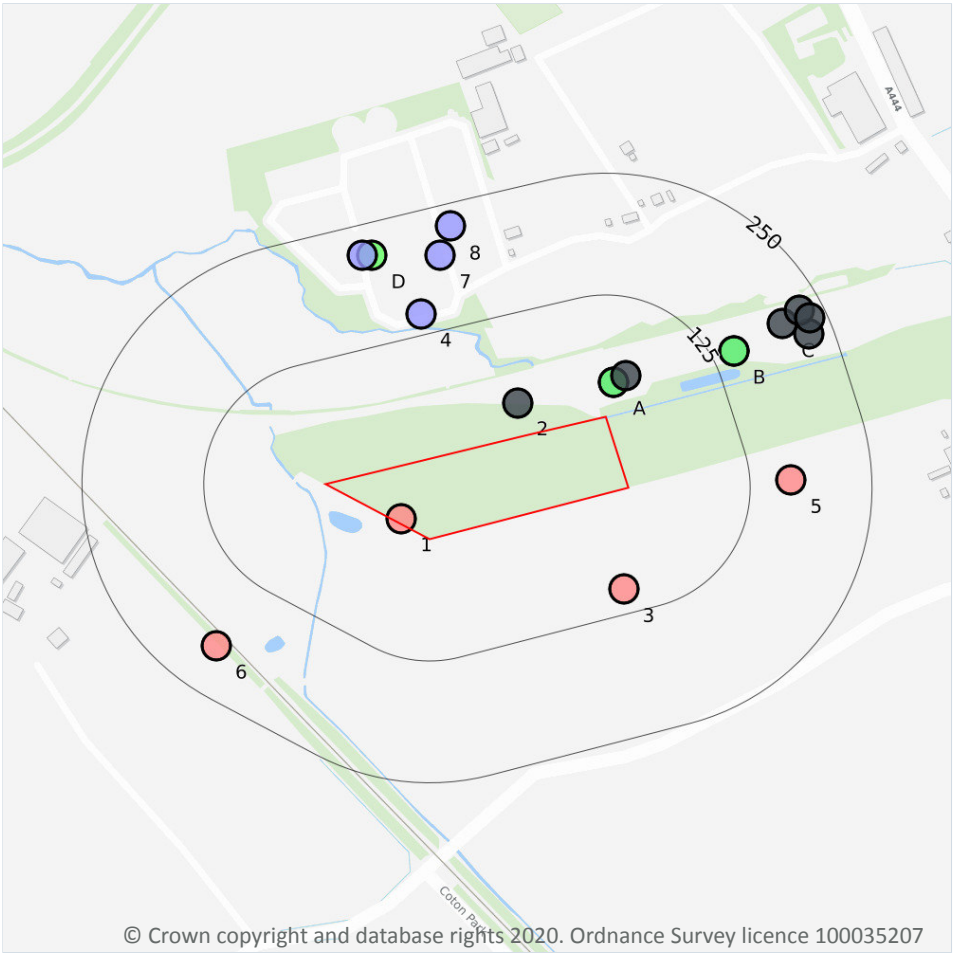
Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 93**

ID	Location	Category	Description
2	**On site**	**FAULT**	**Fault, inferred**
4	**On site**	**FAULT**	**Fault, inferred**
7	41m NE	FAULT	Fault, inferred
14	381m NE	ROCK	Coal seam, observed
15	408m NE	ROCK	Coal seam, observed
17	452m E	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.

16 Boreholes



Site Outline

Search buffers in metres (m)

Confidential

0 - 10m

10 - 30m

30m+

Unknown

16.1 BGS Boreholes

Records within 250m	19

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

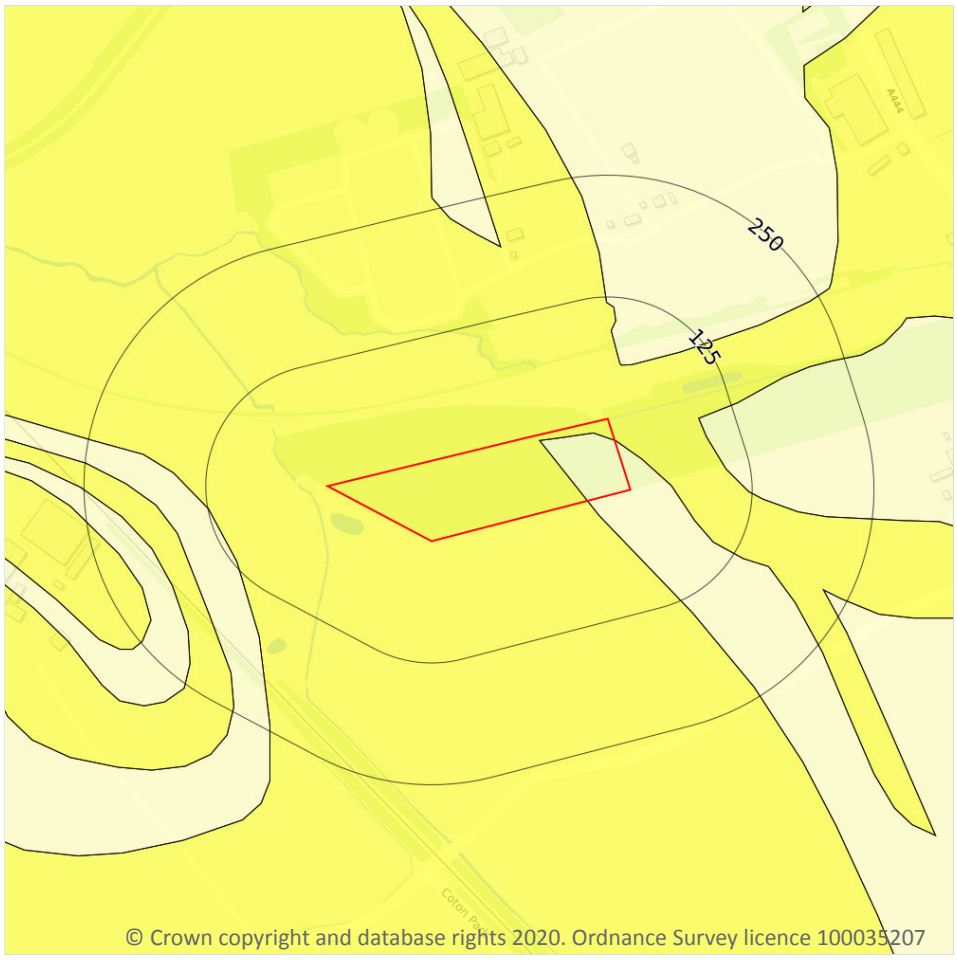
Features are displayed on the Boreholes map on **page 96**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	**On site**	**426830 318950**	**SANDPIT**	**276.45**	**N**	**196899**
2	35m N	426949 319069	CADLEY HILL AQUIFER MONITORING BOREHOLE	-	Y	N/A
A	36m N	427048 319090	NADINS OC SITE 75	6.0	N	197184

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	36m N	427048 319090	NADINS OPENCAST SITE 1163	12.0	N	198943
A	47m NE	427060 319097	PROP LAYOUT DISPOS' PNT BH1A	-	Y	N/A
3	99m S	427058 318878	CAULDWELL LANE	117.5	N	196966
4	147m N	426850 319160	STANTON WRW 2	4.2	N	199725
B	148m NE	427171 319122	NADINS OC SITE 74	9.05	N	197183
B	148m NE	427171 319122	NADINS OPENCAST SITE 1162	18.0	N	198942
5	167m E	427230 318990	CADLEY HILL 4 CASTLE GRESTLEY	57.15	N	196906
6	200m SW	426640 318820	BREACH FARM	281.63	N	196898
7	200m N	426870 319220	STANTON WRW 3	4.7	N	199726
C	205m NE	427221 319150	PROP LAYOUT DISPOS' PNT BH2	-	Y	N/A
D	217m N	426800 319220	STANTON WRW DH 1A	15.0	N	199731
D	219m N	426790 319220	STANTON WRW 1	4.6	N	199724
C	225m E	427248 319140	PROP LAYOUT DISPOS' PNT BH3	-	Y	N/A
C	227m NE	427238 319164	PROP LAYOUT DISPOS' PNT BH5	-	Y	N/A
8	227m N	426880 319250	STANTON WRW 7	5.1	N	199730
C	233m NE	427249 319156	PROP LAYOUT DISPOS' PNT BH4	-	Y	N/A

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m	2

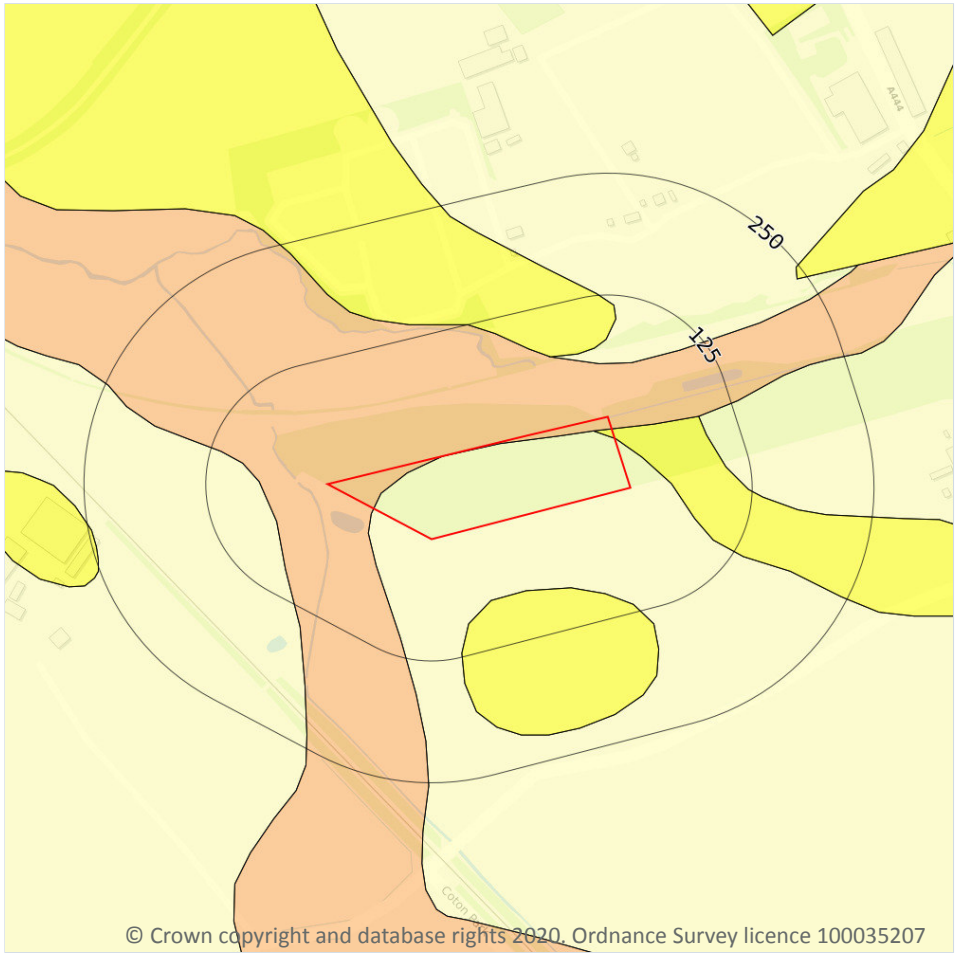
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 98**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	3

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

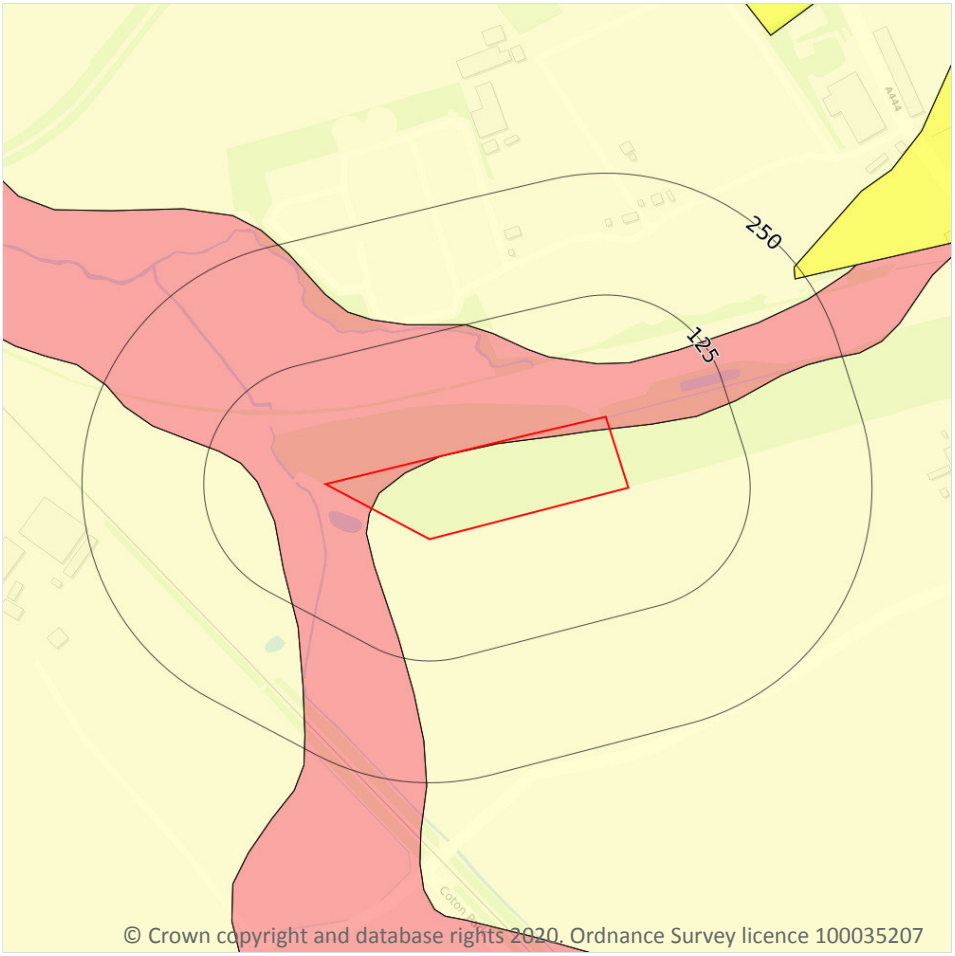
Features are displayed on the Natural ground subsidence - Running sands map on **page 99**

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	2

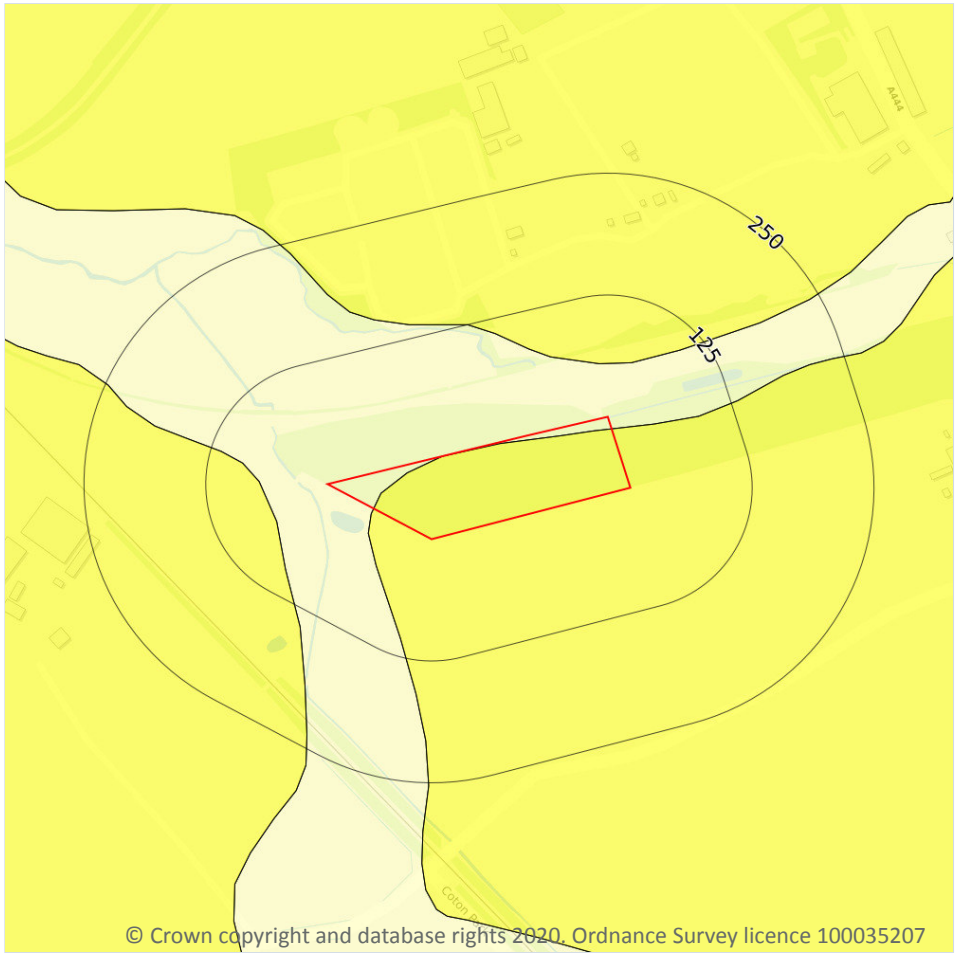
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 101**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	2

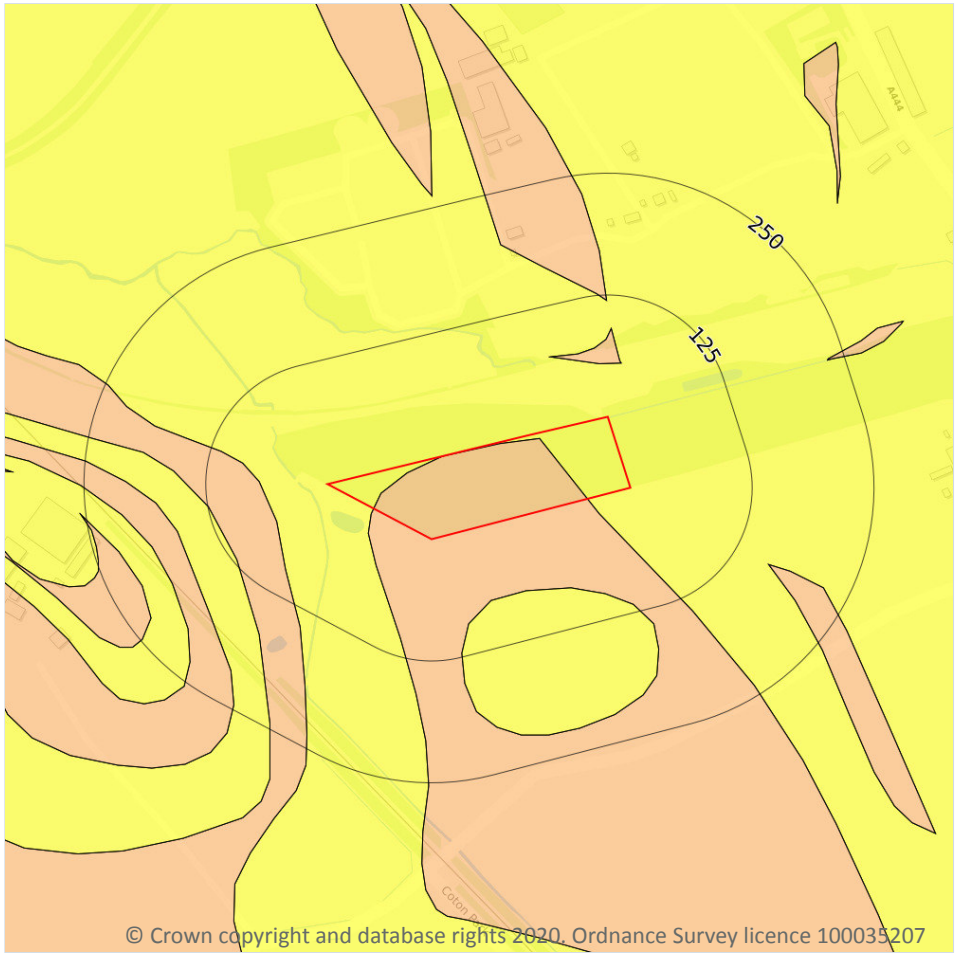
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 103**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

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

17.5 Landslides

Records within 50m	2

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

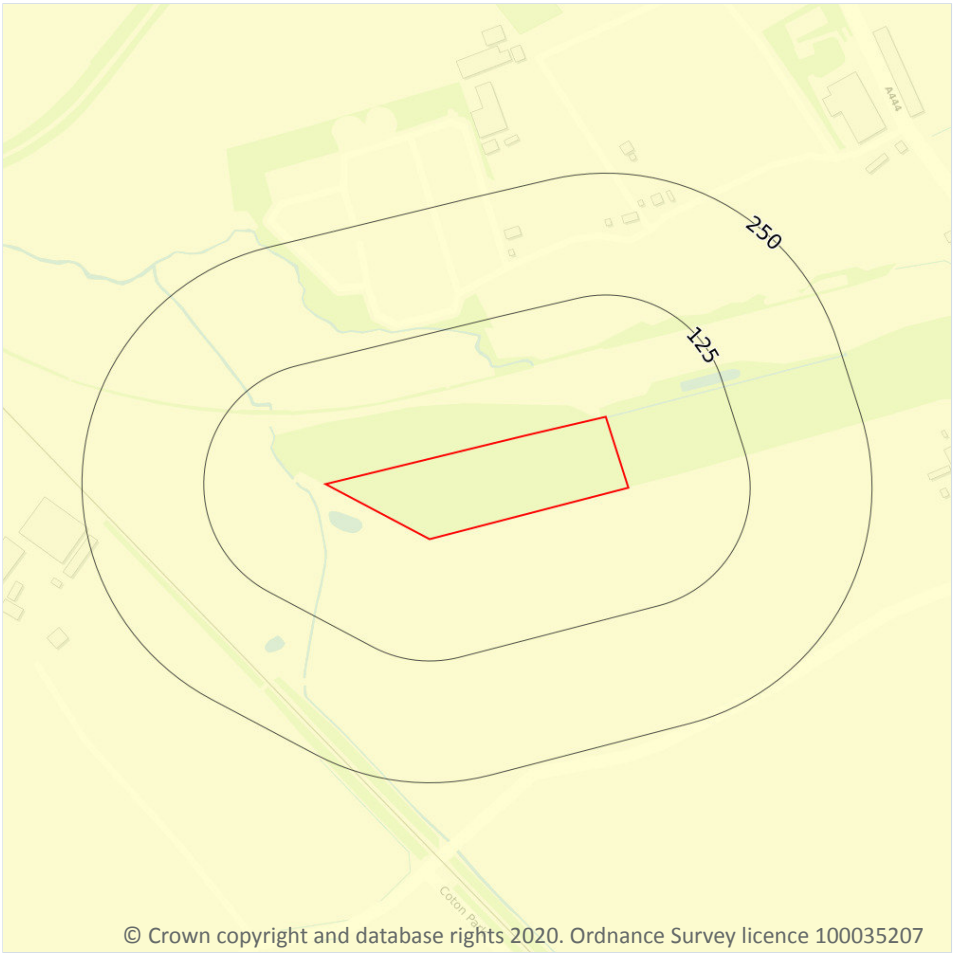
Features are displayed on the Natural ground subsidence - Landslides map on **page 104**

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

Location	Hazard rating	Details
On site	**Low**	**Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	1

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

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 106**

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

This data is sourced from the British Geological Survey.

18 Mining, ground workings and natural cavities

Site Outline

Search buffers in metres (m)

Natural cavities (Area)

Natural cavities (Point)

BritPits

Surface ground workings

Underground workings

Historical Mineral Planning Areas

Mining Cavities

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m	0

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

This data is sourced from Peter Brett Associates (PBA).

18.2 BritPits

Records within 500m	1

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 108**

ID	Location	Details	Description
J	295m NE	Name: Stanton Sand Pit Address: Stanton, SWADLINCOTE, Derbyshire Commodity: Sand Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Type: Ceased Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	22

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 108**

ID	Location	Land Use	Year of mapping	Mapping scale
A	26m N	Pond	1967	1:10560
A	66m N	Cuttings	1938	1:10560
A	66m N	Cuttings	1900	1:10560
A	66m N	Cuttings	1882	1:10560
B	73m N	Sewage Works	1989	1:10000
B	73m N	Sewage Works	1974	1:10000
A	86m NE	Cuttings	1925	1:10560
A	86m NE	Cuttings	1950	1:10560
A	103m NE	Pond	1967	1:10560
C	103m N	Ponds	1938	1:10560
C	104m N	Ponds	1925	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
D	138m N	Sewage Farm	1900	1:10560
D	171m N	Sewage Farm	1925	1:10560
D	171m N	Sewage Farm	1925	1:10560
1	174m N	Sewage Works	1950	1:10560
B	203m N	Pond	1989	1:10000
B	203m N	Pond	1974	1:10000
F	233m N	Unspecified Pit	1989	1:10000
F	233m N	Unspecified Pit	1974	1:10000
F	233m N	Unspecified Pit	1967	1:10560
G	243m NE	Pond	1989	1:10000
G	243m NE	Pond	1974	1:10000

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	**19**

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 108**

ID	Location	Land Use	Year of mapping	Mapping scale
O	459m E	Disused Colliery	1989	1:10000
O	459m E	Colliery	1974	1:10000
-	704m E	Unspecified Mine	1967	1:10560
7	707m S	Disused Colliery	1950	1:10560
-	709m E	Colliery	1950	1:10560
-	725m E	Colliery	1938	1:10560
-	725m E	Colliery	1900	1:10560
-	725m E	Colliery	1882	1:10560
-	820m N	Unspecified Mine	1967	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
-	820m N	Colliery	1950	1:10560
-	823m N	Colliery	1938	1:10560
-	835m N	Colliery	1900	1:10560
-	840m S	Colliery	1882	1:10560
-	843m N	Colliery	1882	1:10560
-	945m N	Colliery	1950	1:10560
-	953m N	Air Shaft	1938	1:10560
-	953m N	Air Shaft	1900	1:10560
-	972m N	Unspecified Shafts	1882	1:10560
-	984m N	Unspecified Shafts	1882	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m **1**

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 108**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
3	375m E	Burton Road	Sand and gravel	Surface mineral working	Valid	19/11/64

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m **2**

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 108**

ID	Location	Name	Commodity	Class	Likelihood
E	228m NE	Not available	Iron Ore (Bedded)	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
-	953m N	Not available	Iron Ore (Bedded)	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m	**0**

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

This data is sourced from Peter Brett Associates (PBA).

18.8 JPB mining areas

Records on site	**1**

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

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

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	**1**

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

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

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	**0**

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

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

18.11 Gypsum areas

Records on site	**0**

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	**0**

Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

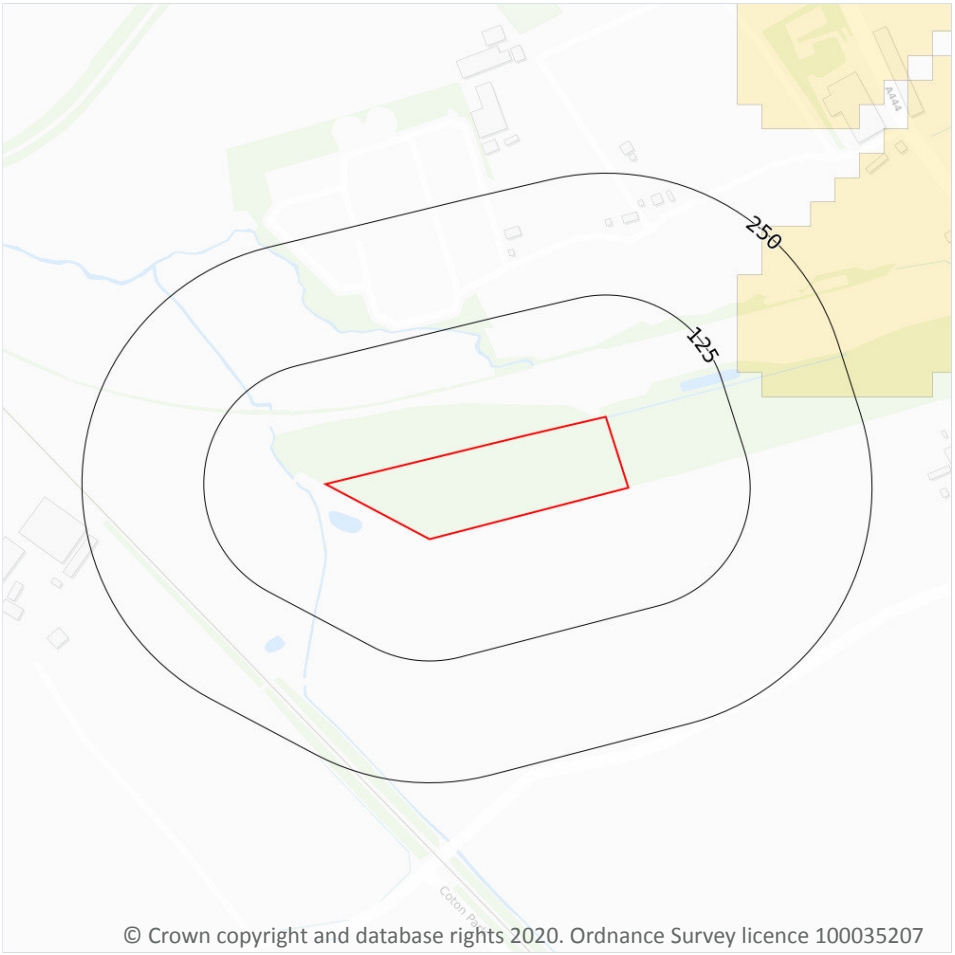
18.13 Clay mining

Records on site	**0**

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

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

19 Radon



Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

19.1 Radon

Records on site	1

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

Features are displayed on the Radon map on **page 114**

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

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

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	20

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**300 - 600 mg/kg**	**240 - 360 mg/kg**	**3.0 - 6.0 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**300 - 600 mg/kg**	**240 - 360 mg/kg**	**3.0 - 6.0 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**300 - 600 mg/kg**	**240 - 360 mg/kg**	**3.0 - 6.0 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**300 - 600 mg/kg**	**240 - 360 mg/kg**	**3.0 - 6.0 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**300 - 600 mg/kg**	**240 - 360 mg/kg**	**3.0 - 6.0 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**300 - 600 mg/kg**	**240 - 360 mg/kg**	**3.0 - 6.0 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
5m E	15 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
31m NE	15 - 25 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	3.0 - 6.0 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
31m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
41m NE	15 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m	**0**

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

This data is sourced from the British Geological Survey.

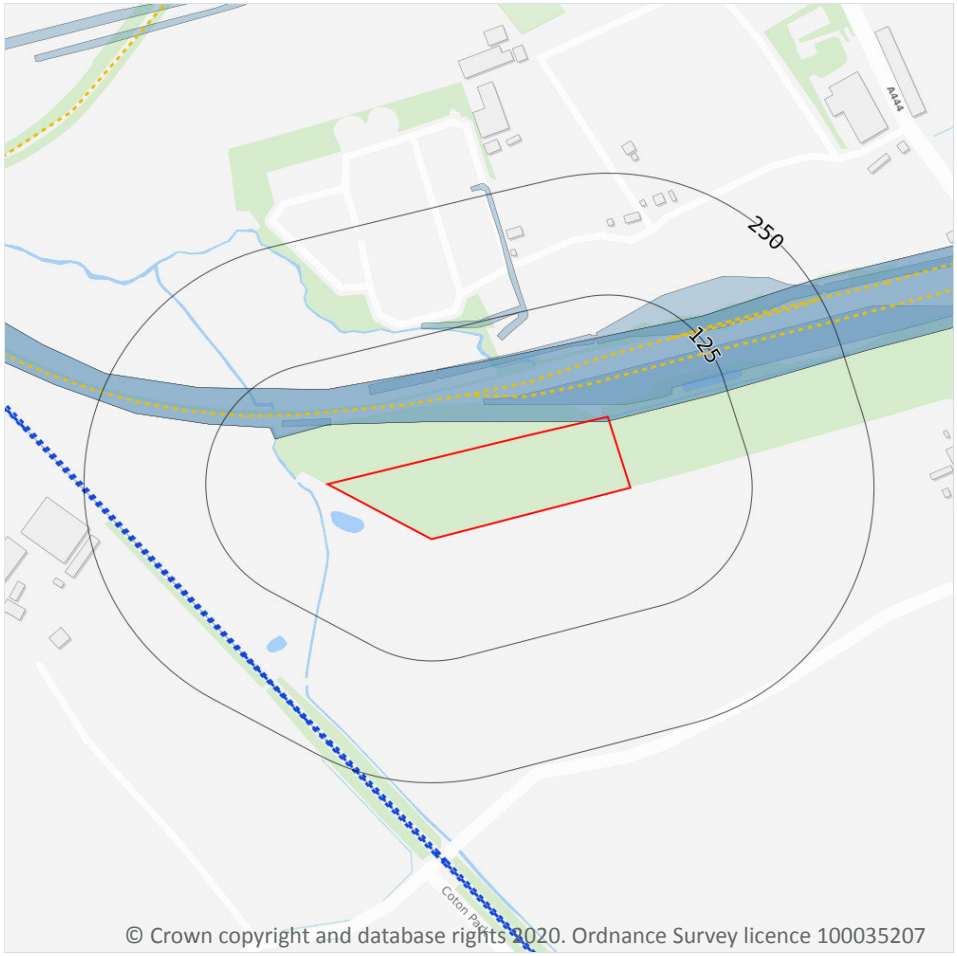
20.3 BGS Measured Urban Soil Chemistry

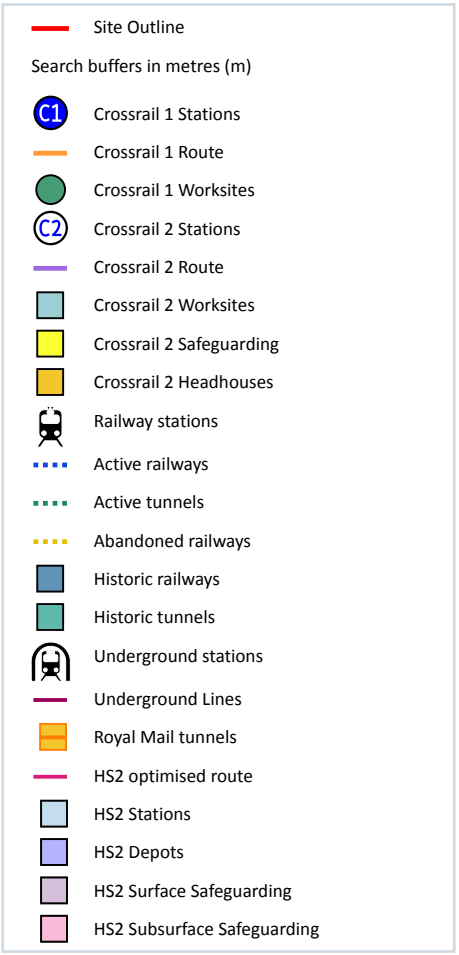
Records within 50m	**0**

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

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects





21.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m	6

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

Features are displayed on the Railway infrastructure and projects map on **page 117**

Location	Land Use	Year of mapping	Mapping scale
On site	**Railway Sidings**	**1989**	**10000**
On site	**Railway Sidings**	**1974**	**10000**
12m N	Railway Sidings	1969	2500
58m N	Railway Sidings	1969	2500
75m N	Railway	1883	-
101m N	Railway Sidings	1959	2500

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m	3

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

Features are displayed on the Railway infrastructure and projects map on **page 117**

Location	Description
37m N	Razed
53m N	Disused
104m NE	Disused

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	7

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

Features are displayed on the Railway infrastructure and projects map on **page 117**

Location	Name	Type
182m SW	Freight Line	rail
184m SW	Not given	Multi Track
185m SW	Freight Line	rail
185m SW	Not given	Multi Track
195m SW	Not given	Multi Track
224m SW	Not given	Multi Track
234m SW	Not given	Multi Track

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

Terms and conditions

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

APPENDIX 6 - Coal Authority Report

The Coal Authority

CON29M
coal mining report

CADLEY HILL FARM, CADLEY LANE, CALDWELL, SWADLINCOTE, DERBYSHIRE DE11 9EL

Known or potential coal mining risks

Past underground coal mining	Page 3
Future underground coal mining	Page 3

Further action

No further reports from the Coal Authority are required. Further information on any next steps can be found in our Professional opinion.

For more information on our reports please visit www.groundstability.com

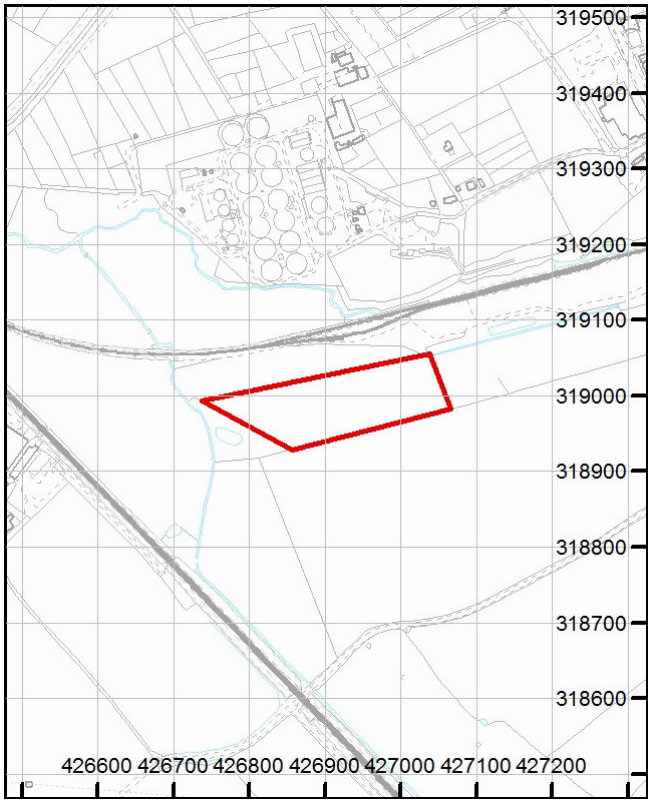
Professional opinion

According to the official mining information records held by the Coal Authority at the time of this search, evidence of, or the potential for, coal mining related features have been identified. It is unlikely that these features will impact on the stability of the enquiry boundary.

Enquiry boundary

Key

Approximate position of enquiry boundary shown



We can confirm that the location is **on the coalfield**

Map data

This report is prepared in accordance with the latest Law Society's Guidance Notes 2018, the User Guide 2018 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.

Accessibility

If you would like this information in an alternative format, please contact our communications team on 0345 762 6848 or email communications@coal.gov.uk.

Detailed findings

Information provided by the Coal Authority in this report is compiled in response to the Law Society's CON29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL.

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 130m to 260m depth, and last worked in 1956.

Any movement in the ground due to coal mining activity associated with these workings should have stopped by now.

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 received an application for, and is currently considering whether to grant a licence to remove or work coal by 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 recorded coal mine entries known to the Coal Authority 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

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

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

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

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 Coal Authority, under its Emergency Surface Hazard Call Out procedures.

12 Withdrawal of support

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

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

13 Working facilities order

The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

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.

Statutory cover

Coal mining subsidence

In the unlikely event of any coal mining related subsidence damage, the Coal Authority or the mine operator has a duty to take remedial action in respect of subsidence caused by the withdrawal of support from land or property in connection with lawful coal mining operations.

When the works are the responsibility of the Coal Authority, our dedicated public safety and subsidence team will manage the claim. The house or land owner ("the owner") is covered for these works under the terms of the Coal Mining Subsidence Act 1991 (as amended by the Coal Industry Act 1994). Please note, this Act does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

If you believe your land or property is suffering from coal mining subsidence damage and you need more information on what to do next, please use the following link to our website which sets out what your rights are and what you need to consider before making a claim.
www.gov.uk/government/publications/coal-mining-subsidence-damage-notice-form

Coal mining hazards

Our public safety and subsidence team provide a 24 hour a day, 7 days a week hazard reporting service, to help protect the public from hazards caused by past coal workings, such as a mine shaft or shallow working collapse. To report any hazards please call 01623 646 333. Further information can be found on our website: www.gov.uk/coalauthority.

Glossary

Key terms

adit - horizontal or sloped entrance to a mine

coal mining subsidence - ground movement caused by the removal of coal by underground mining

Coal Mining Subsidence Act 1991 - the Act setting out the duties of the Coal Authority to repair damage caused by coal mining subsidence

coal mining subsidence damage - damage to land, buildings or structures caused by the removal of coal by underground mining

coal seams - bed of coal of varying thickness

future opencast coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal from the surface

future underground coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal underground. Although it is unlikely, remaining coal reserves could create a possibility for future mining, which would be licensed by the Coal Authority

mine entries - collective name for shafts and adits

payments to owners of former copyhold land - historically, copyhold land gave rights to coal to the copyholder. Legislation was set up to allow others to work this coal, but they had to issue a notice and pay compensation if a copyholder came forward

shaft - vertical entry into a mine

site investigation - investigations of coal mining risks carried out with the Coal Authority's permission

stop notice - a delay to repairs because further coal mining subsidence damage may occur and it would be unwise to carry out permanent repairs

subsidence claim - a formal notice of subsidence damage to the Coal Authority since it was established on 31 October 1994

withdrawal of support - a historic notice informing landowners that the coal beneath their property was going to be worked

working facilities orders - a court order which gave permission, restricted or prevented coal mine workings

APPENDIX 7 - CIRIA Risk Assessment Methodology

Contaminated Land Risk Assessment

Contaminated Land Risk Assessment is a technique that identifies and considers the associated risk, determines whether the risks are significant and whether action needs to be taken. The four main stages of risk assessment are:

Hazard Identification ⇨ Hazard Assessment ⇨ Risk Estimation ⇨ Risk Evaluation

CLR11 outlines the framework to be followed for risk assessment in the UK. The framework is designed to be consistent with UK legislation and policies including planning. The starting point of the risk assessment is to identify the context of the problem and the objectives of the process. Under CLR11, three tiers of risk assessment exist - Preliminary, Generic Quantitative and Detailed Quantitative.

Formulating and developing a conceptual model for the site is an important requirement of risk assessment, this supports the identification and assessment of pollutant linkages. Development of the conceptual model forms the main part of preliminary risk assessment, and the model is subsequently refined or revised as more information and understanding is obtained through the risk assessment process.

Risk is a combination of the likelihood of an event occurring and the magnitude of its consequences. Therefore, both the likelihood and the consequences of an event must be taken into account when assessing risk.

The risk assessment process needs to take into account the degree of confidence required in decisions. Identification of uncertainties is an essential step in risk assessment.

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

- High likelihood: There is a pollution linkage and an 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: There is a pollution linkage and all the elements are present and in the right place, which means it is probable that an event will occur. Circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term;

- Low likelihood: There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain even over a longer period such event would take place, and is less likely in the short term;

- Unlikely: There is a pollution linkage but circumstances are such that it is improbable the event would occur even in the long term.

The severity is also classified using a system based on CIRIA C552. The terms and definitions are:

- Severe: Short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. A short-term risk to a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
  Examples – High concentrations of contaminant on surface of recreation area, major spillage of contaminants from site into controlled waters, explosion causing building to collapse;

- Medium: Chronic damage to human health ('significant harm' as defined in DETR 2000). Pollution of sensitive water resources. A significant change in a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
  Examples - Concentrations of contaminants exceed the generic assessment criteria, leaching of contaminants from a site to a Principal or Secondary Aquifer, death of species within a designated nature reserve;

- Mild: Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures, services or the environment;
  Examples – Pollution of non-classified groundwater or damage to buildings rendering it unsafe to occupy.

- Minor: harm, not necessarily significant harm, which may result in financial loss or expenditure to resolve. Non-permanent health effects to human health (easily prevented by use of personal protective clothing etc). Easily repairable effects of damage to buildings, structures and services.
  Examples – Presence of contaminants at such concentrations PPE is required during site work, loss of plants in landscaping scheme or discolouration of concrete.

Once the likelihood and severity have been determined, a risk category can be assigned using 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 the risk categories obtained from the above table are as follows together with an assessment of the further work that might be required:

- Very high: There is a high probability that severe harm could arise to a designated receptor from an identified hazard or there is evidence that severe harm is currently happening. This risk, if realised, could result in substantial liability. Urgent investigation and remediation are likely to be required;

- High: Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation is required and remedial works may be necessary in the short term and are likely over the longer term;

- Moderate: It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it would be more likely to 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 arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild;

- Very Low: There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.

APPENDIX 8 - Exploratory Hole Logs

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS01** Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 10/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES					Grass over dark brown gravelly silty sandy TOPSOIL. Gravel is subrounded fine to coarse of mixed lithology.
					0.20			
		0.40	ES					Brown gravelly SAND. Gravel is subangular to subrounded fine to coarse of mixed lithology.
		0.95	ES		0.90			Light brown slightly gravelly SAND. Gravel is subangular fine to coarse of mixed lithology.
								Becomes dark orange brown from 1.3m to 1.6m bgl.
					1.60			Light brown slightly clayey SAND.
		1.80	ES					
	▼				3.00			End of borehole at 3.00 m

1 2 3 4 5

Remarks
1. Hand dug pit to 1.2m bgl. 2. Groundwater encountered at 2.7m bgl rising to 2.5m bgl. 3. No standpipe installed.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS02**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 10/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES					Grass over dark brown gravelly silty sandy TOPSOIL. Gravel is subrounded fine to coarse of mixed lithology.
					0.40			
		0.50	ES					Brown gravelly SAND. Gravel is subangular to subrounded fine to coarse of mixed lithology.
					0.70			
								Light brown slightly clayey SAND.
		1.15	ES					
		1.85	ES					
					2.20			End of borehole at 2.20 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. No standpipe installed. 4. Hole terminated due to bedrock obstruction.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS03**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 10/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES					Grass over dark brown gravelly silty sandy TOPSOIL. Gravel is subrounded fine to coarse of mixed lithology.
					0.30			
		0.45	ES					Firm red brown slightly silty slightly sandy slightly gravelly CLAY (Desiccated). Gravel is subangular to subrounded fine to medium of mixed lithology.
		1.20	ES					*Cobble recovered at 1.4m bgl.*
					1.60			Firm to stiff friable red grey slightly gravelly CLAY. Gravel is subangular fine to coarse of mudstone.
					2.00			Brown fine to coarse SAND and subangular to subrounded fine to coarse GRAVEL of mixed lithology.
					2.50			Weak blue grey mottled red slightly clayey MUDSTONE highly weathered.
					2.60			Weak brown SANDSTONE distinctly weathered recovered as sandy gravel.
					2.70			End of borehole at 2.70 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. No standpipe installed. 4. Hole terminated due to bedrock obstruction.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS04**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 10/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES					Dark brown gravelly silty sandy clayey TOPSOIL. Gravel is subangular to angular fine to coarse of mixed lithology including slate.
		0.40	ES		0.30			Dark brown slightly gravelly clayey SAND. Gravel is subrounded fine to medium of mixed lithology.
		0.90	ES		0.65			Firm grey slightly gravelly sandy CLAY. Gravel is subangular fine to coarse of mixed lithology. *Becomes mottled orange from 0.8m bgl.*
	▼							*Clay becomes red mottled grey from 1.8m bgl to 2.5m bgl.*
					2.50			Firm grey slightly gravelly sandy CLAY. Gravel is subangular fine to coarse of mudstone.
					3.00			End of borehole at 3.00 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. Groundwater encountered at 2.1m bgl. 3. No standpipe installed.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS05**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 10/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES		0.10			MADE GROUND: Grey brown gravelly sand with low cobble content of brick and concrete. Gravel is subangular to angular fine to coarse of mixed lithology including brick.
		0.35	ES		0.20			MADE GROUND: Dark brown gravelly silty sandy topsoil. Gravel is subangular to angular fine to coarse of mixed lithology. *Concrete cobble encountered at 0.15m bgl.*
								MADE GROUND: Soft black mottled grey gravelly sandy clay. Gravel is subangular to subrounded fine to coarse of mixed lithology including brick.
					1.00			MADE GROUND: Brown black grey slightly gravelly slightly sandy clay. Gravel is subangular fine to coarse of mixed lithology. *Organic material encountered at 1.1m to 1.25m bgl.*
		1.20	ES		1.30			MADE GROUND: Brown slightly gravelly slightly sandy clay. Gravel is subangular fine to medium of mixed lithology including brick.
					2.40			MADE GROUND: Red brown sandy subangular fine to coarse gravel of mixed lithology including brick.
		2.50	ES		2.60			Firm to stiff brown grey mottled orange slightly sandy CLAY.
					3.00			End of borehole at 3.00 m

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. Standpipe installed to 2.6m (1m plain, 1.6m slotted).

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS06**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 11/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES		0.10			Grass over dark brown gravelly silty sandy TOPSOIL. Gravel is subrounded fine to coarse of mixed lithology.
		0.30	ES					Firm to stiff brown slightly sandy CLAY (desiccated). Rootlets present.
								Becomes brown green mottled orange from 0.4m to 0.85m bgl.
					0.85			Brown slightly clayey gravelly SAND. Gravel is subangular to angular fine to coarse of mixed lithology.
		1.00	ES					
		1.35	ES					
					1.50			Firm grey mottled orange slightly sandy CLAY.
								Becomes sandy from 1.85m to 2.0m bgl.
					2.00			Green brown mottled black slightly gravelly clayey SAND. Gravel is subangular fine to medium of mixed lithology.
					2.45			Firm grey mottled black slightly sandy CLAY.
					2.55			Stiff grey gravelly sandy CLAY. Gravel is subangular fine to coarse of mudstone.
					2.60			End of borehole at 2.60 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. Groundwater encountered at 2.1m bgl rising to 1.9m bgl. 3. Standpipe installed to 2.4m (1m plain, 1.4m slotted). 4. Hole terminated due to bedrock obstruction.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS07**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 11/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES		0.20			MADE GROUND: Grass over dark brown gravelly silty sandy topsoil. Gravel is subrounded fine to coarse of mixed lithology.
					0.55			MADE GROUND: Soft to firm dark grey brown sandy gravelly clay. Gravel is subangular to subrounded fine to coarse of mixed lithology including brick.
		0.65	ES					Firm grey mottled orange slightly gravelly slightly sandy CLAY. Gravel is subrounded medium to coarse of mixed lithology. Rootlets present.
		1.20	ES		1.15			Grey brown slightly clayey gravelly SAND. Gravel is subrounded fine to coarse of mixed lithology.
		1.60	ES		1.40			Dark brown gravelly SAND. Gravel is subangular to subrounded fine to coarse of mixed lithology.
					2.20			Firm red brown mottled grey CLAY. Rootlets present.
					2.40			*Clay becomes firm to stiff from 2.3m to 2.4m bgl.* End of borehole at 2.40 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. No standpipe installed. 4. Hole terminated due to bedrock obstruction.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS08**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 11/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES		0.20			Brown slightly clayey silty gravelly sandy TOPSOIL. Gravel is subangular to angular fine to medium of mixed lithology.
		0.60	ES					Dark brown slightly clayey slightly gravelly SAND. Gravel is subrounded fine to coarse of mixed lithology. Rootlets present.
								Becomes light brown and orange from 0.8m to 1.1m bgl.
		1.20	ES		1.10			Firm grey mottled orange sandy CLAY.
					1.40			Brown grey slightly clayey SAND.
					1.70			*Becomes brown red and clayey at 1.65m to 1.7m bgl.*
					1.75			Stiff grey gravelly sandy CLAY. Gravel is subangular fine to coarse of mudstone.
					1.80			Weak brown grey SANDSTONE residually weathered recovered as slightly clayey gravelly sand.
								End of borehole at 1.80 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. No standpipe installed. 4. Hole terminated due to bedrock obstruction.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS09**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 11/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES		0.15			MADE GROUND: Grey brown gravelly sandy topsoil. Gravel is subangular to angular fine to coarse of mixed lithology.
		0.45	ES					MADE GROUND: Brown gravelly sand. Gravel is subangular to angular fine to coarse of mixed lithology including brick. Rootlets present.
								Cobble of brick encountered at 0.5m bgl.
		1.00	ES		0.80			Light brown slightly clayey gravelly SAND. Gravel is subangular fine to medium of mixed lithology. Rootlets present.
					1.10			Brown clayey SAND. Rootles present.
					1.30			Firm to stiff brown grey mottled orange slightly sandy CLAY. Rootlets present.
								Becomes very sandy from 1.6m to 2.0m bgl.
					2.00			Firm grey slightly sandy CLAY.
								Becomes red mottled orange from 2.8m to 3.0m bgl.
					3.00			End of borehole at 3.00 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. No standpipe installed.

Borehole Log

GROUNDTECH CONSULTING

Borehole No. **WS10**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 11/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES					Brown gravelly sandy TOPSOIL. Gravel is subangular to subrounded fine to coarse of mixed lithology. Rootlets present.
					0.30			
		0.50	ES					Light brown gravelly SAND. Gravel is subrounded to subangular fine to coarse of mixed lithology. Rootlets present.
					0.70			
		0.85	ES					Stiff red brown slightly gravelly CLAY (Desiccated). Gravel is subangular fine to coarse of mudstone. Rootlets present.
					0.95			Extremely weak friable red brown MUDSTONE distinctly weathered recovered as gravel of mudstone.
					2.00			End of borehole at 2.00 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. No standpipe installed. 4. Hole terminated due to bedrock obstruction.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS11**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 11/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES					Brown slightly clayey gravelly sandy TOPSOIL. Gravel is subangular fine to coarse of mixed lithology.
		0.50	ES		0.45			Brown grey clayey gravelly SAND. Gravel is subrounded fine to coarse of mixed lithology. Rootlets present.
					0.80			Soft to firm red brown gravelly sandy CLAY. Gravel is subrounded to rounded fine to coarse of mixed lithology.
					1.20			Firm red brown mottled grey slightly sandy CLAY.
								Clay becomes grey mottled orange from 1.55m to 1.7m bgl.
					1.70			Orange brown slightly clayey SAND.
					2.10			Weak grey brown SANDSTONE distinctly weathered recovered as sandy gravel. Gravel is subangular fine to coarse of sandstone.
					2.20			End of borehole at 2.20 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. No standpipe installed. 4. Hole terminated due to bedrock obstruction.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS12**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 12/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES					Dark brown slightly clayey slightly gravelly sandy TOPSOIL. Gravel is subrounded to subangular fine to coarse of mixed lithology.
					0.40			
		0.50	ES					Brown slightly clayey gravelly SAND. Gravel is subangular fine to coarse of mixed lithology. Rootlets present.
					0.70			Firm grey mottled orange slightly sandy CLAY.
		0.90	ES					*Becomes sandy and slightly gravelly from 0.9m bgl.*
					1.00			Grey brown mottled orange slightly clayey gravelly SAND. Gravel is subangular fine to coarse of sandstone.
					1.35			
		1.40	ES					Grey brown clayey gravelly SAND. Gravel is subangular to angular fine to coarse of sandstone.
					1.50			End of borehole at 1.50 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. No standpipe installed.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS13**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 12/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES					Brown slightly silty gravelly sandy TOPSOIL. Gravel is subrounded fine to coarse of mixed lithology. Rootlets present.
					0.30			Brown red gravelly SAND. Gravel is subrounded fine to coarse of mixed lithology. Rootlets present.
		0.60	ES					
					1.10			Firm red brown slightly sandy CLAY (Desiccated).
		1.50	ES					
					2.65			Firm red brown gravelly sandy CLAY. Gravel is subrounded to rounded fine to coarse of mudstone.
					2.70			End of borehole at 2.70 m

1
2
3
4
5

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. No standpipe installed. 4. Hole terminated due to bedrock obstruction.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS14**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 12/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES					Brown gravelly silty sandy TOPSOIL. Gravel is subrounded fine to coarse of mixed lithology. Rootlets present.
					0.35			
		0.50	ES					Firm brown grey mottled orange slightly gravelly sandy CLAY (Desiccated). Gravel is subangular to subrounded fine to medium of mixed lithology. Rootlets present.
								Becomes red brown from 0.7m bgl.
					1.00			Weak red brown mottled grey slightly clayey MUDSTONE residually weathered. Rootlets present.
					2.00			Extremely weak grey SANDSTONE residually weathered recovered as sandy gravel.. Gravel is subangular fine sandstone.
		2.20	ES					
					2.40			End of borehole at 2.40 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. Standpipe installed to 2.4m bgl (1m plain, 1.4m slotted). 4. Hole terminated due to bedrock obstruction.

GROUNDTECH CONSULTING

Borehole Log

Borehole No. **WS15**

Sheet 1 of 1

Project Name: CADLEY HILL	Project No. 20195	Co-ords: -	Hole Type WS
Location: SWADLINCOTE		Level:	Scale 1:25
Client: WILLSHEE'S WASTE & RECYCLING		Dates: 12/08/2020 -	Logged By LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES					Brown gravelly silty sandy TOPSOIL. Gravel is subangular fine to medium of mixed lithology.
					0.40			
		0.50	ES					Brown grey mottled red slightly gravelly clayey SAND. Gravel is subangular to subrounded fine to medium of mixed lithology. Rootlets present.
								Cobble encountered at 0.55m bgl.
		0.75	ES		0.70			Soft to firm grey mottled orange slightly gravelly sandy CLAY. Gravel is subangular fine to coarse of mixed lithology.
					0.90			Brown red slightly clayey slightly gravelly SAND. Gravel is subrounded fine to coarse of mixed lithology.
		1.00	ES		1.10			Firm to stiff grey mottled orange slightly sandy CLAY. Rootlets present.
					1.20			End of borehole at 1.20 m

1 2 3 4 5

Remarks

1. Hand dug pit to 1.2m bgl. 2. No groundwater encountered. 3. No standpipe installed. 4. Hole terminated due to obstruction.

APPENDIX 9 - Geo-Environmental Testing

Certificate of Analysis

Certificate Number	20-15382
	25-Aug-20
Client	Groundtech Consulting Ltd First Floor Lloyd House Orford Ct Leigh Warrington WN7 3XJ
Our Reference	20-15382
Client Reference	20195
Order No	GRO-20195-130
Contract Title	Cadley Hill
Description	14 Soil samples, 3 Leachate samples.
Date Received	17-Aug-20
Date Started	17-Aug-20
Date Completed	25-Aug-20
Test Procedures	Identified by prefix DETSn (details on request).
Notes	Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

Adam Fenwick
Contracts Manager

UKAS TESTING
2139

Summary of Chemical Analysis
Soil Samples

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

			Lab No	1713397	1713398	1713399	1713400	1713401	1713402
			Sample ID	WS02	WS03	WS05	WS05	WS05	WS06
			Depth	0.50	0.45	0.35	2.50	1.20	0.30
			Other ID						
			Sample Type	ES	ES	ES	ES	ES	ES
			Sampling Date	11/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	11/08/2020
			Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg	7.9	9.4	12	5.4	7.0	9.1
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.2	0.5	0.2	0.3	0.1
Chromium	DETSC 2301#	0.15	mg/kg	14	19	16	14	13	24
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	23	31	46	19	25	25
Lead	DETSC 2301#	0.3	mg/kg	31	19	350	16	42	34
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	0.11	< 0.05	< 0.05	< 0.05
Nickel	DETSC 2301#	1	mg/kg	11	18	18	16	12	11
Selenium	DETSC 2301#	0.5	mg/kg	0.6	0.8	0.6	< 0.5	< 0.5	0.8
Zinc	DETSC 2301#	1	mg/kg	100	87	180	59	78	140
Inorganics									
pH	DETSC 2008#		pH	6.2	5.8	7.5	7.6	8.1	5.8
Organic matter	DETSC 2002#	0.1	%	0.6	0.2	3.9	0.9	1.9	1.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	20	18	330	140	450	39
Petroleum Hydrocarbons									
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01			< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01			< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01			< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg		< 1.5	< 1.5			< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg		< 1.2	< 1.2			< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg		< 1.5	< 1.5			< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg		< 3.4	18			10
Aliphatic C5-C35	DETSC 3072*	10	mg/kg		< 10	19			11
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01			< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01			< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01			< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg		< 0.9	< 0.9			< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg		< 0.5	< 0.5			< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg		< 0.6	< 0.6			< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg		< 1.4	< 1.4			< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg		< 10	< 10			< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg		< 10	19			11
Fuel Identification	*	to provide a qualitative interpretation				rpretation	vide a qualitative interpretation		
Benzene	DETSC 3321#	0.01	mg/kg		< 0.01	< 0.01			< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg		< 0.01	< 0.01			< 0.01
Toluene	DETSC 3321#	0.01	mg/kg		< 0.01	< 0.01			< 0.01
Xylene	DETSC 3321#	0.01	mg/kg		< 0.01	< 0.01			< 0.01
MTBE	DETSC 3321	0.01	mg/kg		< 0.01	< 0.01			< 0.01
PAHs									
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03

Key: * -not accredited. # -MCERTS (accreditation only applies if report carries the MCERTS logo). n/s -not supplied.

Summary of Chemical Analysis
Soil Samples

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

			Lab No	1713397	1713398	1713399	1713400	1713401	1713402
			Sample ID	WS02	WS03	WS05	WS05	WS05	WS06
			Depth	0.50	0.45	0.35	2.50	1.20	0.30
			Other ID						
			Sample Type	ES	ES	ES	ES	ES	ES
			Sampling Date	11/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	11/08/2020
			Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	0.04	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.08	< 0.03	0.10	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.08	< 0.03	0.09	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.04	< 0.03	0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.04	< 0.03	0.04	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.03	< 0.03	0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10	0.28	< 0.10	0.27	< 0.10

Key: * -not accredited. # -MCERTS (accreditation only applies if report carries the MCERTS logo). n/s -not supplied.

Summary of Chemical Analysis
Soil Samples

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

				Lab No	1713403	1713404	1713405	1713406	1713407	1713408
				Sample ID	WS07	WS08	WS09	WS10	WS11	WS12
				Depth	0.05	0.60	0.45	0.05	0.50	0.90
				Other ID						
				Sample Type	ES	ES	ES	ES	ES	ES
				Sampling Date	11/08/2020	11/08/2020	12/08/2020	12/08/2020	11/08/2020	12/08/2020
				Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**							
Metals										
Arsenic	DETSC 2301#	0.2	mg/kg	14	7.1	36	12	11	7.5
Cadmium	DETSC 2301#	0.1	mg/kg	0.3	0.2	0.3	0.3	0.2	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	15	12	21	16	15	12
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	33	19	44	27	24	19
Lead	DETSC 2301#	0.3	mg/kg	55	29	36	40	28	18
Mercury	DETSC 2325#	0.05	mg/kg	0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	DETSC 2301#	1	mg/kg	12	8.1	39	12	9.1	8.8
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Zinc	DETSC 2301#	1	mg/kg	110	77	90	89	69	100
Inorganics										
pH	DETSC 2008#		pH	5.6	7.3	7.4	5.1	7.3	6.8
Organic matter	DETSC 2002#	0.1	%	2.9	1.3	2.9	1.9	0.8	0.3
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	40	29	810	13	33	24
Petroleum Hydrocarbons										
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5				< 1.5	
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2				< 1.2	
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5				< 1.5	
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4				< 3.4	
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10				< 10	
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01				< 0.01	
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9				< 0.9	
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5				< 0.5	
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6				< 0.6	
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4				< 1.4	
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10				< 10	
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	< 10				< 10	
Fuel Identification	*	to provide a qualrpretation		tion to provide a qualitative interpretation					
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01	
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01	
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01	
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01				< 0.01	
MTBE	DETSC 3321	0.01	mg/kg	< 0.01				< 0.01	
PAHs										
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03

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Summary of Chemical Analysis
Soil Samples

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

			Lab No	1713403	1713404	1713405	1713406	1713407	1713408
			Sample ID	WS07	WS08	WS09	WS10	WS11	WS12
			Depth	0.05	0.60	0.45	0.05	0.50	0.90
			Other ID						
			Sample Type	ES	ES	ES	ES	ES	ES
			Sampling Date	11/08/2020	11/08/2020	12/08/2020	12/08/2020	11/08/2020	12/08/2020
			Sampling Time	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.05	< 0.03	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.07	0.03	< 0.03	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.07	< 0.03	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.04	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.03	0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10	0.22	< 0.10	< 0.10	< 0.10

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Summary of Chemical Analysis
Soil Samples

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

			Lab No	1713409	1713410
			Sample ID	WS13	WS15
			Depth	0.60	0.50
			Other ID		
			Sample Type	ES	ES
			Sampling Date	12/08/2020	12/08/2020
			Sampling Time	n/s	n/s
Test	**Method**	**LOD**	**Units**		
Metals					
Arsenic	DETSC 2301#	0.2	mg/kg	11	10
Cadmium	DETSC 2301#	0.1	mg/kg	0.3	0.5
Chromium	DETSC 2301#	0.15	mg/kg	13	14
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	46	26
Lead	DETSC 2301#	0.3	mg/kg	24	42
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05
Nickel	DETSC 2301#	1	mg/kg	14	19
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5
Zinc	DETSC 2301#	1	mg/kg	90	150
Inorganics					
pH	DETSC 2008#		pH	5.5	5.5
Organic matter	DETSC 2002#	0.1	%	0.8	2.2
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	45	74
Petroleum Hydrocarbons					
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg		
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg		
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg		
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg		
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg		
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg		
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg		
Aliphatic C5-C35	DETSC 3072*	10	mg/kg		
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg		
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg		
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg		
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg		
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg		
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg		
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg		
Aromatic C5-C35	DETSC 3072*	10	mg/kg		
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg		
Fuel Identification	*	to provide a qual			
Benzene	DETSC 3321#	0.01	mg/kg		
Ethylbenzene	DETSC 3321#	0.01	mg/kg		
Toluene	DETSC 3321#	0.01	mg/kg		
Xylene	DETSC 3321#	0.01	mg/kg		
MTBE	DETSC 3321	0.01	mg/kg		
PAHs					
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03

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Summary of Chemical Analysis
Soil Samples

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

	Lab No	1713409	1713410
	Sample ID	WS13	WS15
	Depth	0.60	0.50
	Other ID		
	Sample Type	ES	ES
	Sampling Date	12/08/2020	12/08/2020
	Sampling Time	n/s	n/s

Test	Method	LOD	Units		
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

			Lab No	1713398	1713399	1713402	1713403	1713407
			Sample ID	WS03	WS05	WS06	WS07	WS11
			Depth	0.45	0.35	0.30	0.05	0.50
			Other ID					
			Sample Type	ES	ES	ES	ES	ES
			Sampling Date	10/08/2020	10/08/2020	11/08/2020	11/08/2020	11/08/2020
			Sampling Time	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**					
VOCs								
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Key: * -not accredited. n/s -not supplied.

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

				Lab No	1713398	1713399	1713402	1713403	1713407
				Sample ID	WS03	WS05	WS06	WS07	WS11
				Depth	0.45	0.35	0.30	0.05	0.50
				Other ID					
				Sample Type	ES	ES	ES	ES	ES
				Sampling Date	10/08/2020	10/08/2020	11/08/2020	11/08/2020	11/08/2020
				Sampling Time	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
SVOCs									
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Key: * -not accredited. n/s -not supplied.

Summary of Chemical Analysis
Soil VOC/SVOC Samples

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

			Lab No	1713398	1713399	1713402	1713403	1713407
			Sample ID	WS03	WS05	WS06	WS07	WS11
			Depth	0.45	0.35	0.30	0.05	0.50
			Other ID					
			Sample Type	ES	ES	ES	ES	ES
			Sampling Date	10/08/2020	10/08/2020	11/08/2020	11/08/2020	11/08/2020
			Sampling Time	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**					
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Key: * -not accredited. n/s -not supplied.

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill
Sample Id WS05 0.35

Sample Numbers 1713399 1713411
Date Analysed 25/08/2020

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values: Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	2.3	3	5	6
DETSC 2003# Loss On Ignition	%	4.8	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETSC 3311# TPH (C10 - C40)	mg/kg	< 10	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	7.2	100	n/a	n/a
DETSC 2008# pH	pH Units	7.5	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	< 1.0	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached* mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate): Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	0.41	< 0.01	0.5	2	25
DETSC 2306 Barium as Ba	10	0.1	20	100	300
DETSC 2306 Cadmium as Cd	< 0.030	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	< 0.25	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	3.7	0.04	2	50	100
DETSC 2306 Mercury as Hg	< 0.010	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	< 1.1	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	< 0.50	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	< 0.090	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	0.21	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	< 0.25	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	10	0.1	4	50	200
DETSC 2055 Chloride as Cl	2700	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	140	1.4	10	150	500
DETSC 2055 Sulphate as SO4	46000	460	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	79000	790	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	< 2000	< 50	500	800	1000

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive Hazardous Waste

Additional Information

DETSC 2008 pH	7.5
DETSC 2009 Conductivity uS/cm	113.0
* Temperature*	19.0

Mass of Sample Kg*	0.110
Mass of dry Sample Kg*	0.095

Stage 1

Volume of Leachant L2*	0.94
Volume of Eluate VE1*	0.9

Disclaimer: *The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.*

V.2.06 ** DETS are accredited for the testing of leachates and not the leachate preparation stage which is unaccredited.*

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill
Sample Id WS05 2.50

Sample Numbers 1713400 1713412
Date Analysed 24/08/2020

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values: Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	0.6	3	5	6
DETSC 2003# Loss On Ignition	%	1.9	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETSC 3311# TPH (C10 - C40)	mg/kg	< 10	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	< 1.6	100	n/a	n/a
DETSC 2008# pH	pH Units	7.6	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	< 1.0	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached* mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate): Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	0.36	< 0.01	0.5	2	25
DETSC 2306 Barium as Ba	3.6	< 0.1	20	100	300
DETSC 2306 Cadmium as Cd	< 0.030	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	< 0.25	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	2	0.02	2	50	100
DETSC 2306 Mercury as Hg	< 0.010	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	< 1.1	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	< 0.50	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	0.097	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	< 0.17	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	< 0.25	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	10	0.1	4	50	200
DETSC 2055 Chloride as Cl	2500	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	< 100	< 0.1	10	150	500
DETSC 2055 Sulphate as SO4	11000	110	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	21000	210	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	< 2000	< 50	500	800	1000

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive Hazardous Waste

Additional Information

DETSC 2008 pH	7.7
DETSC 2009 Conductivity uS/cm	29.4
* Temperature*	19.0

Mass of Sample Kg*	0.110
Mass of dry Sample Kg*	0.096

Stage 1

Volume of Leachant L2*	0.948
Volume of Eluate VE1*	0.898

Disclaimer: *The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.*

V.2.06 ** DETS are accredited for the testing of leachates and not the leachate preparation stage which is unaccredited.*

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill
Sample Id WS05 1.20

Sample Numbers 1713401 1713413
Date Analysed 24/08/2020

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values: Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	1.2	3	5	6
DETSC 2003# Loss On Ignition	%	2.8	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETSC 3311# TPH (C10 - C40)	mg/kg	< 10	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	< 1.6	100	n/a	n/a
DETSC 2008# pH	pH Units	8.1	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	< 1.0	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached* mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate): Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	0.75	< 0.01	0.5	2	25
DETSC 2306 Barium as Ba	18	0.2	20	100	300
DETSC 2306 Cadmium as Cd	0.04	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	< 0.25	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	6.6	0.07	2	50	100
DETSC 2306 Mercury as Hg	< 0.010	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	3.5	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	0.69	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	0.32	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	0.2	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	< 0.25	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	31	0.31	4	50	200
DETSC 2055 Chloride as Cl	3500	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	< 100	< 0.1	10	150	500
DETSC 2055 Sulphate as SO4	48000	480	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	99000	990	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	3600	< 50	500	800	1000

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive Hazardous Waste

Additional Information

DETSC 2008 pH	6.3
DETSC 2009 Conductivity uS/cm	141.0
* Temperature*	19.0

Mass of Sample Kg*	0.110
Mass of dry Sample Kg*	0.096

Stage 1

Volume of Leachant L2*	0.941
Volume of Eluate VE1*	0.911

Disclaimer: *The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.*

V.2.06 ** DETS are accredited for the testing of leachates and not the leachate preparation stage which is unaccredited.*

Summary of Asbestos Analysis
Soil Samples

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
1713397	WS02 0.50	SOIL	NAD	none	A Christodoulou
1713398	WS03 0.45	SOIL	NAD	none	A Christodoulou
1713399	WS05 0.35	SOIL	NAD	none	A Christodoulou
1713400	WS05 2.50	SOIL	NAD	none	A Christodoulou
1713401	WS05 1.20	SOIL	NAD	none	A Christodoulou
1713402	WS06 0.30	SOIL	NAD	none	A Christodoulou
1713403	WS07 0.05	SOIL	NAD	none	A Christodoulou
1713404	WS08 0.60	SOIL	NAD	none	A Christodoulou
1713405	WS09 0.45	SOIL	NAD	none	A Christodoulou
1713406	WS10 0.05	SOIL	NAD	none	A Christodoulou
1713407	WS11 0.50	SOIL	NAD	none	A Christodoulou
1713408	WS12 0.90	SOIL	NAD	none	A Christodoulou
1713409	WS13 0.60	SOIL	NAD	none	A Christodoulou
1713410	WS15 0.50	SOIL	NAD	none	A Christodoulou

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * - not included in laboratory scope of accreditation.

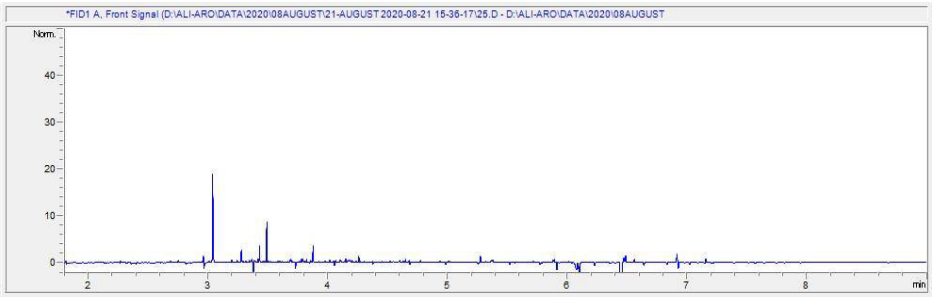
Summary of Chemical Analysis
Chromatograms

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

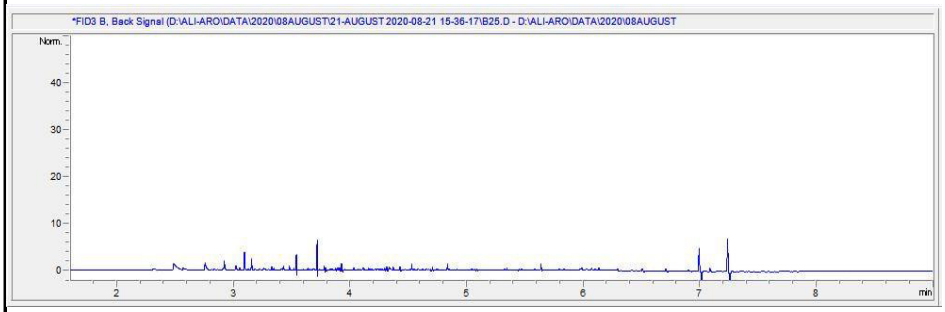
Lab No	1713398
Sample ID	WS03
Depth	0.45
Other ID	
Sample Type	SOIL
Sampling Date	08/10/2020
Sampling Time	

Test	Method	LOD	Units
Petroleum Hydrocarbons			

Chromatogram: Aliphatics *



Chromatogram: Aromatics *



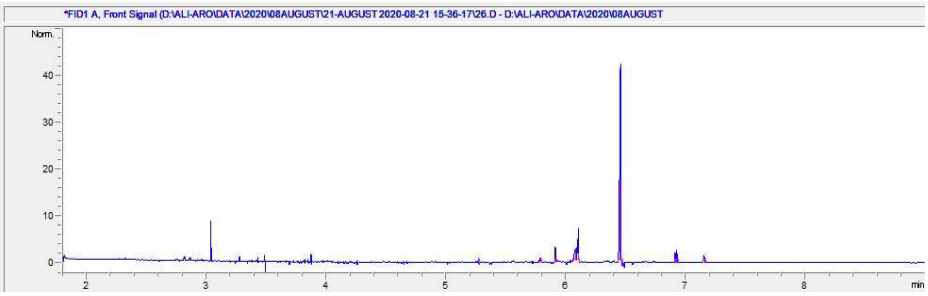
Summary of Chemical Analysis
Chromatograms

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

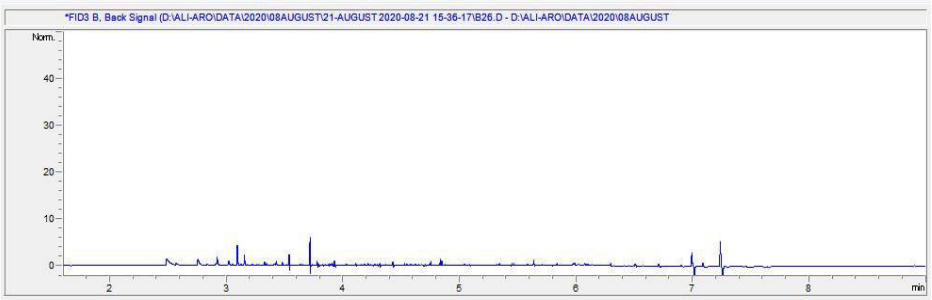
Lab No	1713399
Sample ID	WS05
Depth	0.35
Other ID	
Sample Type	SOIL
Sampling Date	08/10/2020
Sampling Time	

Test	Method	LOD	Units
Petroleum Hydrocarbons			

Chromatogram: Aliphatics *



Chromatogram: Aromatics *



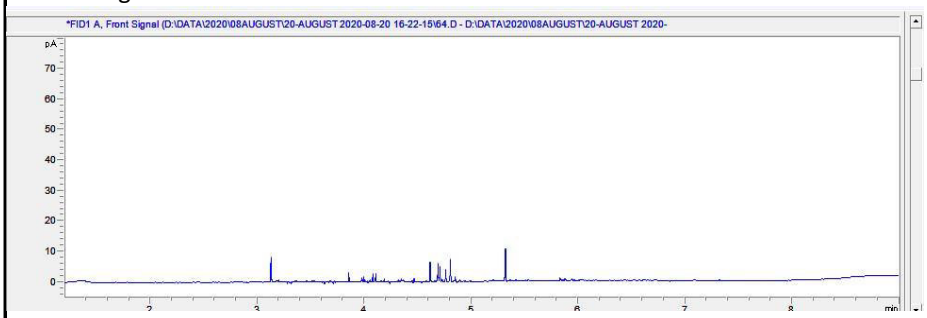
Summary of Chemical Analysis
Chromatograms

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

Lab No	1713399
Sample ID	WS05
Depth	0.35
Other ID	
Sample Type	SOIL
Sampling Date	08/10/2020
Sampling Time	

Test	**Method**	**LOD**	**Units**

Chromatogram: TPH 10-40 *



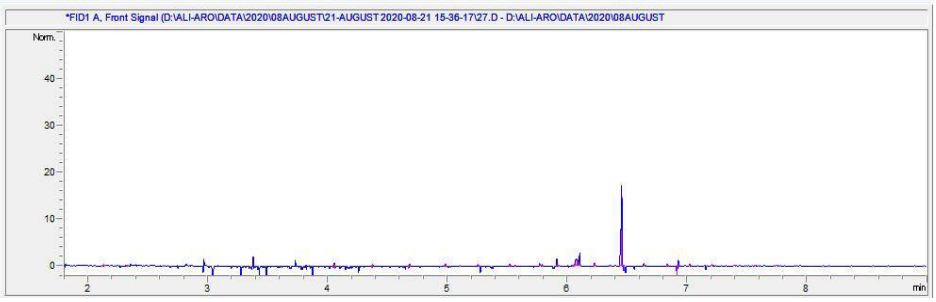
Summary of Chemical Analysis
Chromatograms

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

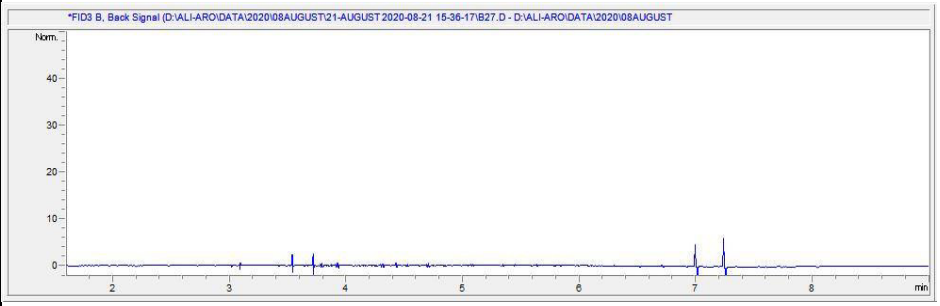
Lab No	1713402
Sample ID	WS06
Depth	0.3
Other ID	
Sample Type	SOIL
Sampling Date	08/11/2020
Sampling Time	

Test	Method	LOD	Units
Petroleum Hydrocarbons			

Chromatogram: Aliphatics *



Chromatogram: Aromatics *



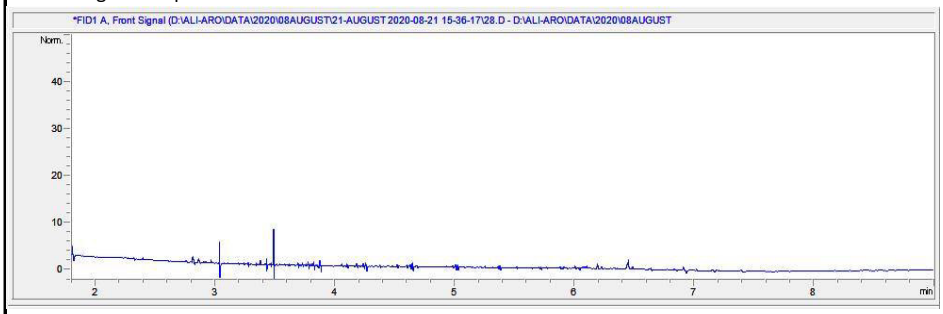
Summary of Chemical Analysis
Chromatograms

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

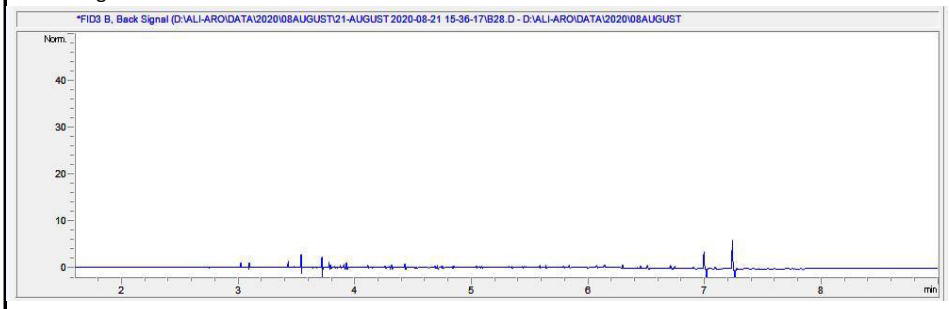
Lab No	1713403
Sample ID	WS07
Depth	0.05
Other ID	
Sample Type	SOIL
Sampling Date	08/11/2020
Sampling Time	

Test	Method	LOD	Units
Petroleum Hydrocarbons			

Chromatogram: Aliphatics *



Chromatogram: Aromatics *



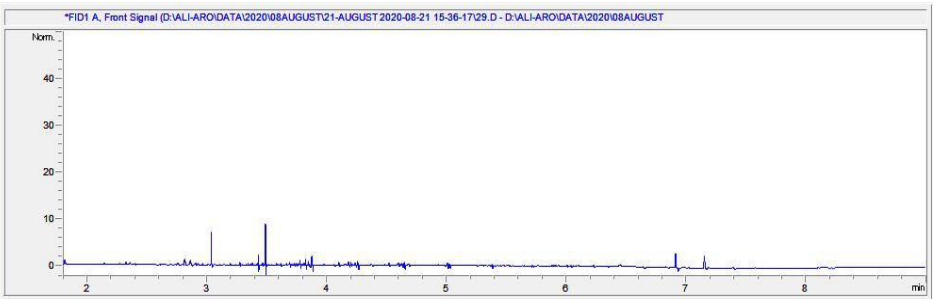
Summary of Chemical Analysis
Chromatograms

Our Ref 20-15382
Client Ref 20195
Contract Title Cadley Hill

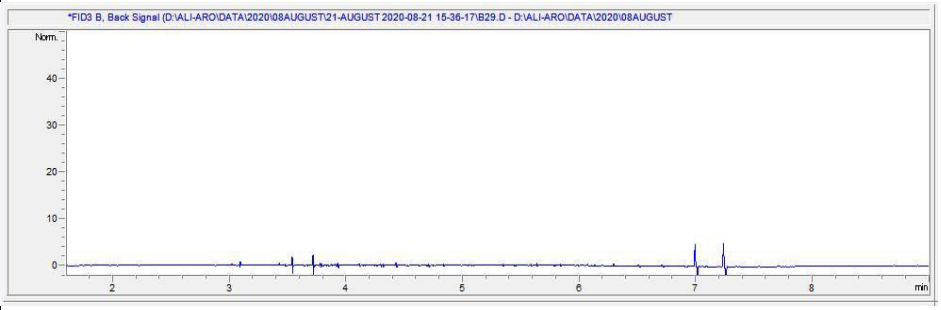
Lab No	1713407
Sample ID	WS11
Depth	0.5
Other ID	
Sample Type	SOIL
Sampling Date	08/11/2020
Sampling Time	

Test	Method	LOD	Units
Petroleum Hydrocarbons			

Chromatogram: Aliphatics *



Chromatogram: Aromatics *



Information in Support of the Analytical Results

Our Ref 20-15382
Client Ref 20195
Contract Cadley Hill

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1713397	WS02 0.50 SOIL	11/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713398	WS03 0.45 SOIL	10/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713399	WS05 0.35 SOIL	10/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713400	WS05 2.50 SOIL	10/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713401	WS05 1.20 SOIL	10/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713402	WS06 0.30 SOIL	11/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713403	WS07 0.05 SOIL	11/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713404	WS08 0.60 SOIL	11/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713405	WS09 0.45 SOIL	12/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713406	WS10 0.05 SOIL	12/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713407	WS11 0.50 SOIL	11/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713408	WS12 0.90 SOIL	12/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713409	WS13 0.60 SOIL	12/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713410	WS15 0.50 SOIL	12/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713411	WS05 0.35 LEACHATE	10/08/20	No containers logged		Cannot evaluate
1713412	WS05 2.50 LEACHATE	10/08/20	GJ 250ml, GJ 60ml, PT 1L		
1713413	WS05 1.20 LEACHATE	10/08/20	GJ 250ml, GJ 60ml, PT 1L		

Key: G-Glass P-Plastic J-Jar T-Tub

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

End of Report

APPENDIX 10 - Interim Permanent Gas Monitoring Results

PERMANENT GROUND GAS MONITORING FORM

GROUNDTECH CONSULTING

SITE NAME:	*CADLEY HILL*	***ENGINEER:***	*Josh Turton*
CLIENT:	*WILSHEE'S WASTE & RECYCLING*	***DATE:***	*01/09/2020*
JOB NO:	*20195*		

Pressure Trend:	*Rising*	***Weather:***	*Sunny*	***Equipment:***	*GFM 436*

Ambient:	O_2 (%v/v)	CH_4 (%v/v)	CO_2 (%v/v)	LEL	H_2S (ppm)	CO (ppm)
Start	20.5	0.0	0.0	0.0	0.0	0.0
Finish	20.5	0.0	0.0	0.0	0.0	0.0

BH Ref.	Gas Flow Rate (l/hr)		Borehole Pressure (mb)	Methane (%v/v)			Carbon Dioxide (%v/v)		Oxygen (%v/v)		Hydrogen Sulphide (ppm)		Carbon Monoxide (ppm)		Q_{hg} CO_2 (l/hr)	Q_{hg} CH_4 (l/hr)	Atmos Press (mb)	PID (ppm)	Sheen (Y/N)	Depth to Water (m bgl)
	Peak	Steady		Peak	Steady	LEL	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady						
WS05	0.0	0.0	0.00	0.0	0.0	0.0	7.3	2.3	5.2	14.7	0.0	0.0	0.0	0.0	0.0073	0.0000	1009	-	N	2.25
WS06	0.0	0.0	0.00	0.0	0.0	0.0	3.7	2.0	15.3	17.5	0.0	0.0	0.0	0.0	0.0037	0.0000	1009	-	N	2.35
WS14	0.0	0.0	0.00	0.0	0.0	0.0	3.8	1.7	17.1	18.5	0.0	0.0	0.0	0.0	0.0038	0.0000	1008	-	N	1.90

Notes:

APPENDIX 11 - Tier 1 Generic Screening Values

Generic Tier I Generic Assessment Criteria (GAC)

GROUNDTECH CONSULTING

Proposed End Use	Unit	Residential with Plant Uptake			Commercial			Source
SOM	%	1	2.5	6	1	2.5	6	
Arsenic	mg/kg	32	32	32	640	640	640	SGVs
Beryllium	mg/kg	1.7	1.7	1.7	12	12	12	LQM S4ULs
Boron (water soluble)	mg/kg	290	290	290	240000	240000	240000	LQM S4ULs
Cadmium	mg/kg	10	10	10	230	230	230	SGVs
Chromium (Total)	mg/kg	910	910	910	8600	8600	8600	LQM S4ULs
Chromium (VI)	mg/kg	21	21	21	49	49	49	DEFRA C4SLs
Copper	mg/kg	2400	2400	2400	68000	68000	68000	LQM S4ULs
Lead	mg/kg	200	200	200	2300	2300	2300	DEFRA C4SLs
Organic Mercury	mg/kg	1.2	1.2	1.2	26	26	26	LQM S4ULs
Nickel	mg/kg	130	130	130	1800	1800	1800	SGVs
Selenium	mg/kg	350	350	350	13000	13000	13000	SGVs
Vanadium	mg/kg	410	410	410	9000	9000	9000	LQM S4ULs
Zinc	mg/kg	3700	3700	3700	730000	730000	730000	LQM S4ULs
Aliphatic EC 5 - 6	mg/kg	42	78	160	3200 (304) [sol]	5900 (558) [sol]	12000 (1150) [sol]	LQM S4ULs
Aliphatic EC 6 - 8	mg/kg	100	230	530	7800 (144) [sol]	17000 (322) [sol]	40000 (736) [sol]	LQM S4ULs
Aliphatic EC 8 - 10	mg/kg	27	65	150	2000 (78) [sol]	4800 (190) [sol]	11000 (451) [vap]	LQM S4ULs
Aliphatic EC 10 - 12	mg/kg	130 (48) [vap]	330 (118) [vap]	760 (283) [vap]	9700 (48) [sol]	23000 (118) [vap]	47000 (283) [vap]	LQM S4ULs
Aliphatic EC 12 - 16	mg/kg	1100 (24) [sol]	2400 (59) [sol]	4300 (142) [sol]	59000 (24) [sol]	82000 (59) [sol]	90000 (142) [sol]	LQM S4ULs
Aliphatic EC 16 - 35	mg/kg	65000 (8.48) [f,sol]	92000 (21) [f,sol]	110000 [f]	1600000 [f]	1700000 [f]	1800000 [f]	LQM S4ULs
Aliphatic EC 35 - 44	mg/kg	65000 (8.48) [f,sol]	92000 (21) [f,sol]	110000 [f]	1600000 [f]	1700000 [f]	1800000 [f]	LQM S4ULs
Aromatic EC 5 - 7	mg/kg	70	140	300	26000 (1220) [sol]	46000 (2260) [sol]	86000 (4710) [sol]	LQM S4ULs
Aromatic EC 7 - 8	mg/kg	130	290	660	56000 (869) [vap]	110000 (1920)	180000 (4360)	LQM S4ULs
Aromatic EC 8 - 10	mg/kg	34	83	190	3500 (613) [vap]	8100 (1500) [vap]	17000 (3580) [vap]	LQM S4ULs
Aromatic EC 10 - 12	mg/kg	74	180	380	16000 (364) [sol]	28000 (899) [sol]	34000 (2150) [sol]	LQM S4ULs
Aromatic EC 12 -16	mg/kg	140	330	660	36000 (169) [sol]	37000	38000	LQM S4ULs
Aromatic EC 16 - 21	mg/kg	260 [f]	540 [f]	930 [f]	28000 [f]	28000 [f]	28000 [f]	LQM S4ULs
Aromatic EC 21 - 35	mg/kg	1100 [f]	1500 [f]	1700 [f]	28000 [f]	28000 [f]	28000 [f]	LQM S4ULs
Aromatic EC 35 - 44	mg/kg	1100 [f]	1500 [f]	1700 [f]	28000 [f]	28000 [f]	28000 [f]	LQM S4ULs
Benzene	mg/kg	0.33	0.33	0.33	95	95	95	SGVs
Toluene	mg/kg	610	610	610	4400	4400	4400	SGVs
Ethyl Benzene	mg/kg	350	350	350	2800	2800	2800	SGVs
Xylene - o	mg/kg	250	250	250	2600	2600	2600	SGVs
Xylene - m	mg/kg	240	240	240	3500	3500	3500	SGVs
Xylene - p	mg/kg	230	230	230	3200	3200	3200	SGVs
MTBE (methyl tert-butyl	mg/kg	49	84	160	7900	13000	24000	CL:AIRE 2010
Acenaphthene	mg/kg	210	510	1100	84000 (57) [sol]	97000 (141) [sol]	100000	LQM SAULs
Acenaphthylene	mg/kg	170	420	920	83000 (86.1) [sol]	97000 (212) [sol]	100000	LQM S4ULs
Anthracene	mg/kg	2400	5400	11000	520000	540000	540000	LQM S4ULs
Benz(a)anthracene	mg/kg	7.2	11	13	170	170	180	LQM S4ULs
Benzo(a)pyrene	mg/kg	2.2	2.7	5*	35	35	77*	DEFRA C4SL*/LQM
Benzo(b)fluoranthene	mg/kg	2.6	3.3	3.7	44	44	45	LQM S4ULs
Benzo(ghi)perylene	mg/kg	320	340	350	3900	4000	4000	LQM S4ULs
Benzo(k)fluoranthene	mg/kg	77	93	100	1200	1200	1200	LQM S4ULs
Chrysene	mg/kg	15	22	27	350	350	350	LQM S4ULs
Dibenz(ah)anthracene	mg/kg	0.24	0.28	0.3	3.5	3.6	3.6	LQM S4ULs
Fluoranthene	mg/kg	280	560	890	23000	23000	23000	LQM S4ULs
Fluorene	mg/kg	170	400	860	63000 (30.9) [sol]	68000	71000	LQM S4ULs
Indeno(123-cd)pyrene	mg/kg	27	36	41	500	510	510	LQM S4ULs
Naphthalene	mg/kg	2.3 f	5.6 f	13 f	190 [f] (76.4) [sol]	460 [f] (183) [sol]	1100 [f] (432) [sol]	LQM S4ULs
Phenanthrene	mg/kg	95	220	440	22000	22000	23000	LQM S4ULs
Pyrene	mg/kg	620	1200	2000	54000	54000	54000	LQM S4ULs

GROUNDTECH CONSULTING

Proposed End Use	Unit	Residential with Plant Uptake			Commercial			Source
SOM	%	1	2.5	6	1	2.5	6	
Phenol	mg/kg	420	420	420	3200	3200	3200	SGVs
Chlorophenols	mg/kg	0.87 [g]	2	4.5	3500	4000	4300	LQM S4ULs
Pentachlorophenol	mg/kg	0.22	0.52	1.2	400	400	400	LQM S4ULs
Carbon disulphide	mg/kg	0.14	0.29	0.62	11	22	47	LQM S4ULs
Hexachlorobutadiene	mg/kg	0.29	0.7	1.6	31	66	120	LQM S4ULs
1,1,1,2 Tetrachloroethane	mg/kg	1.6	3.4	7.5	270	550	1100	LQM S4ULs
1,1,1 Trichloroethane	mg/kg	8.8	18	39	660	1300	3000	LQM S4ULs
Trichloroethene	mg/kg	0.016	0.034	0.075	1.2	2.6	5.7	LQM S4ULs
Tetrachoromethane	mg/kg	0.026	0.056	0.13	2.9	6.3	14	LQM S4ULs
1,2-Dichloroethane	mg/kg	0.0071	0.011	0.019	0.67	0.97	1.7	LQM S4ULs
Chloroethene (Vinyl	mg/kg	0.00064	0.00087	0.0014	0.059	0.077	0.12	LQM S4ULs
Trichloromethane	mg/kg	0.91	1.7	3.4	99	170	350	LQM S4ULs
Tetrachloroethene	mg/kg	0.18	0.39	0.9	19	42	95	LQM S4ULs
Hexachlorobenzene	mg/kg	1.8 (0.2) [vap]	3.3 (0.5) [vap]	4.9	110 (0.2) [vap]	120	120	LQM S4ULs
Pentachlorobenzene	mg/kg	5.8	12	22	640 (43) [sol]	770 (107) [sol]	830	LQM S4ULs
1,2,4,5-Tetrachlorobenzene	mg/kg	0.33	0.77	1.6	42 (19.7) [sol]	72 (49.1) [sol]	96	LQM S4ULs
1,2,3,5-Tetrachlorobenzene	mg/kg	0.66	1.69	3.7	49 (39.4) [vap]	120 (98.1) [vap]	240 (235) [vap]	LQM S4ULs
1,2,3,4-Tetrachlorobenzene	mg/kg	15	36	78	1700 (122) [vap]	3080 (304) [vap]	4400 (728) [vap]	LQM S4ULs
1,3,5-Trichlorobenzene	mg/kg	0.33	0.81	1.9	23	55	130	LQM S4ULs
1,2,4-Trichlorobenzene	mg/kg	2.6	6.4	15	220	530	1300	LQM S4ULs
1,2,3-Trichlorobenzene	mg/kg	1.5	3.6	8.6	102	250	590	LQM S4ULs
1,4-dichlorobenzene	mg/kg	61 [f]	150 [f]	350 [f]	4400 [f] (224) [vap]	10000 [f] (540) [vap]	25000 [f] (1280) [vap]	LQM S4ULs
1,3-dichlorobenzene	mg/kg	0.4	1	2.3	30	73	170	LQM S4ULs
1,2-Dichlorobenzene	mg/kg	23	55	130	2000 (571) [sol]	4800 (1370) [sol]	11000 (3240) [sol]	LQM S4ULs
Chlorobenzene	mg/kg	0.46	1	2.4	56	130	290	LQM S4ULs
Gamma-	mg/kg	0.06	0.14	0.33	67	69	70	LQM S4ULs
Beta-	mg/kg	0.085	0.2	0.46	65	65	65	LQM S4ULs
Alpaha -	mg/kg	0.23	0.55	1.2	170	180	180	LQM S4ULs
Beta -Endosulfan	mg/kg	7	17	39	6300 (0.00007)	7800 (0.0002) [vap]	8700	LQM S4ULs
Alpha-Endosulfan	mg/kg	7.4	18	41	5600 (0.003) [vap]	7400 (0.007) [vap]	8400 (0.016) [vap]	LQM S4ULs
Dichlorvos	mg/kg	0.032	0.066	0.14	140	140	140	LQM S4ULs
Atrazine	mg/kg	3.3	7.6	17.4	9300	9400	9400	LQM S4ULs
Dieldrin	mg/kg	0.97	2	3.5	170	170	170	LQM S4ULs
Aldrin	mg/kg	5.7	6.6	7.1	170	170	170	LQM S4ULs
HMX	mg/kg	5.7	13	26	110000	110000	110000	LQM S4ULs
2,4,6-Trinitrotoulene	mg/kg	1.6	3.7	8.1	1000	1000	1000	LQM S4ULs
RDX	mg/kg	120	250	540	210000	210000	210000	LQM S4ULs

[sol] S4UL exceeds the solubility saturation limit (which is presented in brackets)

[vap] S4ULS presented exceeds the vapour saturation limit, which is presented in brackets

[f] For naphthalene, the S4UL is based on a comparison of inhalation exposure with the TDI_{inhal} for localised affects

[f] S4UL based on comparison of inhalation exposure with inhalation TDI for localised effects

[dir] S4ULs based on a threshold protecive direct skin contact with phenol (guideline in brackets based on health effects following long term exposure provided for illustation only

APPENDIX 12 – HazWasteOnline Report

Waste Classification Report

6WSHA-FT5EY-933WW

Job name

Cadley Hill

Description/Comments

Project

GRO-20195

Site

Cadley Hill

Related Documents

#	Name	Description
1	20-15382.hwol	.hwol file used to create the Job

Waste Stream Template

Example waste stream template for contaminated soils

Classified by

Name:
Sam Flaherty
Date:
15 Sep 2020 15:02 GMT
Telephone:
0800 1613730

Company:
Groundtech Consulting Limited
PO Box 499
Manchester
M28 8EE

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	-
Advanced Hazardous Waste Classification	-

Report

Created by: Sam Flaherty
Created date: 15 Sep 2020 15:02 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS02/0.50/2020-08-11		Non Hazardous		3
2	WS03/0.45/2020-08-10		Non Hazardous		5
3	WS05/0.35/2020-08-10		Non Hazardous		10
4	WS05/2.50/2020-08-10		Non Hazardous		16
5	WS05/1.20/2020-08-10		Non Hazardous		18
6	WS06/0.30/2020-08-11		Non Hazardous		20
7	WS07/0.05/2020-08-11		Non Hazardous		26
8	WS08/0.60/2020-08-11		Non Hazardous		31
9	WS09/0.45/2020-08-12		Non Hazardous		33
10	WS10/0.05/2020-08-12		Non Hazardous		35
11	WS11/0.50/2020-08-11		Non Hazardous		37
12	WS12/0.90/2020-08-12		Non Hazardous		42

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
13	WS13/0.60/2020-08-12		Non Hazardous		44
14	WS15/0.50/2020-08-12		Non Hazardous		46

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	48
Appendix B: Rationale for selection of metal species	51
Appendix C: Version	52

Classification of sample: WS02/0.50/2020-08-11

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS02/0.50/2020-08-11

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.9 mg/kg	1.32	10.431 mg/kg	0.00104 %		
2	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %		
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
4	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<**LOD**
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		23 mg/kg	1.126	25.895 mg/kg	0.00259 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	31 mg/kg	1.56	48.354 mg/kg	0.0031 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<**LOD**
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		11 mg/kg	2.976	32.739 mg/kg	0.00327 %		
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.6 mg/kg	2.554	1.532 mg/kg	0.000153 %		
10	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		100 mg/kg	2.774	277.415 mg/kg	0.0277 %		
11	pH			PH		6.2 pH		6.2 pH	6.2 pH		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**
14	acenaphthene		201-469-6	83-32-9		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**
15	fluorene		201-695-5	86-73-7		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
17		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-371-1	120-12-7									
18		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
19		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-883-8	191-24-2									
										Total:	0.0402 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS03/0.45/2020-08-10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS03/0.45/2020-08-10

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.4 mg/kg	1.32	12.411 mg/kg	0.00124 %		
2	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %		
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		19 mg/kg	1.462	27.77 mg/kg	0.00278 %		
4	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<**LOD**
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		31 mg/kg	1.126	34.903 mg/kg	0.00349 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	29.636 mg/kg	0.0019 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<**LOD**
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		18 mg/kg	2.976	53.573 mg/kg	0.00536 %		
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.8 mg/kg	2.554	2.043 mg/kg	0.000204 %		
10	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		87 mg/kg	2.774	241.351 mg/kg	0.0241 %		
11	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
13	benzene	601-020-00-8	200-753-7	71-43-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
14	toluene	601-021-00-3	203-625-9	108-88-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
16		xylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
17		pH				5.8	pH		5.8	pH	5.8 pH		
				PH									
18		naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
19		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
20		acenaphthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-469-6	83-32-9									
21		fluorene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-695-5	86-73-7									
22		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
23		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-371-1	120-12-7									
24		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
25		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
26		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
27		chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
28		benzo[b]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
29		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
30		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
31		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-893-2	193-39-5									
32		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
33		benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-883-8	191-24-2									
34		phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
35		1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
36		tetrachloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-028-00-4	204-825-9	127-18-4									
37		carbon tetrachloride; tetrachloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
38		trichloroethylene; trichloroethene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
39		vinyl chloride; chloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
40		hexachlorobenzene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-065-00-6	204-273-9	118-74-1									
41		aniline				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		612-008-00-7	200-539-3	62-53-3									
42		benzyl alcohol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		603-057-00-5	202-859-9	100-51-6									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
43		m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]											
		604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
44		bis(2-chloroethyl) ether											
		603-029-00-2	203-870-1	111-44-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
45		3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]											
		604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
46		bis(2-chloroethoxy)methane											
			203-920-2	111-91-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
47		2,4-dichlorophenol											
		604-011-00-7	204-429-6	120-83-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
48		chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol											
		604-014-00-3	200-431-6	59-50-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
49		2-methyl naphthalene											
			202-078-3	91-57-6		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
50		hexachlorocyclopentadiene											
		602-078-00-7	201-029-3	77-47-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
51		2,4,6-trichlorophenol											
		604-018-00-5	201-795-9	88-06-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
52		2,4,5-trichlorophenol											
		604-017-00-X	202-467-8	95-95-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
53		2-chloronaphthalene											
			202-079-9	91-58-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
54		2,4-dinitrotoluene; [1] dinitrotoluene [2]											
		609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
55		4-nitrophenol; p-nitrophenol											
		609-015-00-2	202-811-7	100-02-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
56		dibenzofuran											
			205-071-3	132-64-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
57		2,6-dinitrotoluene											
		609-049-00-8	210-106-0	606-20-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
58		2,3,4,6-tetrachlorophenol											
		604-013-00-8	200-402-8	58-90-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
59		diethyl phthalate											
			201-550-6	84-66-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
60		4-chlorophenylphenylether											
			230-281-7	7005-72-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
61		DNOC (ISO); 4,6-dinitro-o-cresol											
		609-020-00-X	208-601-1	534-52-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
62		diphenylamine											
		612-026-00-5	204-539-4	122-39-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
63		4-bromophenylphenylether											
			202-952-4	101-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
64		pentachlorophenol											
		604-002-00-8	201-778-6	87-86-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
65		dibutyl phthalate; DBP											
		607-318-00-4	201-557-4	84-74-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
66		BBP; benzyl butyl phthalate											
		607-430-00-3	201-622-7	85-68-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
67		bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP											
		607-317-00-9	204-211-0	117-81-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
68	●	di-n-octyl phthalate	204-214-7	117-84-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
69	●	dimethyl phthalate	205-011-6	131-11-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
70		azobenzene	203-102-5	103-33-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		611-001-00-6											
71	●	carbazole	201-696-0	86-74-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
72		1,1-dichloroethylene; vinylidene chloride	200-864-0	75-35-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-025-00-8											
73	●	2,2-dichloropropane	209-832-0	594-20-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
74	●	bromochloromethane	200-826-3	74-97-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
75		chloroform; trichloromethane	200-663-8	67-66-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-006-00-4											
76		1,1,1-trichloroethane; methyl chloroform	200-756-3	71-55-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-013-00-2											
77		1,1-dichloropropene	209-253-3	563-58-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-031-00-0											
78		1,2-dichloropropane; propylene dichloride	201-152-2	78-87-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-020-00-0											
79		dibromomethane	200-824-2	74-95-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-003-00-8											
80	●	bromodichloromethane	200-856-7	75-27-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
81		1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-030-00-5											
82	●	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
83		1,1,2-trichloroethane	201-166-9	79-00-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-014-00-8											
84	●	1,3-dichloropropane	205-531-3	142-28-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
85	●	dibromochloromethane	204-704-0	124-48-1		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
86		1,2-dibromoethane	203-444-5	106-93-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-010-00-6											
87		chlorobenzene	203-628-5	108-90-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-033-00-1											
88	●	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
89		styrene	202-851-5	100-42-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-026-00-0											
90		bromoform; tribromomethane	200-854-6	75-25-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-007-00-X											
91		bromobenzene	203-623-8	108-86-1		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-060-00-9											
92		1,2,3-trichloropropane	202-486-1	96-18-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-062-00-X											
93		mesitylene; 1,3,5-trimethylbenzene	203-604-4	108-67-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-025-00-5											
94	●	tert-butylbenzene	202-632-4	98-06-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
95		1,2,4-trimethylbenzene	202-436-9	95-63-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-043-00-3											
96	●	sec-butylbenzene	205-227-0	135-98-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
97	●	4-isopropyltoluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			202-796-7	99-87-6									
98		1,3-dichlorbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-067-00-7	208-792-1	541-73-1									
99		1,4-dichlorobenzene; p-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-035-00-2	203-400-5	106-46-7									
100	●	n-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			203-209-7	104-51-8									
101		1,2-dichlorobenzene; o-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-034-00-7	202-425-9	95-50-1									
102		1,2-dibromo-3-chloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-021-00-6	202-479-3	96-12-8									
103		1,2,4-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-087-00-6	204-428-0	120-82-1									
104	●	hexachlorobutadiene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-765-5	87-68-3									
105	●	1,2,3-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-757-1	87-61-6									
106		2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]									
107		o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]									
108		dinitrobenzene; [1] 1,4-dinitrobenzene; [2] 1,3-dinitrobenzene; [3] 1,2-dinitrobenzene [4]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		609-004-00-2	246-673-6 [1] 202-833-7 [2] 202-776-8 [3] 208-431-8 [4]	25154-54-5 [1] 100-25-4 [2] 99-65-0 [3] 528-29-0 [4]									
109		cumene; [1] propylbenzene [2]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]									
110		2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]									
111		1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]									
										Total:	0.0408 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS05/0.35/2020-08-10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS05/0.35/2020-08-10

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	arsenic { arsenic trioxide }		12 mg/kg	1.32	15.844 mg/kg	0.00158 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	cadmium { cadmium oxide }		0.5 mg/kg	1.142	0.571 mg/kg	0.0000571 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
	215-160-9 / 1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) oxide }		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
5	copper { dicopper oxide; copper (I) oxide }		46 mg/kg	1.126	51.791 mg/kg	0.00518 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	350 mg/kg	1.56	545.935 mg/kg	0.035 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		0.11 mg/kg	1.353	0.149 mg/kg	0.0000149 %		
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		18 mg/kg	2.976	53.573 mg/kg	0.00536 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.6 mg/kg	2.554	1.532 mg/kg	0.000153 %		
	034-002-00-8							
10	zinc { zinc chromate }		180 mg/kg	2.774	499.346 mg/kg	0.0499 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
11	TPH (C6 to C40) petroleum group		19 mg/kg		19 mg/kg	0.0019 %		
	TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
	603-181-00-X / 216-653-1 / 1634-04-4							
13	benzene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
	601-020-00-8 / 200-753-7 / 71-43-2							
14	toluene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
	601-021-00-3 / 203-625-9 / 108-88-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
16		xylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
17		pH				7.5	pH		7.5	pH	7.5 pH		
				PH									
18		naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
19		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
20		acenaphthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-469-6	83-32-9									
21		fluorene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-695-5	86-73-7									
22		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
23		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-371-1	120-12-7									
24		fluoranthene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
			205-912-4	206-44-0									
25		pyrene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
			204-927-3	129-00-0									
26		benzo[a]anthracene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		601-033-00-9	200-280-6	56-55-3									
27		chrysene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		601-048-00-0	205-923-4	218-01-9									
28		benzo[b]fluoranthene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		601-034-00-4	205-911-9	205-99-2									
29		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
30		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
31		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-893-2	193-39-5									
32		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
33		benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-883-8	191-24-2									
34		phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
35		1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
36		tetrachloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-028-00-4	204-825-9	127-18-4									
37		carbon tetrachloride; tetrachloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
38		trichloroethylene; trichloroethene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
39		vinyl chloride; chloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
40		hexachlorobenzene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-065-00-6	204-273-9	118-74-1									
41		aniline				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		612-008-00-7	200-539-3	62-53-3									
42		benzyl alcohol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		603-057-00-5	202-859-9	100-51-6									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
43		m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]											
		604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
44		bis(2-chloroethyl) ether											
		603-029-00-2	203-870-1	111-44-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
45		3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]											
		604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
46		bis(2-chloroethoxy)methane											
			203-920-2	111-91-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
47		2,4-dichlorophenol											
		604-011-00-7	204-429-6	120-83-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
48		chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol											
		604-014-00-3	200-431-6	59-50-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
49		2-methyl naphthalene											
			202-078-3	91-57-6		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
50		hexachlorocyclopentadiene											
		602-078-00-7	201-029-3	77-47-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
51		2,4,6-trichlorophenol											
		604-018-00-5	201-795-9	88-06-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
52		2,4,5-trichlorophenol											
		604-017-00-X	202-467-8	95-95-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
53		2-chloronaphthalene											
			202-079-9	91-58-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
54		2,4-dinitrotoluene; [1] dinitrotoluene [2]											
		609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
55		4-nitrophenol; p-nitrophenol											
		609-015-00-2	202-811-7	100-02-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
56		dibenzofuran											
			205-071-3	132-64-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
57		2,6-dinitrotoluene											
		609-049-00-8	210-106-0	606-20-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
58		2,3,4,6-tetrachlorophenol											
		604-013-00-8	200-402-8	58-90-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
59		diethyl phthalate											
			201-550-6	84-66-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
60		4-chlorophenylphenylether											
			230-281-7	7005-72-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
61		DNOC (ISO); 4,6-dinitro-o-cresol											
		609-020-00-X	208-601-1	534-52-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
62		diphenylamine											
		612-026-00-5	204-539-4	122-39-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
63		4-bromophenylphenylether											
			202-952-4	101-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
64		pentachlorophenol											
		604-002-00-8	201-778-6	87-86-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
65		dibutyl phthalate; DBP											
		607-318-00-4	201-557-4	84-74-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
66		BBP; benzyl butyl phthalate											
		607-430-00-3	201-622-7	85-68-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
67		bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP											
		607-317-00-9	204-211-0	117-81-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
68	●	di-n-octyl phthalate				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-214-7	117-84-0									
69	●	dimethyl phthalate				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-011-6	131-11-3									
70		azobenzene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		611-001-00-6	203-102-5	103-33-3									
71	●	carbazole				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-696-0	86-74-8									
72		1,1-dichloroethylene; vinylidene chloride				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-025-00-8	200-864-0	75-35-4									
73	●	2,2-dichloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			209-832-0	594-20-7									
74	●	bromochloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			200-826-3	74-97-5									
75		chloroform; trichloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-006-00-4	200-663-8	67-66-3									
76		1,1,1-trichloroethane; methyl chloroform				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-013-00-2	200-756-3	71-55-6									
77		1,1-dichloropropene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-031-00-0	209-253-3	563-58-6									
78		1,2-dichloropropane; propylene dichloride				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-020-00-0	201-152-2	78-87-5									
79		dibromomethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-003-00-8	200-824-2	74-95-3									
80	●	bromodichloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			200-856-7	75-27-4									
81		1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]									
82	●	trans-1,3-dichloropropene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			431-460-4	10061-02-6									
83		1,1,2-trichloroethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-014-00-8	201-166-9	79-00-5									
84	●	1,3-dichloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			205-531-3	142-28-9									
85	●	dibromochloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			204-704-0	124-48-1									
86		1,2-dibromoethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-010-00-6	203-444-5	106-93-4									
87		chlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-033-00-1	203-628-5	108-90-7									
88	●	1,1,1,2-tetrachloroethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			211-135-1	630-20-6									
89		styrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-026-00-0	202-851-5	100-42-5									
90		bromoform; tribromomethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-007-00-X	200-854-6	75-25-2									
91		bromobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-060-00-9	203-623-8	108-86-1									
92		1,2,3-trichloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-062-00-X	202-486-1	96-18-4									
93		mesitylene; 1,3,5-trimethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-025-00-5	203-604-4	108-67-8									
94	●	tert-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			202-632-4	98-06-6									
95		1,2,4-trimethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-043-00-3	202-436-9	95-63-6									
96	●	sec-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			205-227-0	135-98-8									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
97		4-isopropyltoluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			202-796-7	99-87-6									
98		1,3-dichlorbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-067-00-7	208-792-1	541-73-1									
99		1,4-dichlorobenzene; p-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-035-00-2	203-400-5	106-46-7									
100		n-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			203-209-7	104-51-8									
101		1,2-dichlorobenzene; o-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-034-00-7	202-425-9	95-50-1									
102		1,2-dibromo-3-chloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-021-00-6	202-479-3	96-12-8									
103		1,2,4-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-087-00-6	204-428-0	120-82-1									
104		hexachlorobutadiene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-765-5	87-68-3									
105		1,2,3-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-757-1	87-61-6									
106		2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]									
107		o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]									
108		dinitrobenzene; [1] 1,4-dinitrobenzene; [2] 1,3-dinitrobenzene; [3] 1,2-dinitrobenzene [4]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		609-004-00-2	246-673-6 [1] 202-833-7 [2] 202-776-8 [3] 208-431-8 [4]	25154-54-5 [1] 100-25-4 [2] 99-65-0 [3] 528-29-0 [4]									
109		cumene; [1] propylbenzene [2]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]									
110		2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]									
111		1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]									
										Total:	0.102 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No flammable at this concentration.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0019%)

Classification of sample: WS05/2.50/2020-08-10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS05/2.50/2020-08-10

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	arsenic { arsenic trioxide }		5.4 mg/kg	1.32	7.13 mg/kg	0.000713 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	cadmium { cadmium oxide }		0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
	/ 215-160-9 / 1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) oxide }		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
5	copper { dicopper oxide; copper (I) oxide }		19 mg/kg	1.126	21.392 mg/kg	0.00214 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	16 mg/kg	1.56	24.957 mg/kg	0.0016 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		16 mg/kg	2.976	47.62 mg/kg	0.00476 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8 / /							
10	zinc { zinc chromate }		59 mg/kg	2.774	163.675 mg/kg	0.0164 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
11	pH		7.6 pH		7.6 pH	7.6 pH		
	/ / PH							
12	naphthalene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	/ 205-917-1 / 208-96-8							
14	acenaphthene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	/ 201-469-6 / 83-32-9							
15	fluorene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	/ 201-695-5 / 86-73-7							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16	●	phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			201-581-5	85-01-8									
17	●	anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			204-371-1	120-12-7									
18	●	fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-912-4	206-44-0									
19	●	pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
25	●	indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
27	●	benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-883-8	191-24-2									
										Total:	0.028 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS05/1.20/2020-08-10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS05/1.20/2020-08-10

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	arsenic { arsenic trioxide }		7 mg/kg	1.32	9.242 mg/kg	0.000924 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	cadmium { cadmium oxide }		0.3 mg/kg	1.142	0.343 mg/kg	0.0000343 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		13 mg/kg	1.462	19 mg/kg	0.0019 %		
	215-160-9 / 1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) oxide }		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
5	copper { dicopper oxide; copper (I) oxide }		25 mg/kg	1.126	28.147 mg/kg	0.00281 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	42 mg/kg	1.56	65.512 mg/kg	0.0042 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		12 mg/kg	2.976	35.715 mg/kg	0.00357 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8							
10	zinc { zinc chromate }		78 mg/kg	2.774	216.383 mg/kg	0.0216 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
11	pH		8.1 pH		8.1 pH	8.1 pH		
	PH							
12	naphthalene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	205-917-1 / 208-96-8							
14	acenaphthene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	201-469-6 / 83-32-9							
15	fluorene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	201-695-5 / 86-73-7							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		phenanthrene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
			201-581-5	85-01-8									
17		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			204-371-1	120-12-7									
18		fluoranthene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
			205-912-4	206-44-0									
19		pyrene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-883-8	191-24-2									
										Total:	0.0355 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS06/0.30/2020-08-11

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS06/0.30/2020-08-11

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	arsenic { arsenic trioxide }		9.1 mg/kg	1.32	12.015 mg/kg	0.0012 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	cadmium { cadmium oxide }		0.1 mg/kg	1.142	0.114 mg/kg	0.0000114 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		24 mg/kg	1.462	35.077 mg/kg	0.00351 %		
	215-160-9 / 1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) oxide }		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
5	copper { dicopper oxide; copper (I) oxide }		25 mg/kg	1.126	28.147 mg/kg	0.00281 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	34 mg/kg	1.56	53.034 mg/kg	0.0034 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		11 mg/kg	2.976	32.739 mg/kg	0.00327 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.8 mg/kg	2.554	2.043 mg/kg	0.000204 %		
	034-002-00-8							
10	zinc { zinc chromate }		140 mg/kg	2.774	388.381 mg/kg	0.0388 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
11	TPH (C6 to C40) petroleum group		11 mg/kg		11 mg/kg	0.0011 %		
	TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-181-00-X / 216-653-1 / 1634-04-4							
13	benzene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8 / 200-753-7 / 71-43-2							
14	toluene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-021-00-3 / 203-625-9 / 108-88-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
16		xylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
17		pH				5.8	pH		5.8	pH	5.8 pH		
				PH									
18		naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
19		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
20		acenaphthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-469-6	83-32-9									
21		fluorene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-695-5	86-73-7									
22		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
23		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-371-1	120-12-7									
24		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
25		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
26		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
27		chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
28		benzo[b]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
29		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
30		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
31		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-893-2	193-39-5									
32		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
33		benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-883-8	191-24-2									
34		phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
35		1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
36		tetrachloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-028-00-4	204-825-9	127-18-4									
37		carbon tetrachloride; tetrachloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
38		trichloroethylene; trichloroethene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
39		vinyl chloride; chloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
40		hexachlorobenzene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-065-00-6	204-273-9	118-74-1									
41		aniline				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		612-008-00-7	200-539-3	62-53-3									
42		benzyl alcohol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		603-057-00-5	202-859-9	100-51-6									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
43		m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]											
		604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
44		bis(2-chloroethyl) ether											
		603-029-00-2	203-870-1	111-44-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
45		3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]											
		604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
46		bis(2-chloroethoxy)methane											
			203-920-2	111-91-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
47		2,4-dichlorophenol											
		604-011-00-7	204-429-6	120-83-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
48		chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol											
		604-014-00-3	200-431-6	59-50-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
49		2-methyl naphthalene											
			202-078-3	91-57-6		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
50		hexachlorocyclopentadiene											
		602-078-00-7	201-029-3	77-47-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
51		2,4,6-trichlorophenol											
		604-018-00-5	201-795-9	88-06-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
52		2,4,5-trichlorophenol											
		604-017-00-X	202-467-8	95-95-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
53		2-chloronaphthalene											
			202-079-9	91-58-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
54		2,4-dinitrotoluene; [1] dinitrotoluene [2]											
		609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
55		4-nitrophenol; p-nitrophenol											
		609-015-00-2	202-811-7	100-02-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
56		dibenzofuran											
			205-071-3	132-64-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
57		2,6-dinitrotoluene											
		609-049-00-8	210-106-0	606-20-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
58		2,3,4,6-tetrachlorophenol											
		604-013-00-8	200-402-8	58-90-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
59		diethyl phthalate											
			201-550-6	84-66-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
60		4-chlorophenylphenylether											
			230-281-7	7005-72-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
61		DNOC (ISO); 4,6-dinitro-o-cresol											
		609-020-00-X	208-601-1	534-52-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
62		diphenylamine											
		612-026-00-5	204-539-4	122-39-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
63		4-bromophenylphenylether											
			202-952-4	101-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
64		pentachlorophenol											
		604-002-00-8	201-778-6	87-86-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
65		dibutyl phthalate; DBP											
		607-318-00-4	201-557-4	84-74-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
66		BBP; benzyl butyl phthalate											
		607-430-00-3	201-622-7	85-68-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
67		bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP											
		607-317-00-9	204-211-0	117-81-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
68	●	di-n-octyl phthalate				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-214-7	117-84-0									
69	●	dimethyl phthalate				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-011-6	131-11-3									
70		azobenzene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		611-001-00-6	203-102-5	103-33-3									
71	●	carbazole				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-696-0	86-74-8									
72		1,1-dichloroethylene; vinylidene chloride				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-025-00-8	200-864-0	75-35-4									
73	●	2,2-dichloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			209-832-0	594-20-7									
74	●	bromochloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			200-826-3	74-97-5									
75		chloroform; trichloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-006-00-4	200-663-8	67-66-3									
76		1,1,1-trichloroethane; methyl chloroform				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-013-00-2	200-756-3	71-55-6									
77		1,1-dichloropropene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-031-00-0	209-253-3	563-58-6									
78		1,2-dichloropropane; propylene dichloride				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-020-00-0	201-152-2	78-87-5									
79		dibromomethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-003-00-8	200-824-2	74-95-3									
80	●	bromodichloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			200-856-7	75-27-4									
81		1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]									
82	●	trans-1,3-dichloropropene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			431-460-4	10061-02-6									
83		1,1,2-trichloroethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-014-00-8	201-166-9	79-00-5									
84	●	1,3-dichloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			205-531-3	142-28-9									
85	●	dibromochloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			204-704-0	124-48-1									
86		1,2-dibromoethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-010-00-6	203-444-5	106-93-4									
87		chlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-033-00-1	203-628-5	108-90-7									
88	●	1,1,1,2-tetrachloroethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			211-135-1	630-20-6									
89		styrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-026-00-0	202-851-5	100-42-5									
90		bromoform; tribromomethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-007-00-X	200-854-6	75-25-2									
91		bromobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-060-00-9	203-623-8	108-86-1									
92		1,2,3-trichloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-062-00-X	202-486-1	96-18-4									
93		mesitylene; 1,3,5-trimethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-025-00-5	203-604-4	108-67-8									
94	●	tert-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			202-632-4	98-06-6									
95		1,2,4-trimethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-043-00-3	202-436-9	95-63-6									
96	●	sec-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			205-227-0	135-98-8									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
97		4-isopropyltoluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			202-796-7	99-87-6									
98		1,3-dichlorbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-067-00-7	208-792-1	541-73-1									
99		1,4-dichlorobenzene; p-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-035-00-2	203-400-5	106-46-7									
100		n-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			203-209-7	104-51-8									
101		1,2-dichlorobenzene; o-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-034-00-7	202-425-9	95-50-1									
102		1,2-dibromo-3-chloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-021-00-6	202-479-3	96-12-8									
103		1,2,4-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-087-00-6	204-428-0	120-82-1									
104		hexachlorobutadiene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-765-5	87-68-3									
105		1,2,3-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-757-1	87-61-6									
106		2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]									
107		o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]									
108		dinitrobenzene; [1] 1,4-dinitrobenzene; [2] 1,3-dinitrobenzene; [3] 1,2-dinitrobenzene [4]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		609-004-00-2	246-673-6 [1] 202-833-7 [2] 202-776-8 [3] 208-431-8 [4]	25154-54-5 [1] 100-25-4 [2] 99-65-0 [3] 528-29-0 [4]									
109		cumene; [1] propylbenzene [2]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]									
110		2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]									
111		1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]									
										Total:	0.0551 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No flammable at this concentration.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0011%)

Classification of sample: WS07/0.05/2020-08-11

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS07/0.05/2020-08-11

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	arsenic { arsenic trioxide }		14 mg/kg	1.32	18.485 mg/kg	0.00185 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	cadmium { cadmium oxide }		0.3 mg/kg	1.142	0.343 mg/kg	0.0000343 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
	215-160-9 / 1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) oxide }		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
5	copper { dicopper oxide; copper (I) oxide }		33 mg/kg	1.126	37.154 mg/kg	0.00372 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	55 mg/kg	1.56	85.79 mg/kg	0.0055 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		0.09 mg/kg	1.353	0.122 mg/kg	0.0000122 %		
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		12 mg/kg	2.976	35.715 mg/kg	0.00357 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8							
10	zinc { zinc chromate }		110 mg/kg	2.774	305.156 mg/kg	0.0305 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
11	TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
	TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-181-00-X / 216-653-1 / 1634-04-4							
13	benzene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8 / 200-753-7 / 71-43-2							
14	toluene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-021-00-3 / 203-625-9 / 108-88-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
16		xylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
17		pH				5.6	pH		5.6	pH	5.6 pH		
				PH									
18		naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
19		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
20		acenaphthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-469-6	83-32-9									
21		fluorene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-695-5	86-73-7									
22		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
23		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-371-1	120-12-7									
24		fluoranthene				0.4	mg/kg		0.4	mg/kg	0.00004 %		
			205-912-4	206-44-0									
25		pyrene				0.4	mg/kg		0.4	mg/kg	0.00004 %		
			204-927-3	129-00-0									
26		benzo[a]anthracene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
		601-033-00-9	200-280-6	56-55-3									
27		chrysene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
		601-048-00-0	205-923-4	218-01-9									
28		benzo[b]fluoranthene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
		601-034-00-4	205-911-9	205-99-2									
29		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
30		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
31		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-893-2	193-39-5									
32		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
33		benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-883-8	191-24-2									
34		phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
35		1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
36		tetrachloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-028-00-4	204-825-9	127-18-4									
37		carbon tetrachloride; tetrachloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
38		trichloroethylene; trichloroethene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
39		vinyl chloride; chloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
40		hexachlorobenzene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-065-00-6	204-273-9	118-74-1									
41		aniline				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		612-008-00-7	200-539-3	62-53-3									
42		benzyl alcohol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		603-057-00-5	202-859-9	100-51-6									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
43		m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]											
		604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
44		bis(2-chloroethyl) ether											
		603-029-00-2	203-870-1	111-44-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
45		3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]											
		604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
46		bis(2-chloroethoxy)methane											
			203-920-2	111-91-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
47		2,4-dichlorophenol											
		604-011-00-7	204-429-6	120-83-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
48		chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol											
		604-014-00-3	200-431-6	59-50-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
49		2-methyl naphthalene											
			202-078-3	91-57-6		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
50		hexachlorocyclopentadiene											
		602-078-00-7	201-029-3	77-47-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
51		2,4,6-trichlorophenol											
		604-018-00-5	201-795-9	88-06-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
52		2,4,5-trichlorophenol											
		604-017-00-X	202-467-8	95-95-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
53		2-chloronaphthalene											
			202-079-9	91-58-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
54		2,4-dinitrotoluene; [1] dinitrotoluene [2]											
		609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
55		4-nitrophenol; p-nitrophenol											
		609-015-00-2	202-811-7	100-02-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
56		dibenzofuran											
			205-071-3	132-64-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
57		2,6-dinitrotoluene											
		609-049-00-8	210-106-0	606-20-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
58		2,3,4,6-tetrachlorophenol											
		604-013-00-8	200-402-8	58-90-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
59		diethyl phthalate											
			201-550-6	84-66-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
60		4-chlorophenylphenylether											
			230-281-7	7005-72-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
61		DNOC (ISO); 4,6-dinitro-o-cresol											
		609-020-00-X	208-601-1	534-52-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
62		diphenylamine											
		612-026-00-5	204-539-4	122-39-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
63		4-bromophenylphenylether											
			202-952-4	101-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
64		pentachlorophenol											
		604-002-00-8	201-778-6	87-86-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
65		dibutyl phthalate; DBP											
		607-318-00-4	201-557-4	84-74-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
66		BBP; benzyl butyl phthalate											
		607-430-00-3	201-622-7	85-68-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
67		bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP											
		607-317-00-9	204-211-0	117-81-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
68	●	di-n-octyl phthalate	204-214-7	117-84-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
69	●	dimethyl phthalate	205-011-6	131-11-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
70		azobenzene 611-001-00-6	203-102-5	103-33-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
71	●	carbazole	201-696-0	86-74-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
72		1,1-dichloroethylene; vinylidene chloride 602-025-00-8	200-864-0	75-35-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
73	●	2,2-dichloropropane	209-832-0	594-20-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
74	●	bromochloromethane	200-826-3	74-97-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
75		chloroform; trichloromethane 602-006-00-4	200-663-8	67-66-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
76		1,1,1-trichloroethane; methyl chloroform 602-013-00-2	200-756-3	71-55-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
77		1,1-dichloropropene 602-031-00-0	209-253-3	563-58-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
78		1,2-dichloropropane; propylene dichloride 602-020-00-0	201-152-2	78-87-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
79		dibromomethane 602-003-00-8	200-824-2	74-95-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
80	●	bromodichloromethane	200-856-7	75-27-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
81		1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2] 602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
82	●	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
83		1,1,2-trichloroethane 602-014-00-8	201-166-9	79-00-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
84	●	1,3-dichloropropane	205-531-3	142-28-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
85	●	dibromochloromethane	204-704-0	124-48-1		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
86		1,2-dibromoethane 602-010-00-6	203-444-5	106-93-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
87		chlorobenzene 602-033-00-1	203-628-5	108-90-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
88	●	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
89		styrene 601-026-00-0	202-851-5	100-42-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
90		bromoform; tribromomethane 602-007-00-X	200-854-6	75-25-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
91		bromobenzene 602-060-00-9	203-623-8	108-86-1		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
92		1,2,3-trichloropropane 602-062-00-X	202-486-1	96-18-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
93		mesitylene; 1,3,5-trimethylbenzene 601-025-00-5	203-604-4	108-67-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
94	●	tert-butylbenzene	202-632-4	98-06-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
95		1,2,4-trimethylbenzene 601-043-00-3	202-436-9	95-63-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
96	●	sec-butylbenzene	205-227-0	135-98-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
97		4-isopropyltoluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			202-796-7	99-87-6									
98		1,3-dichlorbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-067-00-7	208-792-1	541-73-1									
99		1,4-dichlorobenzene; p-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-035-00-2	203-400-5	106-46-7									
100		n-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			203-209-7	104-51-8									
101		1,2-dichlorobenzene; o-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-034-00-7	202-425-9	95-50-1									
102		1,2-dibromo-3-chloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-021-00-6	202-479-3	96-12-8									
103		1,2,4-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-087-00-6	204-428-0	120-82-1									
104		hexachlorobutadiene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-765-5	87-68-3									
105		1,2,3-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-757-1	87-61-6									
106		2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]									
107		o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]									
108		dinitrobenzene; [1] 1,4-dinitrobenzene; [2] 1,3-dinitrobenzene; [3] 1,2-dinitrobenzene [4]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		609-004-00-2	246-673-6 [1] 202-833-7 [2] 202-776-8 [3] 208-431-8 [4]	25154-54-5 [1] 100-25-4 [2] 99-65-0 [3] 528-29-0 [4]									
109		cumene; [1] propylbenzene [2]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]									
110		2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]									
111		1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]									
										Total:	0.0493 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS08/0.60/2020-08-11

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS08/0.60/2020-08-11

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.1 mg/kg	1.32	9.374 mg/kg	0.000937 %		
2	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %		
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
4	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<**LOD**
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		19 mg/kg	1.126	21.392 mg/kg	0.00214 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	29 mg/kg	1.56	45.235 mg/kg	0.0029 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<**LOD**
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		8.1 mg/kg	2.976	24.108 mg/kg	0.00241 %		
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<**LOD**
10	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		77 mg/kg	2.774	213.609 mg/kg	0.0214 %		
11	pH			PH		7.3 pH		7.3 pH	7.3 pH		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**
14	acenaphthene		201-469-6	83-32-9		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**
15	fluorene		201-695-5	86-73-7		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
17		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-371-1	120-12-7									
18		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
19		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-883-8	191-24-2									
										Total:	0.0319 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS09/0.45/2020-08-12

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS09/0.45/2020-08-12

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		36	mg/kg	1.32	47.532	mg/kg	0.00475 %		
2	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.3	mg/kg	1.142	0.343	mg/kg	0.0000343 %		
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21	mg/kg	1.462	30.693	mg/kg	0.00307 %		
4	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		44	mg/kg	1.126	49.539	mg/kg	0.00495 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	36	mg/kg	1.56	56.153	mg/kg	0.0036 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.00000677 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		39	mg/kg	2.976	116.074	mg/kg	0.0116 %		
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
10	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		90	mg/kg	2.774	249.673	mg/kg	0.025 %		
11	pH			PH		7.4	pH		7.4	pH	7.4 pH		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
14	acenaphthene		201-469-6	83-32-9		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
15	fluorene		201-695-5	86-73-7		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		phenanthrene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
			201-581-5	85-01-8									
17		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			204-371-1	120-12-7									
18		fluoranthene				0.07	mg/kg		0.07	mg/kg	0.000007 %		
			205-912-4	206-44-0									
19		pyrene				0.07	mg/kg		0.07	mg/kg	0.000007 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-883-8	191-24-2									
										Total:	0.0534 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS10/0.05/2020-08-12

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS10/0.05/2020-08-12

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12	mg/kg	1.32	15.844	mg/kg	0.00158 %		
2	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.3	mg/kg	1.142	0.343	mg/kg	0.0000343 %		
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		16	mg/kg	1.462	23.385	mg/kg	0.00234 %		
4	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		27	mg/kg	1.126	30.399	mg/kg	0.00304 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	40	mg/kg	1.56	62.393	mg/kg	0.004 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.00000677 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		12	mg/kg	2.976	35.715	mg/kg	0.00357 %		
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
10	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		89	mg/kg	2.774	246.899	mg/kg	0.0247 %		
11	pH			PH		5.1	pH		5.1	pH	5.1 pH		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
14	acenaphthene		201-469-6	83-32-9		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
15	fluorene		201-695-5	86-73-7		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
17		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-371-1	120-12-7									
18		fluoranthene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
			205-912-4	206-44-0									
19		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-883-8	191-24-2									
										Total:	0.0396 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS11/0.50/2020-08-11

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS11/0.50/2020-08-11

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11 mg/kg	1.32	14.524 mg/kg	0.00145 %		
2	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %		
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
4	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24 mg/kg	1.126	27.021 mg/kg	0.0027 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	28 mg/kg	1.56	43.675 mg/kg	0.0028 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		9.1 mg/kg	2.976	27.084 mg/kg	0.00271 %		
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
10	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		69 mg/kg	2.774	191.416 mg/kg	0.0191 %		
11	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
13	benzene	601-020-00-8	200-753-7	71-43-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
14	toluene	601-021-00-3	203-625-9	108-88-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
16		xylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
17	●	pH				7.3	pH		7.3	pH	7.3 pH		
				PH									
18		naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
19	●	acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
20	●	acenaphthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-469-6	83-32-9									
21	●	fluorene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-695-5	86-73-7									
22	●	phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
23	●	anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-371-1	120-12-7									
24	●	fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
25	●	pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
26		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
27		chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
28		benzo[b]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
29		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
30		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
31	●	indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-893-2	193-39-5									
32		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
33	●	benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-883-8	191-24-2									
34		phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
35	●	1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
36		tetrachloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-028-00-4	204-825-9	127-18-4									
37		carbon tetrachloride; tetrachloromethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
38		trichloroethylene; trichloroethene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
39		vinyl chloride; chloroethylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
40		hexachlorobenzene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-065-00-6	204-273-9	118-74-1									
41		aniline				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		612-008-00-7	200-539-3	62-53-3									
42		benzyl alcohol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		603-057-00-5	202-859-9	100-51-6									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
43		m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]											
		604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
44		bis(2-chloroethyl) ether											
		603-029-00-2	203-870-1	111-44-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
45		3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]											
		604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
46		bis(2-chloroethoxy)methane											
			203-920-2	111-91-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
47		2,4-dichlorophenol											
		604-011-00-7	204-429-6	120-83-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
48		chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol											
		604-014-00-3	200-431-6	59-50-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
49		2-methyl naphthalene											
			202-078-3	91-57-6		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
50		hexachlorocyclopentadiene											
		602-078-00-7	201-029-3	77-47-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
51		2,4,6-trichlorophenol											
		604-018-00-5	201-795-9	88-06-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
52		2,4,5-trichlorophenol											
		604-017-00-X	202-467-8	95-95-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
53		2-chloronaphthalene											
			202-079-9	91-58-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
54		2,4-dinitrotoluene; [1] dinitrotoluene [2]											
		609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
55		4-nitrophenol; p-nitrophenol											
		609-015-00-2	202-811-7	100-02-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
56		dibenzofuran											
			205-071-3	132-64-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
57		2,6-dinitrotoluene											
		609-049-00-8	210-106-0	606-20-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
58		2,3,4,6-tetrachlorophenol											
		604-013-00-8	200-402-8	58-90-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
59		diethyl phthalate											
			201-550-6	84-66-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
60		4-chlorophenylphenylether											
			230-281-7	7005-72-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
61		DNOC (ISO); 4,6-dinitro-o-cresol											
		609-020-00-X	208-601-1	534-52-1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
62		diphenylamine											
		612-026-00-5	204-539-4	122-39-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
63		4-bromophenylphenylether											
			202-952-4	101-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
64		pentachlorophenol											
		604-002-00-8	201-778-6	87-86-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
65		dibutyl phthalate; DBP											
		607-318-00-4	201-557-4	84-74-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
66		BBP; benzyl butyl phthalate											
		607-430-00-3	201-622-7	85-68-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
67		bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP											
		607-317-00-9	204-211-0	117-81-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
68	●	di-n-octyl phthalate	204-214-7	117-84-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
69	●	dimethyl phthalate	205-011-6	131-11-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
70		azobenzene 611-001-00-6	203-102-5	103-33-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
71	●	carbazole	201-696-0	86-74-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
72		1,1-dichloroethylene; vinylidene chloride 602-025-00-8	200-864-0	75-35-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
73	●	2,2-dichloropropane	209-832-0	594-20-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
74	●	bromochloromethane	200-826-3	74-97-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
75		chloroform; trichloromethane 602-006-00-4	200-663-8	67-66-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
76		1,1,1-trichloroethane; methyl chloroform 602-013-00-2	200-756-3	71-55-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
77		1,1-dichloropropene 602-031-00-0	209-253-3	563-58-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
78		1,2-dichloropropane; propylene dichloride 602-020-00-0	201-152-2	78-87-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
79		dibromomethane 602-003-00-8	200-824-2	74-95-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
80	●	bromodichloromethane	200-856-7	75-27-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
81		1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2] 602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
82	●	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
83		1,1,2-trichloroethane 602-014-00-8	201-166-9	79-00-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
84	●	1,3-dichloropropane	205-531-3	142-28-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
85	●	dibromochloromethane	204-704-0	124-48-1		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
86		1,2-dibromoethane 602-010-00-6	203-444-5	106-93-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
87		chlorobenzene 602-033-00-1	203-628-5	108-90-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
88	●	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
89		styrene 601-026-00-0	202-851-5	100-42-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
90		bromoform; tribromomethane 602-007-00-X	200-854-6	75-25-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
91		bromobenzene 602-060-00-9	203-623-8	108-86-1		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
92		1,2,3-trichloropropane 602-062-00-X	202-486-1	96-18-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
93		mesitylene; 1,3,5-trimethylbenzene 601-025-00-5	203-604-4	108-67-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
94	●	tert-butylbenzene	202-632-4	98-06-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
95		1,2,4-trimethylbenzene 601-043-00-3	202-436-9	95-63-6		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
96	●	sec-butylbenzene	205-227-0	135-98-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
97	●	4-isopropyltoluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			202-796-7	99-87-6									
98		1,3-dichlorbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-067-00-7	208-792-1	541-73-1									
99		1,4-dichlorobenzene; p-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-035-00-2	203-400-5	106-46-7									
100	●	n-butylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			203-209-7	104-51-8									
101		1,2-dichlorobenzene; o-dichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-034-00-7	202-425-9	95-50-1									
102		1,2-dibromo-3-chloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-021-00-6	202-479-3	96-12-8									
103		1,2,4-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		602-087-00-6	204-428-0	120-82-1									
104	●	hexachlorobutadiene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-765-5	87-68-3									
105	●	1,2,3-trichlorobenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-757-1	87-61-6									
106		2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]									
107		o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]									
108		dinitrobenzene; [1] 1,4-dinitrobenzene; [2] 1,3-dinitrobenzene; [3] 1,2-dinitrobenzene [4]				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		609-004-00-2	246-673-6 [1] 202-833-7 [2] 202-776-8 [3] 208-431-8 [4]	25154-54-5 [1] 100-25-4 [2] 99-65-0 [3] 528-29-0 [4]									
109		cumene; [1] propylbenzene [2]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]									
110		2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]									
111		1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]									
										Total:	0.0329 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS12/0.90/2020-08-12

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS12/0.90/2020-08-12

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	arsenic { arsenic trioxide }		7.5 mg/kg	1.32	9.902 mg/kg	0.00099 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	cadmium { cadmium oxide }		<0.1 mg/kg	1.142	<0.114 mg/kg	<0.0000114 %		<LOD
	048-002-00-0 / 215-146-2 / 1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
	215-160-9 / 1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) oxide }		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
5	copper { dicopper oxide; copper (I) oxide }		19 mg/kg	1.126	21.392 mg/kg	0.00214 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	18 mg/kg	1.56	28.077 mg/kg	0.0018 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		8.8 mg/kg	2.976	26.191 mg/kg	0.00262 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8							
10	zinc { zinc chromate }		100 mg/kg	2.774	277.415 mg/kg	0.0277 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
11	pH		6.8 pH		6.8 pH	6.8 pH		
	PH							
12	naphthalene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	205-917-1 / 208-96-8							
14	acenaphthene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	201-469-6 / 83-32-9							
15	fluorene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	201-695-5 / 86-73-7							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			201-581-5	85-01-8									
17		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			204-371-1	120-12-7									
18		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-912-4	206-44-0									
19		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-883-8	191-24-2									
										Total:	0.0374 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS13/0.60/2020-08-12

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS13/0.60/2020-08-12

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	arsenic { arsenic trioxide }		11 mg/kg	1.32	14.524 mg/kg	0.00145 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	cadmium { cadmium oxide }		0.3 mg/kg	1.142	0.343 mg/kg	0.0000343 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		13 mg/kg	1.462	19 mg/kg	0.0019 %		
	/ 215-160-9 / 1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) oxide }		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
5	copper { dicopper oxide; copper (I) oxide }		46 mg/kg	1.126	51.791 mg/kg	0.00518 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	24 mg/kg	1.56	37.436 mg/kg	0.0024 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		14 mg/kg	2.976	41.668 mg/kg	0.00417 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8 / /							
10	zinc { zinc chromate }		90 mg/kg	2.774	249.673 mg/kg	0.025 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
11	pH		5.5 pH		5.5 pH	5.5 pH		
	/ / PH							
12	naphthalene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	/ 205-917-1 / 208-96-8							
14	acenaphthene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	/ 201-469-6 / 83-32-9							
15	fluorene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	/ 201-695-5 / 86-73-7							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16	●	phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			201-581-5	85-01-8									
17	●	anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			204-371-1	120-12-7									
18	●	fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-912-4	206-44-0									
19	●	pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
25	●	indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
27	●	benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-883-8	191-24-2									
										Total:	0.0405 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS15/0.50/2020-08-12

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS15/0.50/2020-08-12

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	arsenic { arsenic trioxide }		10 mg/kg	1.32	13.203 mg/kg	0.00132 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	cadmium { cadmium oxide }		0.5 mg/kg	1.142	0.571 mg/kg	0.0000571 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
	/ 215-160-9 / 1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) oxide }		<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
5	copper { dicopper oxide; copper (I) oxide }		26 mg/kg	1.126	29.273 mg/kg	0.00293 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	42 mg/kg	1.56	65.512 mg/kg	0.0042 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		19 mg/kg	2.976	56.549 mg/kg	0.00565 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8 / /							
10	zinc { zinc chromate }		150 mg/kg	2.774	416.122 mg/kg	0.0416 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
11	pH		5.5 pH		5.5 pH	5.5 pH		
	/ / PH							
12	naphthalene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	/ 205-917-1 / 208-96-8							
14	acenaphthene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	/ 201-469-6 / 83-32-9							
15	fluorene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
	/ 201-695-5 / 86-73-7							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16	●	phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			201-581-5	85-01-8									
17	●	anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			204-371-1	120-12-7									
18	●	fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-912-4	206-44-0									
19	●	pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
25	●	indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
27	●	benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-883-8	191-24-2									
										Total:	0.0582 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

1,1-dichloroethane and 1,2-dichloroethane (combined) (EC Number: 203-458-1, 200-863-5, CAS Number: 107-06-2, 75-34-3)

Description/Comments: Combines the hazard statements and risk phrases for 1,1-dichloroethane and 1,2-dichloroethane
Data source: N/a
Data source date: 14 Oct 2016
Hazard Statements: Flam. Liq. 2 H225 , Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 1B H350 , Aquatic Chronic 3 H412

bis(2-chloroethoxy)methane (EC Number: 203-920-2, CAS Number: 111-91-1)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 3 H301 , Acute Tox. 4 H312 , Acute Tox. 1 H330 , Acute Tox. 2 H330 , STOT SE 1 H370 , STOT RE 2 H373

2-methyl naphthalene (EC Number: 202-078-3, CAS Number: 91-57-6)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , STOT SE 3 H336 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

2-chloronaphthalene (EC Number: 202-079-9, CAS Number: 91-58-7)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

dibenzofuran (EC Number: 205-071-3, CAS Number: 132-64-9)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 4 H312 , Acute Tox. 4 H332 , Aquatic Chronic 2 H411

diethyl phthalate (EC Number: 201-550-6, CAS Number: 84-66-2)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Skin Irrit. 2 H315 , Acute Tox. 3 H331 , Acute Tox. 3 H311 , STOT SE 3 H335 , STOT RE 2 H373 , Repr. 2 H361 , Acute Tox. 4 H302 , STOT SE 3 H336 , Skin Sens. 1 H317 , Aquatic Chronic 1 H410

- **4-chlorophenylphenylether** (EC Number: 230-281-7, CAS Number: 7005-72-3)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Dam. 1 H318 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **4-bromophenylphenylether** (EC Number: 202-952-4, CAS Number: 101-55-3)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Dam. 1 H318 , Eye Irrit. 2 H319 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **di-n-octyl phthalate** (EC Number: 204-214-7, CAS Number: 117-84-0)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Repr. 2 H361 , Skin Sens. 1 H317 , Resp. Sens. 1 H334 , Eye Irrit. 2 H319 , Aquatic Chronic 4 H413

- **dimethyl phthalate** (EC Number: 205-011-6, CAS Number: 131-11-3)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Acute Tox. 3 H331 , STOT SE 3 H335 , STOT SE 3 H336 , Repr. 2 H361 , Aquatic Chronic 3 H412

- **carbazole** (EC Number: 201-696-0, CAS Number: 86-74-8)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Muta. 2 H341 , Carc. 2 H351 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Acute Tox. 3 H331 , Acute Tox. 3 H311 , Acute Tox. 3 H301

- **2,2-dichloropropane** (EC Number: 209-832-0, CAS Number: 594-20-7)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H332 , Flam. Liq. 2 H225 , Acute Tox. 4 H302 , Acute Tox. 4 H312 , Eye Irrit. 2 H319

- **bromochloromethane** (EC Number: 200-826-3, CAS Number: 74-97-5)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H312 , Skin Corr. 1B H314 , Eye Dam. 1 H318 , Acute Tox. 4 H332 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Ozone 1 H420

- **bromodichloromethane** (EC Number: 200-856-7, CAS Number: 75-27-4)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Dam. 1 H318 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Muta. 1B H340 , Carc. 1B H350 , Repr. 1A H360

- **trans-1,3-dichloropropene** (EC Number: 431-460-4, CAS Number: 10061-02-6)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Flam. Liq. 3 H226 , Acute Tox. 3 H301 , Asp. Tox. 1 H304 , Acute Tox. 3 H311 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Irrit. 2 H319 , Acute Tox. 4 H332 , STOT SE 3 H335 , Aquatic Chronic 1 H410

- **1,3-dichloropropane** (EC Number: 205-531-3, CAS Number: 142-28-9)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H332 , Flam. Liq. 2 H225 , Flam. Liq. 3 H226 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335

- **dibromochloromethane** (EC Number: 204-704-0, CAS Number: 124-48-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 4 H312 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Acute Tox. 4 H332 , STOT SE 3 H335 , STOT SE 3 H336 , Muta. 2 H341 , Aquatic Chronic 2 H411

- **1,1,1,2-tetrachloroethane** (EC Number: 211-135-1, CAS Number: 630-20-6)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , Acute Tox. 3 H331 , Eye Dam. 1 H318 , Acute Tox. 4 H332 , Carc. 2 H351 , Acute Tox. 4 H312 , Aquatic Chronic 3 H412 , Skin Irrit. 2 H315

- **tert-butylbenzene** (EC Number: 202-632-4, CAS Number: 98-06-6)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Flam. Liq. 3 H226 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Acute Tox. 3 H331 , Acute Tox. 4 H332 , STOT SE 3 H335 , Asp. Tox. 1 H304 , Aquatic Chronic 2 H411

- **sec-butylbenzene** (EC Number: 205-227-0, CAS Number: 135-98-8)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Aquatic Chronic 2 H411

- **4-isopropyltoluene** (EC Number: 202-796-7, CAS Number: 99-87-6)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Chronic 2 H411

- **n-butylbenzene** (EC Number: 203-209-7, CAS Number: 104-51-8)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Flam. Liq. 3 H226 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **hexachlorobutadiene** (EC Number: 201-765-5, CAS Number: 87-68-3)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 3 H301 , Acute Tox. 2 H310 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Irrit. 2 H319 , Acute Tox. 2 H330 , Carc. 2 H351 , Repr. 2 H361 , STOT SE 2 H371 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **1,2,3-trichlorobenzene** (EC Number: 201-757-1, CAS Number: 87-61-6)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , STOT SE 3 H336 , Aquatic Acute 1 H400 , Aquatic Chronic 3 H410

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds (edit as required)

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. (edit as required) Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history (edit as required)

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass (edit as required)

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments (edit as required)

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. (edit as required) Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil. (edit as required)

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.241.4455.8692 (28 Aug 2020)
HazWasteOnline Database: 2020.241.4455.8692 (28 Aug 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

APPENDIX 13 - Relevant Legislative Background

Legislative Background

Environmental liabilities and risks have been evaluated in terms of a source -pathway - target relationship in accordance with the approach set out in:

- The 1995 Environment Act;
- The Contaminated Land (England) Regulations 2000;
- The DETR circular 02/2000 Environmental Protection Act 1990: Part IIA Contaminated Land.

Contaminated land is defined within the legislative framework as land which is in such condition by reason of substances in, on or under the land that:

1) Significant harm is being caused or there is a significant possibility of such harm being caused;
2) Significant pollution of controlled waters is being or is likely to be caused.

The potential for harm is based on the presence of three factors:

- **Source** - substances that are potential contaminants or pollutants that may cause harm;
- **Pathway** - a potential route by which contaminants can move from the source to the receptor;
- **Receptor** - a receptor that may be harmed, for example the water environment, humans and water.

Where a source, pathway and target are all present a pollutant linkage exists and there is potential for harm to be caused. The presence of a source does not automatically imply that a contamination problem exists, since contamination must be defined in terms of pollutant linkages and unacceptable risk of harm. The nature and importance of both pathways and receptors are site specific and will vary according to the intended end use of the site, its characteristics and its surroundings.

The key principle which supports the SPR approach is 'suitable for use' criteria. This requires remedial action only where contamination is considered to pose unacceptable actual or potential risks to health or the environment and, taking into account the proposed use of the site.

Relevant Guidance Documents

This report has been prepared in accordance with the list of guidance below however the list is not exhaustive:

- CLR11 – Model Procedures;
- Contamination and Environmental Matters - Their implications for Property Professionals (2nd Edition RICS Nov 2003);
- Brownfields – Managing the development of previously developed land – A client's guide, CIRIA 2002;
- DEFRA and Environment Agency publications CLR7 – 10, supported by the TOX guides and SGV guides, dated March 2002;
- DETR Circular 02/2000, Contaminated Land: Implementation of Part IIA of the Environmental Protection Act 1990;
- Environment Agency technical advice to third parties on Pollution of Controlled Waters for Part IIA of the EPA1990, May 2002;

Relevant Legislative Documents

The following is a non-exhaustive list of legislative framework documents that has been considered in the production of this report:

- The Environment Act (1995);
- The Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance (2012);
- The Environment Protection Act (1990);
- The Contaminated Land (England) Act (2000);
- Contaminated Land (England) Regulations (2012);
- The Water Resources Act (1991);
- The Pollution Prevention and Control (England and Wales) Regulations (2000);
- The Landfill Regulations (England and Wales) Regulations (2002);
- The Landfill (England and Wales) (Amendment) Regulations (2004);
- Health and Safety at Work Act;

APPENDIX 14 - Limitations

Limitations

This contract was completed by Groundtech Consulting on the basis of a defined programme and scope of works and terms and conditions agreed with the client. This report was compiled with due skill and care, taking into consideration the project brief provided, project objectives, agreed scope of works, prevailing site conditions and budget allocation.

Other than that defined in the paragraph above, Groundtech Consulting provides no other accountability or warranty whether express or implied, is made in relation to the services. Unless otherwise agreed this report has been prepared exclusively for the use and reliance of the client in accordance with generally accepted industry practices and for the intended purposes as stated in the agreement under which this work was completed. This report may not be relied upon, or transferred to, by any other party without the written agreement of a Director of Groundtech Consulting. A third party who relies on this report, does so at their own and sole risk and no liability to such parties is provided by Groundtech Consulting.

It is the understanding of Groundtech Consulting that this report is to be used for the intended purpose as set out in the introduction. The purpose was instrumental in determining the scope and level of the services provided. Should the purpose of the report or the proposed end use of the site change, this report will no longer be directly applicable, and its validity readdressed. No reliance upon the report in the revised situation should be assumed by the client without the permission of Groundtech Consulting.

The report was written in 2020, later changes in legislation, statutory requirements and industry best practices have not been considered and this should be allowed for. Ground conditions can also change and should be investigated if there is any significant delay in acting on the findings of this report. The period of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions in this report should not be relied upon in the future without the written confirmation from Groundtech Consulting that it is safe to do so.

The observations and conclusions outlined in this report are based exclusively on the services that were provided as set out in the agreement between the client and Groundtech Consulting.

Groundtech Consulting are not liable for the existence of any condition, the discovery of which would require additional investigation outside the agreed scope of works or core competency. The services provided are based upon Groundtech Consulting observations of existing physical conditions at the site gained from site reconnaissance together with interpretation of information including documentation, obtained from third parties and from the client on the history and usage of the site. The findings and recommendations contained in this report are based in part upon information provided by third parties, and Groundtech Consulting assume the information to be correct.

No responsibility can be accepted for errors for third party information presented in this report. Groundtech Consulting were not authorised to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the services. Groundtech Consulting are not liable for any inaccurate information, misrepresentation of data or conclusions, which may inform the scope of investigation undertaken by Groundtech Consulting and forms the contract with the client.

Where field investigations have been carried out these have been restricted to a level of detail required to achieve the stated objectives of the work. Ground conditions can also be variable due to its heterogeneous

properties and as investigation exploratory locations only allow examination of the ground at discrete locations. The potential exists for ground conditions to be encountered which are different to those considered in this report, particularly between exploratory holes. The extent of the limited area depends on the soil and groundwater conditions, together with other constraints such as the position of any existing structures and underground utilities. Geo-Environmental testing was carried out for a limited number of parameters [as stipulated in the contract] based on an understanding of the available operational and historical information, and it should not be inferred that other chemical species are not present.

The groundwater conditions entered on the exploratory hole records are those observed at the time of investigation. The groundwater level often has not had time to reach equilibrium and a monitoring period is required. Furthermore, groundwater levels are subject to seasonal variation or changes in local drainage conditions and higher groundwater levels may occur at other times of the year than were recorded during this investigation.

Any site drawings provided in this report are not meant to be an accurate base plan, but are preliminary and used to present the general relative locations of features on, and surrounding, the site.