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SUMMARY

Site Details	
Site Location	<i>The two site locations are located on Cibyn industrial estate which is approximately 2 miles east of Caernarfon town centre. Both sites are located to the east of the industrial estate.</i>
Site Area	<p><i>The skip yard (Site A) almost square in shape and approximately 0.9 hectares in area. The site is an existing skip and plant hire facility which processes the skip waste as well as also housing welfare and offices. The site is split up into 3 separate areas all being topographically level. The first section of the site is the waste process area located to the west, which comprises concrete surfacing. The second is the garage and yard along the north east of the site which comprises tarmac surfacing. The final area of site A, the office building and car park located to the south east comprised concrete surfacing.</i></p> <p><i>The abattoir (Site B) is roughly rectangular in shape and encompasses approximately 1.05 hectares in area. The site is currently occupied by a former abattoir, the site has a slight incline to the west and has areas comprising topsoil and hardsurfacing of concrete and slate. The main feature of the site is the former abattoir located in the centre – west of the site with other features such as farm sheds to the south.</i></p>
Preliminary Risk Assessment	
History	<p><i>The site was undeveloped until the 1986/89 when a small building (shed) was constructed in the south western area of site A. Further development took place in 1994 for Area A as additional buildings were constructed in the south east and north east.</i></p> <p><i>Development began on Area B in 2001 with a warehouse constructed at the centre as well as a small building to the north east.</i></p> <p><i>In 2003 an office building was constructed to the south of site A and site B is now labelled 'Abattoir' with extensions present to the north east and south west of the warehouse.</i></p>
Geology/Hydrogeology	<p><i>The site is indicated to be underlain by Glacial Till (Devensian), this strata characteristically comprises clay, silt, sand and gravel. The bedrock is the Nant Ffrancon Subgroup which comprises siltstone.</i></p> <p><i>The superficial deposits in this area are classified by the Environment Agency as an Unknown aquifer however Glacial Till deposits are typically characterised as a Secondary Undifferentiated aquifer (This is assigned where it is not possible to attribute either category A or B to a soil 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 soil type).</i></p> <p><i>The bedrock is also classified as a Secondary Undifferentiated aquifer.</i></p> <p><i>Two historic potable water abstractions are present 868m southeast of site and are both associated within household use from a pond at Glan Gwna Holiday Park Ltd, dated 2006.</i></p> <p><i>No groundwater abstractions are indicated within 2km of site.</i></p>
Mining	<i>The site is not located within a coal mining area.</i>
Environmental Setting	<p><i>The site is not indicated to lie within a SPZ.</i></p> <p><i>The nearest watercourse is an unnamed tributary to Afon Seiont immediately south of the abattoir area.</i></p> <p><i>Radon precautions are not required.</i></p>

Pollution Linkage (PL) Assessment	Human Health	Nearby sources of contamination have been identified as well as onsite sources associated with the skip waste site and abattoir. The risk has been assessed as Low due to the proposed development to be covered in hardsurfacing.
	Controlled Waters	The risk to controlled waters was assessed as Low.
	Permanent Ground Gas	Several sources of permanent ground gases have been identified within influencing distance of site and the risk is considered to be Moderate.
Ground Model		
Made Ground Soils	Made Ground was encountered across the site to depths of between 0.1m and 2.3m bgl and was generally granular with minor constituents of slate and brick.	
Natural Soils	Firm Clay was typically recorded beneath the Made Ground soils, the gravel and cobble content of the Clay increased with depth and boulders were encountered typically becoming too dense for the borehole to be progressed at 3.0m bgl across the Skip Yard (Area A) and 5.5m bgl across the abattoir (Area B).	
Bedrock	Bedrock was not encountered during the Ground Investigation.	
Groundwater	Groundwater was not encountered within any exploratory hole locations.	
Ground Engineering Assessment		
Foundations	The most suitable foundations are considered to be pads constructed within the natural firm to stiff Clay deposits. All foundations should be deepened through the Made Ground.	
Highways	CBR values of 2 to 3% are likely to be achieved within natural cohesive strata. Made Ground should be assumed to be at formation level and achieve a CBR value of less than 2.5% unless proven otherwise by in-situ testing.	
SuDS	SuDS drainage testing was not carried out however it is unlikely feasible due to the natural Clay present beneath the entire site.	
Constraints	The main development constraint is the cobble and boulder content within the natural Clay deposits encountered beneath the site.	
	<p>Limited investigation was undertaken at the position of the proposed workshop within the abattoir (Area B) due to alterations in proposed development plans. Confirmatory trial pits at this position are recommended to confirm foundation recommendations.</p> <p>There is a risk of differential settlement within the proposed warehouse extension and movement joints are recommended along with consideration of angle of distortion.</p>	
GQRA and Revised (PL) Assessment		

<p>Human Health</p>	<p><i>No elevated contaminants of concern have been recorded, asbestos was detected in one sample of Made Ground. The site is to be completely covered in hardsurfacing and therefore the risk to human health is considered to be Low.</i></p>
<p>Controlled Waters</p>	<p><i>Mobile contamination has not been recorded and groundwater is not considered to be a sensitive resource at the site. The risk to controlled waters is considered to be Low.</i></p>
<p>Permanent Ground Gas</p>	<p><i>Interim ground gas monitoring results place the abattoir (Area B) within CS2 and ground gas precaution measures are required due to a single elevated concentration of CO₂ beneath the footprint of the proposed development.</i></p> <p><i>The skipyard (Area A) falls within CS1 and no ground gas precaution measures are required based on the first monitoring visit.</i></p> <p><i>The site is not located within an area whereby radon precautions are required.</i></p>
<p>Final Appraisal</p>	

The following further work is recommended to progress the development to the construction phase:

- *Completion of gas monitoring programme.*
- *Issue gas assessment.*
- *Confirmatory investigation at position of workshop in abattoir (Area B) post demolition.*
- *Additional topsoil sampling if material is proposed for reuse.*
- *Demolition and Refurbishment Asbestos survey.*
- *Tree survey by qualified arboriculturist.*
- *Detailed foundation design.*
- *Confirmation of remedial recommendations with regulators.*

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	PROJECT OBJECTIVES	1
1.2	PROPOSED DEVELOPMENT	1
1.3	LIMITATIONS	2
2.0	SITE SETTING.....	3
2.1	LOCATION.....	3
2.2	SITE DESCRIPTION	3
3.0	ENVIRONMENTAL SETTING.....	5
3.1	SITE HISTORY	5
3.2	GEOLOGY	6
3.3	HYDROGEOLOGY	7
3.4	HYDROLOGY.....	7
3.5	ENVIRONMENTAL CONSULTATIONS	7
3.6	RADON	8
3.7	COAL AUTHORITY CONSULTATION	9
4.0	CONCEPTUAL SITE MODEL AND RISK ASSESSMENT.....	10
4.1	INTRODUCTION	10
4.2	POTENTIAL CONTAMINATION SOURCES.....	10
4.3	POLLUTION LINKAGES	11
4.4	RECEPTORS.....	12
4.5	PRELIMINARY CONCEPTUAL SITE MODEL (CSM)	12
5.0	SCOPE OF INVESTIGATION AND RATIONALE	18
5.1	PROJECT OBJECTIVES	18
5.2	SCOPE OF WORKS	18
5.3	SOIL SAMPLING	19
5.4	GEO-ENVIRONMENTAL TESTING.....	19
5.5	GAS AND GROUNDWATER MONITORING/SAMPLING	20
6.0	GROUND MODEL.....	21
6.1	MADE GROUND.....	21
6.2	NATURAL GROUND.....	21
6.3	BEDROCK.....	21
6.4	GROUNDWATER.....	21
6.5	WATCHING BRIEF.....	22
6.6	EXCAVATION STABILITY.....	22
6.7	EXCAVATION/BOREHOLE PROGRESS.....	22
7.0	GROUND ENGINEERING.....	23
7.1	GEOTECHNICAL TESTING RESULTS.....	23
7.2	ASSESSMENT BACKGROUND	23
7.3	GEOTECHNICAL PARAMETERS	24
7.4	PRELIMINARY FOUNDATION DESIGN.....	25
7.5	BUILDING NEAR TREES	26
7.6	FLOOR SLABS	26
7.7	CONSTRUCTION	26
7.8	CONCRETE CLASSIFICATION	27
7.9	HIGHWAY DESIGN	27

7.10	SOIL PERCOLATION TESTING	28
7.11	OVERALL STABILITY.....	28
8.0	LAND QUALITY.....	29
8.1	GEO-ENVIRONMENTAL TESTING RESULTS - SOILS	29
8.2	GENERIC QUANTITATIVE RISK ASSESSMENT - SOILS	31
8.3	PERMANENT GROUND GASES	32
8.4	REVISED POLLUTION LINKAGE ASSESSMENT	34
8.5	OUTLINE REMEDIAL STRATEGY	40
8.6	ASBESTOS IN SOILS	40
8.7	HEALTH AND SAFETY - CONSTRUCTION AND GROUND WORKERS	41
8.8	WASTE CLASSIFICATION BY ASSESSMENT.....	41
8.9	WASTE ACCEPTANCE CRITERIA (WAC) RESULTS.....	42
9.0	FINAL APPRAISAL.....	44
9.1	LAND QUALITY	44
9.2	GROUND ENGINEERING.....	44
9.3	REQUIRED SUPPLEMENTARY INVESTIGATION	45
10.0	RELEVANT INDUSTRY REFERENCES.....	46
	APPENDIX 1 - PLANS	
	APPENDIX 2 - SITE PHOTOGRAPHS	
	APPENDIX 3 - HISTORICAL PLANS	
	APPENDIX 4 - BGS RECORDS	
	APPENDIX 5 - GROUNDSURE REPORT	
	APPENDIX 6 - CIRIA RISK ASSESSMENT METHODOLOGY	
	APPENDIX 7 - EXPLORATORY HOLE LOGS	
	APPENDIX 8 - GEO-ENVIRONMENTAL TESTING RESULTS	
	APPENDIX 9 - GEOTECHNICAL TESTING RESULTS	
	APPENDIX 10 - PERMANENT GROUND GAS MONITORING RESULTS	
	APPENDIX 11 - COMMERCIAL END USE SCREENING VALUES	
	APPENDIX 12 – JIWG RECEPTOR TOOL	
	APPENDIX 13 - WASTE CLASSIFICATION REPORT	
	APPENDIX 14 - RELEVANT LEGISLATIVE BACKGROUND	
	APPENDIX 15 - LIMITATIONS	

Plans		
<i>Plan Reference</i>	<i>Revision</i>	<i>Title</i>
<i>GRO-22013-P01</i>	-	<i>Project Location Plan</i>
<i>GRO-22013-P02</i>	-	<i>Preliminary Findings and Constraints Plan</i>
<i>GRO-22013-P03</i>	-	<i>Illustrative Preliminary CSM</i>
<i>GRO-22013-P04</i>	-	<i>Exploratory Hole Location Plan</i>
<i>GRO-22013-P05</i>	-	<i>Generalised Ground Model</i>
<i>GRO-22013-P06</i>	-	<i>Revised Illustrative CSM</i>

1.0 INTRODUCTION

1.1 Project Objectives

Groundtech Consulting Limited have been instructed by Gwynedd Holdings Ltd and their consultant Kennedy Redford Limited to undertake a Geo-Environmental Appraisal for a site at Gwynedd Skips and Plant Hire in Caernarfon.

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.

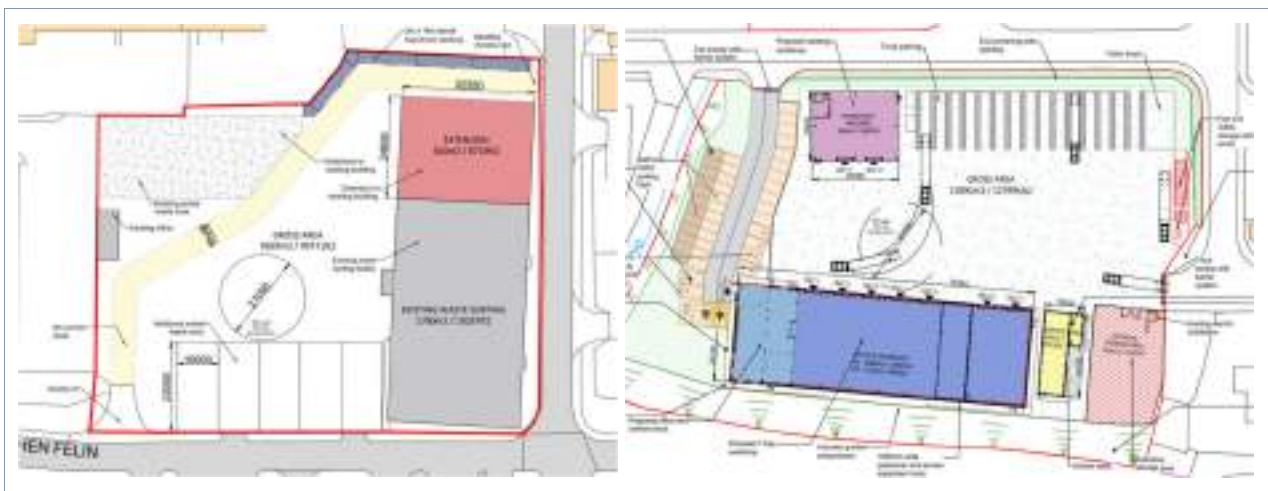
A main investigation was undertaken in accordance with BS 5930:2015, BS 10175:2017, BS 8576:2013 and Eurocode 7 to revise the CSM and quantify the level of risk identified in the PRA. The Appraisal has been prepared in accordance with current UK Legislation and to discharge Land Quality pre-commencement planning conditions.

The report has been undertaken to fulfil the requirements of a preliminary risk assessment in accordance with current risk assessment guidance.

1.2 Proposed Development

The proposed development is commercial end use comprising the following:

- Area A
 - Extend the existing warehouse facility
 - Demolish the office and extend the warehouse
 - Demolish the workshop
- Area B
 - Demolish existing buildings to make way for development
 - Construct 7 bay workshop facility including 2 ½ vehicle pits
 - Staff office and welfare
 - Separate vehicle wash
 - Yard
 - Fuel storage (client preference underground)



Proposed Development Layout (Area A – left) and (Area B – Right)



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 areas are located circa 1.8 kilometres east of Caernarfon Town Centre, as shown on the Project Location Plan *GRO-22013-P01*. The site areas are approximately centred on National Grid Reference 249896, 362735 (*Gwynedd Skips and Plant Hire*) and 249859, 362483 (*Abattoir*).



Access to the site is gained off Lon Hen Felin (*Gwynedd Skips and plant hire*) and Lon Cae Darbi (*Abattoir*).

2.2 Site Description

The site is separated into two main areas - Gwynedd Skip and plant hire yard (Area A) and an abattoir warehouse and yard (Area B).

Area A - Gwynedd Skip & Plant Hire

This area of site is almost square in shape and approximately 0.9 hectares in area, the topography of site is generally level.

This area of site comprises a large skip yard which completely covered in tarmac and concrete hardsurfacing for HGV, heavy plant and machinery usage. A large warehouse is present to the east as well as a smaller building immediately north utilised for repairs and storage. The large warehouse is currently utilised as a recycling plant/warehouse.

A small workshop is present at the south western area of site accessed via the main skip yard area to the centre.

A two-storey office building and café is present to the south surrounded by a tarmac surfacing drive/car park and separated from the main section of site by a two-storey tall corrugated iron wall.

The site is predominantly boarded by a two-storey tall wall however palisade fencing is present to the south at the office/café. The south east boundary is distinguished by the extent of the warehouse.

The site is surrounded by following features/land uses:

- *North* - *Vehicle workshop and access road.*
- *East* - *Unnamed road followed by an HGV fuelling yard (Shell Gas).*
- *South* - *Lon Hen Felin road followed by industrial land use.*
- *West* - *Industrial land use.*

Area B- Abattoir

This area of site is approximately 1.05 hectares in area, rectangular in shape and the topography is level.

The main feature of this site is the existing abattoir to the centre-west section with associated buildings attached to the south west, south and east. This western area of site is completely covered in concrete hardsurfacing.

The eastern section of site is predominantly soft landscaped. Two buildings are present in the south east, one comprises a animal shed for temporarily holding animals and with the other being a storage warehouse. The northern area is utilised as outdoor storage with an area designated as part of a pumping station comprising a small concrete pit filled with water. A small electrical substation is visible in the northern area.

Palisade fencing distinguishes all site boundaries alongside semi-mature to mature trees. Although the site is level, Lon Car Darbi sits at a higher level due to a steep slope at the immediate western site boundary. An embankment is also present along the eastern boundary with site levels reducing by approximately 1.5m.

The abattoir area is surrounded by following features/land uses:

- *North* - *Vehicle service & repairs workshop with hardsurfacing car park.*
- *East* - *Fields and Caernarfon Bypass (A487).*
- *South* - *Industrial land use (Dwyfor Oils) followed by fields.*
- *West* - *Lon Cae Darbi followed by skip yard and industrial land use.*

Site photographs are presented in *Appendix 2* and relevant features are recorded on the Preliminary Development Constraints Plan *GRO-22013-P02*.

For the remainder of the appraisal, the skipyard is referred to as 'Area A' and the abattoir is referred to as 'Area B'.

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	1889, 1900, 1914, 1965, 1972, 1974, 1980, 1977/80, 1983, 1986/89, 1994, 1994/95, 1995.
1:10,000/10,560	1888, 1899/91, 1913, 1949, 1959, 1976, 1990, 2001, 2010, 2022.

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

Date	Site	Surrounding Area
1888	Undeveloped land comprising fields.	Surrounding area is predominantly fields with sparse agricultural buildings and associated pumps present c.125m east and c.100m west. There are also two wells indicated c.100m north west and c.100m east. A single road passes between the two areas in a NW to SE direction. Bod Chual Flour Mill sits c.200m south east of site with associated weirs and sluices.
1913	-	Spring present c.25m north. Bod Chual Flour Mill is now labelled 'Old Mill' on maps.
1972	-	Agricultural buildings/land use to west no longer present. Vehicle Testing Station (MOT) constructed c.220m west.
1976	-	Significant housing development c.100m south of site and replacing former mill c.200m south east. Surrounding areas to the North, East and South West remain predominantly fields.
1980	-	Warehouse developed immediately north of Area A. Further industrial and commercial development from west spanning towards site comprising mostly warehouses and unspecified buildings. Areas to north east and south east of site remain occupied by fields.
1983	-	Garage, depot, works and depot are indicated immediately west of Area A. Electrical Substation present 100m north. Council depot and further surrounding unspecified depots, warehouses and commercial buildings constructed to west.
1986/89	Small building (Shed) constructed at south western section of Area A.	Pumping station visible immediately north of Area B. Additional three buildings developed between Area A and Area B, all considered to be commercial/industrial associated with the expansion of the industrial estate replacing track. Significant road network development between two Areas of site.
1990	-	Industrial estate now labelled Cibyn Industrial Estate.

1994	Area A split up into three sections and additional buildings constructed within the south east and north east.	Industrial estate expansion surrounding site. Section of fields immediately east of Area A now developed with industrial/commercial land use. Majority of land use to east remains fields.
2001	Warehouse constructed within Area B at centre. Small building indicated to the north east.	Further industrial building development surrounding site.
2003	Office building constructed within Area A to the south. Area B is now labelled ' Abattoir ' and extensions are presented to the north east and south west of the warehouse.	No significant changes.
2010	Small building situated at the south east area of Area B.	Warehouses present to north east and south west in previously undeveloped areas.
2022	Further building constructed at south east of Area B.	Both Areas of site situated within Industrial estate and are surrounded by unspecified warehouses and commercial buildings. Fields are present to the east with the exception of immediately east at Area A.

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 Anglesey Sheets 92, & 93 - Solid and Drift Edition.
- 1:50,000 Scale Geological Sheet 94, 105 & 106 - Solid and Drift Edition.
- Memoir.
- BGS Records.

Made Ground

BGS records indicate no Made Ground is present on the site, however due to the historic developments Made Ground is anticipated.

Superficial Deposits

The site is indicated to be underlain by Glacial Till (Devensian), this strata characteristically comprises clay, silt, sand and gravel.

Solid Geology

The bedrock is the Nant Ffrancon Subgroup which comprises siltstone.

BGS Records

The nearest borehole record is located circa 550m from both areas of site and was drilled to a depth of 61m bgl. The geology comprised soils and stones to 1.5m bgl underlain by brown clay and stones (Glacial Till) to 7.0m bgl followed by dark grey fractured Mudstone. Water strikes were observed at 9m, 12m, 21m, 36m, 42m and 55m bgl.

The BGS records are presented in *Appendix 4*.

3.3 Hydrogeology

The superficial deposits in this area are classified by the Environment Agency as an Unknown Aquifer however Glacial Till deposits are typically characterised as a Secondary Undifferentiated aquifer (This is assigned where it is not possible to attribute either category A or B to a soil 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 soil type).

The bedrock is also classified as a Secondary Undifferentiated Aquifer.

The site is not indicated to lie within 500m of a Source Protection Zone and no groundwater abstractions are indicated within 2km of site.

3.4 Hydrology

The nearest named watercourse is Afon Seiont which is located 109m south of site.

Two historic potable water abstractions were present 868m south east of site, both are from surface waters and are associated within household use from a pond at Glan Gwna Holiday Park Ltd, dated 2006.

Environment Agency information indicates that the site is outside a flood risk zone and is not at risk of flooding.

3.5 Environmental Consultations

A request has been submitted to the Contaminated Land Officer at Gwynedd County Council for information pertaining to the site. Relevant information pertained will be forwarded upon receipt.

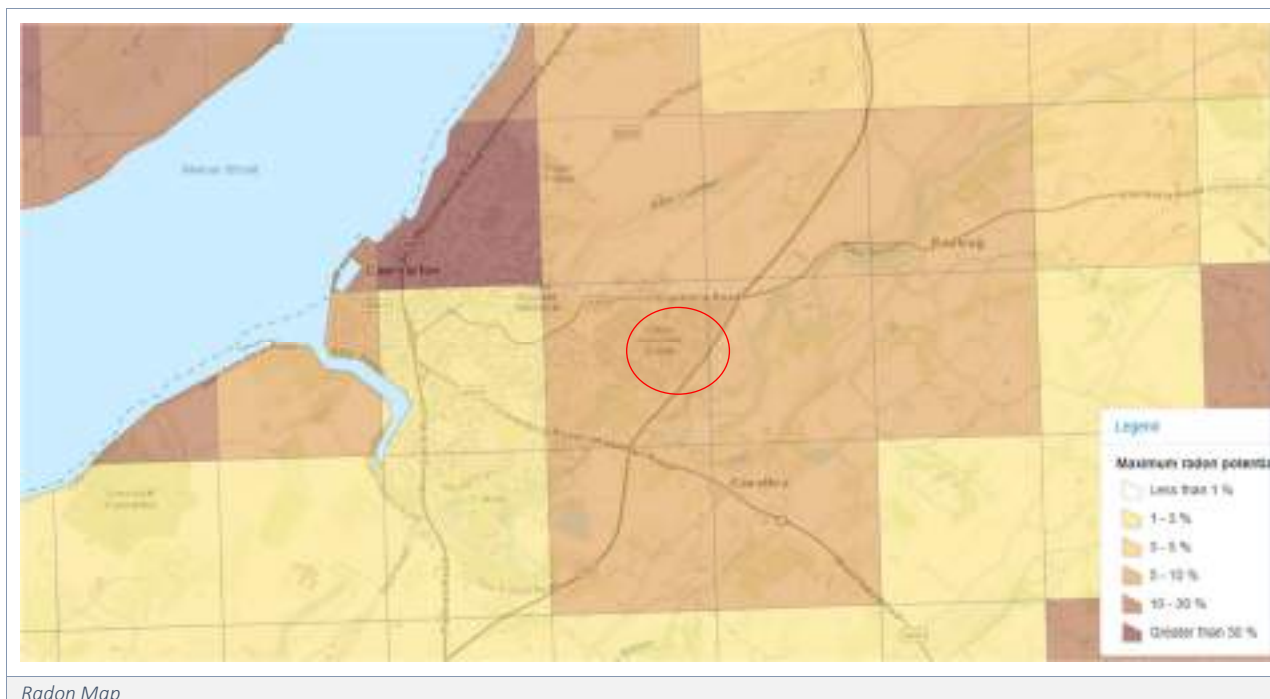
An environmental consultation has been conducted through Groundsure, which accesses British Geological Survey and Environment Agency databases. The complete EnviroInsight Report can be found in *Appendix 5*, a summary of the more relevant points are presented in the table below.

Record	<250m	250 – 500m	Description
<i>Authorised Processes</i>	1	1	<i>Nearest situated 226m west associated with respraying of road vehicles. Timber manufacturer 285m west.</i>
<i>Control of Major Accident Hazards (COMAH)</i>	2	-	<i>Former NIHHS site indicated onsite and current COMAH site present c.6m north east of site (COMAH Lower Tier Operator).</i>
<i>Hazardous Substance Storage/Usage</i>	4	-	<i>Four hazardous substance consents granted between 30m and 209m west of site associated with Dwyfor Oils Ltd, Avanti Gas Ltd and Calor Gas Ltd.</i>
<i>Historical Tanks</i>	2	7	<i>Nearest tanks c.31m north east, 130m west and 306m west from site and are unspecified.</i>
<i>Historical Garages</i>	4	-	<i>Garage indicated 17m north west and vehicle testing stations present 102m west, 137m west and 138m west.</i>
<i>Historic Landfill</i>	2	2	<i>Refuse Tips present c.233m east, 232m east, 345m east and 360m south west.</i>
<i>Historical Energy Features</i>	3	6	<i>Electricity substations situated from 92m north of site, dated between 1971 and 1995.</i>

Record	<250m	250 – 500m	Description
Historic Waste Sites	6	-	Historic waste transport site present immediately south east of Area A. Several waste transfer sites in surrounding areas.
Pollution Incidents	12	7	Several pollution incidents present onsite (Area A) associated with construction and demolition wastes, vehicle and vehicle parts and atmospheric pollutants with no impact to minor impact to land, dated between 2001 and 2007.
Active Landfill Sites	1	-	Landfill site taking Non-Biodegradable wastes at Watkin Jones & Son Ltd c.233m east.
Active Waste Sites/Exemptions	91	11	Gwynedd Skip & Waste site is an active waste site (onsite). Other waste sites c.92m east and 225m south west.
Discharge Consents	1	4	Nearest discharge consent 129m north east of site.
Petrol Filling Stations	-	-	-
Current industrial Uses	19	-	Gwynedd skip & plant hire and Shon Eilian Iron works indicated at Area A. Menai Meats present at Area B. Nearby industrial land use includes electricity substations, pumping station, tanks, and commercial land use.

3.6 Radon

Map 12 Northwest Wales from BRE 211 and HPA was examined which defines areas which require radon protective measures. The probability is between 5% and 10% and Gwynedd Skips is located within area requiring radon precautions in foundations in accordance with BRE Report 211 'Radon – Guidance on protective measures for new dwellings' 2015 Edition.



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 contradicts the radon map data and places the radon risk as less than 1% - **no radon protection measures are required**. 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 is outside the area of a designated coalfield, the Law Society and Coal Authority state a mining search is not required.

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-22013-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

On-Site Sources and Associated Contaminants of Concern (CoC)

From the information obtained during the preliminary risk assessment some onsite sources of contamination have been identified which may affect the redevelopment of the site for commercial end use, these include:

- *Gwynedd Skips Waste Site and Workshop/repair garage (Area A)*
- *Shon Eilian Iron works (Area A)*
- *Pollution incidents associated with demolition, construction and vehicle part repair waste (Area A)*
- *Abattoir (Area B)*
- *Made Ground (Area A & B)*
- *Substation (Area B)*

Limited Made Ground is anticipated associated with the construction of warehouses/offices/commercial buildings at both areas of site and could be a source of metals, Speciated Polycyclic Aromatic Hydrocarbons (PAHs), ground gases and asbestos.

The iron works present at the small building within Area A is considered to be a source of heavy metals, cyanide, sulphates, phosphates, asbestos, fuel/oils and PAHs.

The Gwynedd Skips Waste Site and the former pollution incidents located in Area A present a source of contamination in the form of metals, hydrocarbons, speciated PAHs, and asbestos. The workshop/repair garage is considered to be a source of fuels/oils as well as metals, PAHs and SVOCs/VOCs.

Contaminants associated with the abattoir in Area B may include organics, anthrax, fuels/oils and PAHs.

The electrical substation could be a source of PolyChlorinated Biphenyls (PCBs) used as coolants in the transformers.

Offsite Sources and Associated Contaminants of Concern (CoC)

Several offsite sources of contamination have been identified through the PRA and include the following:

- *Historic Bod Chaul Flour Mill c.200m south/south east*
- *Vehicle Testing Station c.220m west*
- *Surrounding Industrial works*
- *Garage, depot, works and depot immediately west of Area A*
- *Nearby electrical substations (92m north nearest)*
- *Pumping station immediately north at Area B*
- *Refuse tips c.232m east*
- *Hazardous substance licenses c.30m to 209m from site*
- *Unspecified tanks c.31m north east and 130m west*
- *Non-Biodegradable Landfill c.233m east*
- *Waste sites c.92m east and 225m south*
- *Discharge consent c.129m north east*

The garage and vehicle testing station are potential sources of metals, acids, asbestos, speciated PAHs, solvents, fuels, and oils.

Bod Chual Flour Mill may be a source of contaminants such as organics, metals, fuels/oils, asbestos, permanent ground gases and asbestos.

The nearby industrial estate and warehouse present sources of contaminants such as heavy metals, speciated PAHs, Volatile Organic Compounds (VOC), Semi Volatile Organic Compounds (SVOCs), sizing agents, water repellents, soaps, detergents, pesticides, herbicides, organics, fuels/oils, ash, mineral oils, asbestos, PCBs and ground gases.

Electrical substations may be a source of PCBs depending on the age of the transformers.

The active pumping station presents a source of contaminants such as organic materials, methane, fuel/oils, metals and speciated PAHs.

The refuse tips and active landfill site are considered to be a source of permanent ground gases including carbon dioxide, carbon monoxide and methane.

Hazardous substance licenses may be a source of hazardous material such as fuel derived hydrocarbons depending on if any leaks/spills have occurred and migrated into the ground. The tanks are also a source of fuels/oils.

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 recognized for the commercial development from the identified contamination sources that exist.

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

- *Direct soil and dust ingestion.*
- *Dermal contact with soil both indoor 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

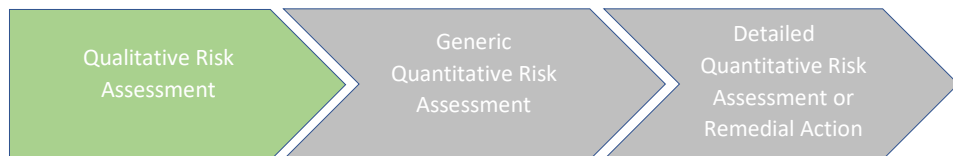
Receptors generally fall into the categories of human health or controlled waters within the river basin system. The recognized receptors are listed below:

- *End site users*
- *Adjacent site users*
- *Afon Sioent 109m south of site*
- *Secondary Undifferentiated Aquifers*
- *Clean potable water supply pipe.*

4.5 Preliminary Conceptual Site Model (CSM)

The factual information obtained from the consultations 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 6*.

Human Health Pollution Linkage Assessment



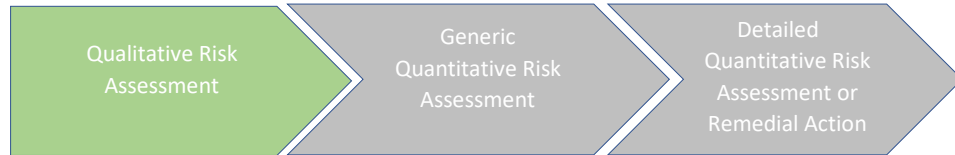
- The table below represents the first stage in the land quality risk assessment process - **the Qualitative Risk Assessment**.
- In order for a development site to be deemed 'suitable for use' the level of risk needs to be reduced to an acceptable level - low to negligible risk. The purpose of each 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	<p><i>Pollution Linkage 1 refers to proposed site users coming into contact with contaminated soils on the site.</i></p> <p><i>The Gwynedd Skip area has historically been utilised as a skipyard and was first developed in 1986. The abattoir area has solely been utilised as an abattoir with unspecified surrounding buildings.</i></p> <p><i>Limited Made Ground is anticipated associated with the construction of the skip yard and abattoir.</i></p> <p><i>Onsite sources of contamination include the abattoir which is considered to be a source of organics, pathogens (if animal waste present), fuels/oils and PAHs and the skipyard which may be a source of heavy metals, hydrocarbons, PAHs and asbestos.</i></p> <p><i>Nearby offsite sources of contamination include a garage/depot immediately west, hazardous substance license, unspecified tank 31m north east. These features present</i></p>

Conceptual Site Model					Qualitative Risk Assessment	
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	Rationale and Action
						<p>a source of heavy metals, VOCs/SVOCs, asbestos and hydrocarbons. All other sources are considered to be outside an influencing distance of site.</p> <p>The proposed development is commercial and will be entirely covered in hardsurfacing and a pollution linkage is not considered to exist.</p>
PL2	Contaminated Soils	Inhalation of vapour.	Low likelihood	Medium to Severe	Moderate to Low	<p>If present vapours have the potential to migrate into confined spaces within the proposed development. At the skipyard, hydrocarbon contamination may be present within the shallow Made Ground due to spills/leakages with machines onsite, ironworks onsite, vehicle repair garage immediately west, and Dwyfor Oils c.34m south west. Sources of hydrocarbons have been identified on the site, however the hardsurfacing will have restricted impact of then soils and any contamination is likely to be heavier range, a minor pollution linkage is considered to exist at this stage.</p> <p>No significant sources of hydrocarbons/vapours have ben identified within the abattoir (Area B) and no pollution linkage is considered to exist.</p>
PL3	Contaminated Soils	Inhalation of soil dust by adjacent site users.	Unlikely	Medium	Low	<p>Pollution Linkage 3 relates to contamination on the subject site affecting adjacent site users. All the contaminative sources identified on site are indictive of the surrounding industrial area and potentially less impactful sources than most surrounding sources such as vehicle and industrial workshops, therefore no pollution linkage is considered to exist.</p>

Conceptual Site Model				Qualitative Risk Assessment		
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	Rationale and Action
PL4	Contaminated Soils	Attacking potable water supply pipe.	Low Likelihood to Likely	Medium	Moderate to Low	<p><i>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. Deep Made Ground may be present at installation depth which may be contaminated with a range of organic contaminants.</i></p> <p><i>A viable pollution linkage is considered to exist and further investigation is required if new potable water supply pipes are to be installed.</i></p>
PL5	Ground Gas	Migration and accumulation of ground gas in internal spaces.	Likely	Medium to Severe	Moderate	<p><i>Made Ground is likely present beneath much of the areas of site due to the presence of the current industrial land use in the form of a skip yard and abattoir.</i></p> <p><i>Nearby sources of permanent ground gases include waste sites c.92m east and c.225m south, non-biodegradable landfill c.233m east and refuse tip c.232m.</i></p> <p><i>Glacial Till underlies the site which will inhibit migration of ground gases however due to the amount of sources present, a linkage is considered to exist and an intrusive investigation comprising the installation of gas monitoring wells is recommended.</i></p> <p><i>The site is not within an area requiring radon precautions within foundations.</i></p>

Controlled 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	<p>Impaction of groundwater from soil contamination (diffuse and point).</p> <p>Impaction of groundwater from groundwater plume.</p>	Unlikely	Medium	Low	<p>Potentially contaminated Made Ground is likely to be present beneath the site associated with the skip and plant yard and abattoir.</p> <p>Geological maps indicate that the superficial deposits at site are Glacial Till (Secondary Undifferentiated) and the solid geology is the Nant Ffrancon Subgroup (Secondary Undifferentiated).</p> <p>The site is not located within 500m of a Source Protection Zone and there are no surface water, groundwater or potable water abstractions within 500m of site.</p> <p>Furthermore, the proposed development will be completely covered with hardsurfacing and groundwater is not considered a sensitive resource. This will considerably reduce infiltration and leaching of potential contaminants, therefore no pollution linkage is considered to exist.</p>

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.	Likely	Medium	Low	<p><i>Pollution Linkage 7 refers to the impaction of Afon Seiont 109m south of the site and nearby unnamed water features from contaminated soils and groundwater.</i></p> <p><i>No significant evidence of mobile contamination has been identified through the PRA. No pollution linkage is considered to exist.</i></p>



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 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.
Obtain relevant geotechnical parameters for preliminary foundation design to address both ULS and SLS conditions.
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 14th March to 19th March 2022.

- 5 No. cable percussive boreholes (CP01 to CP05) were drilled to depths of between 2.0m and 5.5m bgl.
- 18 No. windowless sampling boreholes (WS01 to WS18) to depths of between 0.3m and 3.0m bgl.

The exploratory hole locations are presented on Groundtech Plan GRO-22013-P04 and the exploratory hole logs are in Appendix 7.

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

Location	Target Rationale
WS01 to WS02	Proposed yard development (Area A)
WS03	Proposed fuel storage (Area A)
WS04 to WS05, CP01	Proposed vehicle wash
WS06 to WS10, CP02 to CP03	Proposed workshop and office
WS11 to WS12	Proposed yard development
WS13, CP04 to CP05	Proposed extension
WS14 to WS16	Possible contamination beneath existing yard (Area A)
WS17 to WS18	Demolish existing office and extend existing yard (Area A)

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
<i>Environmental Sample</i>	<i>18</i>
<i>Disturbed Sample</i>	<i>5</i>
<i>Bulk Sample</i>	<i>3</i>
<i>Undisturbed U100 Sample</i>	<i>3</i>

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

Disturbed samples of soil for geo-environmental testing 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 Testing

To inform the 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
<i>Arsenic, cadmium, chromium (total and hexavalent), copper, lead, mercury, nickel, selenium, zinc, sulphate and pH.</i>	<i>Soil</i>	<i>18</i>
<i>Asbestos Screening</i>	<i>Soil</i>	<i>18</i>
<i>Asbestos Quantification</i>	<i>Soil</i>	<i>1</i>
<i>Total Petroleum Hydrocarbons (TPH CWG)</i>	<i>Soil</i>	<i>5</i>
<i>Speciated Polycyclic Aromatic Hydrocarbons (PAHs)</i>	<i>Soil</i>	<i>18</i>
<i>Volatile Organic Compounds (VOCs)</i>	<i>Soil</i>	<i>5</i>
<i>Semi-Volatile Organic Compounds (SVOCs)</i>	<i>Soil</i>	<i>5</i>

The Geo-Environmental Laboratory Testing Results are presented in *Appendix 8*.

Representative disturbed samples were obtained for all soil types encountered. Selected samples were scheduled for testing at an approved laboratory in accordance with BS 1377 ‘Method of Test for Soils for Civil Engineering Purposes’ 1990. The following tests were scheduled:

BS 1377	Test Method	Number
Part 2	Water Content	7
Part 2	Plasticity Index Analysis	7
Part 2	Particle Size Distribution by Wet Sieve	2
Part 3	pH Value	7
Part 3	Water Soluble Sulphate Content	7
Part 7	Determination of Undrained Shear Strength in Triaxial Compression	1

The Geotechnical Laboratory Testing Results are presented in *Appendix 9*.

5.5 Gas and Groundwater Monitoring/Sampling

Gas and groundwater monitoring installations were constructed in the boreholes. The standpipes consisted of high-density polyethylene (HDPE) 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	Response Zone (m bgl)	Targeted Strata	Reason
CP05	3.00m	1.0 - 3.0	Made Ground & Natural clay	Ground Gas
WS04	3.00m	1.0 - 3.0	Natural Clay	Ground Gas
WS06	2.20m	0.5 - 2.2	Made Ground & Natural clay	Ground Gas
WS08	2.35m	1.0 - 2.35	Natural Clay	Ground Gas
WS09	3.00m	1.0 - 3.0	Natural Clay	Ground Gas
WS13	2.00m	0.5 - 2.0	Made Ground & Natural Clay	Ground Gas
WS15	1.70m	0.5 - 1.7	Made Ground & Natural Clay	Ground Gas

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

- Oxygen (O₂), carbon dioxide (CO₂) and methane (CH₄) as the percentage volume in air (%v/v).
- Hydrogen sulphide (H₂S) 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 permanent gas and groundwater monitoring results are presented in *Appendix 10*.

6.0 GROUND MODEL

6.1 Made Ground

Made Ground was encountered beneath the site to a maximum depth of 2.3m bgl. The surfacing of site comprised concrete and tarmac to a maximum depth of 0.5m bgl across the areas of hardsurfacing (Area A) and sandy topsoil to a maximum depth of 0.5m bgl within the abattoir (Area B).

Two main Made Ground populations were encountered during the investigation and are described below:

- *Dark grey/blue occasionally sandy gravel of slate was encountered within CP01 to CP04, WS03, WS04, WS06, WS14, WS15-WS18 from depths of between ground level and 0.3m bgl to depths of between 0.3m and 2.0m bgl.*
- *Red brown slightly sandy occasionally slightly clayey gravel of brick and slate was present within CP05, WS06, WS13, WS14 and WS15 from depths of between ground level and 0.5m bgl to depths of between 0.8m and 2.3m bgl.*

Locally to WS15, black and red gravelly clay with minor constituents of brick and slate was observed between 0.8m and 0.9m bgl.



6.2 Natural Ground

The natural strata encountered generally confirmed the published geological records. One main natural stratification encountered during the investigation and are described below:

- *Firm becoming stiff at depth brown occasionally gravelly Clay with low cobble and boulder content was encountered in all exploratory holes from depths of between 0.1m and 2.3m bgl to depths of between 1.2m and 5.5m bgl where the natural ground was penetrated.*

6.3 Bedrock

Bedrock was not encountered during this investigation.

6.4 Groundwater

No groundwater strikes were observed during the investigation.



6.5 Watching Brief

A watching brief was maintained during the Ground Investigation for visual and olfactory evidence of contamination.

Evidence of visual contamination was recorded in WS14 and comprised black staining within the Made Ground.

6.6 Excavation Stability

No evidence of collapse was noted during the drilling of the boreholes.

6.7 Excavation/Borehole Progress

Obstructions in the form of natural cobbles and boulders within the Glacial Till were encountered during the drilling of the boreholes at depths between 0.3m and 2.5m bgl, where these were encountered the boreholes were typically terminated as it could not progress further.

Made Ground was not fully penetrated within WS14 at 1.0m bgl due to boulder obstruction and WS16 at 0.3m bgl due to a concrete obstruction.

7.0 GROUND ENGINEERING

7.1 Geotechnical Testing Results

Comparison of water content and the value of 0.4 times the Liquid Limit in accordance with BRE Digest 412 'Desiccation in Clay Soils' suggests significant desiccation has taken place when 0.4 times the Liquid Limit is greater than the actual water measured water content. This is a rudimentary method but also a good guide.

Results of the plasticity testing and the volume change potential of the Clay is summarised in the table below:

Reference	Depth	Modified PI	Volume Change Potential	Desiccated Y/N
CP02	3.0	24	Moderate	N
CP04	2.5	18	Low	Y
CP05	2.5	37	Moderate	N
WS04	1.5	29	Moderate	N
WS06	1.0	31	Moderate	Y

An additional plasticity index test was scheduled on CP03 at 4.0m bgl however the sample has no displayable plasticity due to the granular nature of the sample.

Particle size distribution testing was undertaken on two of the natural cohesive superficial deposits taken beneath the site and the results are summarised in the table below:

Reference	Depth (m bgl)	Description	Soil Fraction (%)			
			Cobbles	Gravel	Sand	Silt/Clay
CP02	4.0	Brown slightly sandy slightly gravelly CLAY with cobbles.	44	16	12	28
CP05	2.5 – 3.0	Brown slightly sandy slightly gravelly CLAY with cobbles.	34	18	21	27

7.2 Assessment Background

The ground engineering investigation has been undertaken to formulate an accurate ground model in order to undertake preliminary foundation design. The ground model has been constructed with a moderate to high level of confidence, the ground model has evolved from the information obtained by the PRA.

Area A - Skip & Plant Hire

This area of site is currently utilised as a skip yard with a workshop to the south west, recycling warehouse to the east and offices to the south. The proposed development is to demolish the office building and workshop and extend the warehouse to the north by an additional 810m².

At this area of site, Made Ground was encountered to a maximum depth of 2.3m bgl at the position of the proposed warehouse and was also underlain by firm to stiff cobbly Clay with low boulder content to a maximum depth of 3.0m bgl.

No groundwater was encountered within any of the boreholes.

As part of the enabling works, the existing office and workshop are to be demolished and foundations are to be grubbed up.

The development constraints in this area of site include the cobble and boulder content within the natural soils which require heavy plant and machinery for excavations as part of the construction works. The deepest boreholes were terminated at 3.0m bgl due to the boulder content forcing the drilling to terminate despite chiselling for significant lengths of time.

As the development in this area comprises an extension to the existing building differential settlement is another development constraint to be considered as there are cohesive ground conditions at the position of the proposed extension.

Area B - Abattoir

The entire western area of site is currently occupied by an abattoir warehouse surrounded by concrete hardsurfacing. The eastern section is unoccupied at the centre with two buildings present at the south and a pumping station area with electricity substation to the north.

The proposed development comprises the construction of a new warehouse and office building on the eastern area of the site, the current abattoir will be demolished. A vehicle wash area is proposed in the north east and a fuel storage area is proposed along the northern boundary.

Made Ground was encountered to a maximum depth of 1.5m bgl and was generally granular in nature underlain by slightly sandy gravelly Clay with cobble content of mudstone to a maximum depth of 5.5m bgl whereby the boreholes were terminated due to boulder obstructions.

Groundwater was not encountered during the Ground Investigation.

The existing abattoir, workshops and pumping area are to be demolished as part of the proposed development, all foundations and hardsurfacing should be grubbed up.

The main limitation associated with the site considered to be the ground conditions comprising cobble and boulder content within the firm to stiff Clay, therefore heavy plant and machinery will be required as part of the construction phase to achieve the required excavation depths. Excavations are likely to be enlarged due to the presence of the cobbles and boulders within the founding stratum resulting in wider trenches and increased concrete volumes required.

Another limitation is that only minimal investigation was undertaken at the position of the proposed warehouse in the area of the former abattoir (Area B) due to alterations in the proposed development. It is recommended that supplementary investigation comprising confirmatory trial pits is undertaken post demolition to ensue ground conditions do not differ and confirm geotechnical recommendations.

A small void is present at the north eastern area of the site associated with pumping station and will need to be backfilled with suitable engineered fill. This area does not fall within the footprint of the proposed development buildings however provides a potential constraint depending on the depth of the void.

7.3 Geotechnical Parameters

The geotechnical test results have been evaluated to derive geotechnical parameters for the soils underlying the site. A depth to 'SPT N value' graph is presented in plan *GRO-22013-P05* to provide a generalised ground model for the site.



Characterization of the geotechnical parameters above has been undertaken to select a characteristic value, which is a cautious estimate of the value affecting the occurrence of the limit state.

The characteristic values of cohesive strata at each site have been selected based on correlation with SPT values. The characteristic values for Ultimate Limit State (ULS) selected are presented in the table below:

Stratum	Parameter	Selected Characteristic Value
<i>Firm to stiff Clay</i>	<i>Undrained Shear Strength</i>	<i>45kPa</i>

7.4 Preliminary Foundation Design

The following preliminary design is based on existing levels at the time of the Ground Investigation.

Area A - Skip and Plant Hire

The most suitable foundations for the proposed development at the skip yard are considered to be pad foundations constructed within the firm to stiff gravelly cobbly Clay at a minimum depth of 2.0m bgl. It is recommended that foundations are deepened through the Made Ground deposits.

Preliminary foundation design has been undertaken by calculation, a safe allowable bearing capacity of 100kN/m² is provided for ultimate limit state design for a 1.5m wide pad foundation constructed within the firm to stiff natural Clay at a depth of 2.5m bgl.

Using the above pressures, settlement criteria of 25mm will not be exceeded and Serviceability Limit State conditions will be satisfied. If variable strata are encountered at the base of foundation excavations, then foundations should be deepened to found on the similar strata or reinforced to mitigate the potential for differential settlement.

As the proposed development in this area is an extension consideration should be given to issues arising from differential settlement, movement joints should be installed between the existing warehouse and proposed extension and the angle of distortion taken into consideration to ensure settlement will be within an allowable tolerance.

Area B - Abattoir

The most suitable foundations for the proposed development at the abattoir are also considered to be pads constructed within the firm to stiff gravelly cobbly Clay at a minimum depth of 1.0m bgl. It is recommended that foundations are deepened through the Made Ground deposits.

Preliminary foundation design has been undertaken by calculation and a safe allowable bearing capacity of 125kN/m² is provided for ultimate state design for a 1.5m wide pad footing constructed within the natural Clay at a depth of 2.0m bgl.

Using the above pressures, settlement criteria of 25mm will not be exceeded and Serviceability Limit State conditions will be satisfied. If variable strata are encountered at the base of foundation excavations, then foundations should be deepened to found on the similar strata or reinforced to mitigate the potential for differential settlement.

Construction Requirements

If the ground conditions encountered during the construction phase differ significantly to the conditions encountered during the Ground Investigation, work should cease and Groundtech Consulting contacted for further advice.

During the construction phase supervision should be on a continuous basis to check the design assumptions are correct and construction conforms to design in accordance with EC7. Supervision should include inspections, Control Ground Investigations and monitoring by Groundtech Consulting.

7.5 Building Near Trees

Foundation excavations will encounter cohesive strata in the vicinity of existing, proposed or recently removed trees, foundations should be adjusted in full accordance with appropriate Guidance. Recently removed semi-mature to mature trees have been identified alongside the boundaries of the Area B and foundations may be in the area of influence.

All foundations should be deepened below roots of greater than 5mm diameter during excavations for footings. The clay is of a low to moderate volume change potential.

A survey of all trees and hedges on the site and within 30m of the site boundary should be undertaken to identify tree species, locations and heights. This information will be required in order to assess the effects of trees on the cohesive strata and inform a foundation schedule.

Where foundation depths due to trees already present or recently removed exceeds 1.5m there is a possibility for heave to occur on removal of the tree. Guidance states that in areas where volume change potential is medium, the void dimension against the side of foundations should be 25mm.

7.6 Floor Slabs

Greater than 600mm of Made Ground is present beneath the site and therefore a suspended floor slab is recommended.

Suspended in-situ concrete ground floors with a minimum void of 100mm in thickness should be utilised where heave can occur in accordance with current guidance.

7.7 Construction

Instability of the Made Ground is a possibility and should be considered in the groundworks method statements.

The natural ground is also considered to be unstable due to the cobble and boulder content present, increasing with depth. Additional volumes of concrete may be required due to foundation excavations being oversized.

Tracked high specification heavy plant is recommended to maintain the build programme. Breaking equipment may also be required locally to penetrate obstructions identified by the Ground Investigation.

Groundwater was not encountered during the Ground Investigation however it has been recorded in the standpipes during the monitoring period. Additionally, a spring has been encountered nearby site and therefore groundwater is present at shallow depths, which is a potential constraint if encountered during groundworks/construction.

7.8 Concrete Classification

Made Ground

Water soluble sulphate testing was undertaken on eight samples of the Made Ground. The range of soluble sulphate (SO₄) recorded is 17.1mg/l to 1457.1mg/l. Associated pH values ranged between 6.93 and 9.23 indicating slightly alkaline conditions.

For a dataset of five to nine results, the mean of the highest two of the sulphate test results and the mean of the lowest two pH results should be taken as the characteristic value. The characteristic water soluble sulphate value is 1440mg/l and the characteristic pH value is 7.26.

Natural Strata

Water soluble sulphate testing was also undertaken on seven samples of the natural ground. The range of soluble sulphate (SO₄) recorded is 6.6mg/l to 94.0mg/l. Associated pH values ranged between 6.42 and 7.62 indicating slightly acidic conditions.

For a dataset containing five to nine results, the mean of the highest two of the sulphate test results and the mean of the lowest two pH results should be taken as the characteristic value. The selected characteristic sulphate value is 69mg/l and the pH value is 6.7.

Groundwater is considered to be static due to the natural ground being cohesive and therefore impermeable.

The results of laboratory pH and sulphate content indicate that ACEC Class AC-1s and sulphate class DS-2 conditions prevail in the Made Ground soils with ACEC Class AC-1 and sulphate class DS-1s accordance with BRE Special Digest 1 "Concrete in aggressive ground" 2005. The specific concrete mixes (the Design Concrete Class) to be used on site will be determined by the site specific concrete requirements in terms of the durability and structural performance. These are assessed in terms of the Structural Performance Level (SPL) and any need for Additional Protective Measures (APM) detailed in Part D of BRE Special Digest 1 with further guidance in Pt E and F.

7.9 Highway Design

CBR values of 2 to 3% are likely to be achieved in natural cohesive soils for pavement design purposes, unless proven otherwise by in-situ testing at sub-base level by a specialist geotechnical engineer. Some reengineering of the subgrade is required prior to highway construction to achieve the required design CBR value.

Untreated Made Ground should be assumed to have a CBR value of <2.5%, unless proven otherwise. Highways Agency document HD25 'Interim Advice Note 73/06 Revision 1' (2009) states that where a subgrade has a CBR value lower than 2.5%, it is considered unsuitable support for a pavement foundation since it would tend to deform under construction traffic, and must be improved.

Where highways are proposed in areas underlain by Made Ground, it is recommended that Made Ground to a depth of 1.0m below subgrade level is excavated, sorted and classified in accordance with Series 600 (Earthworks) of the Highways Agency "Specification for Highways Works". Following the above, any suitable material which can be used as part of highway construction shall be compacted in accordance with the earthworks specification.

The soils are considered to frost susceptible due to the fines content, highway construction should be a minimum thickness of 450mm to mitigate against the risk.

7.10 Soil Percolation Testing

Soil percolation testing was not within the scope of the works of this Investigation, however the use of SuDS drainage within the natural ground is unlikely to be a viable option at the site due to the presence of impermeable cohesive deposits underlying both areas of site which possesses poor drainage properties.

If SuDS drainage is to be considered, soil infiltration testing should be carried out in accordance with BRE Digest 365.

7.11 Overall Stability

Two slopes are present alongside the eastern and western site boundary of Area B (Abattoir) which could pose a potential issue to stability.

Alongside the western boundary an upwards slope of c.1.0m is present from the abattoir towards Lon Car Darbi. At this position, an eco-screening layer is proposed and stability is not considered a significant risk due to the height of the wall and the distance of the proposed workshop.

Along the eastern boundary, a c.1.5m slope trends downwards into an embankment, the crest of this slope is located approximately 1.5m east of the proposed warehouse and offices. Foundations should be constructed to ensure that their zone of influence is outside the area of the embankment and the slope is not surcharged by the proposed development.

8.0 LAND QUALITY

8.1 Geo-Environmental Testing Results - Soils

Eighteen samples of Made Ground and natural strata have been tested for a range of relevant Contaminants of Concern. In accordance with LCRM, 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.

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% Soil Organic Matter, unless the results indicate otherwise.

The proposed end-use for the site is a commercial development at both areas and 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:

Skipyard (Area A)

Strata	Number	Locations
<i>Granular Made Ground (Population 1)</i>	6	WS13 – WS18

Abattoir (Area B)

Strata	Number	Locations
<i>Granular Made Ground (Population 1)</i>	2	WS03, WS06
<i>Made Ground Topsoil</i>	3	WS05, WS07, WS08
<i>Natural Clay</i>	7	WS01, WS02, WS04, WS09, WS10, WS11, WS12

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

Contaminant	Metals			
	Range (mg/kg)	Screening Value (mg/kg)	Exceedances	Locations
<i>Arsenic</i>	0.8 – 52.6	640	-	-
<i>Cadmium</i>	<0.1 – 0.3	230	-	-
<i>Chromium</i>	38.9 – 131.1	8600	-	-
<i>Hexavalent Chromium</i>	<0.3	49	-	-
<i>Copper</i>	10 – 54	68000	-	-

<i>Lead</i>	<5 – 355	2300	-	-
<i>Mercury</i>	<0.1 – 0.3	26	-	-
<i>Nickel</i>	11.3 – 31.3	1800	-	-
<i>Selenium</i>	<1 – 2	13000	-	-
<i>Zinc</i>	36 – 118	730000	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)				
Contaminant	Range (mg/kg)	Screening Value (mg/kg)	Exceedances	Locations
<i>Naphthalene</i>	<0.04-0.4	190	-	-
<i>Acenaphthylene</i>	<0.03-0.3	83000	-	-
<i>Acenaphthene</i>	<0.05-0.59	84000	-	-
<i>Fluorene</i>	<0.04-0.55	63000	-	-
<i>Phenanthrene</i>	<0.03-3.98	22000	-	-
<i>Anthracene</i>	<0.04-0.83	520000	-	-
<i>Fluoranthene</i>	<0.03-3.68	23000	-	-
<i>Pyrene</i>	<0.03-3.86	54000	-	-
<i>Benzo(a)anthracene</i>	<0.06-2.14	170	-	-
<i>Chrysene</i>	<0.02-2.07	350	-	-
<i>Benzo(b)fluoranthene</i>	<0.05 – 4.02	44	-	-
<i>Benzo(k)fluoranthene</i>	<0.02 – 1.57	120	-	-
<i>Benzo(a)pyrene</i>	<0.04-3.25	1200	-	-
<i>Indeno(123cd)pyrene</i>	<0.04-2.46	35	-	-
<i>Dibenzo(ah)anthracene</i>	<0.04-0.49	500	-	-
<i>Benzo(ghi)perylene</i>	<0.04-2.24	3900	-	-
TPH CWG - Aliphatics				
Contaminant	Range (mg/kg)	Screening Value (mg/kg)	Exceedances	Locations
>C5-C6	<0.10	3200	-	-
>C6-C8	<0.10	7800	-	-
>C8-C10	<0.10	2000	-	-
>C10-C12	<0.20	9700	-	-
>C12-C16	<4.00	59000	-	-
>C16-C21	<7.00	1600000	-	-
>C21-C35	<7.00	1600000	-	-
<i>Total aliphatics C5-35</i>	<19.00	n/a	-	-
TPH CWG - Aromatics				
Contaminant	Range (mg/)	Screening Value (mg/kg)	Exceedances	Locations
>C5-EC7	<0.10	26000	-	-
>EC7-EC8	<0.10	56000	-	-
>EC8-EC10	<0.10	3500	-	-
>EC10-EC12	<0.20	16000	-	-
>EC12-EC16	<4.00	36000	-	-
>EC16-EC21	<7.00 – 14	28000	-	-
>EC21-EC35	<7.00 – 89	28000	-	-
<i>Total aromatics C5-35</i>	<19.0 – 93.0		-	-

<i>Total aliphatics and aromatics(C5-35)</i>		<i><38.00 – 171.0</i>		-
<i>MTBE</i>	<i><2.00 ug/kg</i>	<i>7900</i>	-	-
<i>Benzene</i>	<i><3.00 ug/kg</i>	<i>95</i>	-	-
<i>Toluene</i>	<i><3.00-4.00 ug/kg</i>	<i>4400</i>	-	-
<i>Ethylbenzene</i>	<i><3.00-5.00 ug/kg</i>	<i>2800</i>	-	-
<i>m/p-Xylene</i>	<i><5.00-8.00 ug/kg</i>	<i>3200</i>	-	-
<i>o-Xylene</i>	<i><3.00-4.00 ug/kg</i>	<i>2600</i>	-	-
Others				
<i>Organic Matter</i>		<i><0.2 – 5.4</i>		
<i>pH</i>		<i>5.89 – 10.20</i>		
Asbestos Screen				
<i>Position</i>	<i>Depth (m bgl)</i>	<i>Result</i>	<i>Quantification</i>	
<i>WS01</i>	<i>0.20</i>	<i>None Detected</i>	-	
<i>WS02</i>	<i>0.50</i>	<i>None Detected</i>	-	
<i>WS03</i>	<i>0.50</i>	<i>None Detected</i>	-	
<i>WS04</i>	<i>0.80</i>	<i>None Detected</i>	-	
<i>WS05</i>	<i>0.20</i>	<i>None Detected</i>	-	
<i>WS06</i>	<i>0.60</i>	<i>None Detected</i>	-	
<i>WS07</i>	<i>0.20</i>	<i>None Detected</i>	-	
<i>WS08</i>	<i>0.20</i>	<i>None Detected</i>	-	
<i>WS09</i>	<i>0.60</i>	<i>None Detected</i>	-	
<i>WS10</i>	<i>0.50</i>	<i>None Detected</i>	-	
<i>WS111</i>	<i>0.20</i>	<i>None Detected</i>	-	
<i>WS12</i>	<i>0.60</i>	<i>None Detected</i>	-	
<i>WS13</i>	<i>0.50</i>	<i>None Detected</i>	-	
<i>WS14</i>	<i>0.20</i>	<i>None Detected</i>	-	
<i>WS15</i>	<i>0.60</i>	<i>Chrysotile Fibre Bundles</i>	<i>Pending</i>	
<i>WS16</i>	<i>0.5</i>	<i>None Detected</i>	-	
<i>WS17</i>	<i>0.30</i>	<i>None Detected</i>	-	
<i>WS18</i>	<i>0.60</i>	<i>None Detected</i>	-	

8.2 Generic Quantitative Risk Assessment - Soils

Made Ground has been encountered beneath the site to depths of between 0.1m and 2.3m bgl and comprised hardsurfacing concrete/tarmac and topsoil underlain by gravelly sand with minor constituents of brick and slate. The Made Ground was typically shallower within the abattoir area.

No visual or olfactory evidence of contamination was encountered across both areas of site with the exception of black staining within the WS14 at 0.1m bgl.

No elevated contaminants of concern have been detected through laboratory testing in any of the eighteen samples screened based on the site having commercial end use.

Asbestos screening was undertaken eighteen samples from the Made Ground and natural ground and asbestos was not detected in seventeen of the samples. One sample within the granular Made Ground in TP15 in the north west of the skip yard (Area A) at a depth of 0.6m bgl tested positive for asbestos in the form of chrysolite fibre bundles. Quantification results are currently pending and will be included in a revision to this document.

No evidence of animal remains were found during the investigation at the abattoir area.

The electricity substation situated within the abattoir area (Area B) is dated post 1990 and is therefore not a risk of PCBs.

Good housekeeping was typically observed across the site, specifically within the skipyard. No evidence of spills or leakages was observed at the vehicle repair workshop (Area A) or the waste treatment area (Area B) due to relatively good housekeeping. The concrete slab located beneath the skipyard was observed as fully intact and underlain by a mesh net layer inhibiting migration of any contamination into the underlying Made Ground and natural soils. The concrete slab at the abattoir also remained undamaged.

8.3 Permanent Ground Gases

A single ground gas monitoring visit has been carried out to date on 13th April 2022.

No concentrations of methane (CH₄) have been recorded within the boreholes, however detectable levels of carbon dioxide (CO₂) were recorded within the standpipes up to a value of 9.6% v/v together with depleted oxygen (O₂) concentrations of 0.0% v/v.

No positive gas flow rates were recorded and the atmospheric pressure was 1009mb. The monitoring was carried out during a period of rising barometric pressure.

Groundwater was recorded within five of the seven standpipes from depths of between 0.63m and 1.4m bgl and were all recorded within the response zone of the standpipes.

Characterisation of the Gas Screening Value (GSV)

In accordance with CIRIA Report C665, November 2007 it is felt that an adequate risk assessment can be undertaken based on the following limiting factors:

- *The proposed development has been considered as low sensitivity based on the site being developed commercially (Table 5.5 – Typical/Idealised frequency and period of monitoring, after Wilson et al, 2005).*
- *The risk associated with the generation potential of a source is considered as moderate, (assessment based on the environmental setting).*
- *No positive flow have been recorded to date (Table 8.5 – Modified Wilson & Card classification).*

Based upon the results recorded to date, in accordance with CIRIA Report C665, the risk to the site from the 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” (Q_{hg}) have been derived for each monitoring point. As no levels of methane have been recorded, a GSV for carbon dioxide only has been calculated.

$$GSV (l/hr) = \text{max borehole flow rate (l/hr)} \times \text{max gas concentration (\%)}$$

For this assessment, the maximum recorded concentration of carbon dioxide of 9.6% v/v has been used to calculate the GSV together with a gas flow rate of 0.1l/hr (the limit of detection of the gas analyser).

$$\text{Carbon Dioxide GSV} = 0.096 (9.6\%) \times 0.1 = 0.0096 \text{ l/hr}$$

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 for 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 value for carbon dioxide is below the assessment GSV of 0.07 l/hr and falls within Characteristic Situation 1. However, a single elevated concentration of 9.6% v/v has been recorded (WS06) within the footprint of the proposed warehouse in the abattoir (Area B) due to Made Ground being present which has potential to generate ground gas. At this stage the abattoir site has been classified as CS2 until further monitoring visits have been undertaken. It may be possible to downgrade the site to CS1 if carbon dioxide concentrations at this location reduce over the monitoring period.

Abattoir (Area B)

Characteristic Situation 2

The proposed development is classified as a Building Type C in accordance with BS 8485:2015 and the abattoir (Area B) falls in CS2 in accordance with Table 2 of the above guidance and gas protection measures will be required within the warehouse based on the dataset to date. A minimum of two out of three points of protection will be required in accordance with Table 8.6 - Typical scope of gas protective measures from CIRIA C665.

Skipyard (Area A)

Characteristic Situation 2

The proposed development is classified as a Building Type C in accordance with BS 8485:2015 and the skipyard (Area A) falls in CS1 in accordance with Table 2 of the above guidance and gas protection measures will not be required within the warehouse extension at the skipyard based on the initial ground gas monitoring visit.

Radon

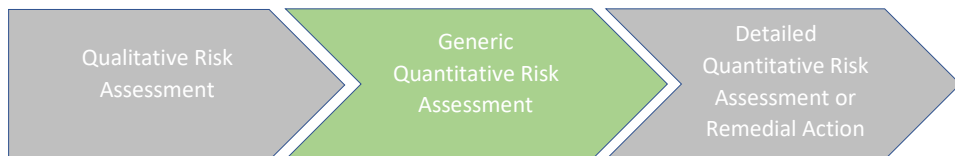
The site is located in an area where no radon precautions are required within proposed developments.



8.4 Revised Pollution Linkage Assessment

A revised pollution linkage assessment has been undertaken based on the findings of the Ground Investigation in accordance with CIRIA C552 to identify any realistic pollution linkages in order to quantify the risks to human health and controlled waters. An Illustrative CSM is presented on *GRO-22013-P06*.

Human Health Pollution Linkage Assessment



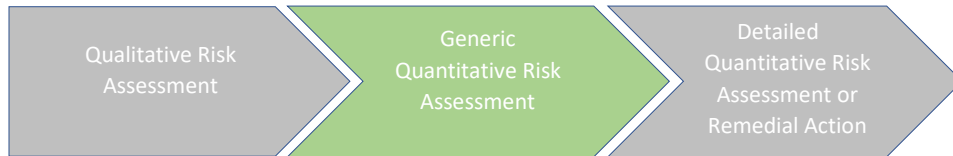
- The table below represents the second stage in the land quality risk assessment process - **the Generic Quantitative Risk Assessment**.
- In order for a development site to be deemed 'suitable for use' the level of risk needs to be reduced to an acceptable level - low to negligible risk. The purpose 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					<i>Generic Quantitative Risk Assessment</i>	
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	<i>Rationale and Action</i>
PL1	Contaminated Soils	Ingestion of soil and dust. Dermal contact with soil.	Unlikely	Medium	Low	<p><i>Pollution Linkage 1 refers to proposed site users coming into contact with contaminated soils on the site.</i></p> <p><i>Made Ground has been encountered across the site to a maximum depth of 2.3m bgl and was generally granular with minor constituents of slate and brick.</i></p> <p><i>No visual or olfactory evidence of contamination was observed during the Ground Investigation. No evidence of animal remains noted but watching brief is required during construction phase.</i></p> <p><i>Geo-Environmental testing of soils has detected no elevated concentrations of contaminants above generic screening values for a commercial end use.</i></p> <p><i>A single concentration of asbestos was recorded within one of the 18 samples screened and was located beneath the skip yard (Area A). Asbestos containing Made Ground is localised and will be beneath hardsurfacing, no pollution linkage is present.</i></p>

Conceptual Site Model					Generic Quantitative Risk Assessment	
PL	Potential Source	Pollution Linkage	Likelihood	Consequence/ Severity	Risk Rating	Rationale and Action
						<i>No source of contamination has been identified in Area B and no pollution linkage is considered to exist.</i>
PL2	Contaminated Soils	Inhalation of vapour.	Low likelihood	Medium to Severe	Low	<i>No visual or olfactory evidence of contamination was identified during the investigation. Laboratory testing has not recorded any elevated levels of hydrocarbons based on the site being developed commercially with the majority of results falling below laboratory detection limits. No pollution linkage is considered to exist.</i>
PL3	Contaminated Soils	Inhalation of soil dust by adjacent site users.	Unlikely	Medium	Low	<i>Pollution Linkage 3 relates to contamination on the subject site affecting adjacent site users. No mobile contamination has been recorded through laboratory testing or observed during the Ground Investigation. Therefore, a plausible pollution linkage is not considered to exist.</i>
PL4	Contaminated Soils	Attacking potable water supply pipe.	Low Likelihood	Medium	Low to Moderate	<i>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 is present at installation depth, it is likely that existing pipes are to be used for the extension, a water company risk assessment is recommended.</i>

Conceptual Site Model				Generic Quantitative 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.	Likely	Medium to Severe	Moderate	<p>Made Ground has been encountered to a maximum depth of 2.3m bgl.</p> <p>Interim ground gas monitoring results place the site within CS2 due to a single elevation of CO₂ (9.6%v/v) within the abattoir (Area B), therefore gas precaution measures may be required.</p> <p>The skip yard (Area A) is considered to fall within CS1 and no gas precaution measures are required based on the interim results. This is subject to the completion of the gas monitoring programme.</p> <p>The site is not within an area requiring radon precautions within foundations.</p>

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				Generic Quantitative Risk Assessment		
PL	Potential source	Pollution linkage	Likelihood	Severity	Level of risk	Rationale
PL6	Contaminated Soils	<p>Impaction of groundwater from soil contamination (diffuse and point).</p> <p>Impaction of groundwater from groundwater plume.</p>	Unlikely	Mild	Very Low	<p>Made Ground has been encountered beneath both sites to a maximum depth of 2.3m bgl due to the historical industrial development.</p> <p>Mobile contamination was not identified through the Ground Investigation and very low concentrations of total TPH were recorded.</p> <p>Groundwater was not encountered within any of the boreholes.</p> <p>Natural Clay deposits underlie both sites which will have limited the downward migration of any potential contamination. The Undifferentiated Secondary Aquifers are not considered to be a sensitive resource.</p> <p>The proposed development commercial/industrial which encompasses the entirety of the site with hardsurfacing. Therefore, a pollution linkage is not considered to exist as a source of mobile contamination has not been identified.</p>

Conceptual Site Model				Generic Quantitative 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	Mild	Very Low	<p><i>Pollution Linkage 7 refers to the impaction of Afon Seiont 109m south and nearby tributaries/water features.</i></p> <p><i>No sources of mobile contamination have been identified and a viable pollution linkage is not considered to exist.</i></p>

8.5 Outline Remedial Strategy

Soils and Groundwater

Based on the results of the Ground Investigation, no specific remedial measures are required with respect to the contaminated soils or groundwater as no elevated contaminants of concern have been recorded at the site. Asbestos has been recorded in a single location.

The site is to be covered with hardsurfacing which will effectively act as a cover system. If soft landscaping areas are proposed, a cover system comprising 300mm of suitably clean soils with a demarcation layer should be placed.

Topsoil

If required, the topsoil is considered to be suitable for reuse as part of a commercial development based on the results of the three topsoil samples tested. Additional testing is recommended prior to reuse once the material has been stripped and stockpiled.

Ground Gas

Preliminary ground gas monitoring results place the abattoir (Area B) in CS2 due to a single elevation of carbon dioxide being recorded within WS06 beneath the footprint of the proposed warehouse, and gas precaution measures may be required as part of the proposed development.

The monitoring results from the skip yard (Area A) place it into CS1 based on the monitoring undertaken to date, as the development in this area is an extension it is recommended that as a minimum the precautions present in the existing building are also incorporated into the proposed extension.

The gas monitoring programme is ongoing and the level of protection will be confirmed upon completion.

The site does not lie within an area where radon precautions are required for foundations.

Watching Brief and Regulatory Liaison

A watching brief is recommended during future ground works for any previously unseen contamination. If identified, work should cease in that area and advice sought from Groundtech Consulting Limited.

Approval from the regulators should be obtained prior to the development commencing to avoid any delays at the construction stage. A Remedial Specification is recommended which will include a protocol for dealing with the risk from asbestos in soils.

8.6 Asbestos in Soils

Asbestos has been encountered within one of the eighteen samples screened and was present within the gravel of slate and brick of WS14 at 0.6m bgl. The asbestos is likely to be present at trace quantity depending on the quantification of the sample. The JIWG receptor tool characterises the risk as negligible.

The JIWG receptor results are present in *Appendix 12*.

The presence of asbestos within the ground will require, a safe system of work to be set up on site to deal with the asbestos risk from the made ground. This may include but be not limited to:

- *The use of qualified personnel where required.*



- *Careful segregation of stockpiles on site.*
- *Defining transport routes.*
- *Cleaning down of machinery in designated areas.*
- *Decontamination unit for ground workers.*
- *Damping down of soils to prevent dust migration.*

All such works will need to be agreed with the regulatory bodies (HSE, LA)

8.7 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:

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

No elevated contaminants have been recorded, asbestos has been detected at a single location within the north western section of the skip yard (Area A). The risk should be communicated to ground workers through a site induction and information should be made available through site noticeboards.

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.*

8.8 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.

Eighteen 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 13*.

Based on the assessment tool the Made Ground and natural soils have been classified as *Non-Hazardous*. The asbestos is unlikely to exceed the hazardous threshold of 0.1%, subject to the results of the quantification.

8.9 Waste Acceptance Criteria (WAC) Results

Waste Acceptance Criteria (WAC) testing was outside the scope of this investigation and the guidance given below is general.

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.

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.*

If any organic contaminated material is encountered during the construction phase, it is possible that this may be classified as hazardous and testing should be undertaken at that time.

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 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. 600m³) of non-hazardous soil*
- *5,000 tonnes (c. 3,000m³) of natural sand and gravels.*
- *50,000 tonnes (c. 25,000m³) of bituminous material to be used in roadways.*
- *5,000 tonnes (c. 3,000m³) of crushed concrete / stone.*

9.0 FINAL APPRAISAL

9.1 Land Quality

Made Ground has been encountered across both sites (Area A and B) to depths of between 0.1m and 2.3m bgl and was generally granular and consistently underlain by natural cohesive clay deposits.

No elevated contaminants of concern were recorded through laboratory testing based on the site being developed commercially. Asbestos was recorded in a single location beneath the skip yard (Area A) in the form of chrysotile fibre bundles.

The proposed commercial development will be covered in hardsurfacing eliminating a pathway to site end users, therefore the risk to human health is considered to be *Low*.

No sources of mobile contamination were identified by the Ground Investigation and the risk to controlled waters is considered to be *Low*.

Preliminary ground gas monitoring results place the abattoir (Area B) within Characterisation Situation 2 and gas precaution measures may be required within the abattoir site as part of the development. The skip yard (Area A) currently falls within CS1 and no gas precaution measures are required. The level of precautions for both areas will be confirmed upon completion of the gas monitoring programme.

The Made Ground and natural soils have been classified as *Non-Hazardous* for waste disposal purposes and the topsoil is suitable for reuse as part of the development.

9.2 Ground Engineering

The most suitable foundations are considered to be pads constructed within the natural Clay deposits encountered in both areas. Foundations should be deepened through the Made Ground encountered during foundation excavations. Provisions should be made for large plant and potential over dig due to the presence of large cobbles and boulders within the founding strata.

A suspended floor slab is recommended due to their being greater than 600mm of Made Ground beneath the footprint of the proposed developments.

The results of laboratory pH and sulphate content indicate that ACEC Class AC-1s and sulphate class DS-2 conditions prevail at the abattoir (Area B) while AC-1 and DS-1s conditions prevail at the skip yard (Area A) in accordance with BRE Special Digest 1 "Concrete in aggressive ground" 2005.

SuDS drainage is unlikely to be feasible at the site due to cohesive natural ground being encountered across the site which will provide poor drainage properties.



9.3 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.

Confirmatory investigation at position of workshop in abattoir (Area B) post demolition.

Additional topsoil sampling if material is proposed for reuse.

Demolition and Refurbishment Asbestos survey.

Tree survey by qualified arboriculturist.

Detailed foundation design.

Confirmation of remedial recommendations with regulators.

10.0 RELEVANT INDUSTRY REFERENCES

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APPENDIX 1 - Plans



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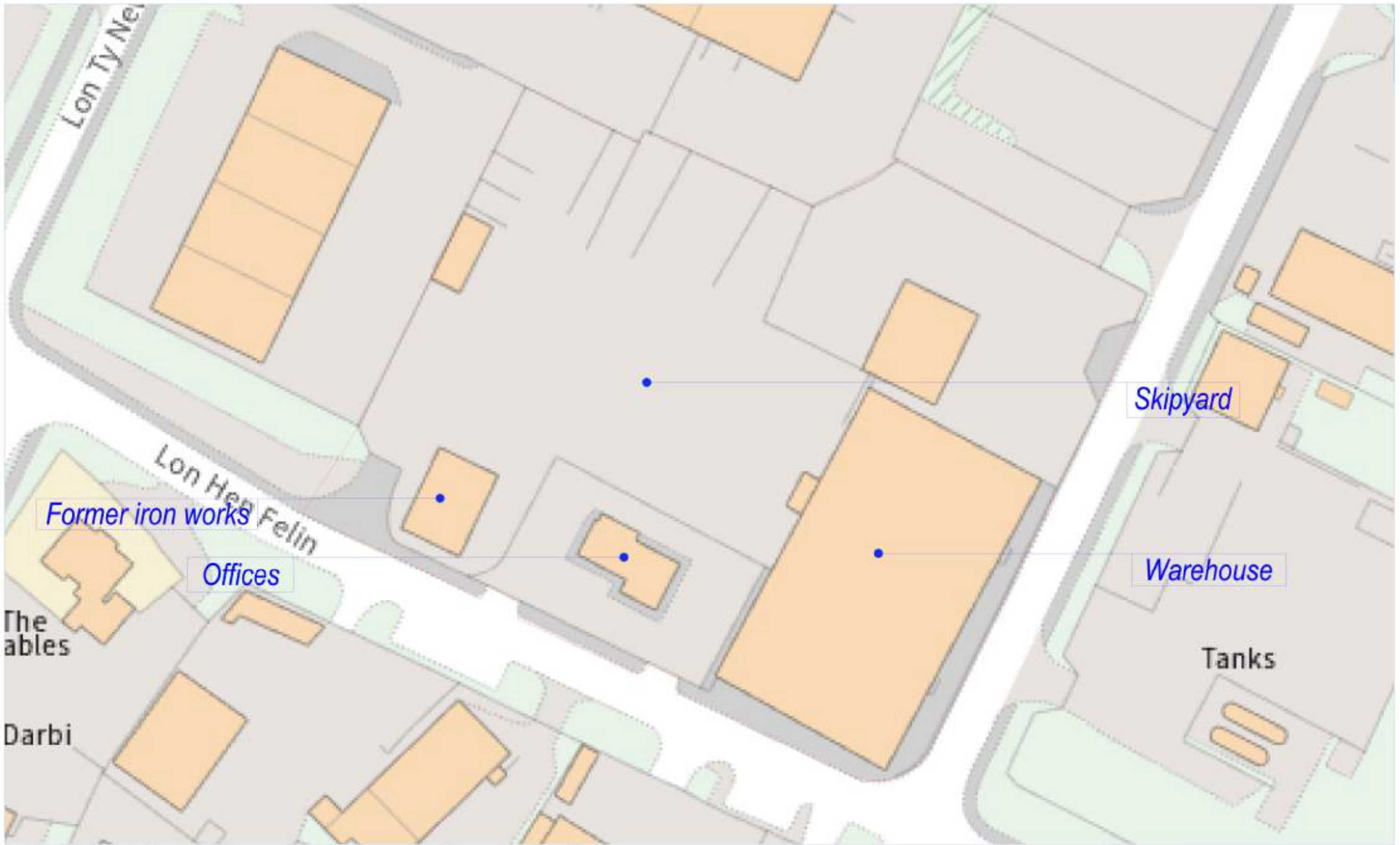
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GWYNEDD SKIPS
PLAN TITLE
PROJECT LOCATION PLAN

DATE
MAY 2022
SCALE
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PLAN NUMBER
GRC-22013-P01

Rev.	Details	Date

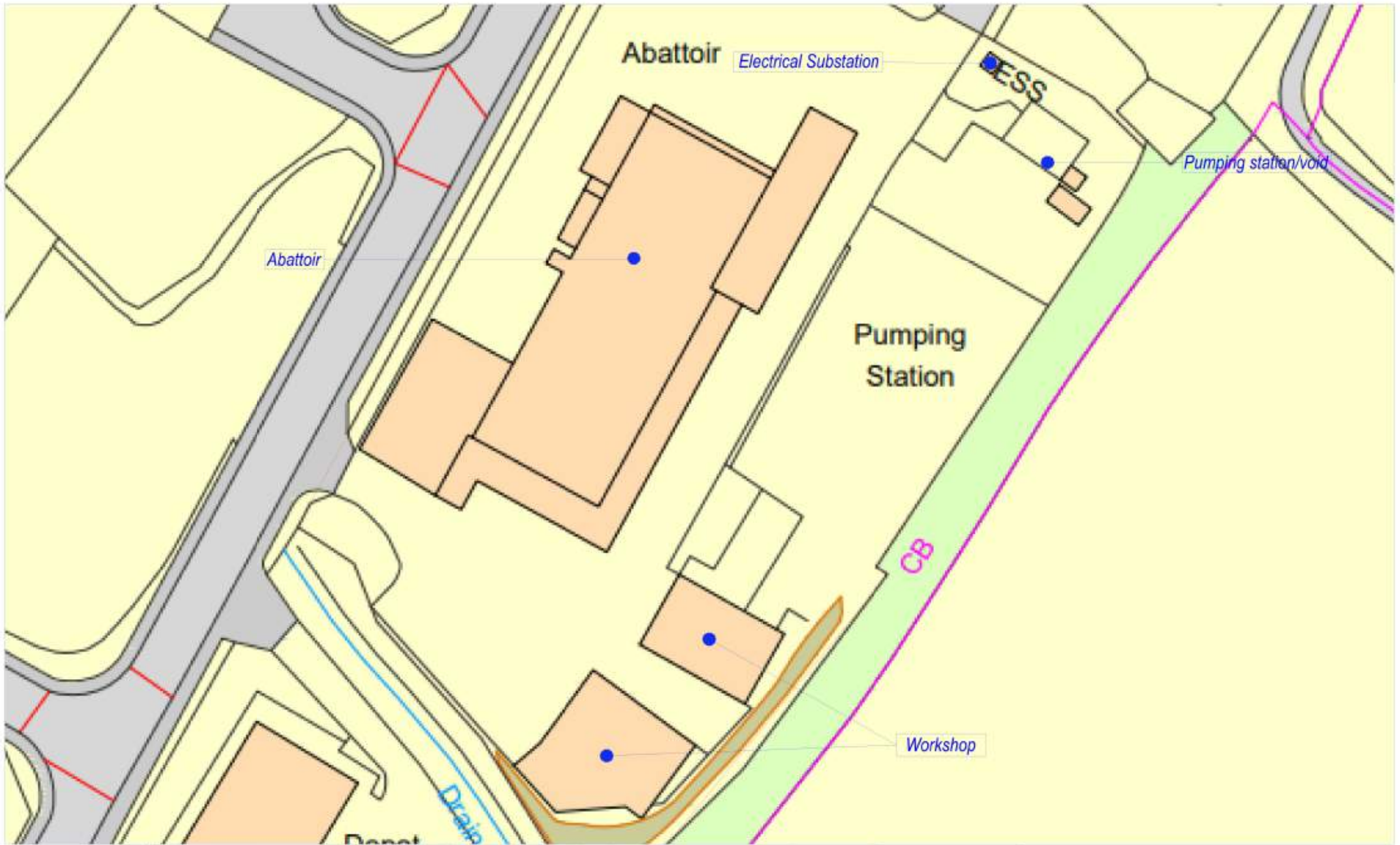
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For Comment	
Approved	





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	PLAN TITLE PRELIMINARY DEVELOPMENT CONSTRAINTS PLAN	PLAN NUMBER GRO-22013-P02_A			Issued	
					For Comment	
			Rev. Details	Date	Approved	





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CLIENT	GWYNEDD SKIP & PLANT HIRE
PROJECT TITLE	GWYNEDD SKIPS
PLAN TITLE	PRELIMINARY DEVELOPMENT CONSTRAINTS PLAN

DATE	MAY 2022
SCALE	NTS
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Rev.	Details	Date

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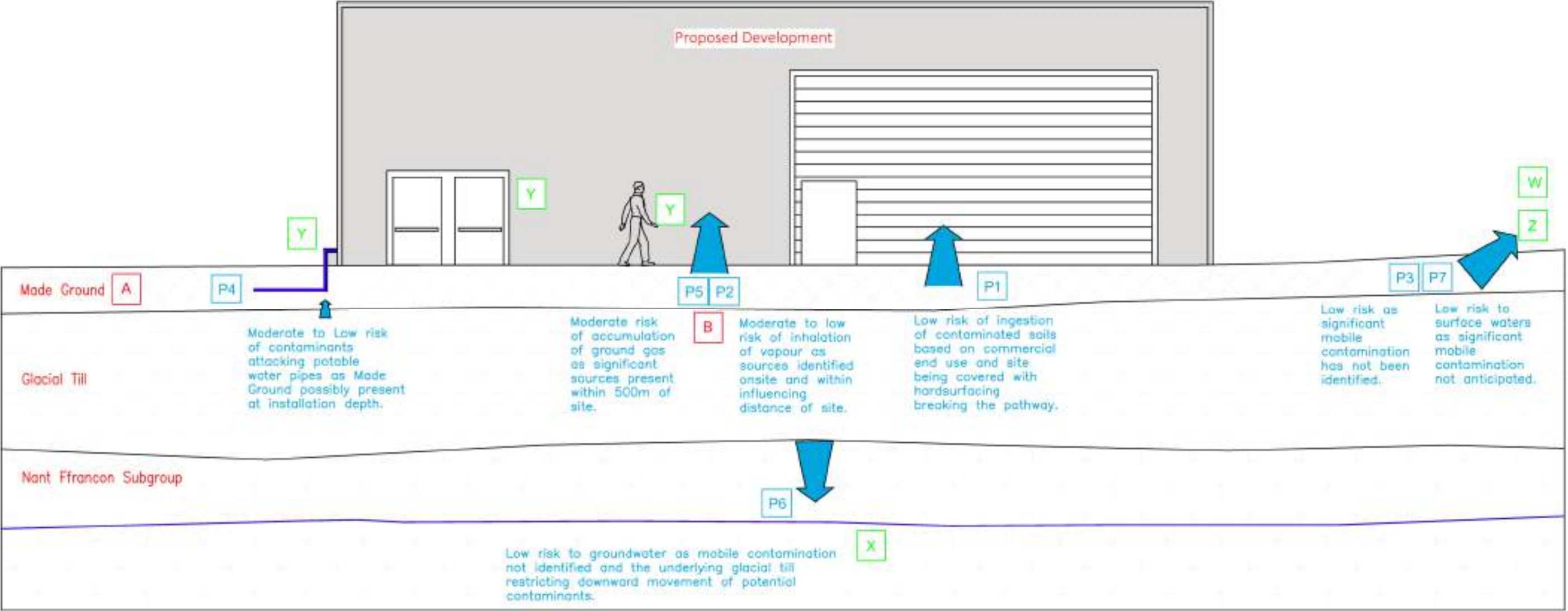
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SOURCES
A. Contaminated soils / Made Ground. B. Ground gas.

POLLUTION LINKAGES
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.

RECEPTORS
W. Nearby surface waters including Afon Seiont 109m south. X. Groundwater within the Secondary Undifferentiated Aquifers. Y. Site end users Z. Adjacent site users.





GROUNDTECH CONSULTING 	CLIENT GWYNEDD SKIP & PLANT HIRE	DATE FEBRUARY 2022	Status Preliminary	Notes  Proposed table permission location position  Proposed water sampling location position
	PROJECT TITLE GWYNEDD SKIPS	SCALE NTS	Draft	
	PLAN TITLE EXPLORATORY HOLE LOCATION PLAN	PLAN NUMBER GRO-22013-P04_A	Issued	
	Rev. Details	Date	For Comment	
			Approved	



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CLIENT
GWYNEDD SKIP & PLANT HIRE

PROJECT TITLE
GWYNEDD SKIPS

PLAN TITLE
EXPLORATORY HOLE LOCATION PLAN

DATE
FEBRUARY 2022

SCALE
NTS

PLAN NUMBER
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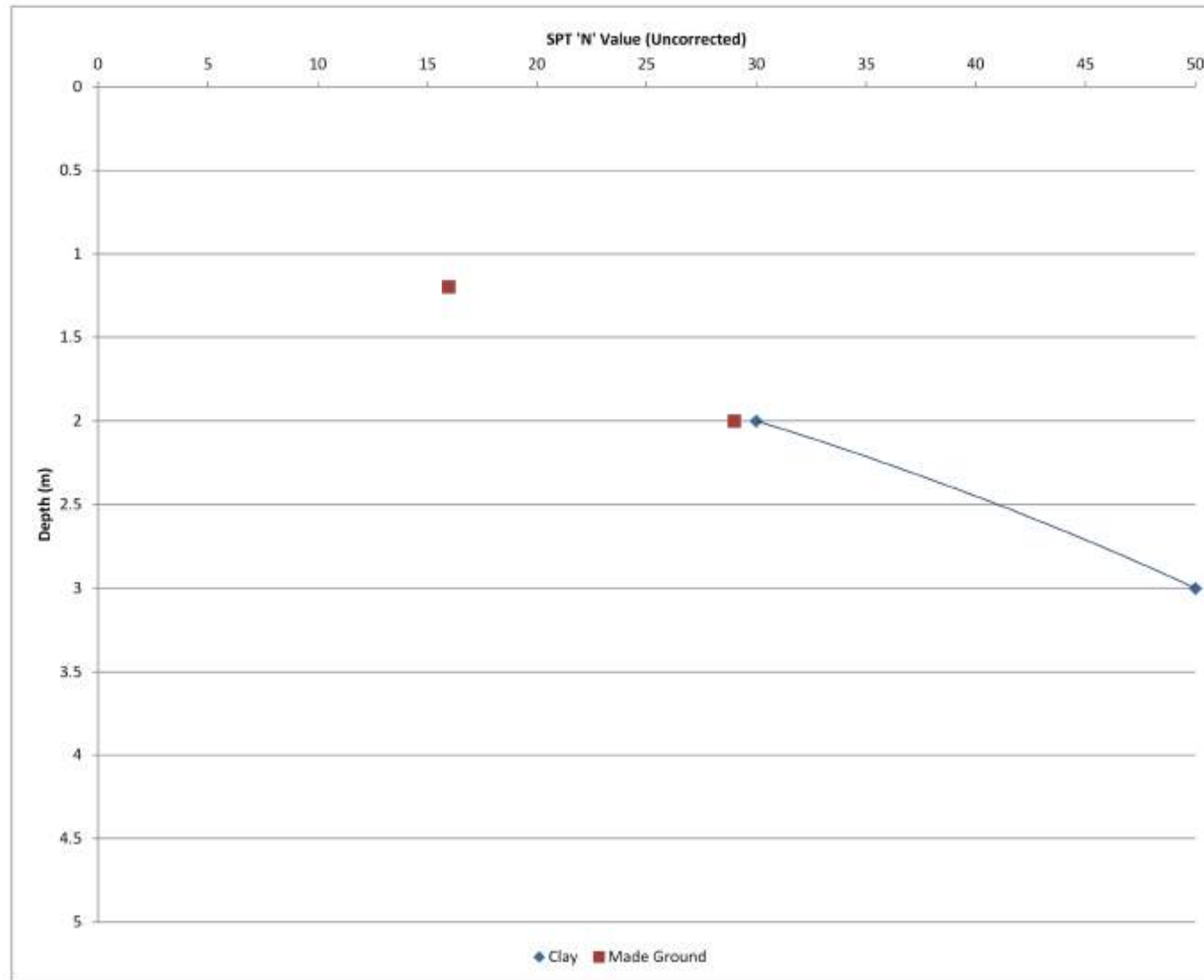
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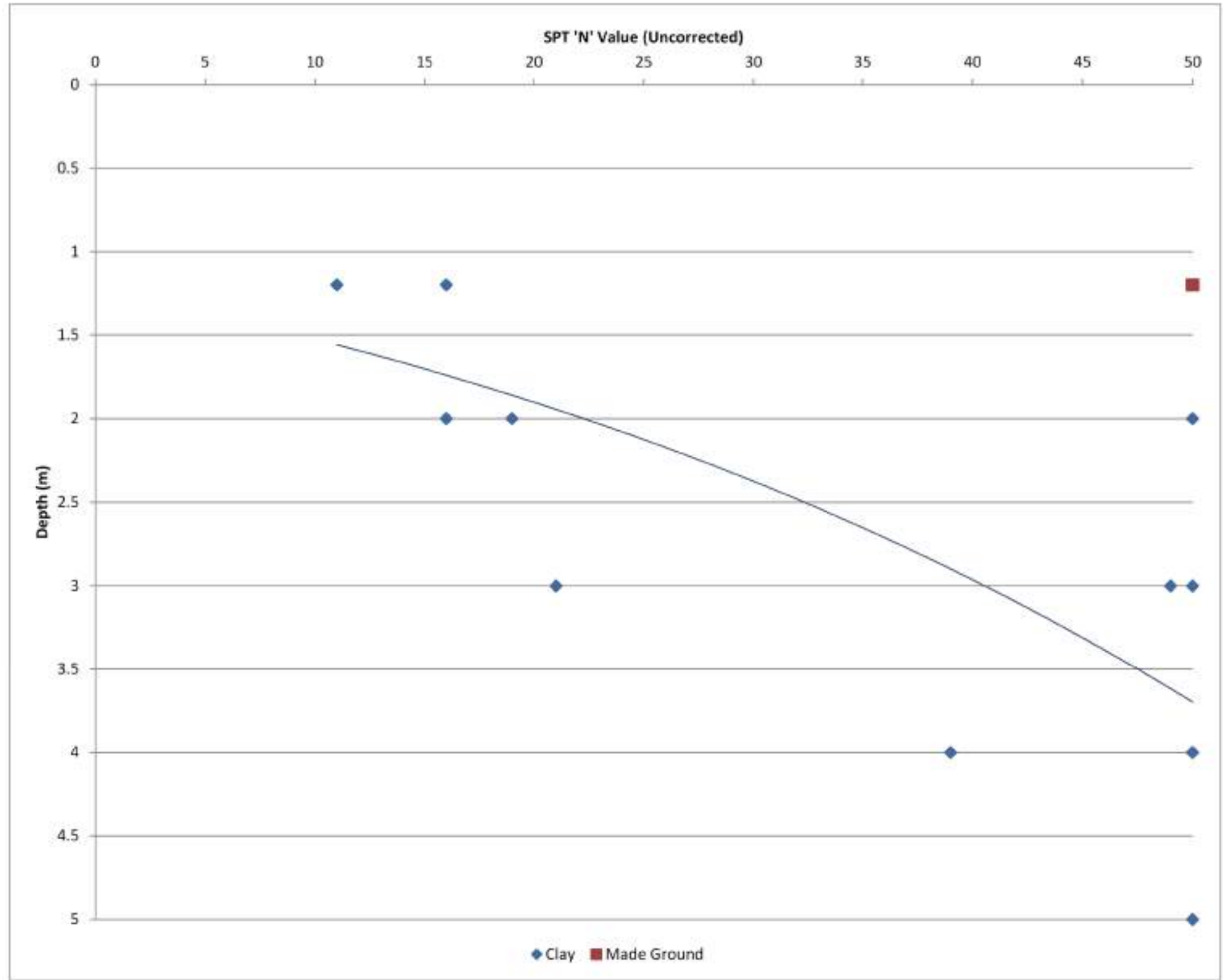
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Issued	●
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Notes

- Proposed table permission territory position
- Proposed waterworks sample territory position



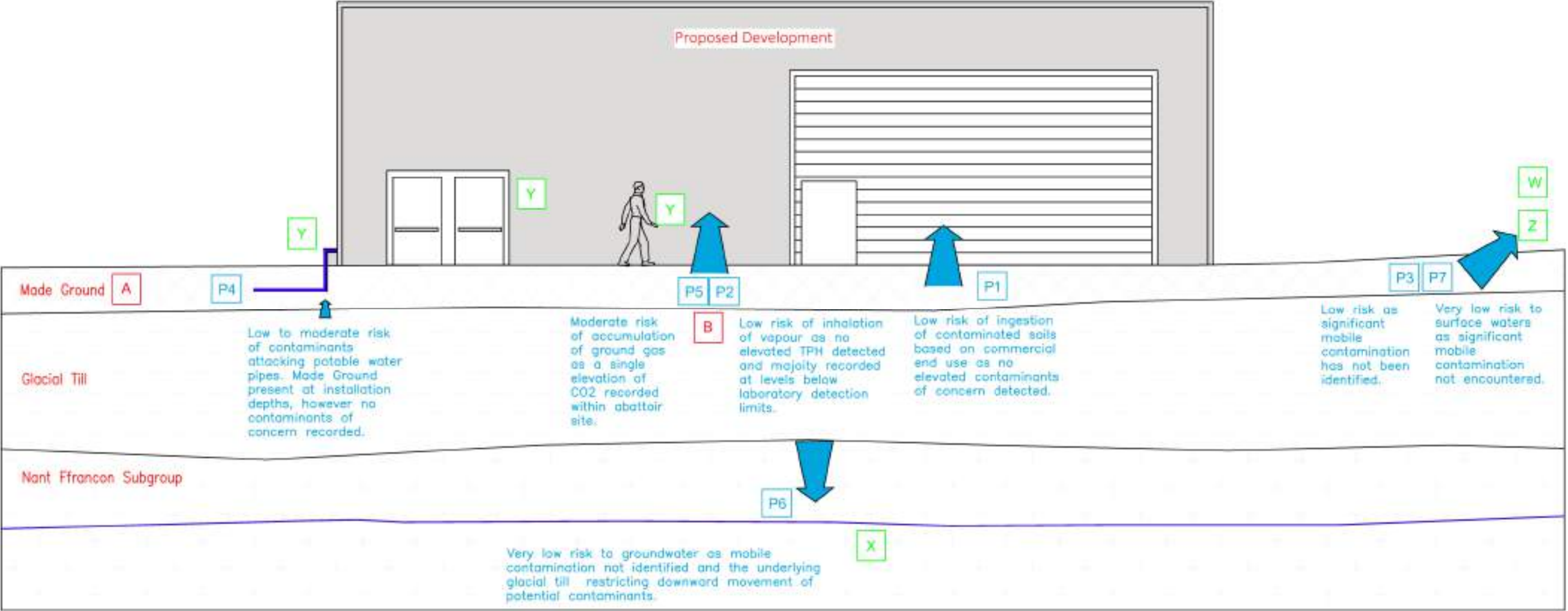




SOURCES
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POLLUTION LINKAGES
P1. Ingestion of soil and dust. P2. Inhalation of vapour. P3. Inhalation of soil dust by adjacent site users. P4. Attacking of potable water supply pipe. P5. Migration and accumulation of ground gas in internal places. P6. Impaction of groundwater from soil contamination. P7. Migration of soil and groundwater contamination impacting surface waters.

RECEPTORS
W. Nearby surface waters including Afon Seiont 109m south. X. Groundwater within the Secondary Undifferentiated Aquifers. Y. Site end users Z. Adjacent site users.



	CLIENT GWYNEDD SKIP & PLANT HIRE	DATE MAY 2022			Status Preliminary Draft Issued <input checked="" type="checkbox"/> For Comment Approved		Notes	
	PROJECT TITLE GWYNEDD SKIPS	SCALE NTS						
	PLAN TITLE REVISED ILLUSTRATIVE CSM	PLAN NUMBER GRO-22013-P06	Rev.	Details	Date			



APPENDIX 2 - Site Photographs



Photograph 1 – Skip yard (warehouse to right)



Photograph 2 – Skip yard



Photograph 3 – Skip yard (waste stockpile)



Photograph 4 - Skip yard waste disposal



Photograph 5 – North eastern area of Abattoir



Photograph 6 – Stockpile of recently stripped topsoil at abattoir



Photograph 7 – Abattoir



Photograph 8 – Western area of site (facing south)



Photograph 9 – Recently stripped area east of abattoir (position of proposed warehouse)



Photograph 10 – Eastern section of abattoir



Photograph 11 – Skip storage area



Photograph 12 – Abattoir (left) and workshops (right)



Photograph 13 – Position of proposed warehouse



Photograph 14 – Abattoir and associated buildings



Photograph 15 – Western site boundary (Abattoir)



Photograph 16 – Northern site entrance at abattoir



Photograph 17 – Entrance to skip yard



Photograph 18 – Site offices and cafe



Photograph 19 – Eastern extent of warehouse at skip yard



Photograph 20 – North eastern access to skip yard



APPENDIX 3 - Historical Plans

Site Details:

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Scale: 1:2,500

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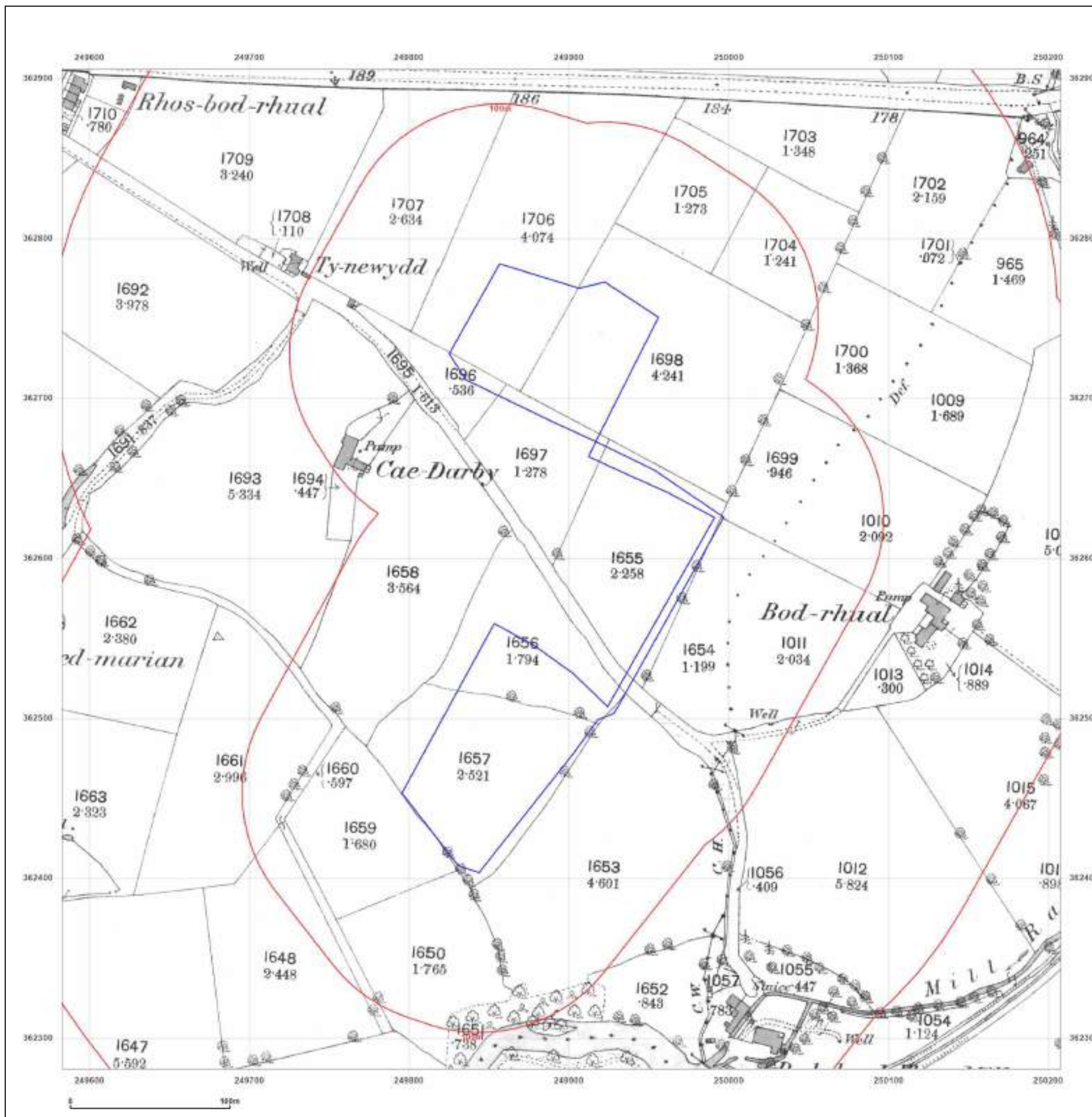


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Map Name: County Series

Map date: 1900

Scale: 1:2,500

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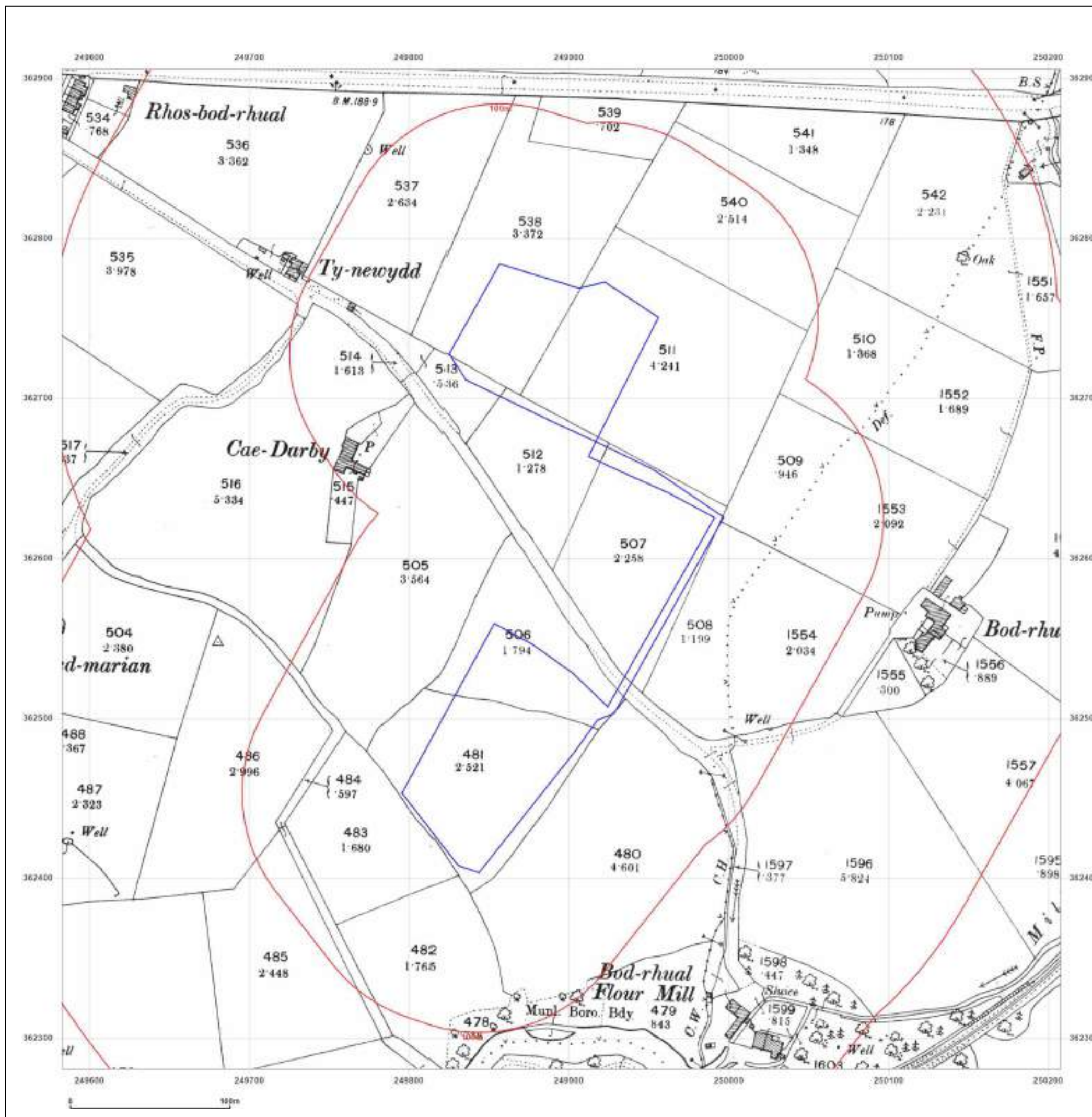


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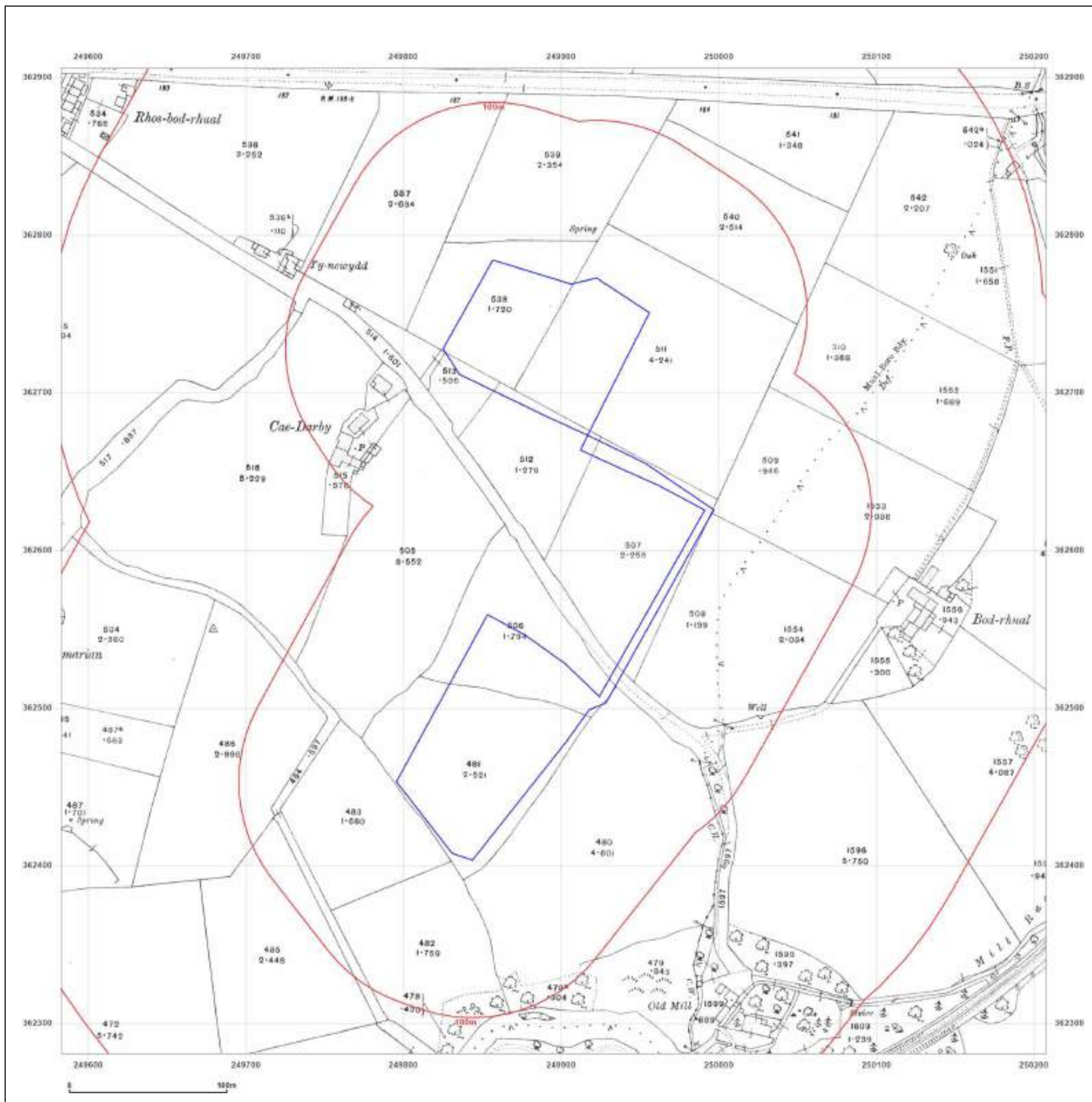


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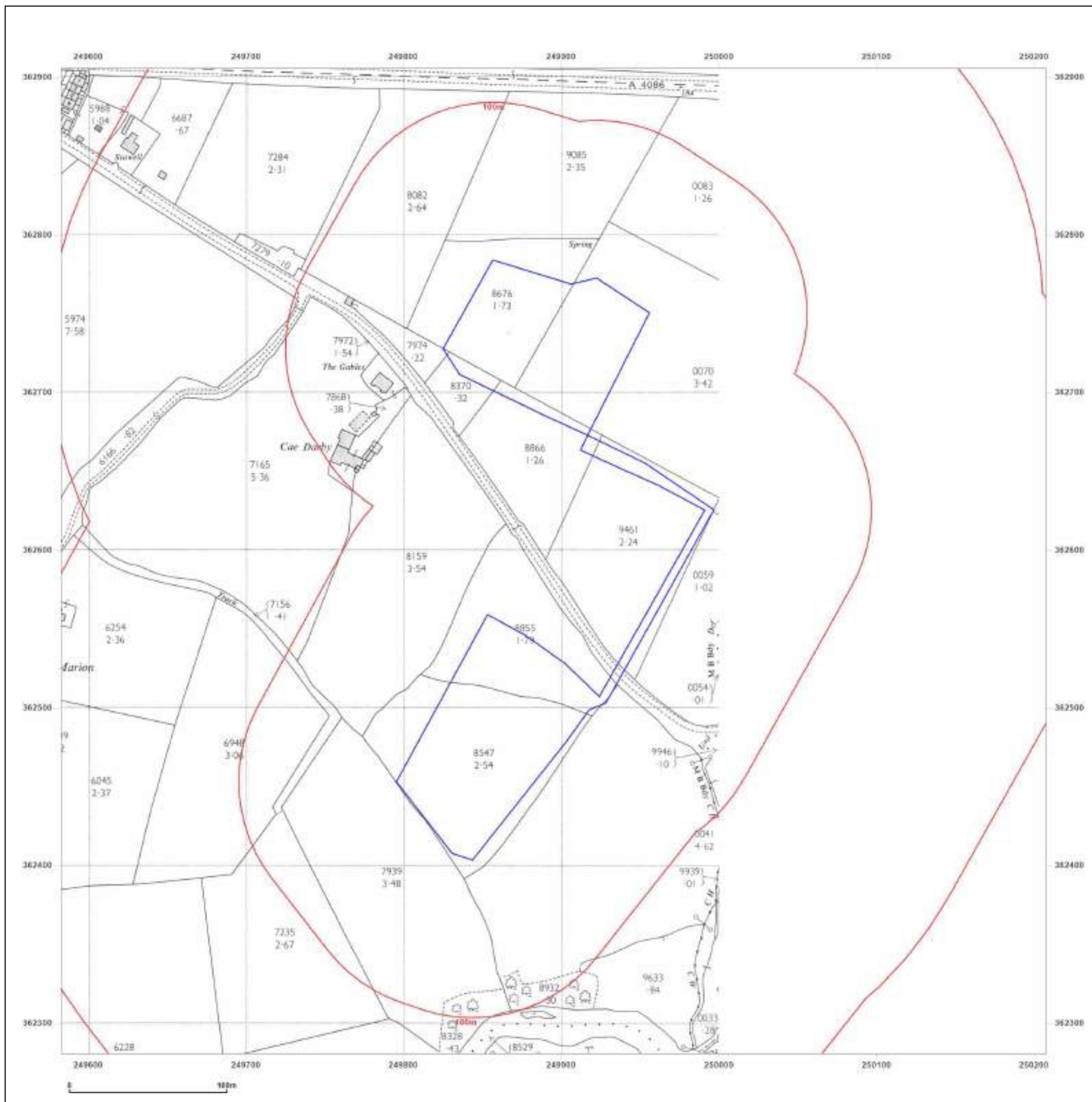


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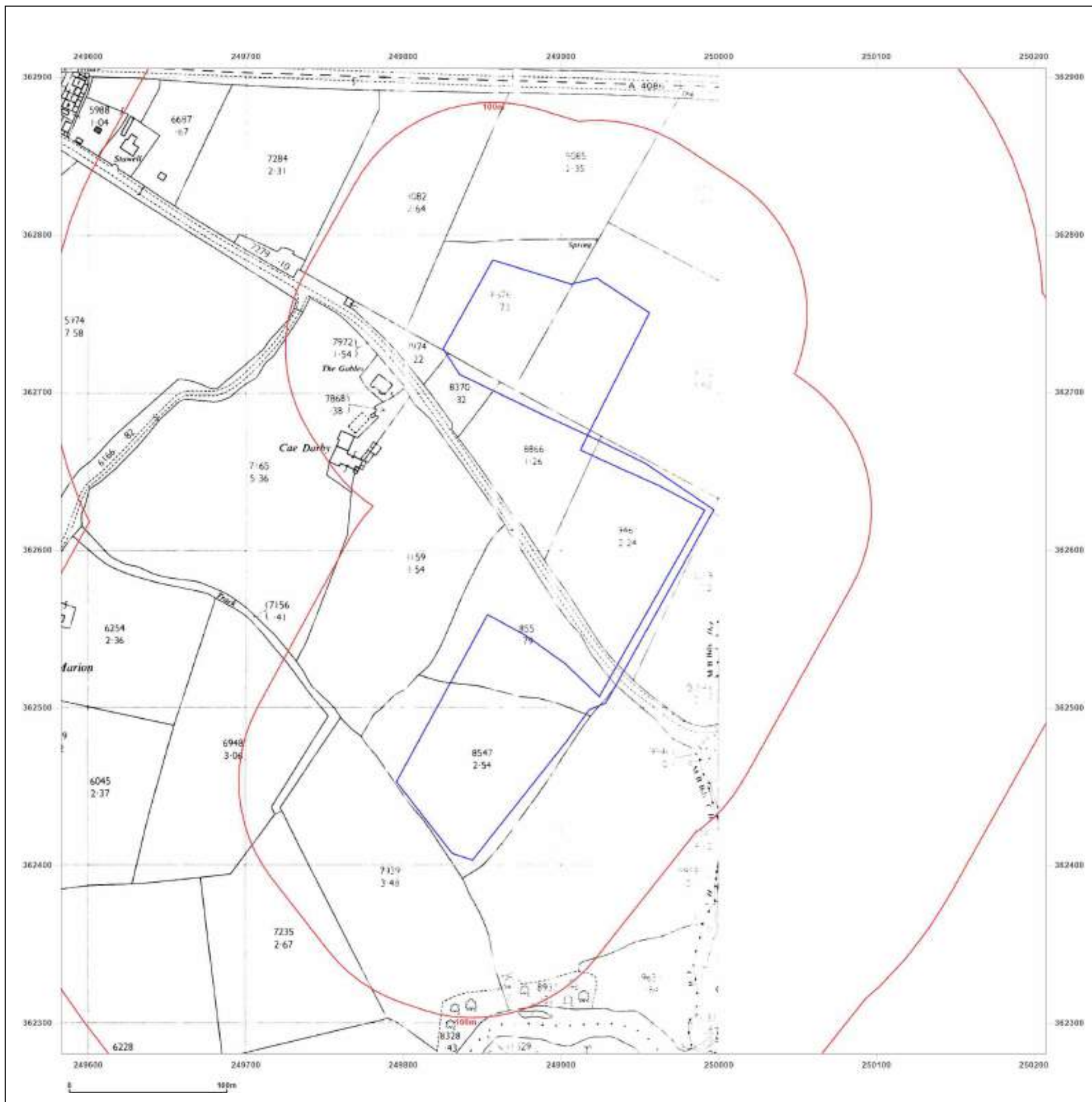


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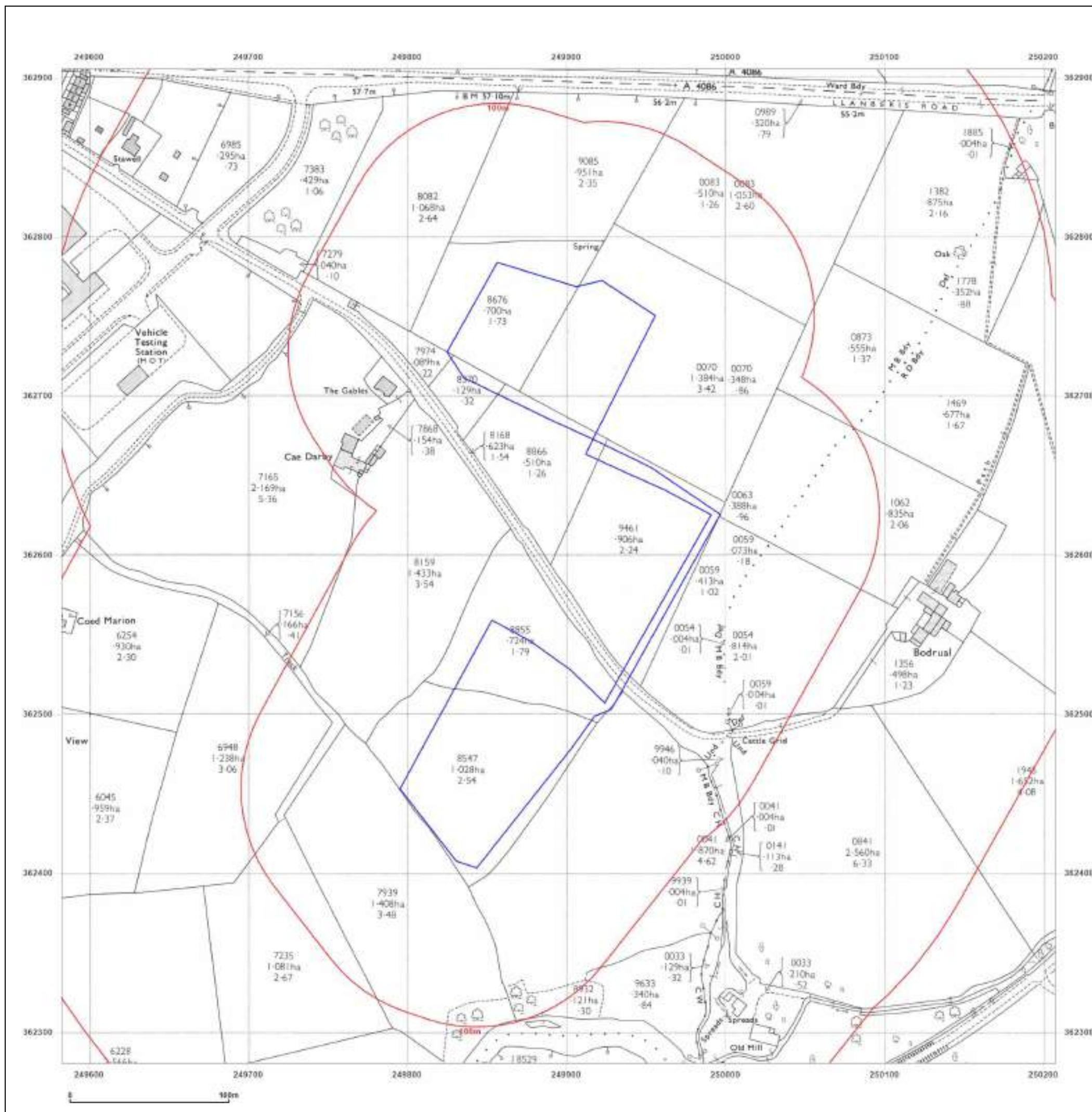


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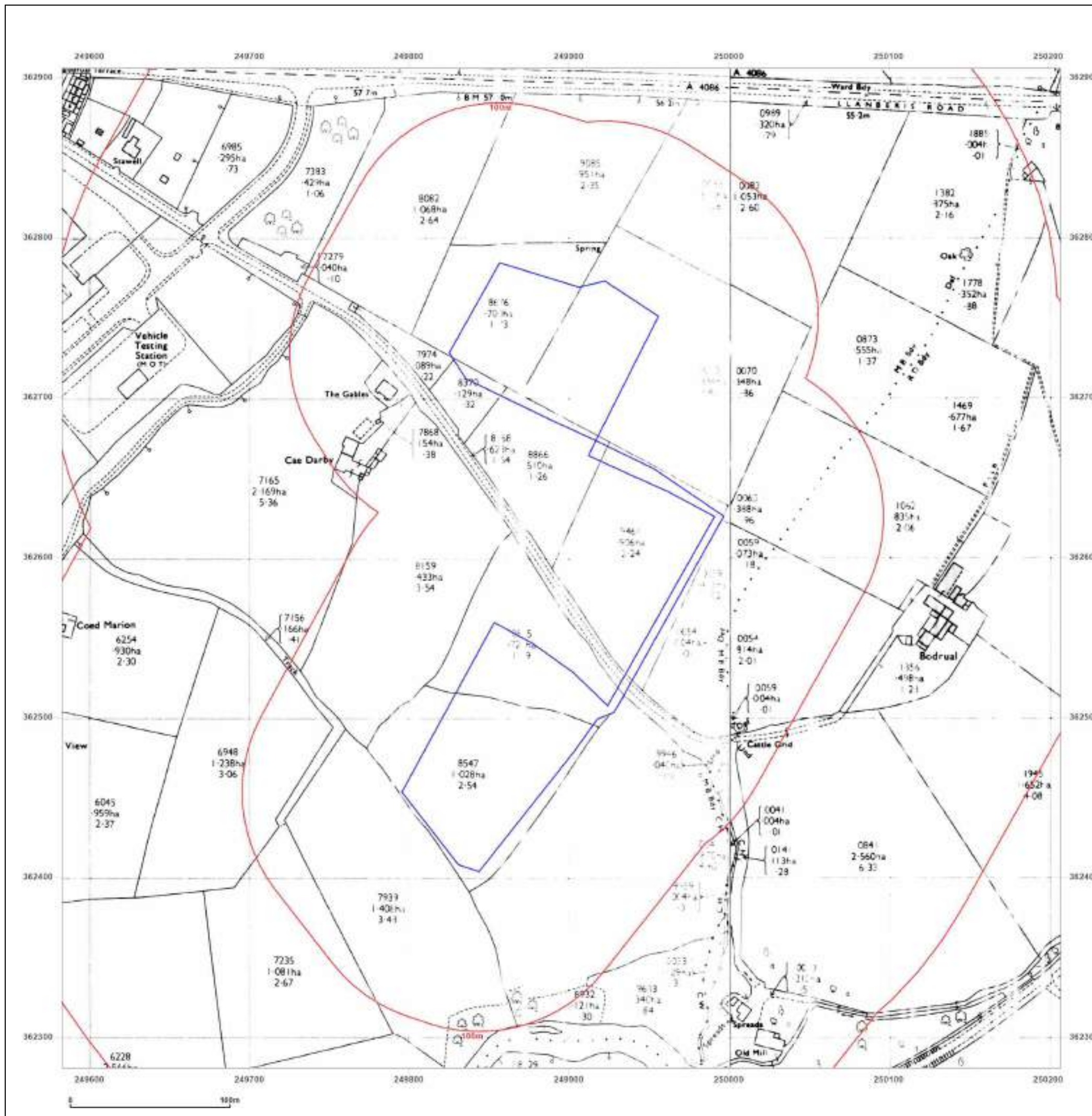
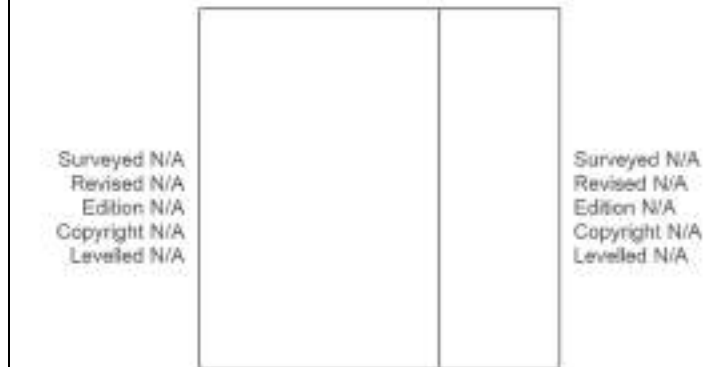
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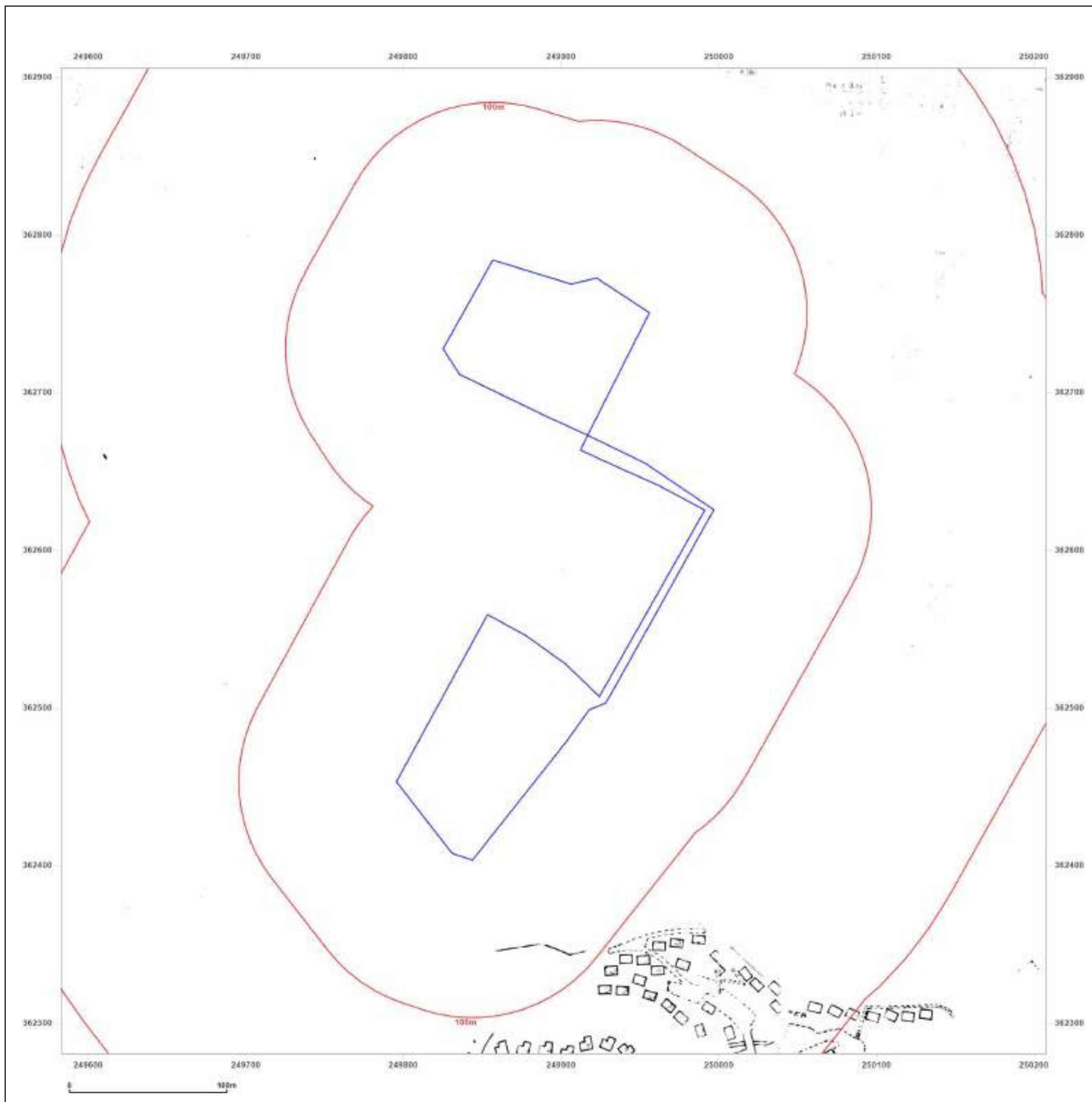


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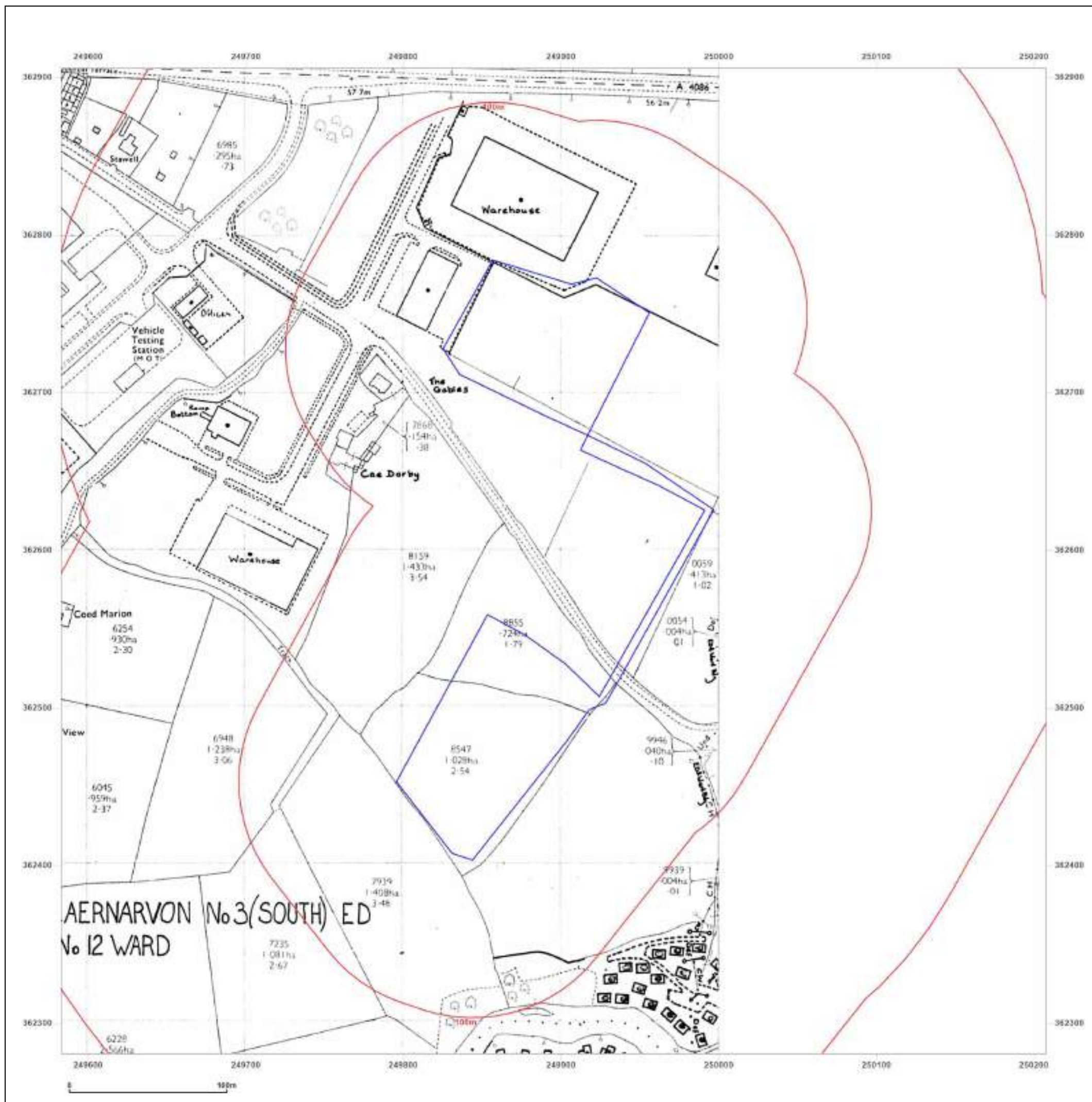


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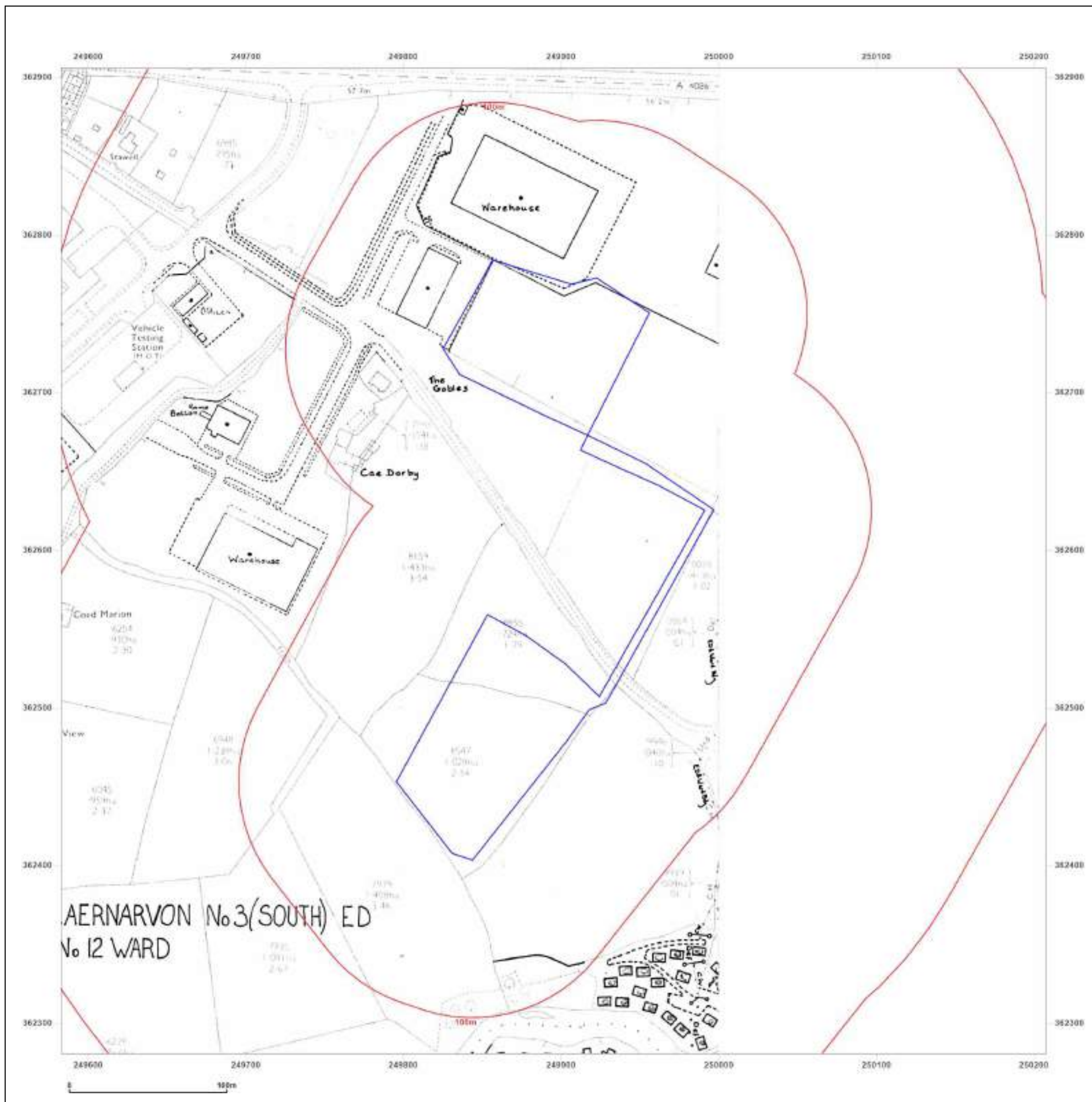


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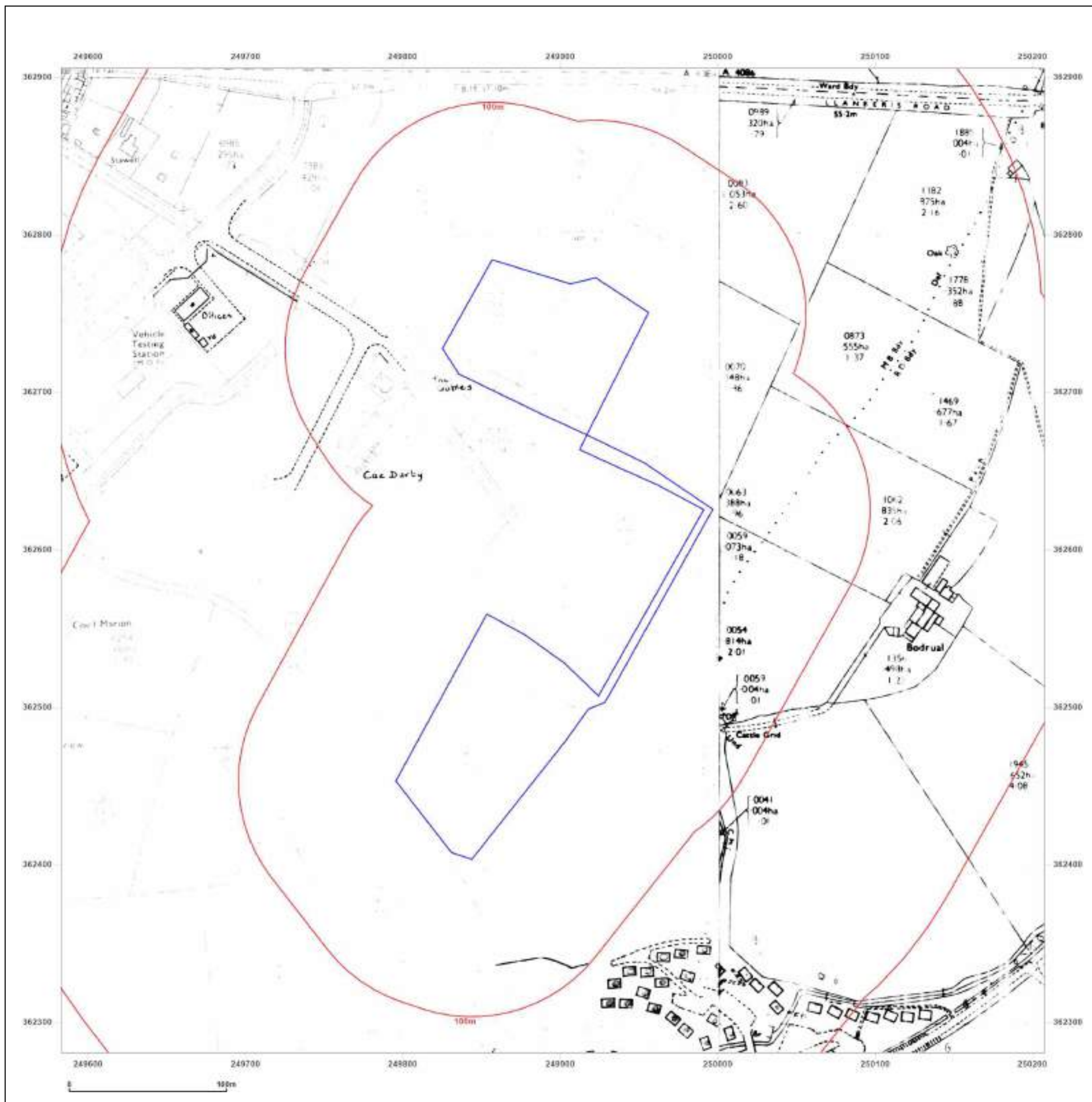
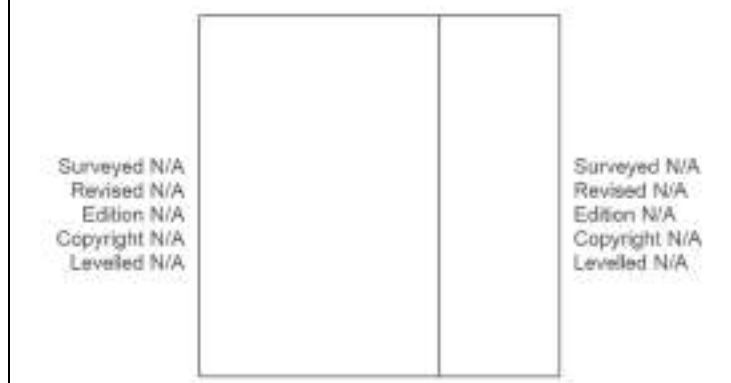
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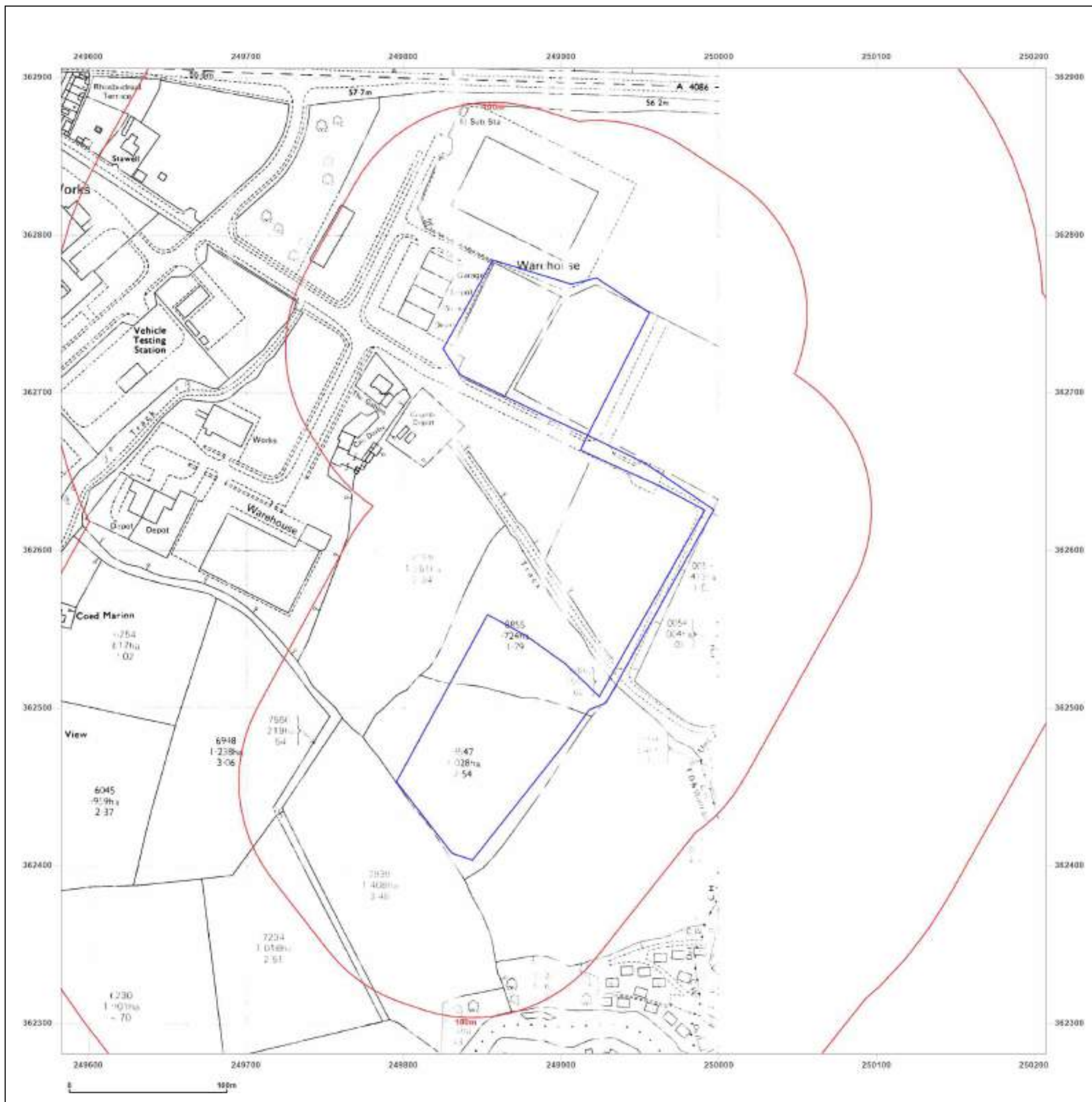


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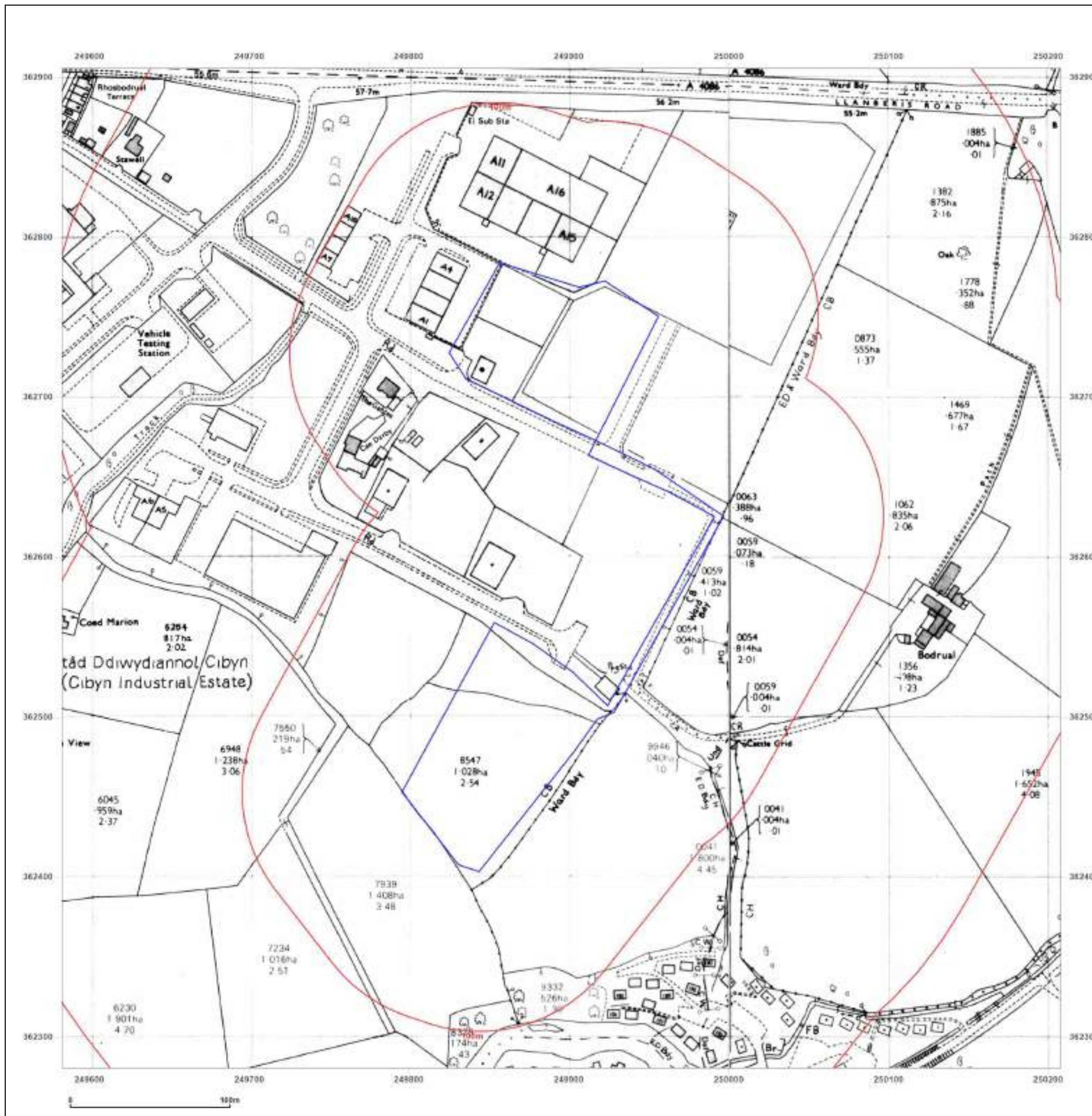
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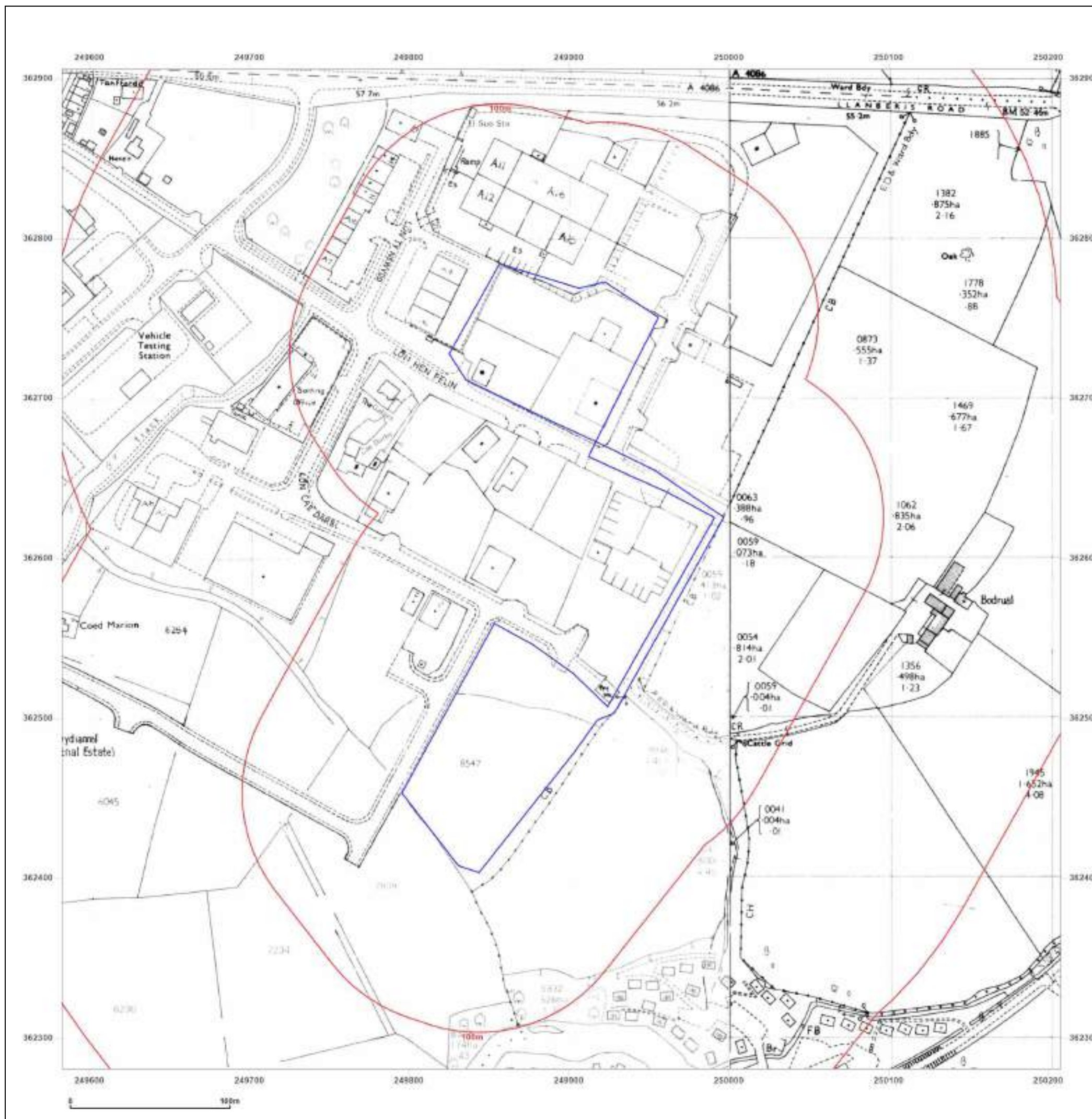


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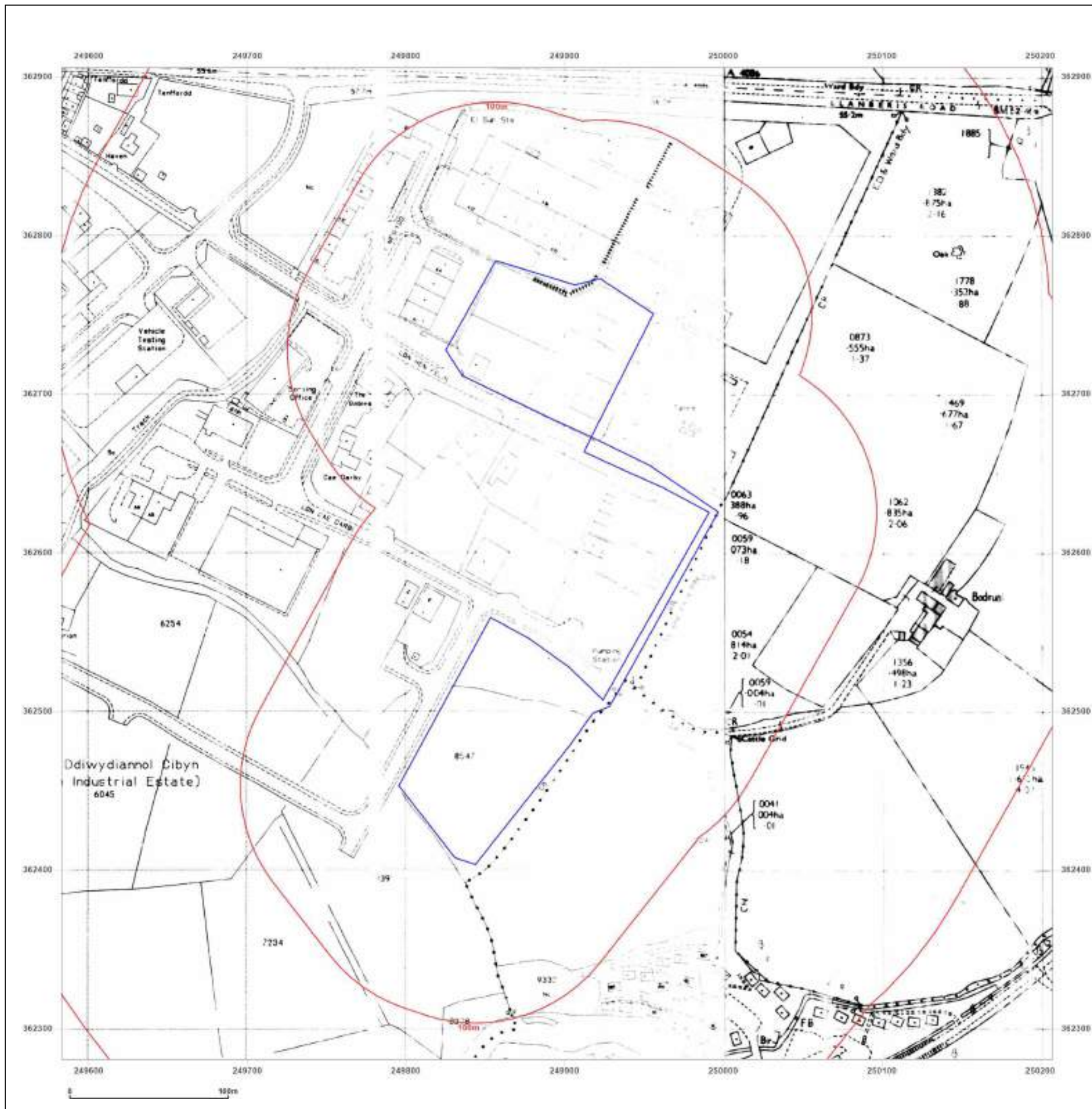
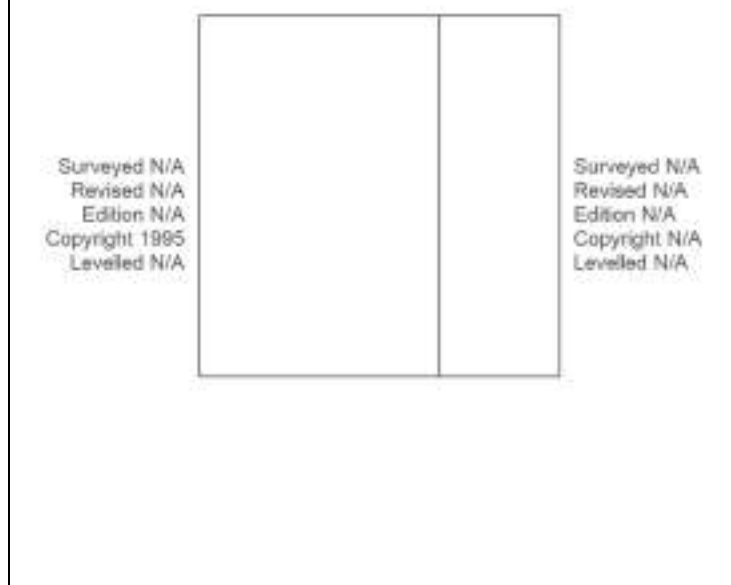
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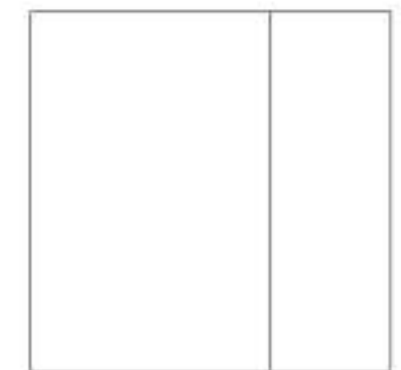
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Report Ref: EMS-763685_988367_2500
Grid Ref: 249895, 362593

Map Name: National Grid

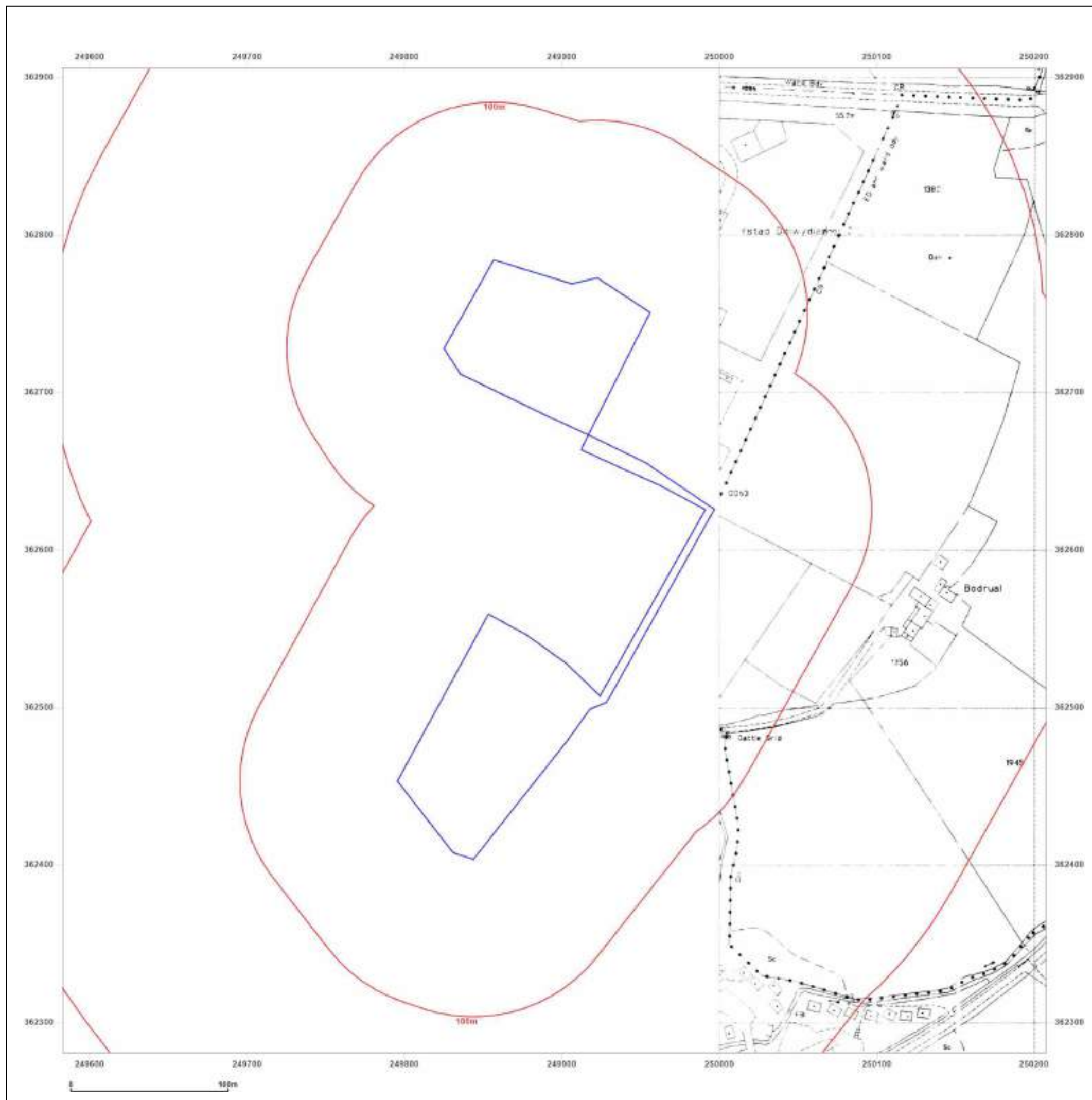
Map date: 1995

Scale: 1:2,500

Printed at: 1:2,500



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

Client Ref: EMS_763685_988367
Report Ref: EMS-763685_988367
Grid Ref: 249896, 362594

Map Name: County Series

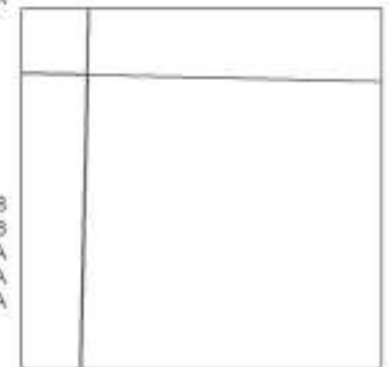
Map date: 1888

Scale: 1:10,560

Printed at: 1:10,560



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 Revised 1888
 Edition N/A
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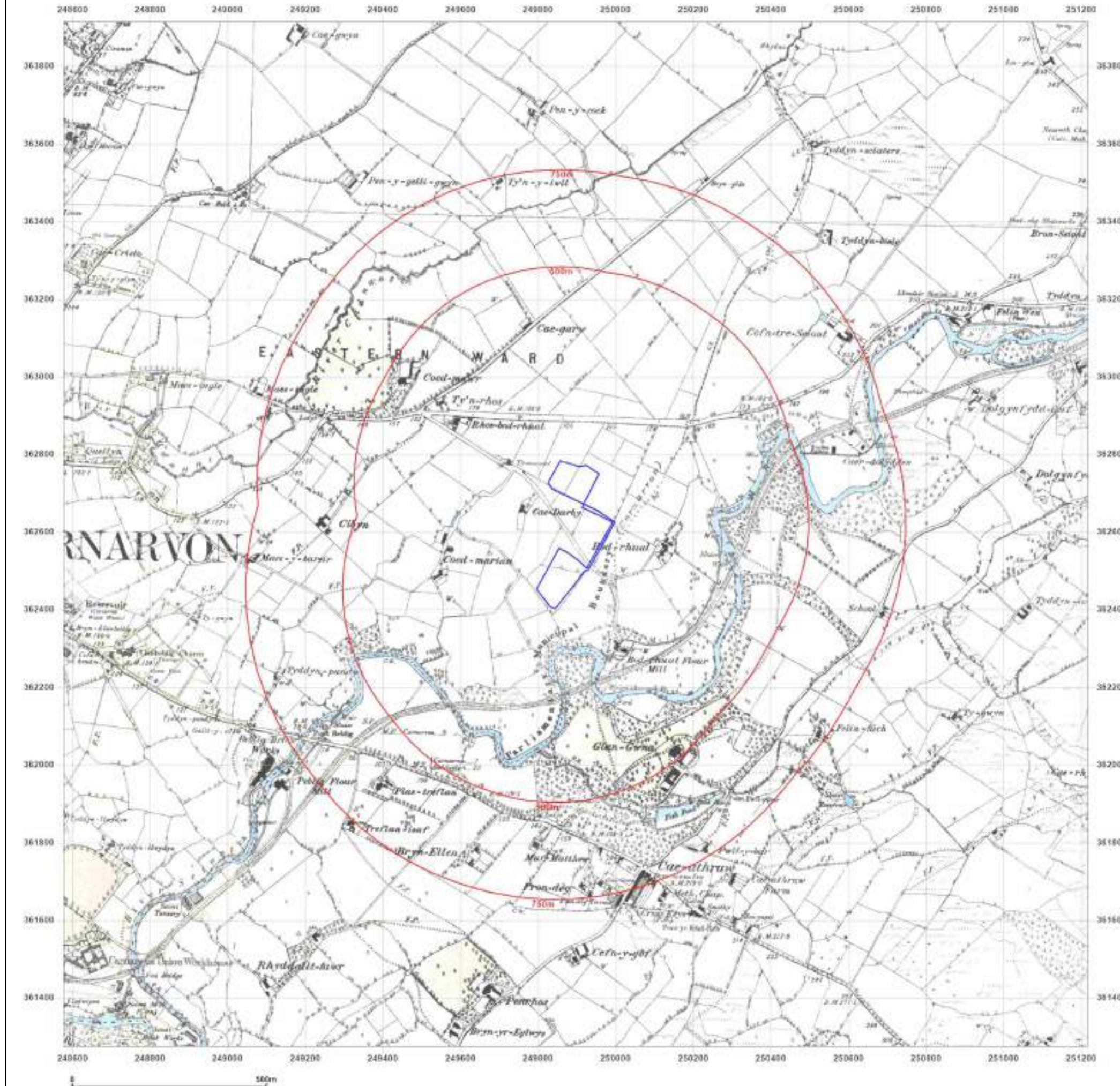


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Site Details:

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 Report Ref: EMS-763685_988367
 Grid Ref: 249896, 362594

Map Name: County Series

Map date: 1899-1901

Scale: 1:10,560

Printed at: 1:10,560

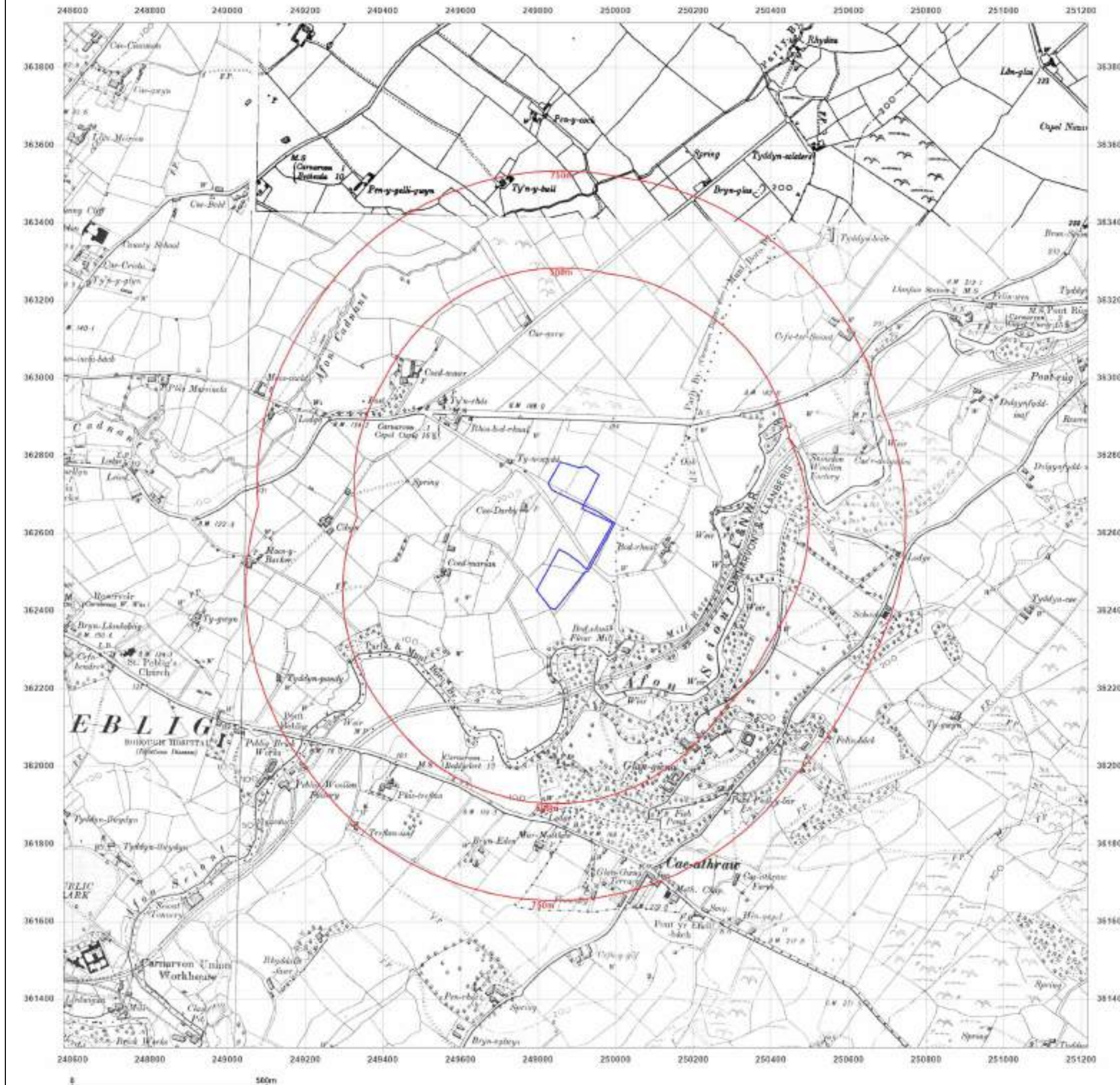
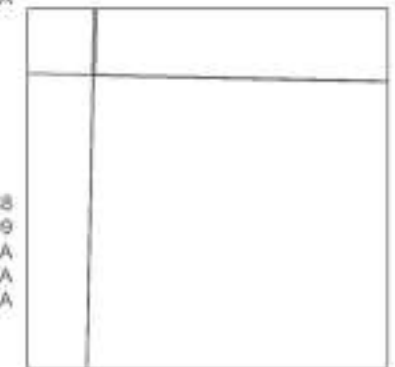


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 Revised 1899
 Edition N/A
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Surveyed N/A
 Revised N/A
 Edition N/A
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 Levelled N/A

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Site Details:

Client Ref: EMS_763685_988367
Report Ref: EMS-763685_988367
Grid Ref: 249896, 362594

Map Name: County Series

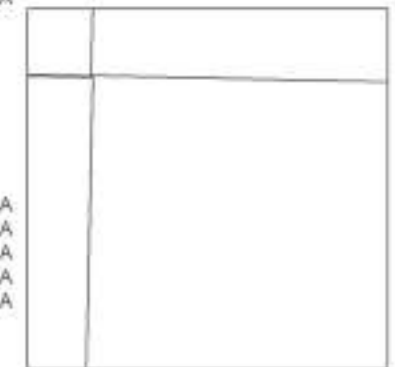
Map date: 1913

Scale: 1:10,560

Printed at: 1:10,560



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



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

Surveyed 1888
 Revised 1913
 Edition N/A
 Copyright N/A
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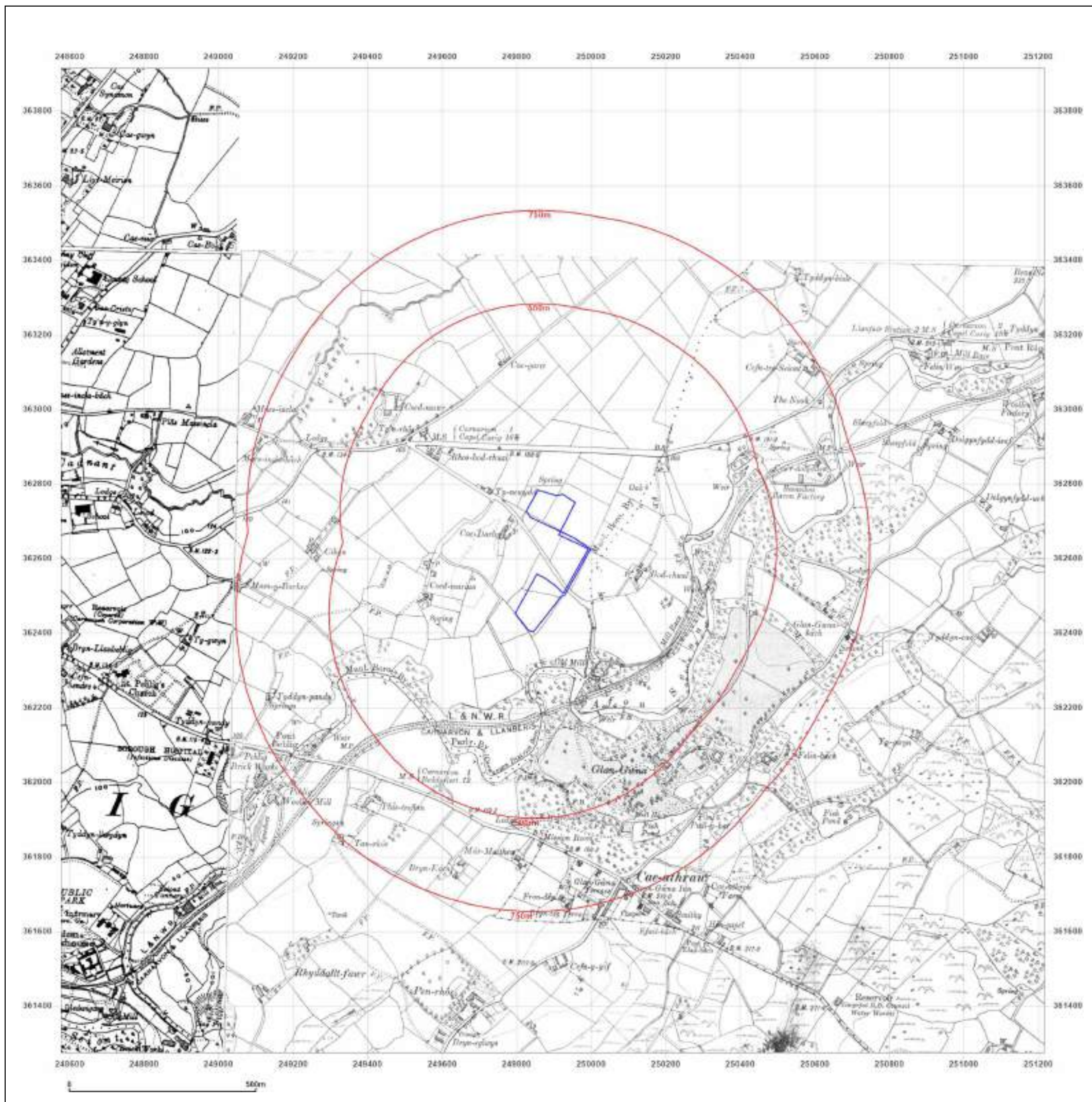


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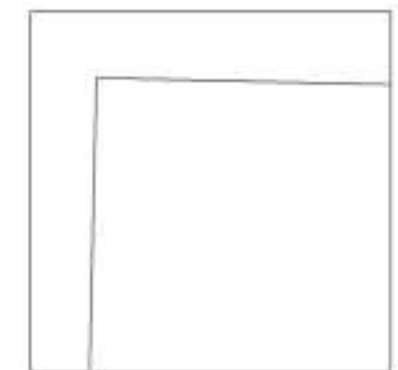
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Report Ref: EMS-763685_988367
Grid Ref: 249896, 362594

Map Name: County Series

Map date: 1949

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1888
 Revised 1949
 Edition 1949
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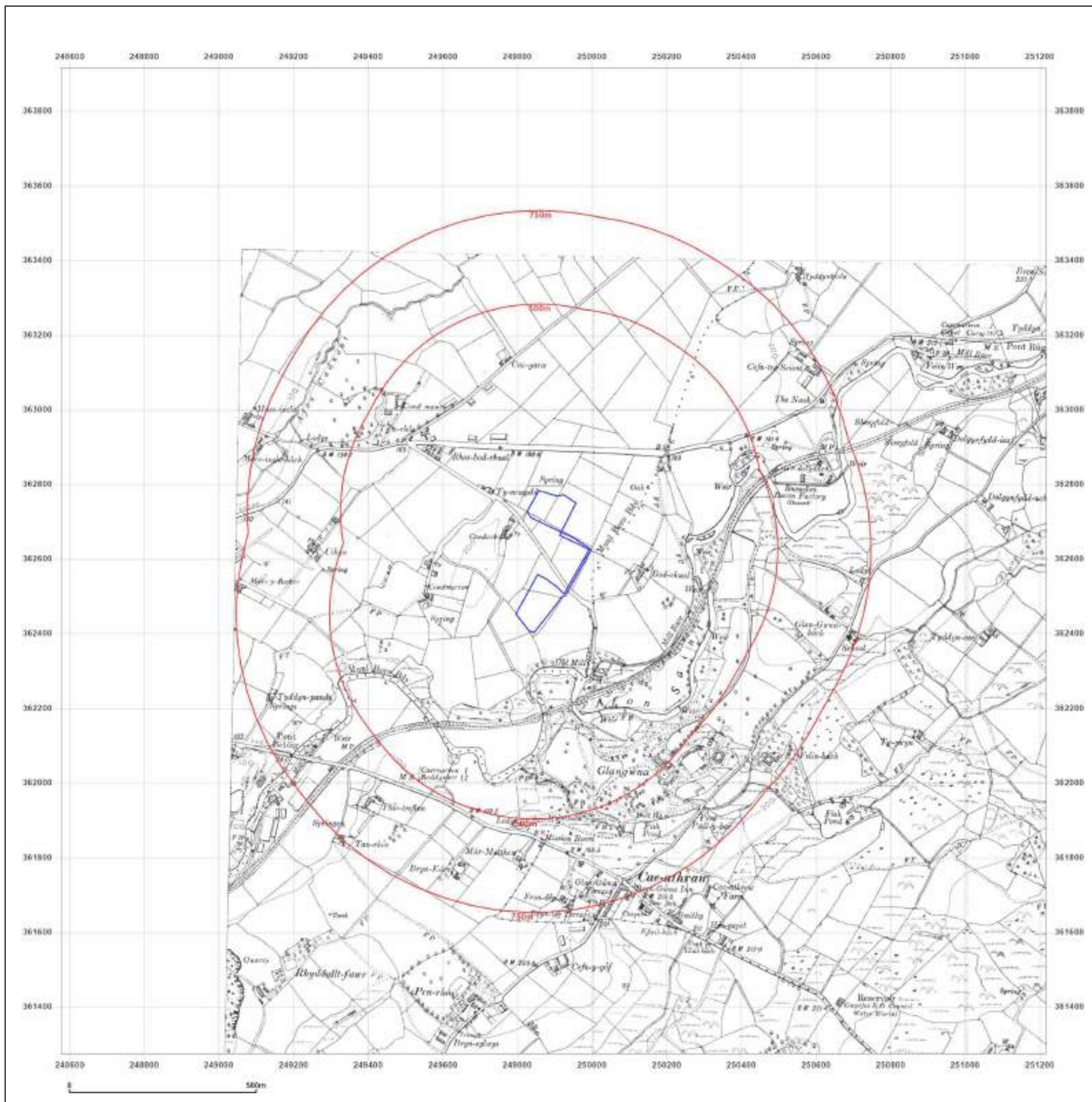


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Client Ref: EMS_763685_988367
Report Ref: EMS-763685_988367
Grid Ref: 249896, 362594

Map Name: Provisional

Map date: 1959

Scale: 1:10,560

Printed at: 1:10,560



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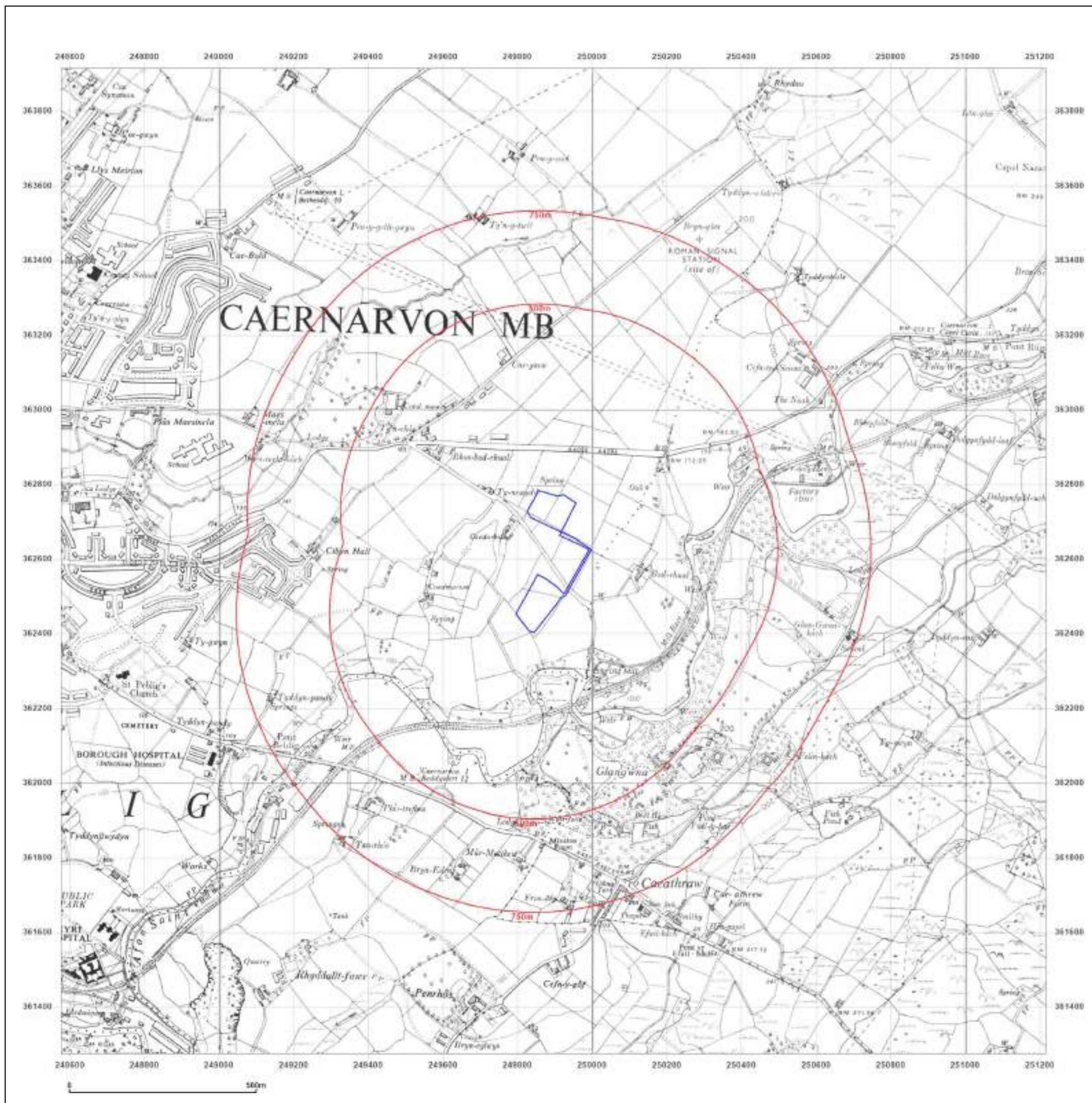


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Site Details:

Client Ref: EMS_763685_988367
Report Ref: EMS-763685_988367
Grid Ref: 249896, 362594

Map Name: National Grid

Map date: 1976

Scale: 1:10,000

Printed at: 1:10,000



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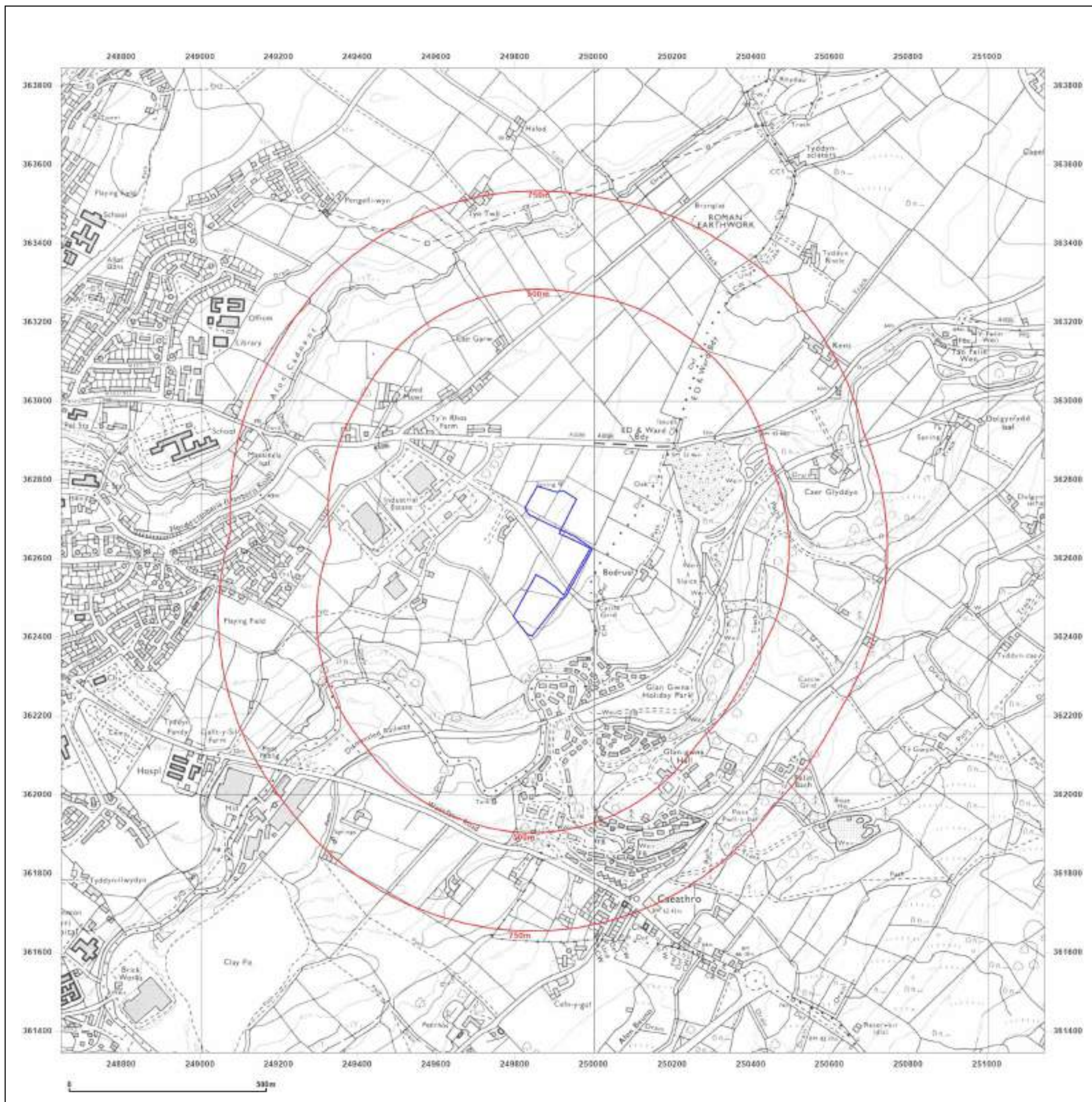


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Site Details:

Client Ref: EMS_763685_988367
Report Ref: EMS-763685_988367
Grid Ref: 249896, 362594

Map Name: National Grid

Map date: 1990

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1987
 Revised 1990
 Edition N/A
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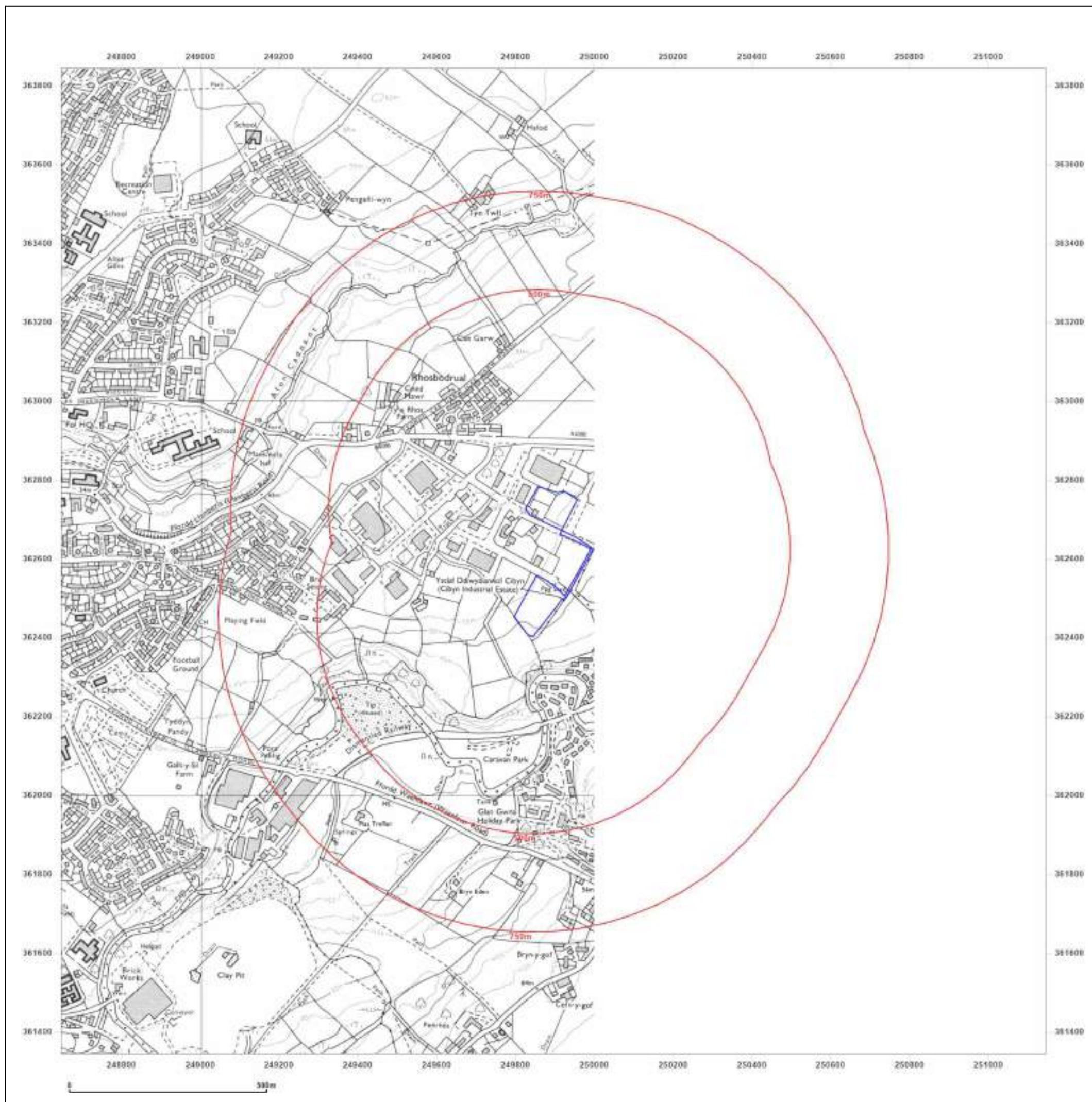


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Site Details:

Client Ref: EMS_763685_988367
Report Ref: EMS-763685_988367
Grid Ref: 249896, 362594

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000



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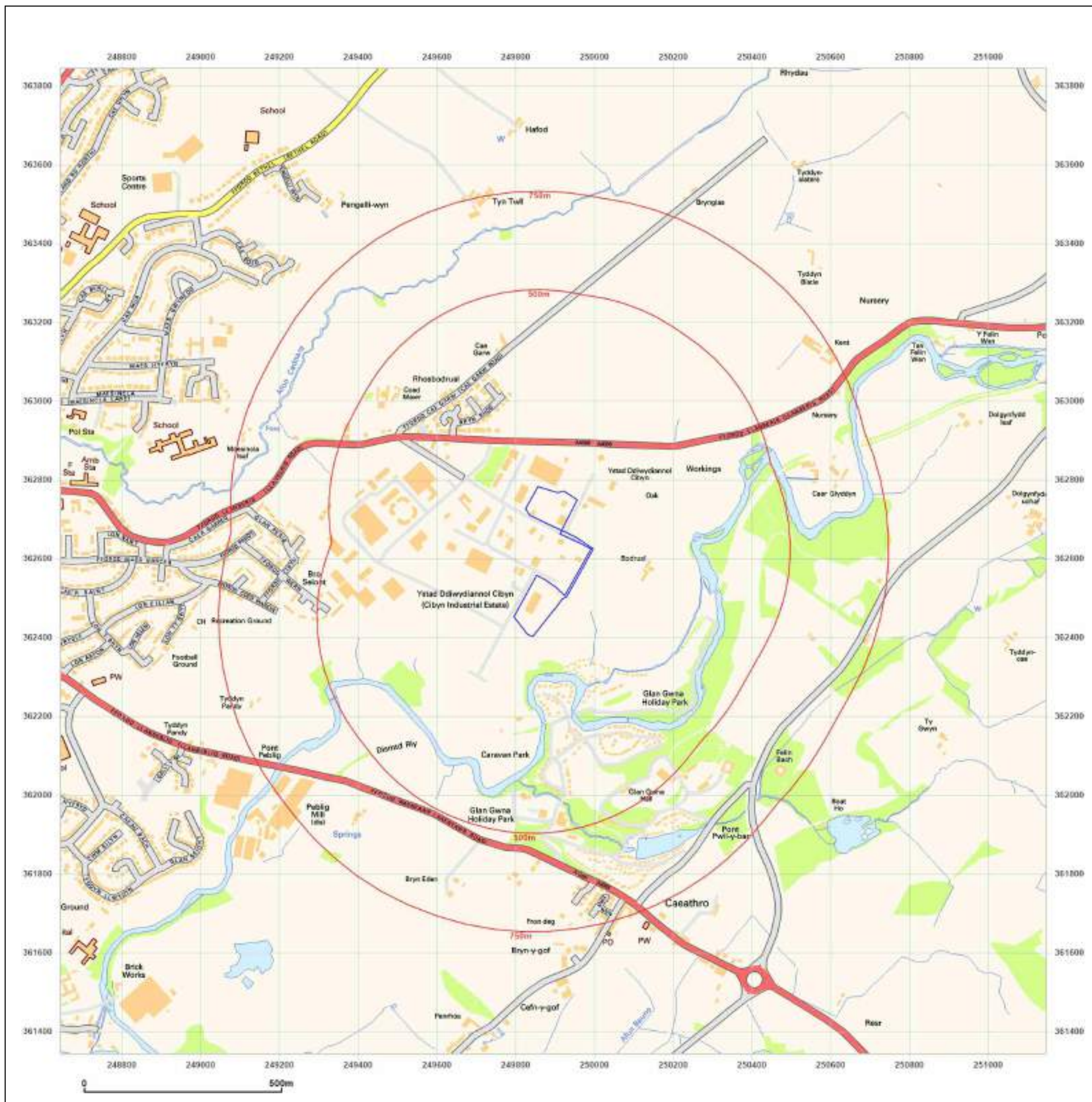


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Site Details:

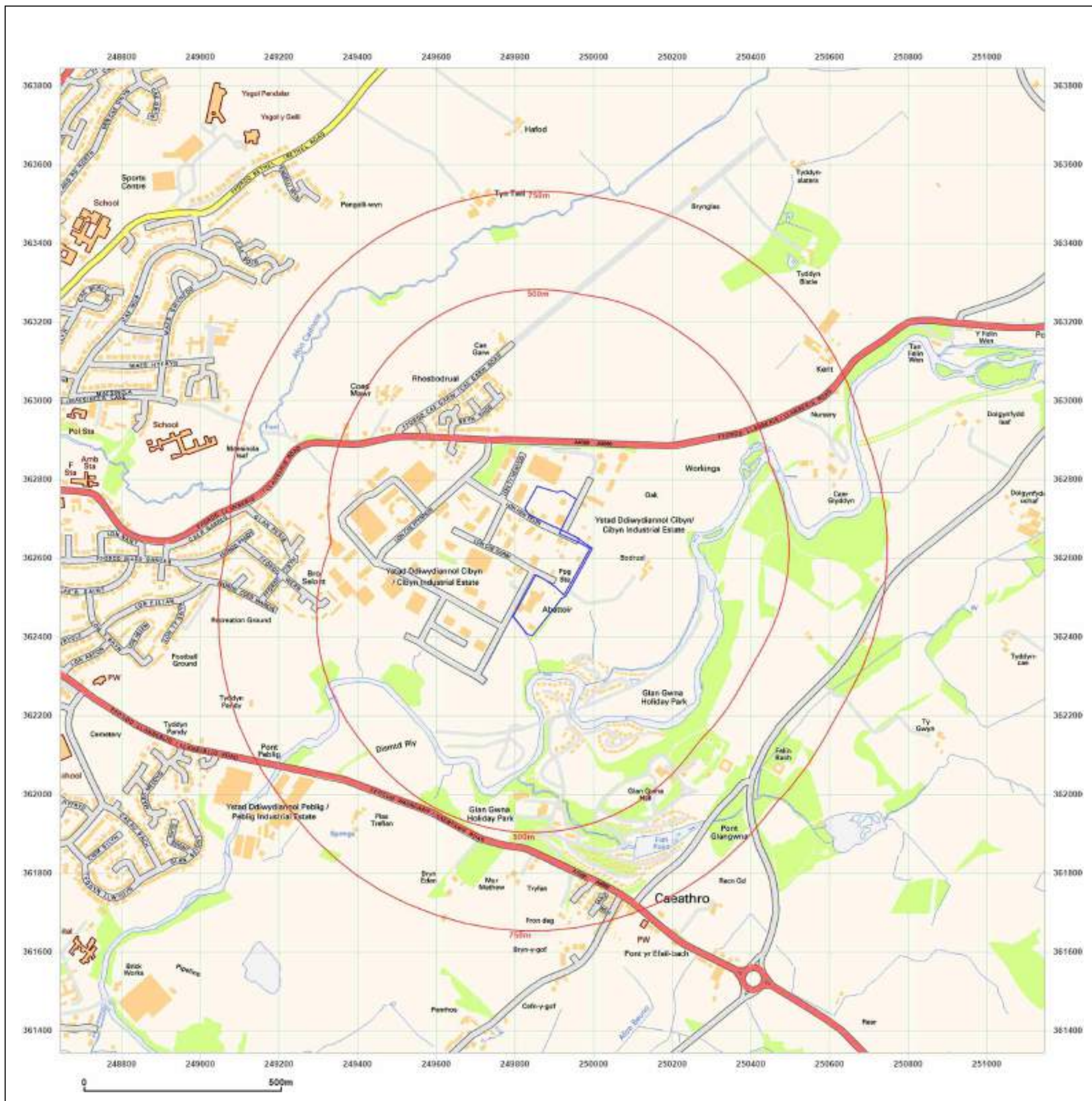
Client Ref: EMS_763685_988367
Report Ref: EMS-763685_988367
Grid Ref: 249896, 362594

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



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Site Details:

Client Ref: EMS_763685_988367
Report Ref: EMS-763685_988367
Grid Ref: 249896, 362594

Map Name: National Grid

Map date: 2022

Scale: 1:10,000

Printed at: 1:10,000



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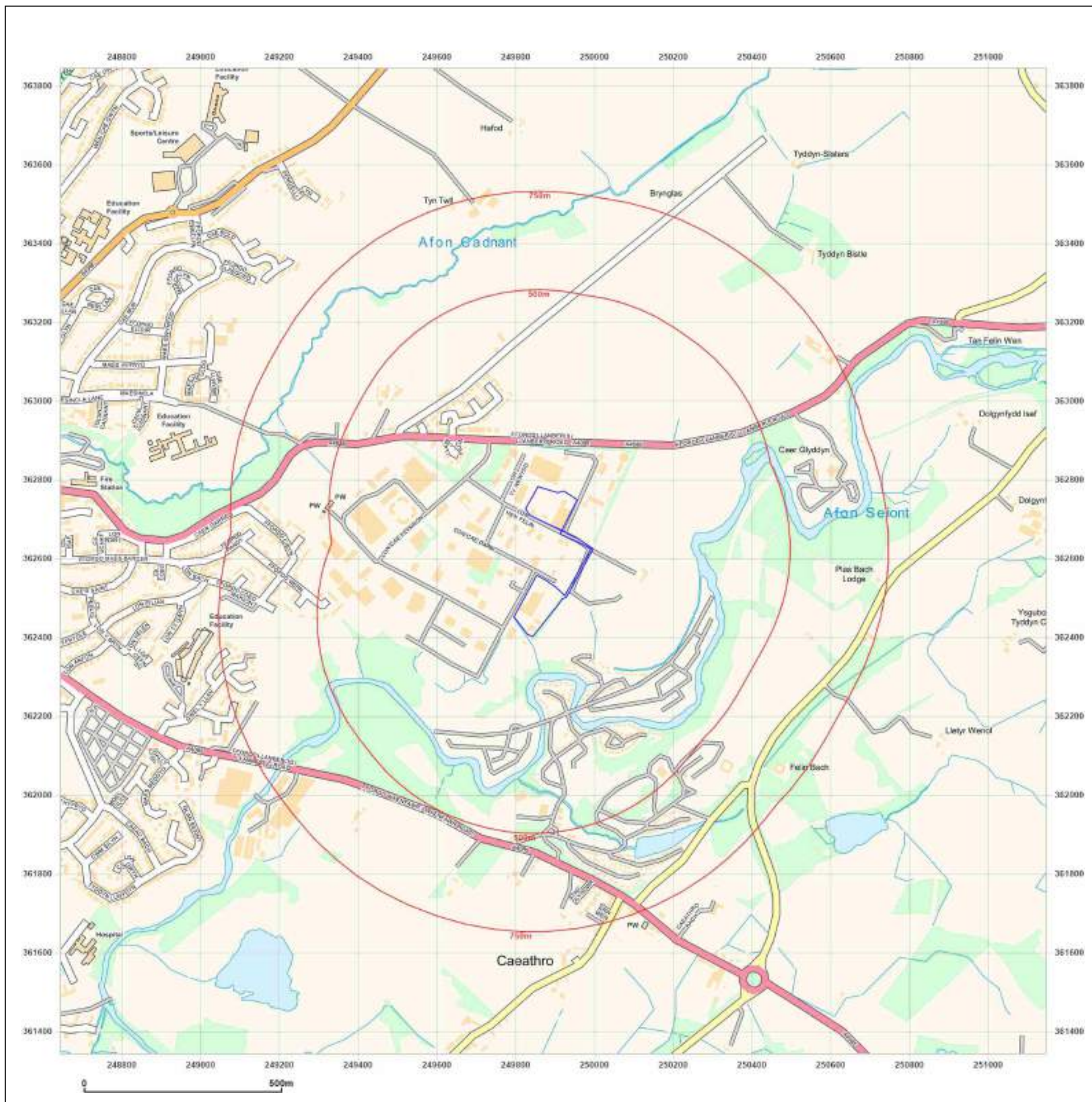


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APPENDIX 4 - BGS Records



DRILLING LOG

LOG NUMBER 9WB 311

DRAGON DRILLING (WATER & ENERGY) LIMITED
GRAIG LELO INDUSTRIAL ESTATE
CORWEN
LL21 9SD
TEL: 01824 707777

SITE: Ready foods Ltd JOB REFERENCE: 662

SITE BH NUMBER: 1 BGS No: sn17/129 GRID REF: SH49326260 DATE: 20/7/17

OPERATION	SIZE (MM)	FROM DEPTH (M)	TO DEPTH (M)	TOTAL
Set up				1
Symmetrix drilling	198	GL	7.5	7.5
Open hole drilling	150	7.5	61	53.5
Mud drilling				
CFA drilling				
Airlift				3

DEPTH (M)	DESCRIPTION	MATERIAL & DEPTH (M)
0 - 1.5	Soil and stones	
1.5 - 7	Brown clay and stones	
7 - 61	Dark grey fractured mudstone	Solid casing size - 113mm
		Bentonite type - Granules
	Standing time 2 hours - Lightning storm	Slotted casing size - 113/1mm
		Gravel pack size - 6mm
		Glass media size - n/a
	Water strike depths - 9, 12, 21, 36, 42, 55m	

PREDICTED DEPTH (M)	ACTUAL DEPTH (M)	WATER STRIKE (MBGL)	LITRES PER MINUTE	SLOTTED (M)	PLAIN (M)	END CAP	GRAVEL/GLASS PACK (MBGL)	BENTONITE (MBGL)
60	61	Multiple	40	58 - 9	61 - 58 9 - GL	Yes	61 - 7.5	7.5 - GL

DRILLING FOR: Commercial water supply

NAME: Ben Ellison (LEAD DRILLER)



APPENDIX 5 - Groundsure Report

Order Details

Date: 02/03/2022
Your ref: EMS_763685_988368
Our Ref: EMS-763685_988368
Client: emapsite

Site Details

Location: 249877 362597
Area: 2.05 ha
Authority: [Gwynedd County Council](#)



Summary of findings

p. 2

Aerial image

p. 8

OS MasterMap site plan

p.13

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	7	7	-
15	1.2	Historical tanks	0	1	1	7	-
16	1.3	Historical energy features	0	0	3	6	-
17	1.4	Historical petrol stations	0	0	0	0	-
17	1.5	Historical garages	0	1	3	0	-
17	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
18	2.1	Historical industrial land uses	2	0	8	9	-
19	2.2	Historical tanks	0	1	2	18	-
20	2.3	Historical energy features	0	0	7	19	-
22	2.4	Historical petrol stations	0	0	0	0	-
22	2.5	Historical garages	0	1	4	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
23	3.1	Active or recent landfill	0	0	1	0	-
24	3.2	Historical landfill (BGS records)	0	0	0	1	-
24	3.3	Historical landfill (LA/mapping records)	0	0	1	0	-
24	3.4	Historical landfill (EA/NRW records)	0	0	1	1	-
25	3.5	Historical waste sites	1	2	3	0	-
27	3.6	Licensed waste sites	0	13	20	10	-
39	3.7	Waste exemptions	13	1	45	2	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
47	4.1	Recent industrial land uses	5	5	9	-	-
49	4.2	Current or recent petrol stations	0	0	0	0	-
49	4.3	Electricity cables	0	0	0	0	-
49	4.4	Gas pipelines	0	0	0	0	-
49	4.5	Sites determined as Contaminated Land	0	0	0	0	-



49	4.6	<u>Control of Major Accident Hazards (COMAH)</u>	1	1	0	0	-
50	4.7	Regulated explosive sites	0	0	0	0	-
50	4.8	<u>Hazardous substance storage/usage</u>	0	2	2	0	-
51	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
51	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
51	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	0	1	1	-
52	4.12	Radioactive Substance Authorisations	0	0	0	0	-
52	4.13	<u>Licensed Discharges to controlled waters</u>	0	0	1	4	-
53	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
53	4.15	Pollutant release to public sewer	0	0	0	0	-
53	4.16	List 1 Dangerous Substances	0	0	0	0	-
53	4.17	List 2 Dangerous Substances	0	0	0	0	-
54	4.18	<u>Pollution Incidents (EA/NRW)</u>	5	4	3	7	-
56	4.19	Pollution inventory substances	0	0	0	0	-
56	4.20	Pollution inventory waste transfers	0	0	0	0	-
56	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
57	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
58	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
60	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
61	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
61	5.5	Groundwater vulnerability- local information	None (within 0m)				
62	5.6	Groundwater abstractions	0	0	0	0	0
63	5.7	<u>Surface water abstractions</u>	0	0	0	0	9
65	5.8	<u>Potable abstractions</u>	0	0	0	0	3
66	5.9	Source Protection Zones	0	0	0	0	-
66	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
67	6.1	<u>Water Network (OS MasterMap)</u>	0	1	24	-	-



70	6.2	<u>Surface water features</u>	0	1	11	-	-
70	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
70	6.4	<u>WFD Surface water bodies</u>	0	0	1	-	-
71	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
72	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
72	7.2	Historical Flood Events	0	0	0	-	-
72	7.3	Flood Defences	0	0	0	-	-
73	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
73	7.5	Flood Storage Areas	0	0	0	-	-
74	7.6	Flood Zone 2	None (within 50m)				
74	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
75	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding					
77	9.1	<u>Groundwater flooding</u>	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
78	10.1	<u>Sites of Special Scientific Interest (SSSI)</u>	0	0	0	0	2
79	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
79	10.3	<u>Special Areas of Conservation (SAC)</u>	0	0	0	0	1
79	10.4	Special Protection Areas (SPA)	0	0	0	0	0
80	10.5	National Nature Reserves (NNR)	0	0	0	0	0
80	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
80	10.7	<u>Designated Ancient Woodland</u>	0	0	2	2	16
81	10.8	Biosphere Reserves	0	0	0	0	0
81	10.9	Forest Parks	0	0	0	0	0
82	10.10	Marine Conservation Zones	0	0	0	0	0
82	10.11	Green Belt	0	0	0	0	0
82	10.12	Proposed Ramsar sites	0	0	0	0	0



82	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
82	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
83	10.15	Nitrate Sensitive Areas	0	0	0	0	0
83	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
84	10.17	SSSI Impact Risk Zones	0	-	-	-	-
84	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
85	11.1	World Heritage Sites	0	0	0	-	-
85	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
85	11.3	National Parks	0	0	0	-	-
85	11.4	Listed Buildings	0	0	0	-	-
86	11.5	Conservation Areas	0	0	0	-	-
86	11.6	Scheduled Ancient Monuments	0	0	0	-	-
86	11.7	Registered Parks and Gardens	0	0	0	-	-

Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
87	12.1	<u>Agricultural Land Classification</u>	Grade 4 (within 250m)				
88	12.2	Open Access Land	0	0	0	-	-
89	12.3	Tree Felling Licences	0	0	0	-	-
89	12.4	Environmental Stewardship Schemes	0	0	0	-	-
89	12.5	Countryside Stewardship Schemes	0	0	0	-	-

Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
90	13.1	Priority Habitat Inventory	0	0	0	-	-
90	13.2	Habitat Networks	0	0	0	-	-
90	13.3	Open Mosaic Habitat	0	0	0	-	-
90	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
91	14.1	<u>10k Availability</u>	Identified (within 500m)				
92	14.2	Artificial and made ground (10k)	0	0	0	0	-
93	14.3	Superficial geology (10k)	0	0	0	0	-



93	14.4	Landslip (10k)	0	0	0	0	-
94	14.5	Bedrock geology (10k)	0	0	0	0	-
94	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
95	15.1	<u>50k Availability</u>	Identified (within 500m)				
96	15.2	Artificial and made ground (50k)	0	0	0	0	-
96	15.3	Artificial ground permeability (50k)	0	0	-	-	-
97	15.4	<u>Superficial geology (50k)</u>	1	0	1	6	-
98	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
98	15.6	<u>Landslip (50k)</u>	0	0	0	1	-
99	15.7	Landslip permeability (50k)	None (within 50m)				
100	15.8	<u>Bedrock geology (50k)</u>	1	0	0	0	-
101	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
101	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
102	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
103	17.1	<u>Shrink swell clays</u>	Negligible (within 50m)				
104	17.2	<u>Running sands</u>	Very low (within 50m)				
106	17.3	<u>Compressible deposits</u>	Negligible (within 50m)				
107	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
108	17.5	<u>Landslides</u>	Low (within 50m)				
110	17.6	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
112	18.1	Natural cavities	0	0	0	0	-
113	18.2	BritPits	0	0	0	0	-
113	18.3	<u>Surface ground workings</u>	0	0	2	-	-
113	18.4	Underground workings	0	0	0	0	0
113	18.5	Historical Mineral Planning Areas	0	0	0	0	-



114	18.6	<u>Non-coal mining</u>		1	1	0	0	1
114	18.7	Mining cavities		0	0	0	0	0
114	18.8	JPB mining areas		None (within 0m)				
115	18.9	Coal mining		None (within 0m)				
115	18.10	Brine areas		None (within 0m)				
115	18.11	Gypsum areas		None (within 0m)				
115	18.12	Tin mining		None (within 0m)				
115	18.13	Clay mining		None (within 0m)				
Page	Section	Radon						
116	19.1	<u>Radon</u>	Less than 1% (within 0m)					
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m	
117	20.1	<u>BGS Estimated Background Soil Chemistry</u>	2	1	-	-	-	
117	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-	
117	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	
118	21.1	Underground railways (London)	0	0	0	-	-	
118	21.2	Underground railways (Non-London)	0	0	0	-	-	
119	21.3	Railway tunnels	0	0	0	-	-	
119	21.4	Historical railway and tunnel features	0	0	0	-	-	
119	21.5	Royal Mail tunnels	0	0	0	-	-	
119	21.6	<u>Historical railways</u>	0	0	1	-	-	
120	21.7	Railways	0	0	0	-	-	
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



Aerial photography supplied by Getmapping PLC. © Copy

Capture Date: 06/06/2018

Site Area: 2.05ha



Recent site history - 2016 aerial photograph



Capture Date: 12/05/2016

Site Area: 2.05ha



Recent site history - 2013 aerial photograph



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Capture Date: 04/06/2013

Site Area: 2.05ha



Recent site history - 2009 aerial photograph



Capture Date: 11/05/2009

Site Area: 2.05ha



Recent site history - 2000 aerial photograph



Capture Date: 21/07/2000

Site Area: 2.05ha



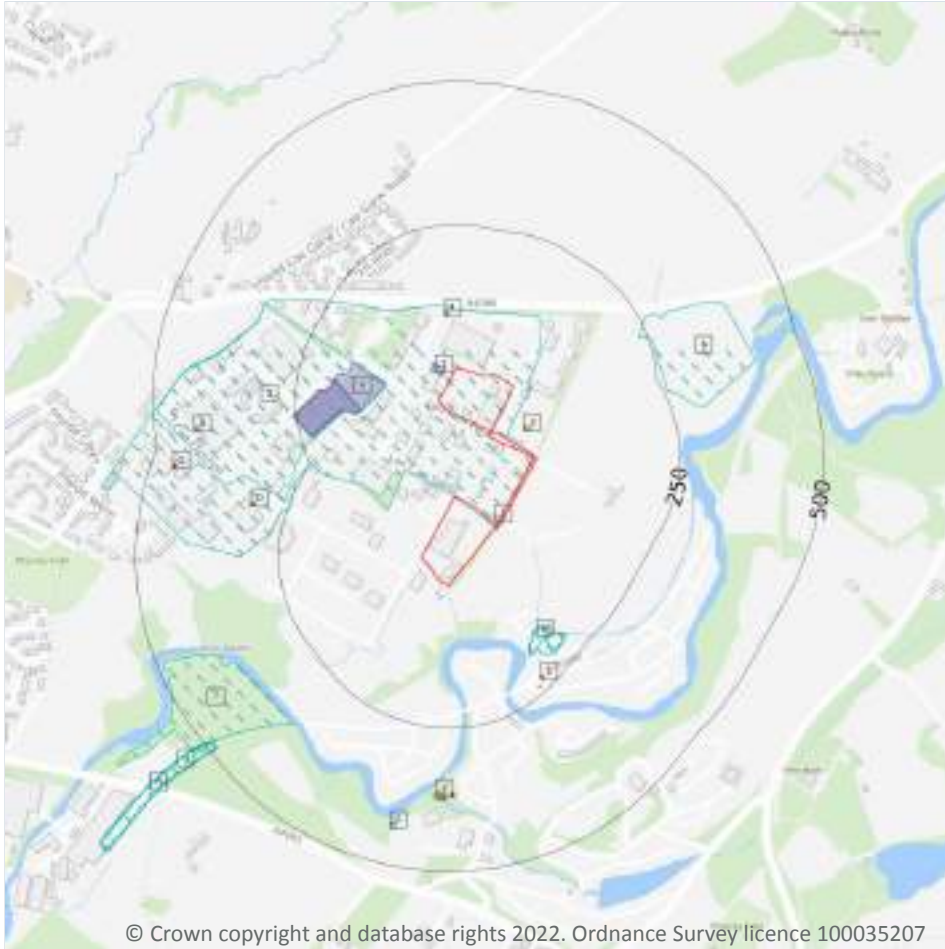
OS MasterMap site plan



Site Area: 2.05ha



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 **16**

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
1	On site	Pumping Station	1990	211341

ID	Location	Land use	Dates present	Group ID
A	On site	Industrial Estate	1990	222435
5	96m W	Industrial Estate	1976	241316
B	164m SE	Unspecified Old Mill	1949	233166
B	164m SE	Flour Mill	1888 - 1899	232289
B	164m SE	Unspecified Old Mill	1913	237320
B	189m SE	Unspecified Commercial/Industrial	1976	217848
B	189m SE	Unspecified Old Mill	1959	229286
6	236m E	Refuse Heap	1976	222083
7	359m SW	Unspecified Disused Tip	1990	219176
E	360m S	Unspecified Tank	1976 - 1990	243614
F	424m S	Unspecified Tank	1976 - 1990	248524
H	486m SW	Cuttings	1949	235742
9	488m SW	Cuttings	1888	242122
H	490m SW	Cuttings	1913	225272
H	498m SW	Cuttings	1959	247701

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

9

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

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

ID	Location	Land use	Dates present	Group ID
3	28m NE	Tanks	1995	31204
A	132m W	Unspecified Tank	1994 - 1995	32142
D	306m W	Unspecified Tank	1982	31813



ID	Location	Land use	Dates present	Group ID
D	307m W	Unspecified Tank	1980 - 1995	32870
E	361m S	Unspecified Tank	1980 - 1995	32361
E	362m S	Unspecified Tank	1971	31947
E	362m S	Unspecified Tank	1982	32091
F	424m S	Unspecified Tank	1964 - 1987	32523
F	427m S	Unspecified Tank	1995	32090

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	9
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Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

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

ID	Location	Land use	Dates present	Group ID
4	92m N	Electricity Substation	1982 - 1995	17243
C	226m SE	Electricity Substation	1995	15672
C	235m SE	Electricity Substation	1989 - 1994	16185
E	362m S	Electricity Substation	1980 - 1994	16469
E	363m S	Electricity Substation	1971	16181
E	368m S	Electricity Substation	1982 - 1995	16919
8	422m W	Electricity Substation	1971 - 1995	16507
G	457m W	Electricity Substation	1986 - 1994	16820
G	461m W	Electricity Substation	1995	17142

This data is sourced from Ordnance Survey / Groundsure.



1.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m

4

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

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

ID	Location	Land use	Dates present	Group ID
2	16m NW	Garage	1982	5078
A	99m W	Vehicle Testing Station	1995	5184
A	138m W	Vehicle Testing Station	1982	5215
A	138m W	Vehicle Testing Station	1986 - 1994	5680

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

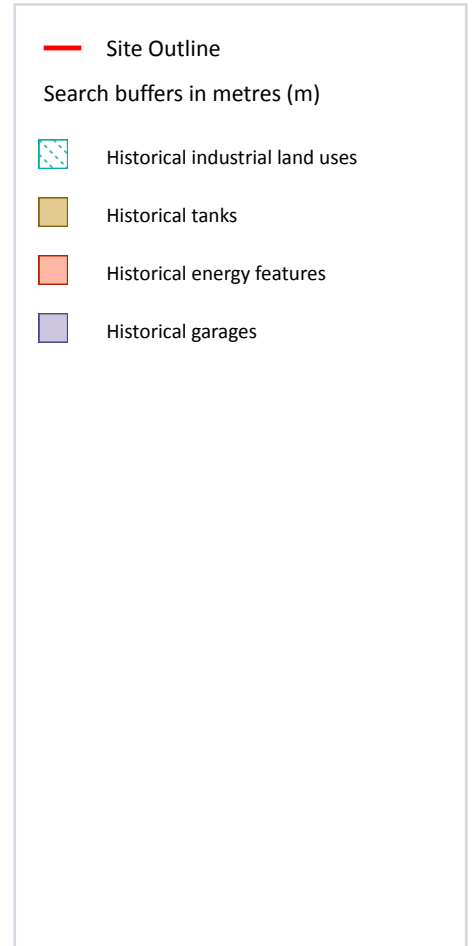
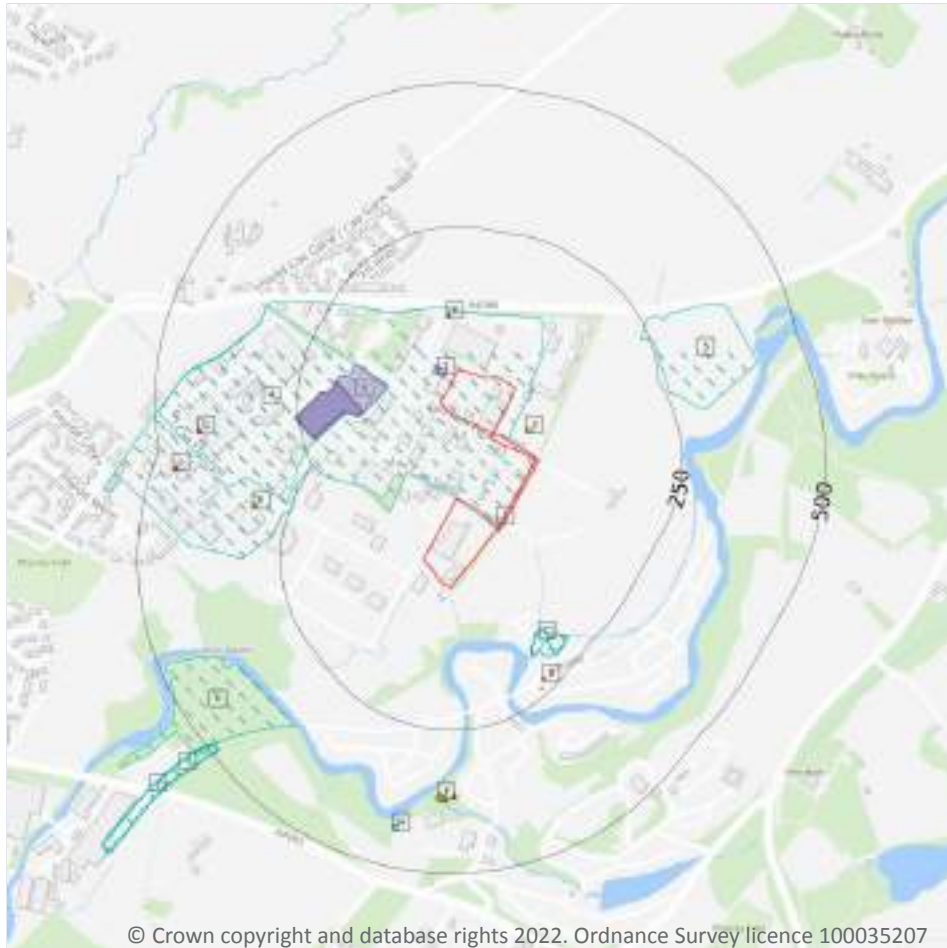
0

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



2.1 Historical industrial land uses

Records within 500m

19

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 18**

ID	Location	Land Use	Date	Group ID
1	On site	Pumping Station	1990	211341
A	On site	Industrial Estate	1990	222435
4	96m W	Industrial Estate	1976	241316

ID	Location	Land Use	Date	Group ID
C	164m SE	Unspecified Old Mill	1949	233166
C	164m SE	Unspecified Old Mill	1913	237320
C	164m SE	Flour Mill	1899	232289
C	164m SE	Flour Mill	1888	232289
C	189m SE	Unspecified Commercial/Industrial	1976	217848
C	189m SE	Unspecified Old Mill	1959	229286
5	236m E	Refuse Heap	1976	222083
6	359m SW	Unspecified Disused Tip	1990	219176
F	360m S	Unspecified Tank	1976	243614
F	363m S	Unspecified Tank	1990	243614
H	424m S	Unspecified Tank	1990	248524
H	424m S	Unspecified Tank	1976	248524
J	486m SW	Cuttings	1949	235742
7	488m SW	Cuttings	1888	242122
J	490m SW	Cuttings	1913	225272
J	498m SW	Cuttings	1959	247701

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

21

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 18**

ID	Location	Land Use	Date	Group ID
3	28m NE	Tanks	1995	31204
A	132m W	Unspecified Tank	1994	32142
A	134m W	Unspecified Tank	1995	32142
E	306m W	Unspecified Tank	1982	31813



ID	Location	Land Use	Date	Group ID
E	307m W	Unspecified Tank	1995	32870
E	307m W	Unspecified Tank	1980	32870
E	307m W	Unspecified Tank	1994	32870
E	307m W	Unspecified Tank	1986	32870
E	307m W	Unspecified Tank	1980	32870
F	361m S	Unspecified Tank	1980	32361
F	361m S	Unspecified Tank	1994	32361
F	361m S	Unspecified Tank	1986	32361
F	361m S	Unspecified Tank	1980	32361
F	362m S	Unspecified Tank	1982	32091
F	362m S	Unspecified Tank	1971	31947
F	362m S	Unspecified Tank	1971	31947
F	362m S	Unspecified Tank	1995	32361
H	424m S	Unspecified Tank	1964	32523
H	424m S	Unspecified Tank	1987	32523
H	424m S	Unspecified Tank	1965	32523
H	427m S	Unspecified Tank	1995	32090

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	26
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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 18**

ID	Location	Land Use	Date	Group ID
B	92m N	Electricity Substation	1994	17243
B	92m N	Electricity Substation	1986	17243
B	93m N	Electricity Substation	1995	17243



ID	Location	Land Use	Date	Group ID
B	93m N	Electricity Substation	1982	17243
D	226m SE	Electricity Substation	1995	15672
D	235m SE	Electricity Substation	1994	16185
D	235m SE	Electricity Substation	1989	16185
F	362m S	Electricity Substation	1980	16469
F	362m S	Electricity Substation	1994	16469
F	362m S	Electricity Substation	1986	16469
F	362m S	Electricity Substation	1980	16469
F	363m S	Electricity Substation	1971	16181
F	363m S	Electricity Substation	1971	16181
F	368m S	Electricity Substation	1995	16919
F	369m S	Electricity Substation	1982	16919
G	422m W	Electricity Substation	1982	16507
G	422m W	Electricity Substation	1971	16507
G	422m W	Electricity Substation	1971	16507
G	423m W	Electricity Substation	1980	16507
G	423m W	Electricity Substation	1994	16507
G	423m W	Electricity Substation	1986	16507
G	423m W	Electricity Substation	1980	16507
G	423m W	Electricity Substation	1995	16507
I	457m W	Electricity Substation	1994	16820
I	457m W	Electricity Substation	1986	16820
I	461m W	Electricity Substation	1995	17142

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

5

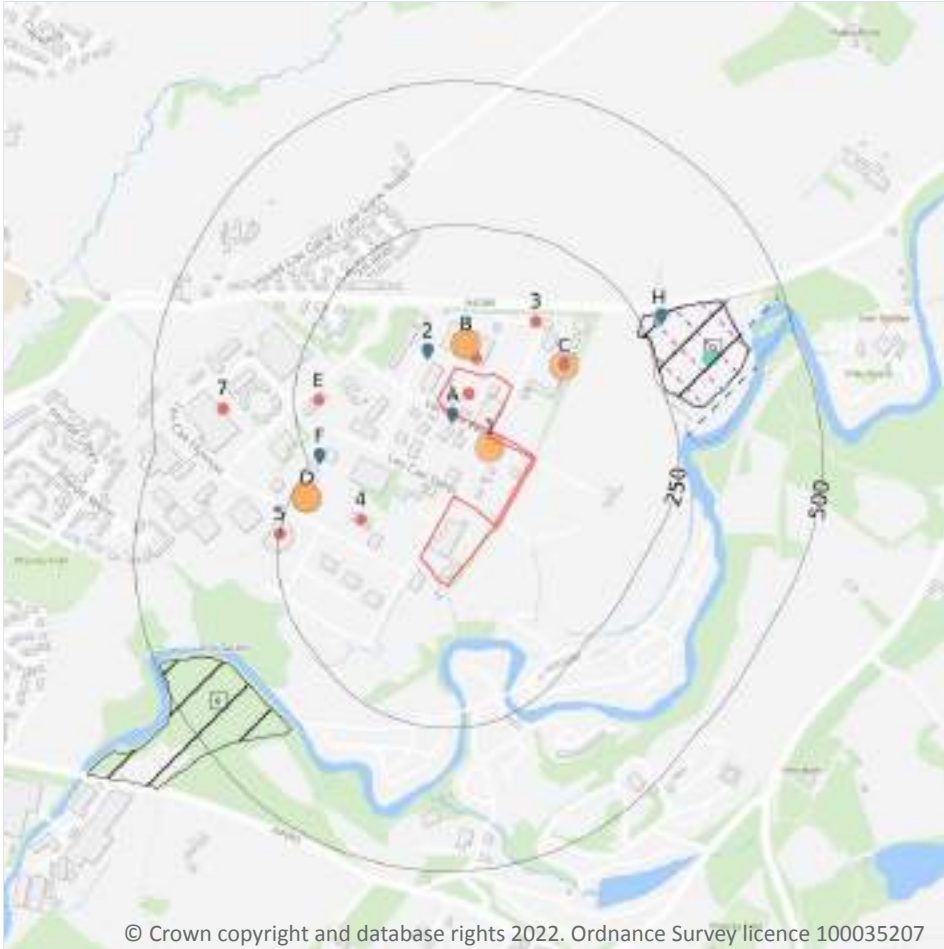
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 18**

ID	Location	Land Use	Date	Group ID
2	16m NW	Garage	1982	5078
A	99m W	Vehicle Testing Station	1995	5184
A	138m W	Vehicle Testing Station	1982	5215
A	138m W	Vehicle Testing Station	1994	5680
A	138m W	Vehicle Testing Station	1986	5680

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



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

3.1 Active or recent landfill

Records within 500m

1

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation. Features are displayed on the Waste and landfill map on **page 23**

ID	Location	Details
G	237m NE	<p>Operator: Watkin Jones & Son Ltd Site Address: Pontrug, Nantlle, Caernarfon, Gwynedd, LL55 2BF</p> <p>WML Number: 37061 EPR Reference: WAT002 Landfill type: A5 : Landfill taking Non-Biodegradable Wastes Status: Closure IPPC Reference: - EPR Number: EAEPR\EA\EPR\XP3094FS/A001</p>

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

3.2 Historical landfill (BGS records)

Records within 500m

1

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

Features are displayed on the Waste and landfill map on **page 23**

ID	Location	Address	BGS Number	Risk	Waste Type
G	348m E	Council Refuse Tip, Rhosbodvral, Caernarvon	1953	No risk to aquifer	N/A

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m

1

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

Features are displayed on the Waste and landfill map on **page 23**

ID	Location	Site address	Source	Data type
G	236m E	Refuse Tip	1971 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 23**

ID	Location	Details		
G	236m E	Site Address: Council Refuse Tip Licence Holder Address: -	Waste Licence: - Site Reference: - Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: Caernarvon Royal Borough Council Licence Holder: County Council First Recorded 31/12/1954 Last Recorded: 31/12/1974
6	365m SW	Site Address: Peblig Mill Tip Licence Holder Address: -	Waste Licence: - Site Reference: - Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded 31/12/1981 Last Recorded: 31/12/1990

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

3.5 Historical waste sites

Records within 500m	6
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Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 23**

ID	Location	Address	Further Details	Date
1	On site	Site Address: Coal Yard, Lon Hen Felin Stad, Cibyn Industrial Estate, CAERNARFON, Gwynedd, LL55 2BD	Type of Site: Waste Transfer Depot (Conversion) Planning application reference: C00A/0428/14/LL Description: Conversion to waste transfer depot. An application for detailed planning permission (Ref:C00A/0428/14/LL) was submitted to Caernarfon & Merionydd C.C. on Friday, 11th August 2000. Data source: Historic Planning Application Data Type: Point	-

ID	Location	Address	Further Details	Date
B	18m N	Site Address: Cibyn Industrial Estate, CAERNARFON, Gwynedd, LL55 2BD	Type of Site: Waste Transfer Building Planning application reference: C06A/0360/14/LL Description: Scheme comprises extension of recycling site with construction of new waste transfer building. An application (ref: C06A/0360/14/LL) for detailed planning permission was refused by Gwynedd Arfon D.C. Planning decision obtained Data source: Historic Planning Application Data Type: Point	-
B	18m N	Site Address: Waste Recycling Centre, Cibyn Industrial Estate, CAERNARFON, Gwynedd, LL55 2BD	Type of Site: Waste Transfer Building Planning application reference: C07A/0054/14/LL Description: Scheme comprises extension of recycling site with construction of new waste transfer building, parking facilities, and construction of 5 metre perimeter screen. Construction - black top surfacing site works. An application (ref: C07A/0054/14/LL) for detailed planning permission was granted by Gwynedd Arfon D.C. Planning decision obtained Data source: Historic Planning Application Data Type: Point	-
C	71m E	Site Address: Cibyn Industrial Estate, CAERNARFON, Gwynedd, LL55 2BF	Type of Site: Waste Transfer Station/Workshop Planning application reference: C05A/0663/14/R3 Description: Scheme comprises proposed conversion of part of the council depot to a waste transfer station, new workshop, access and office. An application (ref: C05A/0663/14/R3) for Detailed Planning permission was granted by Gwynedd Arfon D.C. Detailed plans granted. Data source: Historic Planning Application Data Type: Point	-



ID	Location	Address	Further Details	Date
D	199m NW	Site Address: Stad Ddiwydiannol Cibyn Indust, A15,Cibyn Industrial Estate, CAERNARFON, Gwynedd, LL55 2BD	Type of Site: Waste Transfer Station Planning application reference: C11/0980/14/R3 Description: Scheme comprises part retrospective application from a use previously granted for the storage of recycling materials to a mixed waste transfer station with external alterations to the building and site boundary. Construction - external refurbishment. A application (ref: C11/0980/14/R3) for detailed planning permission was submitted to Gwynedd Dwyfor D.C. A detailed planning application has been submitted. Data source: Historic Planning Application Data Type: Point	31/05/2012
D	199m NW	Site Address: Cibyn Industrial Estate, CAERNARFON, Gwynedd, LL55 2B	Type of Site: Waste Transfer Station Planning application reference: C96A/0272/14/CL Description: Change of use of land with the erection of a workshop and office totalling 189 sqm with 2 roller shutter doors. Construction - 2 roller shutter doors. An application (ref: C96A/0272/14/CL) for Detailed Planning permission was submitted to Caernarfon & Merionydd C.C. on 22nd August 1996. Data source: Historic Planning Application Data Type: Point	-

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

3.6 Licensed waste sites

Records within 500m	43
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Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 23**



ID	Location	Details		
A	2m SW	Site Name: Gwynedd Skip And Plant Hire Ltd Site Address: Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: 75kte HCI Waste TS + treatment + asbestos Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: GWY035 EPR reference: CB3237AP/T001 Operator: Gwynedd Skip And Plant Hire Ltd Waste Management licence No: 37229 Annual Tonnage: 0	Issue Date: 24/01/2002 Effective Date: 27/09/2011 Modified: 15/09/2011 Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Transferred
A	4m SW	Site Name: Gwynedd Skip Hire Limited Site Address: Gwynedd Skip Hire Limited, Lon Hen Felin, Cibyn Industrial Estat, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: Gwynedd Skip Hire Limited, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GWY005 EPR reference: - Operator: Gwynedd Skip Hire Limited Waste Management licence No: 37229 Annual Tonnage: 0	Issue Date: 24/01/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
A	4m SW	Site Name: Gwynedd Skip And Plant Hire Ltd Site Address: Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: 75kte HCI Waste TS + treatment + asbestos Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GWY035 EPR reference: EA/EPR/CB3237AP/T001 Operator: Gwynedd Skip And Plant Hire Ltd Waste Management licence No: 37229 Annual Tonnage: 74999	Issue Date: 24/01/2002 Effective Date: 27/09/2011 Modified: 15/09/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred



ID	Location	Details		
A	4m SW	Site Name: Gwynedd Skip Hire Limited Site Address: Gwynedd Skip Hire Limited, Lon Hen Felin, Cibyn Industrial Estat, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: Gwynedd Skip Hire Limited, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GWY005 EPR reference: - Operator: Gwynedd Skip Hire Limited Waste Management licence No: 37229 Annual Tonnage: 367905	Issue Date: 24/01/2002 Effective Date: - Modified: 10/03/2006 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
A	4m SW	Site Name: - Site Address: Gwynedd Skip And Plant Hire Ltd, Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: CB3237AP EPR reference: - Operator: Gwynedd Skip And Plant Hire Ltd Waste Management licence No: 0 Annual Tonnage: 74999	Issue Date: 24/01/2002 Effective Date: 24/01/2002 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
A	4m SW	Site Name: Gwynedd Skip Hire Ltd Site Address: Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL65 2BD	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GWY005 EPR reference: - Operator: Gwynedd Skip Hire Ltd Waste Management licence No: 37229 Annual Tonnage: 0	Issue Date: 1/24/2002 Effective Date: - Modified: 9/4/2008 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
A	4m SW	Site Name: Gwynedd Skip Hire Ltd Site Address: Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL65 2BD	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GWY005 EPR reference: EA/EPR/BP3196LV/V007 Operator: Gwynedd Skip Hire Ltd Waste Management licence No: 37229 Annual Tonnage: 0	Issue Date: 1/24/2002 Effective Date: - Modified: 9/4/2008 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified



ID	Location	Details		
A	4m SW	Site Name: Gwynedd Skip Hire Ltd Site Address: Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: 75kte HCI Waste TS + treatment + asbestos Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GWY005 EPR reference: EA/EPR/BP3196LV/V008 Operator: Gwynedd Skip Hire Ltd Waste Management licence No: 37229 Annual Tonnage: 74999	Issue Date: 24/01/2002 Effective Date: - Modified: 15/09/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
A	4m SW	Site Name: - Site Address: Gwynedd Skip And Plant Hire Ltd, Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: CB3237AP EPR reference: - Operator: - Waste Management licence No: 37229 Annual Tonnage: 75000	Issue Date: 30/06/2017 Effective Date: 30/06/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
A	4m SW	Site Name: - Site Address: Gwynedd Skip And Plant Hire Ltd, Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: - Environmental Permitting Regulations (Waste) Licence Number: CB3237AP EPR reference: - Operator: Gwynedd Skip And Plant Hire Ltd Waste Management licence No: 37229 Annual Tonnage: 75000	Issue Date: 30/06/2017 Effective Date: 30/06/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
A	4m SW	Site Name: - Site Address: Gwynedd Skip And Plant Hire Ltd, Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: - Environmental Permitting Regulations (Waste) Licence Number: CB3237AP EPR reference: - Operator: Gwynedd Skip And Plant Hire Ltd Waste Management licence No: 37229 Annual Tonnage: 75000	Issue Date: 30/06/2017 Effective Date: 30/06/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
A	4m SW	Site Name: - Site Address: Gwynedd Skip And Plant Hire Ltd, Lon Hen Felin, Cibyn Ind Est, Gwynedd, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: CB3237AP EPR reference: - Operator: Gwynedd Skip And Plant Hire Ltd Waste Management licence No: 37229 Annual Tonnage: 75000	Issue Date: 30/06/2017 Effective Date: 30/06/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
A	4m SW	Site Name: - Site Address: Gwynedd Skip And Plant Hire Ltd, Lon Hen Felin, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: - Environmental Permitting Regulations (Waste) Licence Number: CB3237AP EPR reference: - Operator: Gwynedd Skip and Plant Hire Ltd Waste Management licence No: 37229 Annual Tonnage: -	Issue Date: 30/06/2017 Effective Date: 30/06/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
2	56m NW	Site Name: Cibyn Waste Transfer Station Site Address: Cibyn Waste Transfer Station, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GWY016 EPR reference: EA/EPR/QP3994FZ/V002 Operator: Gwynedd Council Waste Management licence No: 37292 Annual Tonnage: 24999	Issue Date: 05/06/2006 Effective Date: - Modified: 22/08/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
C	95m NE	Site Name: - Site Address: Caerglychu Waste Management Facility, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: Gwynedd Council Waste Management licence No: 0 Annual Tonnage: 40000	Issue Date: 05/06/2006 Effective Date: 05/06/2006 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
C	95m NE	Site Name: - Site Address: Caergylichu Waste Management Facility, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: - Waste Management licence No: 37292 Annual Tonnage: 40000	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
C	95m NE	Site Name: - Site Address: Caergylichu Waste Management Facility, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: - Waste Management licence No: 37292 Annual Tonnage: 40000	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
C	95m NE	Site Name: - Site Address: Caergylichu Waste Management Facility, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: - Waste Management licence No: 37292 Annual Tonnage: 40000	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
C	95m NE	Site Name: - Site Address: Caergylichu Waste Management Facility, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: - Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: Gwynedd Council Waste Management licence No: 37292 Annual Tonnage: -	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
C	95m NE	Site Name: - Site Address: Caergylchu Waste Management Facility, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: - Size: - Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: Gwynedd Council Waste Management licence No: 37292 Annual Tonnage: -	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
C	95m NE	Site Name: - Site Address: Caergylchu Waste Management Facility, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: Gwynedd Council Waste Management licence No: 37292 Annual Tonnage: -	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
C	95m NE	Site Name: - Site Address: Caergylchu Waste Management Facility, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: - Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: Gwynedd Council Waste Management licence No: 37292 Annual Tonnage: 40000	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
C	95m NE	Site Name: - Site Address: Caergylchu Waste Management Facility, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: - Size: - Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: Gwynedd Council Waste Management licence No: 37292 Annual Tonnage: 40000	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
C	95m NE	Site Name: - Site Address: Caergylchu Waste Management Facility, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: Gwynedd Council Waste Management licence No: 37292 Annual Tonnage: 40000	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
C	95m NE	Site Name: - Site Address: Caergylchu Waste Management Facility, Cibyn Industrial Estate, Gwynedd, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: Gwynedd Council Waste Management licence No: 37292 Annual Tonnage: 40000	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
C	95m NE	Site Name: - Site Address: Caergylchu Waste Management Facility, Cibyn Industrial Estate, Gwynedd, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: Gwynedd Council Waste Management licence No: 37292 Annual Tonnage: 40000	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
C	95m NE	Site Name: - Site Address: Caergylchu Waste Management Facility, Cibyn Industrial Estate, Gwynedd, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: QP3994FZ EPR reference: - Operator: Gwynedd Council Waste Management licence No: 37292 Annual Tonnage: 40000	Issue Date: 03/03/2017 Effective Date: 03/03/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
C	97m NE	Site Name: Caerglychu Waste Management Facility Site Address: Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GWY016 EPR reference: QP3994FZ/V004 Operator: Gwynedd Council Waste Management licence No: 37292 Annual Tonnage: 24999	Issue Date: 05/06/2006 Effective Date: - Modified: 06/05/2014 Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Modified
F	229m SW	Site Name: - Site Address: Unit A6, Zone 3, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AB3097ZB EPR reference: - Operator: C & A Asbestos Removal Ltd Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 03/03/2016 Effective Date: 03/03/2016 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
F	229m SW	Site Name: - Site Address: Unit A6, Zone 3, Cibyn Ind Est, Caernarfon, LL55 2BD Correspondence Address: -	Type of Site: Asbestos Waste Transfer Station Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AB3097ZB EPR reference: - Operator: - Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 03/03/2016 Effective Date: 03/03/2016 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
F	229m SW	Site Name: - Site Address: Unit A6, Zone 3, Cibyn Ind Est, Caernarfon, Gwynedd, LL55 2BD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AB3097ZB EPR reference: - Operator: C & A Asbestos Removal Ltd Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 03/03/2016 Effective Date: 03/03/2016 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
F	229m SW	Site Name: - Site Address: Unit A6, Zone 3, Cibyn Ind Est, Caernarfon, LL55 2BD Correspondence Address: -	Type of Site: Asbestos Waste Transfer Station Size: - Environmental Permitting Regulations (Waste) Licence Number: AB3097ZB EPR reference: - Operator: C & A Asbestos Removal Ltd Waste Management licence No: 0 Annual Tonnage: -	Issue Date: 03/03/2016 Effective Date: 03/03/2016 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
F	229m SW	Site Name: - Site Address: Unit A6, Zone 3, Cibyn Ind Est, Caernarfon, LL55 2BD Correspondence Address: -	Type of Site: Asbestos Waste Transfer Station Size: - Environmental Permitting Regulations (Waste) Licence Number: AB3097ZB EPR reference: - Operator: C & A Asbestos Removal Ltd Waste Management licence No: 0 Annual Tonnage: -	Issue Date: 03/03/2016 Effective Date: 03/03/2016 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
H	282m NE	Site Name: Pontrug - Part Ordnance Survey 3990 Site Address: Nantlle, Gwynedd, LL55 2BF Correspondence Address: Unit 21, Llanegai Ind Est, Bangor, Gwynedd, LL57 4YH	Type of Site: Landfill taking Non- Biodegradable Wastes Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAT002 EPR reference: - Operator: Watkin Jones & Sons Waste Management licence No: 37061 Annual Tonnage: 0	Issue Date: 25/02/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure
H	282m NE	Site Name: Pontrug - Part Ordnance Survey 3990 Site Address: Nantlle, Caernarfon, Gwynedd, LL55 2BF Correspondence Address: J Mendoza, Unit 21, Llandegai Industrial Estate, Bangor, Gwynedd, LL57 4YH	Type of Site: Landfill taking Non- Biodegradable Wastes Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAT002 EPR reference: - Operator: Watkin Jones & Son Limited Waste Management licence No: 37061 Annual Tonnage: 0	Issue Date: 25/02/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure



ID	Location	Details		
H	285m NE	Site Name: Pontrug - Part Ordnance Survey 3990 Site Address: Nantlle, Caernarfon, Gwynedd, LL55 2BF Correspondence Address: Unit 21, Llandegai Industrial Estate, Bangor, Gwynedd, LL57 4YH	Type of Site: Landfill taking Non- Biodegradeable Wastes Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAT002 EPR reference: - Operator: Watkin Jones & Son Limited Waste Management licence No: 37061 Annual Tonnage: 0	Issue Date: 25/02/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure
H	285m NE	Site Name: Pontrug Landfill - Part Ordnance Survey 3990 Site Address: Pontrug, Nantlle, Caernarfon, Gwynedd, LL55 2BF Correspondence Address: -	Type of Site: Landfill taking Non- Biodegradeable Wastes Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAT002 EPR reference: EA/EPR/XP3094FS/A001 Operator: Watkin Jones & Son Ltd Waste Management licence No: 37061 Annual Tonnage: 150000	Issue Date: 25/02/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure
H	285m NE	Site Name: - Site Address: Pontrug Landfill - Part Ordnance Survey 3990, Nantlle, Caernarfon, Gwynedd, LL55 2BF Correspondence Address: -	Type of Site: Landfill taking Non- Biodegradeable Wastes Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: XP3094FS EPR reference: - Operator: - Waste Management licence No: 37061 Annual Tonnage: 0	Issue Date: 25/02/1993 Effective Date: 25/02/1993 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective
H	285m NE	Site Name: - Site Address: Pontrug Landfill - Part Ordnance Survey 3990, Nantlle, Caernarfon, Gwynedd, LL55 2BF Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: XP3094FS EPR reference: - Operator: Watkin Jones & Son Ltd Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 25/02/1993 Effective Date: 25/02/1993 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
H	285m NE	Site Name: - Site Address: Pontrug Landfill - Part Ordnance Survey 3990, Nantlle, Caernarfon, Gwynedd, LL55 2BF Correspondence Address: -	Type of Site: Landfill taking Non-Biodegradable Wastes Size: - Environmental Permitting Regulations (Waste) Licence Number: XP3094FS EPR reference: - Operator: Watkin Jones & Son Ltd Waste Management licence No: 37061 Annual Tonnage: 0	Issue Date: 25/02/1993 Effective Date: 25/02/1993 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective
H	285m NE	Site Name: - Site Address: Pontrug Landfill - Part Ordnance Survey 3990, Nantlle, Gwynedd, Caernarfon, Gwynedd, LL55 2BF Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: XP3094FS EPR reference: - Operator: Watkin Jones & Son Ltd Waste Management licence No: 37061 Annual Tonnage: 0	Issue Date: 25/02/1993 Effective Date: 25/02/1993 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective
H	285m NE	Site Name: - Site Address: Pontrug Landfill - Part Ordnance Survey 3990, Nantlle, Caernarfon, Gwynedd, LL55 2BF Correspondence Address: -	Type of Site: Landfill taking Non-Biodegradable Wastes Size: - Environmental Permitting Regulations (Waste) Licence Number: XP3094FS EPR reference: - Operator: Watkin Jones & Son Ltd Waste Management licence No: 37061 Annual Tonnage: -	Issue Date: 25/02/1993 Effective Date: 25/02/1993 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective
H	287m NE	Site Name: Pontrug Landfill - Part Ordnance Survey 3990 Site Address: Pontrug, Nantlle, Caernarfon, Gwynedd, LL55 2BF Correspondence Address: -	Type of Site: Landfill taking Non-Biodegradable Wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAT002 EPR reference: XP3094FS/A001 Operator: Watkin Jones & Son Ltd Waste Management licence No: 37061 Annual Tonnage: 150000	Issue Date: 25/02/1993 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Closure

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



3.7 Waste exemptions

Records within 500m

61

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 23**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Using waste exemption	Not on a farm	Use of waste in construction
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Treating waste exemption	Not on a farm	Screening and blending of waste
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Treating waste exemption	Not on a farm	Recovery of scrap metal
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Treating waste exemption	Not on a farm	Treatment of waste food
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Treating waste exemption	Not on a farm	Sorting mixed waste



ID	Location	Site	Reference	Category	Sub-Category	Description
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Treating waste exemption	Not on a farm	Mechanical treatment of end-of-life tyres
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Treating waste exemption	Not on a farm	Recovery of textiles
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Storing waste exemption	Not on a farm	Storage of waste in secure containers
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Treating waste exemption	Not on a farm	Cleaning, washing, spraying or coating relevant waste
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Treating waste exemption	Not on a farm	Manual treatment of waste
A	On site	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME048626	Treating waste exemption	Not 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
B	24m N	Antur Waunfawr, Caergylchu, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME053530	Storing waste exemption	Not on a farm	Storage of waste in a secure place
C	96m E	Cyngor Gwynedd, Gwasanaethau Priffyrdd a Bwrdeistrefol, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BF	NRW-WME043321	Storing waste exemption	Not on a farm	Storage of waste in a secure place
C	96m E	Cyngor Gwynedd, Gwasanaethau Priffyrdd a Bwrdeistrefol, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BF	NRW-WME031559	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
3	117m NE	Cyngor Gwynedd, Caergylchu, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME059057	Storing waste exemption	Not on a farm	Storage of waste in a secure place
4	123m NW	Antur Waunfawr, Warws Werdd, Parth 4 Stad Ddiwydiannol Cibyn, Caernarfon, Gwynedd, LL55 2BD	NRW-WME053531	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	209m W	Antur Waunfawr, Wawrs Werdd, Parth 4 Stad Ddiwydiannol Cibyn, Caernarfon, Gwynedd, LL55 2BD	NRW-WME068502	Treating waste exemption	Not on a farm	Manual treatment of waste
E	209m W	Antur Waunfawr, Wawrs Werdd, Parth 4 Stad Ddiwydiannol Cibyn, Caernarfon, Gwynedd, LL55 2BD	NRW-WME068502	Treating waste exemption	Not on a farm	Sorting mixed waste
E	209m W	Antur Waunfawr, Warws Werdd, Parth 4 Stad Cibyn, Caernarfon, Gwynedd, LL55 2BD	NRW-WME044372	Treating waste exemption	Not on a farm	Recovery of textiles



ID	Location	Site	Reference	Category	Sub-Category	Description
E	209m W	Gwynedd Skip & Plant Hire Ltd, Plot C1, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL52bd	NRW-WME004908	Storing waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Storage of waste in secure containers
E	209m W	Gwynedd Skip & Plant Hire Ltd, Plot C1, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL52bd	NRW-WME004908	Storing waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Storage of waste in a secure place
E	209m W	Gwynedd Skip & Plant Hire Ltd, Plot C1, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL52bd	NRW-WME004908	Using waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Use of waste in construction
E	209m W	Warws Werdd Parth 4 Stad Ddiwydiannol Cibyn Caernarfon Gwynedd LL52BD	NRW-WME006212	Treating waste exemption	Not on a farm	Sorting mixed waste
E	209m W	Warws Werdd Parth 4 Stad Ddiwydiannol Cibyn Caernarfon Gwynedd LL52BD	NRW-WME006212	Treating waste exemption	Not on a farm	Manual treatment of waste
E	209m W	Antur Waunfawr, Caeryglchu, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL52bd	NRW-WME007651	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	209m W	W & M & T Parry, Fferm Bodruall, Cibyn, Caernarfon, Gwynedd, LL52bd	NRW-WME017496	Disposing of waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Burning waste in the open
E	209m W	W & M & T Parry, Fferm Bodruall, Cibyn, Caernarfon, Gwynedd, LL52bd	NRW-WME017496	Using waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Spreading waste on agricultural land to confer benefit
E	209m W	W & M & T Parry, Fferm Bodruall, Cibyn, Caernarfon, Gwynedd, LL52bd	NRW-WME017496	Disposing of waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Deposit of waste from dredging of inland waters



ID	Location	Site	Reference	Category	Sub-Category	Description
E	209m W	W & M & T Parry, Fferm Bodrual, Cibyn, Caernarfon, Gwynedd, LL552bd	NRW-WME017496	Using waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Use of waste in construction
E	209m W	W & M & T Parry, Fferm Bodrual, Cibyn, Caernarfon, Gwynedd, LL552bd	NRW-WME017496	Using waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Use of waste for a specified purpose
E	209m W	Cyngor Gwynedd, Caergyfchu, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020326	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Treating waste exemption	Not on a farm	Recovery of textiles
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Treating waste exemption	Not on a farm	Recovery of scrap metal
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Treating waste exemption	Not on a farm	Screening and blending of waste
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Treating waste exemption	Not on a farm	Manual treatment of waste
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Treating waste exemption	Not on a farm	Sorting mixed waste



ID	Location	Site	Reference	Category	Sub-Category	Description
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Storing waste exemption	Not on a farm	Storage of waste in secure containers
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Treating waste exemption	Not on a farm	Mechanical treatment of end-of-life tyres
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Treating waste exemption	Not on a farm	Treatment of waste food
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Using waste exemption	Not on a farm	Use of waste in construction
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)



ID	Location	Site	Reference	Category	Sub-Category	Description
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME020982	Treating waste exemption	Not on a farm	Cleaning, washing, spraying or coating relevant waste
E	209m W	Antur Waunfawr, Caeryglchu, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME024883	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	209m W	Antur Waunfawr, Warws Werdd, Parth 4 Stad Ddiwydiannol Cibyn, Caernarfon, Gwynedd, LL552BD	NRW-WME024904	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Cae Darbi, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME030912	Using waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Use of waste in construction
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Cae Darbi, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME030912	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip & Plant Hire Ltd, Lon Cae Darbi, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME030912	Storing waste exemption	Not on a farm	Storage of waste in secure containers
E	209m W	Antur Waunfawr, Wawrs Werdd, Parth 4 Stad Ddiwydiannol Cibyn, Caernarfon, Gwynedd, LL552BD	NRW-WME035127	Treating waste exemption	Not on a farm	Sorting mixed waste
E	209m W	Antur Waunfawr, Wawrs Werdd, Parth 4 Stad Ddiwydiannol Cibyn, Caernarfon, Gwynedd, LL552BD	NRW-WME035127	Treating waste exemption	Not on a farm	Manual treatment of waste

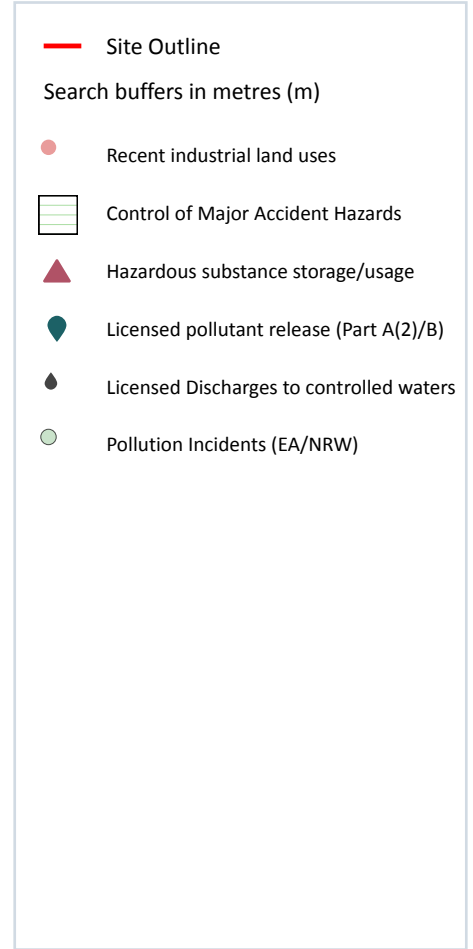
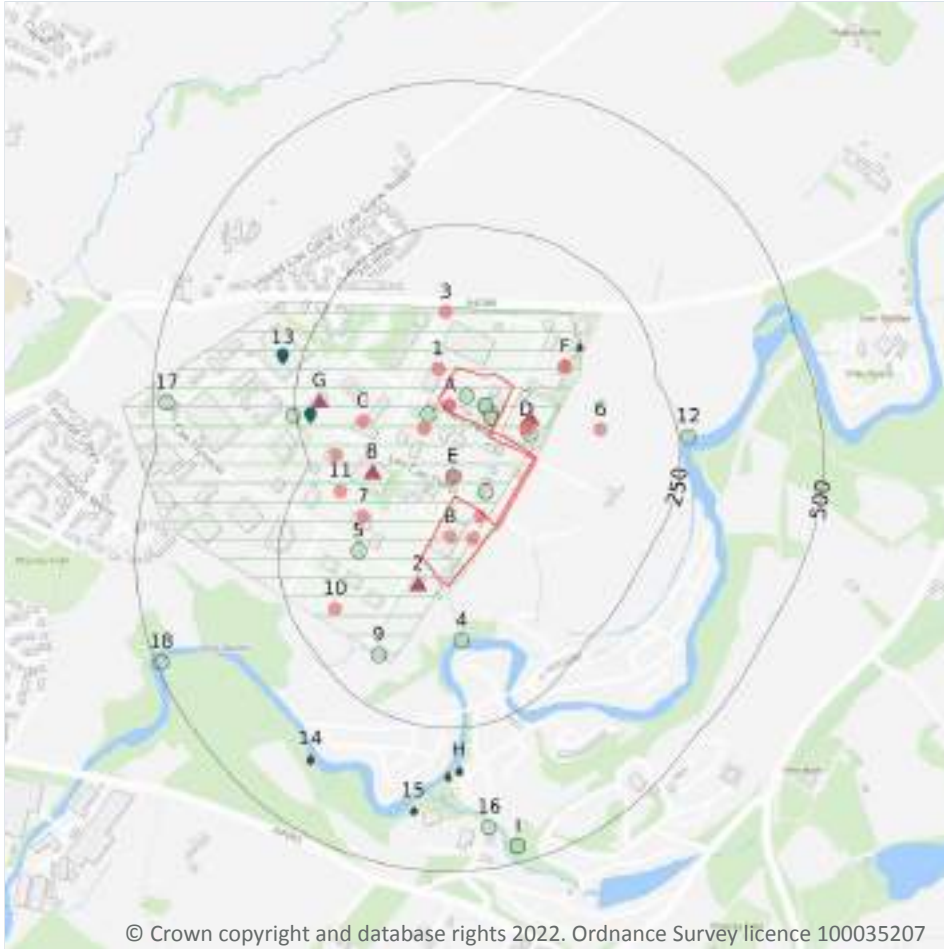


ID	Location	Site	Reference	Category	Sub-Category	Description
E	209m W	Welcome Furniture, Welcome Furniture Ltd, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME035226	Using waste exemption	Not on a farm	Use of waste in construction
E	209m W	Dwyfor Oils, Dwyfor Oils Ltd, Lon Cae Darbi, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME036811	Using waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Use of waste in construction
E	209m W	Antur Waunfawr, Caeryglchu, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552bd	NRW-WME037050	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip Hire, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME037231	Using waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Use of waste in construction
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip Hire, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME037231	Storing waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Storage of waste in a secure place
E	209m W	Gwynedd Skip & Plant Hire Ltd, Gwynedd Skip Hire, Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL552BD	NRW-WME037231	Storing waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Storage of waste in secure containers
5	250m W	Welcome Furniture, Redline Indoor Karting, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME053983	Using waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Use of waste in construction
7	377m W	BEESPEED LTD, Unit 1G, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	NRW-WME067303	Storing waste exemption	Not on a farm	Storage of waste in secure containers

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



4 Current industrial land use



4.1 Recent industrial land uses

Records within 250m **19**

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 47**

ID	Location	Company	Address	Activity	Category
A	On site	Shon Eilian Iron Works	Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	Cutting, Drilling and Welding Services	Construction Services
A	On site	Gwynedd Skip & Plant Hire Ltd	Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	Recycling, Reclamation and Disposal	Recycling Services

ID	Location	Company	Address	Activity	Category
B	On site	Menai Meats Wales Ltd	Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	Fish, Meat and Poultry Products	Foodstuffs
B	On site	Pumping Station	Gwynedd, LL55	Water Pumping Stations	Industrial Features
B	On site	Electricity Sub Station	Gwynedd, LL55	Electrical Features	Infrastructure and Facilities
1	28m NW	I A Q Ltd	Unit A4, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	Precision Engineers	Engineering Services
D	31m NE	Tank	Gwynedd, LL55	Tanks (Generic)	Industrial Features
D	35m NE	Tank	Gwynedd, LL55	Tanks (Generic)	Industrial Features
E	35m N	G & H Car & Commercial Ltd	Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	Vehicle Repair, Testing and Servicing	Repair and Servicing
A	50m SW	Coultons Bread Ltd	Cadnant House Lon Hen Felin, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	Baking and Confectionery	Foodstuffs
F	96m E	Gwynedd Civil Engineering	Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BF	Civil Engineers	Engineering Services
F	96m E	Gwynedd Council Vehicle Repairs	Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BF	Vehicle Repair, Testing and Servicing	Repair and Servicing
3	99m N	Electricity Sub Station	Gwynedd, LL55	Electrical Features	Infrastructure and Facilities
6	121m NE	Cibyn Industrial Estate	Gwynedd, LL55	Business Parks and Industrial Estates	Industrial Features
7	124m NW	Antur Waunfawr	Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	Recycling, Reclamation and Disposal	Recycling Services
C	138m W	Tank	Gwynedd, LL55	Tanks (Generic)	Industrial Features
10	177m SW	Pump House	Gwynedd, LL55	Water Pumping Stations	Industrial Features
11	180m NW	Mast (Telecommunication)	Gwynedd, LL55	Telecommunications Features	Infrastructure and Facilities
C	205m SW	Owen's Autospray	Unit A5, Cibyn Industrial Estate, Caernarfon, Gwynedd, LL55 2BD	Vehicle Repair, Testing and Servicing	Repair and Servicing



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 **2**

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

Features are displayed on the Current industrial land use map on **page 47**

ID	Location	Company	Address	Operational status	Tier
C	On site	Amazon Gas Ltd	Amazon Gas Ltd, Cibyn Industrial Estate, Caernarfon, LL55 2BD	Historical NIHHS Site	-

ID	Location	Company	Address	Operational status	Tier
D	4m NE	Avanti Gas Limited	Avanti Gas Limited, Cibyn Industrial Estate, Unit A5 Cibyn Industrial Estat, Llanberis Road, Caernarfon, Gwynedd, LL55 2BD	Current COMAH Site	COMAH Lower Tier Operator

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	4
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Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

Features are displayed on the Current industrial land use map on **page 47**

ID	Location	Details	
2	34m SW	Application reference number: No Details Application status: Approved Application date: No Details Address: Dwyfor Oils Ltd, Zone 4, Cibyn Industrial Estate, Caernarfon, Gwynedd, Wales, LL55 2BD	Details: No Details Enforcement: No Details Date of enforcement: No Details Comment: No Details
D	48m SE	Application reference number: No Details Application status: Approved Application date: No Details Address: Avanti Gas Ltd, Unit A5 Cibyn Industrial Estat, Llanberis Road, Caernarfon, Gwynedd, Wales, LL55 2BF	Details: No Details Enforcement: Data requested, not received. Date of enforcement: Data requested, not received. Comment: Data requested, not received.
8	147m NW	Application reference number: No Details Application status: Approved Application date: No Details Address: Dwyfor Oils Ltd, Land Adjacent to, Zone 4, Cibyn Industrial Estate, Caernarfon, Gwynedd, Wales, LL55 2BD	Details: No Details Enforcement: Data requested, not received. Date of enforcement: Data requested, not received. Comment: Data requested, not received.

ID	Location	Details	
G	208m W	Application reference number: No Details Application status: Approved Application date: No Details Address: Calor Gas Ltd, Site adjacent to Cibyn Industrial Estate, Caernarfon, Gwynedd, Wales, LL55 2HB	Details: No Details Enforcement: Data requested, not received. Date of enforcement: Data requested, not received. Comment: Data requested, not received.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0
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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
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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	2
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Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 47**

ID	Location	Address	Details	
G	227m W	A. & G. Carbody Repairs, Unit 4, Cibyn Industrial Estate, Caernarfon, LL55 2BD	Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
13	282m W	Welcome Furniture Ltd, Lon Cae Ffynnon, Ystad Diwydiannol Cibyn, Caernarfon, LL55 2BD	Process: Timber Manufacture Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified



This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m

5

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 47**

ID	Location	Address	Details	
F	133m NE	GWYNEDD CIVIL ENGINEERING, CIBYN INDUSTRIAL ESTATE, CAERNARFON, LL55 2BF	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: CG0391601 Permit Version: 1 Receiving Water: UNNAMED TRIB OF AFON SEIONT	Status: Effective Issue date: 02/03/2001 Effective Date: 02/03/2001 Revocation Date: -
H	324m S	CAEATHRO STW	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: CG0060401 Permit Version: 1 Receiving Water: SEIONT	Status: Surrendered Issue date: 31/12/1965 Effective Date: 31/12/1965 Revocation Date: -
H	333m S	GLAN GWNA HOLIDAY PARK	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: CG0075001 Permit Version: 1 Receiving Water: SEIONT	Status: Effective Issue date: 27/06/1968 Effective Date: 27/06/1968 Revocation Date: -
14	384m SW	CAEATHRAW NEW SD.SCHEME (OBSOL	Effluent Type: UNSPECIFIED Permit Number: CG0060301 Permit Version: 1 Receiving Water: SEIONT	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 31/12/1965 Effective Date: 31/12/1965 Revocation Date: 17/02/1986



ID	Location	Address	Details	
15	398m S	CAEATHRO STW	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CG0023601 Permit Version: 2 Receiving Water: SEIONT	Status: Surrendered Issue date: 16/12/1988 Effective Date: 16/12/1988 Revocation Date: -

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m **0**

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

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

4.15 Pollutant release to public sewer

Records within 500m **0**

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m **0**

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

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

4.17 List 2 Dangerous Substances

Records within 500m **0**

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m

19

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 47**

ID	Location	Details	
A	On site	Incident Date: 09/07/2001 Incident Identification: 15149 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
A	On site	Incident Date: 03/04/2007 Incident Identification: 482223 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
A	On site	Incident Date: 12/04/2001 Incident Identification: 2281 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
A	On site	Incident Date: 12/04/2001 Incident Identification: 2281 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
A	On site	Incident Date: 24/07/2003 Incident Identification: 176451 Pollutant: Specific Waste Materials Pollutant Description: Vehicles and Vehicle Parts	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
D	27m NE	Incident Date: 18/07/2001 Incident Identification: 17232 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Fumes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
A	29m SW	Incident Date: 18/07/2014 Incident Identification: 1257565 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
B	34m NE	Incident Date: 26/04/2001 Incident Identification: 3557 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)



ID	Location	Details	
E	34m N	Incident Date: 12/11/2014 Incident Identification: 1293787 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
4	99m S	Incident Date: 11/12/2002 Incident Identification: 125594 Pollutant: Specific Waste Materials Pollutant Description: Other Specific Waste Material	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
5	110m W	Incident Date: 25/11/2001 Incident Identification: 44814 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
9	167m SW	Incident Date: 09/01/2016 Incident Identification: 1401518 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
G	256m W	Incident Date: 27/06/2002 Incident Identification: 87806 Pollutant: Organic Chemicals/Products Pollutant Description: Other Organic Chemical or Product	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
12	267m E	Incident Date: 02/04/2003 Incident Identification: 148134 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
16	428m S	Incident Date: 02/01/2004 Incident Identification: 208727 Pollutant: Contaminated Water Pollutant Description: Suspended Solids	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
I	472m S	Incident Date: 08/11/2016 Incident Identification: 1606766 Pollutant: Contaminated Water Pollutant Description: Suspended Solids	Water Impact: Category 3 (Minor) Land Impact: Other Air Impact: Other
I	472m S	Incident Date: 08/11/2016 Incident Identification: 1606766 Pollutant: - Pollutant Description: -	Water Impact: Category 3 (Minor) Land Impact: Other Air Impact: Other
17	474m W	Incident Date: 02/08/2013 Incident Identification: 1142791 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)



ID	Location	Details	
18	490m W	Incident Date: 01/10/2002 Incident Identification: 112642 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	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
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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
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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.

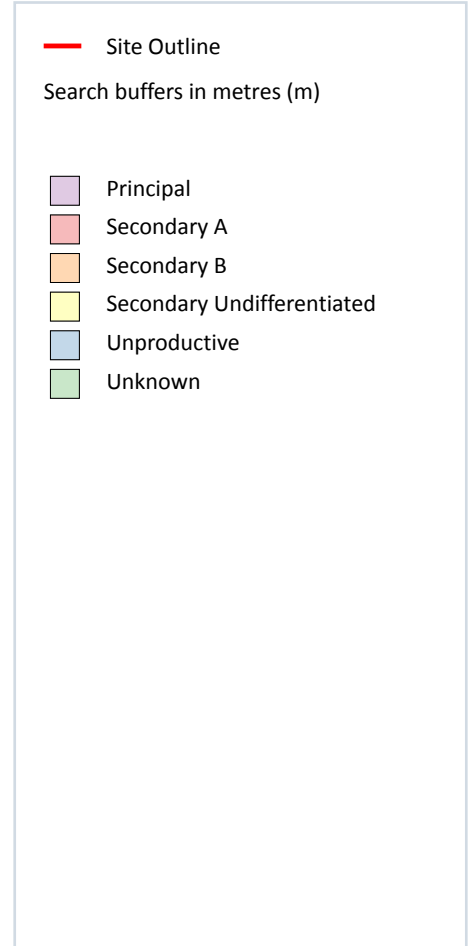
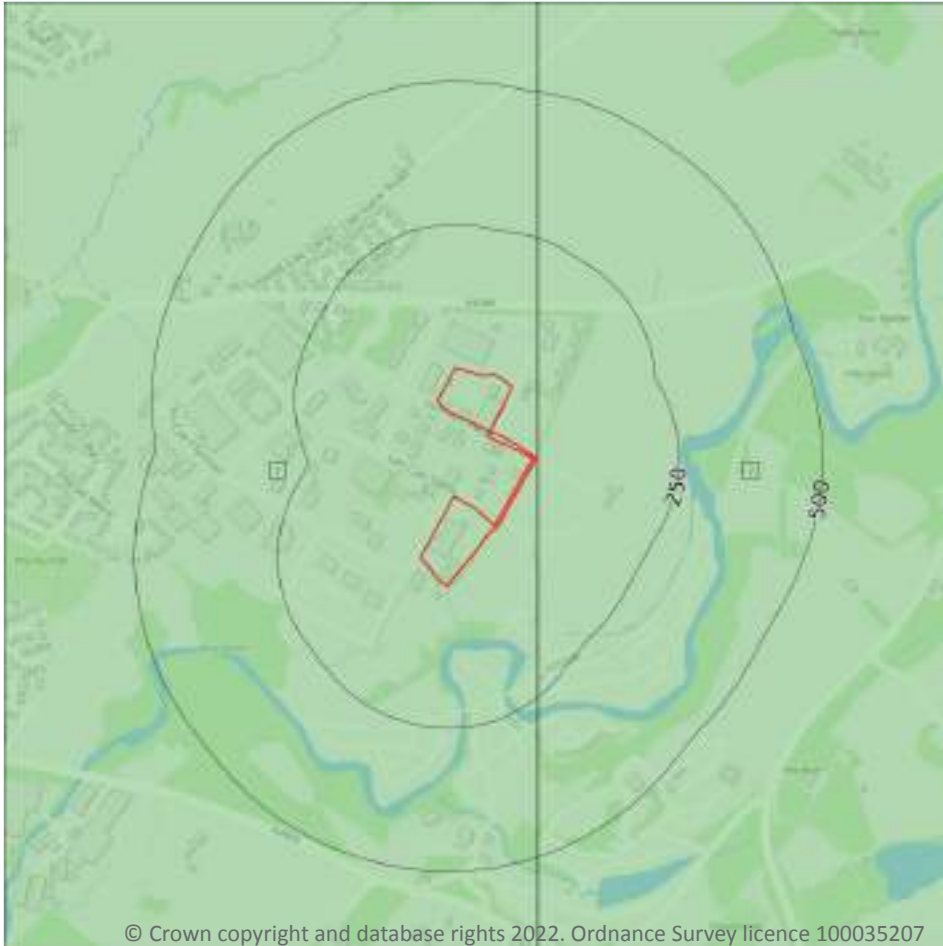
4.21 Pollution inventory radioactive waste

Records within 500m	0
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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



5.1 Superficial aquifer

Records within 500m

2

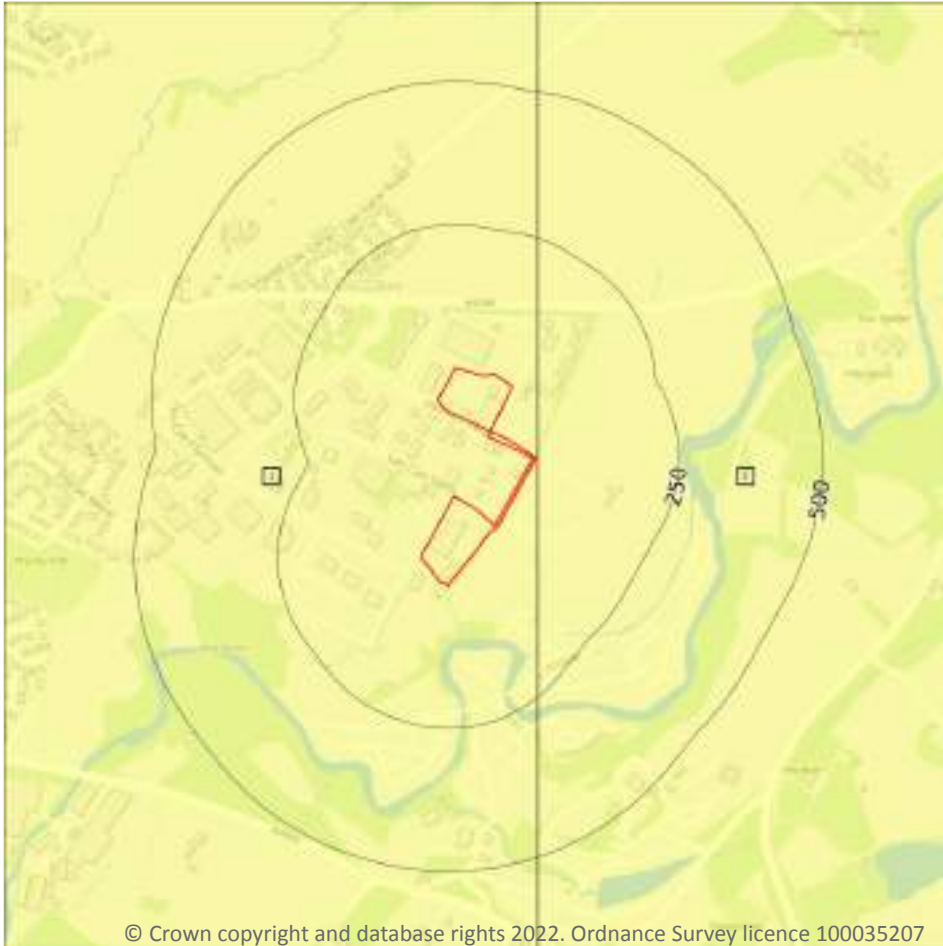
Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 57**

ID	Location	Designation	Description
1	On site	Unknown	Unknown
2	3m E	Unknown	Unknown

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

Bedrock aquifer



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

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5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 58](#)

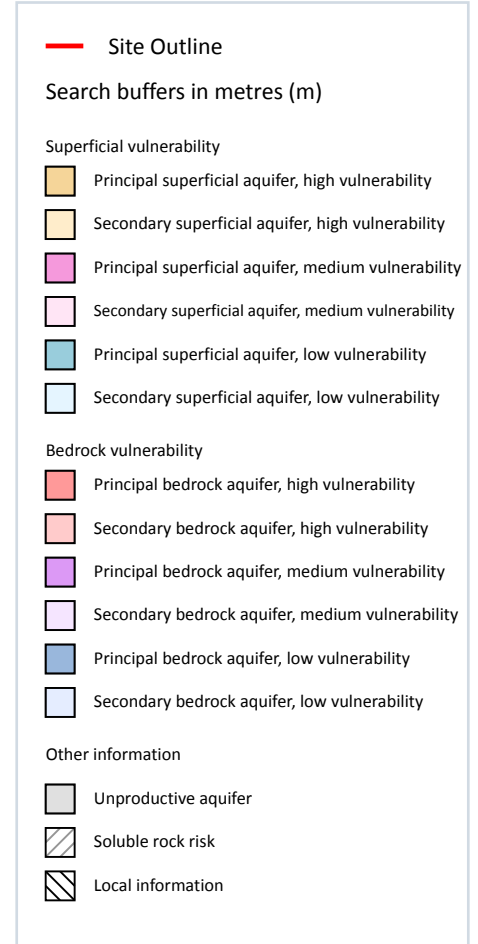
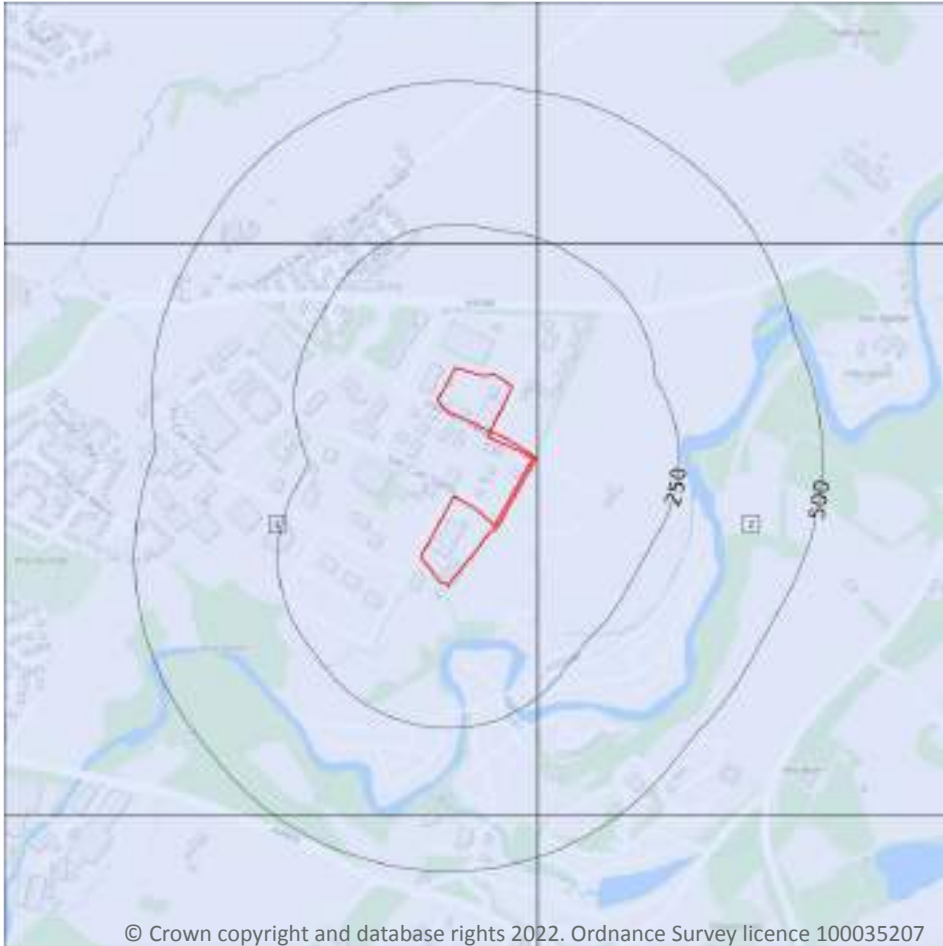
ID	Location	Designation	Description
1	On site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	3m E	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



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



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

2

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

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

Features are displayed on the Groundwater vulnerability map on **page 60**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: >550mm/year	Vulnerability: - Aquifer type: Unknown (lakes+landslip) Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
2	3m E	Summary Classification: Secondary bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: >550mm/year	Vulnerability: - Aquifer type: Unknown (lakes+landslip) Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site

0

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

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

5.5 Groundwater vulnerability- local information

Records on site

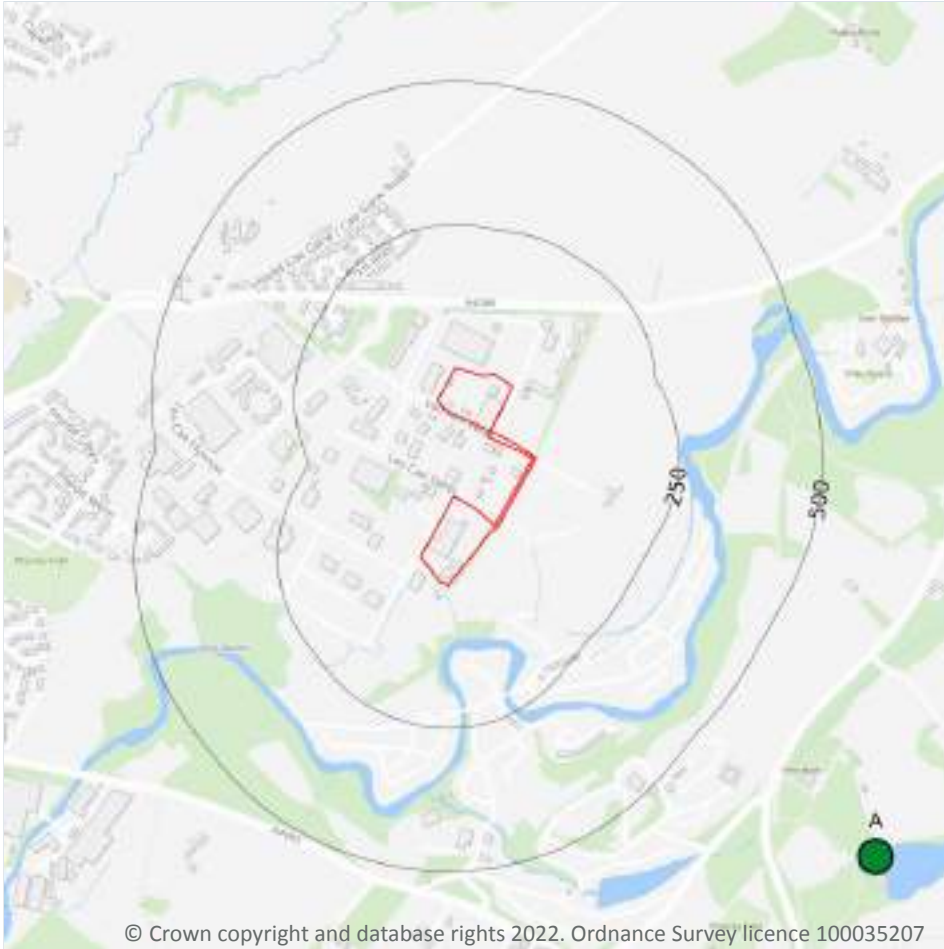
0

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

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



Abstractions and Source Protection Zones



5.6 Groundwater abstractions

Records within 2000m

0

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.

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

5.7 Surface water abstractions

Records within 2000m

9

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 62**

ID	Location	Details	
A	875m SE	Status: Historical Licence No: 23/65/16/0039 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: EAW Surface Water Point: POND AT GLAN GWNA, CAEATHRAW Data Type: Point Name: Glan Gwna Holiday Park Ltd Easting: 250590 Northing: 361930	Annual Volume (m ³): 93502.1 Max Daily Volume (m ³): 256.17 Original Application No: - Original Start Date: 24/06/1968 Expiry Date: - Issue No: 100 Version Start Date: 11/09/2006 Version End Date: -
A	875m SE	Status: Historical Licence No: 23/65/16/0039 Details: Drinking, Cooking, Sanitary Washing (small garden) - Household - Medium Direct Source: - Point: - Data Type: Point Name: - Easting: 250590 Northing: 361930	Annual Volume (m ³): 93,502.10 Max Daily Volume (m ³): - Original Application No: - Original Start Date: Sep 11 2006 12:00AM Expiry Date: - Issue No: - Version Start Date: - Version End Date: -
-	1135m SW	Status: Historical Licence No: 23/65/16/0070 Details: Process Water Direct Source: EAW Surface Water Point: ON SITE LAGOON AT SEIONT BRICKWORKS Data Type: Point Name: Hanson Brick Easting: 249110 Northing: 361530	Annual Volume (m ³): 12000 Max Daily Volume (m ³): 35 Original Application No: - Original Start Date: 20/06/2006 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 01/04/2008 Version End Date: -
-	1389m SW	Status: Historical Licence No: 23/65/16/0019 Details: Lake & Pond Throughflow Direct Source: EAW Surface Water Point: ORNAMENTAL PARK LAKE Data Type: Point Name: Cyngor Gwynedd Easting: 248770 Northing: 361510	Annual Volume (m ³): 382300 Max Daily Volume (m ³): 1047.4 Original Application No: - Original Start Date: 29/11/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2005 Version End Date: -



ID	Location	Details	
-	1389m SW	Status: Active Licence No: 23/65/16/0019 Details: Lake & Pond Throughflow - Very Low Direct Source: - Point: - Data Type: Point Name: - Easting: 248770 Northing: 361510	Annual Volume (m ³): 382,300.42 Max Daily Volume (m ³): 1,047.36 Original Application No: - Original Start Date: Apr 1 2005 12:00AM Expiry Date: - Issue No: - Version Start Date: - Version End Date: -
-	1422m SW	Status: Historical Licence No: 23/65/16/0008 Details: General Washing/Process Washing Direct Source: EAW Surface Water Point: RIVER SEIONT, CAERNARFON Data Type: Point Name: Hanson Brick Easting: 248770 Northing: 361460	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 25/10/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/01/2000 Version End Date: -
-	1422m SW	Status: Historical Licence No: 23/65/16/0008 Details: Process Water Direct Source: EAW Surface Water Point: AFON SEIONT Data Type: Point Name: Hanson Brick Easting: 248770 Northing: 361460	Annual Volume (m ³): 6819 Max Daily Volume (m ³): 27.276 Original Application No: - Original Start Date: 25/10/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date: -
-	1681m SE	Status: Historical Licence No: 23/65/16/0015 Details: General Farming & Domestic Direct Source: EAW Surface Water Point: SPRING AT PRYSGOL FARM, CAEATHRAW Data Type: Point Name: Glan Gwna Holiday Park Ltd Easting: 251340 Northing: 361590	Annual Volume (m ³): 2556.44 Max Daily Volume (m ³): 7.004 Original Application No: - Original Start Date: 29/11/1965 Expiry Date: - Issue No: 100 Version Start Date: 08/02/2008 Version End Date: -
-	1681m SE	Status: Historical Licence No: 23/65/16/0015 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: EAW Surface Water Point: SPRING AT PRYSGOL FARM, CAEATHRAW Data Type: Point Name: Glan Gwna Holiday Park Ltd Easting: 251340 Northing: 361590	Annual Volume (m ³): 2556.44 Max Daily Volume (m ³): 7.004 Original Application No: - Original Start Date: 29/11/1965 Expiry Date: - Issue No: 100 Version Start Date: 08/02/2008 Version End Date: -

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



5.8 Potable abstractions

Records within 2000m

3

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 62**

ID	Location	Details	
A	875m SE	Status: Historical Licence No: 23/65/16/0039 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: EAW Surface Water Point: POND AT GLAN GWNA, CAEATHRAW Data Type: Point Name: Glan Gwna Holiday Park Ltd Easting: 250590 Northing: 361930	Annual Volume (m ³): 93502.1 Max Daily Volume (m ³): 256.17 Original Application No: - Original Start Date: 24/06/1968 Expiry Date: - Issue No: 100 Version Start Date: 11/09/2006 Version End Date: -
A	875m SE	Status: Historical Licence No: 23/65/16/0039 Details: Drinking, Cooking, Sanitary Washing (small garden) - Household - Medium Direct Source: - Point: - Data Type: Point Name: - Easting: 250590 Northing: 361930	Annual Volume (m ³): 93,502.10 Max Daily Volume (m ³): - Original Application No: - Original Start Date: Sep 11 2006 12:00AM Expiry Date: - Issue No: - Version Start Date: - Version End Date: -
-	1681m SE	Status: Historical Licence No: 23/65/16/0015 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: EAW Surface Water Point: SPRING AT PRYSGOL FARM, CAEATHRAW Data Type: Point Name: Glan Gwna Holiday Park Ltd Easting: 251340 Northing: 361590	Annual Volume (m ³): 2556.44 Max Daily Volume (m ³): 7.004 Original Application No: - Original Start Date: 29/11/1965 Expiry Date: - Issue No: 100 Version Start Date: 08/02/2008 Version End Date: -

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



5.9 Source Protection Zones

Records within 500m

0

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

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

5.10 Source Protection Zones (confined aquifer)

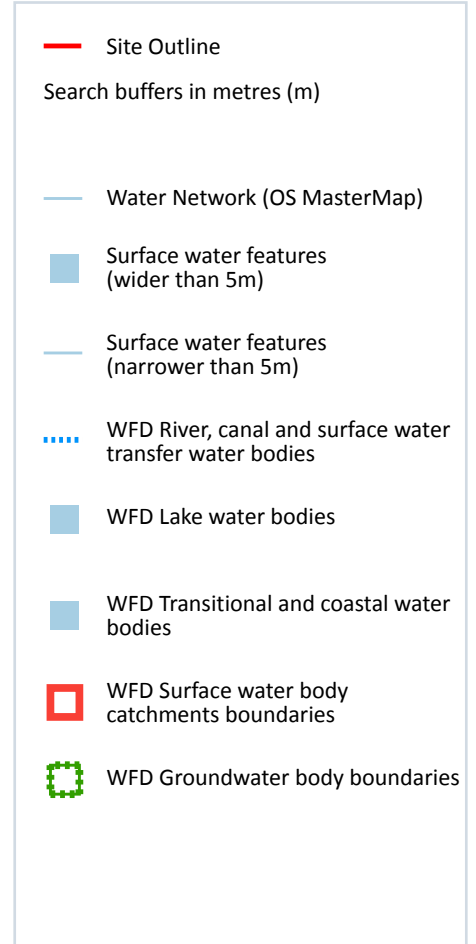
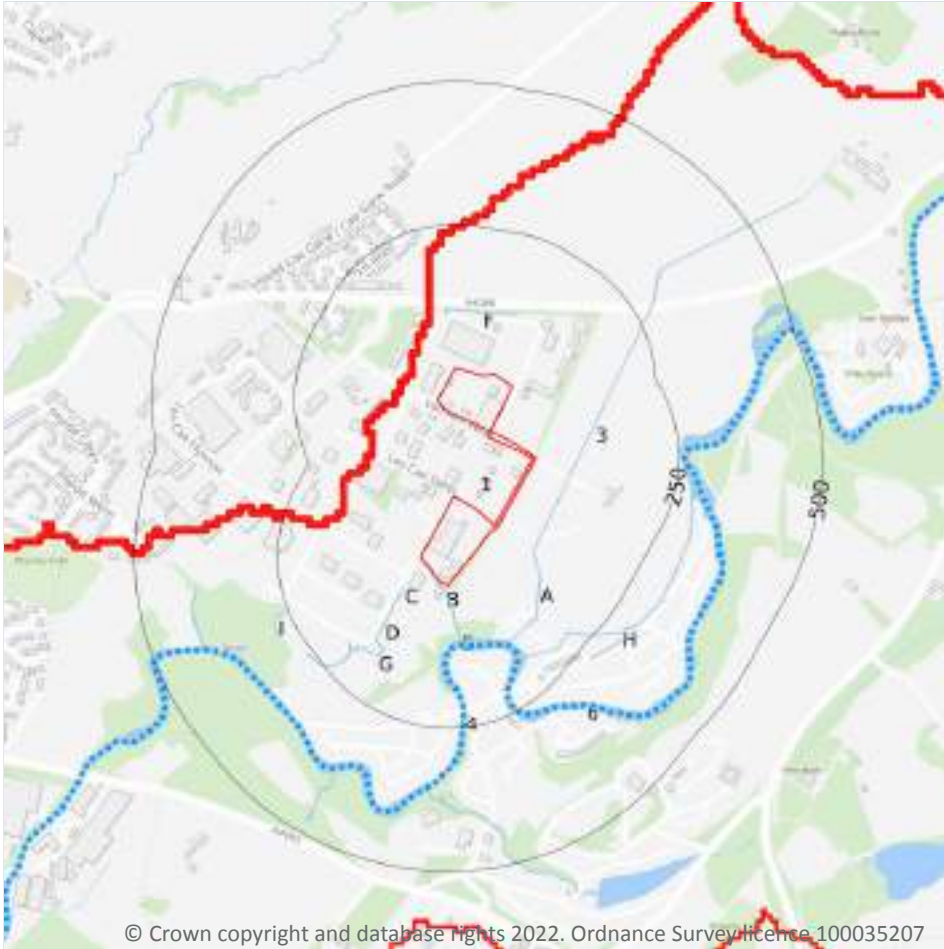
Records within 500m

0

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

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

6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m

25

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 67**

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

ID	Location	Type of water feature	Ground level	Permanence	Name
C	55m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	59m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
D	61m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	66m SE	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
A	75m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	83m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	97m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	100m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	102m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Afon Seiont
4	104m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Afon Seiont
E	105m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Afon Seiont
E	120m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Afon Seiont
E	146m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
E	146m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	151m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Afon Seiont
G	168m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
G	169m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	174m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Afon Seiont
E	174m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	189m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	199m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	206m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
H	214m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	249m W	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

12

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 67**

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 67**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River WB catchment	Seiont	GB110065054040	Gwyrfai Seiont	Llyn and Eryri

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.

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

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
5	107m S	River	Seiont	GB110065054040	Good	Good	Good	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.

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

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
1	On site	Llyn and Eryri	GB41002G204600	Poor	Poor	Good	2017

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

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

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

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

7.6 Flood Zone 2

Records within 50m

0

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.

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

7.7 Flood Zone 3

Records within 50m

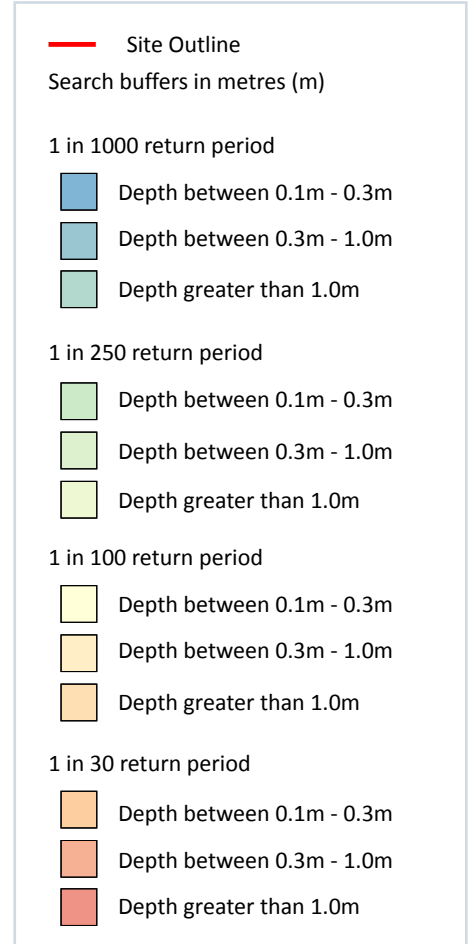
0

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.

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



8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 30 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.1m - 0.3m

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 75**

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

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

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.1m and 0.3m

This data is sourced from Ambiental Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

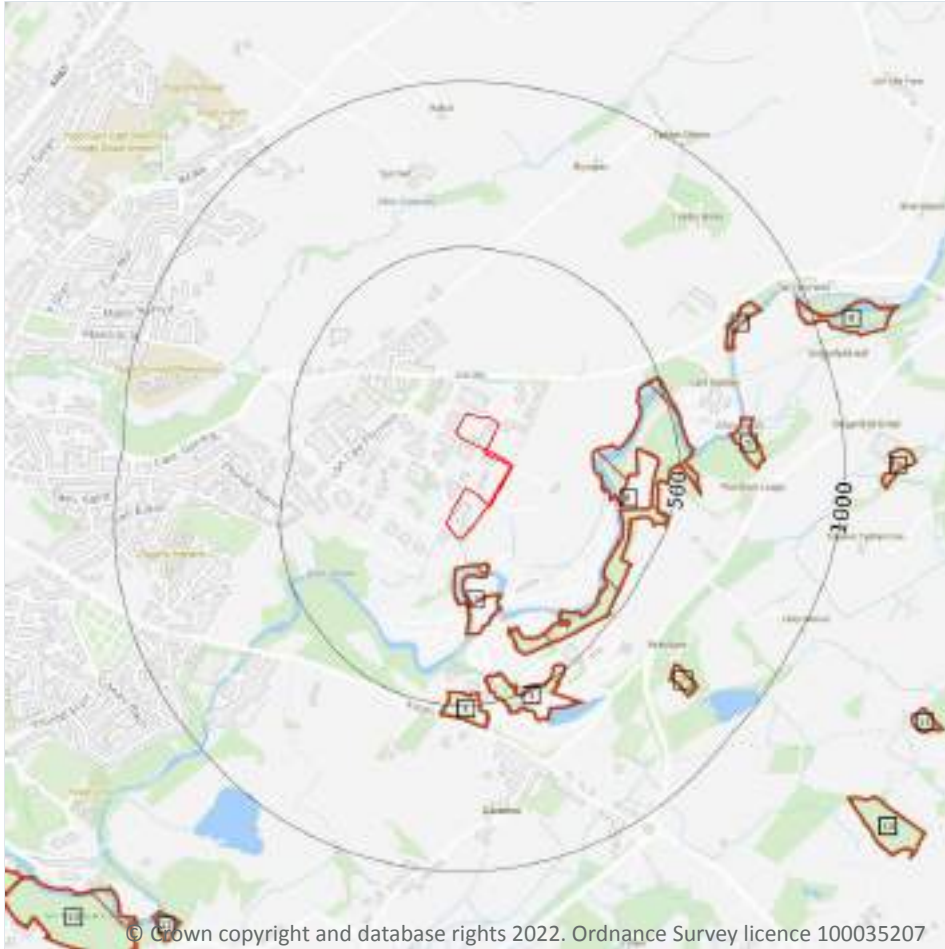
Low

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 77**

This data is sourced from Ambient Risk Analytics.

10 Environmental designations



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

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

2

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

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

ID	Location	Name	Data source
-	1548m SW	AFON SEIONT	Natural Resources Wales

ID	Location	Name	Data source
-	1694m W	AFON SEIONT	Natural Resources Wales

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
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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	1
-----------------------------	----------

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

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

ID	Location	Name	Features of interest	Habitat description	Data source
-	1815m NW	Y Fenai a Bae Conwy / Menai Strait and Conwy Bay	Subtidal sandbanks; Estuaries; Intertidal mudflats and sandflats; Shallow inlets and bays; Reefs; Atlantic salt meadows; Sea caves; Sea lamprey; River lamprey; Allis shad; Twaite shad; Grey seal.	Shingle, Sea cliffs, Islets; Salt marshes, Salt pastures, Salt steppes; Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	Natural Resources Wales

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

10.4 Special Protection Areas (SPA)

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

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

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



10.5 National Nature Reserves (NNR)

Records within 2000m

0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m

0

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

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

10.7 Designated Ancient Woodland

Records within 2000m

20

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 78**

ID	Location	Name	Woodland Type
1	83m S	Unknown	Ancient Semi Natural Woodland
2	242m E	Unknown	Restored Ancient Woodland Site
3	418m S	Unknown	Restored Ancient Woodland Site
4	460m S	Unknown	Ancient Semi Natural Woodland
5	662m E	Unknown	Ancient Semi Natural Woodland
6	720m E	Unknown	Ancient Semi Natural Woodland
7	733m SE	Unknown	Restored Ancient Woodland Site
8	963m E	Unknown	Ancient Semi Natural Woodland
9	1112m E	Unknown	Ancient Semi Natural Woodland
10	1394m SE	Unknown	Restored Ancient Woodland Site



ID	Location	Name	Woodland Type
11	1418m SE	Unknown	Ancient Semi Natural Woodland
12	1429m SW	Unknown	Ancient Semi Natural Woodland
13	1488m SW	Unknown	Restored Ancient Woodland Site
-	1513m NE	Unknown	Ancient Semi Natural Woodland
-	1574m E	Unknown	Restored Ancient Woodland Site
-	1601m S	Unknown	Ancient Semi Natural Woodland
18	1666m SW	Unknown	Ancient Semi Natural Woodland
-	1696m NE	Unknown	Ancient Semi Natural Woodland
-	1756m W	Unknown	Ancient Semi Natural Woodland
-	1778m SE	Unknown	Restored Ancient Woodland Site

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

0

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

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

0

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

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



SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

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

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.

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 Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m

0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m

0

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

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

11.7 Registered Parks and Gardens

Records within 250m

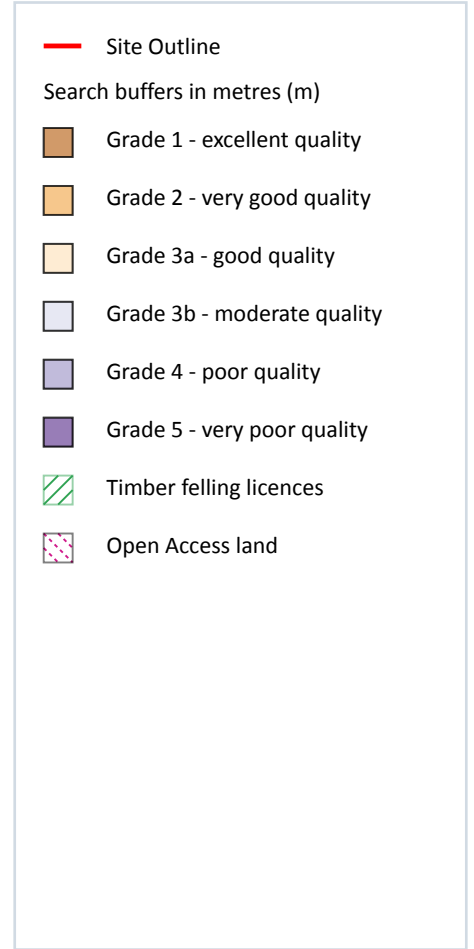
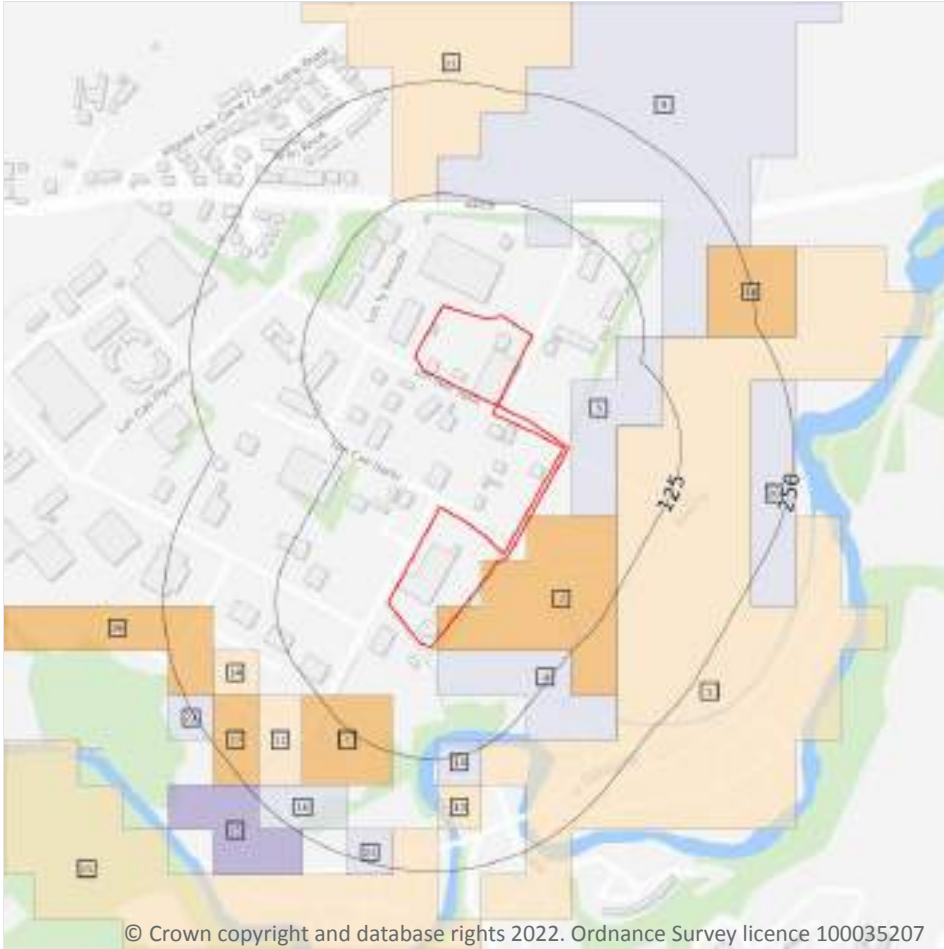
0

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

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



12 Agricultural designations



12.1 Agricultural Land Classification

Records within 250m

20

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 87**

ID	Location	Classification	Description
2	On site	Grade 2	Good quality agricultural land
3	3m E	Grade 3b	Moderate quality agricultural land
4	7m SE	Grade 3b	Moderate quality agricultural land

ID	Location	Classification	Description
5	53m E	Grade 3a	Good to moderate quality agricultural land
7	66m SW	Grade 2	Good quality agricultural land
8	82m N	Grade 3b	Moderate quality agricultural land
10	104m S	Grade 3b	Moderate quality agricultural land
11	116m N	Grade 3a	Good to moderate quality agricultural land
12	139m SW	Grade 3a	Good to moderate quality agricultural land
13	154m S	Grade 3a	Good to moderate quality agricultural land
14	155m W	Grade 3a	Good to moderate quality agricultural land
16	177m SW	Grade 3b	Moderate quality agricultural land
17	178m SW	Grade 2	Good quality agricultural land
18	194m E	Grade 2	Good quality agricultural land
19	195m W	Grade 2	Good quality agricultural land
20	203m E	Grade 3b	Moderate quality agricultural land
21	204m S	Grade 3a	Good to moderate quality agricultural land
22	208m S	Grade 3b	Moderate quality agricultural land
23	221m SW	Grade 3b	Moderate quality agricultural land
25	240m SW	Grade 4	Poor quality agricultural land

This data is sourced from Natural Resources Wales.

12.2 Open Access Land

Records within 250m

0

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

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



12.3 Tree Felling Licences

Records within 250m

0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

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

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

0

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

This data is sourced from Natural England.

13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m	0
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Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

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 91**

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

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m

0

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.

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

14.5 Bedrock geology (10k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

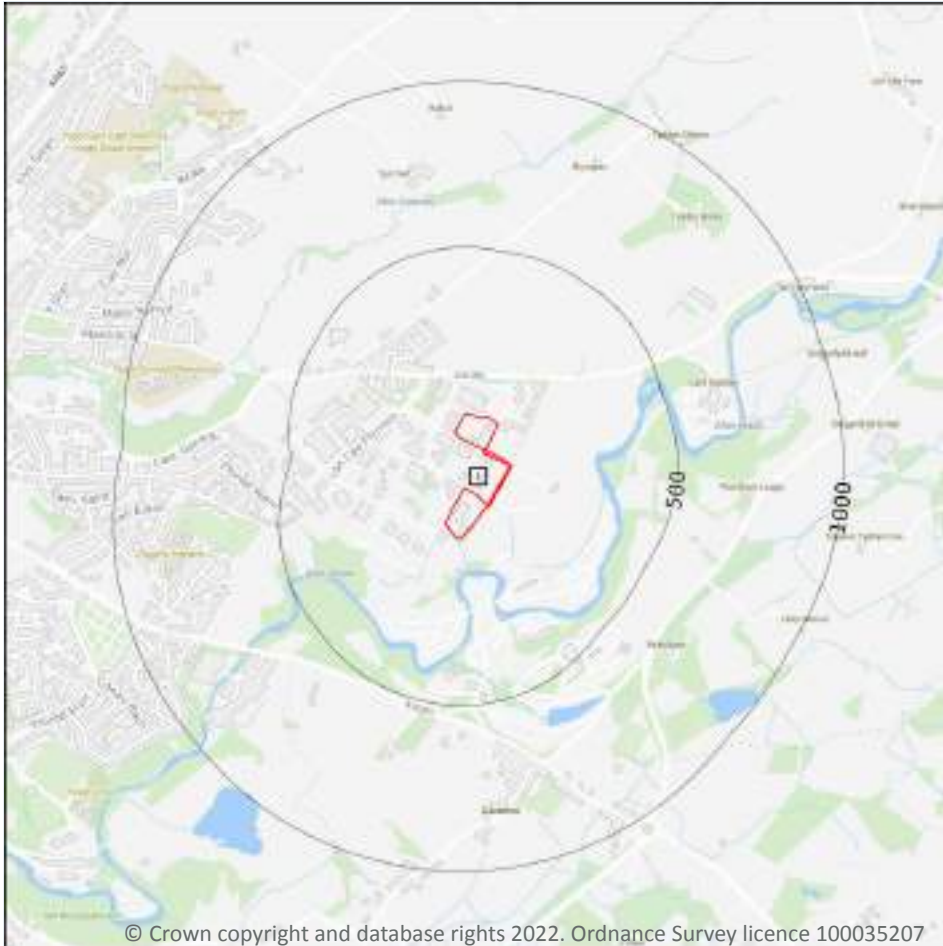
0

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.

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. Where 50k data is not available, this area has been filled in with 625k scale data.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 95**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW105_anglesey_v4

This data is sourced from the British Geological Survey.

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

15.2 Artificial and made ground (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

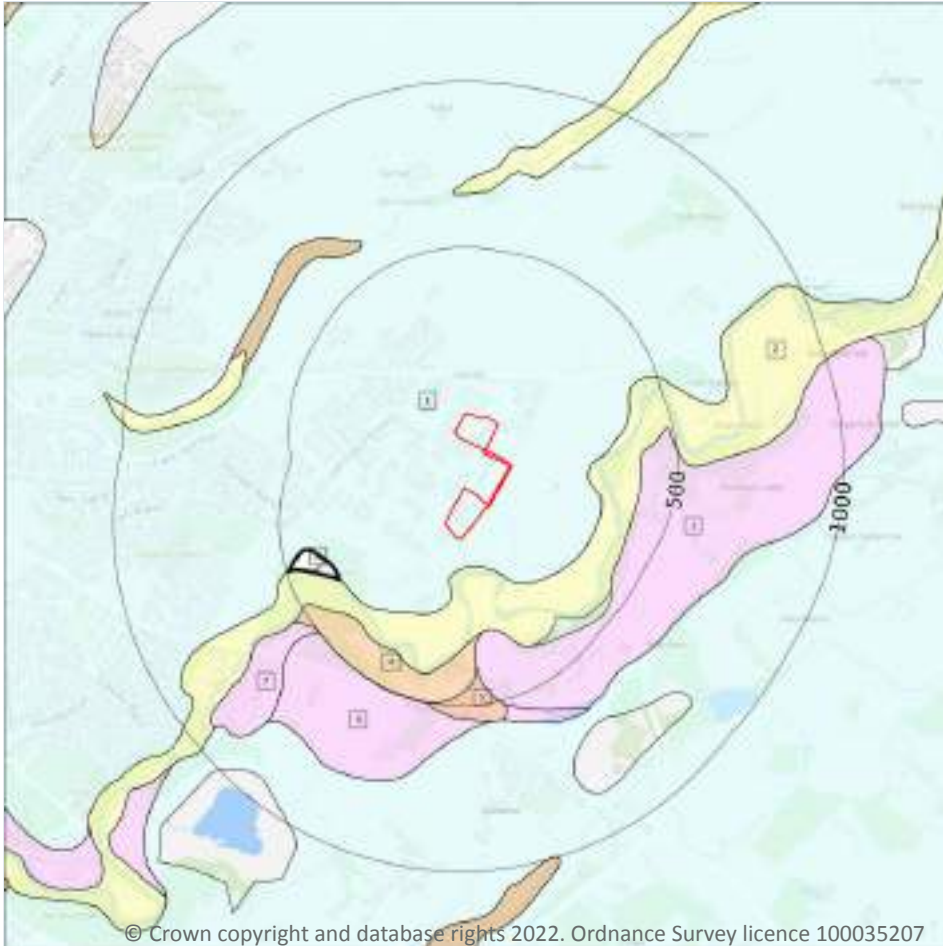
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



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

15.4 Superficial geology (50k)

Records within 500m

8

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 97**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON
2	86m S	ALV-XVSZC	ALLUVIUM	GRAVEL, SAND, SILT AND CLAY
3	283m S	GFICD-XSV	GLACIOFLUVIAL ICE CONTACT DEPOSITS, DEVANSIAN	SAND AND GRAVEL

ID	Location	LEX Code	Description	Rock description
4	285m S	RTDU-XVSZ	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	GRAVEL, SAND AND SILT
A	359m SW	SUPNM-UNKNOWN	SUPERFICIAL THEME NOT MAPPED [FOR DIGITAL MAP USE ONLY]	UNKNOWN/UNCLASSIFIED ENTRY
5	381m S	ALF-XSV	ALLUVIAL FAN DEPOSITS	SAND AND GRAVEL
6	499m SW	GFTDD-XSV	GLACIOFLUVIAL TERRACE DEPOSITS, DEVENSIAN	SAND AND GRAVEL
7	500m SW	GFSDD-XSV	GLACIOFLUVIAL SHEET DEPOSITS, DEVENSIAN	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

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

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low
3m NE	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	1
----------------------------	----------

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 97**

ID	Location	LEX Code	Description	Rock description
A	359m SW	SLIP-UNKNOWN	LANDSLIDE DEPOSITS	UNKNOWN/UNCLASSIFIED ENTRY

This data is sourced from the British Geological Survey.



15.7 Landslip permeability (50k)

Records within 50m

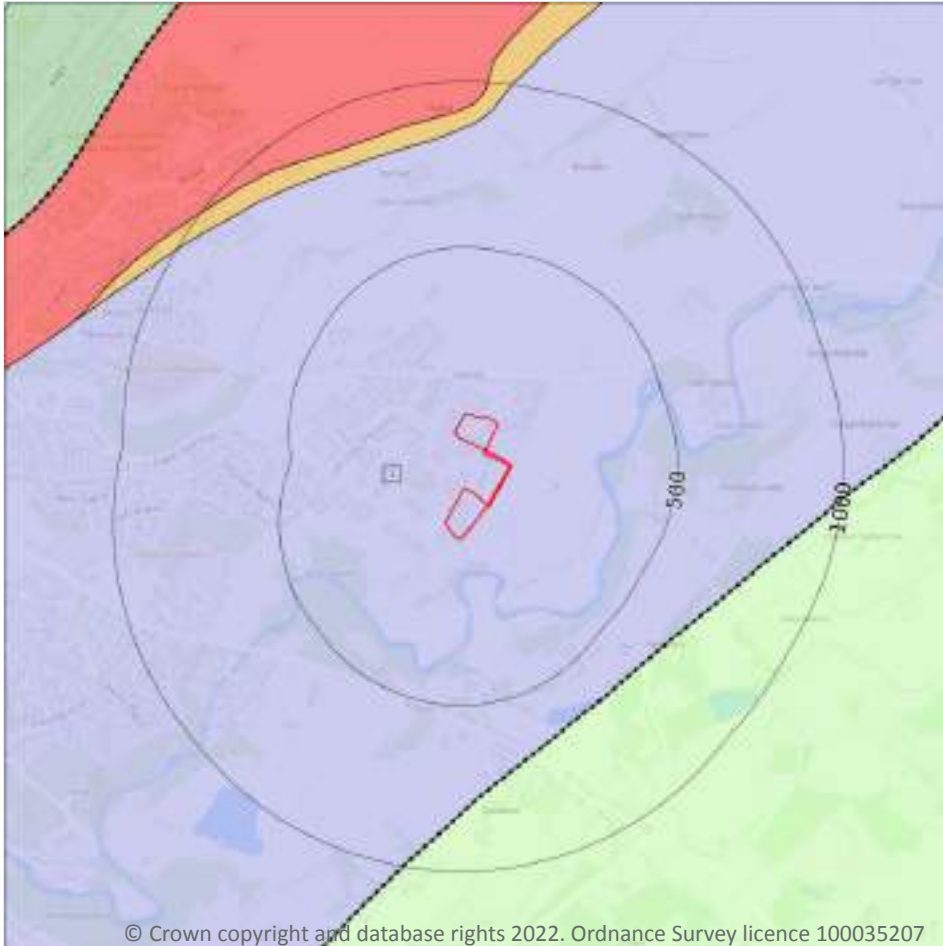
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (50k)
- Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

1

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 100**

ID	Location	LEX Code	Description	Rock age
1	On site	NFR-SLST	NANT FFRANCON SUBGROUP - SILTSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

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

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Moderate	Low
3m NE	Fracture	Moderate	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

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

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.

This data is sourced from the British Geological Survey.

16 Boreholes

16.1 BGS Boreholes

Records within 250m

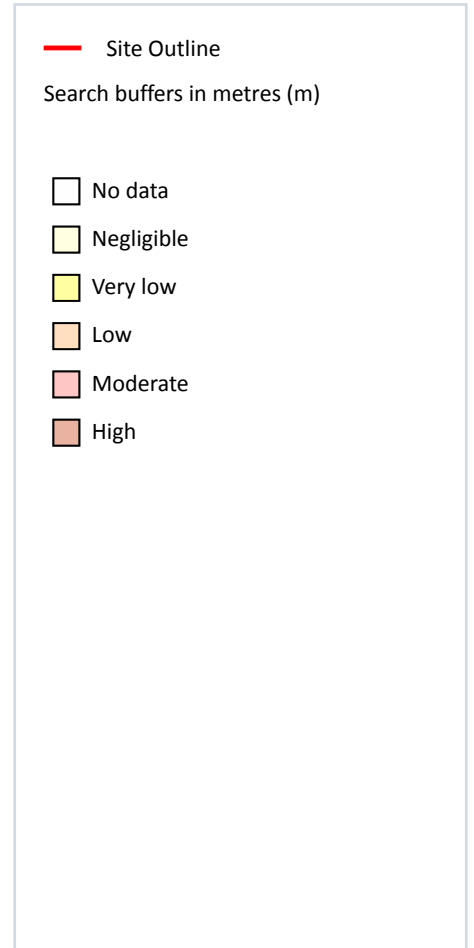
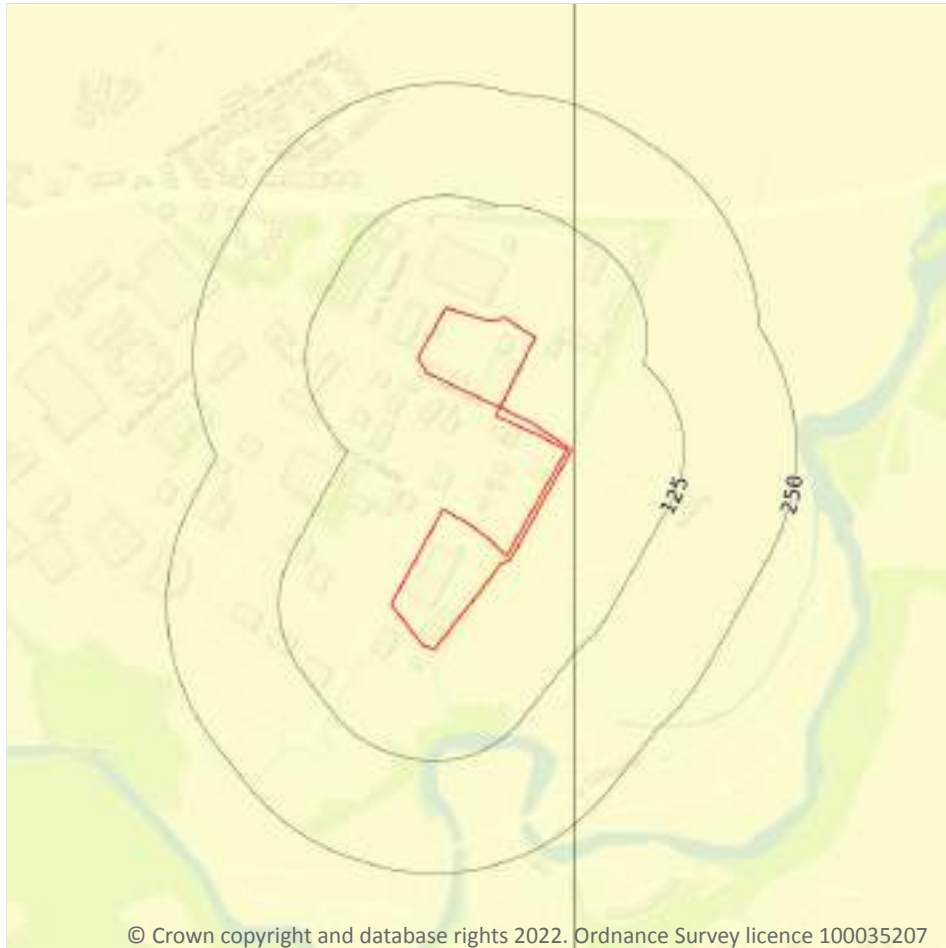
0

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.

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m

2

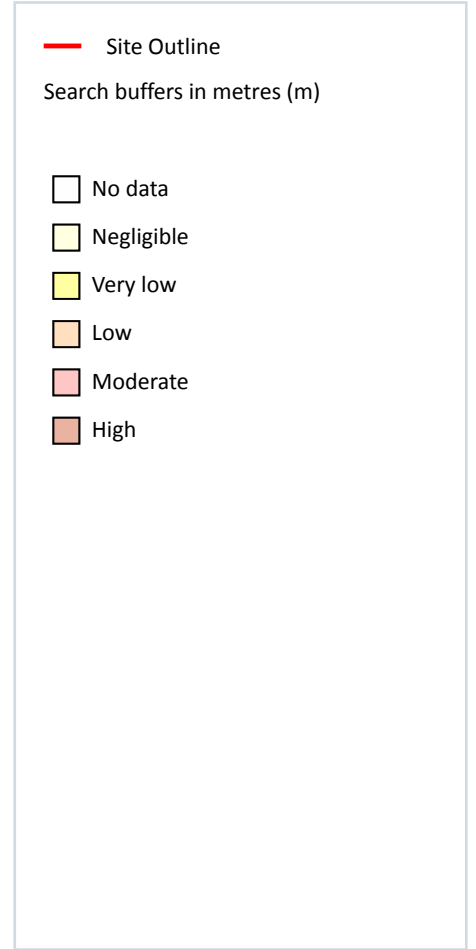
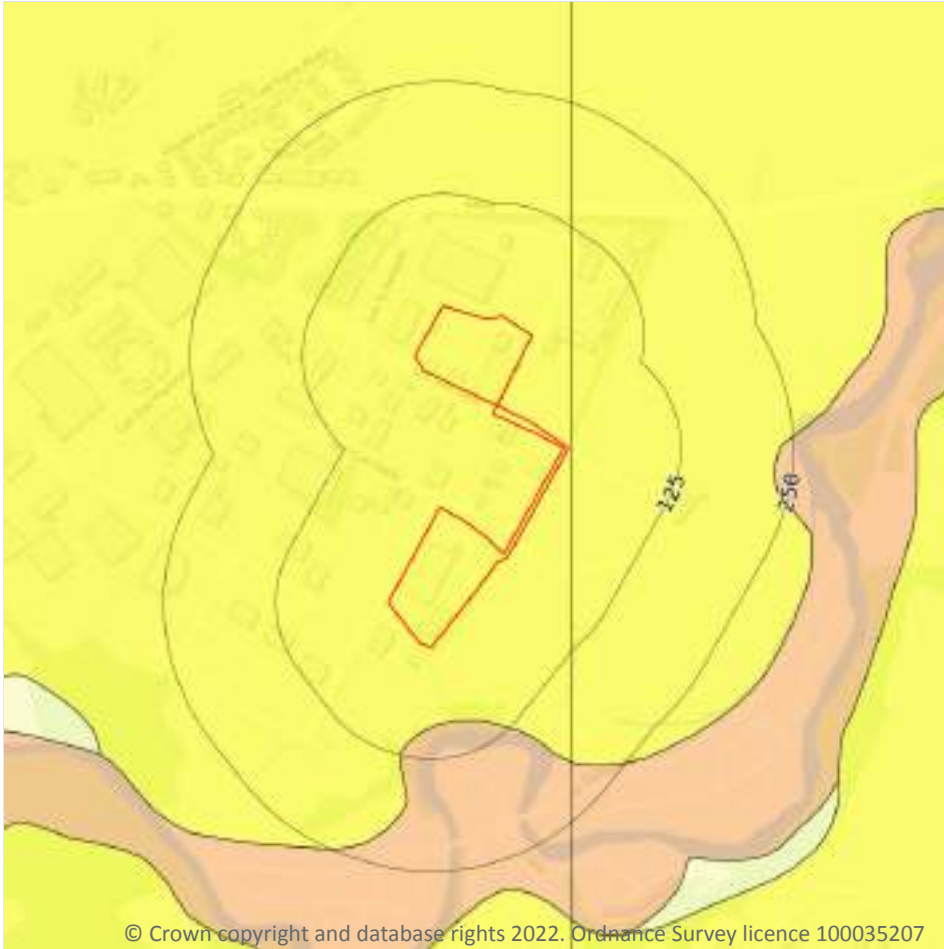
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 103**

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
3m E	Negligible	Ground conditions predominantly non-plastic.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

2

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

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

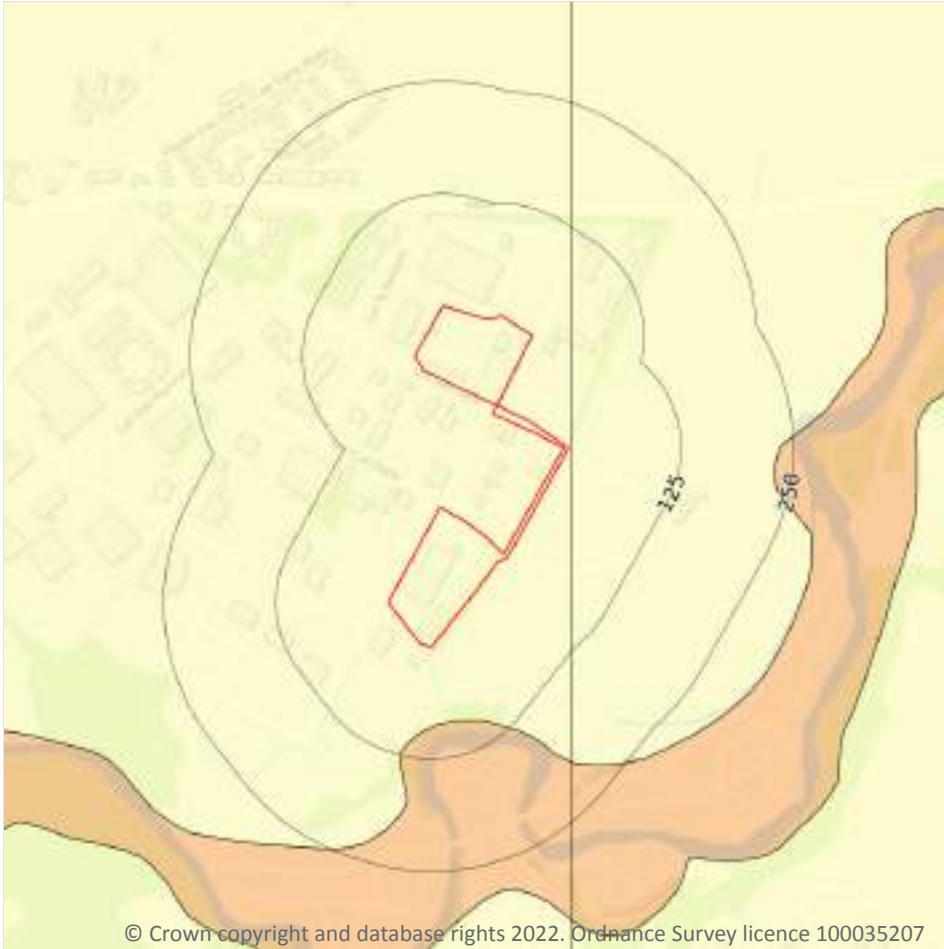
Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

Location	Hazard rating	Details
3m E	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



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17.3 Compressible deposits

Records within 50m

2

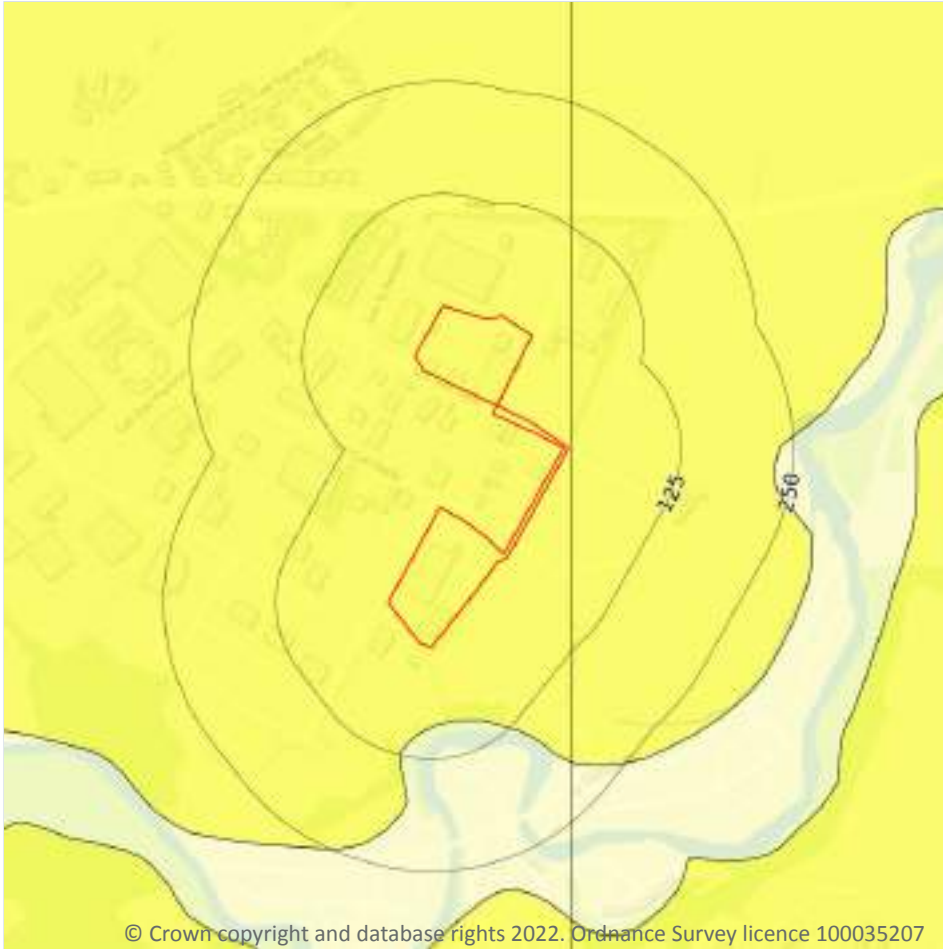
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 106**

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
3m E	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



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17.4 Collapsible deposits

Records within 50m

2

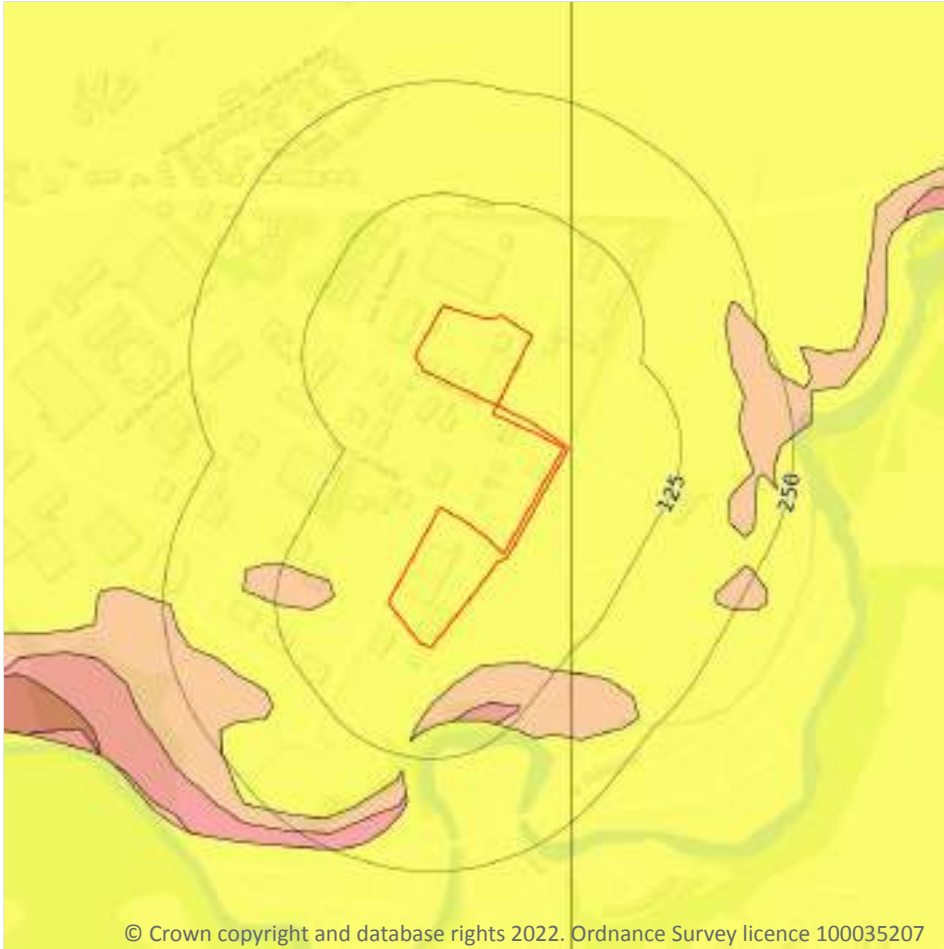
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 107**

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.
3m E	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



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17.5 Landslides

Records within 50m

3

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 108**

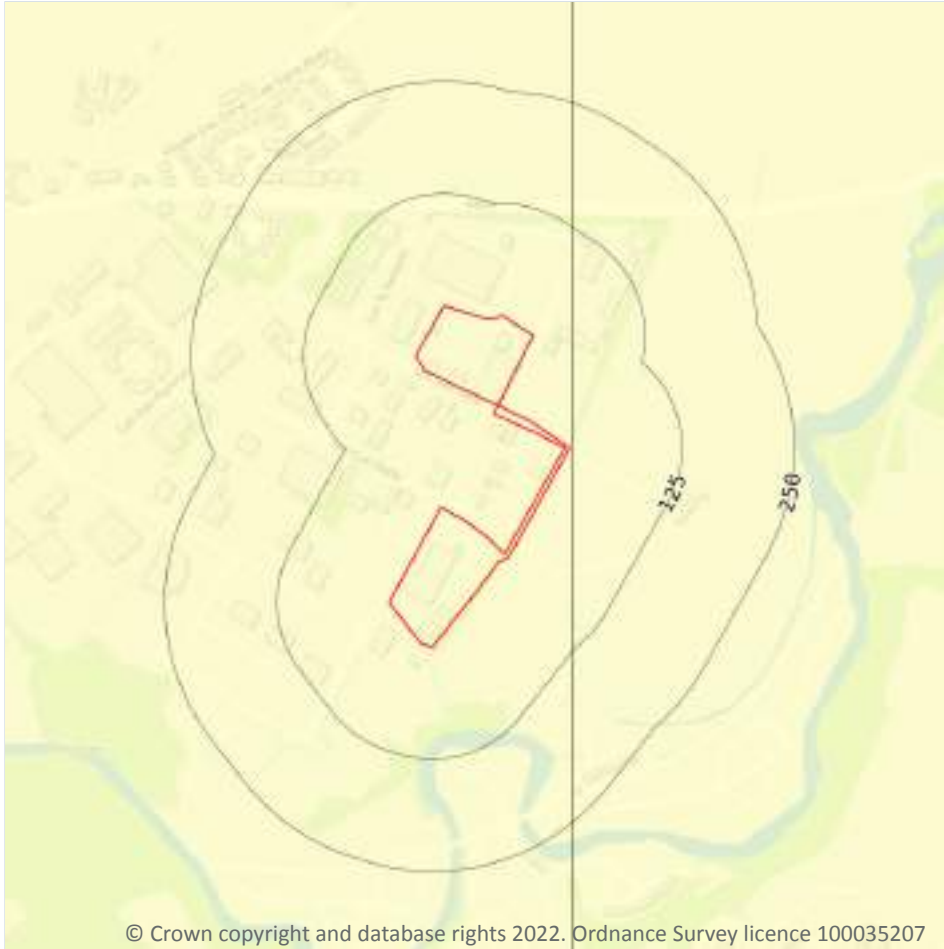
Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

Location	Hazard rating	Details
3m E	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.
48m SE	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



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17.6 Ground dissolution of soluble rocks

Records within 50m

2

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 110**

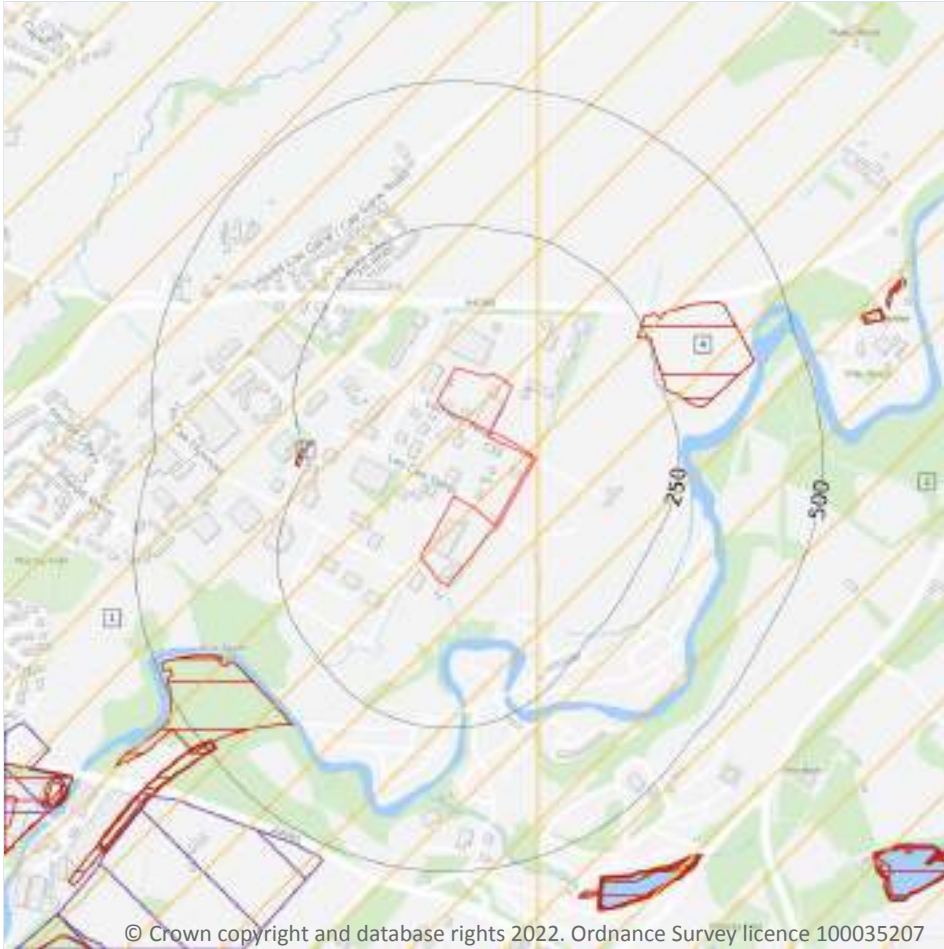
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

Location	Hazard rating	Details
3m E	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



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

18.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

2

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 112**

ID	Location	Land Use	Year of mapping	Mapping scale
3	233m W	Pond	1888	1:10560
4	236m E	Refuse Heap	1976	1:10000

This data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m

0

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

This data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

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

This data is sourced from the British Geological Survey.



18.6 Non-coal mining

Records within 1000m

3

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 112**

ID	Location	Name	Commodity	Class	Likelihood
1	On site	Not available	Vein Mineral	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
2	3m E	Not available	Vein Mineral	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
-	904m N	Not available	Vein Mineral	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 Stantec UK Ltd.

18.8 JPB mining areas

Records on site

0

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

This data is sourced from Johnson Poole and Bloomer.



18.9 Coal mining

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

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

This data is sourced from the Coal Authority.

18.10 Brine areas

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

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

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

18.11 Gypsum areas

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

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

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

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

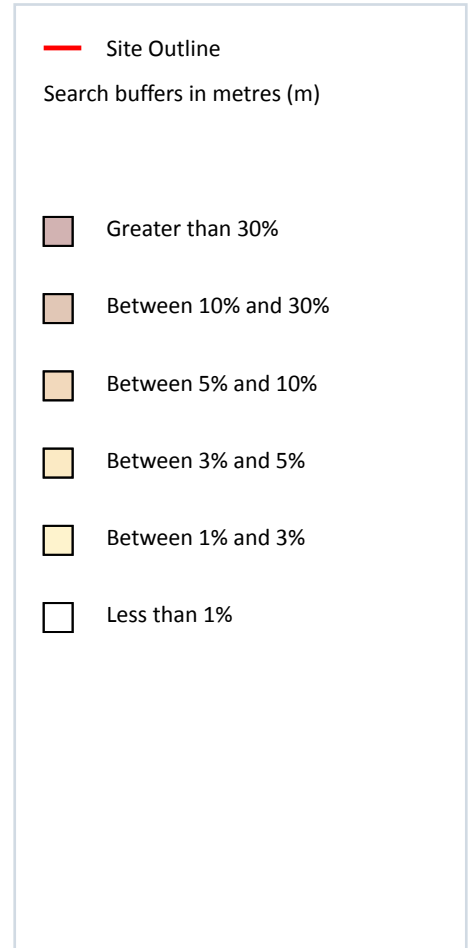
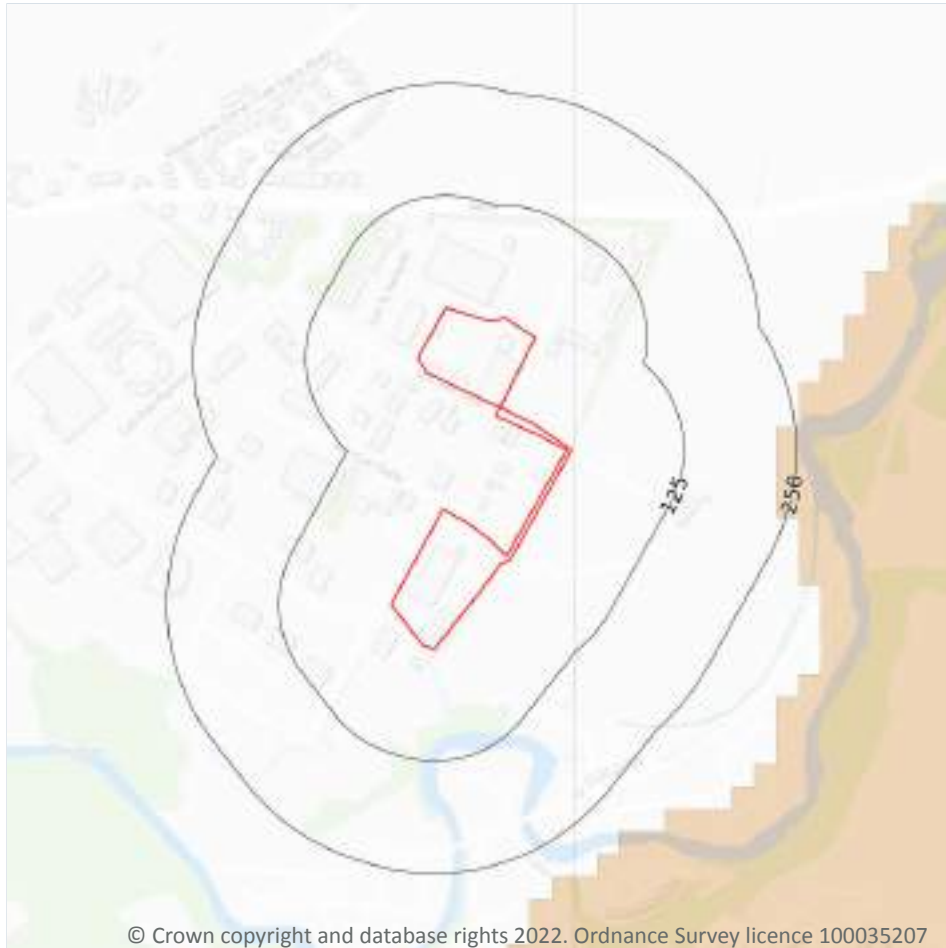
18.13 Clay mining

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

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

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

19 Radon



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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 116**

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

3

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	25 - 35 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	25 - 35 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
3m NE	25 - 35 mg/kg	No data	100 mg/kg	60 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 km²).

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m

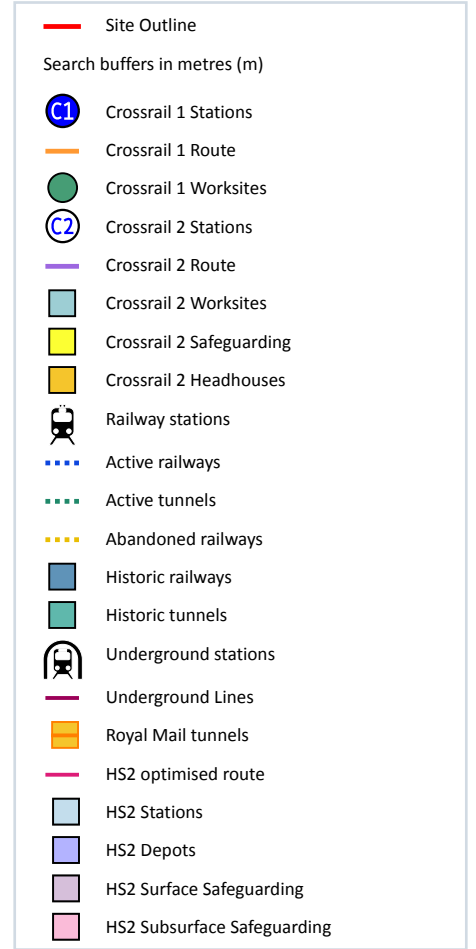
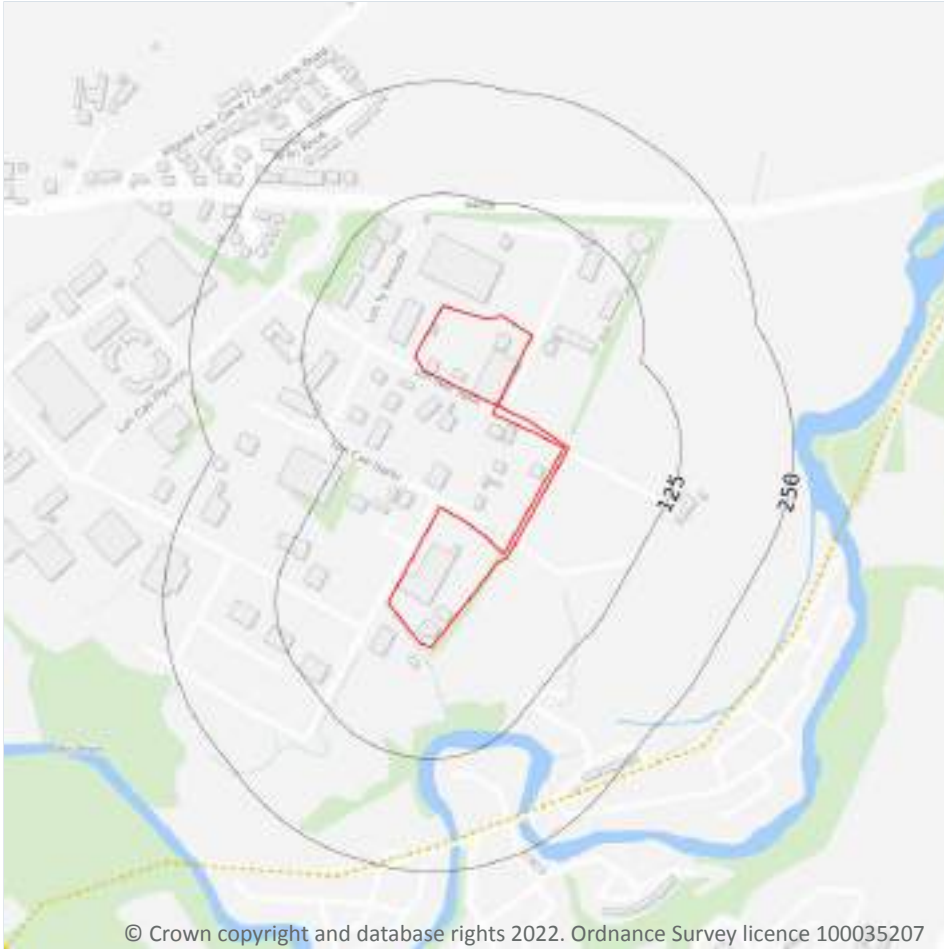
0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



21 Railway infrastructure and projects



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 **0**

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.

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 **1**

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 118**

Location	Description
210m S	Abandoned

This data is sourced from OpenStreetMap.



21.7 Railways

Records within 250m

0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m

0

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

This data is sourced from HS2 Ltd.

Data providers

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

Terms and conditions

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





APPENDIX 6 - 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

LCRM 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.

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 7 - Exploratory Hole Logs



GROUNDTECH
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Borehole Log

Borehole No.

CP01

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
CP

Location: CAERNARFON

Level:

Scale
1:50

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 18/03/2022 - 18/03/2022

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	D	N=50 (25 for 25mm/50 for 50mm)	0.50			MADE GROUND: Dark grey fine to coarse angular to subangular gravel of slate.	1
		0.50	ES		1.00				
		1.00	D		1.00				
		1.00	ES		1.20				
		1.20			1.50				
		1.50	D	N=16 (3,3/3,4,4,5)	1.50		Firm to stiff brown slightly sandy gravelly CLAY. Gravel is subangular to subrounded fine to coarse of mixed lithologies including mudstone.		
		1.50	ES		2.00				
		2.00	D	2.00					
		2.00	ES	2.00					
		3.00	D	3.00	3				
4.00	D	N=21 (4,4/5,5,6,5)	4.00	4					
4.00	ES		4.00						
5.00	D	5.00	5	End of borehole at 5.00 m					

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





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Borehole Log

Borehole No.

CP02

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
CP

Location: CAERNARFON

Level:

Scale
1:50

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 15/03/2022 - 15/03/2022

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.50		MADE GROUND: Dark grey fine to coarse angular to subangular gravel of slate.	
		0.50	D					
		0.50	ES					
		1.00	D					
		1.00	ES					
		1.20		N=16 (5,4/3,4,4,5)				
		1.50	D					
		1.50	ES					
		2.00	D					
		2.00	ES					
	2.00		N=50 (25 for 75mm/50 for 75mm)				Becoming stiff from 2.0m bgl.	
	2.00 - 2.45	U						
	3.00	D						
	3.00	B	N=49 (4,5/7,7,10,25)					
	3.00 - 3.45							
	4.00	D						
	4.00	B	N=39 (4,3/7,10,10,12)					
	4.00 - 4.45							
	5.00	D						
	5.00		N=50 (25 for 10mm/50 for 16mm)		5.50			
							End of borehole at 5.50 m	

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





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Borehole Log

Borehole No.

CP03

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
CP

Location: CAERNARFON

Level:

Scale
1:50

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 14/03/2022 - 14/03/2022

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	D		0.50		MADE GROUND: Dark grey fine to coarse angular to subangular gravel of slate.		
		0.50	ES				MADE GROUND: Dark brown sandy clayey angular fine to coarse gravel of slate.		
		1.00	ES		1.00			1	
		1.20	D						
		1.20		N=11 (2,2/2,2,3,4)				Firm brown slightly sandy gravelly CLAY. Gravel is angular to subrounded fine to coarse of mixed lithologies including mudstone.	
		1.50	ES						
		2.00	D					2	
		2.00	D						
		2.00		N=19 (2,2/4,5,5,5)					
		3.00	D					3	
		3.00		N=50 (25 for 75mm/50 for 75mm)				<u>Becoming stiff from 3.0m bgl.</u>	
		3.00 - 3.45	U						
		3.50	D						
		4.00	D					4	
		4.00	D						
	4.00		50 (25 for 75mm/50 for 75mm)						
	4.00 - 4.45	B							
	5.00	D					5		
	5.00	D							
	5.00 - 5.45	U							
	5.50		N=50 (25 for 75mm/50 for 75mm)	5.50			End of borehole at 5.50 m	6	
								7	
								8	
								9	
								10	

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





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Borehole Log

Borehole No.

CP04

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
CP

Location: CAERNARFON

Level:

Scale
1:50

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 17/03/2022 - 17/03/2022

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20			0.20		MADE GROUND: Tarmac.	
		0.50	ES				MADE GROUND: Grey brown sandy clayey gravel of slate. Sand is fine to coarse.	
		1.00	ES					
		1.20		N=16 (1,3/4,4,5,3)				
		1.50	ES					
		2.00	D		2.00			
	2.00		N=30 (4,4/5,5,7,13)				Firm brown slightly sandy gravelly CLAY with low cobble content of mudstone. Gravel is angular to subrounded fine to coarse of mixed lithologies including mudstone and siltstone.	
	2.50 - 3.00	B						
	3.00		N=50 (25 for 75mm/50 for 127mm)	3.00			End of borehole at 3.00 m	

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





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Borehole Log

Borehole No.

CP05

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
CP

Location: CAERNARFON

Level:

Scale
1:50

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 17/03/2022 - 17/03/2022

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20		MADE GROUND: Tarmac.	
		0.50	D				MADE GROUND: Red brown slightly sandy angular to subangular fine to coarse gravel of mixed lithologies including brick.	
		0.50	ES					
		1.00	D					
		1.00	ES					
		1.20	D	N=16 (2,4/4,3,5,4)				
		1.30	D					
		1.50	ES				<i>Becoming clayey from 1.6m bgl.</i>	
		2.00	D					
		2.00	B	N=29 (3,4/6,6,8,9)	2.30			
	2.00 - 2.25	B						
	2.50 - 3.00	B				Firm brown slightly sandy slightly gravelly CLAY with high cobble content and occasional boulders. Gravel is subangular to rounded fine to coarse of mixed lithologies.		
	3.00		N=50 (25 for 50mm/50 for 70mm)	3.00			End of borehole at 3.00 m	

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Monitoring standpipe installed to 3.0m bgl. (1.0m plain, 2.0m slotted.).





GROUNDTECH
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Borehole Log

Borehole No.

WS01

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 15/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10			0.10		MADE GROUND: Concrete.	
		0.20	ES		0.55		Firm brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of slate.	
		0.40	D					
		0.70	ES			Firm dark brown slightly silty CLAY with moderate cobble content of mixed lithologies including mudstone.		
		1.20		N=50 (5,5/50 for 255mm)	1.60			
	1.50	D						
		End of borehole at 1.60 m						

Remarks
1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





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Borehole Log

Borehole No.

WS02

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 15/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10		MADE GROUND: Concrete.	1 2 3 4 5
		0.20	ES				Firm brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse.	
		0.50	ES					
		0.70	D				<u>Becoming sandy at 0.6m bgl.</u>	
		1.20		N=8 (3,2/2,2,2,2)	1.10		Firm brown sandy CLAY with moderate cobble content of mudstone and quartzite. Sand is fine to coarse.	
		1.50	D					
		2.00		N=14 (2,3/3,3,4,4)	2.00		Firm dark brown to grey silty CLAY.	
		2.30	D					
		2.80	D					
		3.00		N=9 (2,2/2,2,2,3)				
				3.55		End of borehole at 3.55 m		

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Hole backfilled with arisings.





GROUNDTECH
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Borehole Log

Borehole No.

WS03

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 15/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	ES		0.30		MADE GROUND: Grass over brown sandy slightly gravelly topsoil. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of slate.	
		0.50	ES		0.60		MADE GROUND: Grey and blue angular to subangular fine to coarse gravel of slate.	
		0.70	D		0.90		Firm dark brown sandy slightly silty CLAY. Sand is fine to coarse.	
		1.20		N=14 (3,3/4,3,3,4)			Firm dark brown very sandy slightly silty CLAY with moderate cobble content of mixed lithologies including mudstone.	
		1.70	D		1.80			
		1.70		50 (25 for 105mm/50 for 0mm)				
		End of borehole at 1.80 m						

Remarks
1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





GROUNDTECH
CONSULTING

Borehole Log

Borehole No.

WS04

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 17/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.40		MADE GROUND: Dark grey angular to subangular fine to coarse gravel of slate.		
					0.70		MADE GROUND: Brown sandy angular to sub angular fine to coarse gravel. Sand is fine to coarse.		
		0.80	ES				Firm dark brown gravelly CLAY. Gravel is angular to subangular fine to coarse of mixed lithologies including slate.	1	
		1.20		N=7 (2,2/1,2,2,2)					
		1.50	D						
		2.00		N=7 (1,2/1,2,2,2)	1.90			Firm brown gravelly CLAY. Gravel is angular to subangular fine to coarse of slate.	2
		2.50	D		2.50			Firm dark brown CLAY.	
	3.00		N=11 (2,3/3,2,3,3)					3	
				4.00			End of borehole at 4.00 m	4	
								5	

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Monitoring pipe installed to 3.0m bgl (1.0m plain, 2.0m slotted).





GROUNDTECH
CONSULTING

Borehole Log

Borehole No.

WS05

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 17/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.40		MADE GROUND: Brown sandy gravelly topsoil. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of slate.	1	
		0.60	ES		0.80				Firm light brown to brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of slate.
		1.00	D						Firm dark brown grey silty CLAY with moderate cobble content of mudstone.
		1.20		N=15 (2,3/3,3,4,5)					
		2.00 2.00	D	N=25 (5,6/4,5,6,10)			2		
	2.50		N=50 (25 for 115mm/50 for 200mm)	2.50		End of borehole at 2.50 m	3		
								4	
								5	

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





GROUNDTECH
CONSULTING

Borehole Log

Borehole No.

WS06

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 17/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.40		MADE GROUND: Blue and black angular to subangular fine to coarse gravel of slate.		
		0.60	ES		0.90		MADE GROUND: Brown to red sandy clayey gravel including brick.		
		1.00	D				Firm brown CLAY with moderate cobble content of mudstone.	1	
		1.20		N=14 (2,2/2,3,6,3)					
		2.00 2.00	D	N=50 (4,7/50 for 200mm)	2.20			2	
							End of borehole at 2.20 m	3	
								4	
								5	

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Monitoring standpipe installed to 2.2m bgl (0.5m plain, 1.7m slotted).





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Borehole Log

Borehole No.

WS07

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 17/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	ES		0.40		MADE GROUND: Black sandy gravelly topsoil with rootlets. Sand is fine to coarse. Gravel is angular to sub angular fine to coarse of slate.	
		1.20		N=29 (6,6/9,6,7,7)				Firm light brown fine to coarse sandy CLAY with moderate cobble content.
		1.70 1.70	D	N=50 (9,11/50 for 170mm)	1.70			End of borehole at 1.70 m

1

2

3

4

5

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





GROUNDTECH
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Borehole Log

Borehole No.

WS08

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 17/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.40		MADE GROUND: Black sandy gravelly topsoil. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of slate.		
		0.60	ES				Firm brown to dark brown slightly silty CLAY with moderate cobble content of mixed lithologies including mudstone.		
		1.00	D		1.10				
		1.20		N=22 (3,4/5,4,6,7)				Firm brown sandy slightly silty CLAY with moderate cobble content. Sand is fine to coarse.	1
		1.90		N=39 (9,11/14,12,5,8)					2
	2.00	D			2.35				
							End of borehole at 2.35 m	3	
								4	
								5	

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Monitoring standpipe installed to 2.35m bgl (1.0m plain, 1.35m slotted).





Borehole Log

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 15/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.10		MADE GROUND: Concrete.		
		0.20	ES		0.40		Firm brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of mixed lithologies.		
		0.50	D		0.60		Firm brown grey sandy CLAY. Sand is fine to coarse.		
					1.10		Firm brown to dark brown sandy CLAY with moderate cobble content. Sand is fine to coarse.	1	
		1.50	D		1.60		Firm dark brown CLAY with moderate cobble content.		
		2.00		N=10 (4,3/3,2,3,2)				2	
		2.50	D						
		3.00		N=11 (2,2/2,3,3,3)				3	
				N=14 (2,3/4,3,4)	3.80				
							End of borehole at 3.80 m	4	
								5	

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Monitoring standpipe installed to 3.0m bgl (1.0m plain, 2.0m slotted).





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Borehole Log

Borehole No.

WS10

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 15/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.25		MADE GROUND: Concrete.	
		0.50	ES		0.60		Firm brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of mixed lithologies.	
		1.00	D					
		1.20		N=11 (3,4/3,2,3,3)				
		1.80 1.80	D	N=50 (11,9/50 for 85mm)	1.80		End of borehole at 1.80 m	

1

2

3

4

5

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





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Borehole Log

Borehole No.

WS11

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 15/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
Well					0.10		MADE GROUND: Concrete.	1
		0.20	ES		0.40		Firm brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of mixed lithologies.	
		0.50	D		1.00		Firm dark brown sandy slightly silty CLAY. Sand is fine to coarse.	
		0.60	ES		1.20		Firm brown sandy CLAY with low cobble content of gabbro and mudstone. Sand is fine to coarse.	
		1.20		N=50 (2,3/50 for 235mm)	1.50		End of borehole at 1.50 m	
		1.50	D					2
								3
								4
								5

Remarks
1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





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Borehole Log

Borehole No.

WS12

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 15/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	ES		0.10		MADE GROUND: Concrete.	
					0.40		Firm brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of slate.	
		0.60	ES		1.20		N=8 (2,2/2,2,2,2)	Firm brown to dark brown slightly silty CLAY with moderate cobble content of mixed lithologies including mudstone.
		0.70	D					
		1.60	D		2.00		N=11 (2,2/3,2,3,3)	Firm dark brown to grey silty CLAY.
		2.50	D					
		3.00			4.00		N=11 (2,2/3,3,2,3)	End of borehole at 4.00 m

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Hole backfilled with arisings.





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Borehole Log

Borehole No.

WS13

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 16/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
								MADE GROUND: Grey black angular to subangular fine to coarse gravel of slate and brick.	
		0.50	ES		0.80			Firm dark brown CLAY with moderate cobble and low boulder content.	1
		1.00	D		1.20			N=9 (1,2/2,3,2,2)	
		1.20			1.60			Firm to stiff dark brown mottled grey slightly silty CLAY with moderate cobble content.	2
		2.00	D		2.30			N=50 (5,7/50 for 255mm)	
	2.00			2.30			End of borehole at 2.30 m	3	
								4	
								5	

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Monitoring standpipe installed to 2.3m bgl (0.5m plain, 1.3m slotted).





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Borehole Log

Borehole No.

WS14

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 16/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D ES		0.10		MADE GROUND: Concrete.	
		0.20			0.35		MADE GROUND: Black angular to subangular fine to coarse gravel of slate.	
			1.00		MADE GROUND: Black red angular to subangular gravel of slate and brick.			
							End of borehole at 1.00 m	

1
2
3
4
5

Remarks
1. Location cleared using hand held CAT. 2. Hand pit dug to 1.0m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





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Borehole Log

Borehole No.

WS15

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 16/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.15		MADE GROUND: Concrete.	
		0.20	ES		0.30		MADE GROUND: Blue angular to subangular fine to coarse of slate.	
		0.60	ES		0.80		MADE GROUND: Black red angular to subangular fine to coarse gravel of slate and brick.	
		0.85	D		0.90		MADE GROUND: Black red angular to subangular fine to coarse gravelly clay. Gravel is of slate and brick.	
		1.20	D	N=11 (2,2/3,2,3,3)			Firm brown grey CLAY with moderate cobble content.	
		1.20	D		1.70			
	1.70	D	N=50 (25 for 50mm/50 for 75mm)		1.70		End of borehole at 1.70 m	

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Monitoring standpipe installed to 1.7m bgl (0.5m plain, 1.2m slotted).





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Borehole Log

Borehole No.

WS16

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

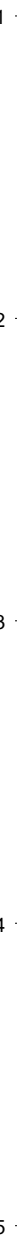
Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 16/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.25	D		0.15		MADE GROUND: Concrete.	
		0.25	ES		0.20		MADE GROUND: Blue angular to subangular fine to coarse gravel of slate.	
					0.30		MADE GROUND: Black angular to subangular fine to coarse gravel of slate. End of borehole at 0.30 m	



Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





GROUNDTECH
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Borehole Log

Borehole No.

WS17

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 16/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10			0.10		MADE GROUND: Concrete.	
		0.30	ES		0.30		MADE GROUND: Grey angular to subangular fine to coarse gravel of slate.	
		0.50	ES				MADE GROUND: Blue angular to subangular fine to coarse gravel of slate.	
		1.20		N=10 (2,2/4,3,2,1)	0.80		Firm brown CLAY with moderate cobble content.	
		1.70		N=50 (25 for 105mm/50 for 0mm)	1.80			
		1.80	D				End of borehole at 1.80 m	

1
2
3
4
5

Remarks
1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





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Borehole Log

Borehole No.

WS18

Sheet 1 of 1

Project Name: GWYNEDD SKIPS

Project No.
GRO-22013

Co-ords: -

Hole Type
WS

Location: CAERNARFON

Level:

Scale
1:25

Client: GWYNEDD SKIP & PLANT HIRE

Dates: 16/03/2022 -

Logged By
AW

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	ES		0.10		MADE GROUND: Concrete.	
					0.40		MADE GROUND: Grey angular to subangular fine to coarse gravel of slate.	
		0.60	ES		0.70		MADE GROUND: Blue angular to subangular fine to coarse gravel of slate.	
		1.00	D				Firm brown CLAY with moderate cobble content.	
		1.20		N=50 (35 for 105mm/50 for 0mm)	1.20		End of borehole at 1.20 m	

1

2

3

4

5

Remarks

1. Location cleared using hand held CAT. 2. Hand pit dug to 1.2m bgl. 3. No groundwater encountered. 4. Location terminated due to boulder obstruction. 5. Hole backfilled with arisings.





APPENDIX 8 - Geo-Environmental Testing Results

Groundtech Consulting Limited
PO Box 499
Manchester
M28 8EE



Attention : Adam White
Date : 8th April, 2022
Your reference : GRO-22013
Our reference : Test Report 22/4931 Batch 1
Location : Gwynedd skip
Date samples received : 26th March, 2022
Status : Final Report
Issue : 1

Twenty seven samples were received for analysis on 26th March, 2022 of which twenty five were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:



Bruce Leslie
Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: Groundtech Consulting Limited
Reference: GRO-22013
Location: Gwynedd skip
Contact: Adam White
EMT Job No: 22/4931

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-11	12-14	15-17	18-20	21-22	23-25	26-28	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS01	WS02	WS03	WS04	WS05	WS06	WS07	WS08	WS09	WS10			
Depth	0.20	0.50	0.50	0.80	0.20	0.60	0.20	0.20	0.60	0.50			
COC No / misc													
Containers	V J T	V J T	V J T	V J	V J T	V J B	V J T	V J	V J T	V J B			
Sample Date	15/03/2022	15/03/2022	15/03/2022	17/03/2022	17/03/2022	17/03/2022	17/03/2022	15/03/2022	15/03/2022	15/03/2022			
Sample Type	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	LOD/LOR	Units	Method No.
Arsenic	3.5	21.4	52.6	12.6	18.3	35.3	16.2	21.3	18.4	10.1	<0.5	mg/kg	TM30/PM15
Cadmium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Chromium	62.6	131.1	62.3	107.5	52.5	77.3	38.9	44.6	51.3	50.6	<0.5	mg/kg	TM30/PM15
Copper	22	12	10	10	18	18	16	25	21	20	<1	mg/kg	TM30/PM15
Lead	8	20	23	23	19	21	25	20	18	14	<5	mg/kg	TM30/PM15
Mercury	<0.1	0.1	0.3	<0.1	0.1	<0.1	0.2	<0.1	0.1	0.2	<0.1	mg/kg	TM30/PM15
Nickel	31.6	21.2	18.7	15.6	18.2	24.1	13.8	26.5	24.7	25.8	<0.7	mg/kg	TM30/PM15
Selenium	<1	2	2	2	2	2	2	2	1	1	<1	mg/kg	TM30/PM15
Zinc	86	52	36	40	69	52	81	71	63	88	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.11	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.08	<0.03	mg/kg	TM4/PM8
Acenaphthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.59	<0.05	mg/kg	TM4/PM8
Fluorene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.42	<0.04	mg/kg	TM4/PM8
Phenanthrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	2.28	<0.03	mg/kg	TM4/PM8
Anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.72	<0.04	mg/kg	TM4/PM8
Fluoranthene	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.03	<0.03	<0.03	4.27	<0.03	mg/kg	TM4/PM8
Pyrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	3.43	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	1.30	<0.06	mg/kg	TM4/PM8
Chrysene	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	1.32	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	2.10	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	1.01	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.76	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.13	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.65	<0.04	mg/kg	TM4/PM8
PAH 16 Total	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	19.2	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.51	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.59	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	94	94	95	81	93	96	96	82	95	93	<0	%	TM4/PM8
Methyl Tertiary Butyl Ether	-	<2	-	-	-	<2	-	-	-	-	<2	ug/kg	TM15/PM10
Benzene	-	<3	-	-	-	<3	-	-	-	-	<3	ug/kg	TM15/PM10
Toluene	-	<3	-	-	-	<3	-	-	-	-	<3	ug/kg	TM15/PM10
Ethylbenzene	-	<3	-	-	-	<3	-	-	-	-	<3	ug/kg	TM15/PM10
m/p-Xylene	-	<5	-	-	-	<5	-	-	-	-	<5	ug/kg	TM15/PM10
o-Xylene	-	<3	-	-	-	<3	-	-	-	-	<3	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	-	102	-	-	-	103	-	-	-	-	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	-	101	-	-	-	95	-	-	-	-	<0	%	TM15/PM10

Element Materials Technology

Client Name: Groundtech Consulting Limited
Reference: GRO-22013
Location: Gwynedd skip
Contact: Adam White
EMT Job No: 22/4931

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-11	12-14	15-17	18-20	21-22	23-25	26-28	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS01	WS02	WS03	WS04	WS05	WS06	WS07	WS08	WS09	WS10			
Depth	0.20	0.50	0.50	0.80	0.20	0.60	0.20	0.20	0.60	0.50			
COC No / misc													
Containers	V J T	V J T	V J T	V J	V J T	V J B	V J T	V J	V J T	V J B			
Sample Date	15/03/2022	15/03/2022	15/03/2022	17/03/2022	17/03/2022	17/03/2022	17/03/2022	15/03/2022	15/03/2022	15/03/2022			
Sample Type	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL)	-	<0.1	-	-	-	<0.1	-	-	-	-	<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL)	-	<0.1	-	-	-	<0.1	-	-	-	-	<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	-	<0.1	-	-	-	<0.1	-	-	-	-	<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL)	-	<0.2	-	-	-	<0.2	-	-	-	-	<0.2	mg/kg	TMS/PM8/PM16
>C12-C16 (EH_CU_1D_AL)	-	<4	-	-	-	<4	-	-	-	-	<4	mg/kg	TMS/PM8/PM16
>C16-C21 (EH_CU_1D_AL)	-	<7	-	-	-	<7	-	-	-	-	<7	mg/kg	TMS/PM8/PM16
>C21-C35 (EH_CU_1D_AL)	-	<7	-	-	-	<7	-	-	-	-	<7	mg/kg	TMS/PM8/PM16
Total aliphatics C5-35 (EH+HS_CU_1D_AL)	-	<19	-	-	-	<19	-	-	-	-	<19	mg/kg	TMS/PM8/PM16/PM12/PM18
Aromatics													
>C5-EC7 (HS_1D_AR)	-	<0.1	-	-	-	<0.1	-	-	-	-	<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR)	-	<0.1	-	-	-	<0.1	-	-	-	-	<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR)	-	<0.1	-	-	-	<0.1	-	-	-	-	<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR)	-	<0.2	-	-	-	<0.2	-	-	-	-	<0.2	mg/kg	TMS/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR)	-	<4	-	-	-	<4	-	-	-	-	<4	mg/kg	TMS/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR)	-	<7	-	-	-	<7	-	-	-	-	<7	mg/kg	TMS/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR)	-	<7	-	-	-	<7	-	-	-	-	<7	mg/kg	TMS/PM8/PM16
Total aromatics C5-35 (EH+HS_CU_1D_AR)	-	<19	-	-	-	<19	-	-	-	-	<19	mg/kg	TMS/PM8/PM16/PM12/PM18
Total aliphatics and aromatics(C5-35) (EH+HS_CU_1D_Total)	-	<38	-	-	-	<38	-	-	-	-	<38	mg/kg	TMS/PM8/PM16/PM12/PM18
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext)	0.0082	0.0161	0.0287	0.0115	0.0207	0.0220	0.0230	0.0184	0.0141	0.0995	<0.0015	g/l	TM38/PM20
Organic Matter	<0.2	0.6	0.6	1.2	1.2	0.3	2.2	0.2	<0.2	0.8	<0.2	%	TM21/PM24
pH	8.80	7.22	7.59	6.84	5.89	6.93	6.53	6.20	7.65	10.20	<0.01	pH units	TM73/PM11

Element Materials Technology

Client Name: Groundtech Consulting Limited
Reference: GRO-22013
Location: Gwynedd skip
Contact: Adam White
EMT Job No: 22/4931

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	29-31	32-34	35-37	38-41	42-44	45-47	48-50	51-53	54	55	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS11	WS12	WS13	WS14	WS15	WS16	WS17	WS18	WS15	WS02			
Depth	0.20	0.60	0.50	0.20	0.60	0.25	0.30	0.60	1.70	1.50			
COC No / misc													
Containers	V J B	V J B	V J T	V J T	V J T	V J T	V J T	V J B	T	T			
Sample Date	15/03/2022	15/03/2022	16/03/2022	16/03/2022	16/03/2022	16/03/2022	16/03/2022	17/03/2022	18/03/2022	15/03/2022			
Sample Type	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	LOD/LOR	Units	Method No.
Arsenic	7.7	21.9	6.7	6.4	8.9	5.9	0.8	4.9	-	-	<0.5	mg/kg	TM30/PM15
Cadmium	<0.1	<0.1	<0.1	<0.1	0.3	0.1	<0.1	<0.1	-	-	<0.1	mg/kg	TM30/PM15
Chromium	39.0	54.3	40.9	108.7	54.9	69.2	130.7	94.6	-	-	<0.5	mg/kg	TM30/PM15
Copper	46	19	23	12	54	34	45	34	-	-	<1	mg/kg	TM30/PM15
Lead	9	23	163	20	355	23	<5	10	-	-	<5	mg/kg	TM30/PM15
Mercury	0.1	<0.1	<0.1	<0.1	0.2	0.1	0.1	0.2	-	-	<0.1	mg/kg	TM30/PM15
Nickel	31.3	26.2	11.3	19.7	16.6	24.9	31.2	24.0	-	-	<0.7	mg/kg	TM30/PM15
Selenium	1	2	<1	1	<1	<1	1	1	-	-	<1	mg/kg	TM30/PM15
Zinc	100	62	118	75	154	108	59	56	-	-	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene	<0.04	<0.04	0.18	<0.04	<0.04	<0.40 ^{AA}	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.30 ^{AA}	<0.03	<0.03	-	-	<0.03	mg/kg	TM4/PM8
Acenaphthene	<0.05	<0.05	0.47	<0.05	<0.05	<0.50 ^{AA}	<0.05	<0.05	-	-	<0.05	mg/kg	TM4/PM8
Fluorene	<0.04	<0.04	0.55	<0.04	<0.04	<0.40 ^{AA}	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Phenanthrene	<0.03	<0.03	3.98	0.07	0.11	0.96 ^{AA}	<0.03	<0.03	-	-	<0.03	mg/kg	TM4/PM8
Anthracene	<0.04	<0.04	0.83	<0.04	0.04	0.66 ^{AA}	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Fluoranthene	<0.03	<0.03	2.89	0.15	0.24	3.68 ^{AA}	<0.03	0.05	-	-	<0.03	mg/kg	TM4/PM8
Pyrene	<0.03	<0.03	3.01	0.15	0.21	3.86 ^{AA}	<0.03	0.05	-	-	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene	<0.06	<0.06	1.11	0.08	0.13	2.14 ^{AA}	<0.06	<0.06	-	-	<0.06	mg/kg	TM4/PM8
Chrysene	<0.02	<0.02	1.43	0.10	0.15	2.07 ^{AA}	<0.02	0.04	-	-	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene	<0.07	<0.07	1.99	0.16	0.24	5.59 ^{AA}	<0.07	0.07	-	-	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene	<0.04	<0.04	1.36	0.09	0.13	3.25 ^{AA}	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	0.95	0.07	0.10	2.46 ^{AA}	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene	<0.04	<0.04	0.20	<0.04	<0.04	0.49 ^{AA}	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene	<0.04	<0.04	1.05	0.07	0.10	2.24 ^{AA}	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
PAH 16 Total	<0.6	<0.6	20.0	0.9	1.5	27.4 ^{AA}	<0.6	<0.6	-	-	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	1.43	0.12	0.17	4.02 ^{AA}	<0.05	0.05	-	-	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	0.56	0.04	0.07	1.57 ^{AA}	<0.02	<0.02	-	-	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	96	89	93	89	95	93 ^{AA}	98	95	-	-	<0	%	TM4/PM8
Methyl Tertiary Butyl Ether	<2	-	<2	<2	-	-	-	-	-	-	<2	ug/kg	TM15/PM10
Benzene	<3	-	<3	<3	-	-	-	-	-	-	<3	ug/kg	TM15/PM10
Toluene	<3	-	<3	4	-	-	-	-	-	-	<3	ug/kg	TM15/PM10
Ethylbenzene	<3	-	<3	5	-	-	-	-	-	-	<3	ug/kg	TM15/PM10
m/p-Xylene	<5	-	<5	8	-	-	-	-	-	-	<5	ug/kg	TM15/PM10
o-Xylene	<3	-	<3	4	-	-	-	-	-	-	<3	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	104	-	93	84	-	-	-	-	-	-	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	100	-	82	76	-	-	-	-	-	-	<0	%	TM15/PM10

Element Materials Technology

Client Name: Groundtech Consulting Limited
Reference: GRO-22013
Location: Gwynedd skip
Contact: Adam White
EMT Job No: 22/4931

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	29-31	32-34	35-37	38-41	42-44	45-47	48-50	51-53	54	55	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS11	WS12	WS13	WS14	WS15	WS16	WS17	WS18	WS15	WS02			
Depth	0.20	0.60	0.50	0.20	0.60	0.25	0.30	0.60	1.70	1.50			
COC No / misc													
Containers	V J B	V J B	V J T	V J T	V J T	V J T	V J T	V J B	T	T			
Sample Date	15/03/2022	15/03/2022	16/03/2022	16/03/2022	16/03/2022	16/03/2022	16/03/2022	17/03/2022	18/03/2022	15/03/2022			
Sample Type	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022	LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL)	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL)	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	<0.1	-	<0.1	0.2	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL)	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	<0.2	mg/kg	TMS/PM8/PM16
>C12-C16 (EH_CU_1D_AL)	<4	-	<4	<4	-	-	-	-	-	-	<4	mg/kg	TMS/PM8/PM16
>C16-C21 (EH_CU_1D_AL)	<7	-	<7	<7	-	-	-	-	-	-	<7	mg/kg	TMS/PM8/PM16
>C21-C35 (EH_CU_1D_AL)	<7	-	34	82	-	-	-	-	-	-	<7	mg/kg	TMS/PM8/PM16
Total aliphatics C5-35 (EH+HS_CU_1D_AL)	<19	-	34	82	-	-	-	-	-	-	<19	mg/kg	TMS/PM8/PM16/PM12/PM15
Aromatics													
>C5-EC7 (HS_1D_AR)	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR)	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR)	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR)	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	<0.2	mg/kg	TMS/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR)	<4	-	<4	<4	-	-	-	-	-	-	<4	mg/kg	TMS/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR)	<7	-	14	<7	-	-	-	-	-	-	<7	mg/kg	TMS/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR)	<7	-	79	89	-	-	-	-	-	-	<7	mg/kg	TMS/PM8/PM16
Total aromatics C5-35 (EH+HS_CU_1D_AR)	<19	-	93	89	-	-	-	-	-	-	<19	mg/kg	TMS/PM8/PM16/PM12/PM15
Total aliphatics and aromatics(C5-35) (EH+HS_CU_1D_Total)	<38	-	127	171	-	-	-	-	-	-	<38	mg/kg	TMS/PM8/PM16/PM12/PM15
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext)	0.0209	<0.0015	1.4221	0.2586	1.4571	0.3505	0.0173	0.0171	0.0940	0.0079	<0.0015	g/l	TM38/PM20
Organic Matter	<0.2	0.5	0.9	0.4	0.8	5.4	<0.2	<0.2	-	-	<0.2	%	TM21/PM24
pH	9.85	7.19	7.94	8.46	8.09	7.98	9.23	8.90	7.33	7.62	<0.01	pH units	TM73/PM11

Element Materials Technology

Client Name: Groundtech Consulting Limited
Reference: GRO-22013
Location: Gwynedd skip
Contact: Adam White
EMT Job No: 22/4931

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	56	57	58	59	60																			
Sample ID	WS07	WS05	WS13	WS14	WS17																			
Depth	1.70	2.00	1.00	1.50	1.80																			
COC No / misc																								
Containers	T	T	T	T	T																			
Sample Date	17/03/2022	17/03/2022	<>	17/03/2022	16/03/2022																			
Sample Type	Solid	Solid	Solid	Solid	Solid																			
Batch Number	1	1	1	1	1																			
Date of Receipt	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022																			
	LOD/LOR	Units	Method No.																					
Arsenic	-	-	-	-	-																<0.5	mg/kg	TM30/PM15	
Cadmium	-	-	-	-	-																	<0.1	mg/kg	TM30/PM15
Chromium	-	-	-	-	-																	<0.5	mg/kg	TM30/PM15
Copper	-	-	-	-	-																	<1	mg/kg	TM30/PM15
Lead	-	-	-	-	-																	<5	mg/kg	TM30/PM15
Mercury	-	-	-	-	-																	<0.1	mg/kg	TM30/PM15
Nickel	-	-	-	-	-																	<0.7	mg/kg	TM30/PM15
Selenium	-	-	-	-	-																	<1	mg/kg	TM30/PM15
Zinc	-	-	-	-	-																	<5	mg/kg	TM30/PM15
PAH MS																								
Naphthalene	-	-	-	-	-																	<0.04	mg/kg	TM4/PM8
Acenaphthylene	-	-	-	-	-																	<0.03	mg/kg	TM4/PM8
Acenaphthene	-	-	-	-	-																	<0.05	mg/kg	TM4/PM8
Fluorene	-	-	-	-	-																	<0.04	mg/kg	TM4/PM8
Phenanthrene	-	-	-	-	-																	<0.03	mg/kg	TM4/PM8
Anthracene	-	-	-	-	-																	<0.04	mg/kg	TM4/PM8
Fluoranthene	-	-	-	-	-																	<0.03	mg/kg	TM4/PM8
Pyrene	-	-	-	-	-																	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene	-	-	-	-	-																	<0.06	mg/kg	TM4/PM8
Chrysene	-	-	-	-	-																	<0.02	mg/kg	TM4/PM8
Benzo(b)fluoranthene	-	-	-	-	-																	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene	-	-	-	-	-																	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	-	-	-	-	-																	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene	-	-	-	-	-																	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene	-	-	-	-	-																	<0.04	mg/kg	TM4/PM8
PAH 16 Total	-	-	-	-	-																	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	-	-	-	-	-																	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	-	-	-	-	-																	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	-	-	-	-	-																	<0	%	TM4/PM8
Methyl Tertiary Butyl Ether	-	-	-	-	-																	<2	ug/kg	TM15/PM10
Benzene	-	-	-	-	-																	<3	ug/kg	TM15/PM10
Toluene	-	-	-	-	-																	<3	ug/kg	TM15/PM10
Ethylbenzene	-	-	-	-	-																	<3	ug/kg	TM15/PM10
m/p-Xylene	-	-	-	-	-																	<5	ug/kg	TM15/PM10
o-Xylene	-	-	-	-	-																	<3	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	-	-	-	-	-																	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	-	-	-	-	-																	<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Groundtech Consulting Limited
Reference: GRO-22013
Location: Gwynedd skip
Contact: Adam White
EMT Job No: 22/4931

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	56	57	58	59	60								
Sample ID	WS07	WS05	WS13	WS14	WS17								
Depth	1.70	2.00	1.00	1.50	1.80								
COC No / misc													
Containers	T	T	T	T	T								
Sample Date	17/03/2022	17/03/2022	<>	17/03/2022	16/03/2022								
Sample Type	Solid	Solid	Solid	Solid	Solid								
Batch Number	1	1	1	1	1								
Date of Receipt	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022								
										LOD/LOR	Units	Method No.	
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL)	-	-	-	-	-					<0.1	mg/kg	TM36/PM12	
>C6-C8 (HS_1D_AL)	-	-	-	-	-					<0.1	mg/kg	TM36/PM12	
>C8-C10 (HS_1D_AL)	-	-	-	-	-					<0.1	mg/kg	TM36/PM12	
>C10-C12 (EH_CU_1D_AL)	-	-	-	-	-					<0.2	mg/kg	TMS/PM8/PM16	
>C12-C16 (EH_CU_1D_AL)	-	-	-	-	-					<4	mg/kg	TMS/PM8/PM16	
>C16-C21 (EH_CU_1D_AL)	-	-	-	-	-					<7	mg/kg	TMS/PM8/PM16	
>C21-C35 (EH_CU_1D_AL)	-	-	-	-	-					<7	mg/kg	TMS/PM8/PM16	
Total aliphatics C5-35 (EH+HS_CU_1D_AL)	-	-	-	-	-					<19	mg/kg	TMS/PM8/PM16/PM12/PM18	
Aromatics													
>C5-EC7 (HS_1D_AR)	-	-	-	-	-					<0.1	mg/kg	TM36/PM12	
>EC7-EC8 (HS_1D_AR)	-	-	-	-	-					<0.1	mg/kg	TM36/PM12	
>EC8-EC10 (HS_1D_AR)	-	-	-	-	-					<0.1	mg/kg	TM36/PM12	
>EC10-EC12 (EH_CU_1D_AR)	-	-	-	-	-					<0.2	mg/kg	TMS/PM8/PM16	
>EC12-EC16 (EH_CU_1D_AR)	-	-	-	-	-					<4	mg/kg	TMS/PM8/PM16	
>EC16-EC21 (EH_CU_1D_AR)	-	-	-	-	-					<7	mg/kg	TMS/PM8/PM16	
>EC21-EC35 (EH_CU_1D_AR)	-	-	-	-	-					<7	mg/kg	TMS/PM8/PM16	
Total aromatics C5-35 (EH+HS_CU_1D_AR)	-	-	-	-	-					<19	mg/kg	TMS/PM8/PM16/PM12/PM18	
Total aliphatics and aromatics(C5-35) (EH+HS_CU_1D_Total)	-	-	-	-	-					<38	mg/kg	TMS/PM8/PM16/PM12/PM18	
Hexavalent Chromium	-	-	-	-	-					<0.3	mg/kg	TM38/PM20	
Sulphate as SO4 (2:1 Ext)	0.0293	0.0066	0.0318	0.0176	0.0439					<0.0015	g/l	TM38/PM20	
Organic Matter	-	-	-	-	-					<0.2	%	TM21/PM24	
pH	6.90	6.42	7.20	6.93	7.05					<0.01	pH units	TM73/PM11	

Please see attached notes for all abbreviations and acronyms

Client Name: Groundtech Consulting Limited
Reference: GRO-22013
Location: Gwynedd skip
Contact: Adam White
EMT Job No: 22/4931

SVOC Report : Solid

EMT Sample No.	4-6	15-17	29-31	35-37	38-41								
Sample ID	WS02	WS06	WS11	WS13	WS14								
Depth	0.50	0.60	0.20	0.50	0.20								
COC No / misc Containers	V J T	V J B	V J B	V J T	V J T								
Sample Date	15/03/2022	17/03/2022	15/03/2022	16/03/2022	16/03/2022								
Sample Type	Solid	Solid	Solid	Solid	Solid								
Batch Number	1	1	1	1	1								
Date of Receipt	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022								
						LOD/LOR	Units	Method No.	Please see attached notes for all abbreviations and acronyms				
SVOC MS													
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
2-Nitroaniline	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
3-Nitroaniline	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
4-Bromophenylphenylether	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
4-Chloroaniline	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
4-Nitroaniline	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
Azobenzene	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
Carbazole	<10	<10	<10	218	<10	<10	ug/kg	TM16/PM8					
Dibenzofuran	<10	<10	<10	89	11	<10	ug/kg	TM16/PM8					
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
Hexachlorobutadiene	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
Hexachloroethane	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
Isophorone	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
N-nitrosodi-n-propylamine	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
Nitrobenzene	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8					
Surrogate Recovery 2-Fluorobiphenyl	110	113	114	113	112	<0	%	TM16/PM8					
Surrogate Recovery p-Terphenyl-d14	108	112	111	120	119	<0	%	TM16/PM8					

Client Name: Groundtech Consulting Limited
 Reference: GRO-22013
 Location: Gwynedd skip
 Contact: Adam White
 EMT Job No: 22/4931

VOC Report : Solid

EMT Sample No.	4-6	15-17	29-31	35-37	38-41								Please see attached notes for all abbreviations and acronyms		
Sample ID	WS02	WS06	WS11	WS13	WS14								LOD/LOR	Units	Method No.
Depth	0.50	0.60	0.20	0.50	0.20										
COC No / misc Containers	V J T	V J B	V J B	V J T	V J T										
Sample Date	15/03/2022	17/03/2022	15/03/2022	16/03/2022	16/03/2022										
Sample Type	Solid	Solid	Solid	Solid	Solid										
Batch Number	1	1	1	1	1										
Date of Receipt	26/03/2022	26/03/2022	26/03/2022	26/03/2022	26/03/2022										
VOC MS															
Dichlorodifluoromethane	<2	<2	<2	<2	<2								<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether	<2	<2	<2	<2	<2								<2	ug/kg	TM15/PM10
Chloromethane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2								<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1								<1	ug/kg	TM15/PM10
Chloroethane	<2	<2	<2	<2	<2								<2	ug/kg	TM15/PM10
Trichlorofluoromethane	<2	<2	<2	<2	<2								<2	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE)	<6	<6	<6	<6	<6								<6	ug/kg	TM15/PM10
Dichloromethane (DCM)	<7	<7	<7	<7	<7								<7	ug/kg	TM15/PM10
trans-1-2-Dichloroethene	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
1,1-Dichloroethane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
cis-1-2-Dichloroethene	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4								<4	ug/kg	TM15/PM10
Bromochloromethane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
Chloroform	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
1,1,1-Trichloroethane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
1,1-Dichloropropene	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
Carbon tetrachloride	<4	<4	<4	<4	<4								<4	ug/kg	TM15/PM10
1,2-Dichloroethane	<4	<4	<4	<4	<4								<4	ug/kg	TM15/PM10
Benzene	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
Trichloroethene (TCE)	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
1,2-Dichloropropane	<6	<6	<6	<6	<6								<6	ug/kg	TM15/PM10
Dibromomethane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
Bromodichloromethane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4								<4	ug/kg	TM15/PM10
Toluene	<3	<3	<3	<3	4								<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
Tetrachloroethene (PCE)	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
1,3-Dichloropropane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
Dibromochloromethane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
1,2-Dibromoethane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
Chlorobenzene	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
Ethylbenzene	<3	<3	<3	<3	5								<3	ug/kg	TM15/PM10
m/p-Xylene	<5	<5	<5	<5	8								<5	ug/kg	TM15/PM10
o-Xylene	<3	<3	<3	<3	4								<3	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3								<3	ug/kg	TM15_A/PM10
Bromoform	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
Isopropylbenzene	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2								<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane	<4	<4	<4	<4	<4								<4	ug/kg	TM15/PM10
Propylbenzene	<4	<4	<4	<4	<4								<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene	<3	<3	<3	<3	4								<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3								<3	ug/kg	TM15/PM10
tert-Butylbenzene	<5	<5	<5	<5	<5								<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene	<6	<6	<6	<6	14								<6	ug/kg	TM15/PM10
sec-Butylbenzene	<4	<4	<4	<4	5								<4	ug/kg	TM15/PM10
4-Isopropyltoluene	<4	<4	<4	<4	<4								<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene	<4	<4	<4	<4	<4								<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene	<4	<4	<4	<4	92								<4	ug/kg	TM15/PM10
n-Butylbenzene	<4	<4	<4	<4	11								<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene	<4	<4	<4	<4	<4								<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane	<4	<4	<4	<4	<4								<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene	<7	<7	<7	<7	<7								<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4								<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27								<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene	<7	<7	<7	<7	<7								<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	102	103	104	93	84								<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	101	95	100	82	76								<0	%	TM15/PM10

Client Name: Groundtech Consulting Limited
Reference: GRO-22013
Location: Gwynedd skip
Contact: Adam White

Note:
 Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Asbestos sub-samples are retained for not less than 6 months from the date of analysis unless specifically requested.

The LOQ of the Asbestos Quantification is 0.001% dry fibre of dry mass of sample.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analyst Name	Date Of Analysis	Analysis	Result
22/4931	1	WS01	0.20	3	Simon Postlewhite	04/04/2022	General Description (Bulk Analysis)	Soil/Stones
					Simon Postlewhite	04/04/2022	Asbestos Fibres	NAD
					Simon Postlewhite	04/04/2022	Asbestos ACM	NAD
					Simon Postlewhite	04/04/2022	Asbestos Type	NAD
22/4931	1	WS02	0.50	6	Simon Postlewhite	04/04/2022	General Description (Bulk Analysis)	Soil/Stones
					Simon Postlewhite	04/04/2022	Asbestos Fibres	NAD
					Simon Postlewhite	04/04/2022	Asbestos ACM	NAD
					Simon Postlewhite	04/04/2022	Asbestos Type	NAD
22/4931	1	WS03	0.50	9	Simon Postlewhite	04/04/2022	General Description (Bulk Analysis)	Soil/Stones
					Simon Postlewhite	04/04/2022	Asbestos Fibres	NAD
					Simon Postlewhite	04/04/2022	Asbestos ACM	NAD
					Simon Postlewhite	04/04/2022	Asbestos Type	NAD
22/4931	1	WS04	0.80	11	Andrew Alker	04/04/2022	General Description (Bulk Analysis)	soil
					Andrew Alker	04/04/2022	Asbestos Fibres	NAD
					Andrew Alker	04/04/2022	Asbestos ACM	NAD
					Andrew Alker	04/04/2022	Asbestos Type	NAD
22/4931	1	WS05	0.20	14	Catherine Coles	04/04/2022	General Description (Bulk Analysis)	soil/stone
					Catherine Coles	04/04/2022	Asbestos Fibres	NAD
					Catherine Coles	04/04/2022	Asbestos ACM	NAD
					Catherine Coles	04/04/2022	Asbestos Type	NAD
22/4931	1	WS06	0.60	17	Matthew Turner	05/04/2022	General Description (Bulk Analysis)	Soil/Stone
					Matthew Turner	05/04/2022	Asbestos Fibres	NAD
					Matthew Turner	05/04/2022	Asbestos ACM	NAD
					Matthew Turner	05/04/2022	Asbestos Type	NAD
22/4931	1	WS07	0.20	20	Catherine Coles	04/04/2022	General Description (Bulk Analysis)	soil/stone
					Catherine Coles	04/04/2022	Asbestos Fibres	NAD
					Catherine Coles	04/04/2022	Asbestos ACM	NAD
					Catherine Coles	04/04/2022	Asbestos Type	NAD
22/4931	1	WS08	0.20	22	Matthew Turner	05/04/2022	General Description (Bulk Analysis)	Soil/Stone
					Matthew Turner	05/04/2022	Asbestos Fibres	NAD
					Matthew Turner	05/04/2022	Asbestos ACM	NAD
					Matthew Turner	05/04/2022	Asbestos Type	NAD

Client Name: Groundtech Consulting Limited
Reference: GRO-22013
Location: Gwynedd skip
Contact: Adam White

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analyst Name	Date Of Analysis	Analysis	Result
22/4931	1	WS09	0.60	25	Catherine Coles	04/04/2022	General Description (Bulk Analysis)	soil/stone
					Catherine Coles	04/04/2022	Asbestos Fibres	NAD
					Catherine Coles	04/04/2022	Asbestos ACM	NAD
					Catherine Coles	04/04/2022	Asbestos Type	NAD
22/4931	1	WS10	0.50	28	Matthew Turner	05/04/2022	General Description (Bulk Analysis)	Soil/Stone
					Matthew Turner	05/04/2022	Asbestos Fibres	NAD
					Matthew Turner	05/04/2022	Asbestos ACM	NAD
					Matthew Turner	05/04/2022	Asbestos Type	NAD
22/4931	1	WS11	0.20	31	Matthew Turner	05/04/2022	General Description (Bulk Analysis)	Soil/Stone
					Matthew Turner	05/04/2022	Asbestos Fibres	NAD
					Matthew Turner	05/04/2022	Asbestos ACM	NAD
					Matthew Turner	05/04/2022	Asbestos Type	NAD
22/4931	1	WS12	0.60	34	Matthew Turner	05/04/2022	General Description (Bulk Analysis)	Soil/Stone
					Matthew Turner	05/04/2022	Asbestos Fibres	NAD
					Matthew Turner	05/04/2022	Asbestos ACM	NAD
					Matthew Turner	05/04/2022	Asbestos Type	NAD
22/4931	1	WS13	0.50	37	Anthony Carman	04/04/2022	General Description (Bulk Analysis)	Soil/Stones
					Anthony Carman	04/04/2022	Asbestos Fibres	NAD
					Anthony Carman	04/04/2022	Asbestos ACM	NAD
					Anthony Carman	04/04/2022	Asbestos Type	NAD
22/4931	1	WS14	0.20	40	Anthony Carman	04/04/2022	General Description (Bulk Analysis)	Soil/Stones
					Anthony Carman	04/04/2022	Asbestos Fibres	NAD
					Anthony Carman	04/04/2022	Asbestos ACM	NAD
					Anthony Carman	04/04/2022	Asbestos Type	NAD
22/4931	1	WS15	0.60	44	Anthony Carman	04/04/2022	General Description (Bulk Analysis)	Soil/Stones
					Anthony Carman	04/04/2022	Asbestos Fibres	Fibre Bundles
					Anthony Carman	04/04/2022	Asbestos ACM	ACM Debris
					Anthony Carman	04/04/2022	Asbestos Type	Chrysotile
22/4931	1	WS16	0.25	47	Andrew Alker	04/04/2022	General Description (Bulk Analysis)	soil/stone
					Andrew Alker	04/04/2022	Asbestos Fibres	NAD
					Andrew Alker	04/04/2022	Asbestos ACM	NAD
					Andrew Alker	04/04/2022	Asbestos Type	NAD
22/4931	1	WS17	0.30	50	Andrew Alker	04/04/2022	General Description (Bulk Analysis)	soil/stone
					Andrew Alker	04/04/2022	Asbestos Fibres	NAD
					Andrew Alker	04/04/2022	Asbestos ACM	NAD
					Andrew Alker	04/04/2022	Asbestos Type	NAD
22/4931	1	WS18	0.60	53	Matthew Turner	05/04/2022	General Description (Bulk Analysis)	Soil/Stone
					Matthew Turner	05/04/2022	Asbestos Fibres	NAD
					Matthew Turner	05/04/2022	Asbestos ACM	NAD
					Matthew Turner	05/04/2022	Asbestos Type	NAD

Client Name: Groundtech Consulting Limited
Reference: GRO-22013
Location: Gwynedd skip
Contact: Adam White

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 22/4931						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 22/4931

SOILS and ASH

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. Asbestos samples are retained for 6 months.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C. Ash samples are dried at 37°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overestimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

STACK EMISSIONS

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation for Dioxins and Furans and Dioxin like PCBs has been performed on XAD-2 Resin, only samples which use this resin will be within our MCERTS scope.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

Please include all sections of this report if it is reproduced

All solid results are expressed on a dry weight basis unless stated otherwise.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Laboratory records are kept for a period of no less than 6 years.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

Customer Provided Information

Sample ID and depth is information provided by the customer.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x10 Dilution

HWOL ACRONYMS AND OPERATORS USED

HS	Headspace Analysis.
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent.
CU	Clean-up - e.g. by florisil, silica gel.
1D	GC - Single coil gas chromatography.
Total	Aliphatics & Aromatics.
AL	Aliphatics only.
AR	Aromatics only.
2D	GC-GC - Double coil gas chromatography.
#1	EH_Total but with humics mathematically subtracted
#2	EU_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +).
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry.

EMT Job No: 22/4931

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM15	Modified USEPA 8260B v2:1996. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM16	Modified USEPA 8270D v5:2014. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry); WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013!	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.			AD	Yes

EMT Job No: 22/4931

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248 Second edition (2021)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.			AR	No
TM15_A	Modified USEPA 8260B v2:1996. Quantitative Determination of Volatile Organic Compounds, Vinyl Chloride & Styrene by Headspace GC-MS.	PM10	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes



APPENDIX 9 - Geotechnical Testing Results



LABORATORY REPORT



4043

Contract Number: PSL22/2998

Report Date: 04 May 2022
Client's Reference: GRO-22013
Client Name: Groundtech Consulting
First Floor
Lloyd House
Orford Court
Greenfold Way
WN7 3XJ

For the attention of: Adam White

Contract Title: Gwynedd Skips
Date Received: 26/4/2022
Date Commenced: 26/4/2022
Date Completed: 4/5/2022

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. 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 other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

A Watkins
(Director)

R Berriman
(Quality Manager)

S Royle
(Laboratory Manager)

L Knight
(Assistant Laboratory Manager)

S Eyre
(Senior Technician)

T Watkins
(Senior Technician)

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Page 1 of

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
CP02		D	3.00		Brown very gravelly very sandy CLAY.
CP03		D	4.00		Brown sandy slightly clayey GRAVEL.
CP04		B	2.50	3.00	Brown gravelly very sandy CLAY.
CP05		B	2.50	3.00	Brown very sandy clayey GRAVEL of cobbles.
WS04		D	1.50		Brown slightly gravelly sandy CLAY.
WS06		D	1.00		Brown mottled grey gravelly sandy CLAY.
CP02		U	2.00	2.45	Soft brown gravelly very sandy CLAY.
CP03		U	3.00	3.45	Brown slightly gravelly slightly sandy CLAY.
CP03		U	5.00	5.45	Brown slightly gravelly slightly sandy CLAY.
CP02		B	4.00		Brown sandy very clayey GRAVEL of cobbles.

 4043		Gwynedd Skips	Contract No:
			PSL22/2998
			Client Ref:
			GRO-22013

SUMMARY OF SOIL CLASSIFICATION TESTS

(BS1377 : PART 2 : 1990)

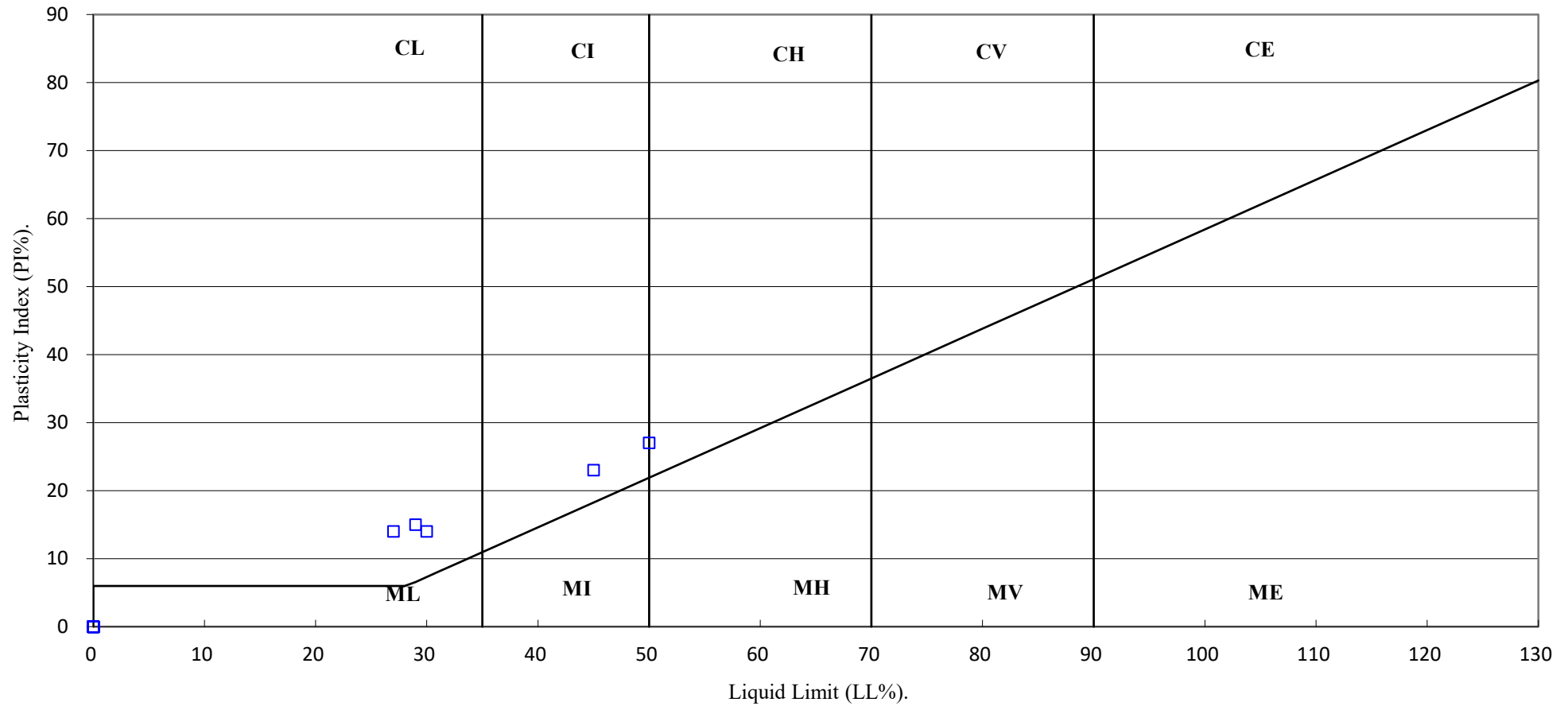
Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Moisture Content % Clause 3.2	Linear Shrinkage % Clause 6.5	Particle Density Mg/m ³ Clause 8.2	Liquid Limit % Clause 4.3/4	Plastic Limit % Clause 5.3	Plasticity Index % Clause 5.4	Passing .425mm %	Remarks
CP02		D	3.00		14			27	13	14	58	Low Plasticity CL
CP03		D	4.00		1.9				NP			
CP04		B	2.50	3.00	10			29	14	15	82	Low Plasticity CL
CP05		B	2.50	3.00	12			30	16	14	38	Low Plasticity CL
WS04		D	1.50		25			50	23	27	93	High Plasticity CH
WS06		D	1.00		15			45	22	23	74	Intermediate Plasticity CI

SYMBOLS : NP : Non Plastic

* : Liquid Limit and Plastic Limit Wet Sieved.

 4043		Gwynedd Skips	Contract No:
			PSL22/2998
			Client Ref:
			GRO-22013

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.



4043

PSL
Professional Soils Laboratory

Gwynedd Skips

Contract No:

PSL22/2998

Client Ref:

GRO-22013

PARTICLE SIZE DISTRIBUTION TEST

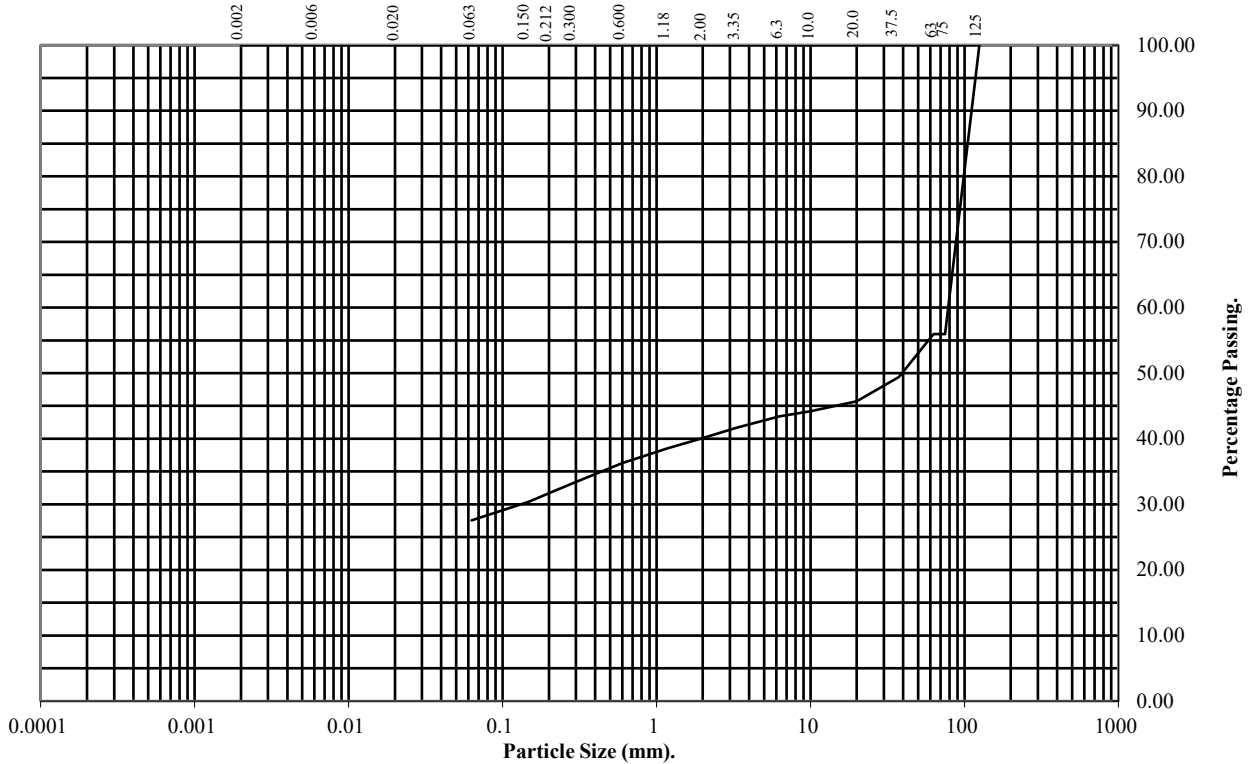
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: CP02 **Top Depth (m):** 4.00

Sample Number: **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	56
63	56
37.5	49
20	46
10	44
6.3	43
3.35	42
2	40
1.18	39
0.6	36
0.3	33
0.212	32
0.15	30
0.063	28

Soil Fraction	Total Percentage
Cobbles	44
Gravel	16
Sand	12
Silt/Clay	28

Remarks:
See Summary of Soil Descriptions



Gwynedd Skips

Contract No:
PSL22/2998
Client Ref:
GRO-22013

PARTICLE SIZE DISTRIBUTION TEST

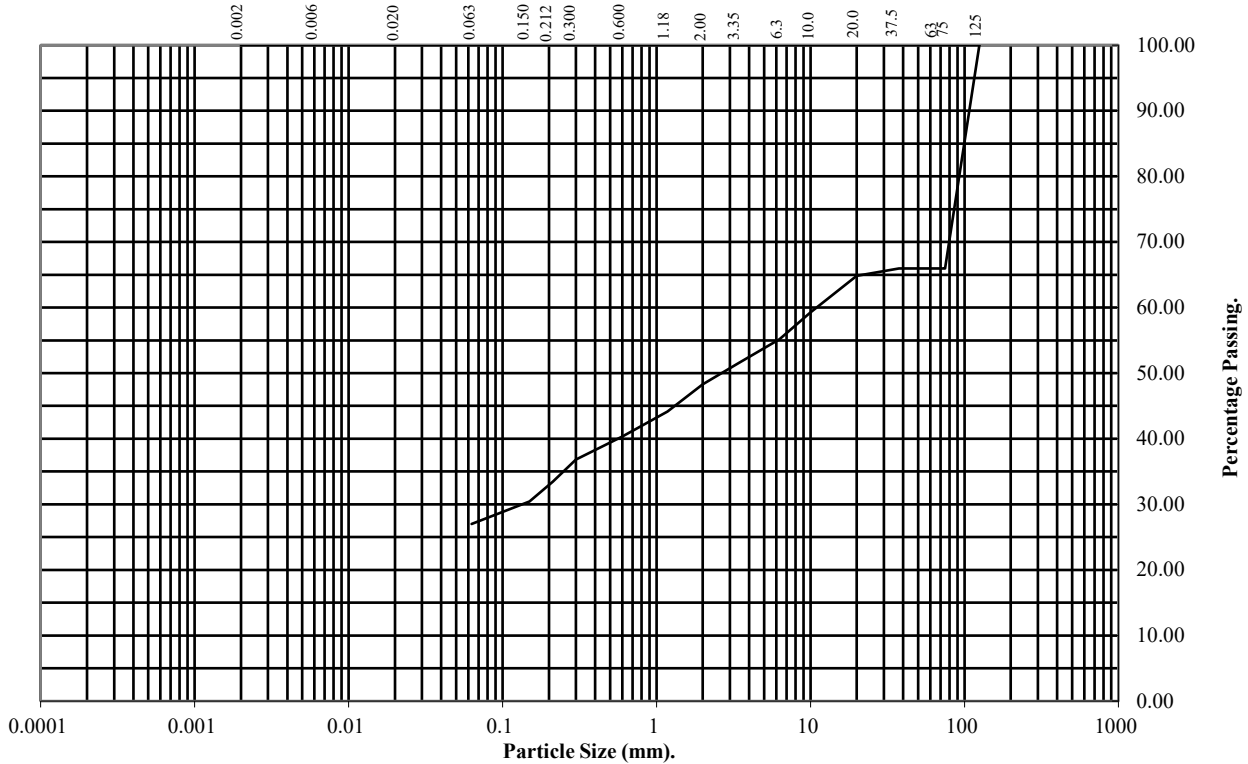
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: CP05 **Top Depth (m):** 2.50

Sample Number: **Base Depth(m):** 3.00

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	66
63	66
37.5	66
20	65
10	59
6.3	55
3.35	51
2	48
1.18	44
0.6	40
0.3	37
0.212	33
0.15	30
0.063	27

Soil Fraction	Total Percentage
Cobbles	34
Gravel	18
Sand	21
Silt/Clay	27

Remarks:
See Summary of Soil Descriptions



Gwynedd Skips

Contract No:
PSL22/2998
Client Ref:
GRO-22013

UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION

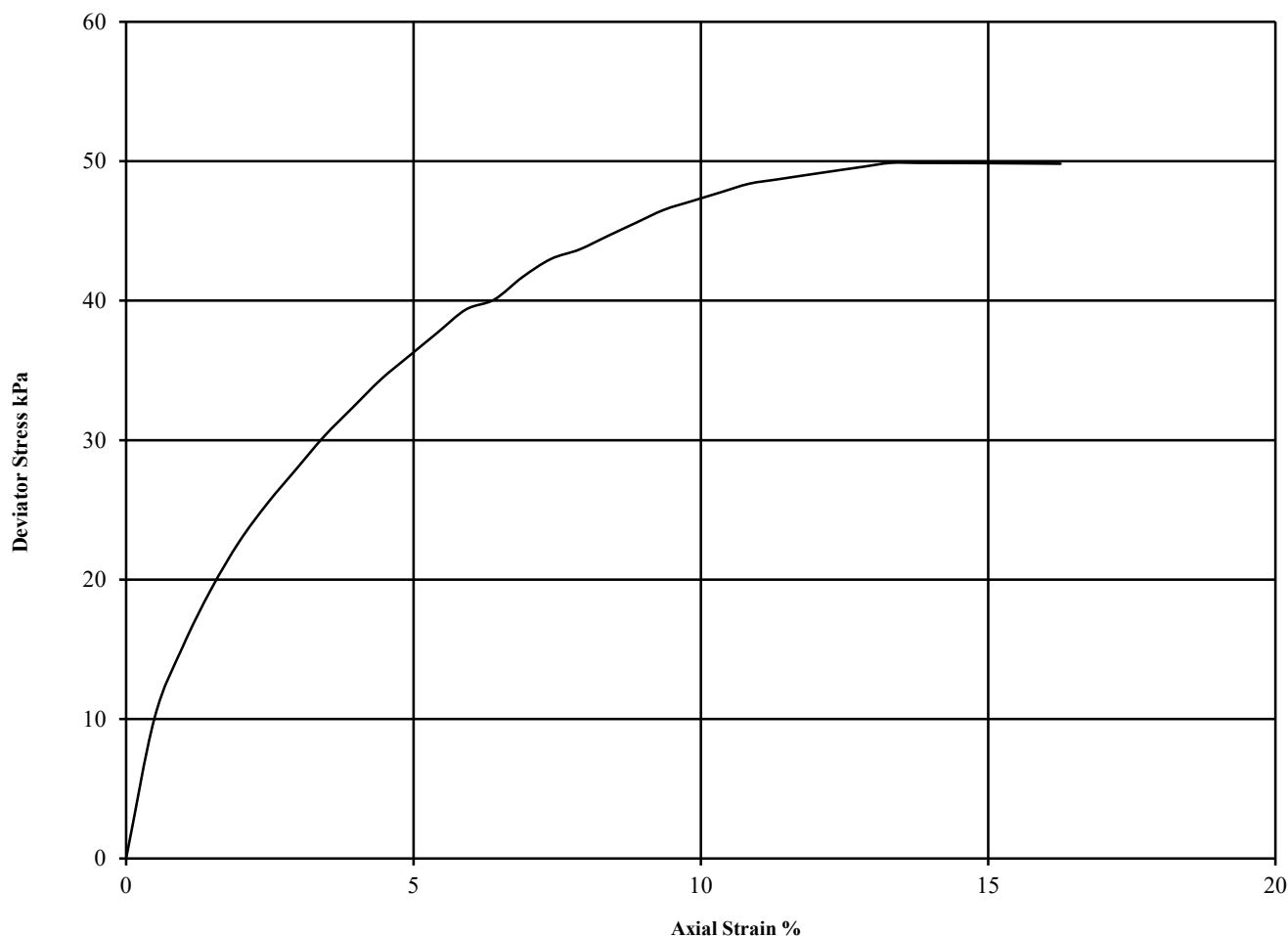
WITHOUT MEASUREMENT OF PORE PRESSURE

BS1377 : Part7 : 1990: Clause 8

Hole Number: CP02 Top Depth (m): 2.00

Sample Number: Base Depth (m): 2.45

Sample Type U



Diameter (mm):		102		Height (mm):		207		Test:		UU Single Stage		Remarks:	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Corr. Max. Deviator Stress (kPa)	Shear Strength Cu (kPa)	Failure Strain (%)	Mode of Failure					Undisturbed Sample
				θ_3	$(\theta_1 - \theta_3)_f$	$\frac{1}{2}(\theta_1 - \theta_3)_f$							Sample taken from top of tube
													Rate of strain = 2 %/min
													Latex Membrane used 0.2 mm thick,
													Correction applied 0.35
1	13	2.28	2.01	40	50	25	13.3	Plastic					See summary of soil descriptions



Gwynedd Skips

Contract No:

PSL22/2998

Client Ref:


GRO-22013

SUMMARY OF LABORATORY HAND VANES

(BS1377 : PART 7 : 1990)

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Moisture Content %	Peak Shear Strength kPa	Residual Shear Strength kPa	Remarks
CP03		U	3.00	3.45	16	62		
CP03		U	5.00	5.45	12	>150		

* This test is out of our UKAS scope

	Gwynedd Skips	Contract No:
		PSL22/2998
		Client Ref:
		GRO-22013



APPENDIX 10 - Permanent Ground Gas Monitoring Results

PERMANENT GROUND GAS MONITORING FORM



<i>SITE NAME:</i>	GWYNEDD SKIPS	<i>ENGINEER:</i>	Josh Turton
<i>CLIENT:</i>	GWYNEDD HOLDINGS LIMITED	<i>DATE:</i>	13/04/2022
<i>JOB NO:</i>	GRO-22013		

<i>Pressure Trend:</i>	Rising	<i>Weather:</i>	Overcast	<i>Equipment:</i>	GFM 436	
<i>Ambient:</i>	O ₂ (%v/v)	CH ₄ (%v/v)	CO ₂ (%v/v)	LEL	H ₂ S (ppm)	CO (ppm)
<i>Start</i>	20.3	0.0	0.0	0.0	0.0	0.0
<i>Finish</i>	20.4	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						
CP05	0.0	0.0	0.00	0.0	0.0	0.0	0.1	0.1	20.3	20.3	0.0	0.0	0.0	0.0	0.0001	0.0000	1009	-	N	NA
WS04	0.0	0.0	0.00	0.0	0.0	0.0	2.0	0.7	17.2	19.9	0.0	0.0	0.0	0.0	0.0020	0.0000	1009	-	N	NGW
WS06	0.0	0.0	0.00	0.0	0.0	0.0	9.6	7.9	0.1	4.3	0.0	0.0	0.0	0.0	0.0096	0.0000	1009	-	N	1.40
WS08	0.0	0.0	0.00	0.0	0.0	0.0	2.4	1.8	18.2	19.0	0.0	0.0	0.0	0.0	0.0024	0.0000	1009	-	N	1.90
WS09	0.0	0.0	0.00	0.9	0.8	18.0	5.1	5.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0051	0.0009	1009	-	N	1.34
WS13	0.0	0.0	0.00	0.0	0.0	0.0	2.8	1.7	16.5	18.5	0.0	0.0	0.0	0.0	0.0028	0.0000	1009	-	N	1.16
WS15	0.0	0.0	0.00	0.0	0.0	0.0	2.7	1.9	15.4	17.5	0.0	0.0	0.0	0.0	0.0027	0.0000	1009	-	N	0.63

Notes:



APPENDIX 11 - Commercial End Use Screening Values

Generic Tier I Generic Assessment Criteria (GAC)								GROUNDTECH
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	980	980	980	LQM S4ULs
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) ^{sof}	5900 (558) ^{sof}	12000 (1150) ^{sof}	LQM S4ULs
Aliphatic EC 6 - 8	mg/kg	100	230	530	7800 (144) ^{sof}	17000 (322) ^{sof}	40000 (736) ^{sof}	LQM S4ULs
Aliphatic EC 8 - 10	mg/kg	27	65	150	2000 (78) ^{sof}	4800 (190) ^{sof}	11000 (451) ^{sof}	LQM S4ULs
Aliphatic EC 10 - 12	mg/kg	130 (48) ^{vop}	330 (118) ^{vop}	760 (283) ^{vop}	9700 (48) ^{sof}	23000 (118) ^{vop}	47000 (283) ^{vop}	LQM S4ULs
Aliphatic EC 12 - 16	mg/kg	1100 (24) ^{sof}	2400 (59) ^{sof}	4300 (142) ^{sof}	59000 (24) ^{sof}	82000 (59) ^{sof}	90000 (142) ^{sof}	LQM S4ULs
Aliphatic EC 16 - 35	mg/kg	65000 (8.48) ^{f,sof}	92000 (21) ^{f,sof}	110000 ^f	1600000 ^f	1700000 ^f	1800000 ^f	LQM S4ULs
Aliphatic EC 35 - 44	mg/kg	65000 (8.48) ^{f,sof}	92000 (21) ^{f,sof}	110000 ^f	1600000 ^f	1700000 ^f	1800000 ^f	LQM S4ULs
Aromatic EC 5 - 7	mg/kg	70	140	300	26000 (1220) ^{sof}	46000 (2260) ^{sof}	86000 (4710) ^{sof}	LQM S4ULs
Aromatic EC 7 - 8	mg/kg	130	290	660	56000 (869) ^{vop}	110000 (1920) ^{vop}	180000 (4360) ^{vop}	LQM S4ULs
Aromatic EC 8 - 10	mg/kg	34	83	190	3500 (613) ^{vop}	8100 (1500) ^{vop}	17000 (3580) ^{vop}	LQM S4ULs
Aromatic EC 10 - 12	mg/kg	74	180	380	16000 (364) ^{sof}	28000 (899) ^{sof}	34000 (2150) ^{sof}	LQM S4ULs
Aromatic EC 12 -16	mg/kg	140	330	660	36000 (169) ^{sof}	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 ether)	mg/kg	49	84	160	7900	13000	24000	CL:AIRE 2010
Acenaphthene	mg/kg	210	510	1100	84000 (57) ^{sof}	97000 (141) ^{sof}	100000	LQM SAULs
Acenaphthylene	mg/kg	170	420	920	83000 (86.1) ^{sof}	97000 (212) ^{sof}	100000	LQM SAULs
Anthracene	mg/kg	2400	5400	11000	520000	540000	540000	LQM SAULs
Benz(a)anthracene	mg/kg	7.2	11	13	170	170	180	LQM SAULs
Benzo(a)pyrene	mg/kg	2.2	2.7	5*	35	35	77*	DEFRA CASL*/LQM
Benzo(b)fluoranthene	mg/kg	2.6	3.3	3.7	44	44	45	LQM SAULs
Benzo(ghi)perylene	mg/kg	320	340	350	3900	4000	4000	LQM SAULs
Benzo(k)fluoranthene	mg/kg	77	93	100	1200	1200	1200	LQM SAULs
Chrysene	mg/kg	15	22	27	350	350	350	LQM SAULs
Dibenz(ah)anthracene	mg/kg	0.24	0.28	0.3	3.5	3.6	3.6	LQM SAULs
Fluoranthene	mg/kg	280	560	890	23000	23000	23000	LQM SAULs
Fluorene	mg/kg	170	400	860	63000 (30.9) ^{sof}	68000	71000	LQM SAULs
Indeno(123-cd)pyrene	mg/kg	27	36	41	500	510	510	LQM SAULs
Naphthalene	mg/kg	2.3 ^f	5.6 ^f	13 ^f	190 ^f (76.4) ^{sof}	460 ^f (183) ^{sof}	1100 ^f (432) ^{sof}	LQM SAULs
Phenanthrene	mg/kg	95	220	440	22000	22000	23000	LQM SAULs
Pyrene	mg/kg	620	1200	2000	54000	54000	54000	LQM SAULs

Generic Tier I Generic Assessment Criteria (GAC)								
Proposed End Use	Unit	Residential with Plant Uptake			Commercial			
SOM	%	1	2.5	6	1	2.5	6	
Phenol	mg/kg	420	420	420	3200	3200	3200	SGVs
Chlorophenols	mg/kg	0.87 ⁹	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
Tetrachloromethane (Carbon Tetrachloride)	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 chloride)	mg/kg	0.00064	0.00087	0.0014	0.059	0.077	0.12	LQM S4ULs
Trichloromethane (Chloroform)	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) ^{vsp}	3.3 (0.5) ^{vsp}	4.9	110 (0.2) ^{vsp}	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) ^{vsp}	120 (98.1) ^{vsp}	240 (235) ^{vsp}	LQM S4ULs
1,2,3,4-Tetrachlorobenzene	mg/kg	15	36	78	1700 (122) ^{vsp}	3080 (304) ^{vsp}	4400 (728) ^{vsp}	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) ^{vsp}	10000 ^f (540)	25000 ^f (1280)	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-Hexachlorocyclohexane	mg/kg	0.06	0.14	0.33	67	69	70	LQM S4ULs
Beta-Hexachlorocyclohexane	mg/kg	0.085	0.2	0.46	65	65	65	LQM S4ULs
Alpha-Hexachlorocyclohexane	mg/kg	0.23	0.55	1.2	170	180	180	LQM S4ULs
Beta-Endosulfan	mg/kg	7	17	39	6300 (0.00007) ^{vsp}	7800 (0.0002) ^{vsp}	8700	LQM S4ULs
Alpha-Endosulfan	mg/kg	7.4	18	41	5600 (0.003) ^{vsp}	7400 (0.007) ^{vsp}	8400 (0.016) ^{vsp}	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)

^{vsp} 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_{inh} for localised affects

^f S4UL based on comparison of inhalation exposure with inhalation TDI for localised effects

^{dt} S4ULs based on a threshold protective direct skin contact with phenol (guideline in brackets based on health effects following long term exposure provided for illustration only)



APPENDIX 12 – JIWG Receptor Tool



Joint Industry Working Group

Asbestos in Soil and Construction & Demolition Materials

Project Reference	GRO-22013
Site Name	Gwynedd Skips
Client	Gwynedd Skip & Plant Hire
Run by	LH
Date	18-May-22
Scenario details	

Decision Support Tool for CAR2012 Work Categories

Stage 1
Hazard Factors

	Score	
Select ACM type (run model for each type to generate 'Worst Case' output)	Free dispersed fibres/fibre bundles	2
Extent of degradation of ACMs at outset of work	Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friability and degree of bonding by matrix (ACM matrix, not ground materials)	Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
Distribution of Visible Asbestos Across Affected Area	No visible ACMs/fibre bundles	0
Amount of asbestos fibre in selected ACM/fibre type as % of host material	Very Low quantities - <0.001 to 0.01 %wt/wt	1
Sub-total		11

Note: the asbestos licensing regime is unaffected by the type of asbestos fibre present in ACMs

Hazard ranking Medium

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool. It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

Stage 2		Score
Exposure Factors		
Anticipated airborne fibre concentration - Control Limit or SALI?	<0.01 fibres/ml	1
Anticipated duration of exposure to asbestos	< 2 hours in a 7 day period for all persons involved (e.g. Short Duration Work)	1
Activity type and effect on deterioration of ACMs during work	Low intensity, no or minimal deterioration expected	0
Best description of primary host material matrix (soil/made ground)	Coarse to Fine Gravel	3
Respirable fibre index for ACM - RIVM report 711701034 (2003)	Low	2
Sub-total		7
Exposure ranking		Low
Combined hazard and exposure ranking	18	Low

Stage 3

Risk Assessment Outputs

Probable Licensing Status	Non-Licensed Work
RPE*	EN149 type FFP3 disposable
Dust Suppression**	Manual/localised dust suppression
Hygiene/Decontamination***	Localised and basic personal decontamination facilities

*Where RPE has to be worn continuously for long periods (e.g. more than 1-hour), then powered RPE may be necessary.

**Reduction in control measures possible if natural mitigation factors are present (e.g. raining, wet ground)

***Guide only; suitability of selected personal hygiene measures may be reviewed on a site/contamination-specific basis

Decision Support Tool for Receptor Risk Ranking

Stage 1		Score
Hazard Identification		
Select ACM type (run model for each type to generate 'Worst Case' output)	Free dispersed fibres/fibre bundles	2
Extent of degradation of ACMs	Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friability and degree of bonding by matrix (ACM matrix, not ground materials)	Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
Distribution of Visible Asbestos Across Affected Area	No visible ACMs/fibre bundles	0
Asbestos fibre type	Chrysotile alone	0
Sub-total		10
Hazard ranking		Low

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.
 It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

Stage 2		Score
Emission Factors		
Amount of asbestos fibre in selected ACM/fibre type as % of host material	Very Low quantities - 0.001 to 0.01 %wt/wt	1
Respirable fibre index for ACM - RIVM report 711701034 (2003)	Low	2
Activity type and effect on deterioration of ACMs	Minimal disturbance, no deterioration expected	1
Best description of primary host material matrix	Coarse to Fine Gravel	3
Sub-total		7
Exposure ranking		Low

Stage 3		Score
Pathway and Receptor Sensitivity		
Receptor category	Commercial/industrial	No score required
Age of Receptor	Adult (>24 and <60)	1
Duration of exposure/site occupancy	> 1hr <10 hr daily exposure (e.g. part-time to full time occupational exposure or extended daily recreational exposure)	3
Receptor ranking		4 Low
Combined hazard, exposure and receptor ranking		Low
Pathway: Distance of Receptor from Source	In or within 10m of area of disturbance	4
Pathway: Depth to impacted material	Material buried at depth, unlikely to be disturbed except for deeper construction related excavation	B
Pathway ranking		4B Very Low
Overall ranking		Negligible

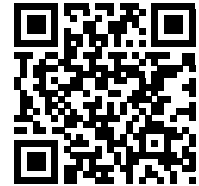


APPENDIX 13 - Waste Classification Report

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



M9VOP-D0AGO-11J00

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

Job name

EMT-22-4931-Batch-1-202204081545

Description/Comments

Project

GRO-22013

Site

Gwynedd Skips

Classified by

Name: **Bradley Massey**
Date: **11 May 2022 13:18 GMT**
Telephone: **01618 201368**
Company: **Groundtech Consulting Limited**
First Floor, Lloyd House, Orford Court,
Greenfold Way
Leigh
WN7 3XJ

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification:

-

Course

Hazardous Waste Classification

Date

-

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS01-15/03/2022-0.20m		Non Hazardous		3
2	WS02-15/03/2022-0.50m		Non Hazardous		5
3	WS03-15/03/2022-0.50m		Non Hazardous		11
4	WS04-17/03/2022-0.80m		Non Hazardous		13
5	WS05-17/03/2022-0.20m		Non Hazardous		15
6	WS06-17/03/2022-0.60m		Non Hazardous		17
7	WS07-17/03/2022-0.20m		Non Hazardous		23
8	WS08-15/03/2022-0.20m		Non Hazardous		25
9	WS09-15/03/2022-0.60m		Non Hazardous		27
10	WS10-15/03/2022-0.50m		Non Hazardous		29
11	WS11-15/03/2022-0.20m		Non Hazardous		31
12	WS12-15/03/2022-0.60m		Non Hazardous		37
13	WS13-16/03/2022-0.50m		Non Hazardous		39
14	WS14-16/03/2022-0.20m		Non Hazardous		45
15	WS15-16/03/2022-0.60m		Non Hazardous		51
16	WS16-16/03/2022-0.25m		Non Hazardous		53
17	WS17-16/03/2022-0.30m		Non Hazardous		55
18	WS18-17/03/2022-0.60m		Non Hazardous		57
19	WS15-18/03/2022-1.70m		Non Hazardous		59
20	WS02-15/03/2022-1.50m		Non Hazardous		60
21	WS07-17/03/2022-1.70m		Non Hazardous		61
22	WS05-17/03/2022-2.00m		Non Hazardous		62
23	WS13-1.00m		Non Hazardous		63
24	WS14-17/03/2022-1.50m		Non Hazardous		64
25	WS17-16/03/2022-1.80m		Non Hazardous		65

Related documents

#	Name	Description
1	EMT-22-4931-Batch-1-202204081545.HWOL	.hwol file used to create the Job
2	Example waste stream template for contaminated soils	waste stream template used to create this Job

Report

Created by: Bradley Massey

Created date: 11 May 2022 13:18 GMT

Appendices	Page
Appendix A: Classifier defined and non EU CLP determinands	66
Appendix B: Rationale for selection of metal species	70
Appendix C: Version	70

Classification of sample: WS01-15/03/2022-0.20m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS01-15/03/2022-0.20m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				3.5 mg/kg	1.32	4.621 mg/kg	0.000462 %		
	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) }				62.6 mg/kg	1.462	91.493 mg/kg	0.00915 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				22 mg/kg	1.126	24.77 mg/kg	0.00248 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	8 mg/kg	1.56	12.479 mg/kg	0.0008 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				31.6 mg/kg	2.976	94.05 mg/kg	0.0094 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				86 mg/kg	2.774	238.577 mg/kg	0.0239 %		
	024-007-00-3	236-878-9	13530-65-9							
11	pH				8.8 pH		8.8 pH	8.8 pH		
			PH							
12	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<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				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
15	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
16	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8							
17	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
19	pyrene	204-927-3	129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
21	chrysene	601-048-00-0	205-923-4	218-01-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
25	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	benzo[ghi]perylene	205-883-8	191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
Total:								0.0466 %		

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 Determinand - 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: WS02-15/03/2022-0.50m

 **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS02-15/03/2022-0.50m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				21.4 mg/kg	1.32	28.255 mg/kg	0.00283 %		
	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) }				131.1 mg/kg	1.462	191.61 mg/kg	0.0192 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				12 mg/kg	1.126	13.511 mg/kg	0.00135 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	20 mg/kg	1.56	31.196 mg/kg	0.002 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				0.1 mg/kg	1.353	0.135 mg/kg	0.0000135 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				21.2 mg/kg	2.976	63.097 mg/kg	0.00631 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				2 mg/kg	2.554	5.108 mg/kg	0.000511 %		
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				52 mg/kg	2.774	144.256 mg/kg	0.0144 %		
	024-007-00-3	236-878-9	13530-65-9							
11	TPH (C6 to C40) petroleum group				<38 mg/kg		<38 mg/kg	<0.0038 %		<LOD
			TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
13	benzene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
14	toluene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
15	ethylbenzene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
16	xylene				<0.013 mg/kg		<0.013 mg/kg	<0.0000013 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2]	95-47-6 [1] 106-42-3 [2]							





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
		203-576-3 [3] 215-535-7 [4]	108-38-3 [3] 1330-20-7 [4]							
17	pH		PH		7.22 pH		7.22 pH	7.22 pH		
18	naphthalene	601-052-00-2	202-049-5	91-20-3	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	acenaphthylene		205-917-1	208-96-8	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
20	acenaphthene		201-469-6	83-32-9	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
21	fluorene		201-695-5	86-73-7	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
22	phenanthrene		201-581-5	85-01-8	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
23	anthracene		204-371-1	120-12-7	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
24	fluoranthene		205-912-4	206-44-0	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
25	pyrene		204-927-3	129-00-0	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
26	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
27	chrysene	601-048-00-0	205-923-4	218-01-9	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
28	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
29	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
30	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
31	indeno[123-cd]pyrene		205-893-2	193-39-5	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
32	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
33	benzo[ghi]perylene		205-883-8	191-24-2	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
34	phenol	604-001-00-2	203-632-7	108-95-2	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	1,1-dichloroethane and 1,2-dichloroethane (combined)		203-458-1, 200-863-5	107-06-2, 75-34-3	<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
36	tetrachloroethylene	602-028-00-4	204-825-9	127-18-4	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
37	carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
38	trichloroethylene; trichloroethene	602-027-00-9	201-167-4	79-01-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
39	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
40	hexachlorobenzene	602-065-00-6	204-273-9	118-74-1	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
41	dichlorodifluoromethane		200-893-9	75-71-8	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
42	chloromethane; methyl chloride	602-001-00-7	200-817-4	74-87-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
43	bromomethane; methylbromide	602-002-00-2	200-813-2	74-83-9	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
44	chloroethane	602-009-00-0	200-830-5	75-00-3	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD

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	EU CLP index number	EC Number	CAS Number							
45	trichlorofluoromethane	200-892-3	75-69-4		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
46	1,1-dichloroethylene; vinylidene chloride	602-025-00-8	200-864-0	75-35-4	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
47	dichloromethane; methylene chloride	602-004-00-3	200-838-9	75-09-2	<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
48	2,2-dichloropropane	209-832-0	594-20-7		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
49	bromochloromethane	200-826-3	74-97-5		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
50	chloroform; trichloromethane	602-006-00-4	200-663-8	67-66-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
51	1,1,1-trichloroethane; methyl chloroform	602-013-00-2	200-756-3	71-55-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
52	1,1-dichloropropene	602-031-00-0	209-253-3	563-58-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
53	1,2-dichloropropane; propylene dichloride	602-020-00-0	201-152-2	78-87-5	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
54	dibromomethane	602-003-00-8	200-824-2	74-95-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
55	bromodichloromethane	200-856-7	75-27-4		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
56	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]	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
57	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
58	1,1,2-trichloroethane	602-014-00-8	201-166-9	79-00-5	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
59	1,3-dichloropropane	205-531-3	142-28-9		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
60	dibromochloromethane	204-704-0	124-48-1		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
61	1,2-dibromoethane	602-010-00-6	203-444-5	106-93-4	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
62	chlorobenzene	602-033-00-1	203-628-5	108-90-7	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
63	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
64	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
65	1,1,2,2-tetrachloroethane	602-015-00-3	201-197-8	79-34-5	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
66	bromobenzene	602-060-00-9	203-623-8	108-86-1	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
67	1,2,3-trichloropropane	602-062-00-X	202-486-1	96-18-4	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
68	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
69	tert-butylbenzene	202-632-4	98-06-6		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
70	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
71	sec-butylbenzene	205-227-0	135-98-8		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
72	4-isopropyltoluene	202-796-7	99-87-6		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
73	1,3-dichlorobenzene	602-067-00-7	208-792-1	541-73-1	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD


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	EU CLP index number	EC Number	CAS Number							
74	1,4-dichlorobenzene; p-dichlorobenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-035-00-2	203-400-5	106-46-7							
75	n-butylbenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
		203-209-7	104-51-8							
76	1,2-dichlorobenzene; o-dichlorobenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
77	1,2-dibromo-3-chloropropane				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-021-00-6	202-479-3	96-12-8							
78	1,2,4-trichlorobenzene				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
79	hexachlorobutadiene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
		201-765-5	87-68-3							
80	1,2,3-trichlorobenzene				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
		201-757-1	87-61-6							
81	styrene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
82	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<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]							
83	2-nitrophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-857-5	88-75-5							
84	2,4-dichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
85	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]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	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]							
86	2,4,5-trichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
87	2,4,6-trichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
88	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
89	4-nitrophenol; p-nitrophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	609-015-00-2	202-811-7	100-02-7							
90	pentachlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-002-00-8	201-778-6	87-86-5							
91	2-chloronaphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		202-079-9	91-58-7							
92	2-methyl naphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		202-078-3	91-57-6							
93	bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-317-00-9	204-211-0	117-81-7							
94	BBP; benzyl butyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
95	dibutyl phthalate; DBP				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
96	di-n-octyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-214-7	117-84-0							
97	diethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-550-6	84-66-2							
98	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
99	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
100	2,6-dinitrotoluene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
101	4-bromophenylphenylether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		202-952-4	101-55-3							
102	4-chloroaniline				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	612-137-00-9	203-401-0	106-47-8							
103	4-chlorophenylphenylether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		230-281-7	7005-72-3							
104	azobenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
105	bis(2-chloroethoxy)methane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		203-920-2	111-91-1							
106	bis(2-chloroethyl) ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-029-00-2	203-870-1	111-44-4							
107	carbazole				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-696-0	86-74-8							
108	dibenzofuran				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		205-071-3	132-64-9							
109	hexachlorocyclopentadiene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	602-078-00-7	201-029-3	77-47-4							
110	hexachloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		200-666-4	67-72-1							
111	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
112	nitrosodipropylamine				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	612-098-00-8	210-698-0	621-64-7							
113	nitrobenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	609-003-00-7	202-716-0	98-95-3							
114	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<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]							
115	cumene; [1] propylbenzene [2]				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]							
116	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<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]							
117	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
	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]							
118	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<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]							
Total:								0.0506 %		

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 Determinand - 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: WS03-15/03/2022-0.50m

 **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WS03-15/03/2022-0.50m	Chapter:
	Entry:
	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				52.6 mg/kg	1.32	69.449 mg/kg	0.00694 %		
	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) }				62.3 mg/kg	1.462	91.055 mg/kg	0.00911 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				10 mg/kg	1.126	11.259 mg/kg	0.00113 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	23 mg/kg	1.56	35.876 mg/kg	0.0023 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				0.3 mg/kg	1.353	0.406 mg/kg	0.0000406 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				18.7 mg/kg	2.976	55.656 mg/kg	0.00557 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				2 mg/kg	2.554	5.108 mg/kg	0.000511 %		
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				36 mg/kg	2.774	99.869 mg/kg	0.00999 %		
	024-007-00-3	236-878-9	13530-65-9							
11	pH				7.59 pH		7.59 pH	7.59 pH		
			PH							
12	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<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				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
15	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
16	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8							
17	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
19	pyrene	204-927-3	129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
21	chrysene	601-048-00-0	205-923-4	218-01-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
25	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	benzo[ghi]perylene	205-883-8	191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
Total:								0.0357 %		

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 Determinand - 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: WS04-17/03/2022-0.80m

 **Non Hazardous Waste**
Classified as 17 05 04
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS04-17/03/2022-0.80m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				12.6 mg/kg	1.32	16.636 mg/kg	0.00166 %		
	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) }				107.5 mg/kg	1.462	157.117 mg/kg	0.0157 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				10 mg/kg	1.126	11.259 mg/kg	0.00113 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	23 mg/kg	1.56	35.876 mg/kg	0.0023 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				15.6 mg/kg	2.976	46.43 mg/kg	0.00464 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				2 mg/kg	2.554	5.108 mg/kg	0.000511 %		
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				40 mg/kg	2.774	110.966 mg/kg	0.0111 %		
	024-007-00-3	236-878-9	13530-65-9							
11	pH				6.84 pH		6.84 pH	6.84 pH		
			PH							
12	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<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				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
15	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
16	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8							
17	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		0.04 mg/kg		0.04 mg/kg	0.000004 %		
19	pyrene	204-927-3	129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
21	chrysene	601-048-00-0	205-923-4	218-01-9	0.04 mg/kg		0.04 mg/kg	0.000004 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
25	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	benzo[ghi]perylene	205-883-8	191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
Total:								0.0372 %		

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 Determinand - 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: WS05-17/03/2022-0.20m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WS05-17/03/2022-0.20m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				18.3 mg/kg	1.32	24.162 mg/kg	0.00242 %		
	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) }				52.5 mg/kg	1.462	76.732 mg/kg	0.00767 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				18 mg/kg	1.126	20.266 mg/kg	0.00203 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	19 mg/kg	1.56	29.636 mg/kg	0.0019 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				0.1 mg/kg	1.353	0.135 mg/kg	0.0000135 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				18.2 mg/kg	2.976	54.168 mg/kg	0.00542 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				2 mg/kg	2.554	5.108 mg/kg	0.000511 %		
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				69 mg/kg	2.774	191.416 mg/kg	0.0191 %		
	024-007-00-3	236-878-9	13530-65-9							
11	pH				5.89 pH		5.89 pH	5.89 pH		
			PH							
12	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<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				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
15	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
16	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8							
17	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
19	pyrene	204-927-3	129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
21	chrysene	601-048-00-0	205-923-4	218-01-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
25	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	benzo[ghi]perylene	205-883-8	191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
Total:								0.0392 %		

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 Determinand - 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: WS06-17/03/2022-0.60m

 **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS06-17/03/2022-0.60m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				35.3 mg/kg	1.32	46.607 mg/kg	0.00466 %		
	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) }				77.3 mg/kg	1.462	112.978 mg/kg	0.0113 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				18 mg/kg	1.126	20.266 mg/kg	0.00203 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	21 mg/kg	1.56	32.756 mg/kg	0.0021 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				24.1 mg/kg	2.976	71.728 mg/kg	0.00717 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				2 mg/kg	2.554	5.108 mg/kg	0.000511 %		
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				52 mg/kg	2.774	144.256 mg/kg	0.0144 %		
	024-007-00-3	236-878-9	13530-65-9							
11	TPH (C6 to C40) petroleum group				<38 mg/kg		<38 mg/kg	<0.0038 %		<LOD
			TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
13	benzene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
14	toluene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
15	ethylbenzene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
16	xylene				<0.013 mg/kg		<0.013 mg/kg	<0.0000013 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2]	95-47-6 [1] 106-42-3 [2]							





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
		203-576-3 [3] 215-535-7 [4]	108-38-3 [3] 1330-20-7 [4]							
17	pH		PH		6.93 pH		6.93 pH	6.93 pH		
18	naphthalene	601-052-00-2	202-049-5	91-20-3	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	acenaphthylene		205-917-1	208-96-8	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
20	acenaphthene		201-469-6	83-32-9	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
21	fluorene		201-695-5	86-73-7	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
22	phenanthrene		201-581-5	85-01-8	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
23	anthracene		204-371-1	120-12-7	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
24	fluoranthene		205-912-4	206-44-0	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
25	pyrene		204-927-3	129-00-0	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
26	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
27	chrysene	601-048-00-0	205-923-4	218-01-9	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
28	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
29	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
30	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
31	indeno[123-cd]pyrene		205-893-2	193-39-5	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
32	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
33	benzo[ghi]perylene		205-883-8	191-24-2	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
34	phenol	604-001-00-2	203-632-7	108-95-2	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	1,1-dichloroethane and 1,2-dichloroethane (combined)		203-458-1, 200-863-5	107-06-2, 75-34-3	<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
36	tetrachloroethylene	602-028-00-4	204-825-9	127-18-4	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
37	carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
38	trichloroethylene; trichloroethene	602-027-00-9	201-167-4	79-01-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
39	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
40	hexachlorobenzene	602-065-00-6	204-273-9	118-74-1	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
41	dichlorodifluoromethane		200-893-9	75-71-8	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
42	chloromethane; methyl chloride	602-001-00-7	200-817-4	74-87-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
43	bromomethane; methylbromide	602-002-00-2	200-813-2	74-83-9	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
44	chloroethane	602-009-00-0	200-830-5	75-00-3	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
45	trichlorofluoromethane	200-892-3	75-69-4		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
46	1,1-dichloroethylene; vinylidene chloride	602-025-00-8	200-864-0	75-35-4	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
47	dichloromethane; methylene chloride	602-004-00-3	200-838-9	75-09-2	<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
48	2,2-dichloropropane	209-832-0	594-20-7		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
49	bromochloromethane	200-826-3	74-97-5		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
50	chloroform; trichloromethane	602-006-00-4	200-663-8	67-66-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
51	1,1,1-trichloroethane; methyl chloroform	602-013-00-2	200-756-3	71-55-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
52	1,1-dichloropropene	602-031-00-0	209-253-3	563-58-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
53	1,2-dichloropropane; propylene dichloride	602-020-00-0	201-152-2	78-87-5	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
54	dibromomethane	602-003-00-8	200-824-2	74-95-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
55	bromodichloromethane	200-856-7	75-27-4		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
56	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]	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
57	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
58	1,1,2-trichloroethane	602-014-00-8	201-166-9	79-00-5	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
59	1,3-dichloropropane	205-531-3	142-28-9		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
60	dibromochloromethane	204-704-0	124-48-1		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
61	1,2-dibromoethane	602-010-00-6	203-444-5	106-93-4	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
62	chlorobenzene	602-033-00-1	203-628-5	108-90-7	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
63	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
64	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
65	1,1,2,2-tetrachloroethane	602-015-00-3	201-197-8	79-34-5	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
66	bromobenzene	602-060-00-9	203-623-8	108-86-1	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
67	1,2,3-trichloropropane	602-062-00-X	202-486-1	96-18-4	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
68	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
69	tert-butylbenzene	202-632-4	98-06-6		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
70	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
71	sec-butylbenzene	205-227-0	135-98-8		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
72	4-isopropyltoluene	202-796-7	99-87-6		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
73	1,3-dichlorobenzene	602-067-00-7	208-792-1	541-73-1	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
74	1,4-dichlorobenzene; p-dichlorobenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-035-00-2	203-400-5	106-46-7							
75	n-butylbenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
		203-209-7	104-51-8							
76	1,2-dichlorobenzene; o-dichlorobenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
77	1,2-dibromo-3-chloropropane				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-021-00-6	202-479-3	96-12-8							
78	1,2,4-trichlorobenzene				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
79	hexachlorobutadiene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
		201-765-5	87-68-3							
80	1,2,3-trichlorobenzene				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
		201-757-1	87-61-6							
81	styrene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
82	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<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]							
83	2-nitrophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-857-5	88-75-5							
84	2,4-dichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
85	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]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	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]							
86	2,4,5-trichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
87	2,4,6-trichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
88	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
89	4-nitrophenol; p-nitrophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	609-015-00-2	202-811-7	100-02-7							
90	pentachlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-002-00-8	201-778-6	87-86-5							
91	2-chloronaphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		202-079-9	91-58-7							
92	2-methyl naphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		202-078-3	91-57-6							
93	bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-317-00-9	204-211-0	117-81-7							
94	BBP; benzyl butyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
95	dibutyl phthalate; DBP				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
96	di-n-octyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-214-7	117-84-0							
97	diethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-550-6	84-66-2							
98	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
99	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
100	2,6-dinitrotoluene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
101	4-bromophenylphenylether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		202-952-4	101-55-3							
102	4-chloroaniline				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	612-137-00-9	203-401-0	106-47-8							
103	4-chlorophenylphenylether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		230-281-7	7005-72-3							
104	azobenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
105	bis(2-chloroethoxy)methane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		203-920-2	111-91-1							
106	bis(2-chloroethyl) ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-029-00-2	203-870-1	111-44-4							
107	carbazole				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-696-0	86-74-8							
108	dibenzofuran				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		205-071-3	132-64-9							
109	hexachlorocyclopentadiene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	602-078-00-7	201-029-3	77-47-4							
110	hexachloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		200-666-4	67-72-1							
111	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
112	nitrosodipropylamine				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	612-098-00-8	210-698-0	621-64-7							
113	nitrobenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	609-003-00-7	202-716-0	98-95-3							
114	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<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]							
115	cumene; [1] propylbenzene [2]				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]							
116	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<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]							
117	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
	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]							
118	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<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]							
Total:								0.0462 %		

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 Determinand - 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: WS07-17/03/2022-0.20m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WS07-17/03/2022-0.20m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				16.2 mg/kg	1.32	21.389 mg/kg	0.00214 %		
	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) }				38.9 mg/kg	1.462	56.855 mg/kg	0.00569 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				16 mg/kg	1.126	18.014 mg/kg	0.0018 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	25 mg/kg	1.56	38.995 mg/kg	0.0025 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				0.2 mg/kg	1.353	0.271 mg/kg	0.0000271 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				13.8 mg/kg	2.976	41.072 mg/kg	0.00411 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				2 mg/kg	2.554	5.108 mg/kg	0.000511 %		
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				81 mg/kg	2.774	224.706 mg/kg	0.0225 %		
	024-007-00-3	236-878-9	13530-65-9							
11	pH				6.53 pH		6.53 pH	6.53 pH		
			PH							
12	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<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				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
15	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
16	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8							
17	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
19	pyrene	204-927-3	129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
21	chrysene	601-048-00-0	205-923-4	218-01-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
25	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	benzo[ghi]perylene	205-883-8	191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
Total:								0.0394 %		

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 Determinand - 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: WS08-15/03/2022-0.20m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS08-15/03/2022-0.20m	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)

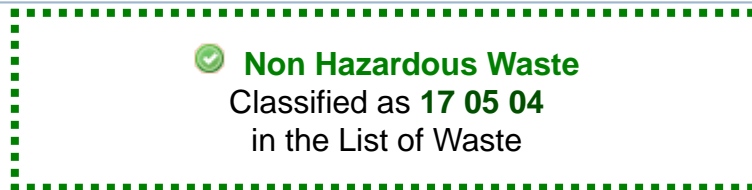
#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				21.3 mg/kg	1.32	28.123 mg/kg	0.00281 %		
	033-003-00-0	215-481-4	1327-53-3							
2	cadmium { cadmium 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) }				44.6 mg/kg	1.462	65.185 mg/kg	0.00652 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
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	20 mg/kg	1.56	31.196 mg/kg	0.002 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				26.5 mg/kg	2.976	78.871 mg/kg	0.00789 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				2 mg/kg	2.554	5.108 mg/kg	0.000511 %		
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				71 mg/kg	2.774	196.964 mg/kg	0.0197 %		
	024-007-00-3	236-878-9	13530-65-9							
11	pH				6.2 pH		6.2 pH	6.2 pH		
			PH							
12	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<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				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
15	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
16	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8							
17	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
19	pyrene	204-927-3	129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
21	chrysene	601-048-00-0	205-923-4	218-01-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
25	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	benzo[ghi]perylene	205-883-8	191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
Total:								0.0424 %		

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 Determinand - 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: WS09-15/03/2022-0.60m



Sample details

Sample name:	LoW Code:	
WS09-15/03/2022-0.60m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				18.4 mg/kg	1.32	24.294 mg/kg	0.00243 %		
	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) }				51.3 mg/kg	1.462	74.978 mg/kg	0.0075 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				21 mg/kg	1.126	23.644 mg/kg	0.00236 %		
	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 }				0.1 mg/kg	1.353	0.135 mg/kg	0.0000135 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				24.7 mg/kg	2.976	73.514 mg/kg	0.00735 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				1 mg/kg	2.554	2.554 mg/kg	0.000255 %		
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				63 mg/kg	2.774	174.771 mg/kg	0.0175 %		
	024-007-00-3	236-878-9	13530-65-9							
11	pH				7.65 pH		7.65 pH	7.65 pH		
			PH							
12	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<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				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
15	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
16	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8							
17	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
19	pyrene	204-927-3	129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
21	chrysene	601-048-00-0	205-923-4	218-01-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
25	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	benzo[ghi]perylene	205-883-8	191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
Total:								0.0393 %		

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 Determinand - 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: WS10-15/03/2022-0.50m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WS10-15/03/2022-0.50m	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
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				10.1	mg/kg	1.32	13.335	mg/kg	0.00133 %		
	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) }				50.6	mg/kg	1.462	73.955	mg/kg	0.0074 %		
		215-160-9	1308-38-9									
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3	mg/kg	2.27	<0.681	mg/kg	<0.0000681 %		<LOD
	024-017-00-8											
5	copper { dicopper oxide; copper (I) oxide }				20	mg/kg	1.126	22.518	mg/kg	0.00225 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead chromate }			1	14	mg/kg	1.56	21.837	mg/kg	0.0014 %		
	082-004-00-2	231-846-0	7758-97-6									
7	mercury { mercury dichloride }				0.2	mg/kg	1.353	0.271	mg/kg	0.0000271 %		
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				25.8	mg/kg	2.976	76.788	mg/kg	0.00768 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { nickel selenate }				1	mg/kg	2.554	2.554	mg/kg	0.000255 %		
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc chromate }				88	mg/kg	2.774	244.125	mg/kg	0.0244 %		
	024-007-00-3	236-878-9	13530-65-9									
11	pH				10.2	pH		10.2	pH	10.2 pH		
			PH									
12	naphthalene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
	601-052-00-2	202-049-5	91-20-3									
13	acenaphthylene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
		205-917-1	208-96-8									
14	acenaphthene				0.59	mg/kg		0.59	mg/kg	0.000059 %		
		201-469-6	83-32-9									
15	fluorene				0.42	mg/kg		0.42	mg/kg	0.000042 %		
		201-695-5	86-73-7									
16	phenanthrene				2.28	mg/kg		2.28	mg/kg	0.000228 %		
		201-581-5	85-01-8									
17	anthracene				0.72	mg/kg		0.72	mg/kg	0.000072 %		
		204-371-1	120-12-7									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		4.27 mg/kg		4.27 mg/kg	0.000427 %		
19	pyrene	204-927-3	129-00-0		3.43 mg/kg		3.43 mg/kg	0.000343 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	1.3 mg/kg		1.3 mg/kg	0.00013 %		
21	chrysene	601-048-00-0	205-923-4	218-01-9	1.32 mg/kg		1.32 mg/kg	0.000132 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	1.51 mg/kg		1.51 mg/kg	0.000151 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.59 mg/kg		0.59 mg/kg	0.000059 %		
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1.01 mg/kg		1.01 mg/kg	0.000101 %		
25	indeno[123-cd]pyrene	205-893-2	193-39-5		0.76 mg/kg		0.76 mg/kg	0.000076 %		
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.13 mg/kg		0.13 mg/kg	0.000013 %		
27	benzo[ghi]perylene	205-883-8	191-24-2		0.65 mg/kg		0.65 mg/kg	0.000065 %		
Total:								0.0468 %		

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 Determinand - 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: WS11-15/03/2022-0.20m

 **Non Hazardous Waste**
Classified as 17 05 04
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS11-15/03/2022-0.20m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				7.7 mg/kg	1.32	10.167 mg/kg	0.00102 %		
	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) }				39 mg/kg	1.462	57.001 mg/kg	0.0057 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
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	9 mg/kg	1.56	14.038 mg/kg	0.0009 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				0.1 mg/kg	1.353	0.135 mg/kg	0.0000135 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				31.3 mg/kg	2.976	93.157 mg/kg	0.00932 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				1 mg/kg	2.554	2.554 mg/kg	0.000255 %		
	028-031-00-5	239-125-2	15060-62-5							
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	TPH (C6 to C40) petroleum group				<38 mg/kg		<38 mg/kg	<0.0038 %		<LOD
			TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
13	benzene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
14	toluene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
15	ethylbenzene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
16	xylene				<0.013 mg/kg		<0.013 mg/kg	<0.0000013 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2]	95-47-6 [1] 106-42-3 [2]							





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
		203-576-3 [3] 215-535-7 [4]	108-38-3 [3] 1330-20-7 [4]							
17	pH		PH		9.85 pH		9.85 pH	9.85 pH		
18	naphthalene	601-052-00-2	202-049-5	91-20-3	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	acenaphthylene		205-917-1	208-96-8	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
20	acenaphthene		201-469-6	83-32-9	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
21	fluorene		201-695-5	86-73-7	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
22	phenanthrene		201-581-5	85-01-8	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
23	anthracene		204-371-1	120-12-7	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
24	fluoranthene		205-912-4	206-44-0	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
25	pyrene		204-927-3	129-00-0	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
26	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
27	chrysene	601-048-00-0	205-923-4	218-01-9	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
28	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
29	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
30	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
31	indeno[123-cd]pyrene		205-893-2	193-39-5	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
32	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
33	benzo[ghi]perylene		205-883-8	191-24-2	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
34	phenol	604-001-00-2	203-632-7	108-95-2	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	1,1-dichloroethane and 1,2-dichloroethane (combined)		203-458-1, 200-863-5	107-06-2, 75-34-3	<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
36	tetrachloroethylene	602-028-00-4	204-825-9	127-18-4	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
37	carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
38	trichloroethylene; trichloroethene	602-027-00-9	201-167-4	79-01-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
39	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
40	hexachlorobenzene	602-065-00-6	204-273-9	118-74-1	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
41	dichlorodifluoromethane		200-893-9	75-71-8	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
42	chloromethane; methyl chloride	602-001-00-7	200-817-4	74-87-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
43	bromomethane; methylbromide	602-002-00-2	200-813-2	74-83-9	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
44	chloroethane	602-009-00-0	200-830-5	75-00-3	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
45	trichlorofluoromethane	200-892-3	75-69-4		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
46	1,1-dichloroethylene; vinylidene chloride	602-025-00-8	200-864-0	75-35-4	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
47	dichloromethane; methylene chloride	602-004-00-3	200-838-9	75-09-2	<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
48	2,2-dichloropropane	209-832-0	594-20-7		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
49	bromochloromethane	200-826-3	74-97-5		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
50	chloroform; trichloromethane	602-006-00-4	200-663-8	67-66-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
51	1,1,1-trichloroethane; methyl chloroform	602-013-00-2	200-756-3	71-55-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
52	1,1-dichloropropene	602-031-00-0	209-253-3	563-58-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
53	1,2-dichloropropane; propylene dichloride	602-020-00-0	201-152-2	78-87-5	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
54	dibromomethane	602-003-00-8	200-824-2	74-95-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
55	bromodichloromethane	200-856-7	75-27-4		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
56	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]	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
57	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
58	1,1,2-trichloroethane	602-014-00-8	201-166-9	79-00-5	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
59	1,3-dichloropropane	205-531-3	142-28-9		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
60	dibromochloromethane	204-704-0	124-48-1		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
61	1,2-dibromoethane	602-010-00-6	203-444-5	106-93-4	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
62	chlorobenzene	602-033-00-1	203-628-5	108-90-7	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
63	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
64	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
65	1,1,2,2-tetrachloroethane	602-015-00-3	201-197-8	79-34-5	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
66	bromobenzene	602-060-00-9	203-623-8	108-86-1	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
67	1,2,3-trichloropropane	602-062-00-X	202-486-1	96-18-4	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
68	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
69	tert-butylbenzene	202-632-4	98-06-6		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
70	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
71	sec-butylbenzene	205-227-0	135-98-8		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
72	4-isopropyltoluene	202-796-7	99-87-6		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
73	1,3-dichlorobenzene	602-067-00-7	208-792-1	541-73-1	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
74	1,4-dichlorobenzene; p-dichlorobenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-035-00-2	203-400-5	106-46-7							
75	n-butylbenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
		203-209-7	104-51-8							
76	1,2-dichlorobenzene; o-dichlorobenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
77	1,2-dibromo-3-chloropropane				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-021-00-6	202-479-3	96-12-8							
78	1,2,4-trichlorobenzene				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
79	hexachlorobutadiene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
		201-765-5	87-68-3							
80	1,2,3-trichlorobenzene				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
		201-757-1	87-61-6							
81	styrene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
82	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<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]							
83	2-nitrophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-857-5	88-75-5							
84	2,4-dichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
85	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]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	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]							
86	2,4,5-trichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
87	2,4,6-trichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
88	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
89	4-nitrophenol; p-nitrophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	609-015-00-2	202-811-7	100-02-7							
90	pentachlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-002-00-8	201-778-6	87-86-5							
91	2-chloronaphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		202-079-9	91-58-7							
92	2-methyl naphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		202-078-3	91-57-6							
93	bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-317-00-9	204-211-0	117-81-7							
94	BBP; benzyl butyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
95	dibutyl phthalate; DBP				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
96	di-n-octyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-214-7	117-84-0							
97	diethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-550-6	84-66-2							
98	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
99	2,4-dinitrotoluene; [1] dinitrotoluene [2] 609-007-00-9 204-450-0 [1] 121-14-2 [1] 246-836-1 [2] 25321-14-6 [2]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
100	2,6-dinitrotoluene 609-049-00-8 210-106-0 606-20-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
101	4-bromophenylphenylether 202-952-4 101-55-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
102	4-chloroaniline 612-137-00-9 203-401-0 106-47-8				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
103	4-chlorophenylphenylether 230-281-7 7005-72-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
104	azobenzene 611-001-00-6 203-102-5 103-33-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
105	bis(2-chloroethoxy)methane 203-920-2 111-91-1				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
106	bis(2-chloroethyl) ether 603-029-00-2 203-870-1 111-44-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
107	carbazole 201-696-0 86-74-8				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
108	dibenzofuran 205-071-3 132-64-9				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
109	hexachlorocyclopentadiene 602-078-00-7 201-029-3 77-47-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
110	hexachloroethane 200-666-4 67-72-1				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
111	3,5,5-trimethylcyclohex-2-enone; isophorone 606-012-00-8 201-126-0 78-59-1				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
112	nitrosodipropylamine 612-098-00-8 210-698-0 621-64-7				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
113	nitrobenzene 609-003-00-7 202-716-0 98-95-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
114	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3] 602-026-00-3 208-750-2 [1] 540-59-0 [1] 205-859-7 [2] 156-59-2 [2] 205-860-2 [3] 156-60-5 [3]				<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
115	cumene; [1] propylbenzene [2] 601-024-00-X 202-704-5 [1] 98-82-8 [1] 203-132-9 [2] 103-65-1 [2]				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
116	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4] 602-040-00-X 202-424-3 [1] 95-49-8 [1] 203-580-5 [2] 108-41-8 [2] 203-397-0 [3] 106-43-4 [3] 246-698-2 [4] 25168-05-2 [4]				<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
117	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4] 604-004-00-9 203-577-9 [1] 108-39-4 [1] 202-423-8 [2] 95-48-7 [2] 203-398-6 [3] 106-44-5 [3] 215-293-2 [4] 1319-77-3 [4]				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
118	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3] 612-012-00-9 201-855-4 [1] 88-74-4 [1] 99-09-2 202-729-1 [2] 2 100-01-6 [3] 202-810-1 [3]				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
Total:								0.0541 %		

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 Determinand - 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: WS12-15/03/2022-0.60m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS12-15/03/2022-0.60m	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
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				21.9	mg/kg	1.32	28.915	mg/kg	0.00289 %		
	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) }				54.3	mg/kg	1.462	79.362	mg/kg	0.00794 %		
		215-160-9	1308-38-9									
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3	mg/kg	2.27	<0.681	mg/kg	<0.0000681 %		<LOD
	024-017-00-8											
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	23	mg/kg	1.56	35.876	mg/kg	0.0023 %		
	082-004-00-2	231-846-0	7758-97-6									
7	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				26.2	mg/kg	2.976	77.978	mg/kg	0.0078 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { nickel selenate }				2	mg/kg	2.554	5.108	mg/kg	0.000511 %		
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc chromate }				62	mg/kg	2.774	171.997	mg/kg	0.0172 %		
	024-007-00-3	236-878-9	13530-65-9									
11	pH				7.19	pH		7.19	pH	7.19 pH		
			PH									
12	naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<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				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
15	fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7									
16	phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8									
17	anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
19	pyrene	204-927-3	129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
21	chrysene	601-048-00-0	205-923-4	218-01-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
25	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	benzo[ghi]perylene	205-883-8	191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
Total:								0.0409 %		

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 Determinand - 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: WS13-16/03/2022-0.50m

 **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS13-16/03/2022-0.50m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				6.7 mg/kg	1.32	8.846 mg/kg	0.000885 %		
	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) }				40.9 mg/kg	1.462	59.778 mg/kg	0.00598 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				23 mg/kg	1.126	25.895 mg/kg	0.00259 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	163 mg/kg	1.56	254.25 mg/kg	0.0163 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				11.3 mg/kg	2.976	33.632 mg/kg	0.00336 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				118 mg/kg	2.774	327.349 mg/kg	0.0327 %		
	024-007-00-3	236-878-9	13530-65-9							
11	TPH (C6 to C40) petroleum group				127 mg/kg		127 mg/kg	0.0127 %		
			TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
13	benzene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
14	toluene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
15	ethylbenzene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
16	xylene				<0.013 mg/kg		<0.013 mg/kg	<0.0000013 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2]	95-47-6 [1] 106-42-3 [2]							


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
		203-576-3 [3] 215-535-7 [4]	108-38-3 [3] 1330-20-7 [4]							
17	pH		PH		7.94 pH		7.94 pH	7.94 pH		
18	naphthalene	601-052-00-2	202-049-5	91-20-3	0.18 mg/kg		0.18 mg/kg	0.000018 %		
19	acenaphthylene		205-917-1	208-96-8	0.08 mg/kg		0.08 mg/kg	0.000008 %		
20	acenaphthene		201-469-6	83-32-9	0.47 mg/kg		0.47 mg/kg	0.000047 %		
21	fluorene		201-695-5	86-73-7	0.55 mg/kg		0.55 mg/kg	0.000055 %		
22	phenanthrene		201-581-5	85-01-8	3.98 mg/kg		3.98 mg/kg	0.000398 %		
23	anthracene		204-371-1	120-12-7	0.83 mg/kg		0.83 mg/kg	0.000083 %		
24	fluoranthene		205-912-4	206-44-0	4.122 mg/kg		4.122 mg/kg	0.000412 %		
25	pyrene		204-927-3	129-00-0	4.123 mg/kg		4.123 mg/kg	0.000412 %		
26	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	2.071 mg/kg		2.071 mg/kg	0.000207 %		
27	chrysene	601-048-00-0	205-923-4	218-01-9	1.953 mg/kg		1.953 mg/kg	0.000195 %		
28	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	2.442 mg/kg		2.442 mg/kg	0.000244 %		
29	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.949 mg/kg		0.949 mg/kg	0.0000949 %		
30	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	2.277 mg/kg		2.277 mg/kg	0.000228 %		
31	indeno[123-cd]pyrene		205-893-2	193-39-5	1.147 mg/kg		1.147 mg/kg	0.000115 %		
32	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.386 mg/kg		0.386 mg/kg	0.0000386 %		
33	benzo[ghi]perylene		205-883-8	191-24-2	1.246 mg/kg		1.246 mg/kg	0.000125 %		
34	phenol	604-001-00-2	203-632-7	108-95-2	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	1,1-dichloroethane and 1,2-dichloroethane (combined)		203-458-1, 200-863-5	107-06-2, 75-34-3	<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
36	tetrachloroethylene	602-028-00-4	204-825-9	127-18-4	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
37	carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
38	trichloroethylene; trichloroethene	602-027-00-9	201-167-4	79-01-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
39	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
40	hexachlorobenzene	602-065-00-6	204-273-9	118-74-1	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
41	dichlorodifluoromethane		200-893-9	75-71-8	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
42	chloromethane; methyl chloride	602-001-00-7	200-817-4	74-87-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
43	bromomethane; methylbromide	602-002-00-2	200-813-2	74-83-9	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
44	chloroethane	602-009-00-0	200-830-5	75-00-3	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
45	trichlorofluoromethane	200-892-3	75-69-4		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
46	1,1-dichloroethylene; vinylidene chloride	602-025-00-8	200-864-0	75-35-4	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
47	dichloromethane; methylene chloride	602-004-00-3	200-838-9	75-09-2	<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
48	2,2-dichloropropane	209-832-0	594-20-7		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
49	bromochloromethane	200-826-3	74-97-5		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
50	chloroform; trichloromethane	602-006-00-4	200-663-8	67-66-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
51	1,1,1-trichloroethane; methyl chloroform	602-013-00-2	200-756-3	71-55-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
52	1,1-dichloropropene	602-031-00-0	209-253-3	563-58-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
53	1,2-dichloropropane; propylene dichloride	602-020-00-0	201-152-2	78-87-5	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
54	dibromomethane	602-003-00-8	200-824-2	74-95-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
55	bromodichloromethane	200-856-7	75-27-4		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
56	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]	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
57	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
58	1,1,2-trichloroethane	602-014-00-8	201-166-9	79-00-5	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
59	1,3-dichloropropane	205-531-3	142-28-9		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
60	dibromochloromethane	204-704-0	124-48-1		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
61	1,2-dibromoethane	602-010-00-6	203-444-5	106-93-4	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
62	chlorobenzene	602-033-00-1	203-628-5	108-90-7	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
63	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
64	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
65	1,1,2,2-tetrachloroethane	602-015-00-3	201-197-8	79-34-5	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
66	bromobenzene	602-060-00-9	203-623-8	108-86-1	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
67	1,2,3-trichloropropane	602-062-00-X	202-486-1	96-18-4	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
68	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
69	tert-butylbenzene	202-632-4	98-06-6		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
70	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
71	sec-butylbenzene	205-227-0	135-98-8		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
72	4-isopropyltoluene	202-796-7	99-87-6		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
73	1,3-dichlorobenzene	602-067-00-7	208-792-1	541-73-1	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
74	1,4-dichlorobenzene; p-dichlorobenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-035-00-2	203-400-5	106-46-7							
75	n-butylbenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
		203-209-7	104-51-8							
76	1,2-dichlorobenzene; o-dichlorobenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
77	1,2-dibromo-3-chloropropane				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-021-00-6	202-479-3	96-12-8							
78	1,2,4-trichlorobenzene				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
79	hexachlorobutadiene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
		201-765-5	87-68-3							
80	1,2,3-trichlorobenzene				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
		201-757-1	87-61-6							
81	styrene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
82	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<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]							
83	2-nitrophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-857-5	88-75-5							
84	2,4-dichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
85	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]				0.016 mg/kg		0.016 mg/kg	0.0000016 %		
	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]							
86	2,4,5-trichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
87	2,4,6-trichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
88	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
89	4-nitrophenol; p-nitrophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	609-015-00-2	202-811-7	100-02-7							
90	pentachlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-002-00-8	201-778-6	87-86-5							
91	2-chloronaphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		202-079-9	91-58-7							
92	2-methyl naphthalene				0.071 mg/kg		0.071 mg/kg	0.0000071 %		
		202-078-3	91-57-6							
93	bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-317-00-9	204-211-0	117-81-7							
94	BBP; benzyl butyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
95	dibutyl phthalate; DBP				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
96	di-n-octyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-214-7	117-84-0							
97	diethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-550-6	84-66-2							
98	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
99	2,4-dinitrotoluene; [1] dinitrotoluene [2] 609-007-00-9 204-450-0 [1] 121-14-2 [1] 246-836-1 [2] 25321-14-6 [2]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
100	2,6-dinitrotoluene 609-049-00-8 210-106-0 606-20-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
101	4-bromophenylphenylether 202-952-4 101-55-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
102	4-chloroaniline 612-137-00-9 203-401-0 106-47-8				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
103	4-chlorophenylphenylether 230-281-7 7005-72-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
104	azobenzene 611-001-00-6 203-102-5 103-33-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
105	bis(2-chloroethoxy)methane 203-920-2 111-91-1				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
106	bis(2-chloroethyl) ether 603-029-00-2 203-870-1 111-44-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
107	carbazole 201-696-0 86-74-8				0.218 mg/kg		0.218 mg/kg	0.0000218 %		
108	dibenzofuran 205-071-3 132-64-9				0.089 mg/kg		0.089 mg/kg	0.0000089 %		
109	hexachlorocyclopentadiene 602-078-00-7 201-029-3 77-47-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
110	hexachloroethane 200-666-4 67-72-1				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
111	3,5,5-trimethylcyclohex-2-enone; isophorone 606-012-00-8 201-126-0 78-59-1				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
112	nitrosodipropylamine 612-098-00-8 210-698-0 621-64-7				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
113	nitrobenzene 609-003-00-7 202-716-0 98-95-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
114	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3] 602-026-00-3 208-750-2 [1] 540-59-0 [1] 205-859-7 [2] 156-59-2 [2] 205-860-2 [3] 156-60-5 [3]				<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
115	cumene; [1] propylbenzene [2] 601-024-00-X 202-704-5 [1] 98-82-8 [1] 203-132-9 [2] 103-65-1 [2]				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
116	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4] 602-040-00-X 202-424-3 [1] 95-49-8 [1] 203-580-5 [2] 108-41-8 [2] 203-397-0 [3] 106-43-4 [3] 246-698-2 [4] 25168-05-2 [4]				<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
117	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4] 604-004-00-9 203-577-9 [1] 108-39-4 [1] 202-423-8 [2] 95-48-7 [2] 203-398-6 [3] 106-44-5 [3] 215-293-2 [4] 1319-77-3 [4]				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
118	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3] 612-012-00-9 201-855-4 [1] 88-74-4 [1] 99-09-2 202-729-1 [2] 2 100-01-6 [3] 202-810-1 [3]				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
Total:								0.0777 %		

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 Determinand - 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 free phase contamination detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0127%)

Classification of sample: WS14-16/03/2022-0.20m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WS14-16/03/2022-0.20m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				6.4 mg/kg	1.32	8.45 mg/kg	0.000845 %		
	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) }				108.7 mg/kg	1.462	158.871 mg/kg	0.0159 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				12 mg/kg	1.126	13.511 mg/kg	0.00135 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	20 mg/kg	1.56	31.196 mg/kg	0.002 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				19.7 mg/kg	2.976	58.632 mg/kg	0.00586 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				1 mg/kg	2.554	2.554 mg/kg	0.000255 %		
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				75 mg/kg	2.774	208.061 mg/kg	0.0208 %		
	024-007-00-3	236-878-9	13530-65-9							
11	TPH (C6 to C40) petroleum group				171 mg/kg		171 mg/kg	0.0171 %		
			TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
13	benzene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
14	toluene				0.004 mg/kg		0.004 mg/kg	0.0000004 %		
	601-021-00-3	203-625-9	108-88-3							
15	ethylbenzene				0.005 mg/kg		0.005 mg/kg	0.0000005 %		
	601-023-00-4	202-849-4	100-41-4							
16	xylene				0.02 mg/kg		0.02 mg/kg	0.000002 %		
	601-022-00-9	202-422-2 [1] 203-396-5 [2]	95-47-6 [1] 106-42-3 [2]							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
		203-576-3 [3] 215-535-7 [4]	108-38-3 [3] 1330-20-7 [4]							
17	pH		PH		8.46 pH		8.46 pH	8.46 pH		
18	naphthalene	601-052-00-2	202-049-5	91-20-3	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	acenaphthylene		205-917-1	208-96-8	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
20	acenaphthene		201-469-6	83-32-9	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
21	fluorene		201-695-5	86-73-7	0.021 mg/kg		0.021 mg/kg	0.0000021 %		
22	phenanthrene		201-581-5	85-01-8	0.076 mg/kg		0.076 mg/kg	0.0000076 %		
23	anthracene		204-371-1	120-12-7	0.033 mg/kg		0.033 mg/kg	0.0000033 %		
24	fluoranthene		205-912-4	206-44-0	0.181 mg/kg		0.181 mg/kg	0.0000181 %		
25	pyrene		204-927-3	129-00-0	0.187 mg/kg		0.187 mg/kg	0.0000187 %		
26	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.119 mg/kg		0.119 mg/kg	0.0000119 %		
27	chrysene	601-048-00-0	205-923-4	218-01-9	0.1 mg/kg		0.1 mg/kg	0.00001 %		
28	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.126 mg/kg		0.126 mg/kg	0.0000126 %		
29	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.049 mg/kg		0.049 mg/kg	0.0000049 %		
30	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.104 mg/kg		0.104 mg/kg	0.0000104 %		
31	indeno[123-cd]pyrene		205-893-2	193-39-5	0.07 mg/kg		0.07 mg/kg	0.000007 %		
32	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.025 mg/kg		0.025 mg/kg	0.0000025 %		
33	benzo[ghi]perylene		205-883-8	191-24-2	0.07 mg/kg		0.07 mg/kg	0.000007 %		
34	phenol	604-001-00-2	203-632-7	108-95-2	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	1,1-dichloroethane and 1,2-dichloroethane (combined)		203-458-1, 200-863-5	107-06-2, 75-34-3	<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
36	tetrachloroethylene	602-028-00-4	204-825-9	127-18-4	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
37	carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
38	trichloroethylene; trichloroethene	602-027-00-9	201-167-4	79-01-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
39	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
40	hexachlorobenzene	602-065-00-6	204-273-9	118-74-1	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
41	dichlorodifluoromethane		200-893-9	75-71-8	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
42	chloromethane; methyl chloride	602-001-00-7	200-817-4	74-87-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
43	bromomethane; methylbromide	602-002-00-2	200-813-2	74-83-9	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
44	chloroethane	602-009-00-0	200-830-5	75-00-3	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
45	trichlorofluoromethane	200-892-3	75-69-4		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
46	1,1-dichloroethylene; vinylidene chloride	602-025-00-8	200-864-0	75-35-4	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
47	dichloromethane; methylene chloride	602-004-00-3	200-838-9	75-09-2	<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
48	2,2-dichloropropane	209-832-0	594-20-7		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
49	bromochloromethane	200-826-3	74-97-5		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
50	chloroform; trichloromethane	602-006-00-4	200-663-8	67-66-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
51	1,1,1-trichloroethane; methyl chloroform	602-013-00-2	200-756-3	71-55-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
52	1,1-dichloropropene	602-031-00-0	209-253-3	563-58-6	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
53	1,2-dichloropropane; propylene dichloride	602-020-00-0	201-152-2	78-87-5	<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<LOD
54	dibromomethane	602-003-00-8	200-824-2	74-95-3	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
55	bromodichloromethane	200-856-7	75-27-4		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
56	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]	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
57	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
58	1,1,2-trichloroethane	602-014-00-8	201-166-9	79-00-5	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
59	1,3-dichloropropane	205-531-3	142-28-9		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
60	dibromochloromethane	204-704-0	124-48-1		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
61	1,2-dibromoethane	602-010-00-6	203-444-5	106-93-4	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
62	chlorobenzene	602-033-00-1	203-628-5	108-90-7	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
63	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
64	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
65	1,1,2,2-tetrachloroethane	602-015-00-3	201-197-8	79-34-5	<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
66	bromobenzene	602-060-00-9	203-623-8	108-86-1	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
67	1,2,3-trichloropropane	602-062-00-X	202-486-1	96-18-4	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
68	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8	0.004 mg/kg		0.004 mg/kg	0.0000004 %		
69	tert-butylbenzene	202-632-4	98-06-6		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
70	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6	0.014 mg/kg		0.014 mg/kg	0.0000014 %		
71	sec-butylbenzene	205-227-0	135-98-8		0.005 mg/kg		0.005 mg/kg	0.0000005 %		
72	4-isopropyltoluene	202-796-7	99-87-6		<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
73	1,3-dichlorobenzene	602-067-00-7	208-792-1	541-73-1	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
74	1,4-dichlorobenzene; p-dichlorobenzene				0.092 mg/kg		0.092 mg/kg	0.0000092 %		
	602-035-00-2	203-400-5	106-46-7							
75	n-butylbenzene				0.011 mg/kg		0.011 mg/kg	0.0000011 %		
		203-209-7	104-51-8							
76	1,2-dichlorobenzene; o-dichlorobenzene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
77	1,2-dibromo-3-chloropropane				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	602-021-00-6	202-479-3	96-12-8							
78	1,2,4-trichlorobenzene				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
79	hexachlorobutadiene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
		201-765-5	87-68-3							
80	1,2,3-trichlorobenzene				<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
		201-757-1	87-61-6							
81	styrene				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
82	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<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]							
83	2-nitrophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-857-5	88-75-5							
84	2,4-dichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
85	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]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	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]							
86	2,4,5-trichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
87	2,4,6-trichlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
88	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
89	4-nitrophenol; p-nitrophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	609-015-00-2	202-811-7	100-02-7							
90	pentachlorophenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	604-002-00-8	201-778-6	87-86-5							
91	2-chloronaphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		202-079-9	91-58-7							
92	2-methyl naphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		202-078-3	91-57-6							
93	bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP				0.561 mg/kg		0.561 mg/kg	0.0000561 %		
	607-317-00-9	204-211-0	117-81-7							
94	BBP; benzyl butyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
95	dibutyl phthalate; DBP				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
96	di-n-octyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-214-7	117-84-0							
97	diethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-550-6	84-66-2							
98	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used						
	EU CLP index number	EC Number	CAS Number													
99	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]													
100	2,6-dinitrotoluene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
	609-049-00-8	210-106-0	606-20-2													
101	4-bromophenylphenylether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
		202-952-4	101-55-3													
102	4-chloroaniline				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
	612-137-00-9	203-401-0	106-47-8													
103	4-chlorophenylphenylether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
		230-281-7	7005-72-3													
104	azobenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
	611-001-00-6	203-102-5	103-33-3													
105	bis(2-chloroethoxy)methane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
		203-920-2	111-91-1													
106	bis(2-chloroethyl) ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
	603-029-00-2	203-870-1	111-44-4													
107	carbazole				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
		201-696-0	86-74-8													
108	dibenzofuran				0.011 mg/kg		0.011 mg/kg	0.0000011 %								
		205-071-3	132-64-9													
109	hexachlorocyclopentadiene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
	602-078-00-7	201-029-3	77-47-4													
110	hexachloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
		200-666-4	67-72-1													
111	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
	606-012-00-8	201-126-0	78-59-1													
112	nitrosodipropylamine				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
	612-098-00-8	210-698-0	621-64-7													
113	nitrobenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD						
	609-003-00-7	202-716-0	98-95-3													
114	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<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]													
115	cumene; [1] propylbenzene [2]										<0.007 mg/kg		<0.007 mg/kg	<0.0000007 %		<LOD
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]													
116	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.006 mg/kg		<0.006 mg/kg	<0.0000006 %		<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]													
117	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]										<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
	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]													
118	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]															
	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]													
Total:								0.0645 %								

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 Determinand - 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 free phase contamination detected**

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

- toluene: (conc.: 4.0e-07%)
- ethylbenzene: (conc.: 5.0e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

- TPH (C6 to C40) petroleum group: (conc.: 0.0171%)
- xylene: (conc.: 2.0e-06%)
- mesitylene; 1,3,5-trimethylbenzene: (conc.: 4.0e-07%)
- 1,2,4-trimethylbenzene: (conc.: 1.4e-06%)
- sec-butylbenzene: (conc.: 5.0e-07%)
- n-butylbenzene: (conc.: 1.1e-06%)

Classification of sample: WS15-16/03/2022-0.60m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WS15-16/03/2022-0.60m	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)

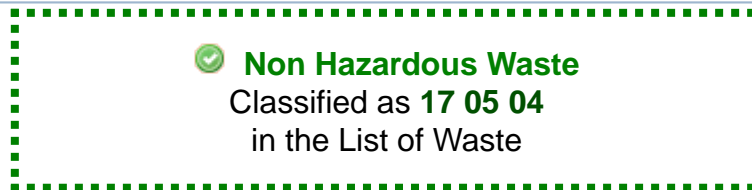
#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				8.9 mg/kg	1.32	11.751 mg/kg	0.00118 %		
	033-003-00-0	215-481-4	1327-53-3							
2	cadmium { cadmium 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) }				54.9 mg/kg	1.462	80.239 mg/kg	0.00802 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				54 mg/kg	1.126	60.798 mg/kg	0.00608 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	355 mg/kg	1.56	553.734 mg/kg	0.0355 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				0.2 mg/kg	1.353	0.271 mg/kg	0.0000271 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				16.6 mg/kg	2.976	49.406 mg/kg	0.00494 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				154 mg/kg	2.774	427.219 mg/kg	0.0427 %		
	024-007-00-3	236-878-9	13530-65-9							
11	pH				8.09 pH		8.09 pH	8.09 pH		
			PH							
12	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<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				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
15	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
16	phenanthrene				0.11 mg/kg		0.11 mg/kg	0.000011 %		
		201-581-5	85-01-8							
17	anthracene				0.04 mg/kg		0.04 mg/kg	0.000004 %		
		204-371-1	120-12-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		0.24 mg/kg		0.24 mg/kg	0.000024 %		
19	pyrene	204-927-3	129-00-0		0.21 mg/kg		0.21 mg/kg	0.000021 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.13 mg/kg		0.13 mg/kg	0.000013 %		
21	chrysene	601-048-00-0	205-923-4	218-01-9	0.15 mg/kg		0.15 mg/kg	0.000015 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.17 mg/kg		0.17 mg/kg	0.000017 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.07 mg/kg		0.07 mg/kg	0.000007 %		
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.13 mg/kg		0.13 mg/kg	0.000013 %		
25	indeno[123-cd]pyrene	205-893-2	193-39-5		0.1 mg/kg		0.1 mg/kg	0.00001 %		
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	benzo[ghi]perylene	205-883-8	191-24-2		0.1 mg/kg		0.1 mg/kg	0.00001 %		
Total:								0.099 %		

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 Determinand - 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: WS16-16/03/2022-0.25m



Sample details

Sample name:	LoW Code:
WS16-16/03/2022-0.25m	Chapter:
	Entry:
	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				5.9 mg/kg	1.32	7.79 mg/kg	0.000779 %		
	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) }				69.2 mg/kg	1.462	101.14 mg/kg	0.0101 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				34 mg/kg	1.126	38.28 mg/kg	0.00383 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	23 mg/kg	1.56	35.876 mg/kg	0.0023 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				0.1 mg/kg	1.353	0.135 mg/kg	0.0000135 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				24.9 mg/kg	2.976	74.109 mg/kg	0.00741 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				108 mg/kg	2.774	299.608 mg/kg	0.03 %		
	024-007-00-3	236-878-9	13530-65-9							
11	pH				7.98 pH		7.98 pH	7.98 pH		
			PH							
12	naphthalene				<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
13	acenaphthylene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		205-917-1	208-96-8							
14	acenaphthene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		201-469-6	83-32-9							
15	fluorene				<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		201-695-5	86-73-7							
16	phenanthrene				0.96 mg/kg		0.96 mg/kg	0.000096 %		
		201-581-5	85-01-8							
17	anthracene				0.66 mg/kg		0.66 mg/kg	0.000066 %		
		204-371-1	120-12-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		3.68 mg/kg		3.68 mg/kg	0.000368 %		
19	pyrene	204-927-3	129-00-0		3.86 mg/kg		3.86 mg/kg	0.000386 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	2.14 mg/kg		2.14 mg/kg	0.000214 %		
21	chrysene	601-048-00-0	205-923-4	218-01-9	2.07 mg/kg		2.07 mg/kg	0.000207 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	4.02 mg/kg		4.02 mg/kg	0.000402 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	1.57 mg/kg		1.57 mg/kg	0.000157 %		
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	3.25 mg/kg		3.25 mg/kg	0.000325 %		
25	indeno[123-cd]pyrene	205-893-2	193-39-5		2.46 mg/kg		2.46 mg/kg	0.000246 %		
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.49 mg/kg		0.49 mg/kg	0.000049 %		
27	benzo[ghi]perylene	205-883-8	191-24-2		2.24 mg/kg		2.24 mg/kg	0.000224 %		
Total:								0.0576 %		

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 Determinand - 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: WS17-16/03/2022-0.30m

 **Non Hazardous Waste**
Classified as 17 05 04
in the List of Waste

Sample details

Sample name:	LoW Code:
WS17-16/03/2022-0.30m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				0.8 mg/kg	1.32	1.056 mg/kg	0.000106 %		
	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) }				130.7 mg/kg	1.462	191.025 mg/kg	0.0191 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				45 mg/kg	1.126	50.665 mg/kg	0.00507 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	<5 mg/kg	1.56	<7.799 mg/kg	<0.0005 %		<LOD
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				0.1 mg/kg	1.353	0.135 mg/kg	0.0000135 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				31.2 mg/kg	2.976	92.859 mg/kg	0.00929 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				1 mg/kg	2.554	2.554 mg/kg	0.000255 %		
	028-031-00-5	239-125-2	15060-62-5							
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				9.23 pH		9.23 pH	9.23 pH		
			PH							
12	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<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				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
15	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
16	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8							
17	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
19	pyrene	204-927-3	129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
21	chrysene	601-048-00-0	205-923-4	218-01-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
25	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	benzo[ghi]perylene	205-883-8	191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
Total:								0.0508 %		

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 Determinand - 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: WS18-17/03/2022-0.60m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS18-17/03/2022-0.60m	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
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				4.9 mg/kg	1.32	6.47 mg/kg	0.000647 %		
	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) }				94.6 mg/kg	1.462	138.263 mg/kg	0.0138 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				34 mg/kg	1.126	38.28 mg/kg	0.00383 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	10 mg/kg	1.56	15.598 mg/kg	0.001 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				0.2 mg/kg	1.353	0.271 mg/kg	0.0000271 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				24 mg/kg	2.976	71.43 mg/kg	0.00714 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				1 mg/kg	2.554	2.554 mg/kg	0.000255 %		
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				56 mg/kg	2.774	155.352 mg/kg	0.0155 %		
	024-007-00-3	236-878-9	13530-65-9							
11	pH				8.9 pH		8.9 pH	8.9 pH		
			PH							
12	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<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				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
15	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
16	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8							
17	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
18	fluoranthene	205-912-4	206-44-0		0.05 mg/kg		0.05 mg/kg	0.000005 %		
19	pyrene	204-927-3	129-00-0		0.05 mg/kg		0.05 mg/kg	0.000005 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
21	chrysene	601-048-00-0	205-923-4	218-01-9	0.04 mg/kg		0.04 mg/kg	0.000004 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.05 mg/kg		0.05 mg/kg	0.000005 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
25	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	benzo[ghi]perylene	205-883-8	191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
Total:								0.0424 %		

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 Determinand - 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: WS15-18/03/2022-1.70m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS15-18/03/2022-1.70m	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
	EU CLP index number	EC Number	CAS Number							
1	● pH		PH		7.33 pH		7.33 pH	7.33 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WS02-15/03/2022-1.50m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS02-15/03/2022-1.50m	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
	EU CLP index number	EC Number	CAS Number							
1	● pH		PH		7.62 pH		7.62 pH	7.62 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WS07-17/03/2022-1.70m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS07-17/03/2022-1.70m	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
	EU CLP index number	EC Number	CAS Number							
1	● pH		PH		6.9 pH		6.9 pH	6.9 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WS05-17/03/2022-2.00m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS05-17/03/2022-2.00m	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
	EU CLP index number	EC Number	CAS Number							
1	● pH		PH		6.42 pH		6.42 pH	6.42 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WS13-1.00m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS13-1.00m	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
	EU CLP index number	EC Number	CAS Number							
1	● pH		PH		7.2 pH		7.2 pH	7.2 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WS14-17/03/2022-1.50m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS14-17/03/2022-1.50m	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
	EU CLP index number	EC Number	CAS Number							
1	● pH		PH		6.93 pH		6.93 pH	6.93 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WS17-16/03/2022-1.80m

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
WS17-16/03/2022-1.80m	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
	EU CLP index number	EC Number	CAS Number							
1	● pH		PH		7.05 pH		7.05 pH	7.05 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Appendix A: Classifier defined and non EU CLP determinands

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

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)

EU CLP index number: 601-023-00-4
Description/Comments:
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

• **dichlorodifluoromethane** (EC Number: 200-893-9, CAS Number: 75-71-8)

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: Aquatic Chronic 3; H412 , Ozone 1; H420 , Press. Gas; H280

• **trichlorofluoromethane** (EC Number: 200-892-3, CAS Number: 75-69-4)

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 , Ozone 1; H420

• **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

• **2-nitrophenol** (EC Number: 201-857-5, CAS Number: 88-75-5)

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; H302, Acute Tox. 4; H312, Skin Irrit. 2; H315, Eye Irrit. 2; H319, Acute Tox. 4; H332, STOT SE 3; H335, STOT RE 2; H373, 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

• **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

• **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

• **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

• **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

• **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

• **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

• **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

• **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

• **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

• **hexachloroethane** (EC Number: 200-666-4, CAS Number: 67-72-1)

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: Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, Carc. 2; H351, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, STOT RE 2; H373

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) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex}

Worst case species based on hazard statements/molecular weight (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) Worst 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 {nickel selenate}

Worst case CLP species based on hazard statements/molecular weight (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: 2022.103.5089.9622 (13 Apr 2022)

HazWasteOnline Database: 2022.103.5089.9622 (13 Apr 2022)

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 Waste 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

15th ATP - Regulation (EU) 2020/1182 of 19 May 2020

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)

Regulations 2019 - UK: 2019 No. 720 of 27th March 2019

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)

Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020

The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK:

2020 No. 1540 of 16th December 2020

17th ATP - Regulation (EU) 2021/849 of 11 March 2021



APPENDIX 14 - 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:

- LCRM – 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 15 - 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 2022, 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.

