



Remediation Strategy Report

24 Ormes Road, Skewen, Neath,
SA10 6SY

Prepared For: Ms Jill Howells

Issue Date: December 2020

Job No: 16299

REPORT TITLE : **Remediation Strategy Report: Proposed Residential Development, 24 Ormes Road, Skewen, Neath SA10 6SY**

REPORT STATUS : **Final**

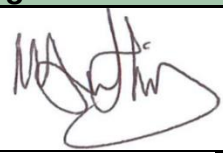
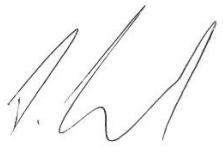
JOB NUMBER : **16299**

DATE : **December 2020**

REPORT REFERENCE : **101220-16299-01**

Document Revision Record

Issue Number	Date	Revision Details
01	14 th December 2020	-

	Name	Signature
Prepared	Michael Watkins MESci FGS	
Checked	David Emanuel BSc (Hons), MSc, FGS, Dip.Chem, M Phil, CGeol	
Approved	Gwyn Lake BSc (Hons). PhD, CGeol, FGS	

This document is reviewed annually and was last reviewed and authorised on 24/08/2020

All amendments made to this document are detailed on the Document Revision & Amendment Register BMS-CR-002 and authorised by the appropriate personnel.



TABLE OF CONTENTS

SECTION 1 Introduction and Proposed Development	1
1.1 Introduction	1
1.2 Objectives	1
1.3 Previous Investigations and Assessments	1
1.4 Roles and Responsibilities	1
1.5 Limitations and Exceptions of Investigation	1
1.6 Quality Assurance	2
SECTION 2 Site Characteristics	3
2.1 Site Location and Description	3
2.2 Site History Summary	3
2.3 Geology and Ground Conditions	3
2.4 Radon	4
2.5 Hydrogeology and Hydrology	4
2.6 Identified Contamination	4
2.6.1 Made Ground Soils	4
SECTION 3 Sources of Contamination Requiring Remediation	5
SECTION 4 Proposed Remedial and Mitigating Measures	6
4.1 General	6
4.2 Made Ground Soils	6
4.2.1 Protection of Construction & Maintenance Workers and Passers-by or Neighbouring Site Users	6
4.2.2 Protection of Future Site Users (Residents)	6
4.2.3 Protection of Construction Materials (Potable Water Supply Pipes)	6
SECTION 5 Validation of Remedial and Mitigating Measures	8
5.1 Capping System	8
5.1.1 Imported Soil Validation	8
5.2 Potable Water Supply Pipes	10
SECTION 6 Working Practices	11
6.1 Protection of Construction Workers	11
6.2 Protection of the Environment	11
6.3 Management & Disposal of Soils	12
6.4 Groundwater Disposal	12

Tables

Table 1.1 Roles and Responsibilities	1
Table 3.1 Summary of Significant Pollutant Linkages	5
Table 5.1 Validation Criteria	9

Figures

Figure 2.1 Site Location	3
--------------------------	---

Annexes

Drawings

Drawing 01 Proposed Site Layout

SECTION 1 Introduction and Proposed Development

1.1 Introduction

Ms Jill Howells (The Client) is proposing the redevelopment of 24 Ormes Road in Skewen, Neath SA10 6SY, including the demolition of the existing building and construction of a new dwelling upon its footprint.

Terra Firma (Wales) Limited have been commissioned by the Client to prepare a Remediation Strategy report for the site.

Previous investigations and assessments have identified that remediation of contamination is required for the development. This report presents a Remediation Strategy for the site based on these previous investigations and assessments.

1.2 Objectives

The objective of the Remediation Strategy is to detail the remedial steps that are required to render the site fit for its intended use.

In summary, the following remediation requirements have been identified and are covered in detail in this report.

- Installation of capping system in landscape and garden above made ground soils
- Installation of a ground gas protection system in the proposed structures

1.3 Previous Investigations and Assessments

The Remediation Strategy is based on the findings of previous investigations and assessments. This report shall be read in conjunction with Terra Firma (Wales) Limited's Geoenvironmental Report 16299 dated September 2020. A copy of this report is presented in **Annex A**.

1.4 Roles and Responsibilities

Table 1.1 Roles and Responsibilities

Role	Organisation
Client	Ms Jill Howells (owner)
Local Authority	Neath Port Talbot Council
Geotechnical & Geoenvironmental Consultant	Terra Firma Wales Ltd
Validator	Terra Firma Wales Ltd

1.5 Limitations and Exceptions of Investigation

This report has been prepared for the sole internal reliance of the Client and her design and construction team. This report shall not be relied upon or transferred to any other parties without the express written authorisation of Terra Firma (Wales) Limited. If an unauthorised third party comes into possession of this report they rely on it at their peril and the authors owe them no duty of care and skill. The report represents the findings and opinions of experienced geo-environmental and geotechnical consultants. Terra Firma (Wales) Limited does not provide legal advice and the advice of lawyers may be required.

It is not within the scope of Terra Firma (Wales) Limited to:

- Provide Method Statements and Risk Assessments for the site remediation, preparation and development.

- Design, assess or install utility service trench fill and pipes for potable water supply beneath the site.

1.6 Quality Assurance

The quality and environmental aspects of the assessment and investigation comply with UKAS Accredited ISO 9001:2015 and ISO 14001:2015 standards.

SECTION 2 Site Characteristics

The following subsection information has been summarised from previous investigation and assessments listed in **Section 1.3**.

2.1 Site Location and Description

The development site is irregular in shape and locates at 24 Ormes Road, Skewen, Neath, SA10 6SY. The site centres on an approximate National Grid Reference of 272220 197690, occupying a plan area of approximately 0.05 Hectares.

The site is currently occupied by a vacated bungalow on the western half of the site and an outbuilding on the eastern side. A garden area lies between the two buildings. The site is located upon a steep hillside rising above Skewen to the south.

The site lies to the immediate north of Ormes Road (downslope); beyond which is a steep slope covered by trees and overgrown vegetation. A track lies to the north (upslope), beyond which is woodland. A retaining wall constructed from gabion baskets forms the site's northern boundary. No. 23 Ormes Road lies to the immediate west of the site and a patch of unoccupied, vegetated land lies to the east; beyond which is woodland and two detached dwellings.

The site elevation is approximately 80m AOD. The site is generally flat, forming a plateau. The general topography falls steeply to the south southwest.

The site location can be seen on **Figure 2.1**.

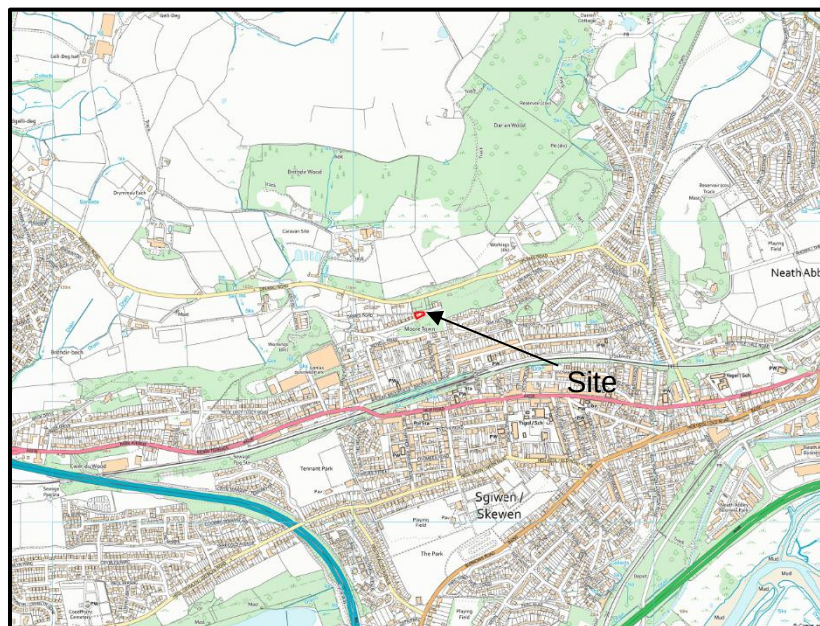


Figure 2.1 Site Location

2.2 Site History Summary

The earliest map researched recorded the site as unoccupied and located within woodland. The current dwelling was constructed at the west of the site sometime between 1921 and 1936. An out-building was built at the east of the site sometime between 1999 and 2020.

2.3 Geology and Ground Conditions

The 1:50,000 scale British Geological Map of the area (Sheet 247) was consulted for geology underlying the site. The site is shown to be underlain by the Hughes Member of the Carboniferous Period. These are green-grey, lithic arenites ("Pennant sandstones"), with thin mudstone/siltstone and seatearth interbeds, and mainly thin coals.

The conjectural outcrop of the Swansea Two Feet coal seam is shown approximately 30m to the south of the site.

Strata are typically dipping 10° to the northeast in the local area.

Till deposits are recorded to the immediate south of the site, and therefore may extend onto the site. Till is unsorted and unstratified drift, generally overconsolidated, deposited directly by and underneath a glacier without subsequent reworking by water from the glacier.

Some made ground is anticipated across the site. Large areas of made ground and worked ground are recorded in the local area, likely to be associated with mining and quarrying.

2.4 Radon

Basic radon protective measures are required for new developments on the investigation site.

2.5 Hydrogeology and Hydrology

Superficial deposits beneath the site have an aquifer designation of secondary aquifer – Undifferentiated.

The bedrock deposits beneath the site have an aquifer designation of secondary aquifer – A.

Surface and shallow groundwater flow is likely to flow downhill to the south.

Deeper groundwater flow within the underlying bedrock will be controlled by the strata dip and any fractures or bedding planes within the rock units.

The hydraulic gradient will be at its steepest during periods of heavy rainfall and aquifer recharge.

The site does not locate within a groundwater source protection zone.

The nearest surface water feature locates 226m to the south and comprises a drainage channel alongside the east to west orientated railway.

2.6 Identified Contamination

2.6.1 Made Ground Soils

Laboratory soil test results highlight exceedances of lead and arsenic when compared to human health guidelines for a residential with plant uptake scenario. Exceedances were located in HDTP04 at 0.3m depth within the dark brown organic-rich sandy slightly gravelly clay with angular mudstone, sandstone, concrete and slag. These soils were recorded to a depth of 0.8m. The same or very similar soils were also encountered at HDTP03 to 0.2m depth.

SECTION 3 Sources of Contamination Requiring Remediation

The summary of the refined conceptual site model is presented in **Table 3.1** and based on findings of previous investigations and assessments, detailing significant pollutant linkages requiring remediation or mitigation.

Table 3.1 Summary of Significant Pollutant Linkages

Source	Pathway	Receptor
S1 (at HDTP03 and HDTP04)	P1, P2, P3, P4	R1, R2, R3

Key:

S1 - Soil (made ground and impacted soil from past residential site use)

Potential contaminant pathways associated with a residential with home grown produce land use are as follows.

- P1 – Direct soil and dust ingestion
- P2 – Consumption of home grown produce
- P3 – Dermal contact
- P4 – Inhalation of dust and vapours

There are human and hydrological receptors to any contamination that may be present on site. Potential receptors include.

- R1 – Construction and maintenance workers
- R2 – Future site users (residents)
- R3 – Passers-by or neighbouring site users

SECTION 4 Proposed Remedial and Mitigating Measures

4.1 General

Based on the finding of previous investigations and assessments and the identified pollutant linkages the following remedial measures have been devised for the site.

Specific validation requirements for the proposed remedial measures are discussed in the following section.

4.2 Made Ground Soils

4.2.1 Protection of Construction & Maintenance Workers and Passers-by or Neighbouring Site Users

The potential production of soil dust containing lead and arsenic contaminants during construction works presents a risk to construction and maintenance workers as well as passers-by or adjacent site users through, direct soil and dust ingestion, dermal contact, inhalation of dust.

A selection of mitigating measures is presented below to disrupt the contaminant pathway to the receptor.

- Dust suppression and measures to dampen the material
- Site perimeter screening
- Suitable PPE for site workers

It is therefore essential that the contractor puts in place adequate measures to ensure the safety of all workers.

These measures should be detailed in the contractor's Risk Assessment and Method Statements as well as the contractor's Construction Management Plan.

4.2.2 Protection of Future Site Users (Residents)

Future site users will be potentially at risk from direct soil and dust ingestion, dermal contact and inhalation of dust from soils containing lead and arsenic contaminants, during excavation of made ground soils while undertaking gardening activities. Future site users are also at risk from the consumption of home grown produce grown within contaminated made ground soils.

It is proposed that the contaminant source will be removed completely in the vicinity of HDTP03 where a veneer of only 0.2m is recorded. Where the contaminant source increases in thickness to approximately 0.8m in the vicinity of HDTP04 the installation of a capping system is proposed to interrupt the link between the source and receptor.

The capping system should be installed above Made Ground soils only in garden and landscaped areas and comprise 600mm thick capping layer of imported clean inert soils. Beneath areas of the site due to be covered by hard-standing or developed upon, no remedial measures are required.

Validation of the capping system and imported materials will be required.

4.2.3 Protection of Construction Materials (Potable Water Supply Pipes)

Potable water supply pipes are at risk of degradation when in contact with made ground soils containing lead and arsenic contaminants.

It is recommended that a Potable Water Supplier should complete an assessment in accordance with UK Water Industry Research guidance; Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites, UKWIR Report Ref: 10/WM/03/21. The assessment should determine the selection of Water Supply Pipe material.

SECTION 5 Validation of Remedial and Mitigating Measures

The following remedial measure will require verification and inclusion within a Validation Report:

- Capping system (importation of soils and installation)
- Ground gas protection system (design and installation)
- Potable water supply pipe (assessment and installation)

5.1 Capping System

Following the removal of the contaminated soils, importation and placement of 600mm of clean inert material in the soft landscaped and gardens area, verification of the soil removal and capping thickness should be undertaken.

Validation of the capping system will comprise photographic evidence clearly showing the thickness and depth of individual strata. In addition, samples will be obtained at this point for validation testing of imported soils in accordance with **Section 5.1.1**.

A validation report including a description of the works undertaken, validation photographs and chemical validation test results (where necessary) shall be presented upon completion.

5.1.1 Imported Soil Validation

Importation of soils will be required to provide a capping layer of clean inert material in identified landscaped and garden areas.

All imported soils, aggregate or stone that are not virgin quarry stone should be validated as suitable for use. Imported materials exempt from validation testing should be accompanied by a transfer note. Transfer notes should be retained and submitted for inclusion within the Validation Report upon completion of the works.

The provider should supply a laboratory analysis report to confirm that the soil/aggregate/stone is suitable for use. Depending on the source and available test data, it may be prudent to independently sample and analyse the materials (if practical) prior to being brought to site.

Sampling and analysis of the soil/aggregate/stone once imported will be required in addition to any taken at source.

In accordance with publication 'Requirements for the Chemical testing of Imported Materials for Various End Uses and Validation of Cover Systems' the number of representative samples required for analysis is dependent on the volume of each source soil. For a volume between 20m³ and 250m³ four samples should be taken. For a volume greater than 250m³, 4 samples per 250m³ should be taken. Where quantities exceed 1000m³ The CLO/EHO should be contacted to agree a sampling scheme.

All samples should be analysed for the determinands listed in **Table 5.1**.

Table 5.1 Validation Criteria

Determinand	Units	Guideline Value (Residential)	Source
Inorganic			
Arsenic	mg/kg	37	1
Boron	mg/kg	290	1
Cadmium	mg/kg	11	1
Chromium III	mg/kg	910	1
Chromium VI	mg/kg	6	1
Copper	mg/kg	2400	1
Lead	mg/kg	200	2
Mercury	mg/kg	40	1
Nickel	mg/kg	180	1
Selenium	mg/kg	250	1
Zinc	mg/kg	3700	1
Cyanide	mg/kg	8	3
Asbestos	%	Non Detected	-
Organics – Phenol & PAH			
Phenol	mg/kg	120	1
Naphthalene	mg/kg	2.3	4
Acenaphthylene	mg/kg	170	4
Acenaphthene	mg/kg	210	4
Flourene	mg/kg	170	4
Phenanthrene	mg/kg	95	4
Anthracene	mg/kg	2400	4
Fluoranthene	mg/kg	280	4
Pyrene	mg/kg	620	4
Benzo(a)anthracene	mg/kg	7.2	4
Chrysene	mg/kg	15	4
Benzo(b)fluoranthene	mg/kg	2.6	4
Benzo(k)fluoranthene	mg/kg	77	4
Benzo(a)pyrene	mg/kg	2.2	4
Indeno(123cd)pyrene	mg/kg	27	4
Dibenzo(ah)anthracene	mg/kg	0.24	4
Benzo(ghi)perylene	mg/kg	320	4
Organics – TPH			
PH C5 – C6 Aliphatic	mg/kg	42	4
PH C6 – C8 Aliphatic	mg/kg	100	4
PH C8 – C10 Aliphatic	mg/kg	27	4
PH C10 – C12 Aliphatic	mg/kg	130	4
PH C12 – C16 Aliphatic	mg/kg	1100	4
PH C16 – C21 Aliphatic	mg/kg	65000	4
PH C21 – C35 Aliphatic	mg/kg	65000	4
PH C5 – C7 Aromatic	mg/kg	70	4
PH C7 – C8 Aromatic	mg/kg	130	4
PH C8 – C10 Aromatic	mg/kg	34	4
PH C10 – C12 Aromatic	mg/kg	74	4
PH C12 – C16 Aromatic	mg/kg	140	4
PH C16 – C21 Aromatic	mg/kg	260	4
PH C21 – C35 Aromatic	mg/kg	1100	4
1 - LQM/CIEH Suitable For Use Level (S4UL) 2015			
2 - Defra Category 4 Screening Level (Provisional value)			
3 - Environment Agency CLEA v1.06 Derived Value (Now withdrawn)			
4 - S4UL threshold based on 1% soil organic matter			

5.2 Potable Water Supply Pipes

A copy of the potable water supply pipe assessment, along with evidence of the water supply pipe installation, should be retained for inclusion in the Validation Report.

Photographic evidence of the installation shall be provided by the **groundworker** for inclusion in the Validation Report.

SECTION 6 Working Practices

6.1 Protection of Construction Workers

In order that construction workers are protected during site works across the site the following should be adhered to:

1. Compliance with health and safety regulations
2. Provision of Method Statements and Risk Assessments
3. Compliance with Control of Substances Hazardous to Health (COSHH) Assessment
4. Good level of Personal Protection Equipment (PPE)
5. Good level of hygiene by site workers
6. Dust suppression measures
7. Emergency contingencies should be defined prior to commencement of site works

6.2 Protection of the Environment

During the remediation and construction periods, there is a risk to the environment and adjacent sites from de-watering, excavations, moving contaminated soil, drainage misconnections, discharges of perched groundwater to local surface waters or the ground, runoff from construction materials and/or exposed ground, wheel washing and oil or chemical spills.

A drainage plan should be devised, identifying manholes to prevent pollutants accidentally reaching surface water sewers. Temporary drainage measures may need to be put in place.

The contractor(s) must also strictly adhere to the Pollution Prevention Guidelines for Working at Construction and Demolition Sites (PPG6). This publication gives both advice and guidelines which should be followed with regards to the planning and preparation of site works, site drainage, delivery and storage of construction materials, the management of waste, good housekeeping in particular to prevent runoff of silt and other fines into nearby water courses, refuelling, concrete and what to do in the event of an emergency.

Within the documentation prepared by the contractor(s), the following information should be provided, but not limited to:

- Project Description
- Key participants/contractor(s)
- Technical procedures
- Phasing of works and approximate timescales
- Site plans to scale
- Details of consents or license needed
- Health and Safety, COSHH Assessment, Method Statements and Risk Assessments
- Emergency contingencies

In addition, the following precautions should also be taken.

- All potential chemicals and associated risks and emergency procedures for spills/leaks should be considered in the site risk assessment and the details provided to all site employees.
- Any potential pollutant materials or chemicals/detergents used on site should be adequately stored in suitable containers, with clear labelling.
- Any oil or hazardous substance containers and associated pipe works should be enclosed within a bund.
- Care taken during delivery of materials, with correct supervision and labelling detailing the substance and its quantities.
- All delivery drivers should be informed of procedures and restrictions.

- Any materials on delivery should be covered to ensure there is no spillage.
- Any detergents, paints, chemicals etc should not be allowed to be discharged into surface drains or water courses.
- Washing out and cleaning of concrete/cement plant should be carried out in a contained area with adequate measures to collect all run-off water.
- Security and prevention of vandalism, especially of oil drums/containers.

6.3 Management & Disposal of Soils

During site works excavations of the made ground are anticipated.

All materials excavated should be managed and stored appropriately in a controlled manner to ensure protection of site construction workers and neighbouring site users, and to prevent the transfer of contamination to other areas of the site.

If possible, and if levels allow, and excavated made ground should be retained on site and relocated beneath areas of hardstanding. This would provide the most sustainable approach and avoid landfill and haulage fees, disruption and aggravation of local residents caused by haulage lorries, and would avoid unnecessary CO₂ emissions.

Any movement and transfer of materials on site should be documented in materials management plan, in accordance with 'CL:AIRE Definition of Waste: Development Industry Code of Practice (DoW CoP)'.

Alternatively, excavated made ground may be disposed of at landfill. Prior to disposal classification of the material will need to be completed in accordance with Environment Agency protocol detailed in 'Technical Guidance WM3 – Waste Classification - Guidance on the Classification and Assessment of Waste'.

A contaminated land specialist should supervise and document any earthworks on site.

Waste transfer and disposal must be undertaken by an authorised person. A waste transfer note must accompany each load and records should be maintained for inspection if required

6.4 Groundwater Disposal

Groundwater resulting from dewatering on site does not require offsite disposal and unless it is contaminated can be discharged onto areas of grassland or into sumps and allowed to soak into the ground.

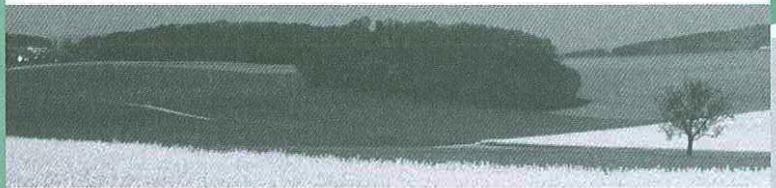
**ANNEX A
Documents**

Geoenvironmental Report:
Proposed Residential Development
24 Ormes Road, Skewen, Neath, SA10 6SY

PREPARED FOR:
Ms Jill Howells

September 2020

Job No: 16299



REPORT TITLE : **Geoenvironmental Report:**
 Proposed Residential Development
 24 Ormes Road, Skewen, Neath, SA10 6SY

REPORT STATUS : **Final**

JOB NUMBER : **16299**

DATE : **September 2020**

REPORT REFERENCE : **29/09/20-16299-01**

Document Revision Record

Issue Number	Date	Revision Details
Version 1	September 2020	-

	Name	Signature
Prepared	Michael Watkins MESci FGS	
Checked	David Emanuel BSc (Hons), MSc, FGS, Dip.Chem, M Phil, CGeol	
Approved	Gwyn Lake BSc (Hons). PhD, CGeol, FGS	



Executive Summary

Site Location and Proposed Development	<i>Ms Jill Howells (the Client) is proposing the redevelopment of 24 Ormes Road in Skewen, Neath SA10 6SY, including the demolition of the existing building and construction of a new dwelling upon its footprint.</i>
Site History	<i>The earliest map researched recorded the site as unoccupied and located within woodland. The current dwelling was constructed at the west of the site sometime between 1921 and 1936. An out-building was built at the east of the site sometime between 1999 and 2020.</i>
Geology	<i>The site is underlain by the Hughes Member of the Carboniferous. Till deposits are recorded to the immediate south of the site and may therefore encroach onto the site.</i>
Radon	<i>Basic radon protection measures are required for new developments at the site.</i>
Ground Conditions	<i>Made ground comprising grey and brown clayey sandy GRAVEL of angular and tabular sandstone with occasional limestone, brick, and concrete. Occasional plastic fragments to 0.05/0.35m at the centre of the site.</i> <i>Made ground comprising organic rich dark brown sandy slightly gravelly CLAY/clayey slightly gravelly SAND with many roots was encountered from ground level to 0.2m at HDTP03 and 0.8m at HDTP04. Gravel is angular mudstone, sandstone, concrete and clinker. The soil in this vicinity is located at the front of the existing bungalow and behind a small retaining wall.</i> <i>Beneath the made ground is dense grey and brown clayey sandy GRAVEL with variable cobble content/Firm orangish brown CLAY/Firm grey and brownish orange slightly sandy slightly gravelly CLAY to 1.5/3.0m.</i>
Contamination of Concern	<i>Elevated concentrations of arsenic and lead in made ground (organic rich dark brown sandy CLAY)).</i>
Mitigation Measures	<i>To protect future site users from the identified contamination, the identified contamination will need to be capped. The capping should consist of the proposed buildings and hard standings. In garden and soft landscaped areas, the capping should consist of 600mm of suitable inert topsoil and subsoil if desired, or stone sourced from a quarry.</i> <i>Alternatively, the effected soil should be removed from site and disposed of at a suitably licenced landfill site. To confirm the affected soils have been removed from site and the remaining soil is uncontaminated, a suitably qualified geoenvironmental engineer should oversee the removal of the 'hot-spot'. Once satisfied that the effected soil has been removed, samples from beneath and the sides of the excavated 'hot-spot' should be taken and tested to confirm that the remaining soil is uncontaminated for arsenic and lead..</i>

TABLE OF CONTENTS

SECTION 1	Introduction and Proposed Development	1
1.1	Introduction	1
1.2	Limitations and Exceptions of Investigation	1
1.3	Quality Assurance	1
SECTION 2	Review of Existing Data	2
2.1	Physical Setting and Current Site Use	2
2.2	Site History	3
2.3	Geological Setting	3
2.3.1	Geology	3
2.3.2	BGS Borehole Information	4
2.3.3	Radon	4
2.3.4	Mining	4
2.4	Environmental Setting	4
2.4.1	Hydrogeology	4
2.4.2	Hydrology	5
2.4.3	Flooding	5
2.4.4	Waste	5
2.4.5	Pollution	5
2.4.6	Sensitive Land Use	5
2.4.7	Infilled Land	5
2.4.8	Previous Site Investigation Data	5
SECTION 3	Preliminary Human Health and Environmental Risk Assessment	6
3.1	General	6
3.2	Potential Sources of Contamination	6
3.3	Potential Pollution Pathways	6
3.4	Potential Receptors	7
3.5	Preliminary Conceptual Site Model	7
SECTION 4	Field Investigation	10
4.1	Site Works	10
4.2	Ground Conditions	10
4.2.1	Miscellaneous Ground Conditions	10
4.3	Groundwater	10
4.4	Laboratory Chemical Testing	11
4.4.1	Sampling Strategy	11
4.4.2	Soil Laboratory Analysis	11
SECTION 5	Evaluation of Geoenvironmental Analytical Results	12
5.1	Assessment Methodology	12
5.2	Soil Test Results	12
5.2.1	Inorganics & Miscellaneous	12
5.2.2	Organics	13
5.2.3	Asbestos Testing	14
SECTION 6	Quantitative Risk Assessment	15
6.1	Contaminants of Concern	15
6.2	Pollutant Linkages	15
6.3	Mitigation and Remedial Measures	15

6.3.1	Human Health	15
6.3.1.1	Contaminated Soils	15
6.3.1.2	Ground Gas/Radon*	16
6.3.2	Aquatic Environment	16

Tables

Table 2.1	Historical Development from Map Information	3
Table 2.2	Potentially Infilled Land	5
Table 3.1	Contamination Sources	6
Table 3.2	Preliminary Conceptual Site Model	8
Table 4.1	Summary of Typical Ground Conditions	10
Table 4.2	Sample Locations, Depths and Targets	11
Table 4.3	Soil Laboratory Analysis	11
Table 5.1	Summary of Soil Chemical Test Results – Inorganics & Miscellaneous	12
Table 5.2	Summary of Soil Chemical Test Results – Speciated Polycyclic Aromatic Hydrocarbons	13
Table 5.3	Summary of Soil Chemical Test Results – Phenols	13
Table 5.4	Summary of Soil Chemical Test Results – Asbestos Quantification	14
Table 6.1	Contaminants of Concern	15
Table 6.2	Refined Conceptual Site Model	15

Figures

Figure 2.1	Site Location	2
------------	---------------	---

Annexes

ANNEX A	Geotechnical Site Investigation Report
ANNEX B	Envirocheck Report
ANNEX C	Risk Assessment Definitions
ANNEX D	Trial Pit Logs
ANNEX E	Laboratory Soil Chemical Test Results

Drawings

Drawing 01	Proposed Site Layout
------------	----------------------

SECTION 1 Introduction and Proposed Development

1.1 Introduction

Ms Jill Howells (the Client) is proposing the redevelopment of 24 Ormes Road in Skewen, Neath SA10 6SY, including the demolition of the existing building and construction of a new dwelling upon its footprint.

Terra Firma (Wales) Limited have been commissioned by the Client to undertake a geoenvironmental assessment of the site.

The main objectives of the geoenvironmental assessment programme are:

- Investigate the potential human health and environmental liabilities at the site associated with any contamination
- Provide a summary of the human health and environmental conditions at the site, together with any necessary further intrusive works and / or remediation works to render the site fit for its intended use

In order to achieve the above objectives, Terra Firma (Wales) Limited carried out an assessment programme including a review of existing data, followed by a field investigation to collect geoenvironmental data from selected locations.

A geotechnical site investigation has previously been undertaken for the site by Quantum Geotech in February 2020. A copy of this report is presented in **Annex A**.

1.2 Limitations and Exceptions of Investigation

The Client has requested that a Geoenvironmental Site Assessment (GSA) be performed to enable the outlined main objectives.

The GSA was conducted, and this report has been prepared for the sole internal reliance of the Client and their design and construction team. This report shall not be relied upon or transferred to any other parties without the express written authorisation of Terra Firma (Wales) Limited. If an unauthorised third party comes into possession of this report, they rely on it at their peril and the authors owe them no duty of care and skill. The report represents the findings and opinions of experienced geoenvironmental consultants. Terra Firma (Wales) Limited does not provide legal advice and the advice of lawyers may be required.

The subsurface geological profiles, any contamination and other plots are generalised by necessity and have been based on the information found at the locations of the exploratory holes and depths sampled and tested.

The investigation was limited by the existing buildings and limited site access.

Prior to undertaking the trial pitting, the Client stated that the area to the north of the retaining wall was not part of the proposed redevelopment and should therefore not be included within the geoenvironmental assessment.

1.3 Quality Assurance

The quality and environmental aspects of the assessment and investigation comply with UKAS Accredited ISO 9001:2015 and ISO 14001:2015 standards.

SECTION 2 Review of Existing Data

2.1 Physical Setting and Current Site Use

The development site is irregular in shape and locates at 24 Ormes Road, Skewen, Neath, SA10 6SY. The site centres on an approximate National Grid Reference of 272220 197690, occupying a plan area of approximately 0.05 Hectares.

The site is currently occupied by a vacated bungalow on the western half of the site and an outbuilding on the eastern side. A garden area lies between the two buildings. The site is located upon a steep hillside rising above Skewen to the south.

The site lies to the immediate north of Ormes Road (downslope); beyond which is a steep slope covered by trees and overgrown vegetation. A track lies to the north (upslope), beyond which is woodland. A retaining wall constructed from gabion baskets forms the site's northern boundary. 23 Ormes Road lies to the immediate west of the site and a patch of unoccupied, vegetated land lies to the east; beyond which is woodland and two detached dwellings.

The site elevation is approximately 80m AOD. The site is generally flat, forming a plateau. The general topography falls steeply to the south southwest.

The site location can be seen on
Figure 2.1.

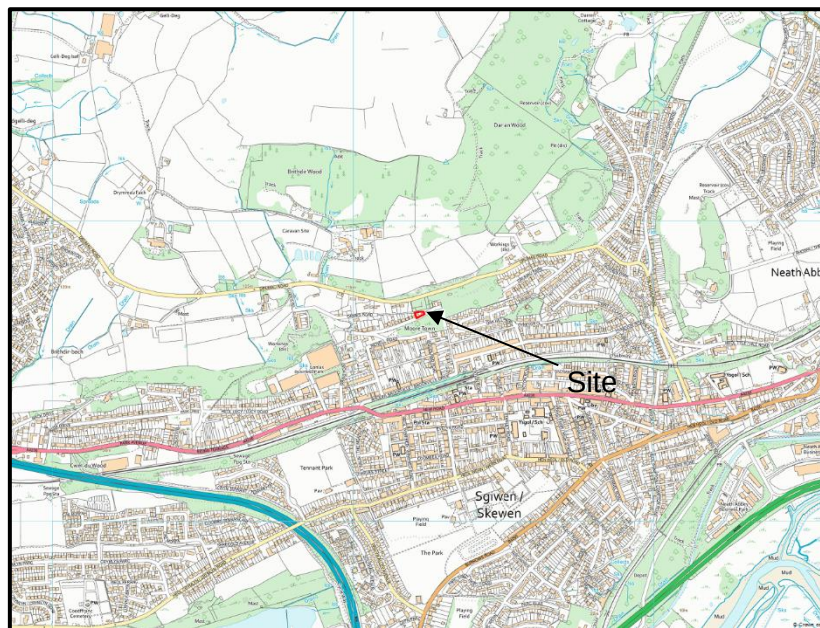


Figure 2.1 Site Location

2.2 Site History

Historical maps of the site have been obtained in an Envirocheck Report, provided by Landmark Information Group. The history plans are supplied in **Annex B** of this report, and the most relevant editions are summarised in **Table 2.1**. Distances are approximate, and any changes in-between map editions may not be recorded.

Table 2.1 Historical Development from Map Information

Map Edition & Scale	Key Features on Site	Key Features off Site
1876-1881 (1:2,500)	The site is unoccupied and lies within woodland.	Woodland surrounds the site. Cwm-du Foundry is located 215m to the southwest and Brithdir and Cwm-du Colliery is located 270m to the west. Several small quarries are located in the local area.
1899 (1:2,500)	No significant changes.	Cwm-du Foundry is no longer evident. Housing lies 65m to the south of the site
1921 (1:2,500)	No significant changes.	Ormes Road lies to the immediate south of the site; along which are a row of new houses 70m to the west. Main Colliery is located 180m to the east. Many more houses have been built to the south.
1936-1940 (1:2,500)	The west of the site is occupied by a house.	More houses have been built along Ormes Road and surrounding area; the nearest of which is located to the immediate west. A coal level associated with Main Colliery is located 96m to the east.
1951 (1:2,250)	No significant changes.	Refuse heaps are located at Main Colliery, 61m to the east.
1964 (1:2,500)	No significant changes.	No significant changes.
1989 (1:2,500)	No significant changes.	No collieries are evident in the local area. The area of land formerly occupied by Main Colliery has been reprofiled and split into two plateaus.
1999 (1:2,500)	No significant changes.	A housing estate occupies the lower plateau at former Main Colliery.
2020 (1:10,000)	A small building occupies the far east of the site.	No significant changes.

2.3 Geological Setting

2.3.1 Geology

The 1:50,000 scale British Geological Map of the area (Sheet 247) was consulted for geology underlying the site. The site is shown to be underlain by the Hughes Member of the Carboniferous Period. These are green-grey, lithic arenites ("Pennant sandstones"), with thin mudstone/siltstone and seatearth interbeds, and mainly thin coals.

The conjectural outcrop of the Swansea Two Feet coal seam is shown approximately 30m to the south of the site

Strata are typically dipping 10° to the northeast in the local area.

Till deposits are recorded to the immediate south of the site, and therefore may extend onto the site. Till is unsorted and unstratified drift, generally overconsolidated, deposited directly by and underneath a glacier without subsequent reworking by water from the glacier.

Some made ground is anticipated across the site. Large areas of made ground and worked ground are recorded in the local area, likely to be associated with mining and quarrying.

2.3.2 BGS Borehole Information

There are no boreholes located within 150m of the site.

2.3.3 Radon

The Envirocheck Report (**Annex A**) details that basic radon protective measures are required for new developments on the investigation site.

2.3.4 Mining

A copy of the Coal Authority mining report was obtained as part of the geotechnical site investigation. The report states that the property is in a surface area that could be affected by underground mining in 1 seam of coal at 230m to 240m depth, and last worked in 1910. Any movement in the ground due to coal mining activity associated with these workings should have stopped by now.

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

The Coal Authority has no record of a mine gas emission requiring action. Due to the depth of the shallowest recorded coal mining of 230m, it is highly unlikely that this source of ground gas will pose a risk to the site as the 230m of competent rock between the source and receptors (on site) will eliminate carbon dioxide and methane's pathway to the surface

There are several BGS Recorded Mineral Sites within the local area. The closest sandstone quarry is located 62m northwest, and the closest coal mine is located 75m to the east. Both mines have ceased.

2.4 Environmental Setting

The following sections have been compiled using the Landmark Information Group Envirocheck datasheet and maps which can be found in **Annex B**.

2.4.1 Hydrogeology

Superficial deposits beneath the site have an aquifer designation of secondary aquifer – Undifferentiated.

The bedrock deposits beneath the site have an aquifer designation of secondary aquifer – A.

Surface and shallow groundwater flow is likely to flow downhill to the south.

Deeper groundwater flow within the underlying bedrock will be controlled by the strata dip and any fractures or bedding planes within the rock units.

The hydraulic gradient will be at its steepest during periods of heavy rainfall and aquifer recharge.

The site does not locate within a groundwater source protection zone.

2.4.2 Hydrology

The nearest surface water feature locates 226m to the south and comprises a drainage channel alongside the east to west orientated railway.

2.4.3 Flooding

The site is not at risk from extreme flooding from rivers or sea.

2.4.4 Waste

There are no recorded landfill sites within 250m of the site.

2.4.5 Pollution

No pollution incidents are recorded to have occurred within 250m radius of the site.

2.4.6 Sensitive Land Use

Ancient woodland is located 3m north of the site. The site is not located within, or within proximity of any other sensitive land use areas.

2.4.7 Infilled Land

Potentially infilled land features within 250m of the site are summarised in **Table 2.22**.

Table 2.2 Potentially Infilled Land

Feature	Distance/Direction from site
Unknown Filled Ground (Pit, quarry etc)	Immediate south of site
Unknown Filled Ground (Pit, quarry etc)	241m west

It appears that the filled ground relates to historic coal mining with some of it labelled 'slag heaps'. From past experience this material will generally comprise colliery spoil (mudstone fragments), and maybe some fragments of coal, glass, ash, clinker and slag. None of this can be considered biodegradable and therefore is not considered to be a source of ground gas. It should also be noted that much of the infilled land has now been built upon by housing.

2.4.8 Previous Site Investigation Data

A geotechnical site investigation was undertaken at the site in February 2020 by Quantum Geotech.

The site work comprised 6No. windowless sampler boreholes undertaken on 14th and 15th January 2020. The area of investigation extended beyond the current site of interest onto the road to the south and above the gabion baskets to the north. Two windowless sampler boreholes were advanced within the garden area of the property.

Made ground (clayey slightly sandy gravel with sandstone and rare brick) was encountered to 0.3/0.35m, underlain by dense clayey slightly sandy gravel to a maximum depth of investigation of 1.5m. Groundwater was recorded in WS05 and WS06 at 1.2m and 1.3m respectively.

There was no visual or olfactory evidence of any soil or groundwater contamination during the investigation works.

SECTION 3 Preliminary Human Health and Environmental Risk Assessment

3.1 General

The preliminary human health and environmental risk assessment is a qualitative evaluation of unacceptable risks to human health or the environment from potential 'contaminated land', based on reviewed information in preceding sections of this report.

For 'contaminated land' to exist as defined in Part 2A of the Environmental Protection Act (EPA) 1990, a Pollutant Linkage needs to be identified. Pollutant linkages are defined by having a valid 'source – pathway – receptor' as established in the preliminary conceptual site model.

For our definitions of pollution linkage and how we define risk please refer to **Annex C** which includes our classifications of consequence and probability, and risk assessment matrix.

3.2 Potential Sources of Contamination

Potential or known sources of contamination associated the site's current and historical land use are summarised in **Table 3.1**.

Table 3.1 Contamination Sources

ID	Source	Contaminant
S1	Soil (made ground and impacted soil from past residential site use)	Metals, metalloids, PAH, cyanide, TPH
S4	Bedrock	Radon
S5	Ground Gas from past shallow mining	Methane, Carbon Dioxide

As stated in **Section 2.4.7**, the nearby filled land is unlikely to contain significant biodegradable material and therefore cannot be considered a source of ground gas.

No other significant potential on-site or off-site sources of contamination have been identified during the desk study.

3.3 Potential Pollution Pathways

Potential contaminant pathways associated with a residential with home grown produce land use are as follows.

- P1 – Direct soil and dust ingestion
- P2 – Consumption of home grown produce
- P3 – Dermal contact
- P4 – Inhalation of dust and vapours
- P5 – Vertical migration of leachates (unsaturated zone)
- P6 – Horizontal and vertical migration of contaminants (saturated zone)
- P7 – Artificial contaminant pathway (borehole, pile, excavation etc)
- P8 – Surface run-off
- P9 – Plant uptake
- P10 – Horizontal and vertical migration of ground gasses and vapours
- P11 – Direct contact with construction materials
- P12 – Inhalation of asbestos fibres

As stated in **Section 2.3**, the 230m of competent rock between the source and receptors (on site) will eliminate carbon dioxide and methane's pathway to the surface.

3.4 Potential Receptors

There are human and hydrological receptors to any contamination that may be present on site. Potential receptors include.

- R1 – Construction and maintenance workers
- R2 – Future site users (residents)
- R3 – Passers-by or neighbouring site users
- R4 – Groundwater (aquifer)
- R5 – Surface waters (river/lake)
- R6 – Area of public open space
- R7 – Construction materials (concrete/potable water pipes)

3.5 Preliminary Conceptual Site Model

The preliminary conceptual site model establishes potential pollutant linkages between contaminants (source), pathways and receptors, realised during the preparation of the desk study report. Where a potential pollutant linkage is identified an assessment of risk is subsequently undertaken. The preliminary conceptual site model is tabulated in **Table 3.2**.

Outcomes of the preliminary conceptual site model are used as a basis for the design and implementation of the site investigation, whereby areas of potential contamination can be targeted as well as investigating the wider site.

Findings of the site investigation can in turn be used to develop and refine the conceptual site model.

Table 3.2 Preliminary Conceptual Site Model

Source	Pathway	Receptor	Preliminary Risk Assessment		
			Consequence	Probability	Risk
Human Health					
Contaminated Soils S1	Direct soil and dust ingestion P1 Dermal contact P3 Inhalation of dust and vapours P4	Construction and maintenance workers R1	Medium	Low Likelihood	Medium Risk - COSHH assessment and good level of PPE/ hygiene by site workers/ staff; dust suppression measures if required. Suitably designed site investigation recommended
		Passers-by or neighbouring site users R3	Medium	Unlikely	Low Risk - Dust suppression measures if required.
		Future site users (residents) R2	Medium	Low Likelihood	Low Risk - Suitably designed site investigation recommended
Radon Gas S4	Horizontal and vertical migration of ground gasses and vapours P10	Future site users (residents) R2	Medium	Low Likelihood	Medium Risk - Basic radon protection measures required
Landfill Gas S6		Future site users (residents) R2, Construction and maintenance workers R1	Severe	Unlikely	Negligible Risk – No landfills identified within 250m of the site. Vapours not anticipated to have been used on site in the past. No pathway for mine gas to migrate to site.
Ground Gas S5					
Vapours S3					
Impacted Groundwaters S2	Horizontal and vertical migration of contaminants (saturated zone) P6 Dermal contact P3	Construction and maintenance workers R1	Medium	Unlikely	Very Low Risk
Contaminated Soils S1	Plant uptake P9 Consumption of home grown produce P2	Future site users (residents) R2	Medium	Unlikely	Low Risk
Contaminated Soils S1	Direct Contact P11	Construction materials (water pipes) R7	Mild	Low Likelihood	Low Risk
Aggressive ground conditions - Sulphates S1		Construction materials (concrete) R7			
Aquatic Environment					
Contaminated Soils S1	Vertical migration of leachates (unsaturated zone) P5	Groundwater (aquifer) R4 Surface waters (river/lake) R5	Mild	Low Likelihood	Very Low Risk
	Surface run-off P8	Surface waters (river/lake) R5			

Ms Jill Howells

	Horizontal and vertical migration of contaminants (saturated zone) P6				
--	---	--	--	--	--

SECTION 4 Field Investigation

4.1 Site Works

A geoenvironmental site investigation comprising hand excavated trial pits was undertaken on the 4th September 2020.

The fieldwork was supervised by Terra Firma (Wales) Limited, who logged the exploratory holes to the requirements of BS 5930:2015+A1:2020. The proposed locations of the exploratory holes were determined by Terra Firma (Wales) Ltd in general accordance with BS 10175:2011+A2:2017 in order to assess the findings of the preliminary conceptual site model.

Trial pits were excavated using hand tools to a maximum depth of 0.6m in the main garden area, and up to 1.0m in the small grass-covered area in front of the bungalow.

A copy of the trial pit logs is presented in **Annex D**.

Exploratory hole locations are shown on **Drawing 01**.

4.2 Ground Conditions

The ground conditions encountered by the exploratory holes can in general be summarised as shown in **Table 4.1**. Exploratory holes provided by the previous geotechnical site investigation report have also been used.

Table 4.1 Summary of Typical Ground Conditions

Depth (m)	Thickness (m)	Stratum
0.0 - 0.05/0.35	Absent/0.35	MADE GROUND . Grey and brown clayey sandy GRAVEL of angular and tabular sandstone with occasional limestone, brick and concrete. Occasional plastic fragments.
0.3/0.9 - >1.5/>3.0		Dense grey and brown clayey sandy GRAVEL with variable cobble content. Gravel is angular and tabular sandstone/Firm orangish brown CLAY /Firm grey and brownish orange slightly sandy slightly gravelly CLAY

4.2.1 Miscellaneous Ground Conditions

Made ground comprising organic rich dark brown sandy slightly gravelly CLAY/clay slightly gravelly SAND with many roots was encountered from ground level to 0.2m at HDTP03 and 0.8m at HDTP04. Gravel is angular mudstone, sandstone, concrete and clinker. The soil in this vicinity is located at the front of the existing bungalow and behind a small retaining wall.

4.3 Groundwater

Groundwater was encountered at 1.2m and 1.3m in WS04 and WS05 of the previous geotechnical site investigation, respectively.

4.4 Laboratory Chemical Testing

4.4.1 Sampling Strategy

Soil sampling locations were selected on a non-targeted basis to characterise the contamination status the site. A herringbone sampling pattern was adopted.

Sample locations, depths and possible contamination source targets are summarised in **Table 4.2**:

Table 4.2 Sample Locations, Depths and Targets

Location	Depth (m)	Contamination Targets
HDTP01	0.01	S1
HDTP02	0.01	S1
HDTP03	0.6	S1
HDTP04	0.3	S1

4.4.2 Soil Laboratory Analysis

During the site investigation works soil samples were taken and despatched to the accredited laboratories of Eurofins Chemtest for laboratory chemical testing. Soil samples were tested for the following determinants.

Table 4.3 Soil Laboratory Analysis

Metals & Metalloids	In-Organics	Organics	Others
Arsenic	Cyanide	Phenols	pH (acidity)
Cadmium	Sulphate	PAH	Asbestos
Chromium III			
Chromium VI			
Copper			
Lead			
Mercury			
Nickel			
Selenium			
Zinc			

The results are discussed in detail in **SECTION 5** and the laboratory test results certificates may be found in **Annex E**.

SECTION 5 Evaluation of Geoenvironmental Analytical Results

5.1 Assessment Methodology

Comparison of the analytical results has been made with the 2015 Suitable 4 Use Levels (S4UL) provided by Land Quality Management (LQM) Limited and the Chartered Institute of Environmental Health (CIEH) or provisional Category 4 Screening Levels (pC4SL). Where S4UL or C4SL values are not available, reference has been made to Soil Guideline Values (SGV) sourced from the now withdrawn Environment Agency Contaminated Land Exposure Assessment (CLEA).

Soil leachate and groundwater analytical results have been compared with available published guidelines in the Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015 and Drinking Water Directive (98/83/EC).

Sulphate results have been compared to guidelines presented in British Research Establishment (BRE SD1:2015). Sulphate levels need only be considered for buried concrete risk assessment and are not human health related.

Soils subjected to a UK Water Industry Research (UKWIR) suite of testing have been compared with guidelines set out in UKWIR Guidance for the Selection of Water Supply Pipes to be Used in Brownfield Sites (Ref 10/WM/03/21).

5.2 Soil Test Results

A summary of the chemical test results which include the regulatory soil guideline values used in a residential setting with plant uptake are given in the following tables. The complete results can be found in **Annex E**.

5.2.1 Inorganics & Miscellaneous

Four samples were tested for a standard suite of inorganics, pH and organic matter. The summarised results are in **Table 5.1**.

Table 5.1 Summary of Soil Chemical Test Results – Inorganics & Miscellaneous

Substance	Threshold Value (mg/kg)	Source	Measured Concentrations (mg/kg)		Number of Exceedances
			Minimum	Maximum	
Arsenic	37	LQM/CIEH	7.8	83	1
Cadmium	11	LQM/CIEH	<0.1	1.8	0
Chromium III	910	LQM/CIEH	19	24	0
Chromium VI	6	LQM/CIEH	<0.5	<0.5	0
Copper	2400	LQM/CIEH	34	130	0
Lead	200	pC4SL	19	320	1
Mercury (inorganic)	40	LQM/CIEH	<0.05	0.2	0
Nickel	180	LQM/CIEH	15	51	0
Selenium	250	LQM/CIEH	0.28	1.5	0
Zinc	3700	LQM/CIEH	45	230	0
Cyanide	-	-	<0.5	0.6	-
Boron	290	LQM/CIEH	<0.4	<0.4	0
Sulphate (%)	0.24	BRE	0.011	0.69	0
Organic Matter (%)	-	-	0.6	4.5	-
pH	-	-	5.9	8.5	-

Notes:
- No available guideline

5.2.2 Organics

Four samples were tested for speciated polycyclic aromatic hydrocarbons. The summarised results are in **Table 5.2**.

Table 5.2 Summary of Soil Chemical Test Results – Speciated Polycyclic Aromatic Hydrocarbons

Substance	Threshold Value (mg/kg)	Source	Measured Concentrations (mg/kg)		Number of Exceedances
			Minimum	Maximum	
Naphthalene	2.3	LQM/CIEH	<0.01	<0.01	0
Acenaphthylene	170	LQM/CIEH	<0.01	<0.01	0
Acenaphthene	210	LQM/CIEH	<0.01	<0.01	0
Fluorene	170	LQM/CIEH	<0.01	<0.01	0
Phenanthrene	95	LQM/CIEH	<0.01	<0.01	0
Anthracene	2400	LQM/CIEH	<0.01	<0.01	0
Fluoranthene	280	LQM/CIEH	<0.01	<0.01	0
Pyrene	620	LQM/CIEH	<0.01	<0.01	0
Benzo(a)anthracene	7.2	LQM/CIEH	<0.01	<0.01	0
Chrysene	15	LQM/CIEH	<0.01	<0.01	0
Benzo(b)fluoranthene	2.6	LQM/CIEH	<0.01	<0.01	0
Benzo(k)fluoranthene	77	LQM/CIEH	<0.01	<0.01	0
Benzo(a)pyrene	2.2	LQM/CIEH	<0.01	<0.01	0
Indeno(123cd)pyrene	27	LQM/CIEH	<0.01	<0.01	0
Dibenzo(ah)anthracene	0.24	LQM/CIEH	<0.01	<0.01	0
Benzo(ghi)perylene	320	LQM/CIEH	<0.01	0.88	0
Total PAH	-	-	<2.0	<2.0	-

Notes:
Thresholds based on 1.0% soil organic matter
- No available guidelines

Four samples were tested for Phenols. The summarised results are in **Table 5.33**.

Table 5.3 Summary of Soil Chemical Test Results – Phenols

Substance	Threshold Value (mg/kg)	Source	Measured Concentrations (mg/kg)		Number of Exceedances
			Minimum	Maximum	
Phenols	120	LQM/CIEH	<0.3	<0.3	0

Notes:
- No available guideline

5.2.3 Asbestos Testing

All soil samples were scheduled for asbestos screening. Asbestos was not detected in any of the samples.

Table 5.4 Summary of Soil Chemical Test Results – Asbestos Quantification

Sample	Depth (m)	Comment	Result (mass %)
HDTP01	0.01	No Asbestos Detected	-
HDTP02	0.01	No Asbestos Detected	-
HDTP03	0.6	No Asbestos Detected	-
HDTP04	0.3	No Asbestos Detected	-

SECTION 6 Quantitative Risk Assessment

6.1 Contaminants of Concern

Contaminants identified as part of the investigation are summarised in **Table 6.1**, along with an interpretation of the likely contamination source. Where applicable, the contaminant, source relationship is based on the inferences made in the preliminary conceptual site model.

Table 6.1 Contaminants of Concern

Location	Depth	Contaminant	Source
HDTP04	0.3	Arsenic and Lead	MADE GROUND: organic rich dark brown sandy CLAY. Gravel is angular mudstone, sandstone, concrete and clinker.

6.2 Pollutant Linkages

Based on the findings of the intrusive site investigation and identified contaminants, the preliminary conceptual site model has been revised. Significant pollutant linkages are tabulated in the refined conceptual site model **Table 6.2**. Identified pollutant linkages will require detailed risk assessment, appropriate mitigation or remedial measures.

Table 6.2 Refined Conceptual Site Model

Source	Pathway	Receptor
S1 (at HDTP03 and HDTP04)	P1, P2, P3, P4	R1, R2, R3

6.3 Mitigation and Remedial Measures

The following sections summarise the likely mitigation and remedial measures suitable for the identified contamination and proposed development. Detailed methodology to achieve the measures should be prescribed in a Remediation Strategy Report and the results presented in a Validation Report upon completion of the development.

6.3.1 Human Health

6.3.1.1 Contaminated Soils

To protect future site users from the identified contamination, the identified contamination will need to be capped. The capping should consist of the proposed buildings and hard standings. In garden and soft landscaped areas, the capping should consist of 600mm of suitable inert topsoil and subsoil if desired, or stone sourced from a quarry.

Alternatively, the effected soil should be removed from site and disposed of at a suitably licenced landfill site. To confirm the affected soils have been removed from site and the remaining soil is uncontaminated, a suitably qualified geoenvironmental engineer should oversee the removal of the 'hot-spot'. Once satisfied that the effected soil has been removed, samples from beneath and the sides of the excavated 'hot-spot' should be taken and tested to confirm that the remaining soil is uncontaminated for arsenic and lead.

As good practice, construction workers should adhere to good site management, COSHH, good standards of hygiene and appropriate health & safety on site, with personal protection equipment (PPE) and dust suppression where appropriate.

All imported soils should be validated as clean and suitable for use in accordance with 'Requirements for the Chemical Testing of Imported Soils for Various End Uses and Validation Cover Systems'.

For proposed new supply water pipes, the UK Water Industry Research publication 'Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites (Report 10/WM/03/21)' should be consulted.

In accordance with EC Regulation 1272/2008 and Environment Agency Guidance WM3 soils destined for off-site disposal should be classified on the basis of their hazard phrases prior to disposal. Soils are classified as a mirror entry waste and should be classified on the basis of their specific chemical properties.

6.3.1.2 Ground Gas/Radon*

Basic radon protection measures are required for new dwellings at the site.

No ground gas protection measures are necessary.

6.3.2 Aquatic Environment

During the construction period, there is a risk to the environment/adjacent sites from de-watering, digging foundations, moving contaminated soil, drainage misconnections, discharges to local surface waters or the ground, runoff from construction materials and/or exposed ground, wheel washings and oil or chemical spills.

The risk is considered to be negligible as any adverse effects will be easily preventable by due diligence to good construction practise and housekeeping in preventing surface runoff and the spillage of materials.

The basic measures that should be taken are as follows:

- Prepare a drainage plan and mark the manholes to prevent pollutants accidentally reaching the surface water sewers;
- Carry out any activities that could cause pollution in a designated, bunded area, away from rivers or boreholes. Where possible it should drain to the foul sewer;
- Use settlement ponds to remove silty water;
- Store all oils and chemicals in a fully bunded area to prevent leaks or spills;
- Get advice on whether you need an environmental permit and apply in good time

ANNEX A
Geotechnical Site Investigation Report

24 ORMES ROAD, SKEWEN, NEATH

Ground Investigation Report

Report No. Q0177/GIR

February 2020

DOCUMENT CONTROL

Contract Name: 24 Ormes Road, Skewen, Neath, SA10 6SY

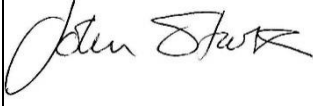
Contract Reference: Q0177

Report Type: Ground Investigation Report

Report Reference: Q0177/GIR

Date of Report: 20th February 2020

Client: Ms. Jill Howells

Version:	Date:	Prepared by:	Checked by:	Approved by:
First Issue	20/02/20	J. E. Stark	P. Darby	J.E. Stark
				
		Technical Manager B.Sc.(Hons)., C.Geol., FGS	Senior Engineering Geologist M.Sc., C.Geol., FGS	Technical Manager B.Sc.(Hons)., C.Geol., FGS
<i>Disclaimer: Quantum Geotechnic Limited has prepared this report in accordance with the instructions of the above-named Client for their sole and specific use. Any third parties who may use the information contained herein do so at their own risk.</i> Quantum Geotechnic Ltd, Plas Newydd, Llanedi, Pontarddulais, Swansea, SA4 0FQ ☎ 01554 744880 ✉ enquiries@quantumgeotech.co.uk				

CONTENTS

0.0	FOREWORD	3
1.0	INTRODUCTION	4
1.1	General	4
1.2	Purpose of Ground Investigation.....	4
1.3	Scope of Work	4
2.0	SITE SETTING	5
2.1	Site Description.....	5
2.2	Published Geology.....	5
2.3	Mining History	6
3.0	FIELDWORK	8
4.0	LABORATORY TESTING.....	9
4.1	General	9
4.2	Geotechnical Laboratory Testing	9
5.0	GROUND CONDITIONS	10
5.1	Summary of Strata Encountered.....	10
5.2	Groundwater Conditions	11
5.3	Visual & Olfactory Evidence of Soil Contamination.....	11
5.4	Visual & Olfactory Evidence of Groundwater & Surface Water Contamination	11
6.0	GEOTECHNICAL ENGINEERING APPRAISAL.....	12
6.1	General	12
6.2	Engineering Properties of Strata	12
6.3	Foundations	13
6.4	Site Stability	14
6.5	Earthworks	15
6.6	Concrete Classification	16
6.7	Infiltration Testing.....	16
7	REFERENCES	17
APPENDIX I – SITE PLANS		I
APPENDIX II – EXPLORATORY HOLE LOGS.....		II
APPENDIX III – INFILTRATION TEST RESULTS		III
APPENDIX IV – GEOTECHNICAL LABORATORY TEST RESULTS		IV
APPENDIX V – COAL AUTHORITY MINING REPORT		V

0.0 FOREWORD

The following Conditions and Notes on Site Investigation Procedures should be read in conjunction with this report.

General

Recommendations made and opinions expressed in the report are based on the strata observed in the excavations / recovered samples, together with the results of site and laboratory testing. No responsibility can be held for conditions which have not been revealed by the exploratory holes or which occur between exploratory holes. Whilst the report may suggest the likely configuration of strata, both between exploratory holes and below the maximum depth of investigation, this is only indicative and liability cannot be accepted for its accuracy.

Unless specifically stated, no account has been taken of possible subsidence due to mineral extraction below or close to the site.

Investigation Procedures

Intrusive techniques for ground investigation have been employed throughout the project. All intrusive operations, geotechnical / environmental sampling, logging of soils / rocks and in-situ testing complies with the recommendations of the British Code of Practice BS 5930: 2015 'Site Investigations', British Code of Practice BS 10175: 2011 +A1:2013 'Investigation of Potentially Contaminated Sites' and BS 1377: 1990, 'Methods of Test for Soils for Engineering Purposes'.

Routine Sampling

Representative bulk, disturbed and environmental samples of the different strata were taken. All samples are returned from site to Quantum Geotechnic Ltd.'s laboratory partners for controlled storage within 24 hours of sampling to await test scheduling / requirements.

In-Situ Testing, Surveying & Instrumentation

In-situ testing comprised windowless sample boreholes with standard penetration tests, supplemented by dynamic probing.

Groundwater

Where possible, the depth of entry of any influx of groundwater is recorded during the course of excavation or boring operations. The rate of inflow into the excavation or borehole is monitored during the course of the excavation or during boring procedures. Upon encountering any water strikes, work is temporarily halted and the water levels monitored for a standard twenty-minute period recording the change in water level at the end of the twenty minutes.

Groundwater conditions observed in the excavations are those appertaining to the period of investigation. It should be noted, that groundwater levels are subject to diurnal, seasonal and climatic variations as well as affects caused by drainage conditions or other causes.

Retention of Samples

After satisfactory completion of all the scheduled laboratory tests on any sample, the remaining material is discarded. Further to notifying the Client / Engineer with one week's notice, all soil and / or rock samples not tested will be discarded 28 days after submission of the approved final report.

1.0 INTRODUCTION

1.1 General

Upon the instructions of our Client, Ms. Jill Howells, Quantum Geotechnic Ltd (QG) was commissioned to undertake a ground investigation at 24 Ormes Road, Skewen, Neath.

1.2 Purpose of Ground Investigation

The purpose of the ground investigation was to allow a site-specific geotechnical assessment of the ground conditions, to aid with the design of the new dwelling following demolition of the existing structure on site and to identify any potential geotechnical and stability issues that may be present that may affect the proposed works.

1.3 Scope of Work

The general scope of work undertaken in the preparation of this assessment was as follows:

- Conduct an intrusive ground investigation with the aim of identifying the underlying ground conditions, targeting the issues that could potentially impact the reconstruction of the new property
- Carry out laboratory testing to gain geotechnical data.
- Provide an interpretative ground investigation report presenting an analysis of the ground conditions and offering recommendations on site suitability for the proposed development with regards to geotechnical parameters and overall stability.

The investigation works scoped by QG comprised of six windowless sample boreholes drilled to allow a ground model to be developed. The details of the work undertaken is described in Section 3.

General notes on the techniques employed by Quantum Geotechnic Ltd are described in the Foreword together with the limitations inherent in carrying out ground investigation work.

2.0 SITE SETTING

2.1 Site Description

The site is located at the eastern end of Ormes Road, Skewen. The postcode of the site is SA10 6SY.

The site is currently occupied by a bungalow on its western half with an outbuilding to the eastern side. A gabion retaining wall supports the higher ground to the north of the property.

The National Grid Reference of the centre of the site is SS 722 976. The approximate elevation of the site is c.70m.AOD. The site location is indicated on the aerial image capture presented below.



Figure 1: Site Location on Aerial Image ©Google Maps 2020 [Not to Scale]

2.2 Published Geology

The Six Inch to One Mile (1:10,560 scale) British Geological Survey map SS79NW shows the detailed geology of the site. An extract from the map is presented over page.

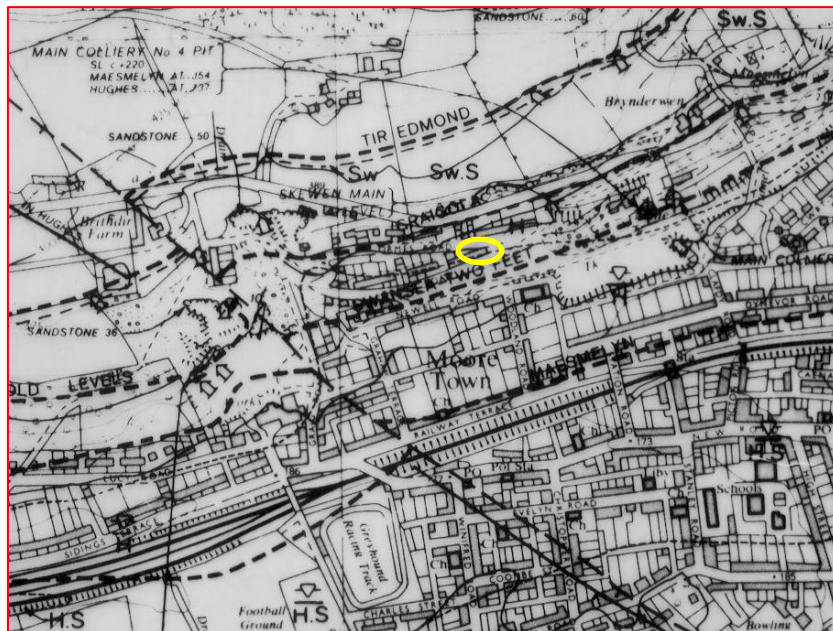


Figure 2: BGS SS79NW Extract (Not to Scale) British Geological Survey © NERC

This edition map indicates the site to have no superficial/soil cover, although Glacial Till (boulder clay) is mapped close to the south of the site boundary. The underlying solid strata is shown to be from the Hughes Beds of the Upper Coal Measures. The conjectural outcrop of the Swansea Two Feet coal seam is shown approximately 30m south of the site. The strata are shown dipping in a generally northern direction at angles of around 10°.

The current British Geological Survey on-line mapping resource 'Geology of Britain viewer' <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> shows a similar setting to the large scale map, with the Hughes Beds being described as mudstones, siltstones and sandstones.

The map also details historical mining features with two adits to the east of the site; the closest being some 150m distant.

2.3 Mining History

Given the location of the site and proximity of potential historical mining features, a Coal Authority Mining Report has been obtained for the site. This is presented in Appendix V.

In summary the Report states:

Past Underground Mining: The property is in a surface area that could be affected by underground mining in 1 seam of coal at 230m to 240m depth, and last worked in 1910. Any movement in the ground due to coal mining activity associated with these workings should have stopped by now.

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

Mine Entries: There are no recorded coal mine entries known to the Coal Authority within, or within 20 metres, of the boundary of the property.

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

Coal mining subsidence: The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994. There is no current Stop Notice delaying the start of remedial works or repairs to the property. The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine Gas:

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

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

3.0 FIELDWORK

The fieldwork was carried out between the 14th and 15th January 2020 under the direction of Quantum's Project Engineer.

The windowless sample boreholes were positioned in order to provide detailed information on the ground for the new build and to be able to draw a cross section through the site for development and assessment of the ground model.

The fieldworks comprised of six boreholes advanced by percussive windowless sampling methods. On refusal of the windowless sampling, the boreholes were extended by continuous dynamic probing, to refusal. A summary of the investigation hole depths is tabulated below. Groundwater monitoring standpipes were installed in two boreholes' one above the gabion wall; and one at house level.

In addition, two infiltration permeability tests were carried out in the boreholes WS05 and WS06 to inform the drainage strategy for the site.

Table 1: Summary of Investigation holes.

Borehole	Location)	Depth (m.bgl)	Observations
WS01	Above Gabion	2.5m	WS to 2.0m; DP extended to 2.5m.
WS02	Above Gabion	2.1m	WS to 2.0m; DP extended to 2.1m. Standpipe installed.
WS03	Road/Front	3.5m	WS to 3.0m; DP extended to 3.5m.
WS04	Road/Front	3.5m	WS to 3.0m; DP extended to 3.5m.
WS05	Adj. Bungalow	1.6m	WS to 1.4m; DP extended to 1.6m.
WS06	Adj. Bungalow	1.8m	WS to 1.5m; DP extended to 1.8m. Standpipe installed.

All site operations, sampling and logging, including in-situ testing were undertaken in accordance with the relevant British Standards, namely: BS5930:2015 *Code of practice for ground investigation*; BS EN 1997-2:2007 *Eurocode 7. Geotechnical design. Ground investigation and testing*; BS1377-9:1999 *Method of test for soils for civil engineering purposes. In-situ testing*; BS EN ISO 14688-1:2018 *Geotechnical investigation and testing. Identification and classification of soil. Identification and description*; and BS EN ISO 14688-2:2018 *Geotechnical investigation and testing. Identification and classification of soil. Principles for a classification* and BS EN ISO 22476-2:2005+A1:2011 *Geotechnical investigation and testing. Field testing. Dynamic probing*.

The relative positions of the holes are shown on the site plan included in Appendix I. The engineering logs of the investigation holes are presented in Appendix II. The permeability test results are presented in Appendix III.

4.0 LABORATORY TESTING

4.1 General

The laboratory testing was scheduled by Quantum and comprised of geotechnical testing on selected soil samples obtained from the investigation to inform interpretation of the ground.

4.2 Geotechnical Laboratory Testing

All the geotechnical soil testing was carried out in accordance with the procedure stipulated in the various sections of BS 1377:1999 Parts 1 – 9 Methods of test for soils for civil engineering purposes. Table 2 details the tests undertaken.

Table 2: Summary of Scheduled Geotechnical Tests.

Type of Test	No. of Tests
Natural Moisture Content	9
Atterberg Limits.	9
PSD - Wet Sieve	9
PSD - Sedimentation	9
pH & Sulphate	6

A full set of geotechnical laboratory test certificates are provided within Appendix IV.

5.0 GROUND CONDITIONS

5.1 Summary of Strata Encountered

A detailed description of the strata encountered during the investigation is given in the Engineering Geologist's logs presented in Appendix II. Table 3 summarises the strata encountered in the investigation holes.

Table 3: Summary of strata encountered

Borehole	Depth (m.bgl)		Description
	From	To	
WS01 <i>Above Gabion</i>	GL	0.45	Made Ground: Silty slightly Sandy GRAVEL
	0.45	>2.0	Firm slightly gravelly & sandy CLAY <i>Slow groundwater ingress at 1.9m depth</i>
WS02 <i>Above Gabion</i>	GL	0.35	Made Ground: Sandy GRAVEL (Hardcore)
	0.35	0.7	Made Ground: Slightly sandy & gravelly CLAY
	0.7	1.8	Firm slightly gravelly & sandy CLAY
	1.8	>2.0	Medium dense clayey slightly sandy GRAVEL <i>Medium groundwater ingress at 1.7m depth</i>
WS03 <i>In Road</i>	GL	1.3	Made Ground: Slightly clayey, silty & sandy GRAVEL
	1.3	1.6	Soft organic SILT/CLAY
	1.6	2.3	Soft slightly gravelly & sandy CLAY
	2.3	>3.0	Soft to firm slightly sandy gravelly CLAY <i>No groundwater</i>
WS04 <i>In Road</i>	GL	1.5	Made Ground: Slightly clayey, silty & sandy GRAVEL
	1.5	2.2	Soft slightly sandy slightly organic SILT/CLAY
	2.2	>3.0	Soft to firm slightly sandy gravelly CLAY <i>No groundwater</i>
WS05 <i>Adj. House</i>	GL	0.35	Made Ground: clayey slightly sandy GRAVEL
	0.35	>1.4	Dense clayey slightly sandy GRAVEL <i>Slow groundwater ingress at 1.2m depth</i>
WS06 <i>Adj. House</i>	GL	0.3	Made Ground: clayey slightly sandy GRAVEL
	0.3	>1.5	Dense clayey slightly sandy GRAVEL <i>Slow groundwater ingress at 1.3m depth</i>

A schematic cross section has been constructed through the site and is presented in Appendix I.

In summary, this ground model shows beneath a mantle of mixed made ground over firm variably sandy and gravelly Clay at the upper level, north of the gabion wall (WS01/WS02).

The boreholes drilled adjacent to the house (WS05/WS06), at around existing house formation level, reveal a dense clayey and sandy Gravel.

The two boreholes drilled to the south on Ormes Road (WS03/WS04) revealed up to 1.5m of mixed poorly compacted Made Ground resting on a slightly organic soft Clay; perhaps the original ground level. This gave way to soft, becoming soft to firm, sandy gravelly Clay.

All the window sample boreholes terminated in firm/stiff or dense strata at their bases. The follow on dynamic probes all showed a rapidly increasing relative density, reaching refusal within 0.5m of the window sample borehole base. This is interpreted as the on-set of weathered bedrock.

The succession of strata in each trial hole beneath the re-worked stratum, where present, revealed a weathered profile of the underlying bedrock.

5.2 Groundwater Conditions

Groundwater strikes were recorded in four of the six window sample boreholes drilled.

The depths of water strikes were as follows:

Table 4: Summary of Groundwater Strikes

Borehole	Depth of GW Strike (m.bgl)
WS01	1.9
WS02	1.7
WS03	None
WS04	None
WS05	1.2
WS06	1.3

Simple standpipes were installed in WS02 and WS06 to measure the equilibrium groundwater level.

It should be noted that groundwater levels are subject to diurnal, seasonal and climatic conditions or may vary due to other causes.

5.3 Visual & Olfactory Evidence of Soil Contamination

There was no visual and / or olfactory evidence of any soil contamination during the investigation works.

5.4 Visual & Olfactory Evidence of Groundwater & Surface Water Contamination

There was no evidence of any groundwater contamination during the investigation works.

6.0 GEOTECHNICAL ENGINEERING APPRAISAL

6.1 General

The purpose of this Ground Investigation, and subsequent reporting, was to determine and assess the existing shallow ground conditions on site in preparation for the construction of new storage tanks.

The main aims of the geotechnical investigation are to provide an assessment of the ground conditions to inform design of the proposed works and determine chemical conditions in respect of below ground structures, confirm ground water levels within the working area and highlight any potential contamination issues revealed within the ground.

6.2 Engineering Properties of Strata

The engineering descriptions of the strata are presented on the exploratory hole logs in Appendix II.

A summary of the geotechnical testing classification testing results are summarised in the table below.

Table 5: Summary of Geotechnical Test Results

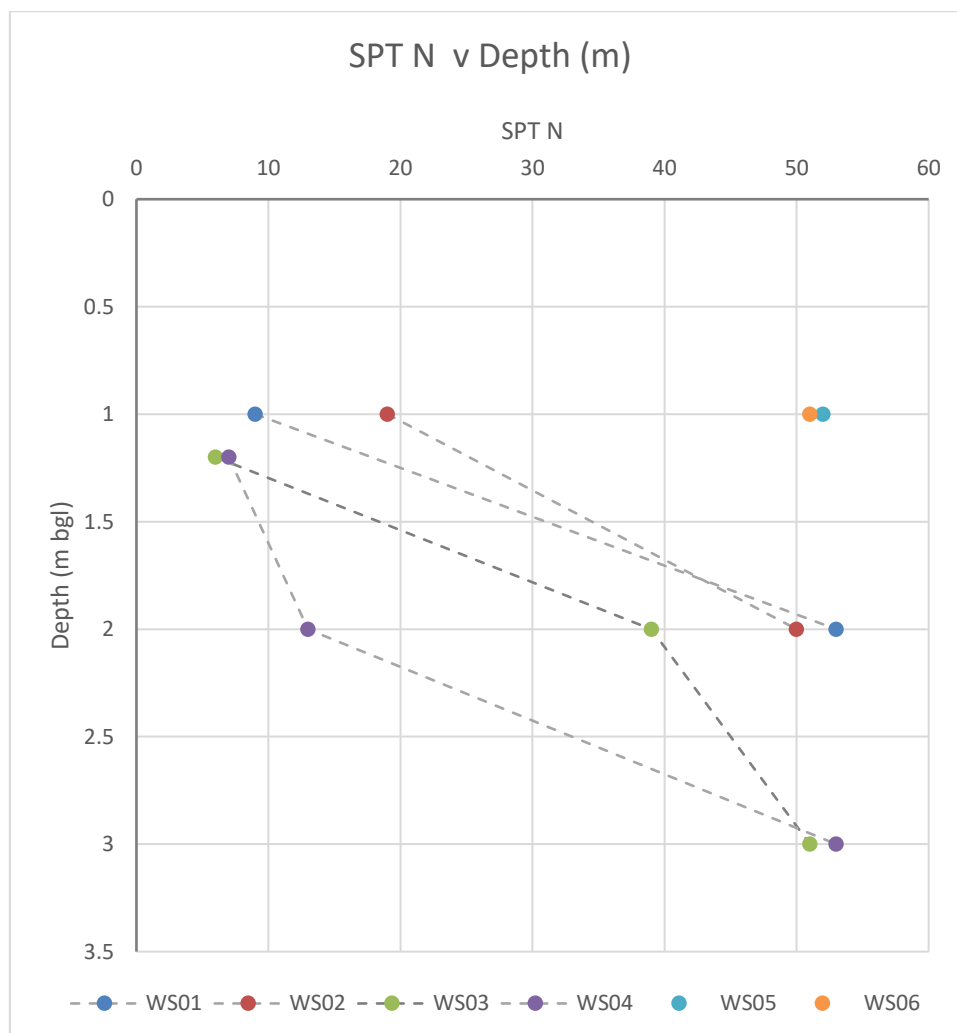
Hole	Depth (m)	Classification Tests							Particle Size Gradings				
		w	LL	PL	PI	<425 μm	PI _{mod}	Plasticity	Cobbles	Gravel	Sand	Silt	Clay
		%	%	%	%	%	%		%	%	%	%	%
WS01	1.0	20	46	22	24	65	16	CI	0	25	19	21	35
WS02	0.7	27											
WS02	1.0	31	65	21	44	100	44	CH	0	0	1	4	95
WS02	1.3	20	52	23	29	72	21	CH	0	22	9	14	55
	2.0	10											
WS03	1.4	39											
	1.8	20											
	2.5	19	53	18	35	50	18	CH	0	32	26	14	28
WS04	0.5	12											
	1.8	25	46	19	27	87	23	CI					
	2.5	17	40	16	24	31	7	CI	0	53	23	6	18
WS05	0.5	25	51	20	31	48	15	CH	0	48	11	11	30
WS06	0.5	15	45	17	28	20	6	CI	0	72	11	4	13

Classification tests showed variable characteristics: A cohesive dominant soil was proved in WS01 & WS02 above the gabion wall, with a more mixed soil in WS05/WS06 at house level and in the ground to the south. The Modified Plasticity Index, allowing for the proportion of coarser material, ranged between 6% and 44%.

At this modified Plasticity Index these shallow soils are predominantly of *Medium* shrink/swell potential (in accordance with NHBC Standards), with one higher value in WS02 of 44%. The classification of CI and CH type soils is more akin to a completely weathered bedrock than typical clay soils in this area.

The results of the Particle Size Distribution curves (PSD) analysis undertaken confirm the range in soil types present.

The consistency and relative density of the soil profile was measured by undertaking Standard Penetration Tests in the window sample boreholes. A summary of the results is presented graphically below.



From these results, the overall average SPT N is 33, with a 25th percentile value of 12. Taking the mean value of all tests in natural soils where full penetration was achieved; the average N value is 36. Adopting the 25th percentile value as indicative of a characteristic value, the N_{char} is 17.

6.3 Foundations

Foundations for the new building on site should be set in the natural clayey slightly sandy Gravel proved at a depth of 0.35m in WS05. Foundations should be constructed at a level consistent with Building Regulations requirements and the maximum modified Plasticity Index recorded of 44%.

On the basis of the SPT testing undertaken, given the presence of relatively shallow groundwater, we would recommend an allowable bearing capacity of 85kN/m² at a depth below 0.5m in this stratum.

We would recommend that the new house foundations are set on a raft foundation to limit any differential settlements.

The existing bungalow showed evidence of differential settlement at the front (south) of the building,

suggesting a variation in founding strata across the footprint of the property. We would therefore recommend that any new foundations are set within uniform strata across the foundation. This may require excavation and replacement of unsuitable soils on the southern elevation, or possibly deepening or stepping of the foundation to suit.

6.4 Site Stability

The area of Ormes Road has an anecdotal history of generic instability.

The geological map extract presented in Section 2.2 does not detail any areas of made ground or landslip.

The BGS *GeoIndex* on-line resource shows recorded landslides along with areas of *made ground*, *landscaped ground* and *worked ground*. An extract from this is presented below for the Skewen area.

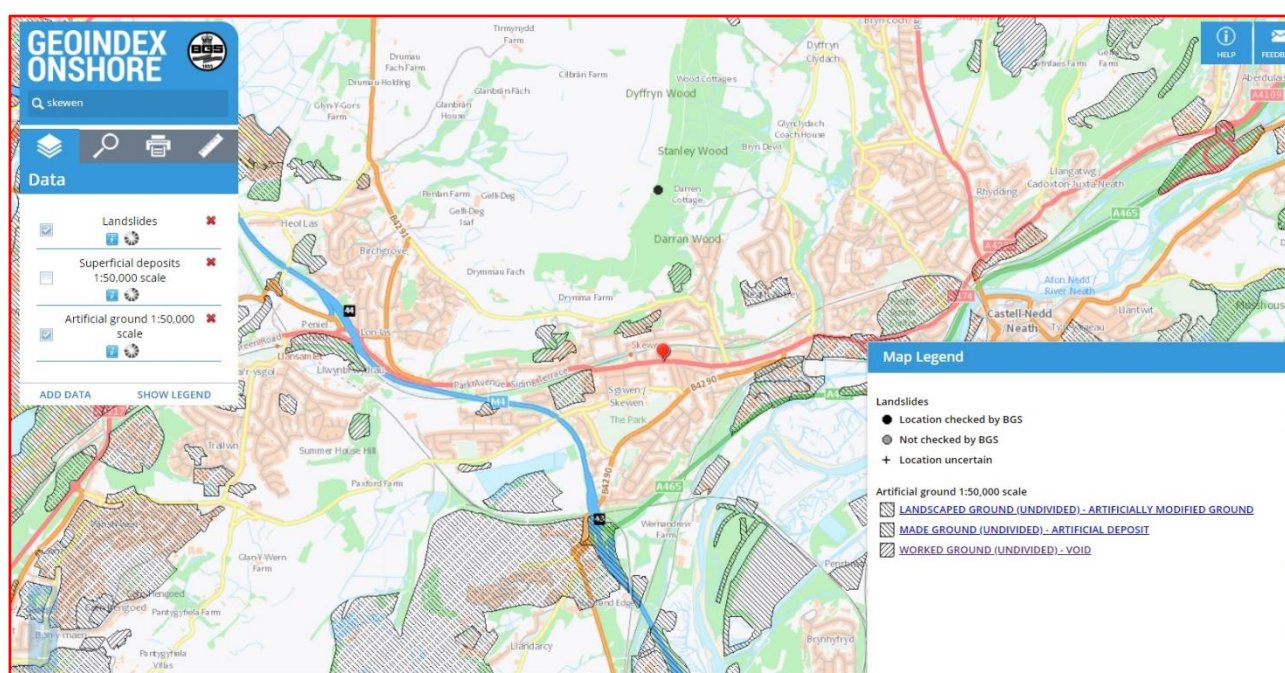


Figure 3: BGS GeoIndex Extract (British Geological Survey © NERC)

The only recorded landslip is to the north of the site. An area of *Made Ground* is mapped to the east of the site, interpreted to be associated with former coal mining activity.

The Institute of Geological Sciences South Wales Coalfield Landslip Survey (1980) mapped all landslides in the South Wales Coalfield area. No feature is noted in the Skewen area.

From the investigation work undertaken for this development site, undisturbed ground has been proved over the whole site, with the boreholes proving the on-set of bedrock at their bases.

Given the findings of the investigation and ground model concluded (Figure 2 Appendix I), the new development will be entirely within virgin ground, with the foundation footprint (and zone of influence of load) being within competent strata.

The investigation boreholes put down on the higher ground above the gabion wall forming part of the northern boundary of the site, indicate that this is founded on dense/firm ground. The material retained by the wall is essentially a firm, becoming firmer/denser with depth, variably sandy and gravelly Clay.

A properly designed retaining structure will be required immediately north of the new building. Typical characteristic parameters that could be used in the design of this, based on the ground investigation, are:

$$\phi' = 32^\circ$$

$$c' = 0 \text{ kN/m}^2$$

$$\gamma' = 19 \text{ kN/m}^3$$

Any drainage entering the site from the northern side as part of any temporary or permanent works must be trained in to formal drainage and not allowed to percolate to ground.

6.5 Earthworks

Site Preparation

Prior to commencing any earth / groundworks for any proposed works, any live services on and in the vicinity of the site, should be accurately located, protected and diverted, if required. Any ledges of hard rock, roots of trees or former services at the base of the proposed development area shall be excavated and replaced with general fill which shall be suitably compacted.

All topsoil shall be stripped. Where required for further use, stockpiled in an area provided by the contractor and agreed by the Engineer.

Any exposed formations should be protected from the effects of the weather, site traffic or water in order to prevent deterioration of this surface. It is recommended that any exposed formation be protected with a minimum thickness of 200mm of suitable granular material or a thin layer of building concrete, which should be placed immediately after excavation and exposure.

Cutting and Filling

Cutting and filling is not envisaged to be required for this development.

Excavation Plant

On the basis of the observations made during the investigation, it is considered that excavations within the natural soils will be possible with conventional excavation plant.

The excavatability of the strata below the depths of investigation cannot be commented on.

Control of Groundwater

Groundwater was encountered at 1.2m.bgl in WS05 adjacent to the existing house. Conventional foundation excavations should therefore not encounter significant groundwater inflows.

If deeper excavations that approach 1.2m, for whatever purpose, do encounter groundwater, then some instability may be encountered owing to the granular dominant nature of the soils encountered on this level of the site.

Sump pumping should be adequate for dewatering any excavations where groundwater seepage is encountered or where surface water ingress occurs. Care must be taken in any control of groundwater that a loss of fines from any formation is inhibited.

Any pumping out of groundwater from excavations should be properly trained to existing drains, assuming the appropriate permissions have been obtained.

Stability of Excavations

From observations made on site, it would be prudent to allow for temporary support or shoring of excavations which should be mandatory if manned entry is required. Given the presence of groundwater, temporary support of the excavations should be allowed for.

6.6 Concrete Classification

The Aggressive Chemical Environment for Concrete (ACEC) classification for the site has been assessed according to the guidelines within BRE Special Digest (2005). For classification purposes, based on the BRE guidance, the groundwater must be classed as 'mobile' unless proven to be 'static' over a 24hr period.

The pH values of the soil samples taken from across the site ranged between 6.1 and 6.8 whilst the levels of water-soluble sulphate (SO_4) content of the tested soil samples varied between 0.03g/l and 0.06g/l.

Based on the there being little re-worked soils on the development footprint site a *greenfield* situation is assumed with a mobile water table. The Design Sulphate (DS) class for the site is assessed as DS-1 with an ACEC classification as AC-1.

6.7 Infiltration Testing

Two borehole soakaway tests were undertaken as part of the ground investigation work in the two boreholes drilled adjacent and on the level of the existing bungalow. The test results are presented in Appendix III.

The tests did not result in a sufficient drop in water level to allow calculation of the infiltration rate by conventional methods. The infiltration rate was therefore calculated using the procedure within BS5930 for borehole permeability testing by the general approach. The permeability infiltration rates calculated were:

WS05: 8.8×10^{-8} m/sec

WS06: 1.1×10^{-8} m/sec

These indicate very poor drainage characteristics that would not lend themselves to soakaway drainage.

Given the history of the wider site area as discussed in Section 6.4. We would not recommend that soakaway drainage to the ground was utilised.

7 REFERENCES

British Geological Survey (BGS)

- British Geological Survey Sheet SS79NW 1:10,560 scale.
- BGS Geology of Britain Viewer/GeoIndex (www.bgs.ac.uk).
- IGS Special Surveys Division (1980), South Wales Landslip Survey, Report No. EG80/4.

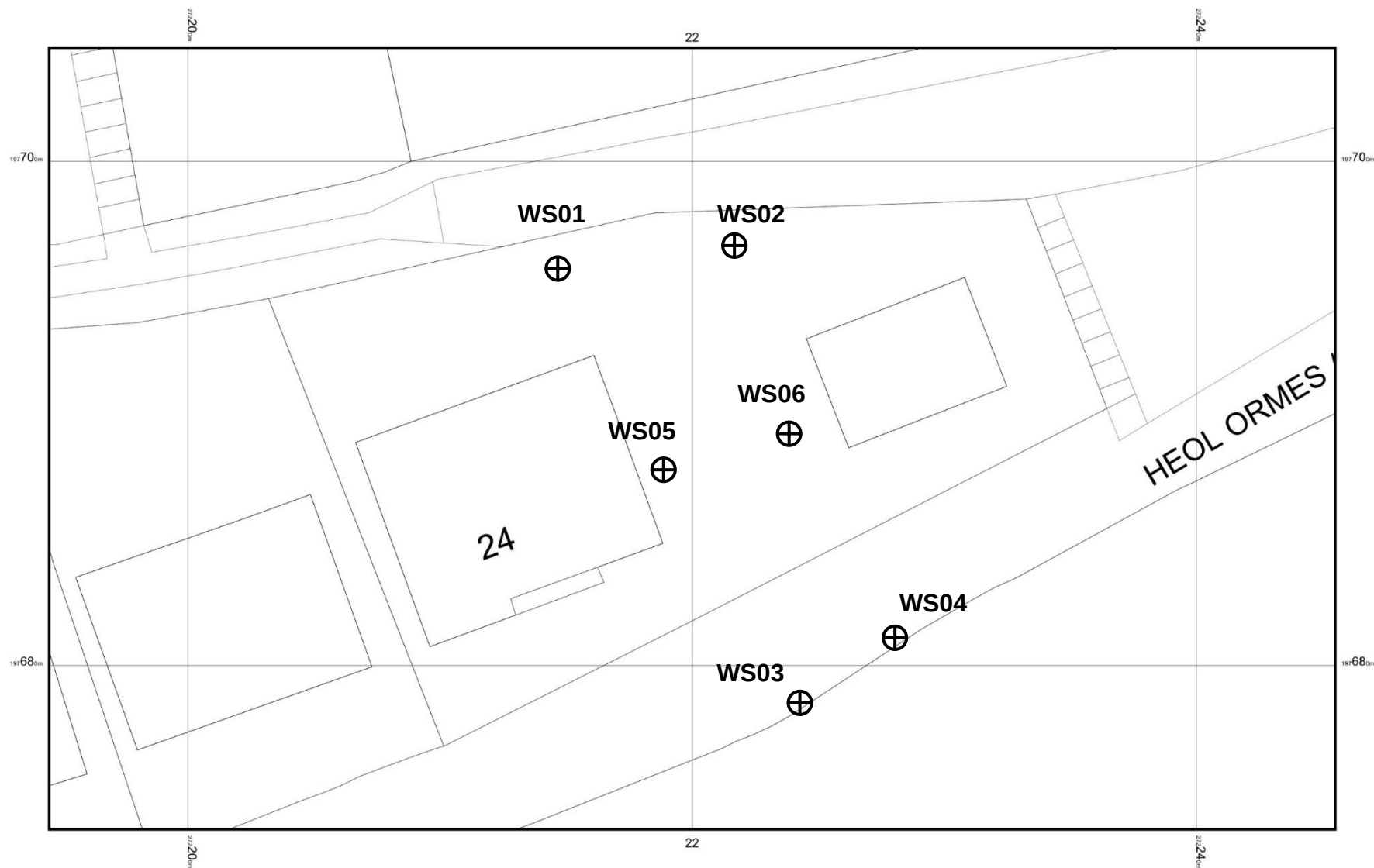
Coal Authority

- Mining Report No. 51002233175001, January 2020

Specialist Publications

- BS 5930:2015 '*Code of Practice for Site Investigations*'
- BS 1377:1990 '*Methods of test for soils for civil engineering purposes*'.
- BS EN ISO 14688-1:2018 *Geotechnical investigation and testing. Identification and classification of soil. Identification and description.*
- BS EN ISO 14688-2:2018 *Geotechnical investigation and testing. Identification and classification of soil. Principles for a classification.*
- BS EN 1997-2:2007 *Eurocode 7. Geotechnical design. Ground investigation and testing*;
- *BS EN ISO 22476-2:2005+A1:2011 Geotechnical investigation and testing. Field testing. Dynamic probing.*
- Health and Safety Executive Guidance Note EH40/90
- BRE (2005) Special Digest 1:2005, 3rd Edition, *Concrete in aggressive ground.*
- BS 6031: 2009 *Code of Practice for Earthworks.*
- CIRIA Report 113 (1986) *Control of Groundwater for Temporary Works*
- Workmanship for excavation shall comply with BS 8000: 1989 Part 1, Sections 3.1, 3.2 and 3.3.
- Bentley and Carter (1991) *Correlations of Soil Properties.*

APPENDIX I – SITE PLANS



Not to Scale

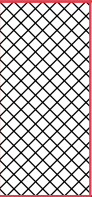
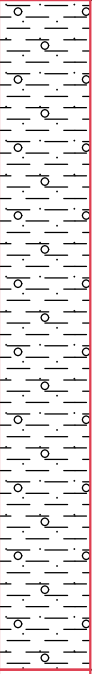


Plas Newydd, Llanedi, Pontarddulais SA4 0FQ
Tel: 01554 744880 E: enquiries@quantumgeotech.co.uk

24 Ormes Road, Skewen Site Plan

Job No:	Q0177	Date:	12/02/20
Ref:	Fig 1	By:	JES

APPENDIX II – EXPLORATORY HOLE LOGS

Contract : 24 Ormes Road, Skewen Client : Jill Howells										Window Sample No. WS01						
Dates : 14/1/20 - 14/1/20 Location : Above Gabion baskets					Job Number : Q0177 Engineer :			Ground Level : Coordinates:								
Samples		Sample Run		Tests		STRATA										
Depth	Type No.	Diam. (mm)	Recovery (%)	Depth	SPT & Hand Vane Results	Depth (Thickness)	DESCRIPTION	Legend	Depth (Thickness)	Water						
0.20	D 1					(0.45)	MADE GROUND: Black silty slightly sandy GRAVEL. Gravel is angular to sub angular fine to coarse sandstone siltstone and tile, fine to medium coal and ash.		(0.45)							
		87	55			0.45	Firm mottled brownish orange grey slightly gravelly slightly sandy CLAY. Gravel is angular to sub angular fine to coarse siltstone.		0.45							
1.00 - 2.00	B 2			1.00	SPT (C) 9 (1-0-1-2-3-3)	(1.55)	with pockets of slightly sandy slightly gravelly Silt.		(1.55)							
		77	95													
2				2.00	SPT (C) 53 (7-9-12-13-14-14)	2.00	Sampling terminated on refusal of sampler and CPT. Continued with Dynamic probe.		2.00							
Equipment / plant used: Dart terrier rig Remarks: Available STATS checked and area CAT and genny scanned prior to excavation. On completion hole backfilled with bentonite pellets with arisings to surface as existing layer. Slow water ingress at 1.9mbgl																
		Plas Newydd, Llanedi, Pontarddulais, Swansea, SA4 0FQ Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk			Operator: DS&ST		Logged By: A Jones		Sheet No. 1 Of 1		m Per Page 3.5		All measurements in metres unless otherwise stated			

Contract : 24 Ormes Road, Skewen

Client : Jill Howells

Borehole No.

WS01

Dates : 14/1/20 - 14/1/20

Job Number : Q0177

Ground Level :

Location : Above Gabion baskets

Engineer :

Coordinates:



Contract : 24 Ormes Road, Skewen Client : Jill Howells										Dynamic Probe WS01	
Dates : 14/1/20 - 14/1/20 Location : Above Gabion baskets					Job Number : Q0177 Engineer :					Ground Level : Coordinates:	

Depth (m)	Reading (Blows / 100mm)					BLOW COUNT (N100 VALUES)										Torque (Nm)	Remarks
	1	2	3	4	5	5	10	15	20	25	30	35	40	45			
0.5																	
1.0																	
1.5																	
2.0	7																
		9															
			13														
				31													
2.5					50												
3.0																	
3.5																	
4.0																	
4.5																	
5.0																	
5.5																	
6.0																	
6.5																	
7.0																	
7.5																	
8.0																	
8.5																	
9.0																	
9.5																	

Equipment: Dart terrier rig Test carried out in accordance with BS 1377 (1990):Part 9, Sect.3.2					Comments: Continued from window sample refusal.				
---	--	--	--	--	--	--	--	--	--

	Plas Newydd, Llanedi, Pontarddulais, Swansea, SA4 0FQ Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk	Operator: DS&ST	Logged By: A Jones	Sheet No. 1 Of 1	m Per Page 10	All measurements in metres unless otherwise stated	
--	--	---------------------------	------------------------------	----------------------------	-------------------------	--	---

Contract : 24 Ormes Road, Skewen Client : Jill Howells										Window Sample No. WS02	
Dates : 14/1/20 - 14/1/20 Location : Above Gabion baskets					Job Number : Q0177 Engineer :			Ground Level : Coordinates:			

	Samples		Sample Run		Tests		STRATA					Water
	Depth	Type No.	Diam. (mm)	Recovery (%)	Depth	SPT & Hand Vane Results	Depth (Thickness)	DESCRIPTION	Legend	Depth (Thickness)		
1	0.30	D 1	87	100	1.00	SPT (C) 19 (3-3-4-5-5-5)	(0.35)	MADE GROUND: Grey slightly silty slightly sandy GRAVEL. Gravel is angular fine to coarse Limestone.		(0.35)		
							0.35	MADE GROUND: Soft to firm mottled brownish orange grey slightly gravelly slightly sandy re-worked CLAY. Gravel is angular to sub angular fine to coarse siltstone, siltstone and rare brick fragments with pockets of slightly sandy slightly gravelly Silt.		0.35		
	0.70	D 2		0.70			Firm mottled brownish orange grey slightly gravelly slightly sandy CLAY. Gravel is angular to sub angular fine to coarse siltstone and sandstone.		0.70			
	1.00 - 1.30	B 3		(0.60)					(0.60)			
	1.30 - 1.80	B 4		1.30			Pale brown slightly sandy gravelly CLAY. Gravel is angular to sub-angular fine to coarse siltstone and sandstone.		1.30			
2			77	100			(0.50)			(0.50)		
	2.00	D 5			2.00	SPT (C) 50/75mm (16-22-50---)	1.80	Pale brown clayey slightly sandy GRAVEL. Gravel is angular to sub angular fine to coarse siltstone and sandstone.		1.80		
							2.00	Sampling terminated on refusal of sampler and CPT. Continued with Dynamic probe.		2.00		

Equipment / plant used: Dart terrier rig
Remarks: Available STATS checked and area CAT and genny scanned prior to excavation. On completion hole installed with water monitoring standpipe.
 Medium water ingress at 1.7mbgl

	Plas Newydd, Llanedi, Pontarddulais, Swansea, SA4 0FQ Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		DS&ST	A Jones	1 Of 1	3.5		

Library File: C:\USERS\ARWELJONES\QUANTUM\DESKTOP\QUANTUM 4.GLB. Form Name: WINDOW SAMPLE PREC2 WITH SPT. Version 1.10.100, 10/05/16 Output By: ArwelJones

Contract : 24 Ormes Road, Skewen

Client : Jill Howells

Borehole No.

WS02

Dates : 14/1/20 - 14/1/20

Job Number : Q0177

Ground Level :

Location : Above Gabion baskets

Engineer :

Coordinates:



Contract : 24 Ormes Road, Skewen											Dynamic Probe WS02	
Client : Jill Howells												
Dates : 14/1/20 - 14/1/20					Job Number : Q0177					Ground Level :		
Location : Above Gabion baskets					Engineer :					Coordinates:		

Depth (m)	Reading (Blows / 100mm)					BLOW COUNT (N100 VALUES)										Torque (Nm)	Remarks
	1	2	3	4	5	5	10	15	20	25	30	35	40	45			
0.5																	
1.0																	
1.5																	
2.0	50																
2.5																	
3.0																	
3.5																	
4.0																	
4.5																	
5.0																	
5.5																	
6.0																	
6.5																	
7.0																	
7.5																	
8.0																	
8.5																	
9.0																	
9.5																	

Equipment: Dart terrier rig					Comments: Continued from window sample refusal.				
Test carried out in accordance with BS 1377 (1990):Part 9, Sect.3.2									

	Plas Newydd, Llanedi, Pontarddulais, Swansea, SA4 0FQ Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		DS&ST	A Jones	1 Of 1	10		

Contract : 24 Ormes Road, Skewen Client : Jill Howells										Window Sample No. WS03	
Dates : 14/1/20 - 14/1/20 Location : Road Level					Job Number : Q0177 Engineer :			Ground Level : Coordinates:			
Samples		Sample Run		Tests		STRATA					
Depth	Type No.	Diam. (mm)	Recovery (%)	Depth	SPT & Hand Vane Results	Depth (Thickness)	DESCRIPTION	Legend	Depth (Thickness)	Water	
0.50 - 1.00	B 1			1.20	SPT (C) 6 (2-2-1-2-1-2)	(1.30)	MADE GROUND: Brown grey slightly clayey slightly silty slightly sandy GRAVEL with low cobble content of brick concrete and sandstone. Gravel is angular to sub angular fine to coarse sandstone, siltstone, brick and concrete.		(1.30)		
1.40 - 1.60	D 2	87	95			1.30 (0.30)	Soft grey slightly sandy slightly organic SILT / CLAY.		1.30 (0.30)		
1.80 - 2.00	D 3					1.60 (0.70)	Soft mottled brownish orange grey slightly gravelly slightly sandy CLAY. Gravel is angular to sub angular fine to coarse siltstone and sandstone.		1.60 (0.70)		
2.50 - 3.00	B 4	77	100	2.00	SPT (C) 39 (4-5-8-8-11-12)	2.30 (0.70)	Soft to firm pale brown slightly sandy gravelly CLAY. Gravel is angular to sub-angular fine to coarse siltstone and sandstone.		2.30 (0.70)		
				3.00	SPT (C) 51 (4-8-10-13-14-14)	3.00	Sampling terminated on refusal of sampler and CPT. Continued with Dynamic probe.		3.00		
Equipment / plant used: Dart terrier rig Remarks: Available STATS checked and area CAT and genny scanned prior to excavation. On completion hole backfilled with bentonite pellets with arisings to surface as existing layer. Water entering pit from surface, standing water level on completion = 2.2mbgl											
		Plas Newydd, Llanedi, Pontarddulais, Swansea, SA4 0FQ Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk				Operator: DS&ST		Logged By: A Jones		Sheet No. 1 Of 1	
						m Per Page 3.5		All measurements in metres unless otherwise stated			

Contract : 24 Ormes Road, Skewen

Client : Jill Howells

Borehole No.

WS03

Dates : 14/1/20 - 14/1/20

Job Number : Q0177

Ground Level :

Location : Road Level

Engineer :

Coordinates:



Plas Newydd, Llanedi,
Pontarddulais, Swansea, SA4 0FQ
Tel: 01554 744880
Fax:
email: enquiries@quantumgeotech.co.uk

Operator:
DS&ST

Logged By:
A Jones

Sheet No.
1 Of 1

m Per
Page
2

All measurements in
metres unless
otherwise stated



Contract : 24 Ormes Road, Skewen

Client : Jill Howells

Dynamic Probe
WS03

Dates : 14/1/20 - 14/1/20

Job Number : Q0177

Ground Level :

Location : Road Level

Engineer :

Coordinates:

Depth (m)	Reading (Blows / 100mm)					BLOW COUNT (N100 VALUES)										Torque (Nm)	Remarks
	1	2	3	4	5	5	10	15	20	25	30	35	40	45			
0.5																	
1.0																	
1.5																	
2.0																	
2.5																	
3.0	13																
		18															
			19														
				25													
3.5					50												
4.0																	
4.5																	
5.0																	
5.5																	
6.0																	
6.5																	
7.0																	
7.5																	
8.0																	
8.5																	
9.0																	
9.5																	

Equipment: Dart terrier rig

Comments: Continued from window sample refusal.

Test carried out in accordance with BS 1377 (1990):Part 9, Sect.3.2



Plas Newydd, Llanedi,
Pontarddulais, Swansea, SA4 0FQ
Tel: 01554 744880
Fax:
email: enquiries@quantumgeotech.co.uk

Operator:
DS&ST

Logged By:
A Jones

Sheet No.
1 Of 1

m Per
Page
10

All measurements in
metres unless
otherwise stated



Contract : 24 Ormes Road, Skewen										Window Sample No.	
Client : Jill Howells										WS04	
Dates : 14/1/20 - 14/1/20					Job Number : Q0177			Ground Level :			
Location : Road Level					Engineer :			Coordinates:			

	Samples		Sample Run		Tests		STRATA					Water
	Depth	Type No.	Diam. (mm)	Recovery (%)	Depth	SPT & Hand Vane Results	Depth (Thickness)	DESCRIPTION	Legend	Depth (Thickness)		
1	0.50 - 1.00	B 1					(1.50)	MADE GROUND: Brown grey slightly clayey slightly silty slightly sandy GRAVEL with low cobble content of brick concrete and sandstone. Gravel is angular to sub angular fine to coarse sandstone, siltstone, brick and concrete.		(1.50)		
					1.20	SPT (C) 7 (1-0-1-2-2-2)						
2	1.80 - 2.00	D 2	87	100			1.50	Soft grey slightly sandy slightly organic SILT / CLAY.		1.50		
					2.00	SPT (C) 13 (3-5-2-3-4-4)	(0.70)			(0.70)		
3	2.50 - 3.00	B 3	77	70			2.20	Soft to firm pale brown slightly sandy gravelly CLAY. Gravel is angular to sub-angular fine to coarse siltstone and sandstone.		2.20		
					3.00	SPT (C) 53 (7-9-14-14-12-13)	(0.80)			(0.80)		
					3.00		3.00	Sampling terminated on refusal of sampler and CPT. Continued with Dynamic probe.		3.00		

Equipment / plant used: Dart terrier rig

Remarks: Available STATS checked and area CAT and genny scanned prior to excavation. On completion hole backfilled with bentonite pellets with arisings to surface as existing layer.

Water entering pit from surface, standing water level on completion = 2.5mbgl

	Plas Newydd, Llanedi, Pontarddulais, Swansea, SA4 0FQ Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		DS&ST	A Jones	1 Of 1	3.5		

Library File: C:\USERS\ARWELJONES\QUANTUM\DESKTOP\QUANTUM 4.GLB. Form Name: WINDOW SAMPLE PREC2 WITH SPT. Version 1.10.100, 10/05/16 Output By: ArwelJones

Contract : 24 Ormes Road, Skewen

Client : Jill Howells

Borehole No.

WS04

Dates : 14/1/20 - 14/1/20

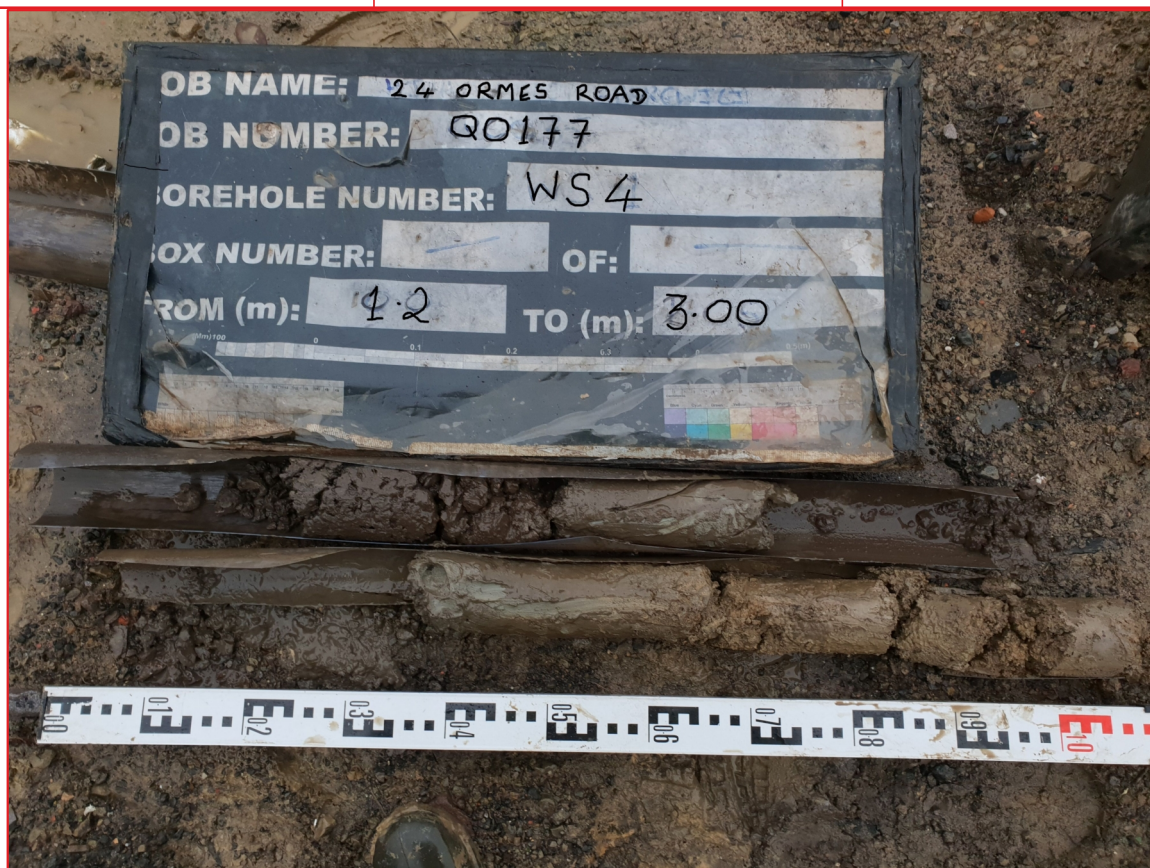
Job Number : Q0177

Ground Level :

Location : Road Level

Engineer :

Coordinates:



Plas Newydd, Llanedi,
Pontarddulais, Swansea, SA4 0FQ
Tel: 01554 744880
Fax:
email: enquiries@quantumgeotech.co.uk

Operator:
DS&ST

Logged By:
A Jones

Sheet No.
1 Of 1

**m Per
Page**
2

All measurements in
metres unless
otherwise stated



Contract : 24 Ormes Road, Skewen

Client : Jill Howells

Dynamic Probe
WS04

Dates : 14/1/20 - 14/1/20

Job Number : Q0177

Ground Level :

Location : Road Level

Engineer :

Coordinates:

Depth (m)	Reading (Blows / 100mm)					BLOW COUNT (N100 VALUES)										Torque (Nm)	Remarks
	1	2	3	4	5	5	10	15	20	25	30	35	40	45			
0.5																	
1.0																	
1.5																	
2.0																	
2.5																	
3.0	16																
		19															
			25														
				32													
3.5					50												
4.0																	
4.5																	
5.0																	
5.5																	
6.0																	
6.5																	
7.0																	
7.5																	
8.0																	
8.5																	
9.0																	
9.5																	

Equipment: Dart terrier rig

Comments: Continued from window sample refusal.

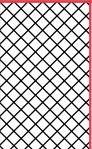
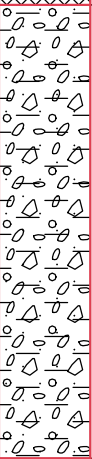
Test carried out in accordance with BS 1377 (1990):Part 9, Sect.3.2



Plas Newydd, Llanedi,
Pontarddulais, Swansea, SA4 0FQ
Tel: 01554 744880
Fax:
email: enquiries@quantumgeotech.co.uk

Operator:
DS&STLogged By:
A JonesSheet No.
1 Of 1m Per
Page
10All measurements in
metres unless
otherwise stated

Contract : 24 Ormes Road, Skewen										Window Sample No.	
Client : Jill Howells										WS05	
Dates : 15/1/20 - 15/1/20					Job Number : Q0177			Ground Level :			
Location : Below Gabion baskets					Engineer :			Coordinates:			

	Samples		Sample Run		Tests		STRATA					Water
	Depth	Type No.	Diam. (mm)	Recovery (%)	Depth	SPT & Hand Vane Results	Depth (Thickness)	DESCRIPTION	Legend	Depth (Thickness)		
1	0.50 - 1.00	B 1			1.00	SPT (C) 52/225mm (10-15-15-17-20-)	(0.35)	MADE GROUND (Re-worked): Pale brown clayey slightly sandy GRAVEL with low cobble content of sandstone and rare brick. Gravel is angular to sub angular fine to coarse siltstone and sandstone.		(0.35)		
			0.35	Pale brown clayey slightly sandy GRAVEL. Gravel is angular to sub angular fine to coarse siltstone and sandstone.				0.35				
			(1.05)				(1.05)					
			87	0			1.40	Sampling terminated on refusal of sampler and CPT. Continued with Dynamic probe.		1.40		

Equipment / plant used: Orange wheeled rig

Remarks: Available STATS checked and area CAT and genny scanned prior to excavation. On completion hole backfilled with bentonite pellets with arisings to surface as existing layer.

Slow water ingress at 1.2mbgl

	Plas Newydd, Llanedi, Pontarddulais, Swansea, SA4 0FQ Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		DS&ST	A Jones	1 Of 1	3.5		

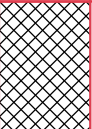
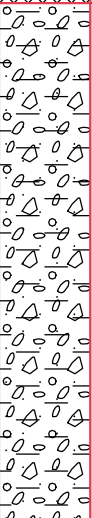
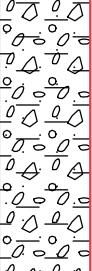
Library File: C:\USERS\ARWELJONES\QUANTUM\DESKTOP\QUANTUM 4.GLB. Form Name: WINDOW SAMPLE PREC2 WITH SPT. Version 1.10.100, 10/05/16 Output By: ArwelJones

Contract : 24 Ormes Road, Skewen Client : Jill Howells											Dynamic Probe WS05	
Dates : 15/1/20 - 15/1/20 Location : Below Gabion baskets					Job Number : Q0177 Engineer :					Ground Level : Coordinates:		

Depth (m)	Reading (Blows / 100mm)					BLOW COUNT (N100 VALUES)										Torque (Nm)	Remarks
	1	2	3	4	5	5	10	15	20	25	30	35	40	45			
0.5																	
1.0																	
1.5	31																
		50															
2.0																	
2.5																	
3.0																	
3.5																	
4.0																	
4.5																	
5.0																	
5.5																	
6.0																	
6.5																	
7.0																	
7.5																	
8.0																	
8.5																	
9.0																	
9.5																	

Equipment: Orange wheeled rig Test carried out in accordance with BS 1377 (1990):Part 9, Sect.3.2					Comments: Continued from window sample refusal.				
---	--	--	--	--	--	--	--	--	--

	Plas Newydd, Llanedi, Pontarddulais, Swansea, SA4 0FQ Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk	Operator: DS&ST	Logged By: A Jones	Sheet No. 1 Of 1	m Per Page 10	All measurements in metres unless otherwise stated	
--	--	---------------------------	------------------------------	----------------------------	-------------------------	--	---

Contract : 24 Ormes Road, Skewen Client : Jill Howells										Window Sample No. WS06	
Dates : 15/1/20 - 15/1/20 Location : Below Gabion baskets					Job Number : Q0177 Engineer :			Ground Level : Coordinates:			
Samples		Sample Run		Tests		STRATA					
Depth	Type No.	Diam. (mm)	Recovery (%)	Depth	SPT & Hand Vane Results	Depth (Thickness)	DESCRIPTION	Legend	Depth (Thickness)	Water	
0.50 - 1.00	B 1	87	0	1.00	SPT (C) 51 (7-9-10-12-13-16)	(0.30)	MADE GROUND (Re-worked): Pale brown clayey slightly sandy GRAVEL with low cobble content of sandstone and rare brick. Gravel is angular to sub angular fine to coarse siltstone and sandstone.		(0.30)		
						0.30	Pale brown clayey slightly sandy GRAVEL. Gravel is angular to sub angular fine to coarse siltstone and sandstone.		0.30		
						(1.20)			(1.20)		
						1.50	Sampling terminated on refusal of sampler and CPT. Continued with Dynamic probe.		1.50		

DRAFT

Equipment / plant used: Orange wheeled rig
Remarks: Available STATS checked and area CAT and genny scanned prior to excavation. On completion hole installed with water monitoring standpipe.
 Slow water ingress at 1.3mbgl

	Plas Newydd, Llanedi, Pontarddulais, Swansea, SA4 0FQ Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		DS&ST	A Jones	1 Of 1	3.5		

Contract : 24 Ormes Road, Skewen											Dynamic Probe WS06	
Client : Jill Howells												
Dates : 15/1/20 - 15/1/20					Job Number : Q0177					Ground Level :		
Location : Below Gabion baskets					Engineer :					Coordinates:		

Depth (m)	Reading (Blows / 100mm)					BLOW COUNT (N100 VALUES)										Torque (Nm)	Remarks
	1	2	3	4	5	5	10	15	20	25	30	35	40	45			
0.5																	
1.0																	
1.5	11																
		27															
			50														
2.0																	
2.5																	
3.0																	
3.5																	
4.0																	
4.5																	
5.0																	
5.5																	
6.0																	
6.5																	
7.0																	
7.5																	
8.0																	
8.5																	
9.0																	
9.5																	

Equipment: Orange wheeled rig					Comments: Continued from window sample refusal.				
Test carried out in accordance with BS 1377 (1990):Part 9, Sect.3.2									

	Plas Newydd, Llanedi, Pontarddulais, Swansea, SA4 0FQ Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		DS&ST	A Jones	1 Of 1	10		

APPENDIX III – INFILTRATION TEST RESULTS

Test Location : WS6
Test No : 1
Date : 15/01/2020

The diagram illustrates a cross-section of a borehole soakaway. At the top, the title "BOREHOLE SOAKAWAY" is centered. The ground level is indicated by a hatched line on the right, labeled "GL" with an inverted triangle symbol. The water level inside the borehole is marked with a hatched line and an inverted triangle, labeled "WL". The vertical distance from the ground level to the water level is labeled "Depth to water". The borehole itself is a vertical cylinder. The total height of the water column is labeled "Borehole depth" on the left. The water column is divided into two sections: the top section is labeled "75% Effective Depth" and the bottom section is labeled "25% Effective Depth", both indicated by dashed horizontal lines. The total height of the water column is also labeled "Effective depth" on the right. Arrows indicate the vertical dimensions for "Depth to water", "Borehole depth", and "Effective depth".

Effective depth (Head of Water) = 0.70 m

$$\begin{aligned} \mathbf{v}_{p75-25} &= 0.00 \text{ m}^3 \\ \mathbf{a}_{p50} &= 0.14 \text{ m}^2 \\ \mathbf{t}_{p75-25} &= 0 \text{ min} \end{aligned}$$

Soil Infiltration rate, f = m/sec
Unable to determine

Sheet 1 of 2

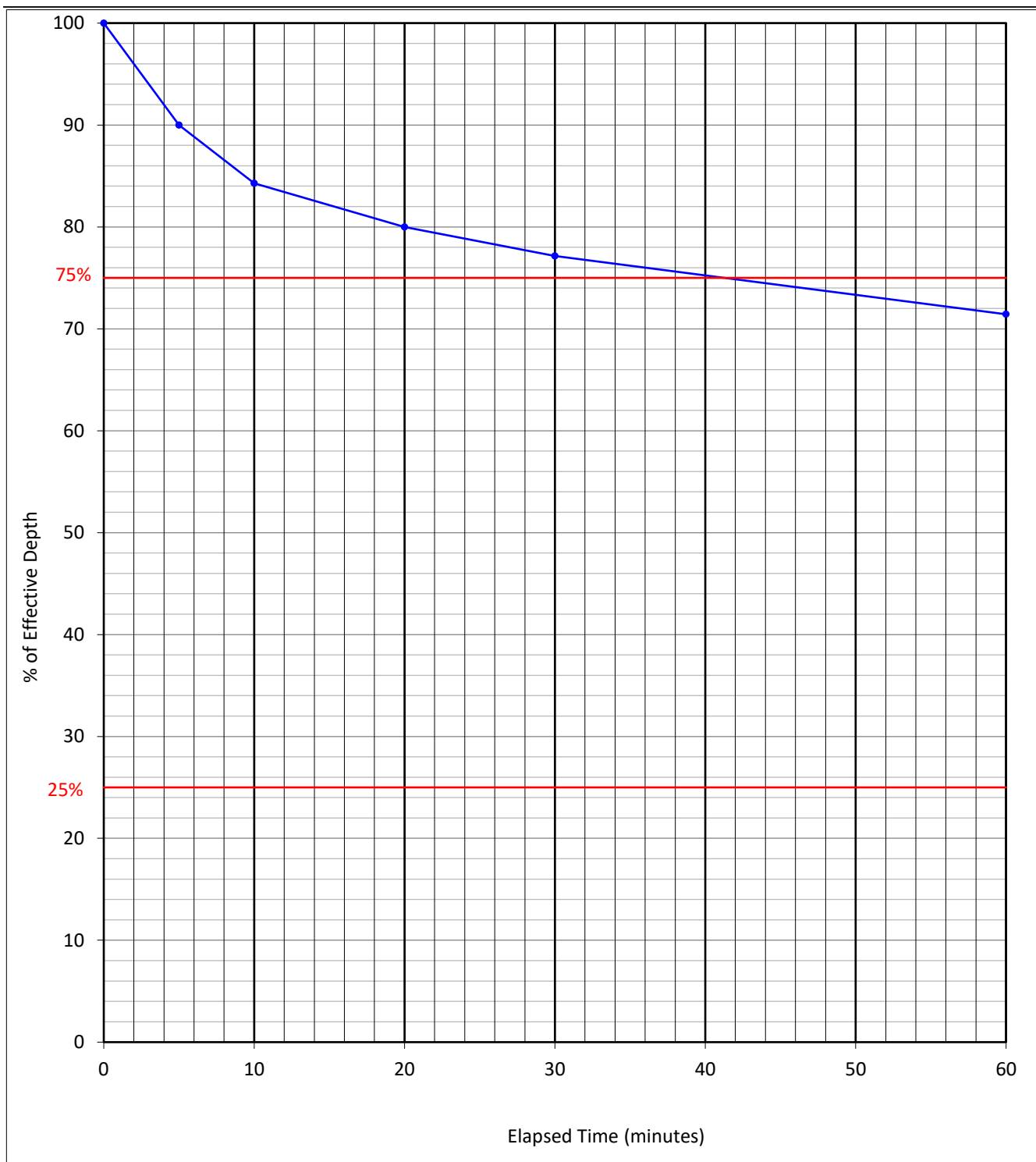
Remarks:



IN-SITU TESTING - Soakaway Test

Project: 24 Ormes Road
Project No: Q0177
Client: Jill Howells

Test Location : WS6
Test No : 1
Date : 15/01/2020



t_{p75} =	minutes
t_{p25} =	minutes

Sheet 2 of 2

Remarks:



Test Location : WS5
Test No : 1
Date : 15/01/2020

The diagram illustrates a cross-section of a borehole soakaway. At the top, the title "BOREHOLE SOAKAWAY" is centered. The ground level is indicated by a hatched line on the right, labeled "GL" with an inverted triangle symbol. The water level inside the borehole is marked with a hatched line and an inverted triangle, labeled "WL". The vertical distance from the ground level to the water level is labeled "Depth to water". The borehole itself is a vertical cylinder. The total height of the water column is labeled "Borehole depth" on the left. The water column is divided into two sections: the top section is labeled "75% Effective Depth" and the bottom section is labeled "25% Effective Depth". The total height of the water column is also labeled "Effective depth" on the right. The borehole is shown as a vertical cylinder with a hatched top and bottom.

Effective depth (Head of Water) = 0.80 m

$$\begin{aligned} \mathbf{v}_{p75-25} &= 0.00 \text{ m}^3 \\ \mathbf{a}_{p50} &= 0.16 \text{ m}^2 \\ \mathbf{t}_{p75-25} &= 0 \text{ min} \end{aligned}$$

Soil Infiltration rate, f = m/sec
Unable to determine

Sheet 1 of 2

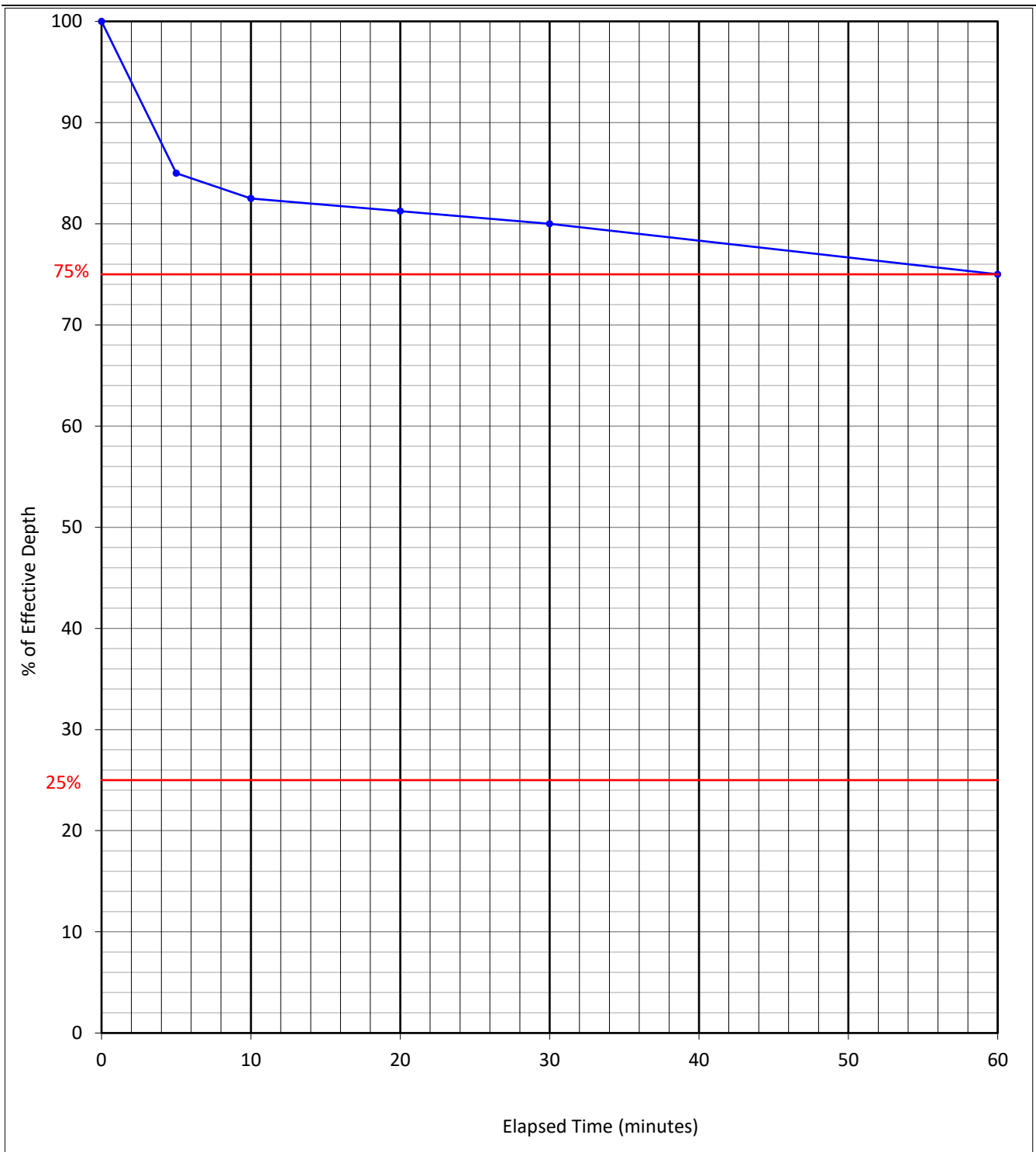
Remarks:



IN-SITU TESTING - Soakaway Test

Project: 24 Ormes Road
Project No: Q0177
Client: Jill Howells

Test Location : WS5
Test No : 1
Date : 15/01/2020



t_{p75} =	minutes
t_{p25} =	minutes

Sheet 2 of 2

Remarks:



APPENDIX IV – GEOTECHNICAL LABORATORY TEST RESULTS



Contract Number: 47604

Client Ref: **Q0177**

Report Date: **14-02-2020**

Client PO:

Client **Quantum Geotechnic Ltd**
Ty Berwig
Bynea
Llanelli.
Carmarthenshire.
SA14 9ST

Contract Title: **24 Ormes Road, Skewen**
For the attention of: **John Stark**

Date Received: **03-02-2020**

Date Completed: **14-02-2020**

Test Description	Qty
Moisture Content BS 1377:1990 - Part 2 : 3.2 - * UKAS	13
4 Point Liquid & Plastic Limit BS 1377:1990 - Part 2 : 4.3 & 5.3 - * UKAS	8
PSD Wet Sieve method BS 1377:1990 - Part 2 : 9.2 - * UKAS	7
Water Soluble Sulphate 2:1 extract BS 1377:1990 - Part 3 : 5.3 - @ Non Accredited Test	5
pH value of soil BS 1377:1990 - Part 3 : 9.5 - @ Non Accredited Test	5
PSD: Sedimentation by pipette carried out with Wet Sieve (Wet Sieve must also be selected) BS 1377:1990 - Part 2 : 9.4 - * UKAS	7
Disposal of samples for job	1

Notes: Observations and Interpretations are outside the UKAS Accreditation
* - denotes test included in laboratory scope of accreditation
- denotes test carried out by approved contractor
@ - denotes non accredited tests

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved Signatories:

Emma Sharp (Office Manager) - Paul Evans (Quality/Technical Manager) - Richard John (Advanced Testing Manager)
Sean Penn (Administrative/Accounts Assistant) - Shaun Jones (Laboratory manager) - Wayne Honey (Administrative/Quality Assistant)

Natural Moisture Content
(BS 1377:1990 - Part 2 : 3.2)

DESCRIPTIONS

Contract Number	47604	
Site Name	24 Ormes Road, Skewen	
Date Tested	10/02/2020	

[illegible]

Operators	Checked	14/02/2020	Wayne Honey (Administrative/Quality Assistant)
Daniel Bassett	Approved	14/02/2020	Paul Evans (Quality/Technical Manager)



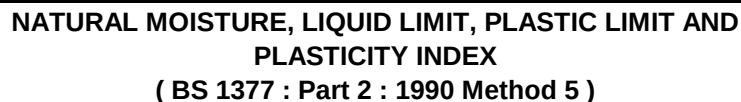
2788

**Natural Moisture Content
(BS 1377:1990 - Part 2 : 3.2)**

Contract Number	47604	
Site Name	24 Ormes Road, Skewen	
Date Tested	10/02/2020	

[illegible]

Operators	Checked	14/02/2020	Wayne Honey (Administrative/Quality Assistant)
Daniel Bassett	Approved	14/02/2020	Paul Evans (Quality/Technical Manager)



Contract Number

47604

Site Name

24 Ormes Road, Skewen

Date Tested

14/02/2020

DESCRIPTIONS

[illegible]

Operators	Checked	14/02/2020	Wayne Honey (Administrative/Quality Assistant)
** Please Select Operator **	Approved	14/02/2020	Paul Evans (Quality/Technical Manager)

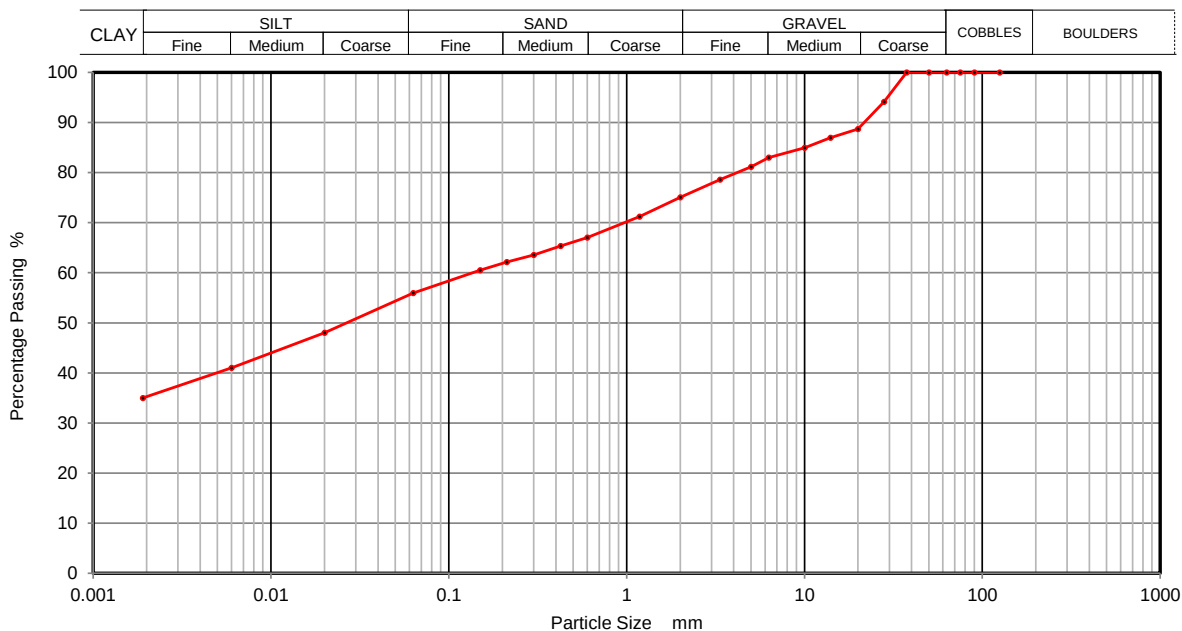




PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Contract Number	47604
Borehole/Pit No.	WS01
Sample No.	2
Depth Top	1.00
Depth Base	2.00
Sample Type	B

Site Name	24 Ormes Road, Skewen
Soil Description	Brown fine to coarse sandy silty fine to coarse gravelly CLAY
Date Tested	11/02/2020



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	48
90	100	0.0060	41
75	100	0.0020	35
63	100		
50	100		
37.5	100		
28	94		
20	89		
14	87		
10	85		
6.3	83		
5	81		
3.35	79		
2	75		
1.18	71		
0.6	67		
0.425	65		
0.3	64		
0.212	62		
0.15	61		
0.063	56		

Sample Proportions	% dry mass
Cobbles	0
Gravel	25
Sand	19
Silt	21
Clay	35

Remarks
 Preparation and testing in accordance with BS1377 unless noted below

Operators	Checked	13/02/2020	Wayne Honey	<i>W. Honey</i>
RO/MH	Approved	14/02/2020	Paul Evans	<i>P. Evans</i>





PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Contract Number **47604**

Borehole/Pit No. **WS02**

Site Name **24 Ormes Road, Skewen**

Sample No. **3**

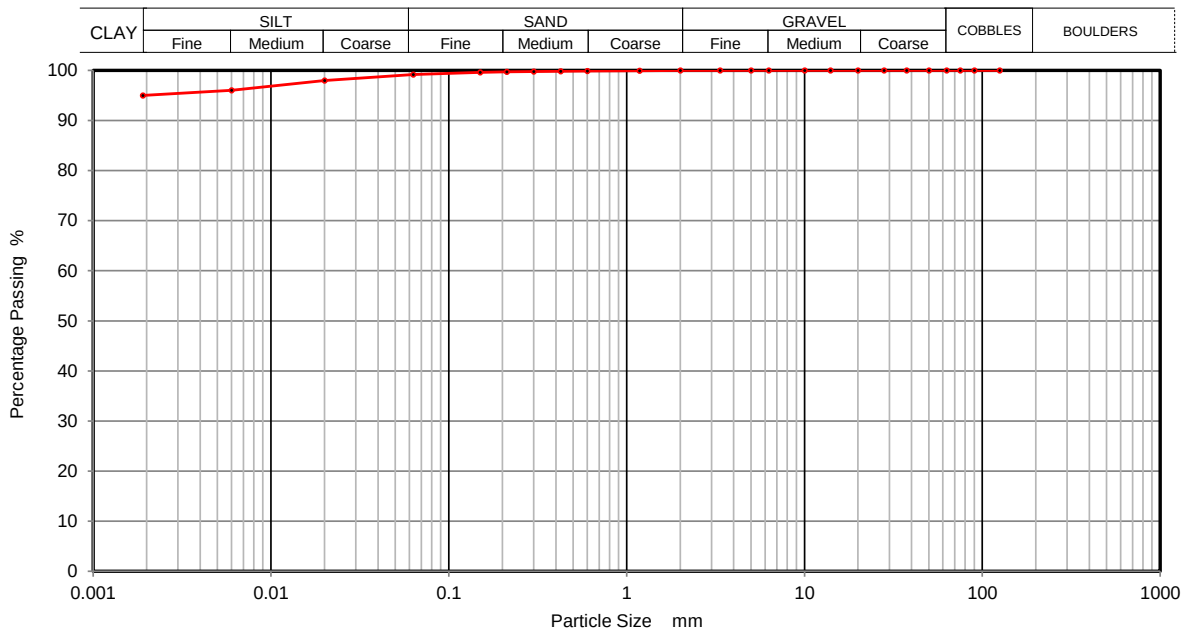
Soil Description **Brownish grey slightly sandy slightly silty CLAY**

Depth Top **1.00**

Depth Base **1.30**

Date Tested **11/02/2020**

Sample Type **B**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	98
90	100	0.0060	96
75	100	0.0020	95
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	1
Silt	4
Clay	95

Remarks
 Preparation and testing in accordance with BS1377 unless noted below

Operators	Checked	13/02/2020	Wayne Honey	<i>W. Honey</i>
RO/MH	Approved	14/02/2020	Paul Evans	<i>P. Evans</i>

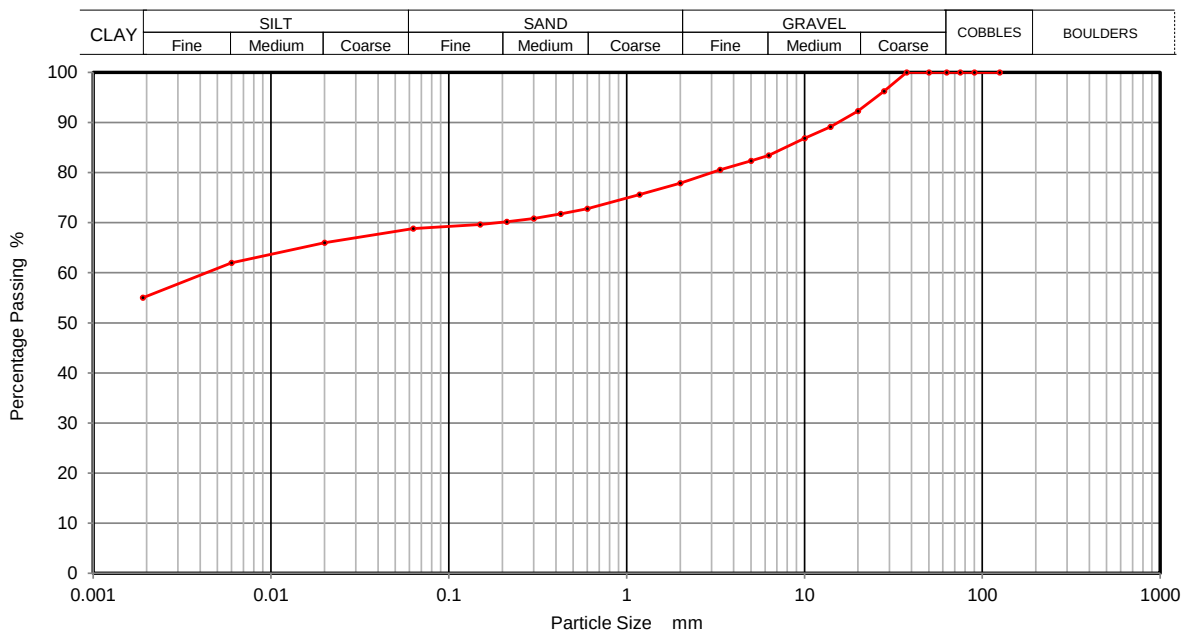




PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Contract Number	47604
Borehole/Pit No.	WS02
Sample No.	4
Depth Top	1.30
Depth Base	1.80
Sample Type	B

Site Name	24 Ormes Road, Skewen
Soil Description	Grey slightly fine to coarse sandy silty fine to coarse gravelly CLAY
Date Tested	11/02/2020



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	66
90	100	0.0060	62
75	100	0.0020	55
63	100		
50	100		
37.5	100		
28	96		
20	92		
14	89		
10	87		
6.3	83		
5	82		
3.35	81		
2	78		
1.18	76		
0.6	73		
0.425	72		
0.3	71		
0.212	70		
0.15	70		
0.063	69		

Sample Proportions	% dry mass
Cobbles	0
Gravel	22
Sand	9
Silt	14
Clay	55

Remarks
 Preparation and testing in accordance with BS1377 unless noted below

Operators	Checked	13/02/2020	Wayne Honey	<i>W. Honey</i>
RO/MH	Approved	14/02/2020	Paul Evans	<i>P. Evans</i>





PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Contract Number **47604**

Borehole/Pit No. **WS03**

Site Name **24 Ormes Road, Skewen**

Sample No. **4**

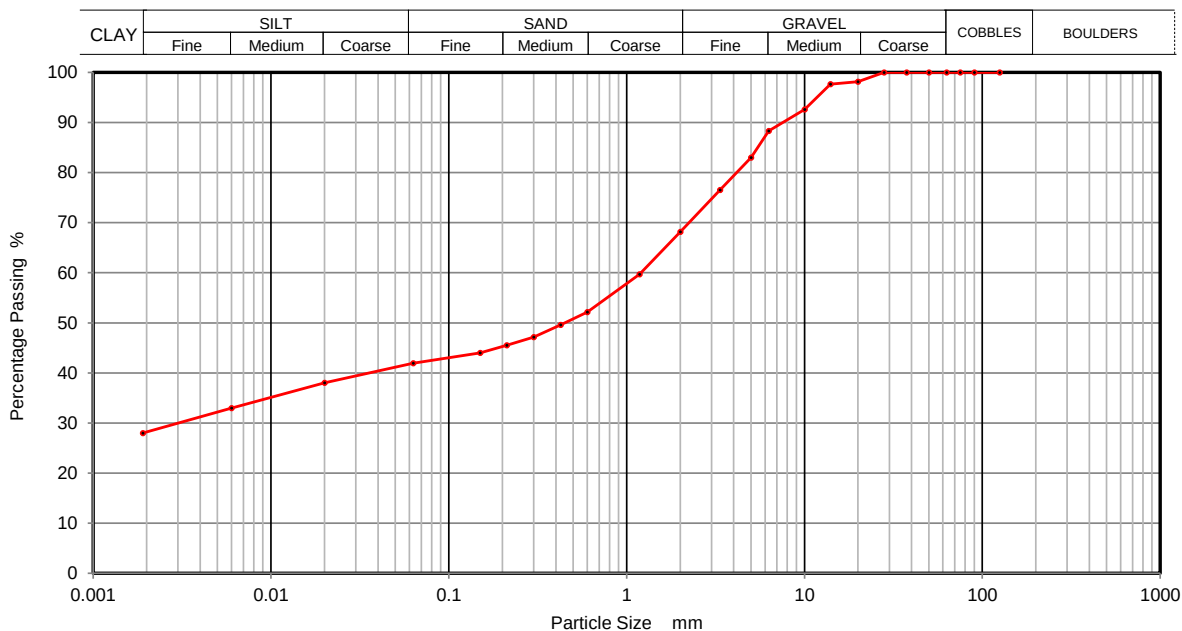
Soil Description **Grey silty fine to coarse sandy clayey fine to coarse GRAVEL**

Depth Top **2.50**

Depth Base **3.00**

Date Tested **11/02/2020**

Sample Type **B**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	38
90	100	0.0060	33
75	100	0.0020	28
63	100		
50	100		
37.5	100		
28	100		
20	98		
14	98		
10	93		
6.3	88		
5	83		
3.35	77		
2	68		
1.18	60		
0.6	52		
0.425	50		
0.3	47		
0.212	46		
0.15	44		
0.063	42		

Sample Proportions	% dry mass
Cobbles	0
Gravel	32
Sand	26
Silt	14
Clay	28

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operators	Checked	13/02/2020	Wayne Honey	<i>W. Honey</i>
RO/MH	Approved	14/02/2020	Paul Evans	<i>P. Evans</i>

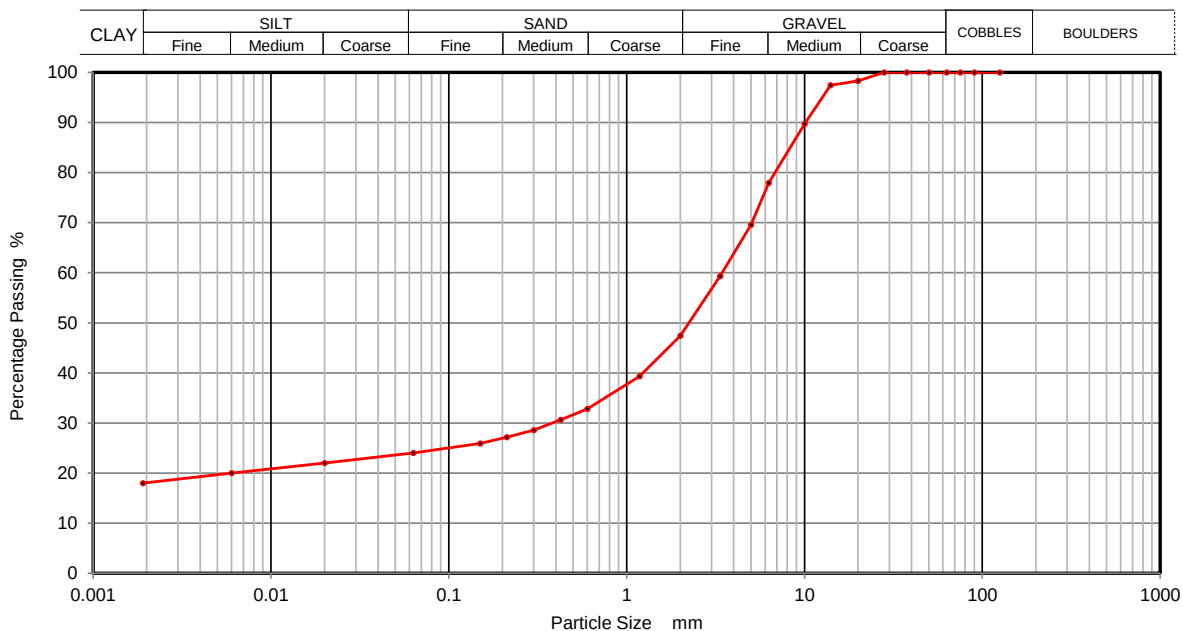




PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Contract Number	47604
Borehole/Pit No.	WS04
Sample No.	3
Depth Top	2.50
Depth Base	3.00
Sample Type	B

Site Name	24 Ormes Road, Skewen
Soil Description	Grey slightly silty clayey fine to coarse sandy fine to coarse GRAVEL
Date Tested	11/02/2020



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	22
90	100	0.0060	20
75	100	0.0020	18
63	100		
50	100		
37.5	100		
28	100		
20	98		
14	97		
10	90		
6.3	78		
5	70		
3.35	59		
2	47		
1.18	39		
0.6	33		
0.425	31		
0.3	29		
0.212	27		
0.15	26		
0.063	24		

Sample Proportions	% dry mass
Cobbles	0
Gravel	53
Sand	23
Silt	6
Clay	18

Remarks
 Preparation and testing in accordance with BS1377 unless noted below

Operators	Checked	13/02/2020	Wayne Honey	<i>W. Honey</i>
RO/MH	Approved	14/02/2020	Paul Evans	<i>P. Evans</i>

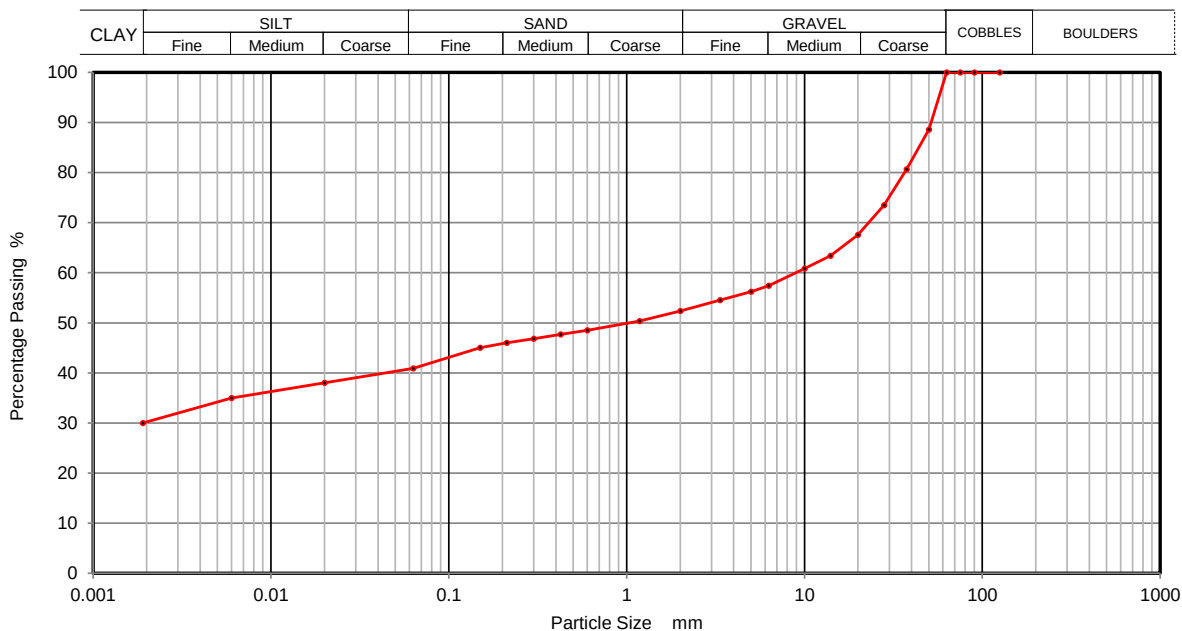




PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Contract Number	47604
Borehole/Pit No.	WS05
Sample No.	1
Depth Top	0.50
Depth Base	1.00
Sample Type	B

Site Name	24 Ormes Road, Skewen
Soil Description	Brown fine to coarse sandy silty clayey fine to coarse GRAVEL
Date Tested	11/02/2020



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	38
90	100	0.0060	35
75	100	0.0020	30
63	100		
50	89		
37.5	81		
28	73		
20	68		
14	63		
10	61		
6.3	57		
5	56		
3.35	55		
2	52		
1.18	50		
0.6	48		
0.425	48		
0.3	47		
0.212	46		
0.15	45		
0.063	41		

Sample Proportions	% dry mass
Cobbles	0
Gravel	48
Sand	11
Silt	11
Clay	30

Remarks
 Preparation and testing in accordance with BS1377 unless noted below

Operators	Checked	13/02/2020	Wayne Honey	<i>W. Honey</i>
RO/MH	Approved	14/02/2020	Paul Evans	<i>P. Evans</i>





PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Contract Number **47604**

Borehole/Pit No. **WS06**

Site Name **24 Ormes Road, Skewen**

Sample No. **1**

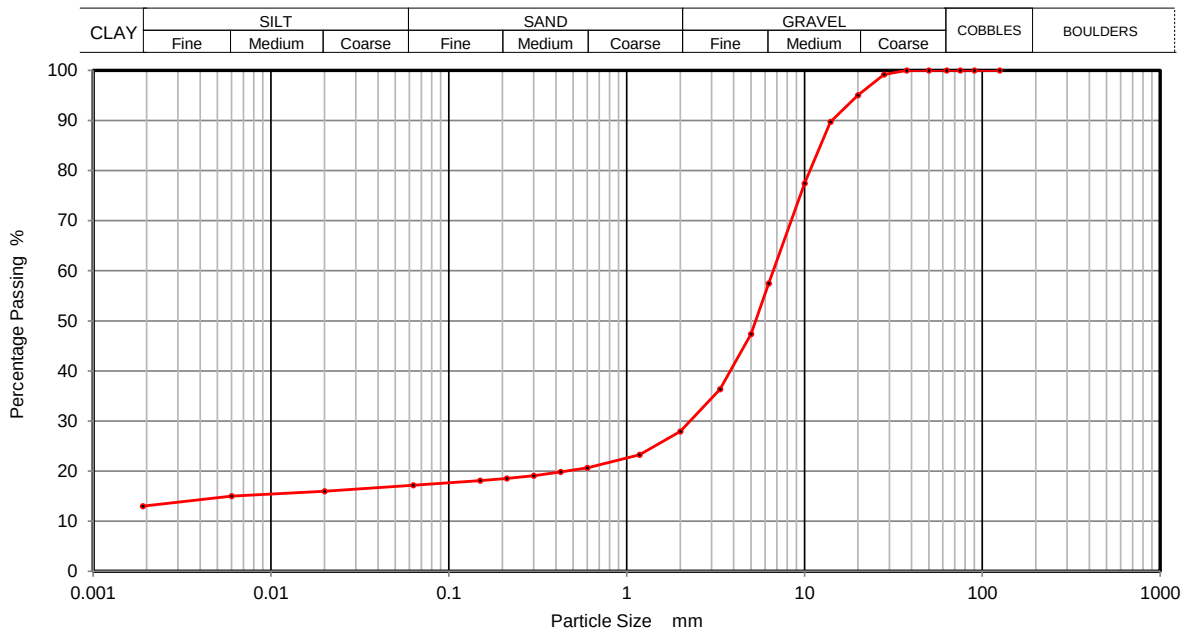
Soil Description **Grey slightly silty fine to coarse sandy clayey fine to coarse GRAVEL**

Depth Top **0.50**

Depth Base **1.00**

Date Tested **11/02/2020**

Sample Type **B**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	16
90	100	0.0060	15
75	100	0.0020	13
63	100		
50	100		
37.5	100		
28	99		
20	95		
14	90		
10	77		
6.3	57		
5	47		
3.35	36		
2	28		
1.18	23		
0.6	21		
0.425	20		
0.3	19		
0.212	19		
0.15	18		
0.063	17		

Sample Proportions	% dry mass
Cobbles	0
Gravel	72
Sand	11
Silt	4
Clay	13

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operators	Checked	13/02/2020	Wayne Honey	<i>W. Honey</i>
RO/MH	Approved	14/02/2020	Paul Evans	<i>P. Evans</i>



Test Operator	Checked and Authorised by		Paul Evans	
Darren Bourne	Date	14/02/2020		

APPENDIX V – COAL AUTHORITY MINING REPORT



The Coal
Authority

CON29M

coal mining report

24 ORMES ROAD, SKEWEN, NEATH PORT TALBOT, SA10 6SY



Known or potential coal mining risks

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



Further action

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

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



Professional opinion

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

Your reference: **Q0177**
Our reference: **51002233175001**
Date: **6 January 2020**

Client name:
Quantum Geotechnical

If you require any further assistance please
contact our experts on:
0345 762 6848
groundstability@coal.gov.uk

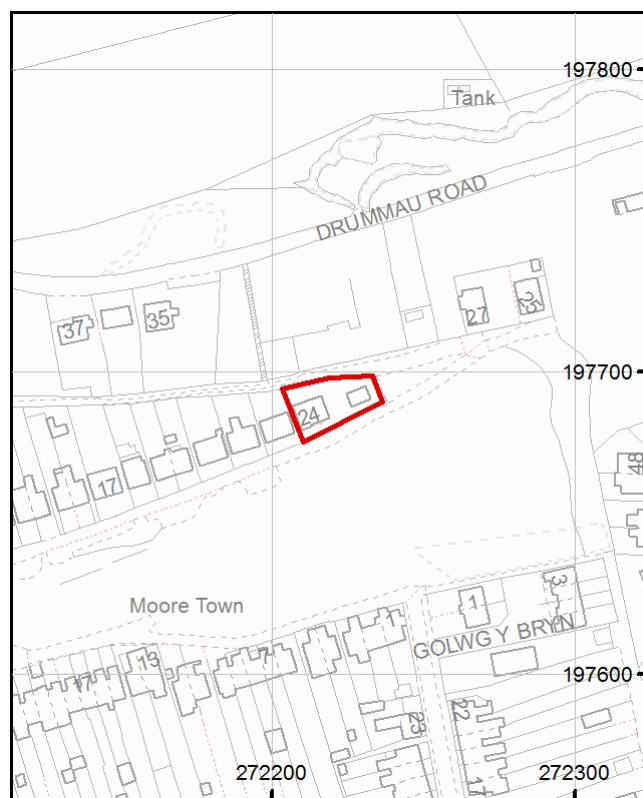


The Law
Society

Enquiry boundary

Key

Approximate position of enquiry boundary shown



We can confirm that the location is
on the coalfield



Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2018. All rights reserved.
Ordnance Survey Licence number: 100020315.

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



Accessibility

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



What if this information changes?

If this report is for a residential property, insurance is included to cover any loss in property value caused by any changes in the information contained in this report. Please see the attached certificate of insurance for the terms and conditions of this insurance. The insurance does not cover non-residential property or further action reports.

Your reference: **Q0177**
Our reference: **51002233175001**
Date: **6 January 2020**

Client name:
Quantum Geotechnical

If you require any further assistance please
contact our experts on:
0345 762 6848
groundstability@coal.gov.uk

Detailed findings

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

The Coal Authority owns the copyright in this report and the information used to produce this report is protected by our database rights. All rights are reserved and unauthorised use is prohibited. If we provide a report for you, this does not mean that copyright and any other rights will pass to you. However, you can use the report for your own purposes.

1 Past underground coal mining

The property is in a surface area that could be affected by underground mining in 1 seam of coal at 230m to 240m depth, and last worked in 1910.

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

2 Present underground coal mining

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

3 Future underground coal mining

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

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

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

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

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

4 Mine entries

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

5 Coal mining geology

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

6 Past opencast coal mining

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

7 Present opencast coal mining

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

8 Future opencast coal mining

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

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

9 Coal mining subsidence

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

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

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

10 Mine gas

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

11 Hazards related to coal mining

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

Statutory cover



Coal mining subsidence

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

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

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

www.gov.uk/government/publications/coal-mining-subsidence-damage-notice-form



Coal mining hazards

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



On behalf of the insurer

Coal Mining Report Insurance Policy Schedule

Policy number: 27337482

The insurer: Liberty Legal Indemnities – underwritten by Liberty Mutual Insurance Europe SE

Binding Authority contract number: RNMFP1903841

Property: 24 ORMES ROAD, SKEWEN, NEATH PORT TALBOT, SA10 6SY

Report reference number: 51002233175001

Limit of cover: £50,000.00

Dated: 6 January 2020

This policy and schedule shall be read together and any word or expression to which a specific meaning has been attached in either shall bear such meaning wherever it may appear.

Where a Coal Mining Report has been obtained in connection with a sale of the property, cover is provided for the benefit of a purchaser and their lender; in the case of a re-mortgage or where the existing owner chooses to obtain a Coal Mining Report, cover is provided for the benefit of the owner and their lender.

The policy offers protection against loss sustained by the owner of the property if any new problems or adverse entries are revealed in a subsequent Coal Mining Report which were not revealed by the original report to which the policy was attached.

The insured shall at all times comply with the requirements of the Conditions of this Policy.

Coal Mining Report Terms and Conditions can be viewed online at this link:

<https://www.groundstability.com/insurance/terms/20190404/terms.html>

Glossary



Key terms

adit - horizontal or sloped entrance to a mine

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

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

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

coal seams - bed of coal of varying thickness

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

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

mine entries - collective name for shafts and adits

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

shaft - vertical entry into a mine

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

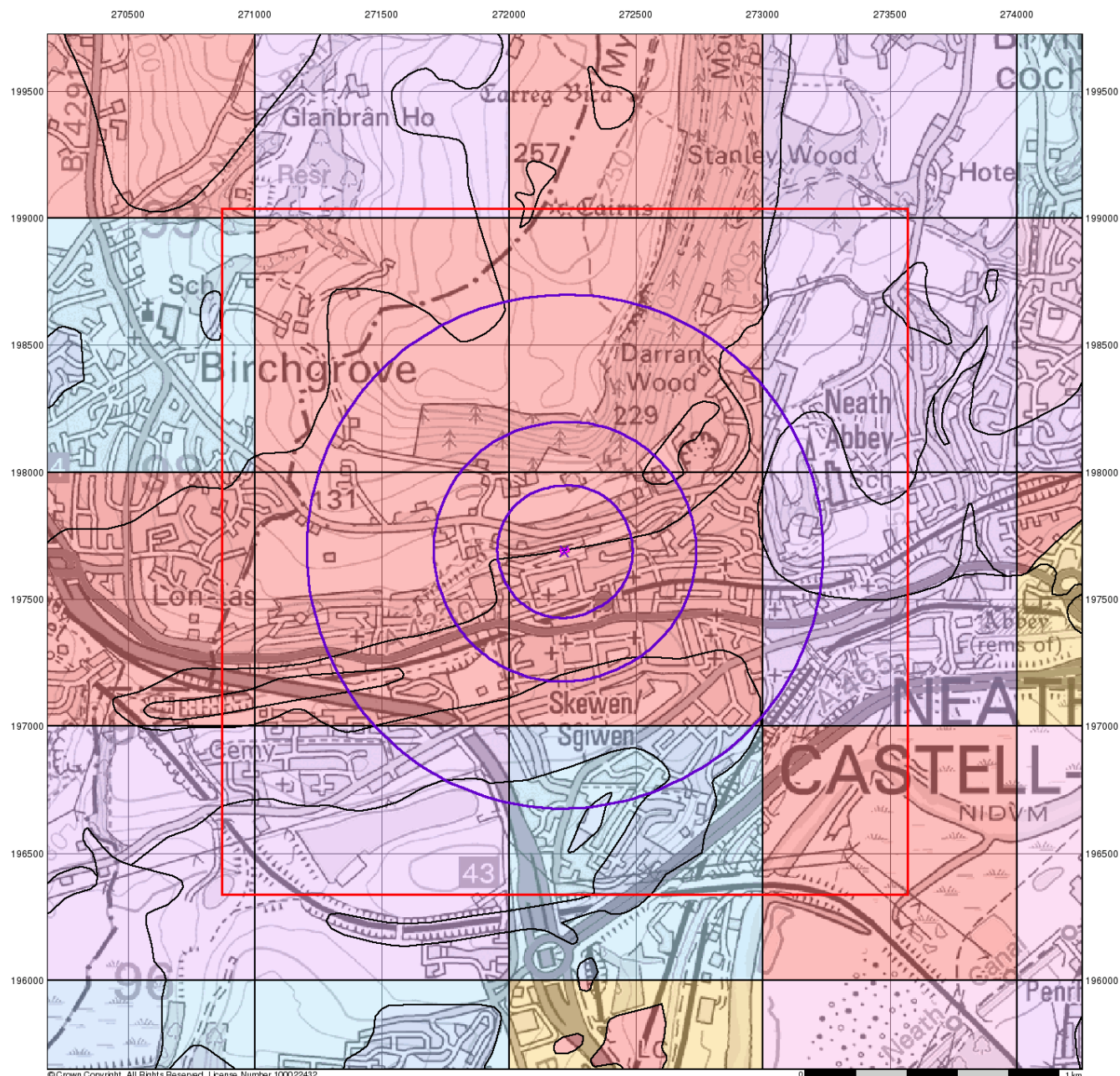
stop notice - a delay to repairs because further coal mining subsidence damage may occur and it would be unwise to carry out permanent repairs

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

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

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

**ANNEX B
Envirocheck Report**



© Crown Copyright. All Rights Reserved. License Number 100022432.



Geotechnical & Geoenvironmental Specialists

Groundwater Vulnerability

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Bedrock Aquifers

- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer

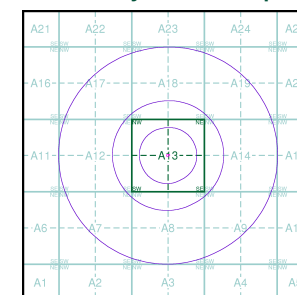
Superficial Aquifers

- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

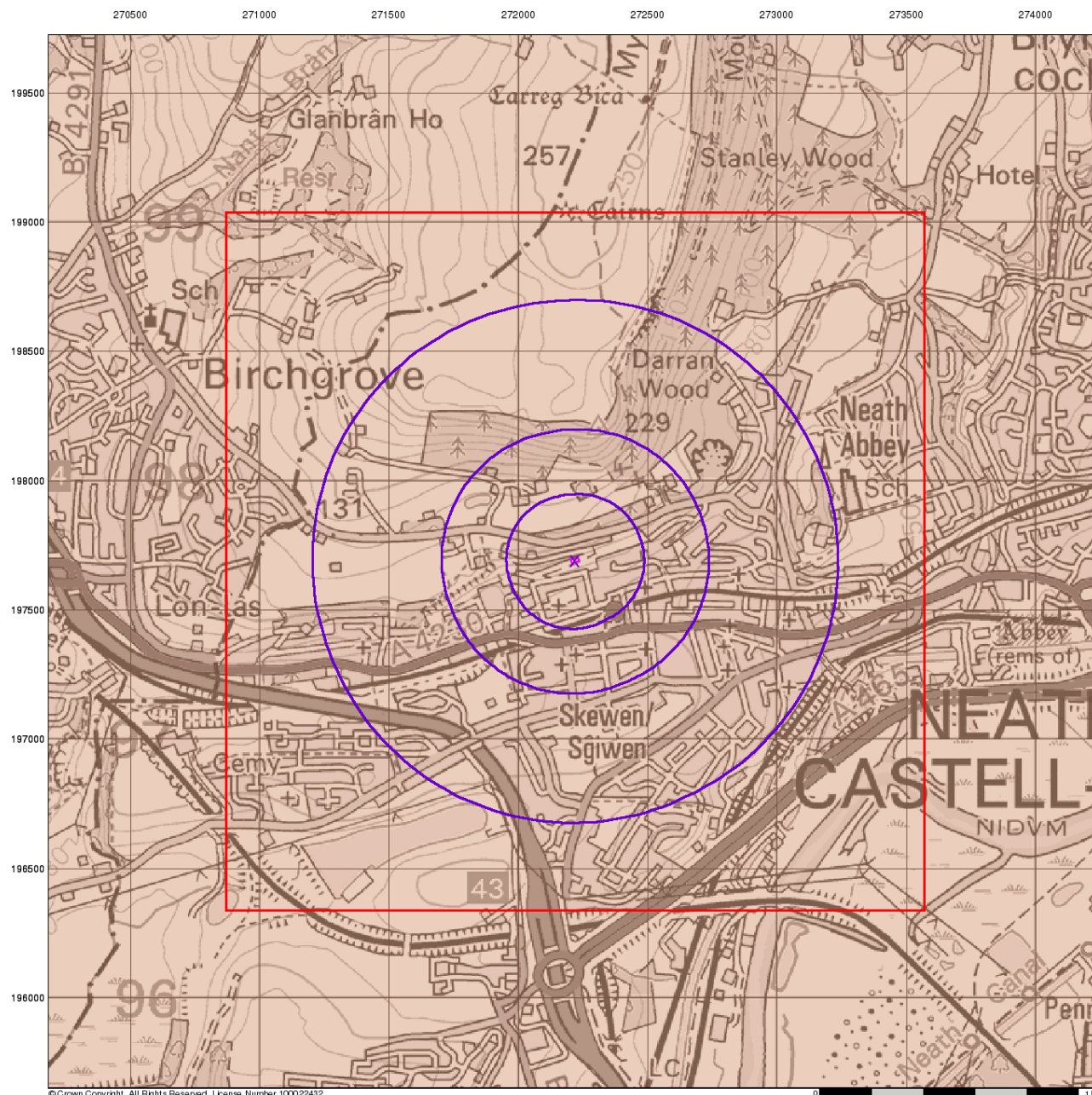
Order Number: 254977540_1_1
 Customer Ref: 16299-MW
 National Grid Reference: 272220, 197690
 Slice: A
 Site Area (Ha): 0.05
 Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY

Landmark
 INFORMATION GROUP

Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



© Crown Copyright. All Rights Reserved. License Number 100022432.

0 1 km



Geotechnical & Geoenvironmental Specialists

Bedrock Aquifer Designation

General

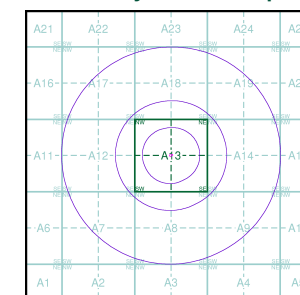
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

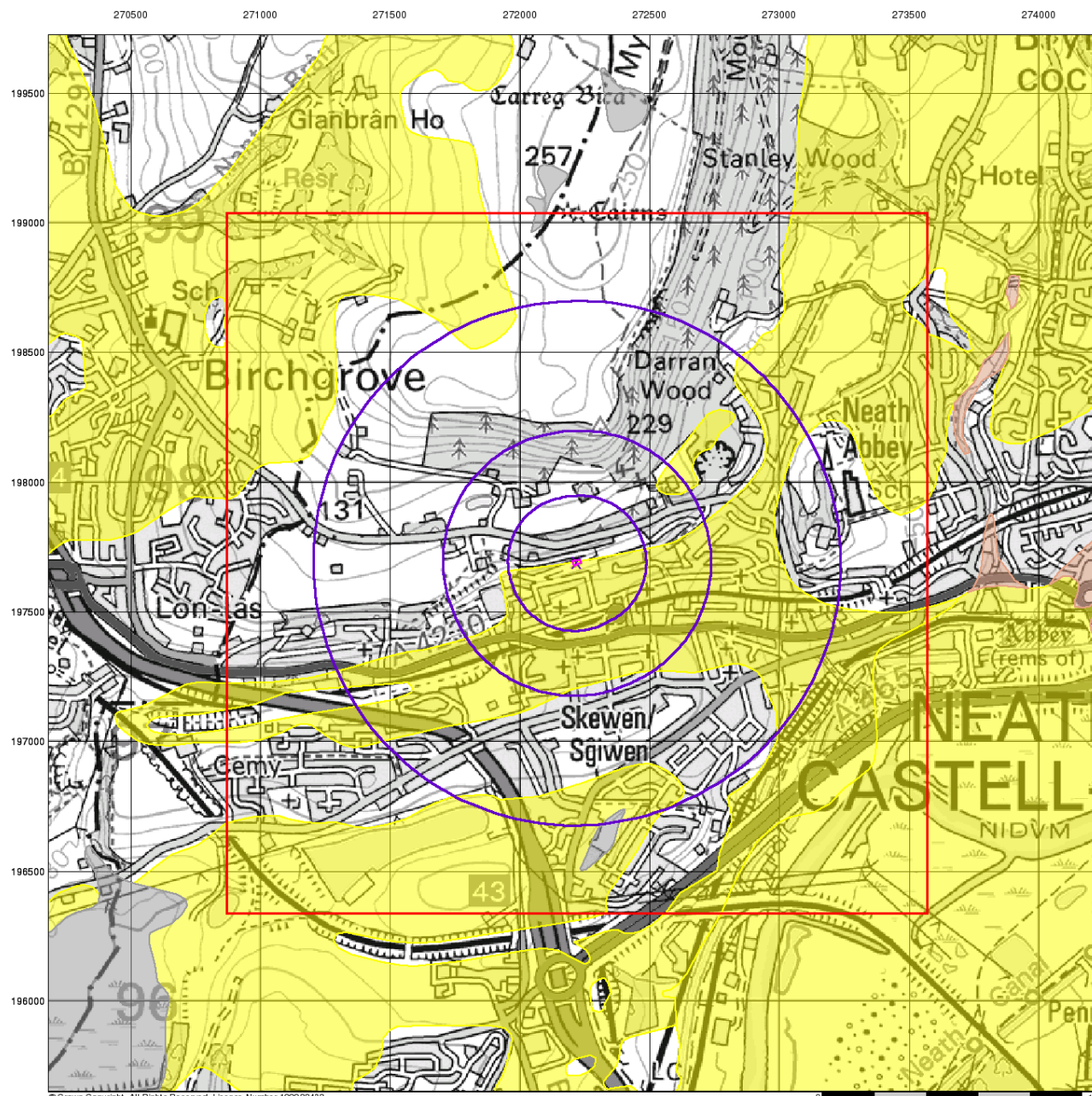
Order Number: 254977540_1_1
 Customer Ref: 16299-MW
 National Grid Reference: 272220, 197690
 Slice: A
 Site Area (Ha): 0.05
 Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.ernirocheck.co.uk



© Crown Copyright. All Rights Reserved. License Number 100022432.

0 1 km



Geotechnical & Geoenvironmental Specialists

Superficial Aquifer Designation

General

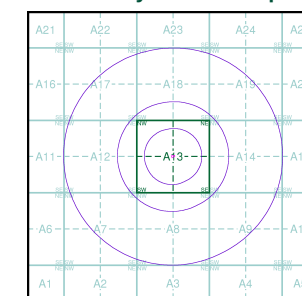
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

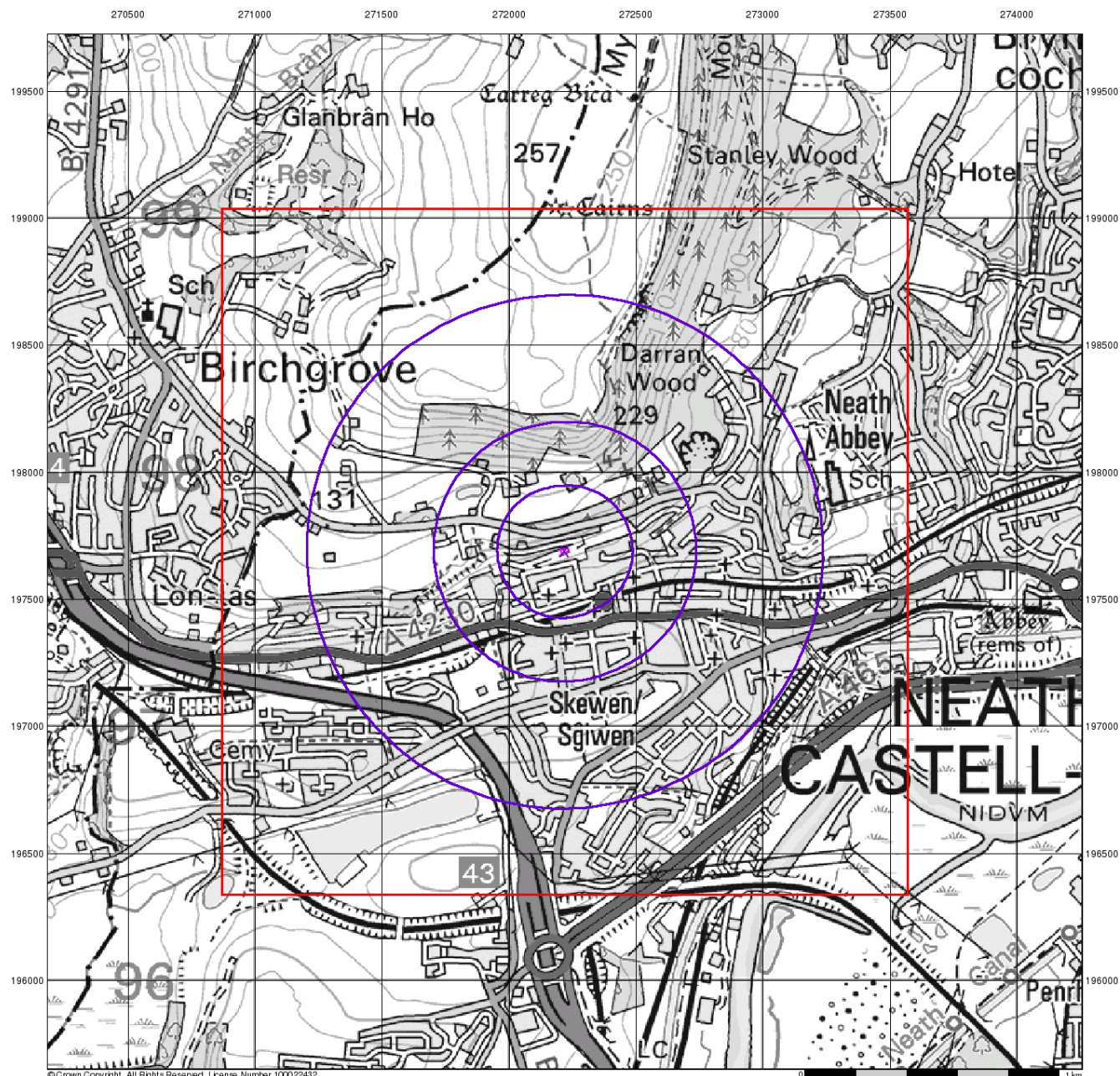
Order Number: 254977540_1_1
 Customer Ref: 16299-MW
 National Grid Reference: 272220, 197690
 Slice: A
 Site Area (Ha): 0.05
 Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.ernirocheck.co.uk



© Crown Copyright. All Rights Reserved. License Number 100022432.



Geotechnical & Geoenvironmental Specialists

Source Protection Zones

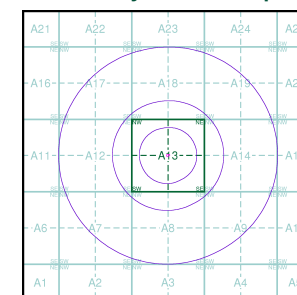
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A



Order Details

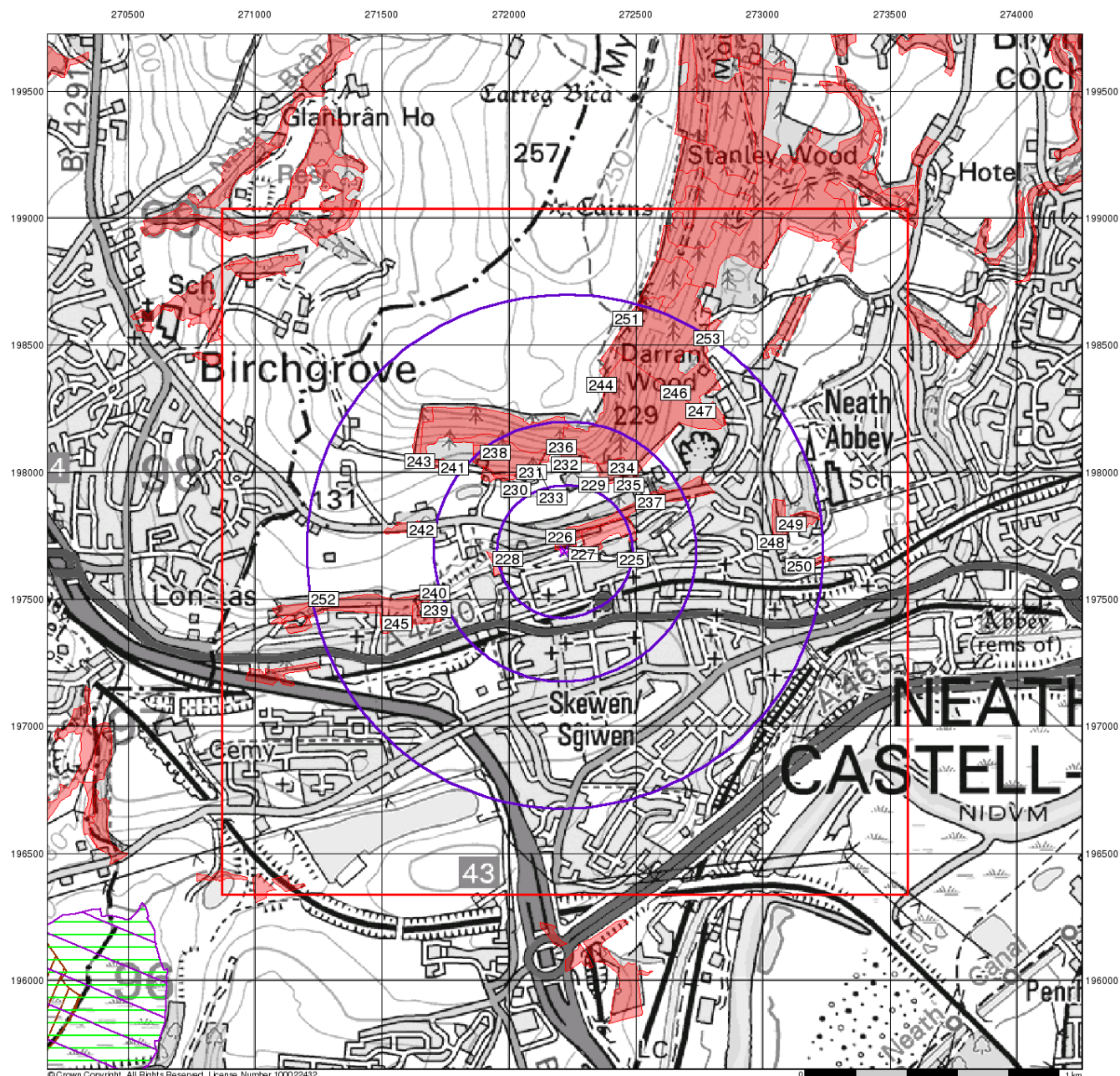
Order Number: 254977540_1_1
 Customer Ref: 16299-MW
 National Grid Reference: 272220, 197690
 Slice: A
 Site Area (Ha): 0.05
 Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.ernirocheck.co.uk



© Crown Copyright. All Rights Reserved. License Number 100022432.



Geotechnical & Geoenvironmental Specialists

Sensitive Land Uses

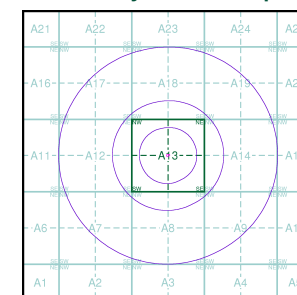
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

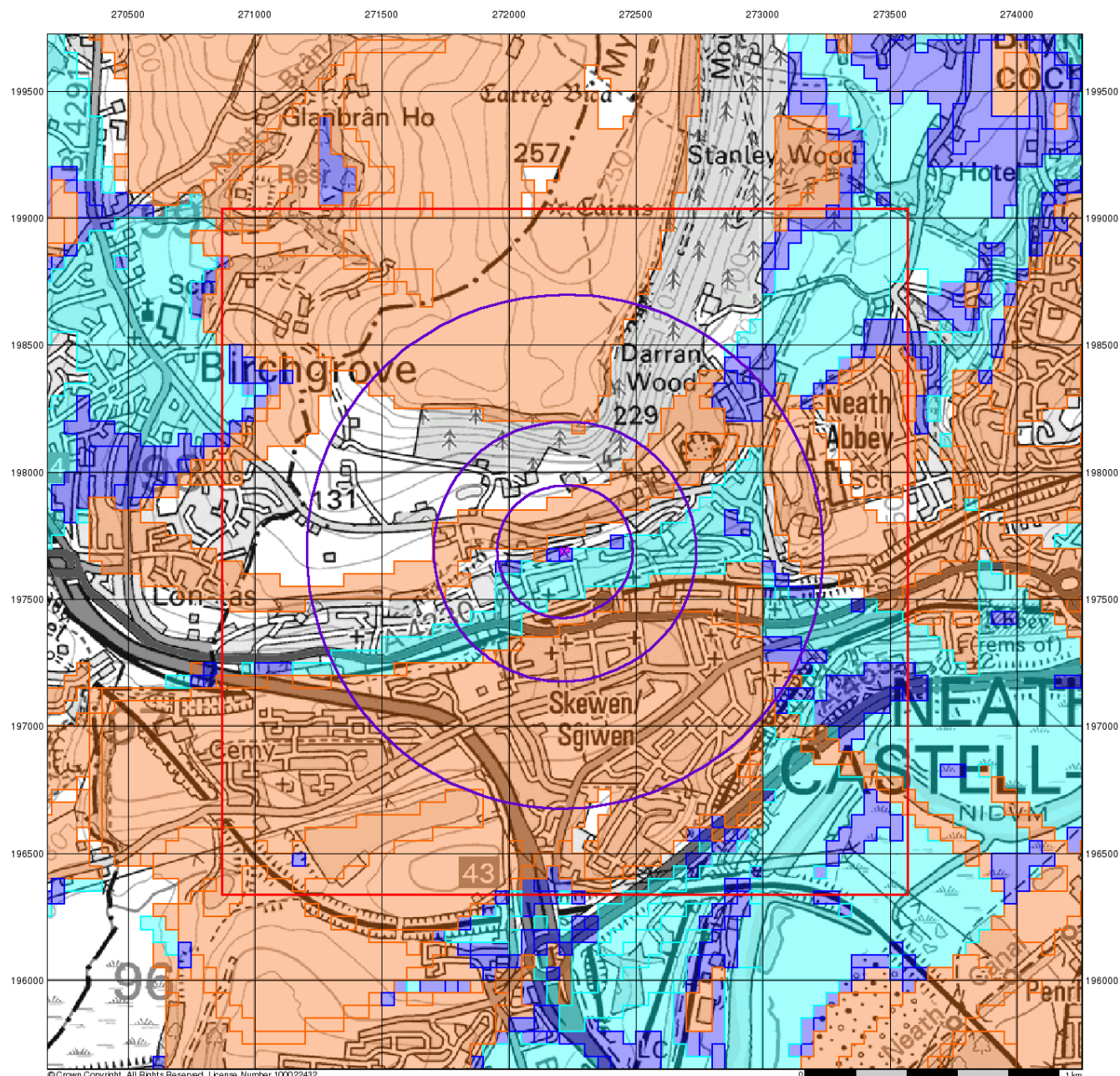
Order Number: 254977540_1_1
 Customer Ref: 16299-MW
 National Grid Reference: 272220, 197690
 Slice: A
 Site Area (Ha): 0.05
 Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY

Landmark
 INFORMATION GROUP

Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



© Crown Copyright. All Rights Reserved. License Number 100022432.



Geotechnical & Geoenvironmental Specialists

BGS Flood GFS Data

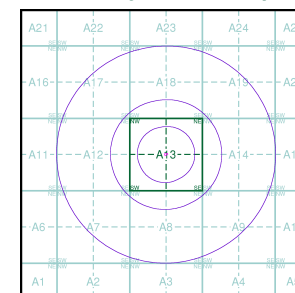
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 254977540_1_1
 Customer Ref: 16299-MW
 National Grid Reference: 272220, 197690
 Slice: A
 Site Area (Ha): 0.05
 Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk

Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

254977540_1_1

Customer Reference:

16299-MW

National Grid Reference:

272220, 197690

Slice:

A

Site Area (Ha):

0.05

Search Buffer (m):

1000

Site Details:

24, Ormes Road

NEATH

SA10 6SY

Client Details:

Ms N Thomas

Terra Firma (Wales) Ltd

5 Deryn Court

Wharfdale Road

Pentwyn

Cardiff

CF23 7HB

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	17
Hazardous Substances	-
Geological	18
Industrial Land Use	33
Sensitive Land Use	48
Data Currency	51
Data Suppliers	57
Useful Contacts	58

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Copyright Notice

© Landmark Information Group Limited 2020. The Copyright on the information and data and its format as contained in this Envirocheck® Report ("Report") is the property of Landmark Information Group Limited ("Landmark") and several other Data Providers, including (but not limited to) Ordnance Survey, British Geological Survey, the Environment Agency/Natural Resources Wales and Natural England, and must not be reproduced in whole or in part by photocopying or any other method. The Report is supplied under Landmark's Terms and Conditions accepted by the Customer. A copy of Landmark's Terms and Conditions can be found with the Index Map for this report. Additional copies of the Report may be obtained from Landmark, subject to Landmark's charges in force from time to time. The Copyright, design rights and any other intellectual rights shall remain the exclusive property of Landmark and /or other Data providers, whose Copyright material has been included in this Report. © Environment Agency & United Kingdom Research and Innovation 2020. © Natural Resources Wales & United Kingdom Research and Innovation 2020.

Natural England Copyright Notice

Site of Special Scientific Interest, National Nature Reserve, Ramsar, Special Protection Area, Special Conservation Area, Marine Nature Reserve data (derived from Ordnance Survey 1:10000 raster) is provided by, and used with the permission of, Natural England who retain the copyright and Intellectual Property Rights for the data.

Scottish Natural Heritage Copyright

Contains SNH information licensed under the Open Government Licence v3.0.

Ove Arup Copyright Notice

The Mining Instability data was obtained on licence from Ove Arup & Partners Limited (for further information, contact mining.review@arup.com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The supplied Mining Instability data is derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

Stantec Copyright Notice

The cavity data presented has been extracted from the PBA (now Stantec UK Ltd) enhanced version of the original DEFRA national cavity databases. Stantec UK Ltd retain the copyright & intellectual property rights in the data. Whilst all reasonable efforts are made to check that the information contained in the cavity databases is accurate we do not warrant that the data is complete or error free. The information is based upon our own researches and those collated from a number of external sources and is continually being augmented and updated by Stantec UK Ltd. In no event shall Stantec UK Ltd or Landmark be liable for any loss or damage including, without limitation, indirect or consequential loss or damage arising from the use of this data.

Radon Potential dataset Copyright Notice

Information supplied from a joint dataset compiled by The British Geological Survey and Public Health England.

Natural Resources Wales Copyright Notice

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number 100019741. Crown Copyright and Database Right. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2020. Land & Property Services © Crown copyright and database right.

Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1				9
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 3			1	
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 3		Yes		
Pollution Incidents to Controlled Waters	pg 4			5	4
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 5			1	
Water Abstractions	pg 5				(*4)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 6	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 7	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 7	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 7		2	24	56

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 17	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 17	1	1	1	6
Potentially Infilled Land (Water)	pg 17			1	6
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 18	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 18	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 21		7	23	16
BGS Urban Soil Chemistry	pg 28		Yes	Yes	Yes
BGS Urban Soil Chemistry Averages	pg 30	Yes			
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 31	Yes	n/a	n/a	n/a
Mining Instability	pg 31	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities	pg 31		1		1
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 31	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 31		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 31	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 32	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 32	Yes		n/a	n/a
Radon Potential - Radon Affected Areas	pg 32	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures	pg 32	Yes	n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 33		3	51	35
Fuel Station Entries	pg 40				1
Points of Interest - Commercial Services	pg 41		1	14	13
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 43		2	15	11
Points of Interest - Public Infrastructure	pg 45			4	3
Points of Interest - Recreational and Environmental	pg 46		2		8
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 48		4	10	15
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	0	1	272219 197690
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	4	1	272200 197690
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (E)	14	1	272250 197690
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (N)	52	1	272219 197750
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (W)	54	1	272150 197690
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	154	1	272300 197550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (W)	160	1	272050 197650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	164	1	272400 197700
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	245	1	272300 197450
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (SW)	364	1	272050 197350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SE (N)	452	1	272250 198150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (SW)	458	1	271950 197300
1	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Water Supply Grid Location: Darran S.Res Chl.Overfl Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Bp0179401 Permit Version: 1 Effective Date: 2nd October 1989 Issued Date: 2nd October 1989 Revocation Date: 14th March 1994 Discharge Type: Unspecified Discharge: Not Supplied Environment: Not Supplied Receiving Water: To Land Status: Consent expired Positional Accuracy: Located by supplier to within 100m	A18SW (N)	503	2	272200 198200
2	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Cso 34 Rear 38 Caenart Trce Neath, Cso 34 Rear Of 38 Caenart Terrac, Neath Port Talbot, Wales Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Bp0316501 Permit Version: 1 Effective Date: 31st March 2004 Issued Date: 31st March 2004 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Not Supplied Receiving Water: Trib Of Tennant Canal Status: Effective Positional Accuracy: Located by supplier to within 10m	A14SW (E)	545	2	272756 197526

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Cso 34 Rear 38 Caenant Trce Neath, Cso 34 Rear Of 38 Caenant Terrac, Neath Port Talbot, Wales Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Bp0316501 Permit Version: 1 Effective Date: 31st March 2004 Issued Date: 31st March 2004 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Trib Of Tennant Canal Status: Effective Positional Accuracy: Located by supplier to within 10m	A14SW (E)	545	2	272756 197526
3	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Cso At R/O 38 Caenant Terrace, Neath, R/O 38 Caenant Terrace, Port Talbot, Sa10 6up Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Bp0316501 Permit Version: 2 Effective Date: 18th September 2019 Issued Date: 18th September 2019 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: A Tributary Of The Tennant Cannal Status: Effective Positional Accuracy: Located by supplier to within 10m	A14SE (SE)	787	2	272954 197368
4	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Staions Location: New Road Nursing Home Cso, Skewen, New Rd Nursing Home, Swansea, Sa10 6ye Authority: Natural Resources Wales Catchment Area: CLYDACH - HEADWATERS TO CONF WITH RIVER NEATH Reference: Bp0303801 Permit Version: 2 Effective Date: 7th October 2019 Issued Date: 7th October 2019 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Unnamed Stream To The Tennant Canal Status: Effective Positional Accuracy: Located by supplier to within 10m	A14SE (E)	901	2	273077 197366
4	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Staions Location: Cso No 31 Opp New Road Skewen, Opposite New Road, Neath Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Bp0303801 Permit Version: 1 Effective Date: 5th March 2003 Issued Date: 5th March 2003 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Stream To The Tennant Canal Status: Effective Positional Accuracy: Located by supplier to within 10m	A14SE (E)	918	2	273107 197400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Staions Location: Cso No 31 Opp New Road Skewen, Opposite New Road, Neath Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Bp0303801 Permit Version: 1 Effective Date: 5th March 2003 Issued Date: 5th March 2003 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Stream To The Tennant Canal Status: Effective Positional Accuracy: Located by supplier to within 10m	A14SE (E)	918	2	273107 197400
5	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Station - Water Company Location: Sso.Skewen P.S. Lonlas. Authority: Natural Resources Wales Catchment Area: River Tawe Reference: Bw2902601 Permit Version: 2 Effective Date: 31st March 2006 Issued Date: 31st March 2005 Revocation Date: 7th February 2008 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge: Freshwater Stream/River Environment: Receiving Water: River Neath Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m	A7NW (SW)	941	2	271400 197200
5	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Station - Water Company Location: Sso.Skewen P.S. Lonlas. Authority: Natural Resources Wales Catchment Area: River Tawe Reference: BW2902601 Permit Version: 1 Effective Date: 19th October 1989 Issued Date: 19th October 1989 Revocation Date: 30th March 2006 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 100m	A7NW (SW)	941	2	271400 197200
6	Prosecutions Relating to Controlled Waters Location: River Clydach (tributary of), Drymau Road, NEATH, West Glamorgan, SA10 6NU Prosecution Text: EA Welsh Data 02/09/1999, Polluting an unnamed tributary of the River Clydach with industrial metal. Offence committed 25/04/1995. Prosecution Act: WRA91 s85(1) Hearing Date: 22nd April 1996 Verdict: Guilty Fine: 1500 Cost: 968 Positional Accuracy: Manually positioned to the road within the address or location	A14SE (E)	869	4	273081 197487
7	Local Authority Pollution Prevention and Controls Name: Arden Motors Limited Location: Units 5 & 6 Lonlas Industrial Estate, Skewen, Sa10 6rp Authority: Neath Port Talbot County Borough Council, Environmental Health Department Permit Reference: E3/1/127 Dated: 10th April 2008 Process Type: Local Authority Pollution Prevention and Control Description: PG6/34 Respraying of road vehicles Status: Permitted Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	310	3	271944 197518
	Nearest Surface Water Feature	A13SE (S)	226	-	272291 197466

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Stream Authority: Environment Agency, Welsh Region Pollutant: Sullage Note: Not Supplied Incident Date: 11th May 1992 Incident Reference: 4756 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13NW (W)	322	4	271900 197800
9	Pollution Incidents to Controlled Waters Property Type: Not Given Location: SKEWEN Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Not Supplied Incident Date: 24th May 1991 Incident Reference: 751 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SE (SE)	326	4	272500 197500
10	Pollution Incidents to Controlled Waters Property Type: Waste Handling Facilities Location: Drummaw Farm, Skewen Next To, Green Bank Authority: Environment Agency, Welsh Region Pollutant: Light Oil Note: Neglect Incident Date: 20th May 1992 Incident Reference: 4751 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	367	4	271900 197900
11	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Jenkins And Usk Garage, Wildmill, Skewen, NEATH Authority: Environment Agency, Welsh Region Pollutant: Chemicals - Other Organic Note: Deliberate Act Incident Date: 29th December 1996 Incident Reference: 30835 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	393	4	272100 197300
12	Pollution Incidents to Controlled Waters Property Type: Not Given Location: SKEWEN Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: Not Supplied Incident Date: 13th November 1995 Incident Reference: 27058 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SW (SW)	416	4	271900 197400
13	Pollution Incidents to Controlled Waters Property Type: Stables Location: Drummaw Woods Authority: Environment Agency, Welsh Region Pollutant: Farm Effluent/Slurry Note: Deliberate Act Incident Date: 13th October 1994 Incident Reference: 21657 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Direct Discharge Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	503	4	271800 197995

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	Pollution Incidents to Controlled Waters Property Type: Stables Location: Drummau Woods Authority: Environment Agency, Welsh Region Pollutant: Light Oil Note: Deliberate Act Incident Date: 13th October 1994 Incident Reference: 21657 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Direct Discharge Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	506	4	271800 198000
14	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Electro-Plating Company Authority: Environment Agency, Welsh Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 9th October 1994 Incident Reference: 21548 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14SE (E)	885	4	273100 197500
14	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Not Supplied Incident Date: 9th October 1994 Incident Reference: 21548 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14SE (E)	886	4	273100 197495
15	Substantiated Pollution Incident Register Authority: Natural Resources Wales Incident Date: 15th June 2020 Incident Reference: 2004207 Water Impact: Category 4 - No Impact Air Impact: Category 4 - No Impact Land Impact: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Specific Waste Materials: Vehicles And Vehicle Parts	A13NW (NW)	395	2	271952 197999
	Water Abstractions Operator: St Mowden Properties Plc Licence Number: 22/59/5/0005 Permit Version: 102 Location: North Site Reservoir Authority: Natural Resources Wales Abstraction: Petrochemicals: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 29th July 2010 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2NW (SW)	1623	2	271290 196340

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Bp Oil Llandarcy Refinery Ltd Licence Number: 22/59/5/0005 Permit Version: 101 Location: North Site Reservoir Authority: Environment Agency, Welsh Region Abstraction: Petrochemicals: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 31st March 2005 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2NW (SW)	1623	4	271290 196340
	Water Abstractions Operator: Bp Oil Llandarcy Refinery Ltd Licence Number: 22/59/5/0005 Permit Version: 100 Location: North Site Reservoir Authority: Environment Agency, Welsh Region Abstraction: Petrochemicals: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: North Site Reservoir Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A2NW (SW)	1623	4	271290 196340
	Water Abstractions Operator: St Mowden Properties Plc Licence Number: 22/59/5/0005 Permit Version: Not Supplied Location: North Site Reservoir At B P Refinery Llandarcy Authority: Natural Resources Wales Abstraction: Petrochemicals: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2NW (SW)	1623	2	271290 196340
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: >550 mm/year Baseflow Index: <40% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13NW (NW)	0	2	272219 197690

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: >550 mm/year Baseflow Index: <40% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13NW (N)	0	2	272219 197693
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13NW (NW)	0	2	272219 197690
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	A13NW (NW)	0	2	272219 197690
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
16	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 278.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SE (S)	226	5	272291 197466
17	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 158.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SE (S)	242	5	272264 197441
18	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 120.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SE (S)	251	5	272269 197433
19	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SW (S)	276	5	272128 197414
20	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 24.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NW (NW)	308	5	272089 197980

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
21	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 27.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NW (NW)	315	5	272089 197988
22	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 91.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NW (W)	322	5	271896 197788
23	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 11.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NW (NW)	366	5	271885 197876
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 91.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (W)	370	5	271834 197716
25	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (NW)	377	5	271874 197876
26	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 11.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (NW)	381	5	271869 197876
27	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 105.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SW (SE)	386	5	272583 197522
28	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 74.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NW (NW)	386	5	271926 197962
29	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (NW)	391	5	271858 197877

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
30	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 9.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (NW)	398	5	271851 197877
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (NW)	406	5	271842 197877
32	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 27.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (NW)	415	5	271831 197878
33	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SE (W)	417	5	271819 197534
34	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 30.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (W)	418	5	271793 197772
35	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 3.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NW (NW)	431	5	271913 198013
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 226.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NW (NW)	433	5	271911 198014
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 24.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (NW)	437	5	271805 197873
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (W)	445	5	271769 197791

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 197.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (W)	446	5	271788 197856
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 65.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (W)	446	5	271788 197856
41	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (W)	460	5	271755 197798
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 120.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SE (W)	521	5	271708 197533
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SW (E)	534	5	272768 197651
44	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 79.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (W)	570	5	271634 197689
45	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (W)	595	5	271614 197770
46	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 60.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (W)	599	5	271610 197771
47	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 31.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (W)	599	5	271610 197771

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
48	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 7.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NE (W)	599	5	271614 197800
49	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A17SE (NW)	604	5	271704 198033
50	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 52.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A17SE (NW)	607	5	271701 198035
51	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A17SE (NW)	654	5	271649 198040
52	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 83.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A17SE (NW)	656	5	271645 198039
53	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 187.6 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	721	5	272957 197658
54	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 139.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	721	5	272957 197658
55	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 109.7 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SW (NE)	747	5	272723 198262
56	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 196.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SW (NE)	747	5	272723 198262

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
57	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 61.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14NE (E)	764	5	272984 197844
58	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 56.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14NE (E)	771	5	272977 197904
59	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 61.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SW (NE)	774	5	272747 198278
60	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 171.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SW (NE)	779	5	272657 198351
61	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.0 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (SE)	786	5	272953 197367
62	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14NE (E)	793	5	272982 197961
63	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 16.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	802	5	273023 197538
64	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 57.4 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (SE)	804	5	272970 197364
65	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SW (NE)	813	5	272893 198172

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
66	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 114.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SW (NE)	815	5	272757 198322
67	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 30.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	818	5	273039 197534
68	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SE (NE)	818	5	272901 198170
69	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SE (NE)	819	5	272902 198170
70	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 19.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SE (NE)	821	5	272905 198170
71	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 34.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	832	5	273046 197504
72	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 140.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SE (NE)	836	5	272925 198167
73	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 39.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	858	5	273028 197359
74	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.4 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	863	5	273075 197488

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
75	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 77.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	868	5	273078 197482
76	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 82.5 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	892	5	273065 197361
77	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 172.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A19NW (NE)	904	5	272787 198413
78	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 12.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A19NW (NE)	908	5	272794 198412
79	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 248.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	910	5	272818 198395
80	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 78.6 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	914	5	272806 198410
81	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 29.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	914	5	273139 197553
82	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 64.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	915	5	273107 197410
83	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 79.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	927	5	272685 198507

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
84	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 28.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9SW (SE)	927	5	272634 196853
85	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 91.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tawe Primacy: 1	A12NW (W)	932	5	271275 197771
86	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 81.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tawe Primacy: 1	A8SW (S)	935	5	271936 196784
87	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 518.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tawe Primacy: 1	A18NW (N)	949	5	271920 198600
88	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 82.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	961	5	272784 198485
89	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tawe Primacy: 1	A12SW (W)	965	5	271241 197636
90	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 100.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	970	5	273148 197359
91	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 56.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Tawe Primacy: 1	A12SW (W)	974	5	271232 197631
92	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SE (NE)	975	5	273052 198226

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
93	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 188.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SE (NE)	979	5	273054 198230
94	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Tawe Primacy: 1	A12NW (W)	981	5	271222 197696
95	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 44.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tawe Primacy: 1	A12NW (W)	986	5	271218 197691
96	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 52.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tawe Primacy: 1	A7SE (S)	989	5	271862 196752
97	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 96.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tawe Primacy: 1	A8SW (S)	998	5	271955 196712

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: Neath Port Talbot County Borough Council - Has supplied landfill data		0	3	272219 197690
98	Potentially Infilled Land (Non-Water) Bearing Ref: S Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13SE (S)	0	-	272222 197684
99	Potentially Infilled Land (Non-Water) Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13NW (W)	241	-	271962 197690
100	Potentially Infilled Land (Non-Water) Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13SW (W)	284	-	271943 197579
101	Potentially Infilled Land (Non-Water) Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A12SE (SW)	591	-	271678 197421
102	Potentially Infilled Land (Non-Water) Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A14NW (NE)	695	-	272861 197995
103	Potentially Infilled Land (Non-Water) Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9NW (SE)	701	-	272692 197158
104	Potentially Infilled Land (Non-Water) Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A14NE (E)	831	-	273041 197895
105	Potentially Infilled Land (Non-Water) Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A19NW (NE)	904	-	272804 198399
106	Potentially Infilled Land (Non-Water) Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9SW (SE)	995	-	272757 196843
107	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1900	A14SW (E)	483	-	272692 197531
108	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1884	A14SW (E)	595	-	272830 197658
109	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1965	A14NE (E)	744	-	272979 197734
110	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1965	A8SW (S)	901	-	272021 196797
111	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1965	A8SW (S)	927	-	272112 196756
112	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1965	A8SW (S)	968	-	272023 196728
113	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1884	A8SE (S)	975	-	272428 196727

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: South Wales Upper Coal Measures Formation	A13NW (NW)	0	1	272219 197690
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: 3.0 - 6.0 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NW (N)	0	1	272219 197693
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 35 - 45 mg/kg Cadmium Concentration: 3.0 - 6.0 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NW (NW)	0	1	272219 197690
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 35 - 45 mg/kg Cadmium Concentration: 3.0 - 6.0 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NW (N)	50	1	272200 197746
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 35 - 45 mg/kg Cadmium Concentration: 3.0 - 6.0 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (S)	176	1	272264 197510
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 45 - 60 mg/kg Cadmium Concentration: 3.0 - 6.0 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NW (W)	204	1	272000 197691
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 35 - 45 mg/kg Cadmium Concentration: 3.0 - 6.0 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NE (NE)	406	1	272539 197965

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 35 - 45 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A8NE (S)	458	1	272347 197240
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 35 - 45 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A18SE (N)	476	1	272271 198172
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A18SW (NW)	548	1	272000 198203
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A8NW (S)	605	1	272000 197110
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A14NE (E)	754	1	272987 197753
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A7NE (SW)	782	1	271583 197211

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 35 - 45 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A8SE (S)	803	1	272413 196900
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 35 - 45 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NE (E)	811	1	272984 198004
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14NE (E)	829	1	273011 197986
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 35 - 45 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A17NE (NW)	896	1	271866 198524
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 35 - 45 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A9NE (SE)	952	1	272991 197111
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 35 - 45 mg/kg Concentration: Cadmium 3.0 - 6.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A8SE (S)	958	1	272403 196739

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
114	BGS Recorded Mineral Sites Site Name: Brithdir Quarries Location: Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229839 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	62	1	272176 197750
115	BGS Recorded Mineral Sites Site Name: Maesmelyn Level Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229844 Type: Underground Status: Ceased Operator: Dynevor Main Colliery Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13NE (E)	75	1	272311 197695
115	BGS Recorded Mineral Sites Site Name: Maesmelyn Level Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229843 Type: Underground Status: Ceased Operator: Dynevor Main Colliery Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SE (E)	95	1	272325 197658
116	BGS Recorded Mineral Sites Site Name: Brithdir Quarries Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154093 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NE (N)	76	1	272233 197774
117	BGS Recorded Mineral Sites Site Name: Skewen Main No. 4 Level Location: Neath, Neath Port Talbot Source: British Geological Survey, National Geoscience Information Service Reference: 188772 Type: Underground Status: Ceased Operator: Individual'S Name Withheld Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	93	1	272311 197748
117	BGS Recorded Mineral Sites Site Name: Skewen Main No. 4 Level Location: Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229842 Type: Underground Status: Ceased Operator: Wm. Prestwich & Sons, Ltd Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	123	1	272334 197769

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
118	BGS Recorded Mineral Sites Site Name: Main Colliery No. 4 Pit Location: Neath, Neath Port Talbot Source: British Geological Survey, National Geoscience Information Service Reference: 188770 Type: Underground Status: Ceased Operator: Main Colliery Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13NE (E)	221	1	272452 197735
118	BGS Recorded Mineral Sites Site Name: Main Colliery No. 3 Pit Location: Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 188771 Type: Underground Status: Ceased Operator: Main Colliery Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13NE (E)	261	1	272490 197750
119	BGS Recorded Mineral Sites Site Name: Main Colliery Level Location: Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229841 Type: Underground Status: Ceased Operator: Main Colliery Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13NE (E)	254	1	272490 197689
120	BGS Recorded Mineral Sites Site Name: Brithdir Level Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229856 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Tir Edmond Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13NW (W)	262	1	271955 197777
121	BGS Recorded Mineral Sites Site Name: Brithdir Quarries Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229846 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NW (W)	270	1	271936 197729
121	BGS Recorded Mineral Sites Site Name: Lower Graigola Colliery Level Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154099 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Tir Edmond Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13NW (W)	318	1	271888 197732

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
122	BGS Recorded Mineral Sites Site Name: Cwm Du Brick Works Quarries Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229850 Type: Opencast Status: Ceased Operator: Taylor J. Brooks & Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A13SW (W)	300	1	271915 197614
123	BGS Recorded Mineral Sites Site Name: Brithdir Quarries Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154094 Type: Opencast Status: Ceased Operator: Taylor J. Brooks & Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12NE (W)	325	1	271880 197718
123	BGS Recorded Mineral Sites Site Name: Brithdir Quarries Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154094 Type: Opencast Status: Ceased Operator: Taylor J. Brooks & Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A12NE (W)	325	1	271880 197718
124	BGS Recorded Mineral Sites Site Name: Cwm Du Brick Works Quarries Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229849 Type: Opencast Status: Ceased Operator: Taylor J. Brooks & Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	339	1	271922 197500
125	BGS Recorded Mineral Sites Site Name: Brithdir Level Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229855 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Tir Edmond Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12NE (W)	340	1	271881 197800
126	BGS Recorded Mineral Sites Site Name: Maesmelyn Location: Birchgrove, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154121 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	378	1	272534 197927

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
127	BGS Recorded Mineral Sites Site Name: Cwmdru Level Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229854 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12SE (W)	381	1	271832 197611
127	BGS Recorded Mineral Sites Site Name: Cwmdru Quarry Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154095 Type: Opencast Status: Ceased Operator: Taylor J. Brooks & Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12SE (W)	392	1	271825 197595
127	BGS Recorded Mineral Sites Site Name: Cwmdru Quarry Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154095 Type: Opencast Status: Ceased Operator: Taylor J. Brooks & Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A12SE (W)	392	1	271825 197595
128	BGS Recorded Mineral Sites Site Name: Dynevor Main Colliery, Old Slant Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229853 Type: Underground Status: Ceased Operator: Dynevor Main Colliery Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Graigola Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	395	1	271866 197484
129	BGS Recorded Mineral Sites Site Name: Maesmelyn Level Location: Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229837 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Graigola Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A14NW (NE)	401	1	272589 197882
130	BGS Recorded Mineral Sites Site Name: Brithdir & Cwmdru Colliery Shaft Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229847 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12NE (W)	408	1	271796 197694

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
130	BGS Recorded Mineral Sites Site Name: Brithdir & Cwmdru Colliery, Old Cwmdru Slant Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154098 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12NE (W)	411	1	271793 197688
131	BGS Recorded Mineral Sites Site Name: Lower Graigola Colliery Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154122 Type: Underground Status: Ceased Operator: Dynevor Main Colliery Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Graigola Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	420	1	271822 197518
131	BGS Recorded Mineral Sites Site Name: Cwm Du Brick Works Quarries Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229851 Type: Opencast Status: Ceased Operator: Taylor J. Brooks & Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	425	1	271827 197493
131	BGS Recorded Mineral Sites Site Name: Dynevor Main Colliery, New Slant Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229852 Type: Underground Status: Ceased Operator: Dynevor Main Colliery Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Graigola Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	453	1	271796 197495
132	BGS Recorded Mineral Sites Site Name: Brithdir & Cwmdru Colliery, Brithdir Drift Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229848 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12NE (W)	466	1	271741 197748
132	BGS Recorded Mineral Sites Site Name: Brithdir & Cwmdru Colliery Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154096 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Tir Edmond Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12NE (W)	498	1	271710 197760

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
133	BGS Recorded Mineral Sites Site Name: Maesmelin Pit Location: Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229840 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A14NW (E)	523	1	272724 197877
134	BGS Recorded Mineral Sites Site Name: Brithdir & Cwmdru Colliery, West Brithdir Level Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154097 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12SE (W)	571	1	271638 197621
134	BGS Recorded Mineral Sites Site Name: Brithdir & Cwmdru Colliery Level Air Shaft Location: Moore Town, Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229845 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Tir Edmond Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A12SE (W)	603	1	271602 197650
135	BGS Recorded Mineral Sites Site Name: Maesmelyn Location: Birchgrove, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154091 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14NW (NE)	591	1	272755 197976
136	BGS Recorded Mineral Sites Site Name: Maesmelyn Location: Neath Abbey, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 228794 Type: Opencast Status: Ceased Operator: Bater Bros. & Co. (Materials) Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	629	1	272733 198080
137	BGS Recorded Mineral Sites Site Name: Pentre-Ffynnon Location: Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154105 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	683	1	272677 197169

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
138	BGS Recorded Mineral Sites Site Name: Brithdir Wood Level Location: Glais, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154080 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	746	1	271669 198214
139	BGS Recorded Mineral Sites Site Name: Darran Colliery Level Location: Neath Abbey, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229833 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Tir Edmond Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	758	1	272694 198300
140	BGS Recorded Mineral Sites Site Name: Penshanel Level Location: Skewen, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229838 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	781	1	272927 198056
141	BGS Recorded Mineral Sites Site Name: Darran Colliery Level Location: Neath Abbey, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229832 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Tir Edmond Coal (South Wales) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	812	1	272728 198342
142	BGS Recorded Mineral Sites Site Name: Graig Level Location: Neath Abbey, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229836 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A14NE (E)	828	1	273043 197874
143	BGS Recorded Mineral Sites Site Name: East Graigola Slant Location: Neath Abbey, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229859 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A14SE (E)	834	1	273061 197571

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
144	BGS Recorded Mineral Sites Site Name: Graig Location: Birchgrove, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154092 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14NE (E)	843	1	273071 197809
145	BGS Recorded Mineral Sites Site Name: Darran Colliery Pit Location: Neath Abbey, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154081 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	900	1	272788 198406
146	BGS Recorded Mineral Sites Site Name: Graig Location: Birchgrove, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154120 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SE (E)	933	1	273168 197646
147	BGS Recorded Mineral Sites Site Name: Graig Quarries Location: Neath Abbey, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 229835 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Swansea Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A19SE (E)	944	1	273112 198043
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 272240, 197750 Soil Sample Type: Topsoil Sample Area: Swansea Arsenic Measured 59.90 mg/kg Concentration: Cadmium Measured 2.50 mg/kg Concentration: Chromium Measured 87.40 mg/kg Concentration: Lead Measured 150.00 mg/kg Concentration: Nickel Measured 56.20 mg/kg Concentration:	A13NE (N)	53	1	272240 197750

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 272270, 197240 Soil Sample Type: Topsoil Sample Area: Swansea Arsenic Measured 55.00 mg/kg Concentration: Cadmium Measured 3.00 mg/kg Concentration: Chromium Measured 76.80 mg/kg Concentration: Lead Measured 407.20 mg/kg Concentration: Nickel Measured 62.40 mg/kg Concentration:	A8NE (S)	441	1	272270 197240
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 271740, 197790 Soil Sample Type: Topsoil Sample Area: Swansea Arsenic Measured 35.90 mg/kg Concentration: Cadmium Measured 1.90 mg/kg Concentration: Chromium Measured 113.40 mg/kg Concentration: Lead Measured 213.60 mg/kg Concentration: Nickel Measured 44.70 mg/kg Concentration:	A12NE (W)	473	1	271740 197790
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 272740, 197740 Soil Sample Type: Topsoil Sample Area: Swansea Arsenic Measured 58.30 mg/kg Concentration: Cadmium Measured 1.40 mg/kg Concentration: Chromium Measured 81.70 mg/kg Concentration: Lead Measured 240.40 mg/kg Concentration: Nickel Measured 67.30 mg/kg Concentration:	A14NW (E)	507	1	272740 197740
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 271760, 197220 Soil Sample Type: Topsoil Sample Area: Swansea Arsenic Measured 61.60 mg/kg Concentration: Cadmium Measured 2.30 mg/kg Concentration: Chromium Measured 69.90 mg/kg Concentration: Lead Measured 307.20 mg/kg Concentration: Nickel Measured 58.60 mg/kg Concentration:	A7NE (SW)	642	1	271760 197220
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 272780, 197250 Soil Sample Type: Topsoil Sample Area: Swansea Arsenic Measured 84.90 mg/kg Concentration: Cadmium Measured 3.50 mg/kg Concentration: Chromium Measured 73.40 mg/kg Concentration: Lead Measured 618.40 mg/kg Concentration: Nickel Measured 76.10 mg/kg Concentration:	A9NW (SE)	700	1	272780 197250

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 272750, 198250 Soil Sample Type: Topsoil Sample Area: Swansea Arsenic Measured Concentration: 427.70 mg/kg Cadmium Measured Concentration: 0.40 mg/kg Chromium Measured Concentration: 61.50 mg/kg Lead Measured Concentration: 431.10 mg/kg Nickel Measured Concentration: 61.20 mg/kg	A19SW (NE)	756	1	272750 198250
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 272250, 196750 Soil Sample Type: Topsoil Sample Area: Swansea Arsenic Measured Concentration: 150.10 mg/kg Cadmium Measured Concentration: 3.90 mg/kg Chromium Measured Concentration: 55.20 mg/kg Lead Measured Concentration: 155.50 mg/kg Nickel Measured Concentration: 29.10 mg/kg	A8SE (S)	928	1	272250 196750
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 271240, 197760 Soil Sample Type: Topsoil Sample Area: Swansea Arsenic Measured Concentration: 73.90 mg/kg Cadmium Measured Concentration: 4.30 mg/kg Chromium Measured Concentration: 69.00 mg/kg Lead Measured Concentration: 111.80 mg/kg Nickel Measured Concentration: 39.10 mg/kg	A12NW (W)	966	1	271240 197760
	BGS Urban Soil Chemistry Averages Source: British Geological Survey, National Geoscience Information Service Sample Area: Swansea Count Id: 368 Arsenic Minimum Concentration: 8.00 mg/kg Arsenic Average Concentration: 79.00 mg/kg Arsenic Maximum Concentration: 2161.00 mg/kg Cadmium Minimum Concentration: 0.10 mg/kg Cadmium Average Concentration: 2.90 mg/kg Cadmium Maximum Concentration: 61.90 mg/kg Chromium Minimum Concentration: 13.00 mg/kg Chromium Average Concentration: 72.00 mg/kg Chromium Maximum Concentration: 562.00 mg/kg Lead Minimum Concentration: 23.00 mg/kg Lead Average Concentration: 413.00 mg/kg Lead Maximum Concentration: 10000.00 mg/kg Nickel Minimum Concentration: 8.00 mg/kg Nickel Average Concentration: 52.00 mg/kg Nickel Maximum Concentration: 384.00 mg/kg	A13NW (NW)	0	1	272219 197690

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13NW (NW)	0	6	272219 197690
	Mining Instability Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13NW (NW)	0	-	272219 197690
	Natural Cavities Easting: 272300 Northing: 197800 Distance: 122 Quadrant Reference: A13 Quadrant Reference: NE Bearing Ref: NE Cavity Type: Unknown x 1 Solid Geology Detail: Millstone Grit Group Superficial Geology No Details Detail:	A13NE (NE)	122	7	272300 197800
	Natural Cavities Easting: 271700 Northing: 197500 Distance: 540 Quadrant Reference: A12 Quadrant Reference: SE Bearing Ref: W Cavity Type: Unknown x 1 Solid Geology Detail: Upper Coal Measures Superficial Geology No Details Detail:	A12SE (W)	540	7	271700 197500
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	272219 197690
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	272219 197690
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	42	1	272262 197656
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	272219 197690
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	272219 197690
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	272221 197683
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	41	1	272207 197738
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	42	1	272262 197656
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	174	1	272163 197864
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	210	1	272237 197468
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	221	1	272338 197495

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	226	1	272206 197451
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	272219 197690
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	272221 197683
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	272219 197690
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	41	1	272207 197738
	Radon Potential - Radon Affected Areas Affected Area: The property is an Intermediate probability radon area (3 to 5% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	272219 197690
	Radon Potential - Radon Protection Measures Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	272219 197690

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
148	Contemporary Trade Directory Entries Name: Ritz Car Sales Location: Station Road, Skewen, Neath, West Glamorgan, SA10 6TG Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	237	-	272388 197509
148	Contemporary Trade Directory Entries Name: Motosave Location: Station Road, Skewen, Neath, West Glamorgan, SA10 6TG Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	237	-	272388 197509
148	Contemporary Trade Directory Entries Name: Station Road Ironing Service Location: Station Road, Skewen, Neath, West Glamorgan, SA10 6TG Classification: Ironing & Home Laundry Services Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (SE)	237	-	272388 197509
149	Contemporary Trade Directory Entries Name: Ritz Car Sales Location: Station Rd, Skewen, Neath, West Glamorgan, SA10 6TE Classification: Car Dealers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A13SE (SE)	257	-	272404 197496
149	Contemporary Trade Directory Entries Name: Design Printers Location: Station Road, Skewen, Neath, West Glamorgan, SA10 6HF Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (SE)	292	-	272421 197464
149	Contemporary Trade Directory Entries Name: Affordable Cars Location: 2, Station Road, Skewen, Neath, SA10 6HF Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	295	-	272406 197450
150	Contemporary Trade Directory Entries Name: South Wales Cleaners Location: 130b, Dynevor Road, Skewen, Neath, West Glamorgan, SA10 6TH Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	266	-	272461 197549
151	Contemporary Trade Directory Entries Name: Monolithic Refractories Ltd Location: Drymau Farm, Drummau Road, Skewen, Neath, West Glamorgan, SA10 6NW Classification: Refractory Materials & Supplies Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (NW)	284	-	272025 197915
151	Contemporary Trade Directory Entries Name: Monolithic Refractories Location: Drymau Farm, Drummau Road, Skewen, Neath, West Glamorgan, SA10 6NW Classification: Refractory Materials & Supplies Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (NW)	284	-	272025 197915
152	Contemporary Trade Directory Entries Name: D K B Locks Location: 87, New Road, Skewen, Neath, West Glamorgan, SA10 6HG Classification: Safes & Vaults - Suppliers & Installers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	312	-	272376 197412
152	Contemporary Trade Directory Entries Name: Steve Cooper Location: 165, New Road, Skewen, Neath, West Glamorgan, SA10 6HD Classification: Staircase, Balustrade & Handrail Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (SE)	351	-	272380 197369

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
153	Contemporary Trade Directory Entries Name: Badge Palace Location: Unit 19 Lonlas Village Workshops, Skewen, Neath, West Glamorgan, SA10 6RP Classification: T-Shirts Status: Inactive Positional Accuracy: Manually positioned to the address or location	A13SW (SW)	324	-	271916 197542
153	Contemporary Trade Directory Entries Name: S & J Industrial Solutions Ltd Location: Unit 17, Lonlas Village Workshops, Cwmdy Industrial Estate, Neath, SA10 6RP Classification: Gaskets Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	326	-	271920 197530
153	Contemporary Trade Directory Entries Name: Graphic Impressions Location: Unit 17, Lonlas Village Workshops, Cwmdy Industrial Estate, Neath, SA10 6RP Classification: T-Shirts Status: Active Positional Accuracy: Automatically positioned to the address	A13SW (SW)	326	-	271920 197530
153	Contemporary Trade Directory Entries Name: Actoflex Ltd Location: Unit 17 Lonlas Village Workshops, Skewen, Neath, West Glamorgan, SA10 6RP Classification: Hose, Tubing & Fittings Status: Inactive Positional Accuracy: Manually positioned to the address or location	A13SW (SW)	326	-	271920 197530
153	Contemporary Trade Directory Entries Name: Clothing Industrial Services Location: Unit A, Lonlas Village Workshops, Cwmdy Industrial Estate, Neath, SA10 6RP Classification: Ironing & Home Laundry Services Status: Active Positional Accuracy: Automatically positioned to the address	A13SW (SW)	339	-	271901 197540
153	Contemporary Trade Directory Entries Name: Stadium Of Skewen Location: Unit 7, Lonlas Village Workshops, Cwmdy Ind Est, Neath, West Glamorgan, SA10 6RP Classification: Car Dealers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A13SW (SW)	352	-	271889 197533
153	Contemporary Trade Directory Entries Name: Stadium Auto Repairs Location: Unit 7, Cwmdy Industrial Estate, Neath, West Glamorgan, SA10 6RP Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	352	-	271889 197532
153	Contemporary Trade Directory Entries Name: Motor Star Garage Services Location: Unit 7, Cwmdy Industrial Estate, Neath, SA10 6RP Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	354	-	271889 197530
153	Contemporary Trade Directory Entries Name: Motor Star Location: Unit 7, Cwmdy Industrial Estate, Neath, SA10 6RP Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	354	-	271889 197530
153	Contemporary Trade Directory Entries Name: Argent Fabrications & Coatings Ltd Location: Unit 5, Lonlas Village Workshops, Cwmdy Industrial Estate, Neath, West Glamorgan, SA10 6RP Classification: Powder Coatings Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	360	-	271885 197522
153	Contemporary Trade Directory Entries Name: Independent Packaging Services Location: Unit 5, Lonlas Village Workshops, Cwmdy Industrial Estate, Neath, West Glamorgan, SA10 6RP Classification: Pallets, Crates & Packing Cases Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	360	-	271885 197522

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
153	Contemporary Trade Directory Entries Name: City Maintenance Services Location: Offices 5 & 6 Lon Las Village Workshops, Skewen, Neath, West Glamorgan, SA10 6RB Classification: Door Manufacturers - Industrial Status: Inactive Positional Accuracy: Manually positioned to the address or location	A13SW (SW)	361	-	271884 197522
153	Contemporary Trade Directory Entries Name: Xtreme Sportswear Location: Lonlas Village Workshops, Cwmdru Indust Est, Neath, West Glamorgan, SA10 6RP Classification: Sportswear - Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A13SW (SW)	361	-	271885 197522
153	Contemporary Trade Directory Entries Name: Kiwi Sports Neath Ltd Location: Unit 6, Lonlas Village Workshops, Cwmdru Industrial Estate, Neath, West Glamorgan, SA10 6RP Classification: Sports Equipment Manufacturers & Distributors Status: Inactive Positional Accuracy: Automatically positioned to the address	A12SE (SW)	362	-	271881 197528
153	Contemporary Trade Directory Entries Name: Skewen Welding Location: Unit 30a, Lonlas Village Workshops, Cwmdru Ind Est, Neath, West Glamorgan, SA10 6RP Classification: Wrought Ironwork Status: Inactive Positional Accuracy: Manually positioned to the address or location	A12SE (W)	377	-	271858 197544
153	Contemporary Trade Directory Entries Name: Cambrian Refrigeration Location: Lonlas Village Workshops, Cwmdru Indust Est, Neath, West Glamorgan, SA10 6RP Classification: Refrigeration Equipment - Commercial Status: Inactive Positional Accuracy: Manually positioned to the address or location	A12SE (SW)	380	-	271876 197496
153	Contemporary Trade Directory Entries Name: Nationwide Paging Location: Office 6, Cwmdru Ind Est, Neath, West Glamorgan, SA10 6RP Classification: Telecommunications Equipment & Systems Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A12SE (SW)	392	-	271846 197532
154	Contemporary Trade Directory Entries Name: Valley Sealants Location: A, 1, Brookville Drive, Skewen, Neath, West Glamorgan, SA10 6SR Classification: Adhesives, Glues & Sealants Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	337	-	272010 197406
155	Contemporary Trade Directory Entries Name: Skewen Launderette Location: 79, New Road, Skewen, Neath, West Glamorgan, SA10 6HE Classification: Laundries & Launderettes Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	343	-	272442 197416
155	Contemporary Trade Directory Entries Name: Elite Blinds Location: New Rd, Skewen, Neath, West Glamorgan, SA10 6HG Classification: Blinds, Awnings & Canopies Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A13SE (SE)	353	-	272441 197403
155	Contemporary Trade Directory Entries Name: Leo Optical Frames Location: 187, New Road, Skewen, Neath, West Glamorgan, SA10 6HD Classification: Optical Goods - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	385	-	272469 197384
156	Contemporary Trade Directory Entries Name: Express Belting Location: Unit 28a, Lonlas Village Workshops, Cwmdru Ind Est, Neath, West Glamorgan, SA10 6RP Classification: Conveyors & Conveyor Belts Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A12SE (W)	345	-	271878 197580

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
157	Contemporary Trade Directory Entries Name: P & T Autos Location: Evelyn Road, Neath, SA10 6LF Classification: Mot Testing Centres Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (S)	364	-	272249 197315
158	Contemporary Trade Directory Entries Name: Wood Shop Location: 130, New Road, Skewen, Neath, West Glamorgan, SA10 6HL Classification: Joinery Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A8NW (S)	364	-	272089 197334
159	Contemporary Trade Directory Entries Name: Melding Stone Craft Location: 41, Winifred Road, Neath, West Glamorgan, SA10 6HW Classification: Fireplaces & Mantelpieces Status: Active Positional Accuracy: Automatically positioned to the address	A8NW (S)	371	-	272187 197307
159	Contemporary Trade Directory Entries Name: Marble Arte & Decor Location: 1, Winifred Road, Neath, West Glamorgan, SA10 6HP Classification: Fireplaces & Mantelpieces Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	388	-	272154 197293
159	Contemporary Trade Directory Entries Name: Direct Supplies Location: 3, Winifred Road, Neath, West Glamorgan, SA10 6HP Classification: Washing Machines - Servicing & Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	397	-	272154 197284
159	Contemporary Trade Directory Entries Name: A M Osborne Location: Winifred Road, Neath, West Glamorgan, SA10 6HP Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	429	-	272142 197254
159	Contemporary Trade Directory Entries Name: Select Accident Repair Centre Ltd Location: Unit 2, Winifred Road, Neath, SA10 6HP Classification: Car Body Repairs Status: Active Positional Accuracy: Automatically positioned to the address	A8NW (S)	431	-	272133 197253
160	Contemporary Trade Directory Entries Name: Awteq Engineering Ltd Location: Unit 2, Cwmdru Ind Est, Neath, West Glamorgan, SA10 6RP Classification: Precision Engineers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A13SW (SW)	390	-	271884 197464
160	Contemporary Trade Directory Entries Name: Stadium Service Station Location: Lucy Road, Neath, West Glamorgan, SA10 6RS Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	395	-	271909 197423
160	Contemporary Trade Directory Entries Name: Hi Q Motorway Tyres Ltd Location: Unit 1, Cwmdru Industrial Estate, Neath, West Glamorgan, SA10 6RP Classification: Tyre Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12SE (SW)	420	-	271870 197431
161	Contemporary Trade Directory Entries Name: West Wales Print Ltd Location: 63, New Road, Skewen, Neath, West Glamorgan, SA10 6HA Classification: T-Shirts Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	399	-	272538 197429
162	Contemporary Trade Directory Entries Name: Skewen Motor Services Ltd Location: Picton Rd, Neath, West Glamorgan, SA10 6UN Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14SW (SE)	399	-	272573 197477

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
162	Contemporary Trade Directory Entries Name: G A Hopkins Location: Picton Rd, Neath, West Glamorgan, SA10 6UN Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14SW (SE)	402	-	272572 197470
162	Contemporary Trade Directory Entries Name: Auto Electrical Services Location: Picton Road Garage, Picton Road, Skewen, Neath, West Glamorgan, SA10 6UN Classification: Mot Testing Centres Status: Active Positional Accuracy: Automatically positioned to the address	A14SW (SE)	424	-	272589 197455
163	Contemporary Trade Directory Entries Name: Skewen Tyre & Auto Centre Ltd Location: Flat 1, Mount Pleasant Court, Evelyn Road, Skewen, Neath, West Glamorgan, SA10 6NE Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	409	-	272354 197295
164	Contemporary Trade Directory Entries Name: Silverline Trading Uk Ltd Location: Unit 7, Lonlas Business Park, Lonlas, Neath, SA10 6SN Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A12SE (SW)	423	-	271837 197479
164	Contemporary Trade Directory Entries Name: Stadium Auto Repairs Ltd Location: Unit 7,Cwmdu Ind Est, Neath, West Glamorgan, SA10 6RP Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the address or location	A12SE (SW)	423	-	271833 197486
164	Contemporary Trade Directory Entries Name: W W Powder Coating Location: Unit 8 Cwmdu Industrial Estate, Neath, West Glamorgan, SA10 6RP Classification: Powder Coatings Status: Active Positional Accuracy: Manually positioned to the address or location	A12SE (SW)	437	-	271822 197478
164	Contemporary Trade Directory Entries Name: Clarkes Coatings (UK) Ltd Location: Unit 8,Lonlas Business Park, Skewen, Neath, West Glamorgan, SA10 6RP Classification: Coating Specialists Status: Inactive Positional Accuracy: Manually positioned to the address or location	A12SE (SW)	437	-	271821 197480
164	Contemporary Trade Directory Entries Name: Elite Electroplating Ltd Location: Unit 10 Lonlas Business Park,Cwmdu Indust Est, Neath, West Glamorgan, SA10 6RP Classification: Metal Finishing Services Status: Inactive Positional Accuracy: Manually positioned to the address or location	A12SE (SW)	467	-	271793 197468
165	Contemporary Trade Directory Entries Name: Premier Concrete Products Location: Unit 12, Lonlas Business Park, Lonlas, Neath, West Glamorgan, SA10 6SN Classification: Concrete Manufacturers & Distributors Status: Inactive Positional Accuracy: Automatically positioned to the address	A12SE (SW)	497	-	271765 197457
165	Contemporary Trade Directory Entries Name: J & J Motors Location: Unit 14, Lonlas Business Park, Lonlas, Neath, West Glamorgan, SA10 6SN Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A12SE (SW)	531	-	271733 197444
166	Contemporary Trade Directory Entries Name: Day View Cars Location: 33, High Street, Skewen, Neath, West Glamorgan, SA10 6NB Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	528	-	272660 197376

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
167	Contemporary Trade Directory Entries Name: Carpoint Wales Location: Siding Ter, Neath, West Glamorgan, SA10 6RF Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7NE (SW)	544	-	271809 197310
167	Contemporary Trade Directory Entries Name: Stadium Service Garage Location: Sidings Terrace, Neath, West Glamorgan, SA10 6RF Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	544	-	271809 197310
167	Contemporary Trade Directory Entries Name: Stadium Service Garage Location: Sidings Terrace, Neath, West Glamorgan, SA10 6RF Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	544	-	271809 197310
167	Contemporary Trade Directory Entries Name: Stadium Cars Location: Siding Terrace, Neath, West Glamorgan, SA10 6RF Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	544	-	271809 197310
167	Contemporary Trade Directory Entries Name: Low Cost Vans Location: Main Road, Siding Ter, Neath, West Glamorgan, SA10 6RF Classification: Commercial Vehicle Dealers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7NE (SW)	544	-	271809 197310
168	Contemporary Trade Directory Entries Name: Karcher (Uk) Ltd Location: 31, Goshen Park, Skewen, Neath, West Glamorgan, SA10 6PT Classification: Cleaning Materials & Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (E)	594	-	272803 197865
169	Contemporary Trade Directory Entries Name: Solar 2 Energy Savings Location: Unit 1 Lon Las Industrial Estate, Lucy Road Skewen, Neath, West Glamorgan, SA10 6RR Classification: Electricity Generating & Distributing Equipment Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A12SE (SW)	595	-	271691 197388
170	Contemporary Trade Directory Entries Name: Low Cost Vans Location: Siding Terrace, Neath, SA10 6RF Classification: Commercial Vehicle Dealers Status: Active Positional Accuracy: Automatically positioned to the address	A7NE (SW)	602	-	271749 197290
170	Contemporary Trade Directory Entries Name: J & J Motors Location: Siding Terrace, Neath, SA10 6RF Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A7NE (SW)	635	-	271717 197278
170	Contemporary Trade Directory Entries Name: J & J Motors Location: Siding Terrace, Neath, West Glamorgan, SA10 6RF Classification: Car Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	635	-	271717 197278
170	Contemporary Trade Directory Entries Name: Crownhawk Properties Location: Siding Terrace, Neath, West Glamorgan, SA10 6RF Classification: Commercial Vehicle Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	635	-	271717 197278

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
171	Contemporary Trade Directory Entries Name: Celtic Trailers Ltd Location: 25, New Road, Skewen, Neath, West Glamorgan, SA10 6UT Classification: Trailers & Towing Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	608	-	272784 197427
172	Contemporary Trade Directory Entries Name: Mister Window Co Location: Unit 2, 89, Old Road, Skewen, Neath, West Glamorgan, SA10 6LR Classification: Window Frame Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	648	-	272649 197191
172	Contemporary Trade Directory Entries Name: Skewen Accident Repair Centre Location: 89, Old Road, Skewen, Neath, West Glamorgan, SA10 6LR Classification: Car Body Repairs Status: Active Positional Accuracy: Automatically positioned to the address	A9NW (SE)	650	-	272651 197190
172	Contemporary Trade Directory Entries Name: K D Motors Location: 89, Old Road, Skewen, Neath, West Glamorgan, SA10 6LR Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	650	-	272651 197190
172	Contemporary Trade Directory Entries Name: J-Tech Motors Location: 52, Old Road, Skewen, Neath, West Glamorgan, SA10 6LS Classification: Mechanical Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	651	-	272682 197216
173	Contemporary Trade Directory Entries Name: Enterprise Print Location: New Rd, Skewen, Neath, West Glamorgan, SA10 6UU Classification: Printers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14SW (SE)	679	-	272852 197404
174	Contemporary Trade Directory Entries Name: Skewen Body Repairs Location: Unit 1, Old Road, Skewen, SA10 6LR Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	702	-	272673 197141
175	Contemporary Trade Directory Entries Name: U Wash I Dry Launderette Service Location: 47, Burrows Road, Skewen, Neath, SA10 6AB Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address	A9NW (SE)	782	-	272720 197076
175	Contemporary Trade Directory Entries Name: Richards Coal Merchants Ltd Location: 1, Bosworth Road, Neath, West Glamorgan, SA10 6BU Classification: Coal & Smokeless Fuel Merchants & Distributors Status: Active Positional Accuracy: Automatically positioned to the address	A9NW (SE)	820	-	272742 197045
176	Contemporary Trade Directory Entries Name: Janiserve Ltd Location: 1b, Cardonnel Road, Neath, West Glamorgan, SA10 6DE Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	787	-	272847 197195
177	Contemporary Trade Directory Entries Name: Skewen Press Location: New Road, Skewen, Neath, West Glamorgan, SA10 6UU Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (SE)	812	-	272979 197362
178	Contemporary Trade Directory Entries Name: Trumpet Tyres Location: 41, Pen-yr-Alley Avenue, Skewen, Neath, SA10 6DS Classification: Tyre Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SW (S)	813	-	272065 196877

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
179	Contemporary Trade Directory Entries Name: M P Gillard Location: Access Road To Wharf, Skewen, Neath, West Glamorgan, SA10 7GA Classification: Car Breakers & Dismantlers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A9NE (SE)	840	-	272924 197209
180	Contemporary Trade Directory Entries Name: Grime Busters Location: 25, Old Road, Skewen, Neath, West Glamorgan, SA10 6AF Classification: Carpet, Curtain & Upholstery Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NE (SE)	848	-	272977 197279
181	Contemporary Trade Directory Entries Name: Mike Haller Aggregates Location: 16, Bosworth Road, Neath, West Glamorgan, SA10 6BU Classification: Quarries Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	861	-	272795 197036
182	Contemporary Trade Directory Entries Name: Kleenbee Location: 10, Parc Andrew, Neath, West Glamorgan, SA10 6BJ Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	882	-	272576 196875
183	Contemporary Trade Directory Entries Name: Furniture Medic Location: 1, Darran Park, Neath Abbey, Neath, West Glamorgan, SA10 6PX Classification: Furniture - Repairing & Restoring Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SE (NE)	887	-	272935 198241
184	Contemporary Trade Directory Entries Name: Mining & Tunneling Supplies Location: Unit C, Lonlas Cellars, Siding Terrace, Lonlas, SA10 6RD Classification: Coal Mining Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NW (SW)	938	-	271392 197218
184	Contemporary Trade Directory Entries Name: Cymru Automation Location: Unit 1, Lonlas Village Workshops, Cwmdy Industrial Estate, Neath, West Glamorgan, SA10 6RP Classification: Distribution Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NW (SW)	958	-	271369 197220
184	Contemporary Trade Directory Entries Name: Equilibrium Chemical Services Location: Cwmdy Ind Est, Neath, West Glamorgan, SA10 6RP Classification: Chemical Manufacturers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7NW (SW)	972	-	271354 197218
185	Contemporary Trade Directory Entries Name: Kyle Evans Ltd Location: Whitegates Yard, Drummau Road, Skewen, Neath, SA10 6NU Classification: Refrigeration Equipment - Commercial Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	944	-	273143 197430
185	Contemporary Trade Directory Entries Name: G P Auto Centre Location: GP Auto Centre, Drummau Road, Neath Abbey, SA10 6NU Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	944	-	273143 197430
186	Fuel Station Entries Name: Stadium Garage Location: New Road, Skewen, Neath, Neath Port Talbot, SA10 6RF Brand: Obsolete Premises Type: Not Applicable Status: Obsolete Positional Accuracy: Automatically positioned to the address	A7NE (SW)	544	-	271809 197310

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
187	Points of Interest - Commercial Services Name: G T Motors Location: 1 Graham Terrace, Neath, SA10 6RL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SW (SW)	210	8	272086 197508
188	Points of Interest - Commercial Services Name: Monolithic Environmental Services Limited Location: Drummau Farm, Drummau Road, Skewen, Neath, West Glamorgan, SA10 6NW Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A13NW (NW)	284	8	272025 197915
189	Points of Interest - Commercial Services Name: Stadium Auto Repairs Ltd Location: Unit 7, Cwmdy Industrial Estate, Neath, SA10 6RP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SW (SW)	352	8	271889 197532
189	Points of Interest - Commercial Services Name: Stadium Auto Repairs Ltd Location: Unit 7, Cwmdy Industrial Estate, Neath, SA10 6RP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SW (SW)	352	8	271889 197532
189	Points of Interest - Commercial Services Name: Motor Star Garage Services Location: Unit 7 Lonlas Village Workshops, Cwmdy Industrial Estate, Neath, SA10 6RP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SW (SW)	353	8	271889 197532
189	Points of Interest - Commercial Services Name: Motor Star Location: Unit 7, Cwmdy Industrial Estate, Neath, SA10 6RP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SW (SW)	354	8	271889 197530
189	Points of Interest - Commercial Services Name: Cymru Automation Location: Unit 1 Lonlas Village Workshops, Cwmdy Industrial Estate, Neath, SA10 6RP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13SW (SW)	363	8	271894 197500
189	Points of Interest - Commercial Services Name: Skewen Welding Location: Unit 30a, Lonlas Village Workshops, Cwmdy Ind Est, Neath, West Glamorgan, SA10 6RP Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A12SE (W)	377	8	271858 197544
189	Points of Interest - Commercial Services Name: Skewen Welding Location: Unit 30a Lonlas Village Workshops, Cwmdy Industrial Estate, Neath, SA10 6RP Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A12SE (W)	377	8	271858 197544
189	Points of Interest - Commercial Services Name: Skewen Tyre & Auto Centre Ltd Location: Unit 2, Lonlas Business Park, Lonlas, Neath, SA10 6SN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SW (SW)	390	8	271884 197464
189	Points of Interest - Commercial Services Name: Stadium Garage Workshop Location: Unit 7, Cwmdy Ind Est, Neath, West Glamorgan, SA10 6RP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12SE (SW)	423	8	271833 197486

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
190	Points of Interest - Commercial Services Name: P & T Autos Location: Evelyn Road, Neath, SA10 6LF Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (S)	364	8	272249 197315
191	Points of Interest - Commercial Services Name: Auto Electrical Services Location: Picton Road Garage, Picton Road, Skewen, Neath, SA10 6UN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SW (SE)	422	8	272586 197455
192	Points of Interest - Commercial Services Name: Stadium Body Shop Location: Dynevor Place, Skewen, Neath, SA10 6RG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SW (SW)	428	8	271932 197353
193	Points of Interest - Commercial Services Name: Select Accident Repair Centre Ltd Location: Unit 2, Winifred Road, Neath, SA10 6HP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (S)	430	8	272141 197253
194	Points of Interest - Commercial Services Name: J & J Motors Location: Unit 14, Lonlas Business Park, Lonlas, Neath, SA10 6SN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12SE (SW)	531	8	271733 197444
195	Points of Interest - Commercial Services Name: Stadium Service Garage Location: Sidings Terrace, Neath, SA10 6RF Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	544	8	271809 197310
195	Points of Interest - Commercial Services Name: Stadium Service Garage Location: Siding Terrace, Neath, SA10 6RF Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	544	8	271809 197310
195	Points of Interest - Commercial Services Name: Stadium Body Shop Location: Sidings Terrace, Skewen, Neath, SA10 6RE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	558	8	271793 197307
196	Points of Interest - Commercial Services Name: A & A Electrics Location: 31 Cae Nant Terrace, Neath, SA10 6UP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SW (E)	628	8	272836 197504
196	Points of Interest - Commercial Services Name: A J Auto Electrical Location: 31 Cae Nant Terrace, Neath, SA10 6UP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SW (E)	628	8	272836 197505
196	Points of Interest - Commercial Services Name: A J Auto Electrical Location: 31 Cae Nant Terrace, Neath, SA10 6UP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SW (E)	628	8	272836 197505
197	Points of Interest - Commercial Services Name: J & J Motors Location: Siding Terrace, Main Road, Neath, SA10 6RF Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	635	8	271717 197278

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
198	Points of Interest - Commercial Services Name: Skewen Accident Repair Centre Location: 89 Old Road, Skewen, Neath, SA10 6LR Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9NW (SE)	650	8	272651 197190
199	Points of Interest - Commercial Services Name: Mike Haller Aggregates Location: 16 Bosworth Road, Neath, SA10 6BU Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9NW (SE)	861	8	272795 197036
200	Points of Interest - Commercial Services Name: G P Auto Centre Location: 1 Drummau Road, Skewen, Neath, SA10 6NU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SE (E)	913	8	273114 197438
200	Points of Interest - Commercial Services Name: Easyfreeze Ltd Location: Whitegates Yard, Drummau Road, Skewen, Neath, SA10 6NU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SE (E)	916	8	273113 197427
201	Points of Interest - Commercial Services Name: Cymru Automation Location: Unit 1 Lonlas Village Workshops, Cwmda Industrial Estate, Neath, SA10 6RP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7NW (SW)	958	8	271369 197220
202	Points of Interest - Manufacturing and Production Name: Tank Location: SA10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	99	8	272267 197791
202	Points of Interest - Manufacturing and Production Name: Shaft (Dis) Location: SA10 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	128	8	272338 197772
203	Points of Interest - Manufacturing and Production Name: Tank Location: SA10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	306	8	271958 197504
203	Points of Interest - Manufacturing and Production Name: Tank Location: SA10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	321	8	271959 197477
203	Points of Interest - Manufacturing and Production Name: Lonlas Village Workshops Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	376	8	271887 197485
203	Points of Interest - Manufacturing and Production Name: Workshops Location: SA10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	376	8	271888 197483
204	Points of Interest - Manufacturing and Production Name: Lonlas Village Workshops Location: SA10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A13SW (SW)	333	8	271904 197548

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
205	Points of Interest - Manufacturing and Production Name: G J Isaac & Son Location: 70 New Road, Skewen, Neath, SA10 6HA Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A13SE (SE)	372	8	272497 197426
206	Points of Interest - Manufacturing and Production Name: Quarry (Disused) Location: SA10 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A13NE (NE)	377	8	272531 197929
206	Points of Interest - Manufacturing and Production Name: Quarry (Disused) Location: SA10 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	380	8	272539 197924
207	Points of Interest - Manufacturing and Production Name: South Wales Granite Wholesale Location: 1 Winifred Road, Neath, SA10 6HP Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A8NW (S)	388	8	272154 197293
208	Points of Interest - Manufacturing and Production Name: Quarry (Disused) Location: SA10 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	402	8	271811 197609
209	Points of Interest - Manufacturing and Production Name: Quarry (Disused) Location: SA10 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A12SE (W)	406	8	271805 197619
209	Points of Interest - Manufacturing and Production Name: Shaft (Disused) Location: SA10 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	418	8	271786 197695
209	Points of Interest - Manufacturing and Production Name: Shaft (Disused) Location: SA10 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	419	8	271785 197695
210	Points of Interest - Manufacturing and Production Name: G J Isaac & Son Ltd Location: Unit 9, Lonlas Business Park, Lonlas, Neath, SA10 6SN Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A12SE (SW)	449	8	271809 197476
210	Points of Interest - Manufacturing and Production Name: George J Isaac & Son Ltd Location: Unit 9, Lonlas Business Park, Lonlas, Neath, SA10 6SN Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A12SE (SW)	449	8	271809 197476
210	Points of Interest - Manufacturing and Production Name: Lonlas Business Park Location: SA10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A12SE (SW)	514	8	271739 197473
210	Points of Interest - Manufacturing and Production Name: Lonlas Business Park Location: SA10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A12SE (SW)	532	8	271723 197463

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
211	Points of Interest - Manufacturing and Production Name: Quarry (Disused) Location: SA10 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A14NW (NE)	559	8	272706 197996
211	Points of Interest - Manufacturing and Production Name: Quarry (Disused) Location: SA10 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	619	8	272720 198080
211	Points of Interest - Manufacturing and Production Name: Quarry (Disused) Location: SA10 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A19SW (NE)	633	8	272753 198059
212	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SE (SE)	810	8	272978 197366
212	Points of Interest - Manufacturing and Production Name: Works Location: SA10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SE (SE)	810	8	272978 197366
213	Points of Interest - Manufacturing and Production Name: Mike Haller Aggregates Location: 16 Bosworth Road, Neath, SA10 6BU Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A9NW (SE)	861	8	272795 197036
213	Points of Interest - Manufacturing and Production Name: Mike Haller Location: 16 Bosworth Road, Neath, SA10 6BU Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A9NW (SE)	861	8	272795 197036
214	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	934	8	273131 197422
214	Points of Interest - Manufacturing and Production Name: Works Location: SA10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	934	8	273131 197422
215	Points of Interest - Public Infrastructure Name: Skewen Rail Station Location: Woodland Close, SA10 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A13SE (SE)	251	8	272369 197478
215	Points of Interest - Public Infrastructure Name: Skewen Station Location: Woodland Close, SA10 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A13SE (SE)	251	8	272369 197478
216	Points of Interest - Public Infrastructure Name: Skewen Police Station Location: 152 New Road, Skewen, Neath, SA10 6HH Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A8NE (S)	333	8	272240 197346

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
216	Points of Interest - Public Infrastructure Name: Skewen Police Station Location: 152 New Road, Skewen, Neath, West Glamorgan, SA10 6HH Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A8NE (S)	333	8	272240 197346
217	Points of Interest - Public Infrastructure Name: Refuse Tip (Disused) Location: SA10 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A14NW (NE)	607	8	272769 197983
218	Points of Interest - Public Infrastructure Name: D F & A M Bevan Location: 2 Capel Terrace, Skewen, Neath, SA10 6LY Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A9NW (SE)	724	8	272766 197197
219	Points of Interest - Public Infrastructure Name: Sewage Pumping Station Location: SA10 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	737	8	271656 197191
220	Points of Interest - Recreational and Environmental Name: Playground Location: Penlan Road, SA10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A13SW (SW)	222	8	272033 197544
220	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	233	8	272024 197537
221	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8NW (SW)	511	8	271922 197255
221	Points of Interest - Recreational and Environmental Name: Playground Location: The Meadows (Y Waun), SA10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8NW (SW)	511	8	271922 197255
222	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8NE (S)	658	8	272391 197045
222	Points of Interest - Recreational and Environmental Name: Playground Location: Nr Christopher Road, SA10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A8NE (S)	659	8	272395 197045
223	Points of Interest - Recreational and Environmental Name: Playground Location: New Road, SA10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A14SW (SE)	708	8	272870 197376
223	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A14SW (SE)	709	8	272872 197378

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
224	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	944	8	273053 198166
224	Points of Interest - Recreational and Environmental Name: Playground Location: The Highlands, SA10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A19SE (NE)	948	8	273050 198179

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
225	Ancient Woodland Name: Not Supplied Reference: 14837 Area(m ²): 4050.35 Type: Ancient and Semi-Natural Woodland	A13NW (N)	3	2	272217 197701
226	Ancient Woodland Name: Not Supplied Reference: 14839 Area(m ²): 8349.5 Type: Ancient and Semi-Natural Woodland	A13NW (N)	49	2	272203 197745
227	Ancient Woodland Name: Not Supplied Reference: 21719 Area(m ²): 14743.78 Type: Restored Ancient Woodland Site	A13SE (E)	56	2	272291 197678
228	Ancient Woodland Name: Not Supplied Reference: 40641 Area(m ²): 2980.54 Type: Plantation on Ancient Woodland	A13SW (W)	212	2	271995 197659
229	Ancient Woodland Name: Not Supplied Reference: 14841 Area(m ²): 8163.43 Type: Ancient and Semi-Natural Woodland	A13NE (NE)	285	2	272367 197950
230	Ancient Woodland Name: Not Supplied Reference: 41286 Area(m ²): 4979.69 Type: Plantation on Ancient Woodland	A13NW (N)	296	2	272108 197974
231	Ancient Woodland Name: Not Supplied Reference: 39865 Area(m ²): 29219.97 Type: Plantation on Ancient Woodland	A13NW (N)	319	2	272107 197998
232	Ancient Woodland Name: Not Supplied Reference: 7910 Area(m ²): 5326.46 Type: Ancient and Semi-Natural Woodland	A18SE (N)	333	2	272225 198031
233	Ancient Woodland Name: Not Supplied Reference: 41288 Area(m ²): 1176.78 Type: Plantation on Ancient Woodland	A13NW (N)	340	2	272114 198022
234	Ancient Woodland Name: Not Supplied Reference: 11533 Area(m ²): 127585.24 Type: Restored Ancient Woodland Site	A13NE (NE)	343	2	272447 197966
235	Ancient Woodland Name: Not Supplied Reference: 14002 Area(m ²): 1158.16 Type: Ancient and Semi-Natural Woodland	A13NE (NE)	346	2	272472 197948
236	Ancient Woodland Name: Not Supplied Reference: 39579 Area(m ²): 67574.28 Type: Plantation on Ancient Woodland	A18SW (N)	372	2	272207 198069
237	Ancient Woodland Name: Not Supplied Reference: 21390 Area(m ²): 12115.6 Type: Restored Ancient Woodland Site	A14NW (NE)	389	2	272558 197913
238	Ancient Woodland Name: Not Supplied Reference: 41289 Area(m ²): 3295.81 Type: Plantation on Ancient Woodland	A18SW (NW)	462	2	271945 198078

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
239	Ancient Woodland Name: Not Supplied Reference: 23156 Area(m ²): 5135.25 Type: Restored Ancient Woodland Site	A12SE (W)	521	2	271714 197517
240	Ancient Woodland Name: Not Supplied Reference: 11356 Area(m ²): 34083.64 Type: Restored Ancient Woodland Site	A12SE (W)	523	2	271708 197526
241	Ancient Woodland Name: Not Supplied Reference: 41287 Area(m ²): 1468.18 Type: Plantation on Ancient Woodland	A12NE (NW)	531	2	271781 198016
242	Ancient Woodland Name: Not Supplied Reference: 14838 Area(m ²): 4579.63 Type: Ancient and Semi-Natural Woodland	A12NE (W)	551	2	271658 197773
243	Ancient Woodland Name: Not Supplied Reference: 9068 Area(m ²): 6287.74 Type: Ancient and Semi-Natural Woodland	A17SE (NW)	656	2	271647 198041
244	Ancient Woodland Name: Not Supplied Reference: 7395 Area(m ²): 6004.56 Type: Ancient and Semi-Natural Woodland	A18SE (N)	659	2	272365 198344
245	Ancient Woodland Name: Not Supplied Reference: 23154 Area(m ²): 1588.21 Type: Restored Ancient Woodland Site	A12SE (SW)	707	2	271558 197405
246	Ancient Woodland Name: Not Supplied Reference: 10339 Area(m ²): 111132.49 Type: Restored Ancient Woodland Site	A19SW (NE)	745	2	272656 198311
247	Ancient Woodland Name: Not Supplied Reference: 21391 Area(m ²): 4204.13 Type: Restored Ancient Woodland Site	A19SW (NE)	754	2	272756 198241
248	Ancient Woodland Name: Not Supplied Reference: 41104 Area(m ²): 7341.02 Type: Plantation on Ancient Woodland	A14NE (E)	806	2	273038 197769
249	Ancient Woodland Name: Not Supplied Reference: 14001 Area(m ²): 5713.96 Type: Ancient and Semi-Natural Woodland	A14NE (E)	881	2	273111 197793
250	Ancient Woodland Name: Not Supplied Reference: 14000 Area(m ²): 2937.22 Type: Ancient and Semi-Natural Woodland	A14SE (E)	910	2	273144 197631
251	Ancient Woodland Name: Not Supplied Reference: 50250 Area(m ²): 25524.6 Type: Ancient Woodland Site of Unknown Category	A18NE (N)	935	2	272465 198604
252	Ancient Woodland Name: Not Supplied Reference: 23155 Area(m ²): 5432.96 Type: Restored Ancient Woodland Site	A12SW (W)	955	2	271269 197499

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
253	Ancient Woodland Name: Not Supplied Reference: 21392 Area(m ²): 1844.36 Type: Restored Ancient Woodland Site	A19NW (NE)	994	2	272785 198525

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices City and County of Swansea - Environmental Health Department Natural Resources Wales Neath Port Talbot County Borough Council - Environmental Health Department	January 2015 June 2020 March 2015	Annual Rolling Update Annually Annual Rolling Update
Discharge Consents Environment Agency - Welsh Region Natural Resources Wales	August 2014 July 2020	Quarterly Quarterly
Enforcement and Prohibition Notices Environment Agency - Welsh Region	March 2013	Annual Rolling Update
Integrated Pollution Controls Environment Agency - Welsh Region	October 2008	Variable
Integrated Pollution Prevention And Control Natural Resources Wales Environment Agency - Welsh Region	April 2020 July 2020	Quarterly Quarterly
Local Authority Integrated Pollution Prevention And Control Swansea Bay Port Health Authority Neath Port Talbot County Borough Council - Environmental Health Department City and County of Swansea - Environmental Health Department	April 2014 August 2012 June 2014	Variable Variable Variable
Local Authority Pollution Prevention and Controls Swansea Bay Port Health Authority City and County of Swansea - Environmental Health Department Neath Port Talbot County Borough Council - Environmental Health Department	April 2014 June 2014 March 2014	Annually Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Swansea Bay Port Health Authority City and County of Swansea - Environmental Health Department Neath Port Talbot County Borough Council - Environmental Health Department	April 2014 June 2014 March 2014	Variable Variable Variable
Nearest Surface Water Feature Ordnance Survey	June 2020	
Pollution Incidents to Controlled Waters Environment Agency - Welsh Region	December 1998	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - Welsh Region Natural Resources Wales	March 2013 March 2013	Annual Rolling Update Annual Rolling Update
Prosecutions Relating to Controlled Waters Environment Agency - Welsh Region Natural Resources Wales	March 2013 March 2013	Annual Rolling Update Annual Rolling Update
Registered Radioactive Substances Natural Resources Wales Environment Agency - Welsh Region	January 2015 June 2016	Annually
Substantiated Pollution Incident Register Environment Agency Wales - South West Area Natural Resources Wales	July 2020 July 2020	Quarterly Quarterly
Water Abstractions Environment Agency - Welsh Region Natural Resources Wales	July 2020 July 2020	Quarterly Quarterly
Water Industry Act Referrals Natural Resources Wales Environment Agency - Welsh Region	July 2020 October 2017	Quarterly Quarterly
Groundwater Vulnerability Map Natural Resources Wales	June 2018	As notified
Bedrock Aquifer Designations Natural Resources Wales	January 2018	Annually

Agency & Hydrological	Version	Update Cycle
Superficial Aquifer Designations Natural Resources Wales	January 2018	Annually
Source Protection Zones Natural Resources Wales	November 2016	Annual Rolling Update
Extreme Flooding from Rivers or Sea without Defences Natural Resources Wales	August 2019	Quarterly
Flooding from Rivers or Sea without Defences Natural Resources Wales	May 2020	Quarterly
Areas Benefiting from Flood Defences Natural Resources Wales	November 2019	Quarterly
Flood Water Storage Areas Natural Resources Wales	August 2019	Quarterly
Flood Defences Natural Resources Wales	November 2019	Quarterly
OS Water Network Lines Ordnance Survey	June 2020	Quarterly
Surface Water 1 in 30 year Flood Extent Natural Resources Wales	October 2013	Annually
Surface Water 1 in 100 year Flood Extent Natural Resources Wales	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent Natural Resources Wales	October 2013	Annually
Surface Water Suitability Natural Resources Wales	October 2013	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites Natural Resources Wales	July 2017	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Welsh Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency Wales - South West Area Natural Resources Wales	July 2020 July 2020	Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency Wales - South West Area Natural Resources Wales	July 2020 July 2020	Quarterly Quarterly
Local Authority Landfill Coverage City and County of Swansea - Environmental Health Department Neath Port Talbot County Borough Council - Environmental Health Department	May 2000 May 2000	Not Applicable Not Applicable
Local Authority Recorded Landfill Sites City and County of Swansea - Environmental Health Department Neath Port Talbot County Borough Council - Environmental Health Department	May 2000 September 2003	Not Applicable Not Applicable
Potentially Infilled Land (Non-Water) Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water) Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites Environment Agency Wales - South West Area	March 2003	Not Applicable
Registered Waste Transfer Sites Environment Agency Wales - South West Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency Wales - South West Area	March 2003	Not Applicable
Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements City and County of Swansea - Planning Department Neath Port Talbot County Borough Council - Planning Department	January 2016 October 2015	Variable Variable
Planning Hazardous Substance Consents City and County of Swansea - Planning Department Neath Port Talbot County Borough Council - Planning Department	January 2016 October 2015	Variable Variable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	June 2020	Bi-Annually
BGS Urban Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Urban Soil Chemistry Averages British Geological Survey - National Geoscience Information Service	October 2015	Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	July 2020	Quarterly
Fuel Station Entries Catalist Ltd - Experian	June 2020	Quarterly
Gas Pipelines National Grid	July 2014	
Points of Interest - Commercial Services PointX	June 2020	Quarterly
Points of Interest - Education and Health PointX	June 2020	Quarterly
Points of Interest - Manufacturing and Production PointX	June 2020	Quarterly
Points of Interest - Public Infrastructure PointX	June 2020	Quarterly
Points of Interest - Recreational and Environmental PointX	June 2020	Quarterly
Underground Electrical Cables National Grid	August 2020	

Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural Resources Wales	August 2018	Bi-Annually
Areas of Adopted Green Belt City and County of Swansea Neath Port Talbot County Borough Council - Planning Services	June 2020 June 2020	As notified As notified
Areas of Unadopted Green Belt City and County of Swansea Neath Port Talbot County Borough Council - Planning Services	June 2020 June 2020	As notified As notified
Areas of Outstanding Natural Beauty Natural Resources Wales	June 2019	Bi-Annually
Environmentally Sensitive Areas The National Assembly for Wales - GI Services (Department of Planning & Countryside)	January 2017	
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves City and County of Swansea Neath Port Talbot County Borough Council	August 2018 August 2018	Bi-Annually Bi-Annually
Marine Nature Reserves Natural Resources Wales	August 2018	Bi-Annually
National Nature Reserves Natural Resources Wales	June 2019	Bi-Annually
National Parks Natural Resources Wales	August 2018	Annually
Nitrate Vulnerable Zones Natural Resources Wales The National Assembly for Wales - GI Services (Department of Planning & Countryside)	July 2019 October 2005	Bi-Annually
Ramsar Sites Natural Resources Wales	July 2019	Bi-Annually
Sites of Special Scientific Interest Natural Resources Wales	March 2020	Bi-Annually
Special Areas of Conservation Natural Resources Wales	August 2020	Bi-Annually
Special Protection Areas Natural Resources Wales	August 2018	Bi-Annually

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	 Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Natural Resources Wales Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP	Telephone: 0300 065 3000 Email: enquiries@naturalresourceswales.gov.uk
3	Neath Port Talbot County Borough Council - Environmental Health Department Room 322, Neath Civic Centre, Neath, West Glamorgan, SA11 3QZ	Telephone: 01639 763333 Fax: 01693 763444 Website: www.neath-porttalbot.gov.uk
4	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
5	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	The Coal Authority - Property Searches 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
7	Stantec UK Ltd Caversham Bridge House, Waterman Place, Reading, RG1 8DN	Telephone: 0118 950 0761 Email: pba.reading@stantec.com Website: www.stantec.com
8	PointX 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.

Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	MGR	Made Ground (Undivided)	Artificial Deposit	Not Supplied - Holocene
	WGR	Worked Ground (Undivided)	Void	Not Supplied - Holocene
	LSGR	Landscaped Ground (Undivided)	Artificially Modified Ground	Not Supplied - Holocene
	SLIP	Landslide Deposit	Unknown/Unclassified Entry	Not Supplied - Quaternary

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	TFD	Tidal Flat Deposits	Clay, Silt and Sand	Not Supplied - Holocene
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	TILLD	Till, Devensian	Diamicton	Not Supplied - Devensian
	GFSD	Glaciofluvial Sheet Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	PEAT	Peat	Peat	Not Supplied - Quaternary

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	H	Hughes Member	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
	SW	Swansea Member	Sandstone	Not Supplied - Westphalian
	SW	Swansea Member	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
	H	Hughes Member	Sandstone	Not Supplied - Westphalian
	GDB	Grovesend Formation	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
	GDB	Grovesend Formation	Sandstone	Not Supplied - Westphalian
	BD	Brithdir Member	Sandstone	Not Supplied - Westphalian
	BD	Brithdir Member	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	RA	Rhondda Member	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
		Rock Segments		
		Faults		



Geology 1:50,000 Maps

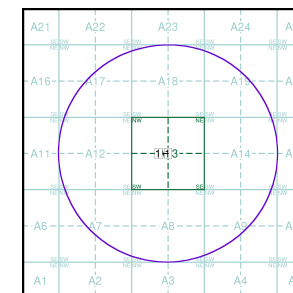
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID:	1
Map Sheet No:	247
Map Name:	Swansea
Map Date:	2011
Bedrock Geology:	Available
Superficial Geology:	Available
Artificial Geology:	Available
Faults:	Not Supplied
Landslip:	Available
Rock Segments:	Not Supplied

Geology 1:50,000 Maps - Slice A



Order Details:

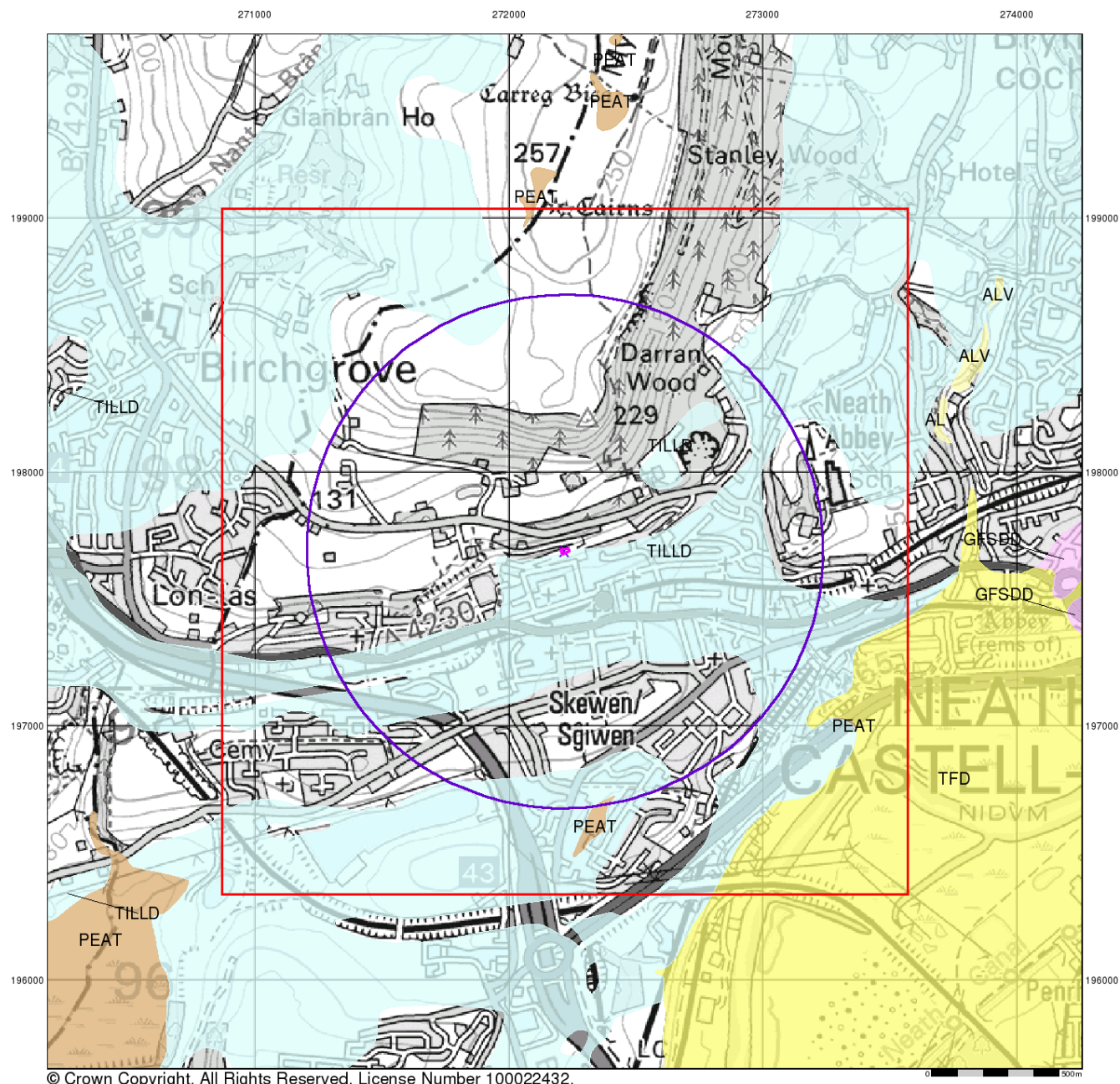
Order Number:	254977540_1_1
Customer Reference:	16299-MW
National Grid Reference:	272220, 197690
Slice:	A
Site Area (Ha):	0.05
Search Buffer (m):	1000

Site Details:

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.ernirocheck.co.uk



© Crown Copyright. All Rights Reserved. License Number 100022432.



Geotechnical & Geoenvironmental Specialists

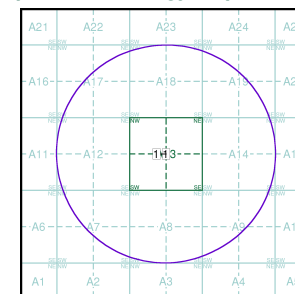
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



Order Details:

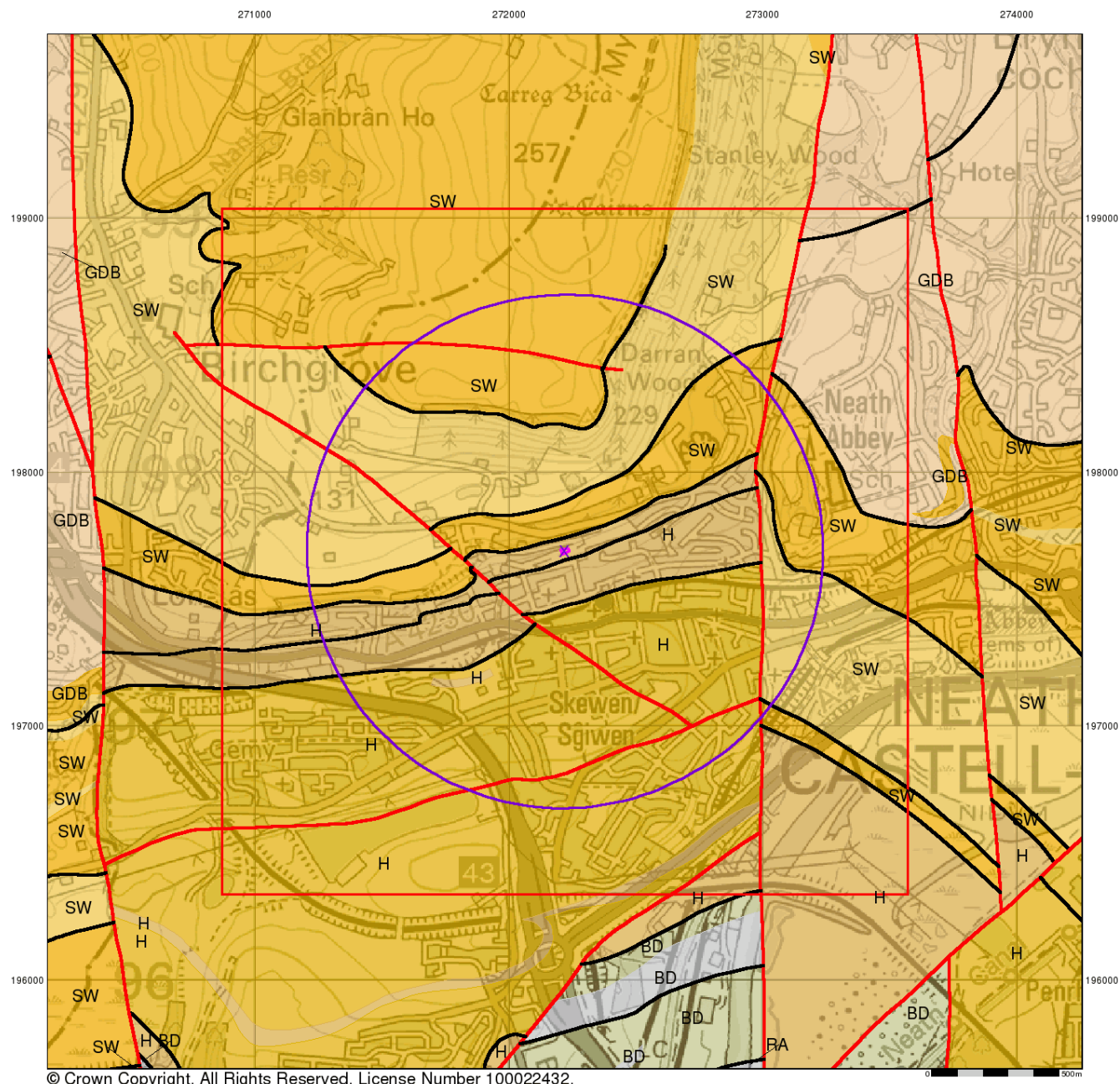
Order Number: 254977540_1_1
 Customer Reference: 16299-MW
 National Grid Reference: 272220, 197690
 Slice: A
 Site Area (Ha): 0.05
 Search Buffer (m): 1000

Site Details:

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.ernirocheck.co.uk



© Crown Copyright. All Rights Reserved. License Number 100022432.



Bedrock and Faults

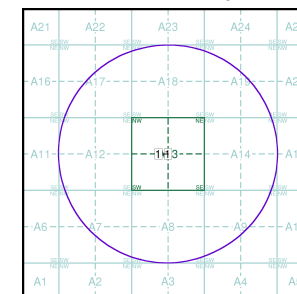
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A



Order Details:

Order Number: 254977540_1_1
 Customer Reference: 16299-MW
 National Grid Reference: 272220, 197690
 Slice: A
 Site Area (Ha): 0.05
 Search Buffer (m): 1000

Site Details:

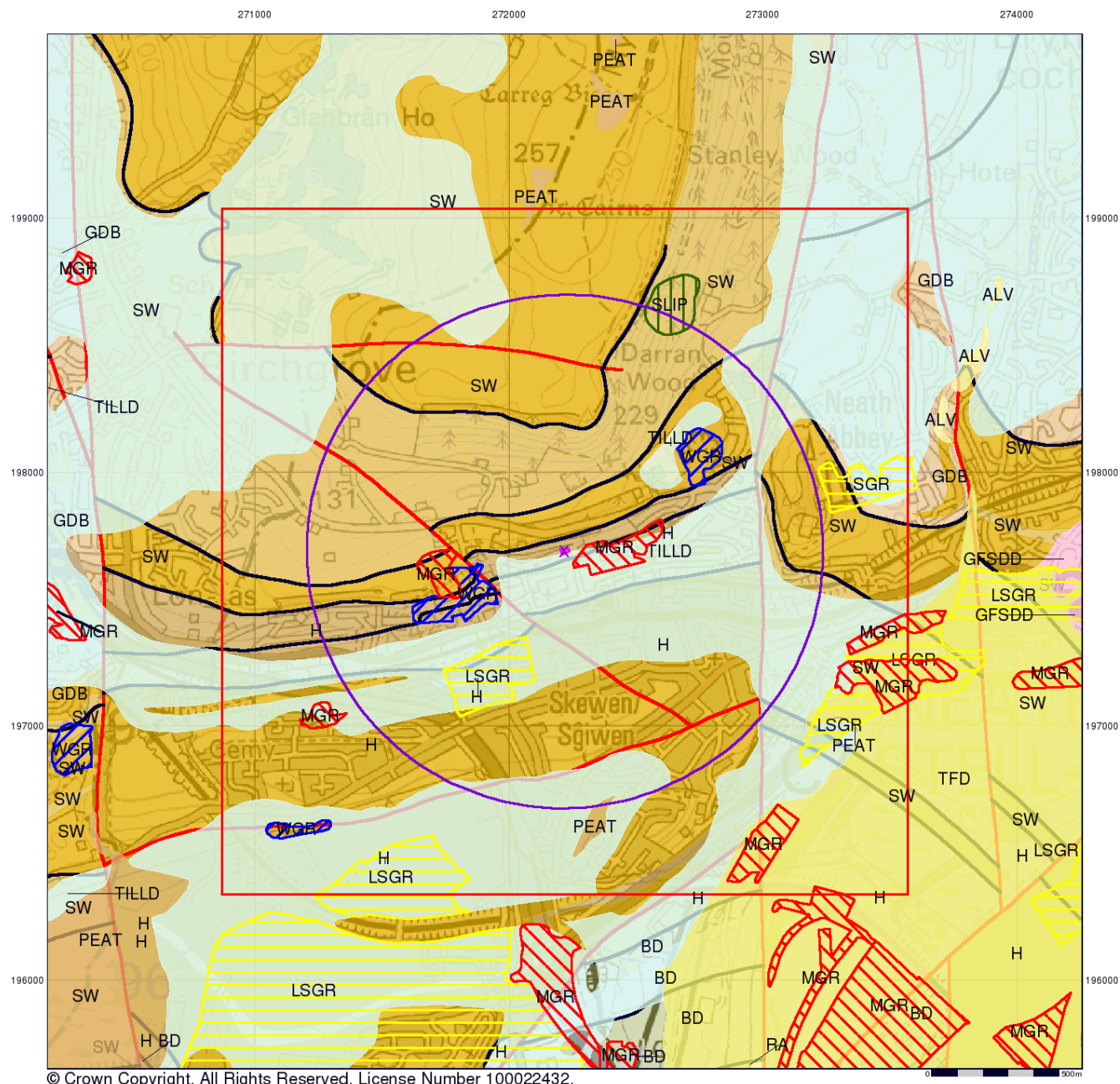
24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk

v15.0 01-Sep-2020

Page 4 of 5



© Crown Copyright. All Rights Reserved. License Number 100022432.



Geotechnical & Geoenvironmental Specialists

Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

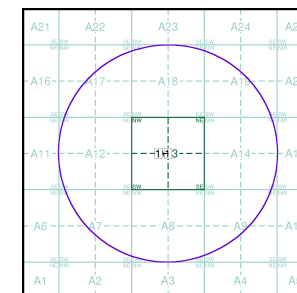
Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A



Order Details:

Order Number: 254977540_1_1
Customer Reference: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details:

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

v15.0 01-Sep-2020

Page 5 of 5

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

	Gravel Pit		Sand Pit		Other Pits
	Quarry		Shingle		Orchard
	Osiers		Reeds		Marsh
	Mixed Wood		Deciduous		Brushwood
	Fir		Furze		Rough Pasture
	Arrow denotes flow of water		Trigonometrical Station		
	Site of Antiquities		Bench Mark		
	Pump, Guide Post, Signal Post		Well, Spring, Boundary Post		
	•285 Surface Level				
	Sketched Contour		Instrumental Contour		
	Main Roads		Minor Roads		
	Sunken Road		Raised Road		
	Road over Railway		Railway over River		
	Railway over Road		Level Crossing		
	Road over River or Canal		Road over Stream		
	Road over Stream				
	County Boundary (Geographical)				
	County & Civil Parish Boundary				
	Administrative County & Civil Parish Boundary				
	County Borough Boundary (England)				
	County Burgh Boundary (Scotland)				
	Rural District Boundary				
	Civil Parish Boundary				

Ordnance Survey Plan 1:10,000

	Chalk Pit, Clay Pit or Quarry		Gravel Pit
	Sand Pit		Disused Pit or Quarry
	Refuse or Slag Heap		Lake, Loch or Pond
	Dunes		Boulders
	Coniferous Trees		Non-Coniferous Trees
	Orchard		Scrub
	Bracken		Heath
	Marsh		Reeds
	Building		Glasshouse
	Sloping Masonry		Pylon
	Cutting		Embankment
	Road Under		Road Over
	Level Crossing		Foot Bridge
	Standard Gauge Multiple Track		Standard Gauge Single Track
	Siding, Tramway or Mineral Line		Narrow Gauge
	Geographical County		Administrative County, County Borough or County of City
	Municipal Borough, Urban or Rural District, Burgh or District Council		Borough, Burgh or County Constituency
	Civil Parish		
	BP, BS Boundary Post or Stone		Police Station
	Church		Post Office
	Club House		Public Convenience
	Fire Engine Station		Public House
	Foot Bridge		Signal Box
	Fountain		Spring
	Guide Post		Telephone Call Box
	Mile Post		Telephone Call Post
	Mile Stone		Well

1:10,000 Raster Mapping

	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
	Area of wooded vegetation		Non-coniferous trees
	Non-coniferous trees (scattered)		Coniferous trees
	Coniferous trees (scattered)		Positioned tree
	Orchard		Coppice or Osiers
	Rough Grassland		Heath
	Scrub		Marsh, Salt Marsh or Reeds
	Water feature		Flow arrows
	Mean high water (springs)		Mean low water (springs)
	Telephone line (where shown)		Electricity transmission line (with poles)
	Bench mark (where shown)		Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)		Pylon, flare stack or lighting tower
	Site of (antiquity)		Glasshouse
	General Building		Important Building

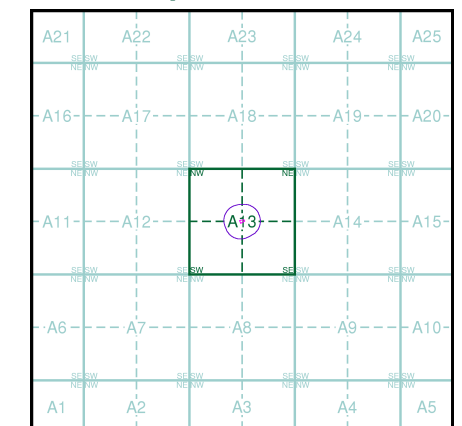


Geotechnical & Geoenvironmental Specialists

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:10,560	1884	3
Glamorganshire	1:10,560	1900	4
Glamorganshire	1:10,560	1921	5
Glamorganshire	1:10,560	1921	6
Glamorganshire	1:10,560	1938 - 1940	7
Historical Aerial Photography	1:10,560	1945	8
Glamorganshire	1:10,560	1951 - 1952	9
Ordnance Survey Plan	1:10,000	1965	10
Ordnance Survey Plan	1:10,000	1970	11
Swansea	1:10,000	1976	12
Ordnance Survey Plan	1:10,000	1980	13
Ordnance Survey Plan	1:10,000	1992	14
10K Raster Mapping	1:10,000	1999	15
10K Raster Mapping	1:10,000	2006	16
VectorMap Local	1:10,000	2020	17

Historical Map - Slice A



Order Details

Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings

Military and Industrial Buildings

Military and Communication Areas

Subway Entrance

Fireproof Building

Prominent Fireproof Building

Non-fireproof Building

Non-fireproof Building (non-dwelling)

Factory, mill, and flour mill, with chimneys

Factory, mill, and flour mill, without chimneys

Power Station, drawn to scale

Hydroelectric Power Station

Radio Station, drawn to scale

Telephone Station, drawn to scale

Abandoned Open-pit Mine or Quarry

Open-pit Salt Mine

Pit

Oil Deposit or Well

Oil Seepage

Tailings Pile

Fuel Storage Tanks

Natural Gas Tank

Bench Mark

Drill Hole

Burial Mound

Triangulation Point on Burial Mound

Single-track Railroad

Double-track Railroad

Railroad and Station Building

Coniferous Forest

Deciduous Forest

Mixed Forest

Lawns

Citrus Orchard

Wet Ground

Scattered Vegetation

243.8 Values for prominent elevations
186.0 Numbers for spot elevations, depth soundings, contour lines, etc.
0.2 Velocity of the current, width of river bed, depth of river
180/12 Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	Ъ (-)
Д д (D)	Л л (L)	У у (U)	Ы (Y)
Е е (E)	М м (M)	Ф ф (F)	Ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings

Military and Industrial Buildings

Military and Communication Areas

Subway Entrance

Partly Demolished Buildings

Demolished Buildings

Built-Up Area with Fireproof Buildings Predominant

Built-Up Area with Non-Fireproof Buildings Predominant

Individual Fireproof Building

Prominent Industrial Building

Individual Dwelling, Fireproof

Ruins of an Individual Dwelling

Factory or Mill Chimney

Factory or Mill with Chimney

Factory or Mill without Chimney

Mine or Open Pit Mine

Operating Shaft or Mine

Non-Operating Shaft or Mine

Salt Mine

Tailings Pile

Pit

Stone Quarry

Gas Pump or Service Station

Fuel Storage or Natural Gas Tank

Oil or Natural Gas Derrick

Small Hydroelectric Power Station

Power Station

Transformer Station

Cemetery

Burial Mound (height in metres)

Triangulation Point on Burial Mound

Triangulation Point

Bench Mark

Bench Mark (monumented)

Telegraph Office

Telephone Station

Radio Station

Radio Tower

Airfield or Seaplane Base

Landing Strip

Cut, Fill, Km Post, Plantings

Telegraph/Telephone Lines

Main Highway

Highway under Construction

Improved Dirt Road (former truck road)

Small Bridge, Pipe (Culvert), Tunnel

Double-track Railroad with First Class Station

Railroad Under Construction

Dismantled Railroad

Shore Embankment

River or Ditch with Embankment

Water Gauge

Water Level Mark

Well

Water Reservoir or Rain Water Pit

Spring

Isobath with value

Heavy (Index) Contour Line

Contour Line and Value

Half Contour Line

Spot Elevation Value

Coniferous

Deciduous

Mixed

Scrub

Key to Numbers on Mapping

SS79NW_Swansea

No.	Description
76	Industrial Building (Use Unknown)

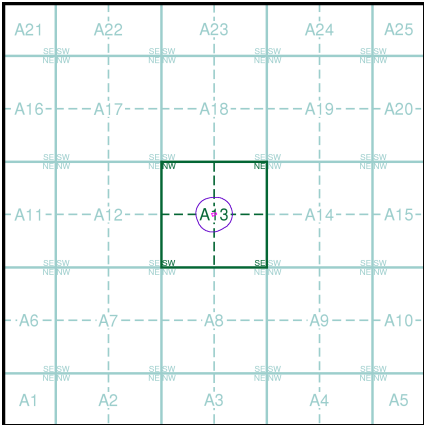


Geotechnical & Geoenvironmental Specialists

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:10,560	1884	3
Glamorganshire	1:10,560	1900	4
Glamorganshire	1:10,560	1921	5
Glamorganshire	1:10,560	1921	6
Glamorganshire	1:10,560	1938 - 1940	7
Historical Aerial Photography	1:10,560	1945	8
Glamorganshire	1:10,560	1951 - 1952	9
Ordnance Survey Plan	1:10,000	1965	10
Ordnance Survey Plan	1:10,000	1970	11
Swansea	1:10,000	1976	12
Ordnance Survey Plan	1:10,000	1980	13
Ordnance Survey Plan	1:10,000	1992	14
10K Raster Mapping	1:10,000	1999	15
10K Raster Mapping	1:10,000	2006	16
VectorMap Local	1:10,000	2020	17

Russian Map - Slice A



Order Details

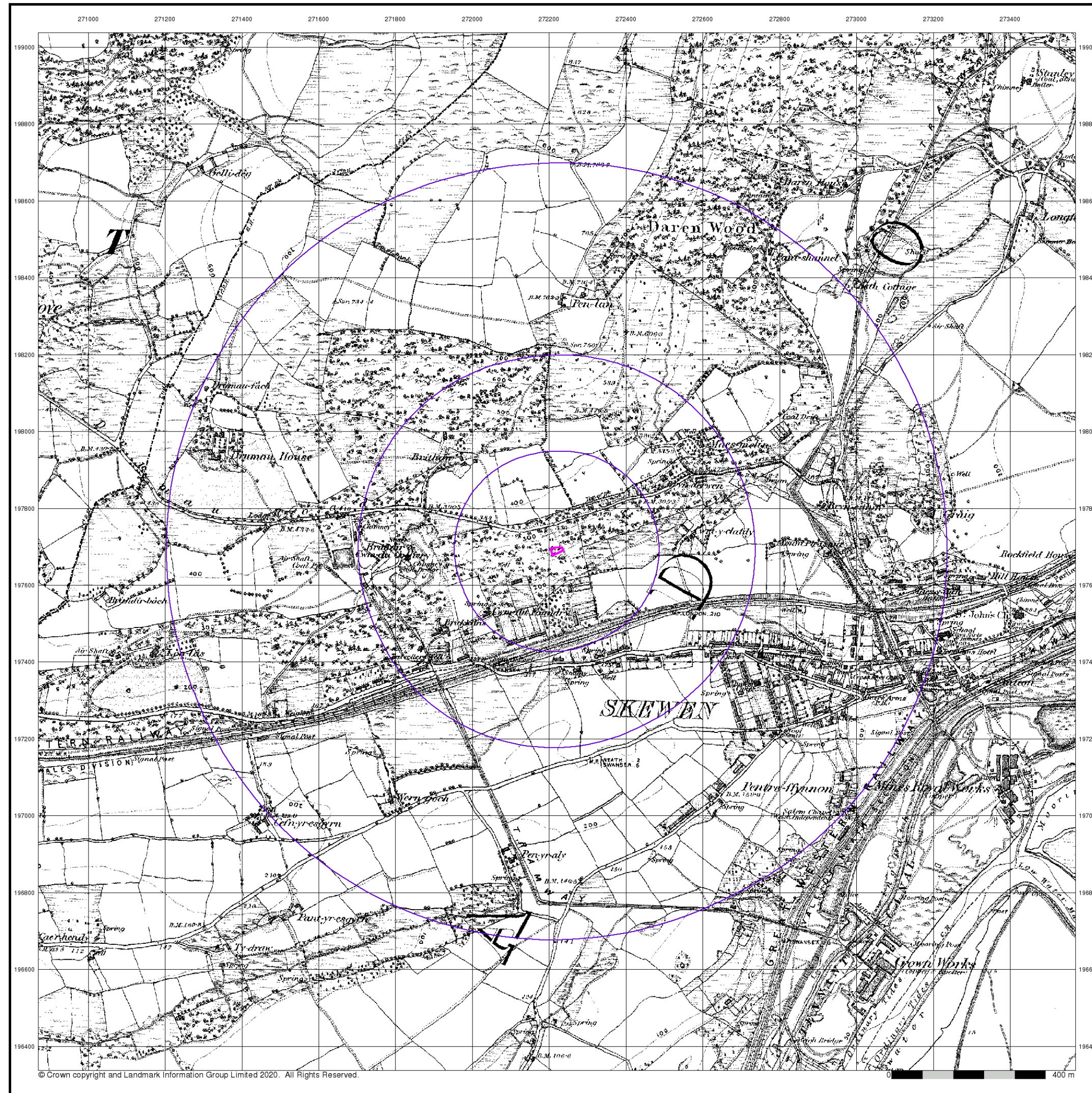
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.



Geotechnical & Geoenvironmental Specialists

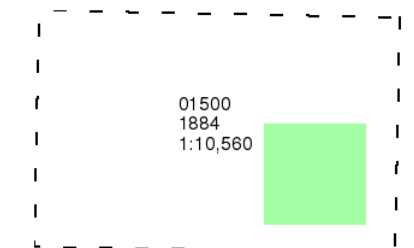
Glamorganshire

Published 1884

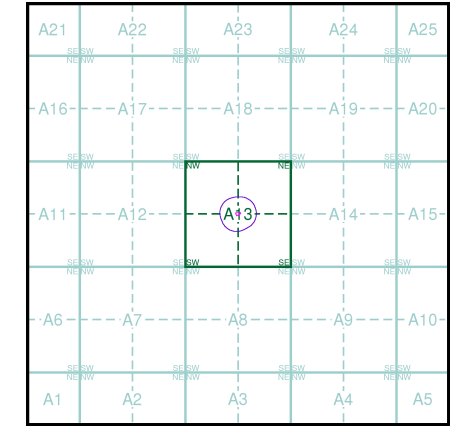
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

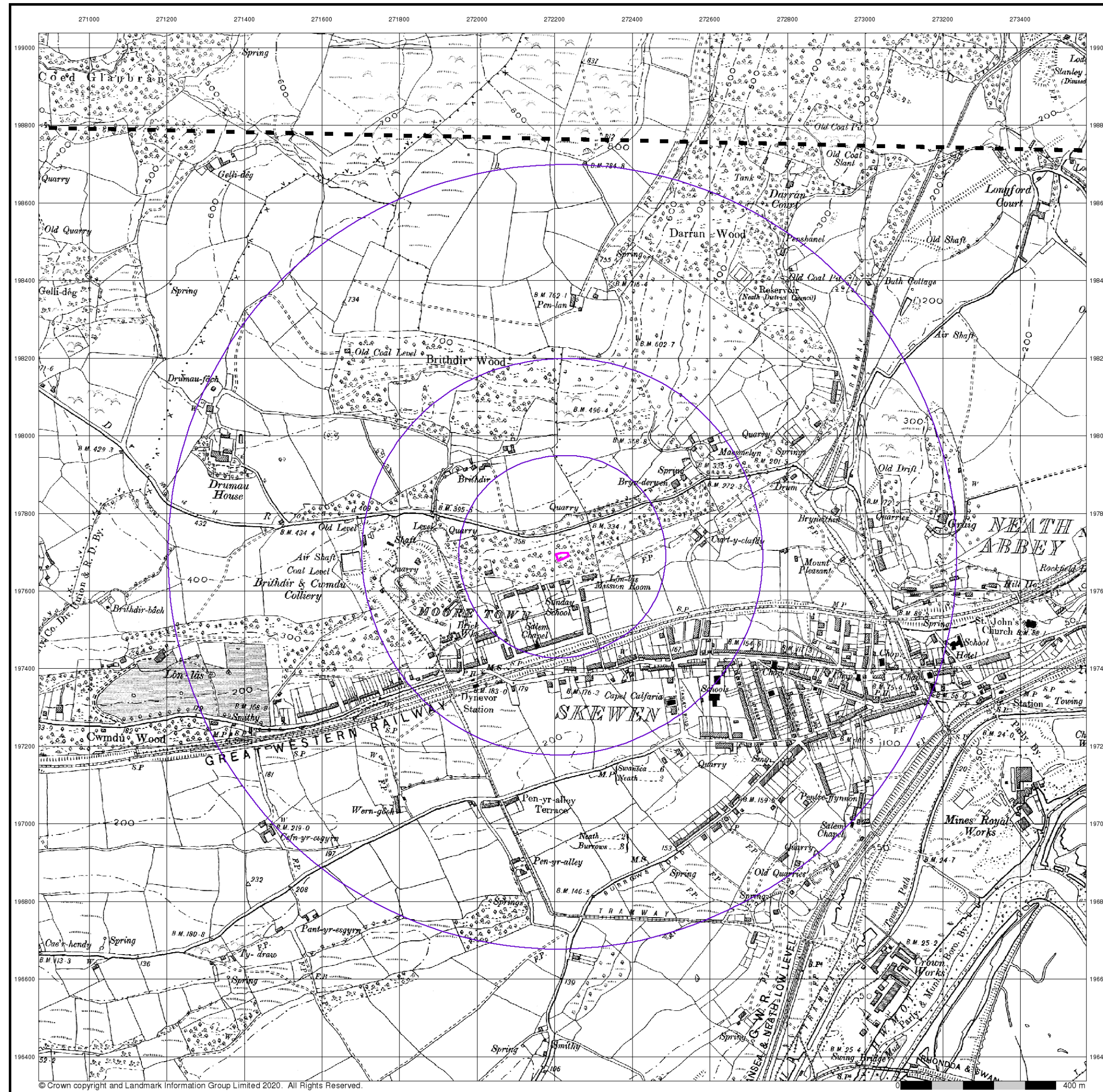
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

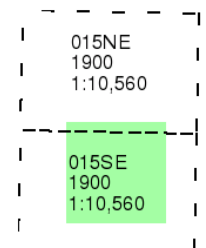
Glamorganshire

Published 1900

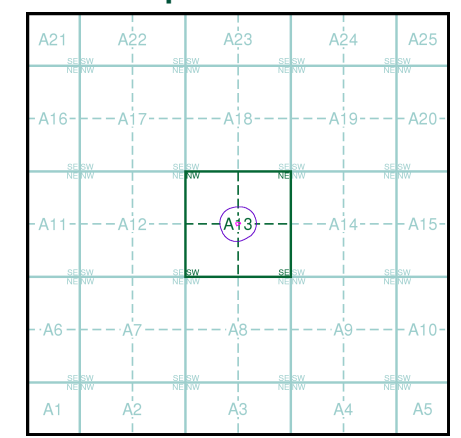
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

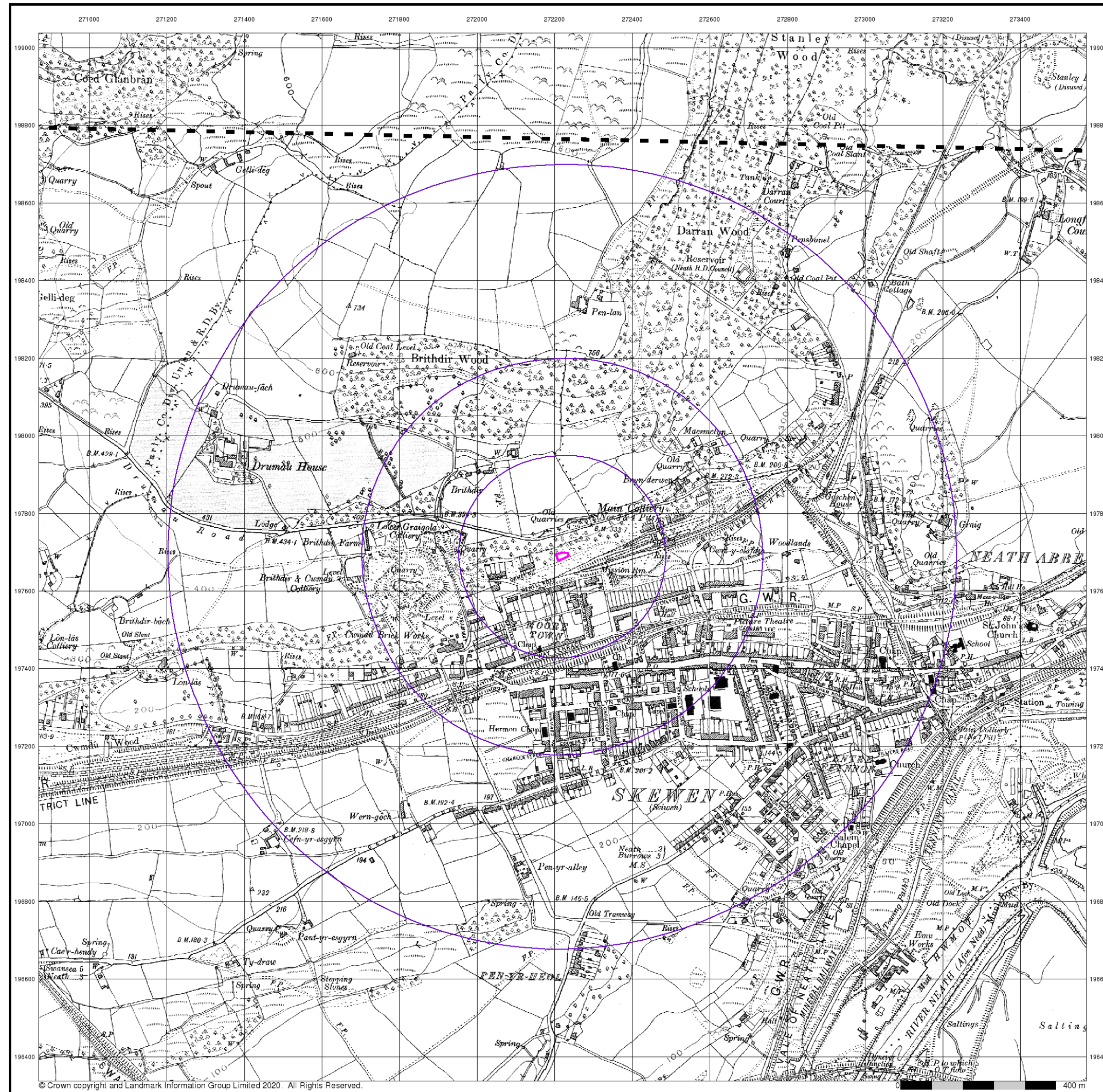
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Glamorganshire

Published 1921

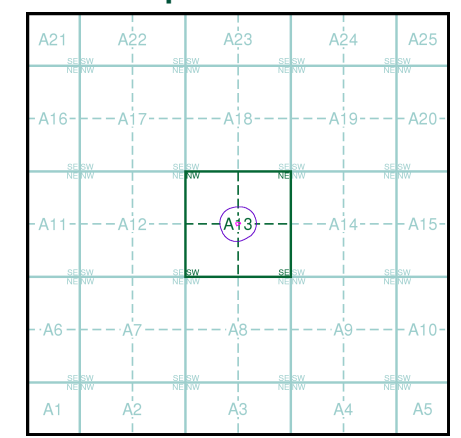
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

015NE 1921 1:10,560
015SE 1921 1:10,560

Historical Map - Slice A



Order Details

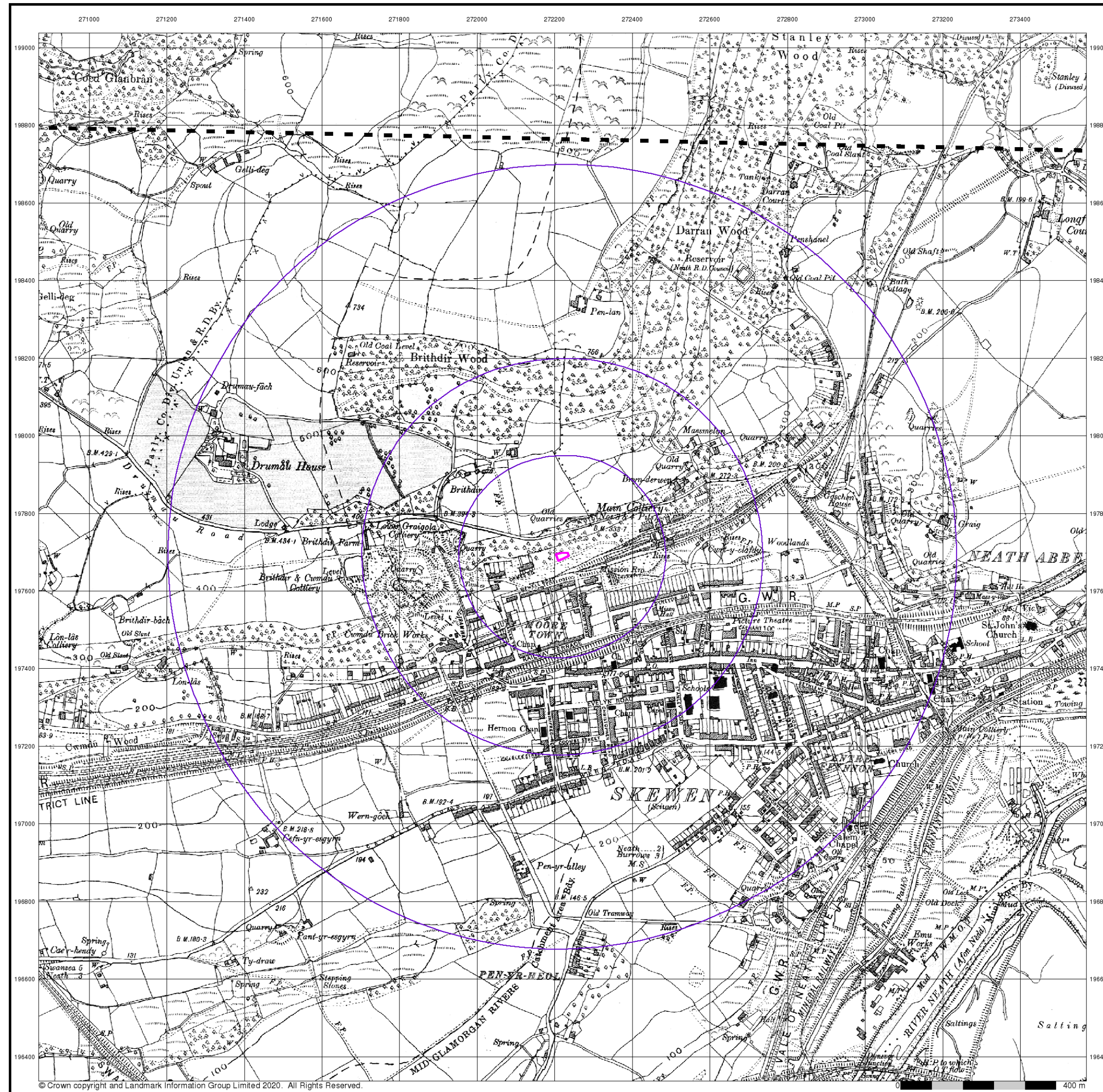
Order Number:	254977540_1_1
Customer Ref:	16299-MW
National Grid Reference:	272220, 197690
Slice:	A
Site Area (Ha):	0.05
Search Buffer (m):	1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.



Geotechnical & Geoenvironmental Specialists

Glamorganshire

Published 1921

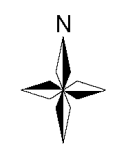
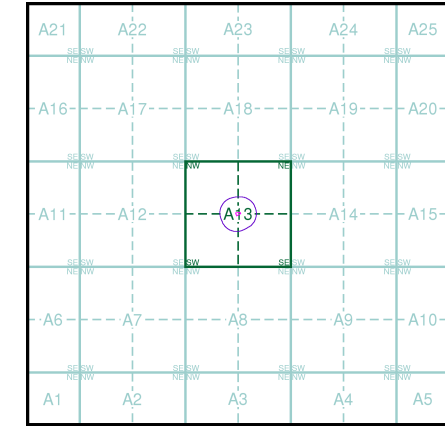
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

015NE
1921
1:10,560
015SE
1921
1:10,560

Historical Map - Slice A



Order Details

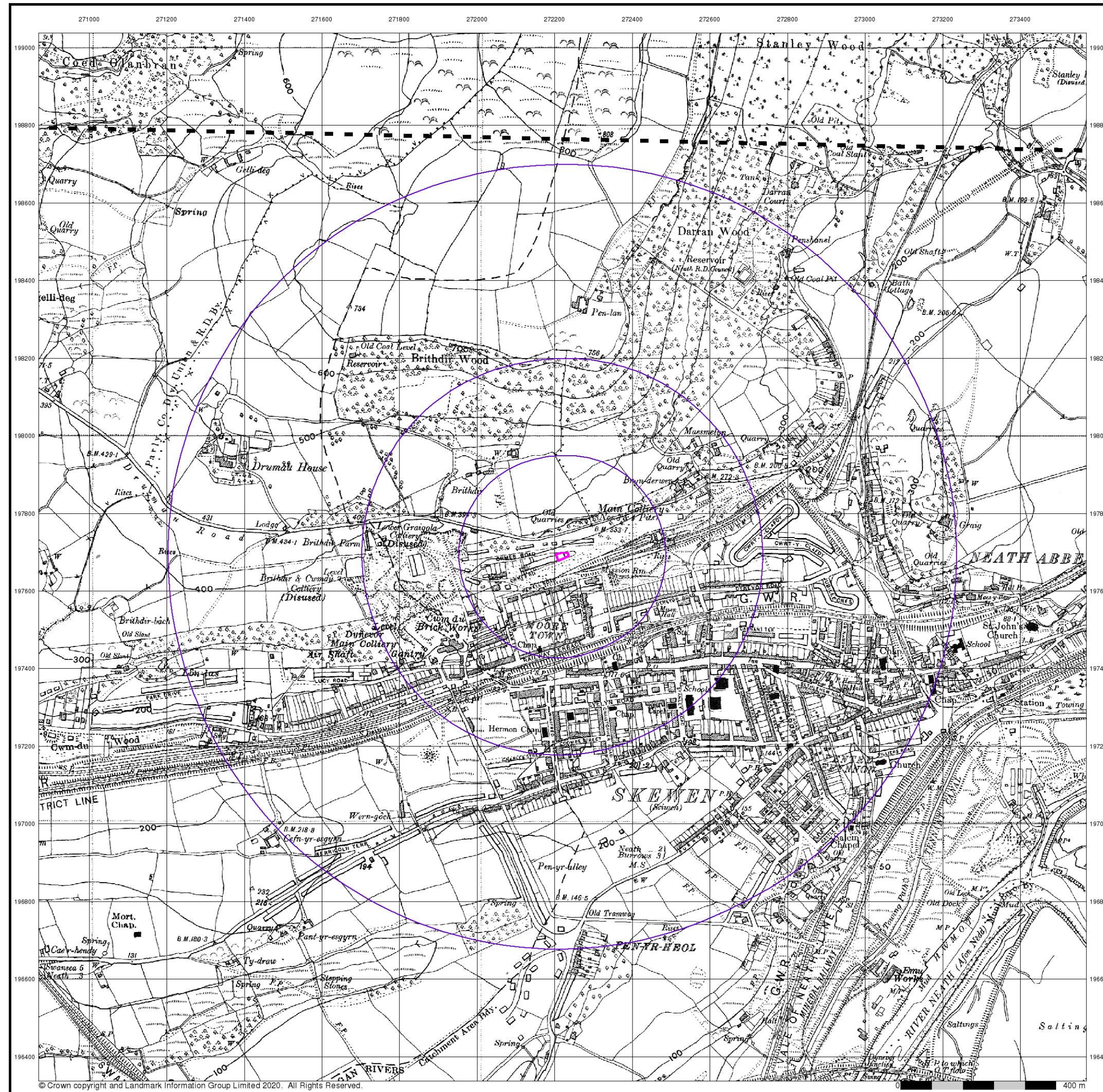
Order Number:	254977540_1_1
Customer Ref:	16299-MW
National Grid Reference:	272220, 197690
Slice:	A
Site Area (Ha):	0.05
Search Buffer (m):	1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.



Geotechnical & Geoenvironmental Specialists

Glamorganshire

Published 1938 - 1940

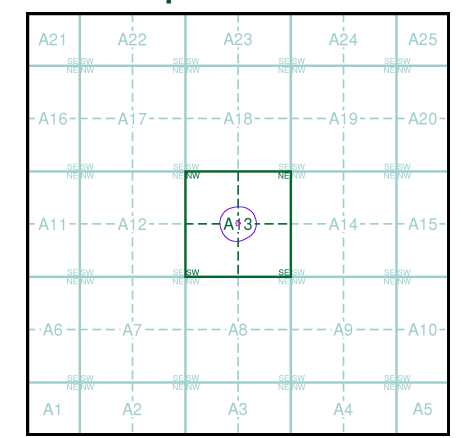
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

015NE 1938 1:10,560
015SE 1940 1:10,560

Historical Map - Slice A



Order Details

Order Number:	254977540_1_1
Customer Ref:	16299-MW
National Grid Reference:	272220, 197690
Slice:	A
Site Area (Ha):	0.05
Search Buffer (m):	1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Landmark Information Group and/or Data Suppliers 2020.



Geotechnical & Geoenvironmental Specialists

Historical Aerial Photography

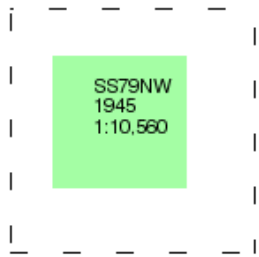
Published 1945

Source map scale - 1:10,560

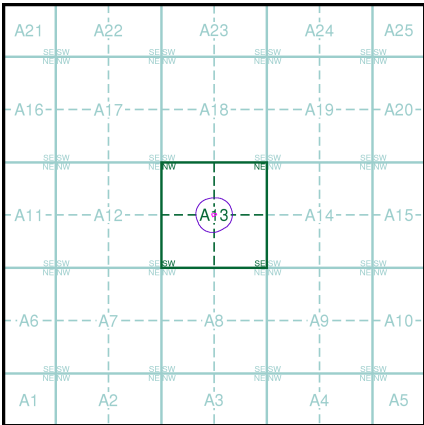
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

© Landmark Information Group and/or Data Suppliers 2010.

Map Name(s) and Date(s)



Historical Aerial Photography - Slice A



LIBRARY
HSILIRB

Order Details

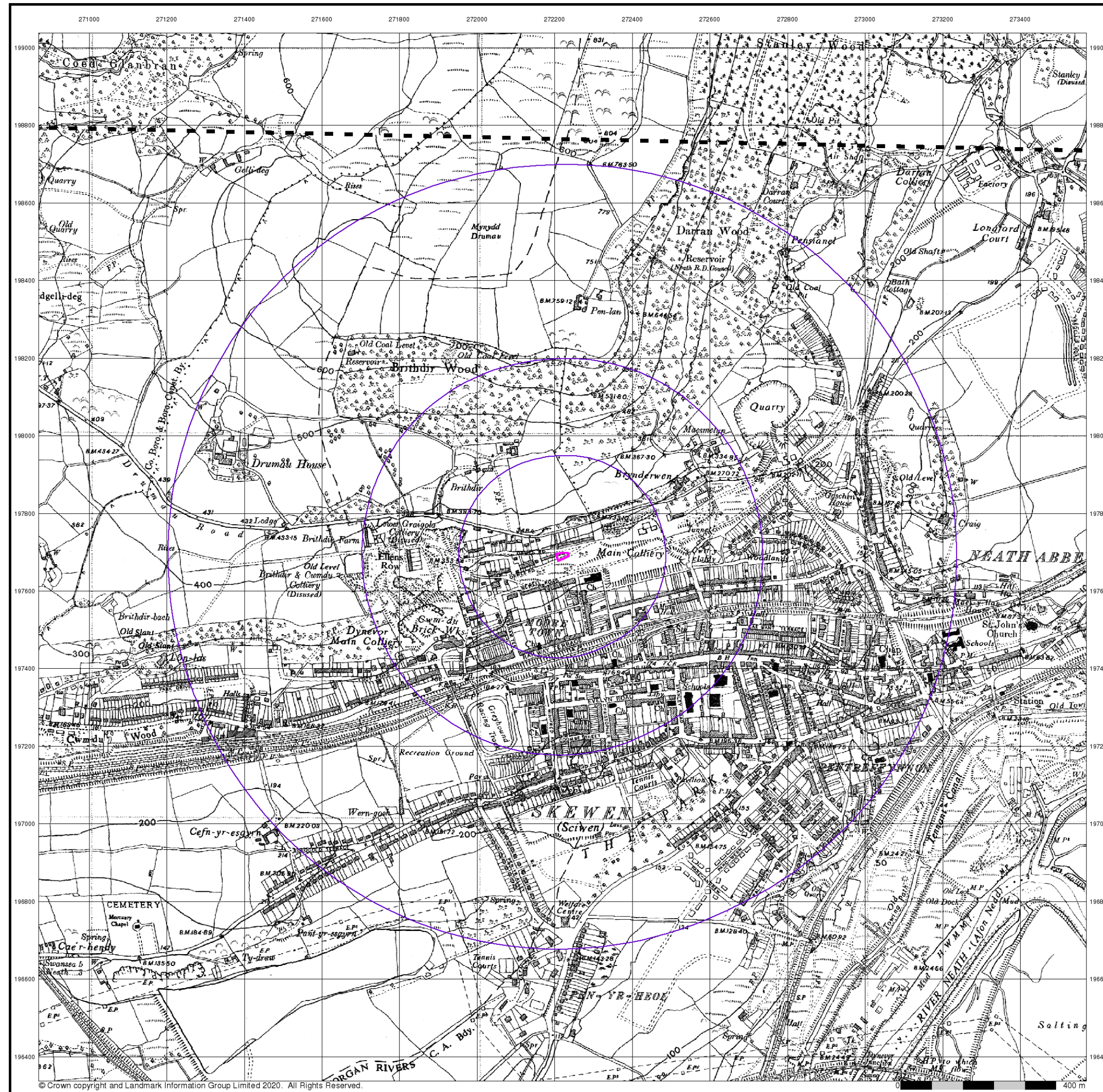
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Glamorgan

Published 1951 - 1952

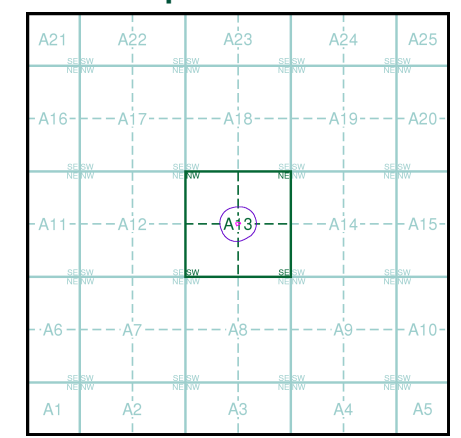
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

015NE 1951 1:10,560
015SE 1952 1:10,560

Historical Map - Slice A



Order Details

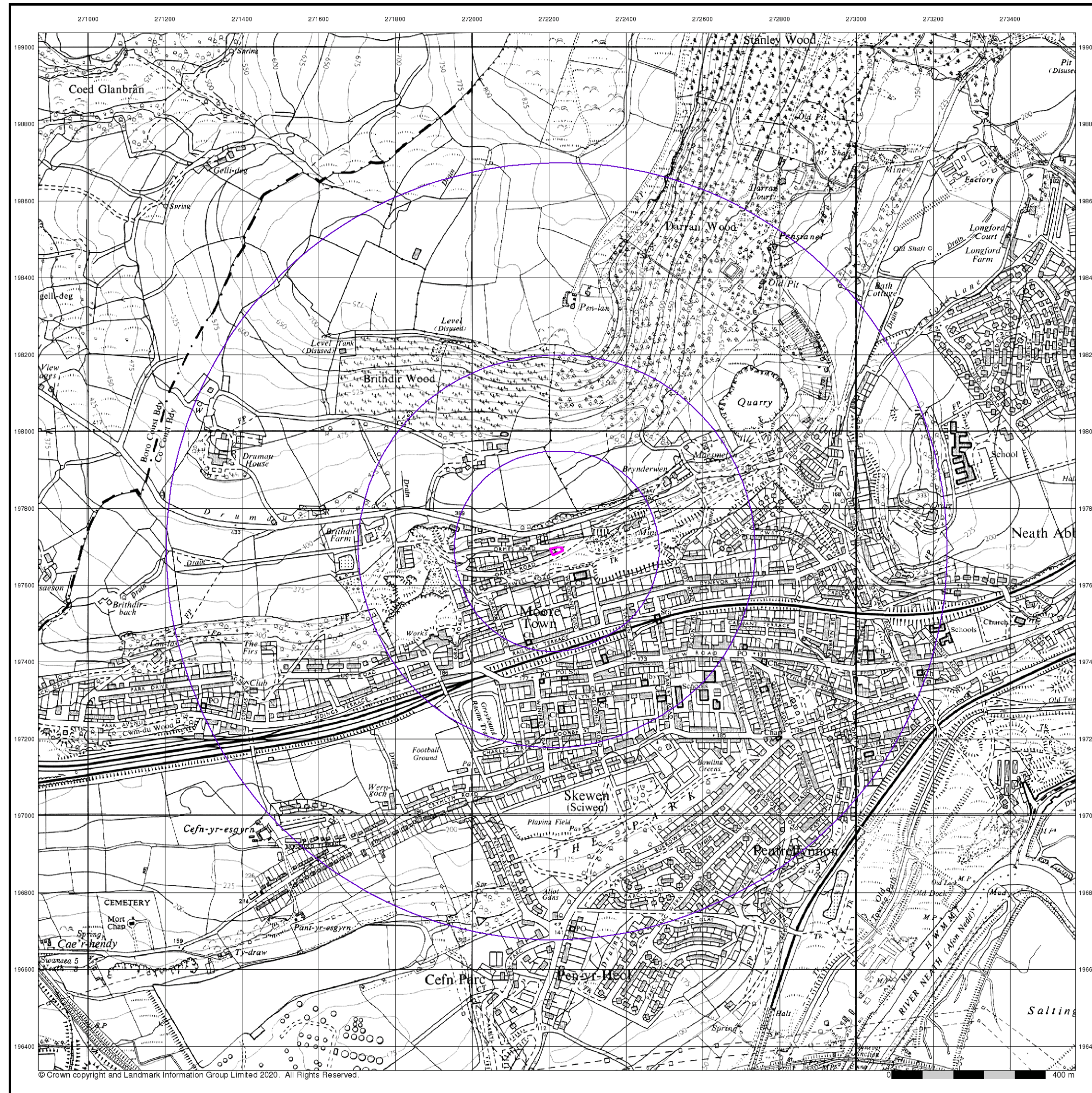
Order Number:	254977540_1_1
Customer Ref:	16299-MW
National Grid Reference:	272220, 197690
Slice:	A
Site Area (Ha):	0.05
Search Buffer (m):	1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.



Geotechnical & Geoenvironmental Specialists

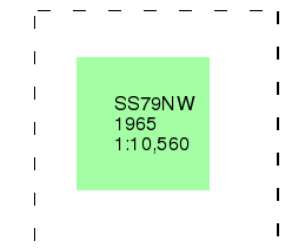
Ordnance Survey Plan

Published 1965

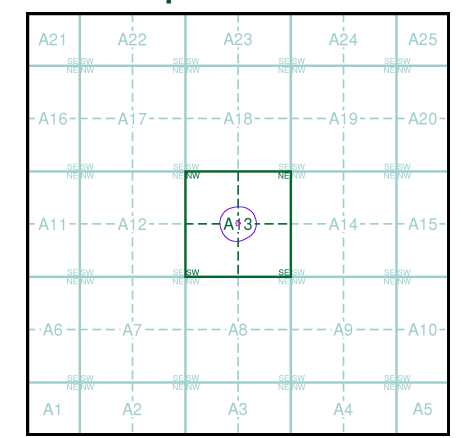
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

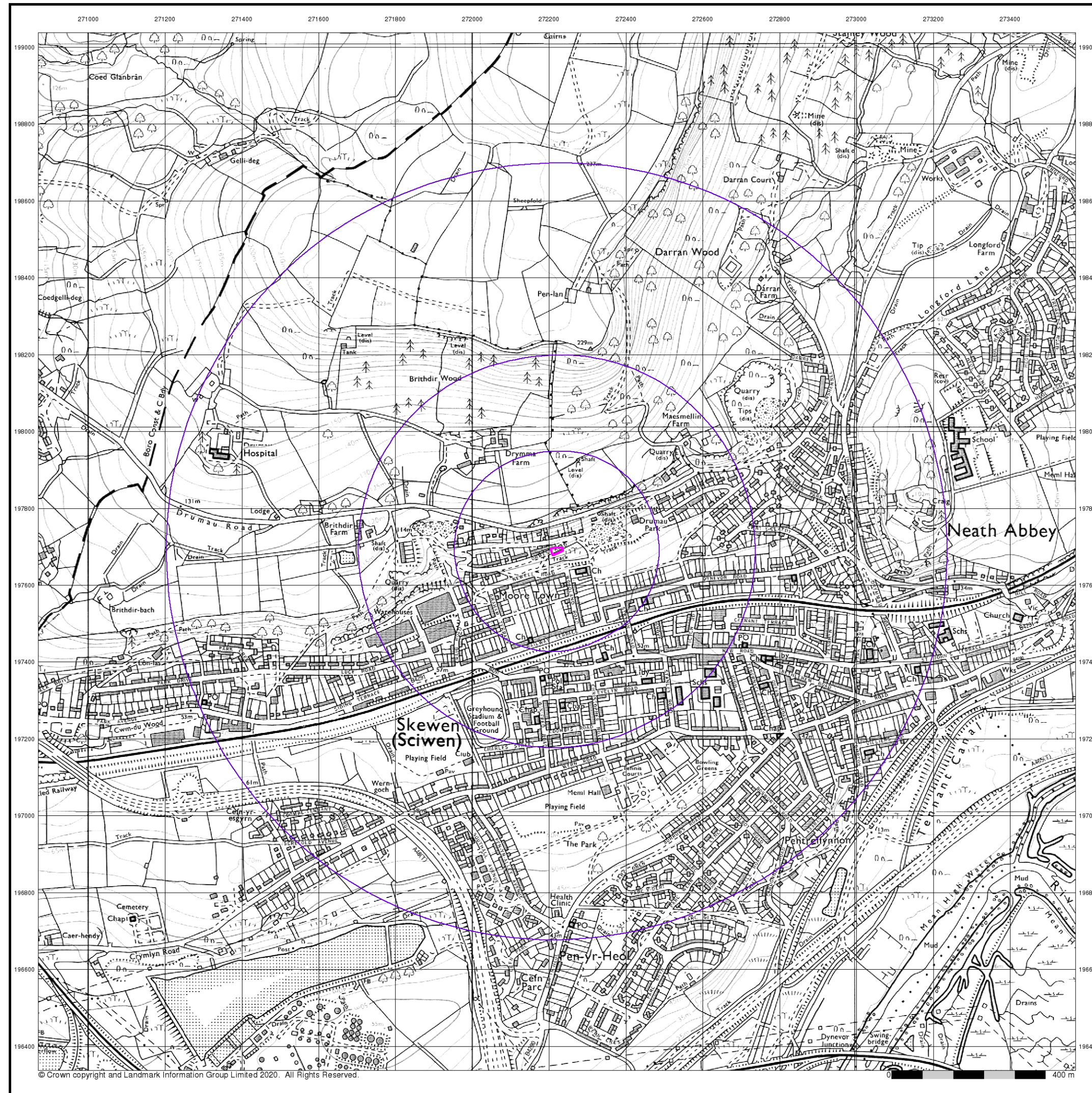
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.



Geotechnical & Geoenvironmental Specialists

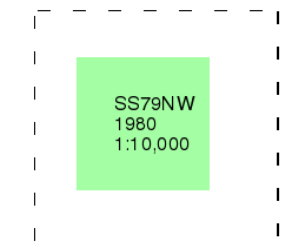
Ordnance Survey Plan

Published 1980

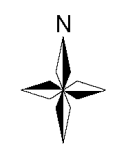
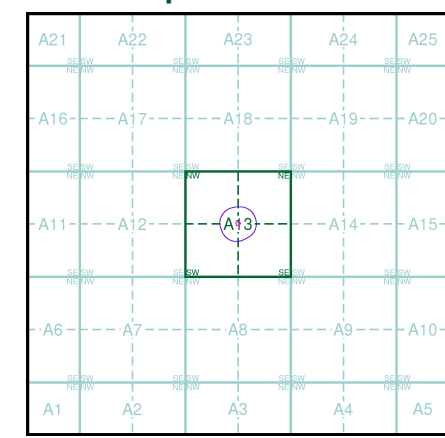
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

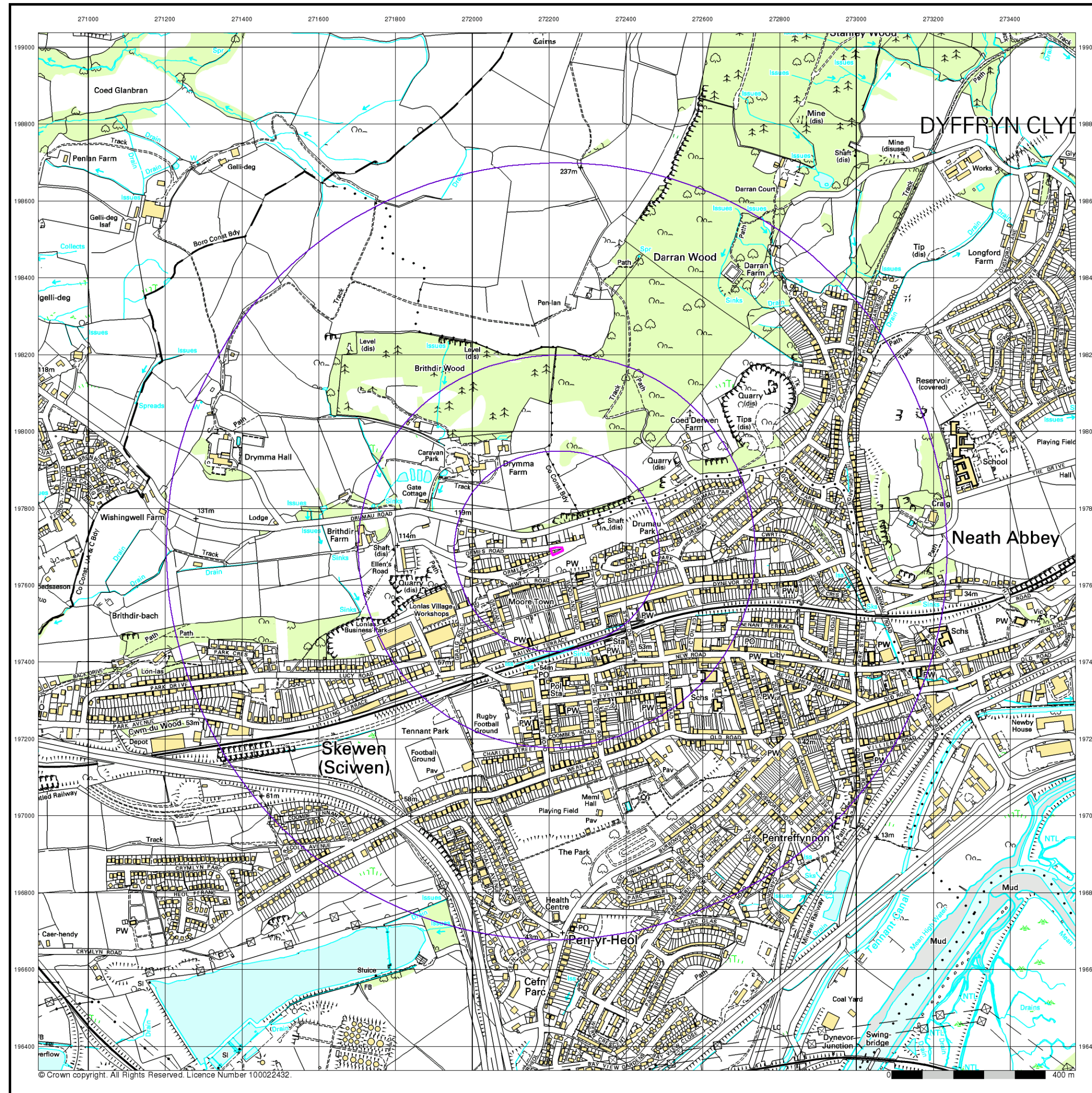
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Crown copyright. All Rights Reserved. Licence Number 100022432.



Geotechnical & Geoenvironmental Specialists

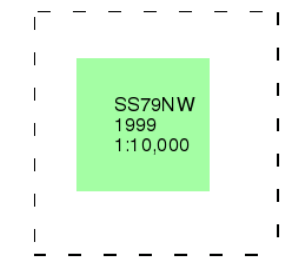
10k Raster Mapping

Published 1999

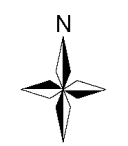
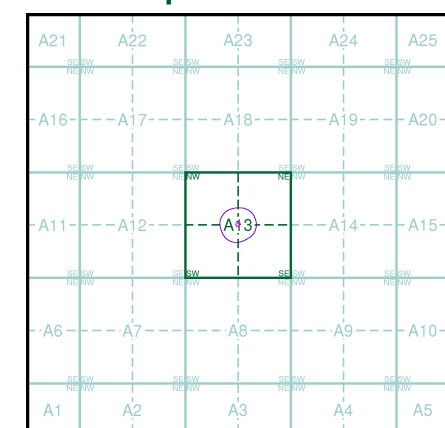
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

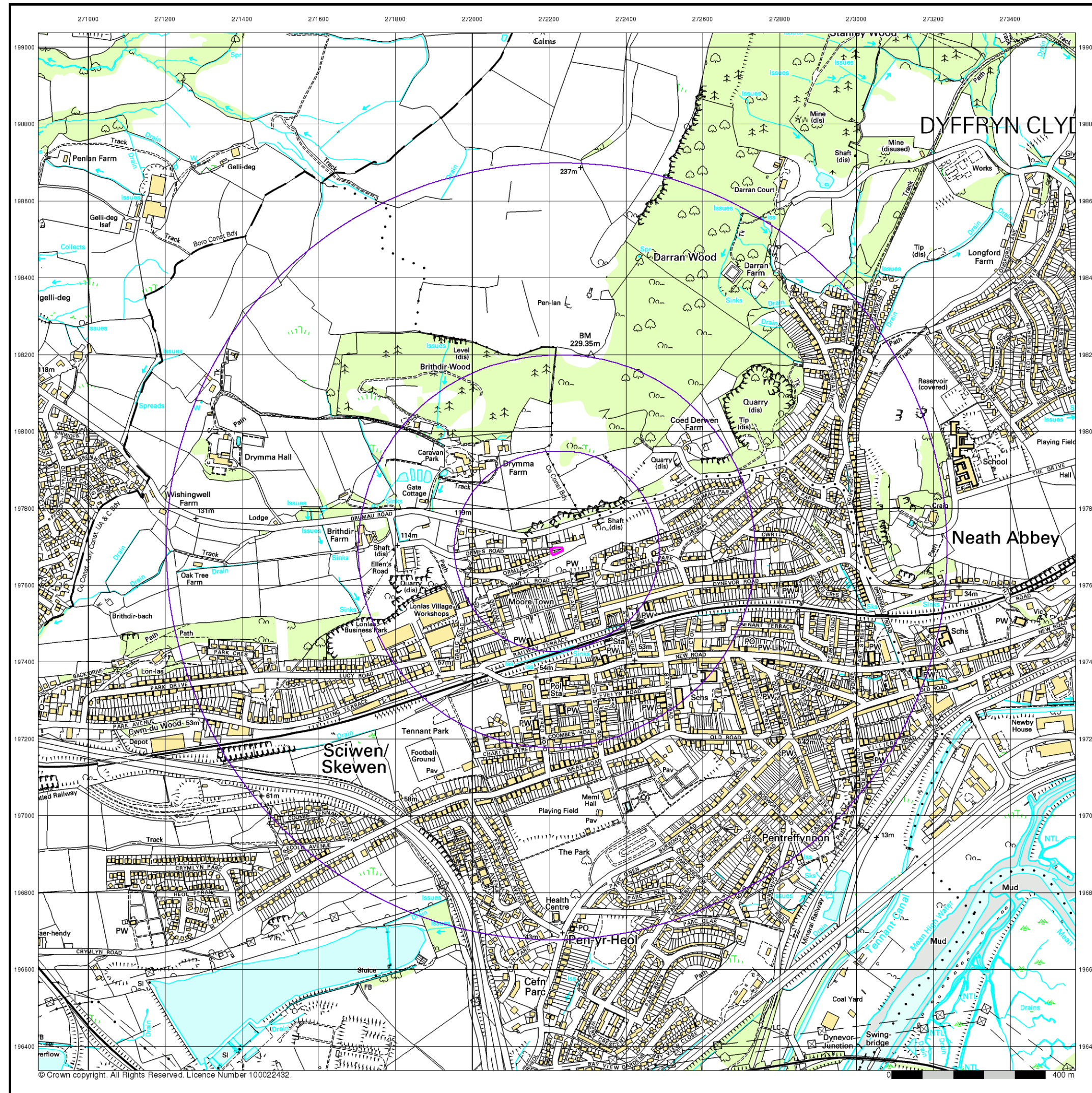
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Crown copyright. All Rights Reserved. Licence Number 100022432.



Geotechnical & Geoenvironmental Specialists

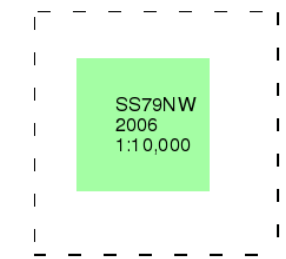
10k Raster Mapping

Published 2006

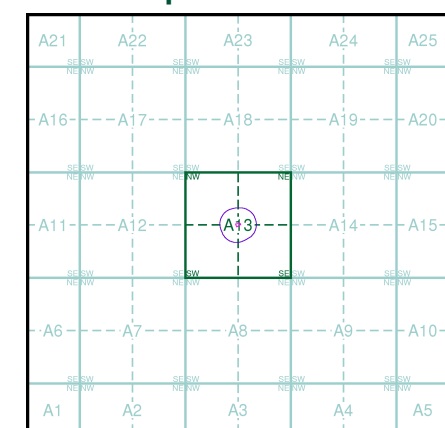
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

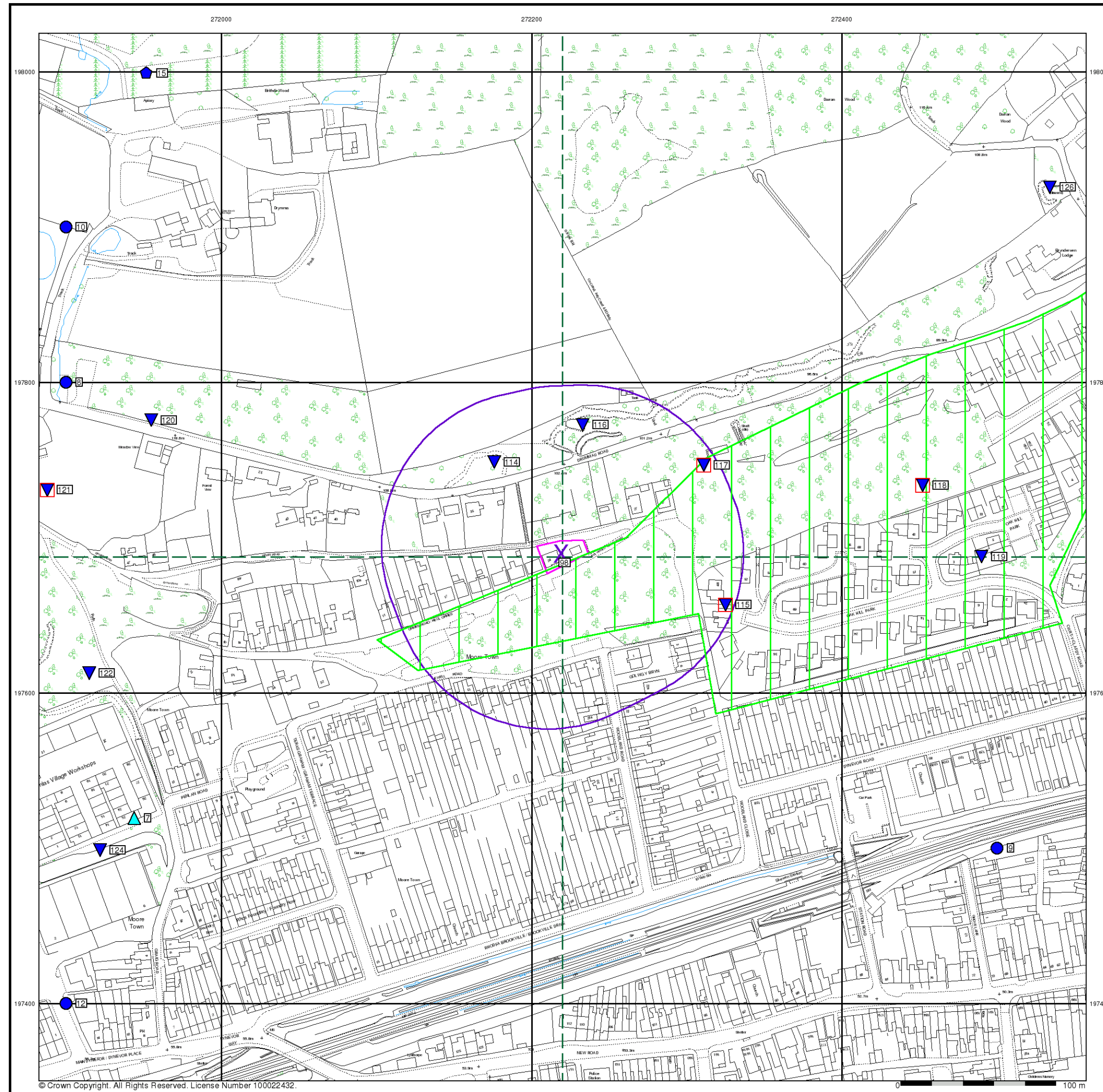
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

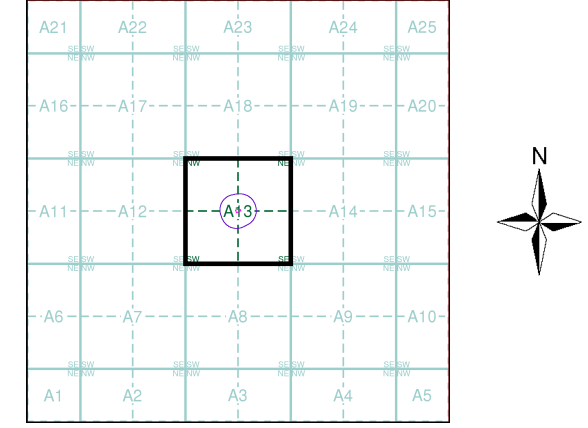


© Crown Copyright. All Rights Reserved. License Number 100022432.



- General**
 - Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Map ID
 - Several of Types at Location
 - Pylon
 - Overhead Transmission Line
- Agency and Hydrological**
 - Contaminated Land Register Entry or Notice (Location)
 - Contaminated Land Register Entry or Notice
 - Discharge Consent
 - Enforcement or Prohibition Notice
 - Integrated Pollution Control
 - Integrated Pollution Prevention Control
 - Local Authority Integrated Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control Enforcement
 - Pollution Incident to Controlled Waters
 - Prosecution Relating to Authorised Processes
 - Prosecution Relating to Controlled Waters
 - Registered Radioactive Substance
 - River Network or Water Feature
 - River Quality Sampling Point
 - Substantiated Pollution Incident Register
 - Water Abstraction
 - Water Industry Act Referral
- Waste**
 - BGS Recorded Landfill Site (Location)
 - BGS Recorded Landfill Site
 - EA Historic Landfill (Buffered Point)
 - EA Historic Landfill (Polygon)
 - Integrated Pollution Control Registered Waste Site
 - Licensed Waste Management Facility (Landfill Boundary)
 - Licensed Waste Management Facility (Location)
 - Local Authority Recorded Landfill Site (Location)
 - Local Authority Recorded Landfill Site
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Registered Landfill Site
 - Registered Landfill Site (Location)
 - Registered Landfill Site (Point Buffered to 100m)
 - Registered Landfill Site (Point Buffered to 250m)
 - Registered Waste Transfer Site (Location)
 - Registered Waste Transfer Site
 - Registered Waste Treatment or Disposal Site (Location)
 - Registered Waste Treatment or Disposal Site
- Hazardous Substances**
 - COMAH Site
 - Explosive Site
 - NIHHS Site
 - Planning Hazardous Substance Consent
 - Planning Hazardous Substance Enforcement
- Geological**
 - BGS Recorded Mineral Site

Site Sensitivity Map - Segment A13

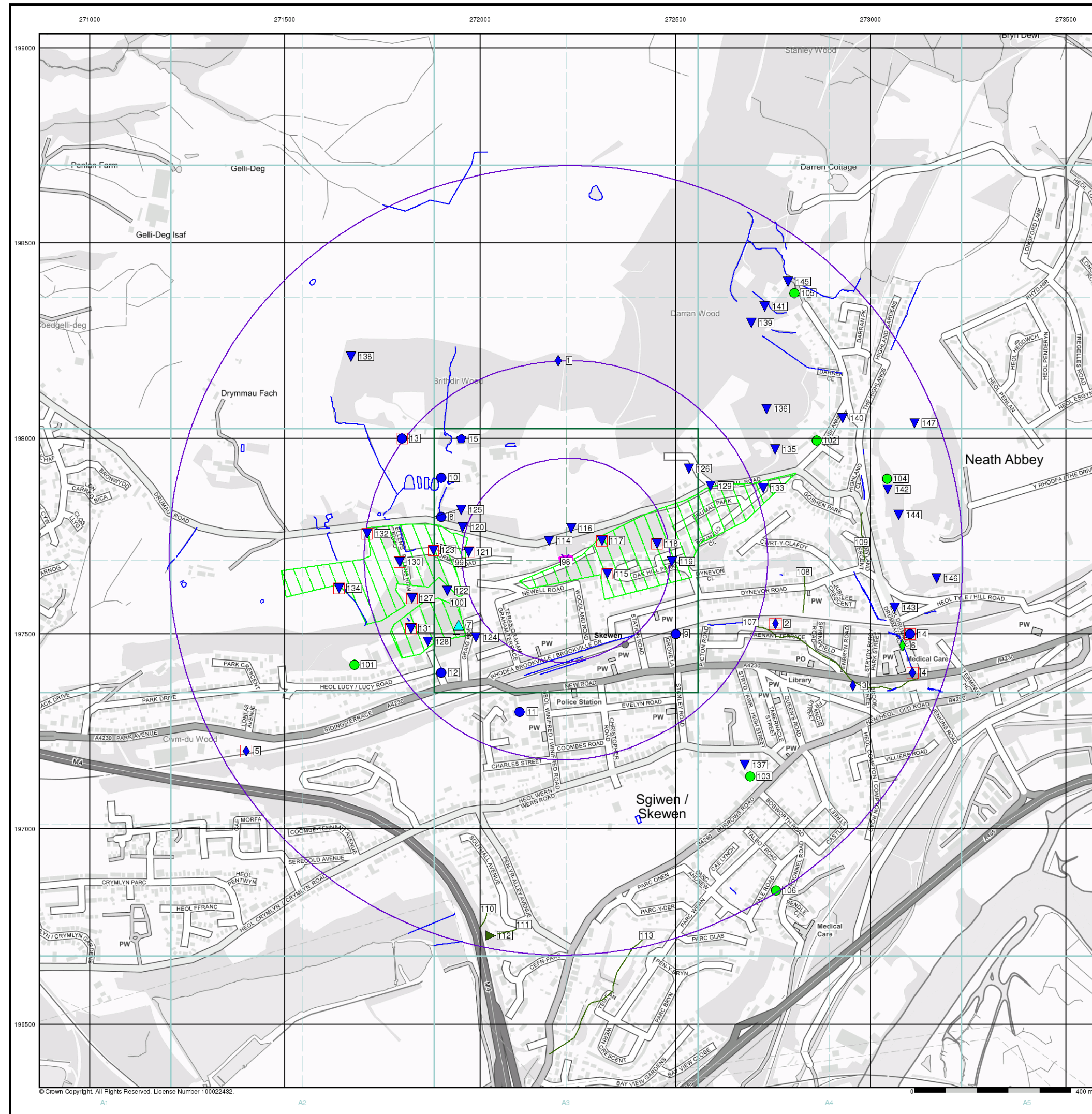


Order Details
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Plot Buffer (m): 100

Site Details
24, Ormes Road, NEATH, SA10 6SY

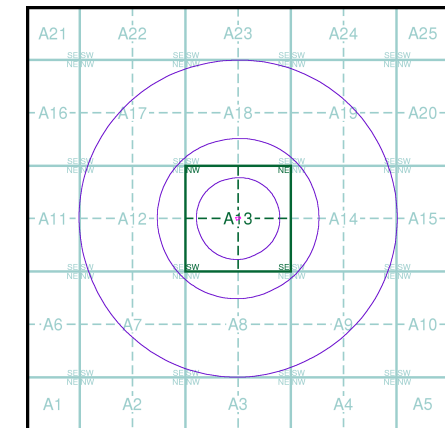
Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Map ID
 - Several of Type at Location
- Agency and Hydrological**
- Contaminated Land Register Entry or Notice (Location)
 - Contaminated Land Register Entry or Notice
 - Discharge Consent
 - Enforcement or Prohibition Notice
 - Integrated Pollution Control
 - Integrated Pollution Prevention Control
 - Local Authority Integrated Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control Enforcement
 - Pollution Incident to Controlled Waters
 - Prosecution Relating to Authorised Processes
 - Prosecution Relating to Controlled Waters
 - Registered Radioactive Substance
 - River Network or Water Feature
 - River Quality Sampling Point
 - Substantiated Pollution Incident Register
 - Water Abstraction
 - Water Industry Act Referral
- Hazardous Substances**
- COMAH Site
 - Explosive Site
 - NIHHS Site
 - Planning Hazardous Substance Consent
 - Planning Hazardous Substance Enforcement
 - BGS Recorded Mineral Site
- Waste**
- BGS Recorded Landfill Site (Location)
 - BGS Recorded Landfill Site
 - EA Historic Landfill (Buffered Point)
 - EA Historic Landfill (Polygon)
 - Integrated Pollution Control Registered Waste Site
 - Licensed Waste Management Facility (Landfill Boundary)
 - Licensed Waste Management Facility (Location)
 - Local Authority Recorded Landfill Site (Location)
 - Local Authority Recorded Landfill Site
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Registered Landfill Site (Location)
 - Registered Landfill Site (Point Buffered to 100m)
 - Registered Landfill Site (Point Buffered to 250m)
 - Registered Waste Transfer Site (Location)
 - Registered Waste Transfer Site
 - Registered Waste Treatment or Disposal Site (Location)
 - Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Slice A

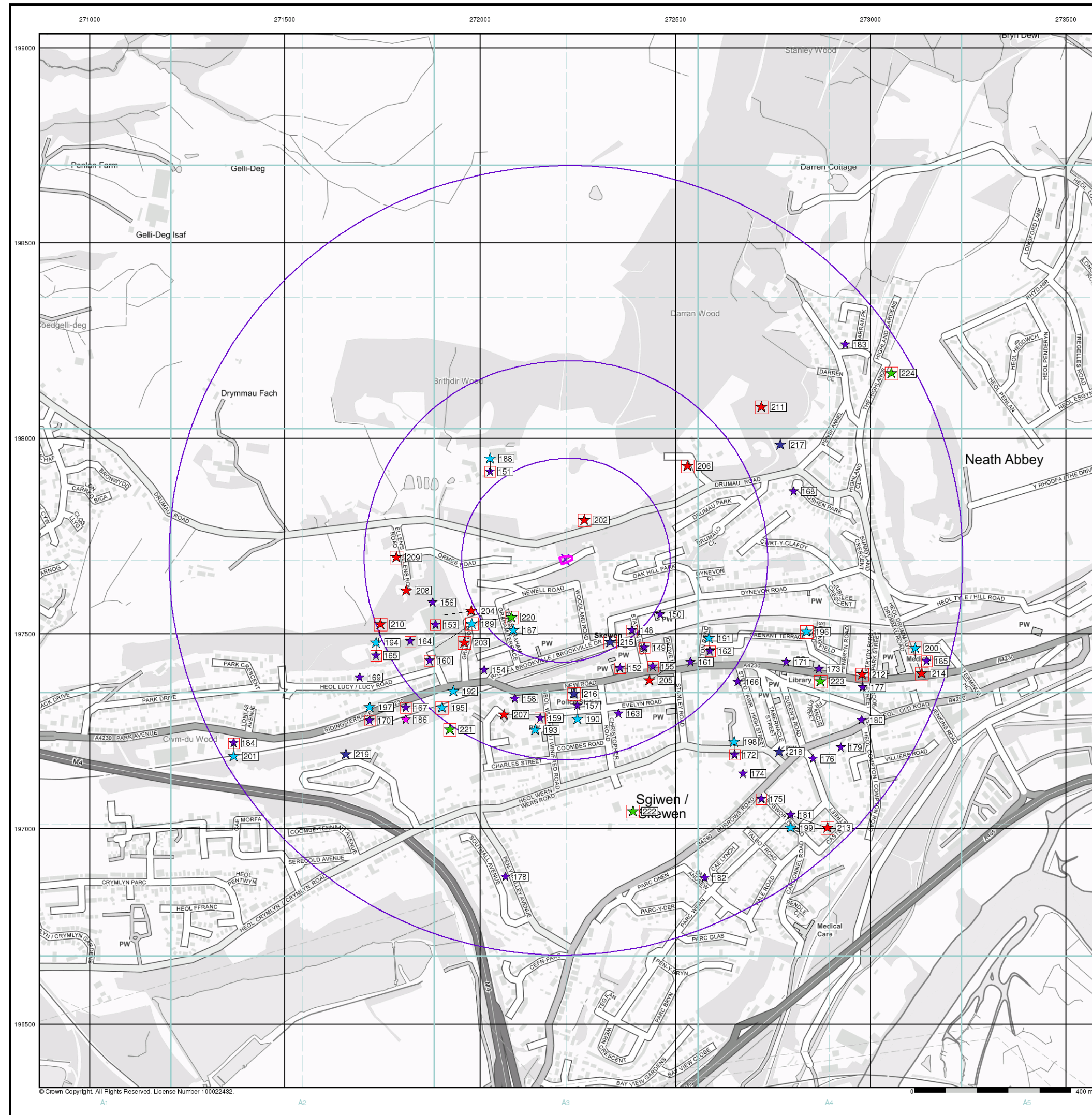


Order Details

Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Geotechnical & Geoenvironmental Specialists
Industrial Land Use Map

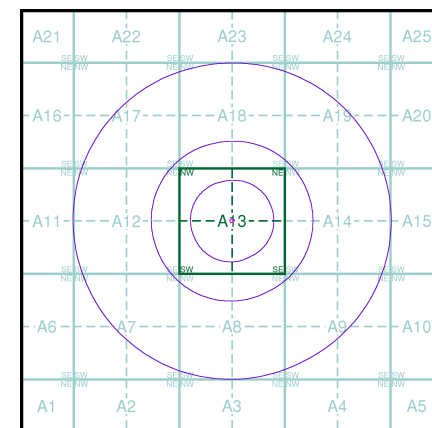
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



Order Details

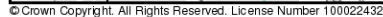
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

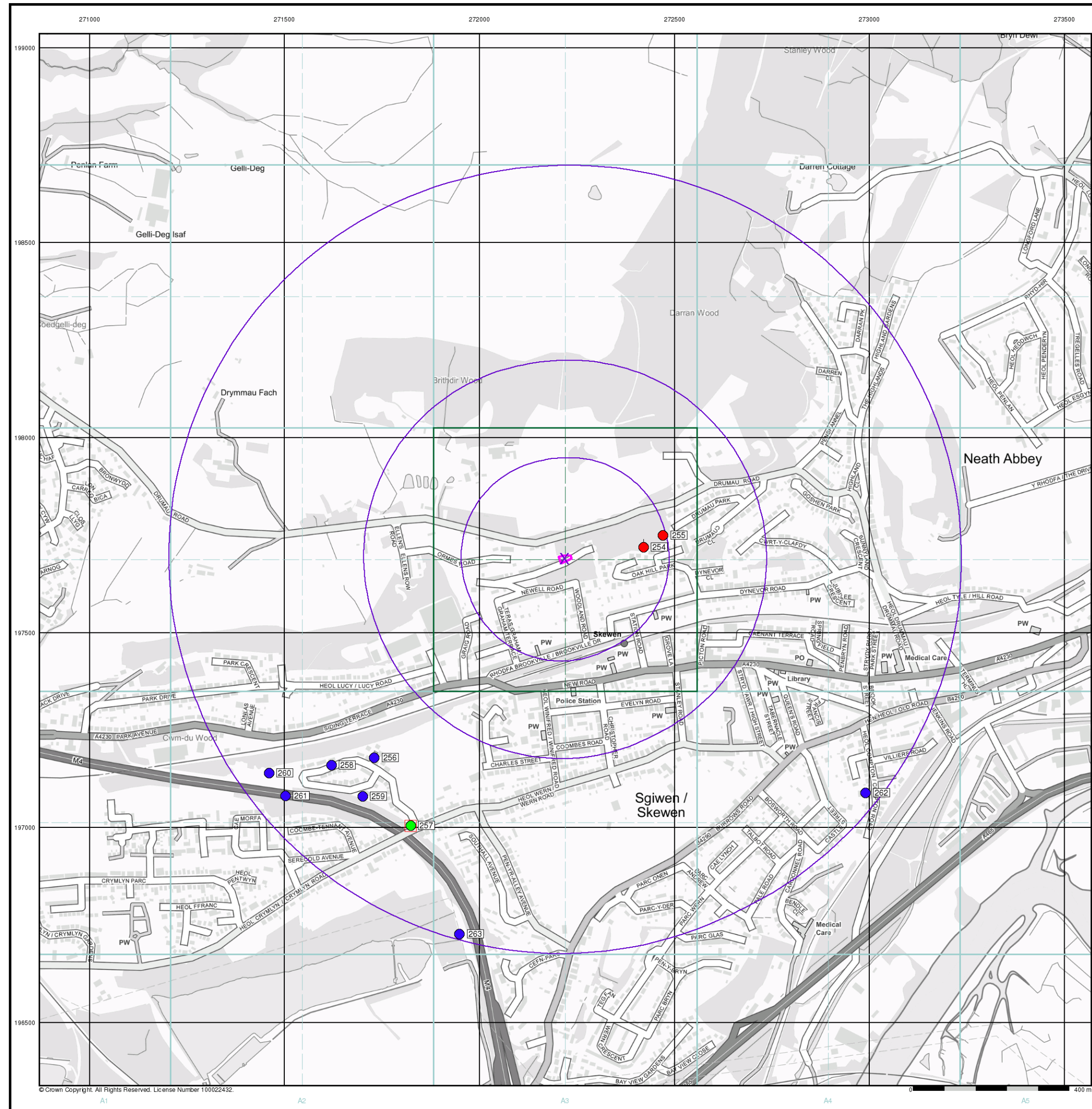
Site Details

24, Ormes Road, NEATH, SA10 6SY

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk





© Crown Copyright. All Rights Reserved. License Number 100022432.



General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

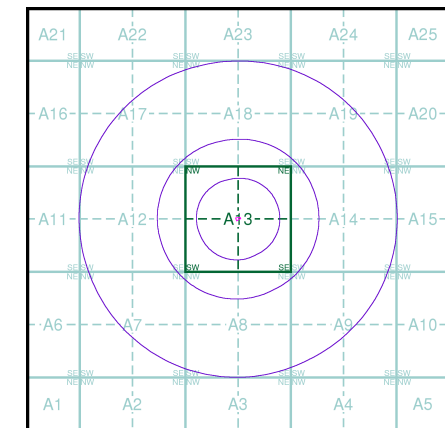
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



Order Details

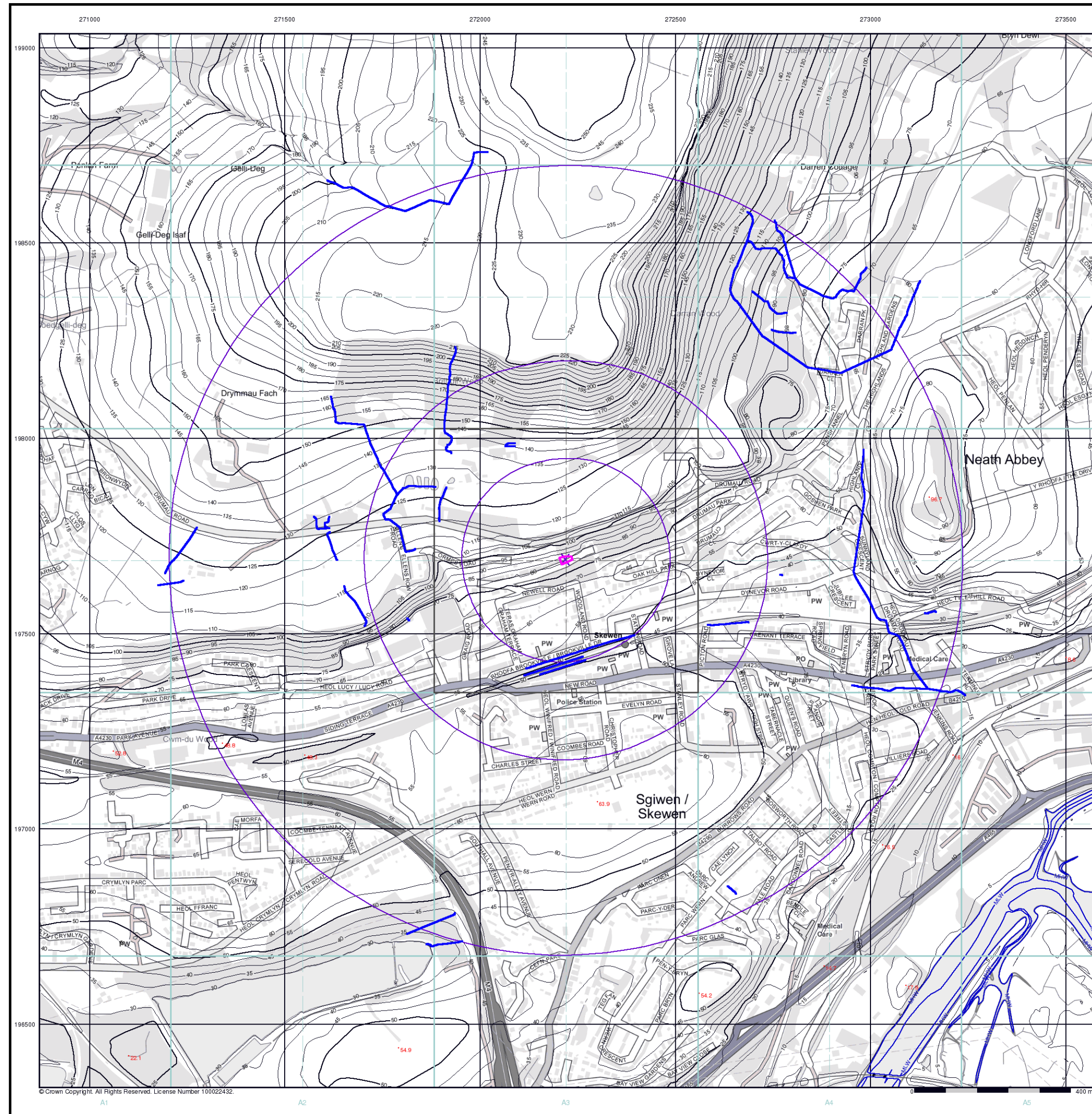
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

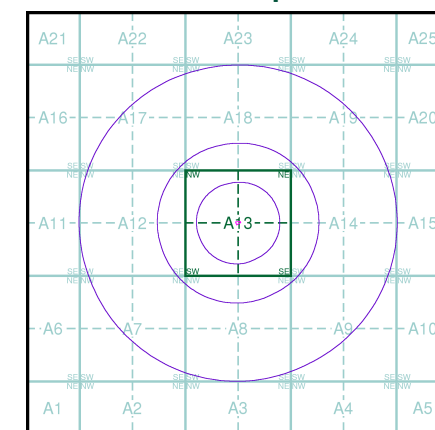
OS Water Network Data

- | | |
|--------------|-------------------------|
| Canal | Drain |
| Reservoir | Other |
| Foreshore | Lake |
| Marsh | Transfer |
| Tidal River | Lock Or Flight Of Locks |
| Inland River | Sea |

Contours (height in meters)

- Standard Contour: 105, 100, 95
- Master Contour: 105, 100, 95
- Spot Height: 167.3
- MLW: Mean Low Water
- MHW: Mean High Water

OS Water Network Map - Slice A



Order Details

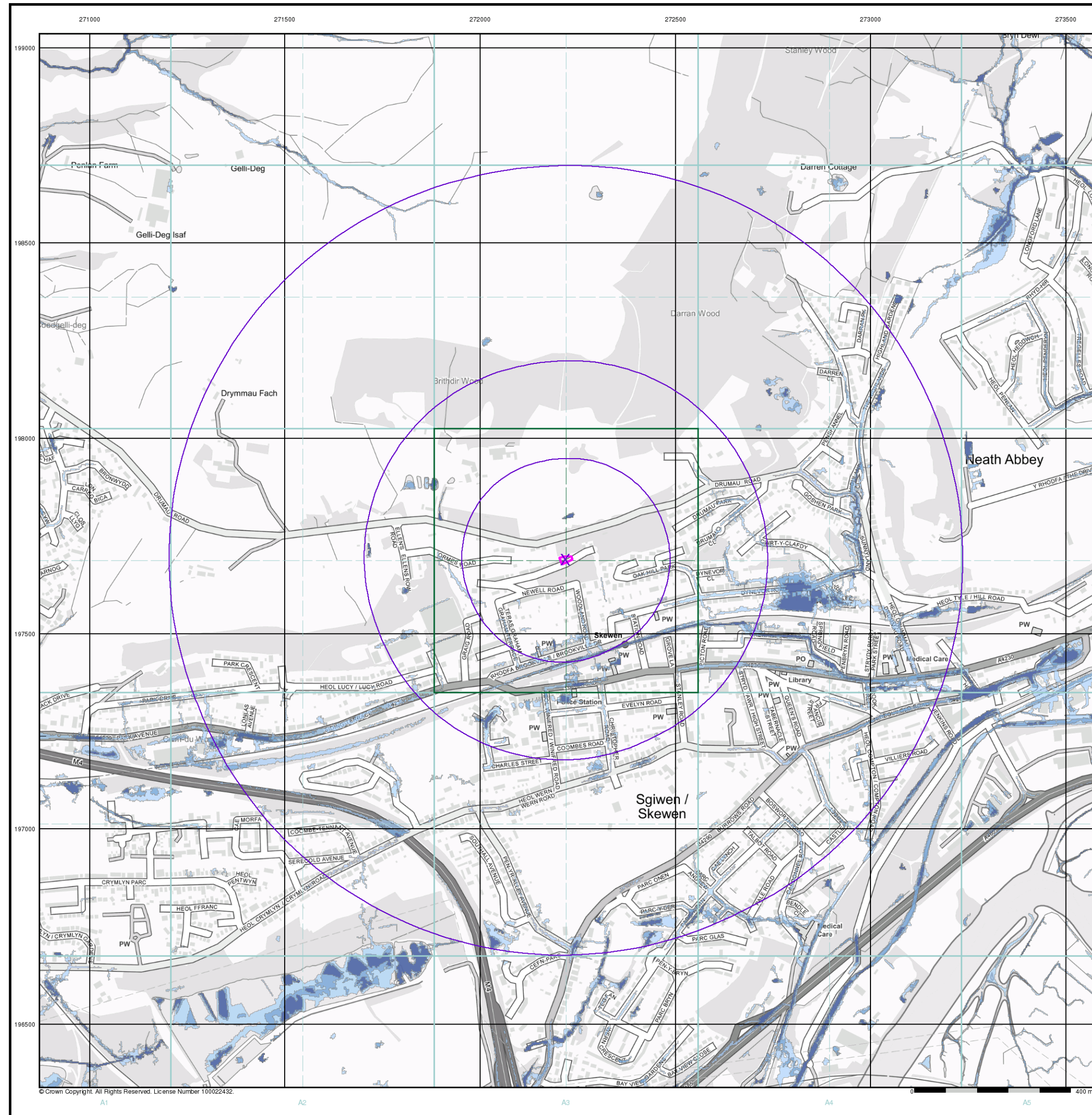
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Risk of Flooding from Surface Water

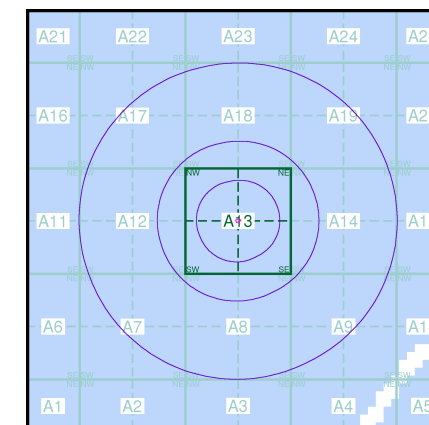
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

E/NRW Suitability Map - Slice A

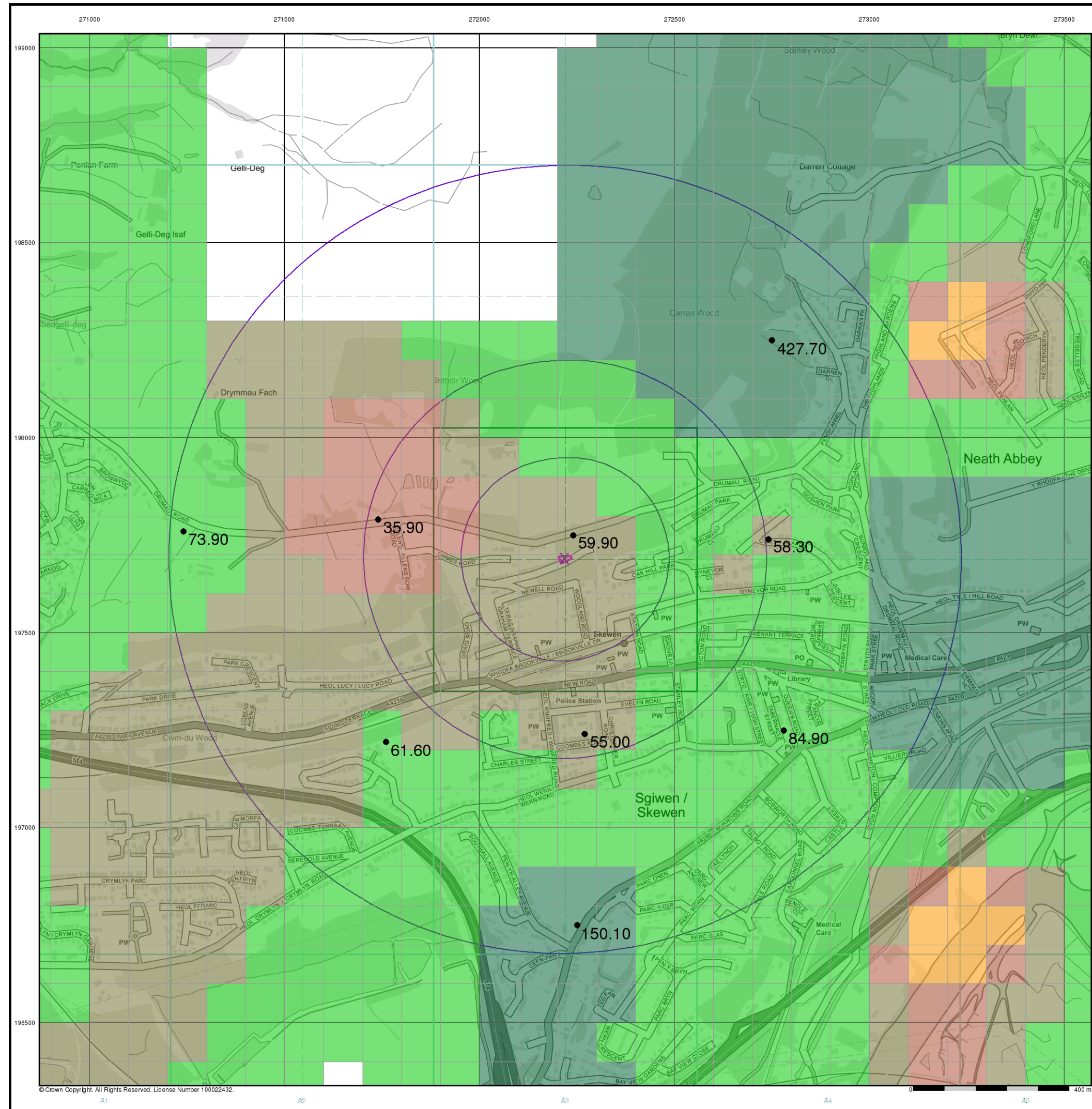


Order Details

Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



© Crown Copyright. All Rights Reserved. License Number 100022432.

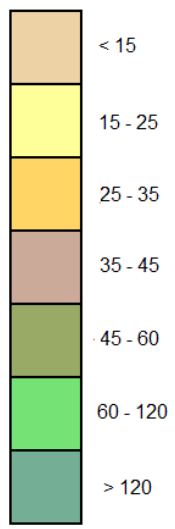
General

-  Specified Site
-  Specified Buffer(s)
-  Bearing Reference Point

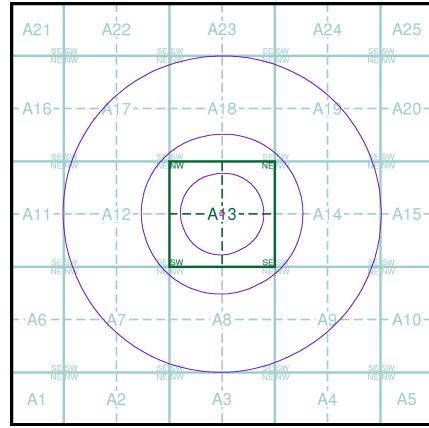
Urban Soil Chemistry Arsenic

● BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Arsenic Concentrations mg/kg



Urban Soil Chemistry Arsenic - Slice A



Order Details

Order Details:

Customer Ref:

National Grid Reference:

Slice:

Site Area (Ha):

Search buffer (m):

254977540_1_1

16299-MW

272220, 197690

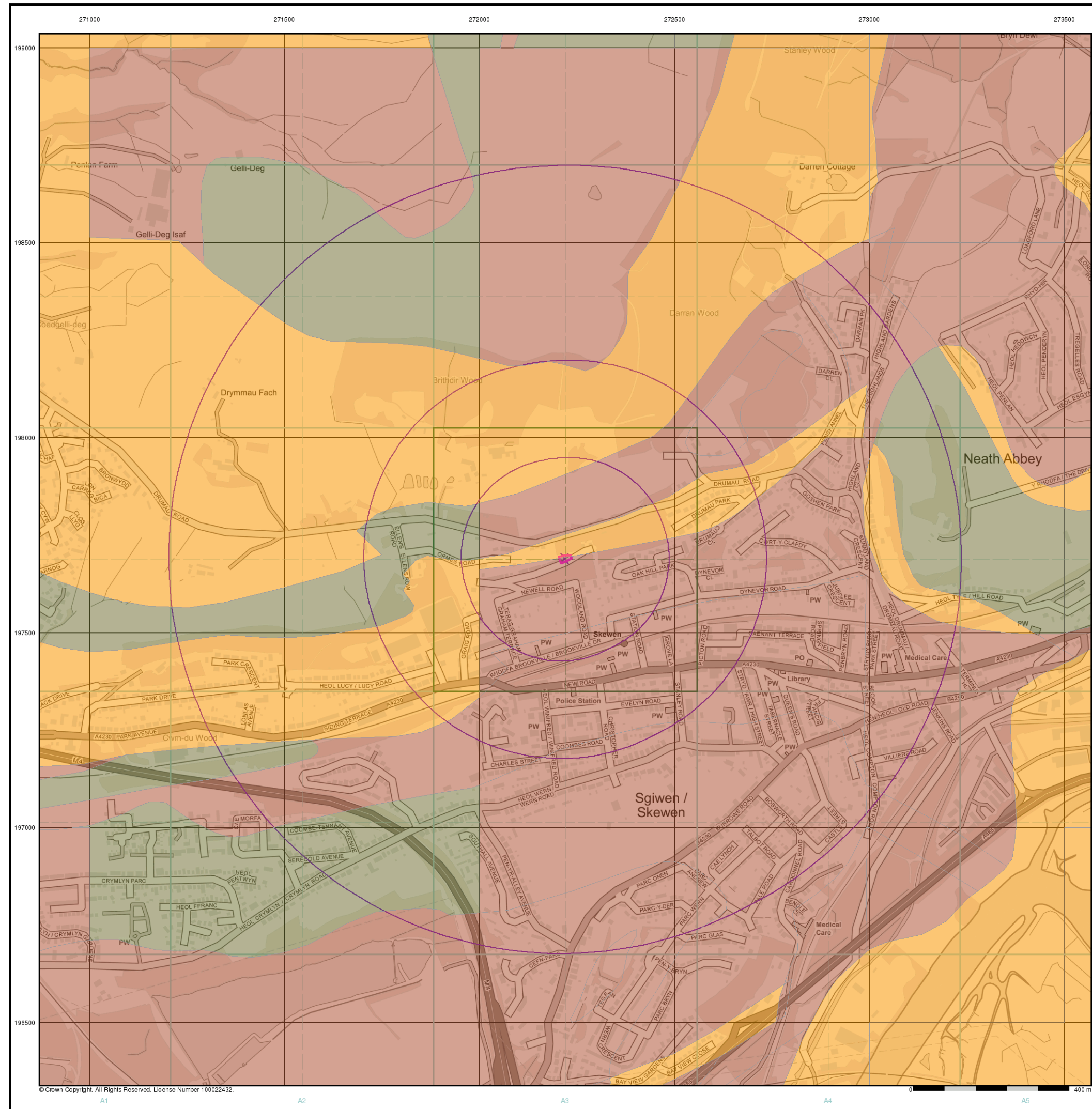
A

0.05

1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



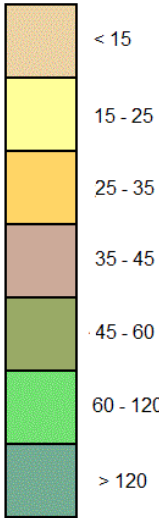
Geotechnical & Geoenvironmental Specialists

General

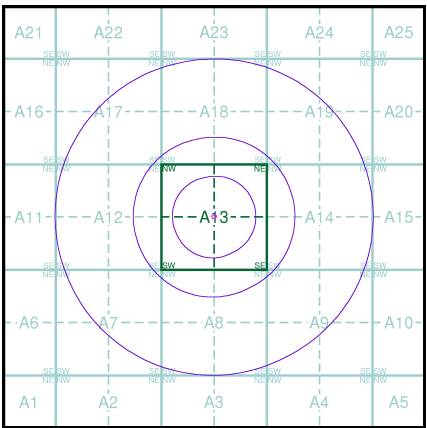
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg



Estimated Soil Chemistry Arsenic - Slice A



Order Details

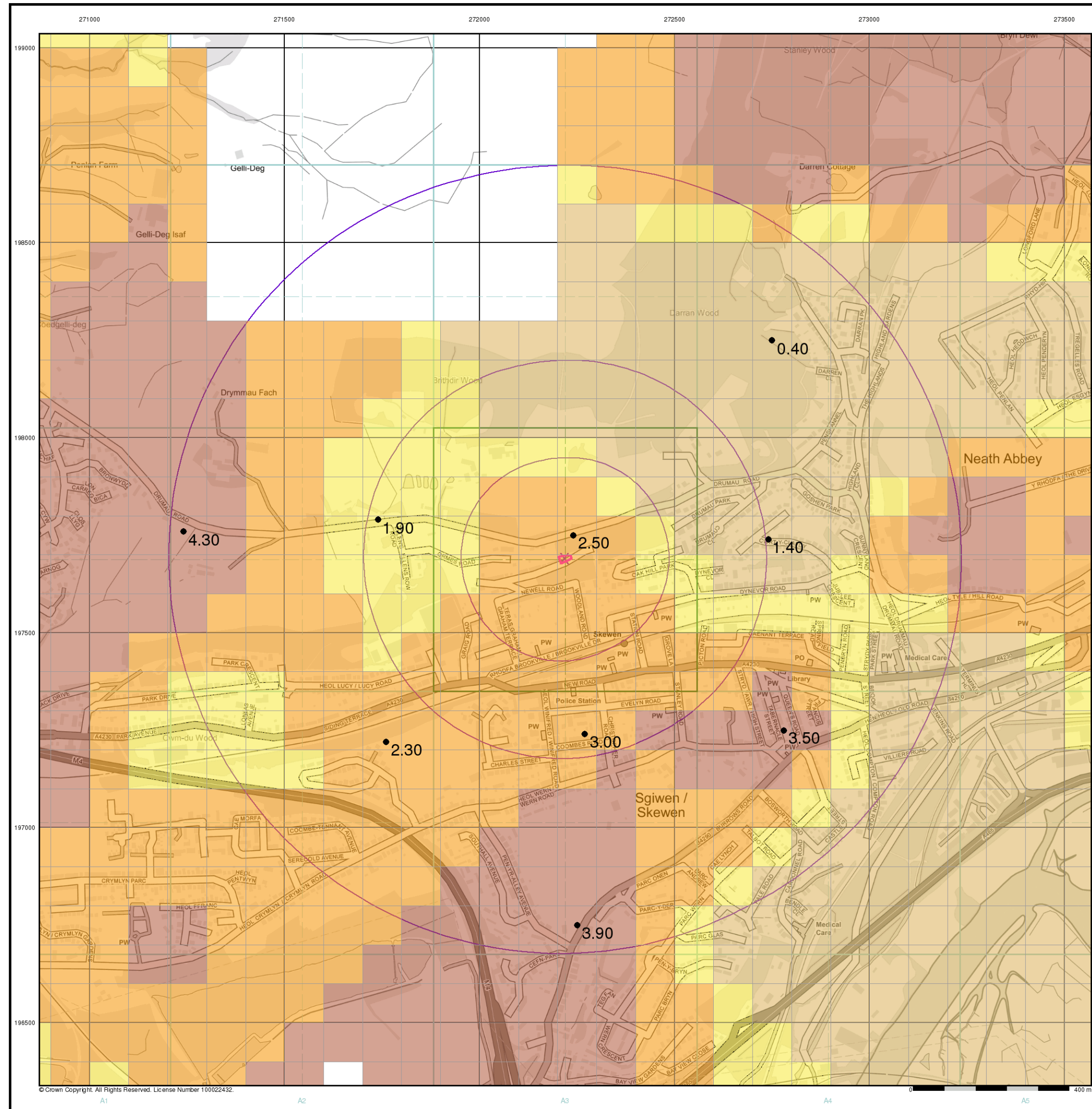
Order Details: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Crown Copyright. All Rights Reserved. License Number 100022432.



Geotechnical & Geoenvironmental Specialists

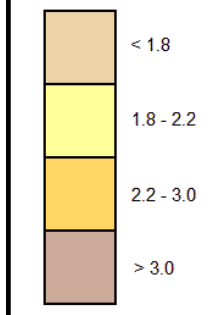
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

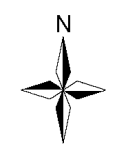
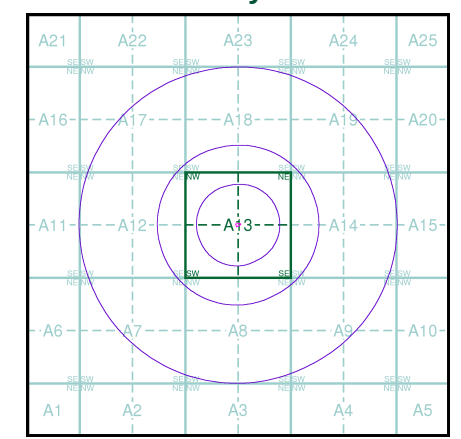
Urban Soil Chemistry Cadmium

BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Cadmium Concentrations mg/kg



Urban Soil Chemistry Cadmium - Slice A



Order Details

Order Details: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



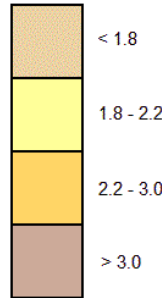
Geotechnical & Geoenvironmental Specialists

General

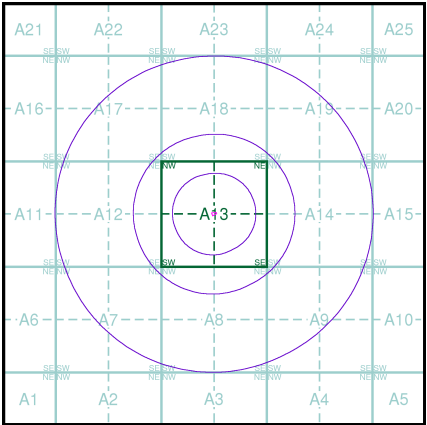
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg



Estimated Soil Chemistry Cadmium - Slice A



Order Details

Order Details: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

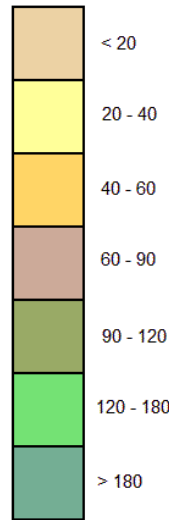
General

Specified Site Specified Buffer(s) Bearing Reference Point

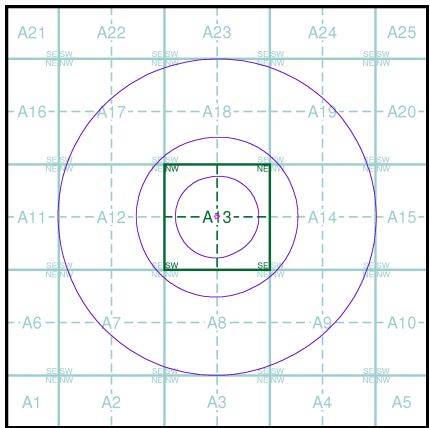
Urban Soil Chemistry Chromium

BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Chromium Concentrations mg/kg



Urban Soil Chemistry Chromium - Slice A



Order Details

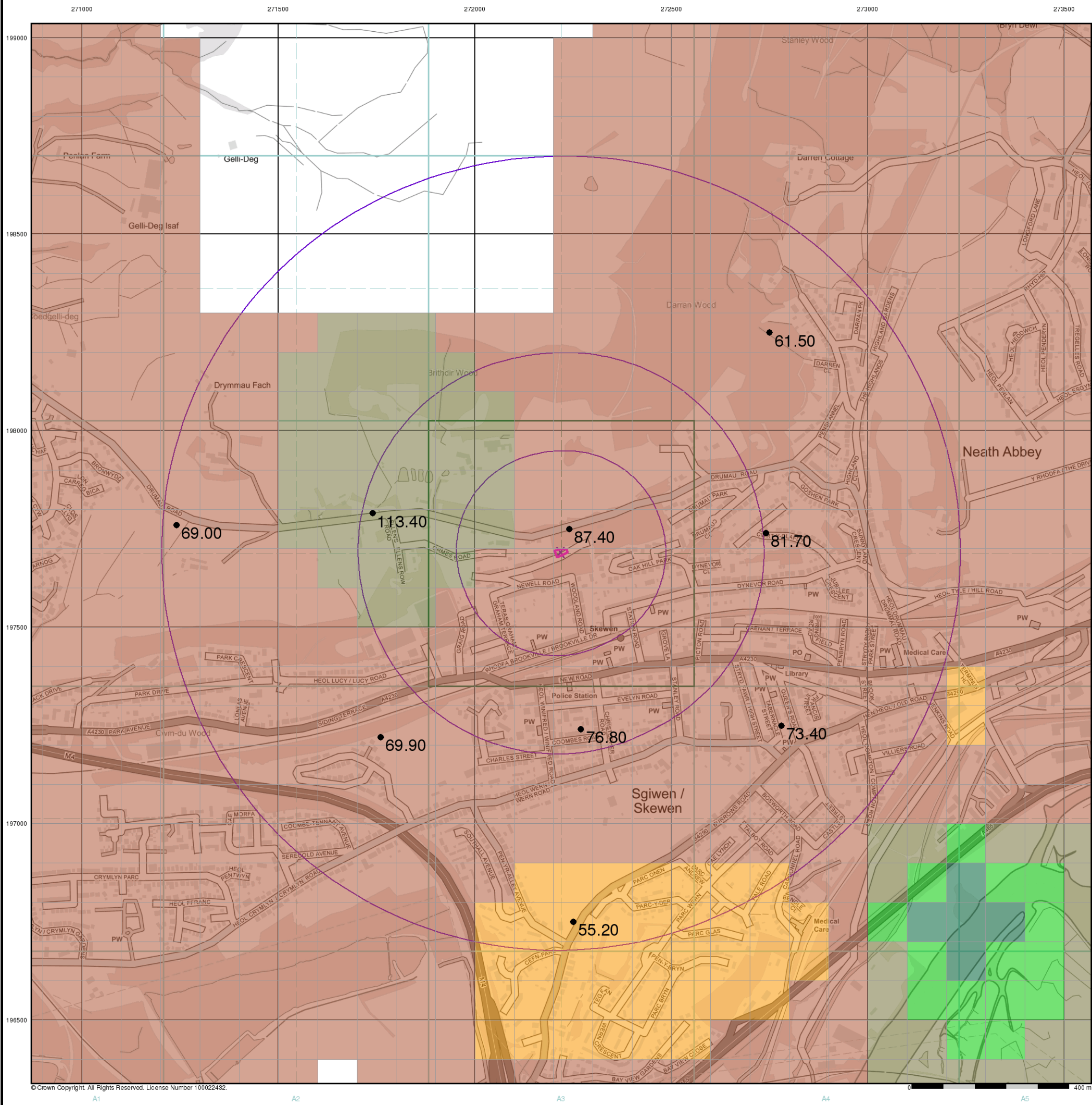
Order Details: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk





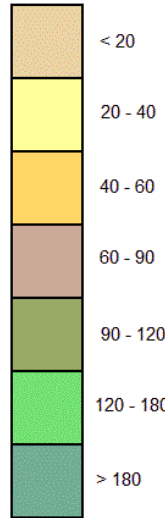
Geotechnical & Geoenvironmental Specialists

General

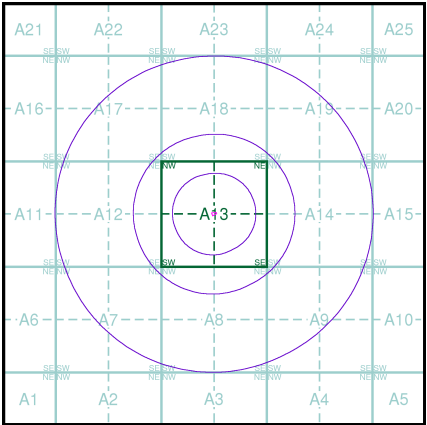
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg



Estimated Soil Chemistry Chromium - Slice A



Order Details

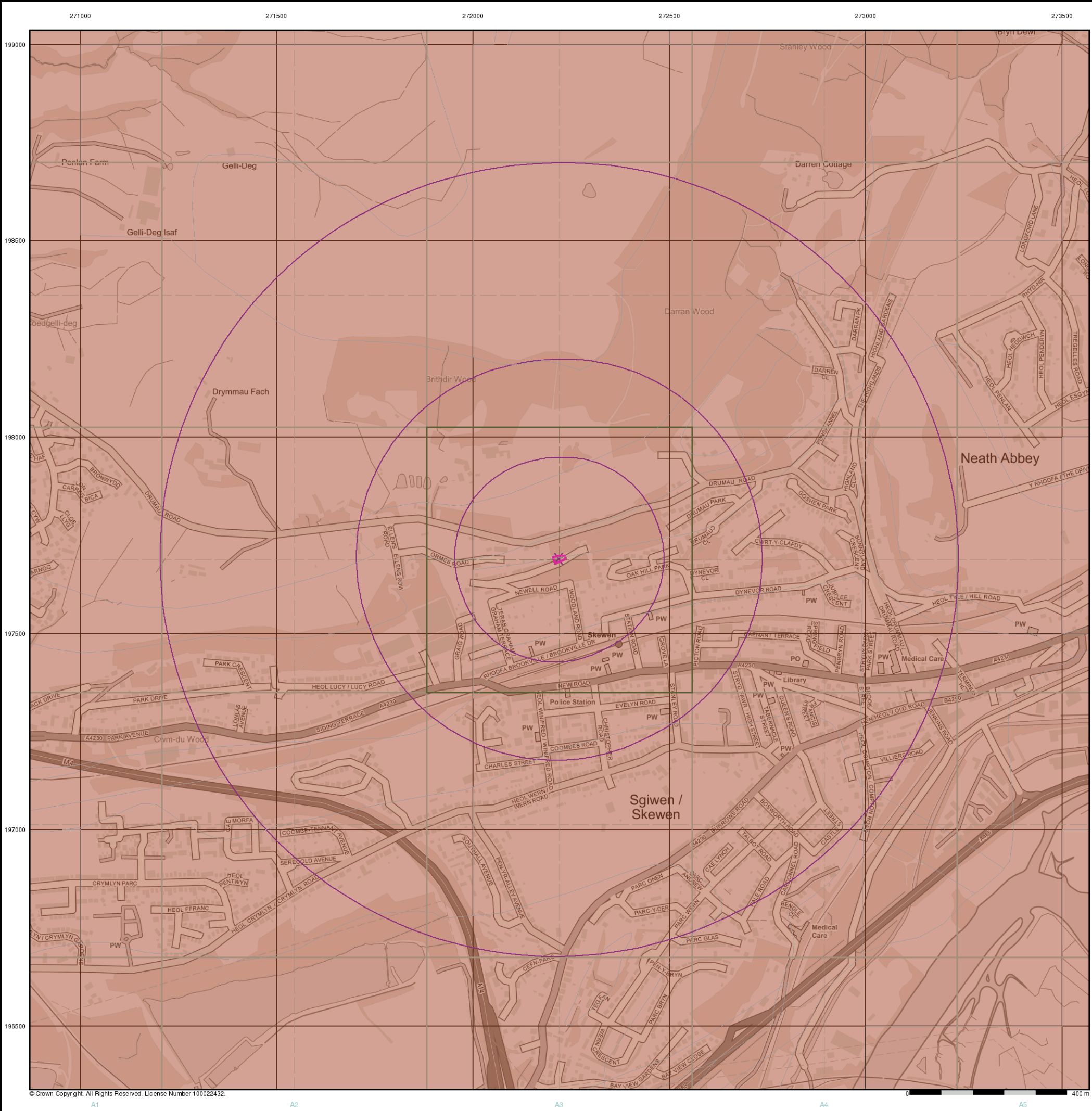
Order Details: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search buffer (m): 1000

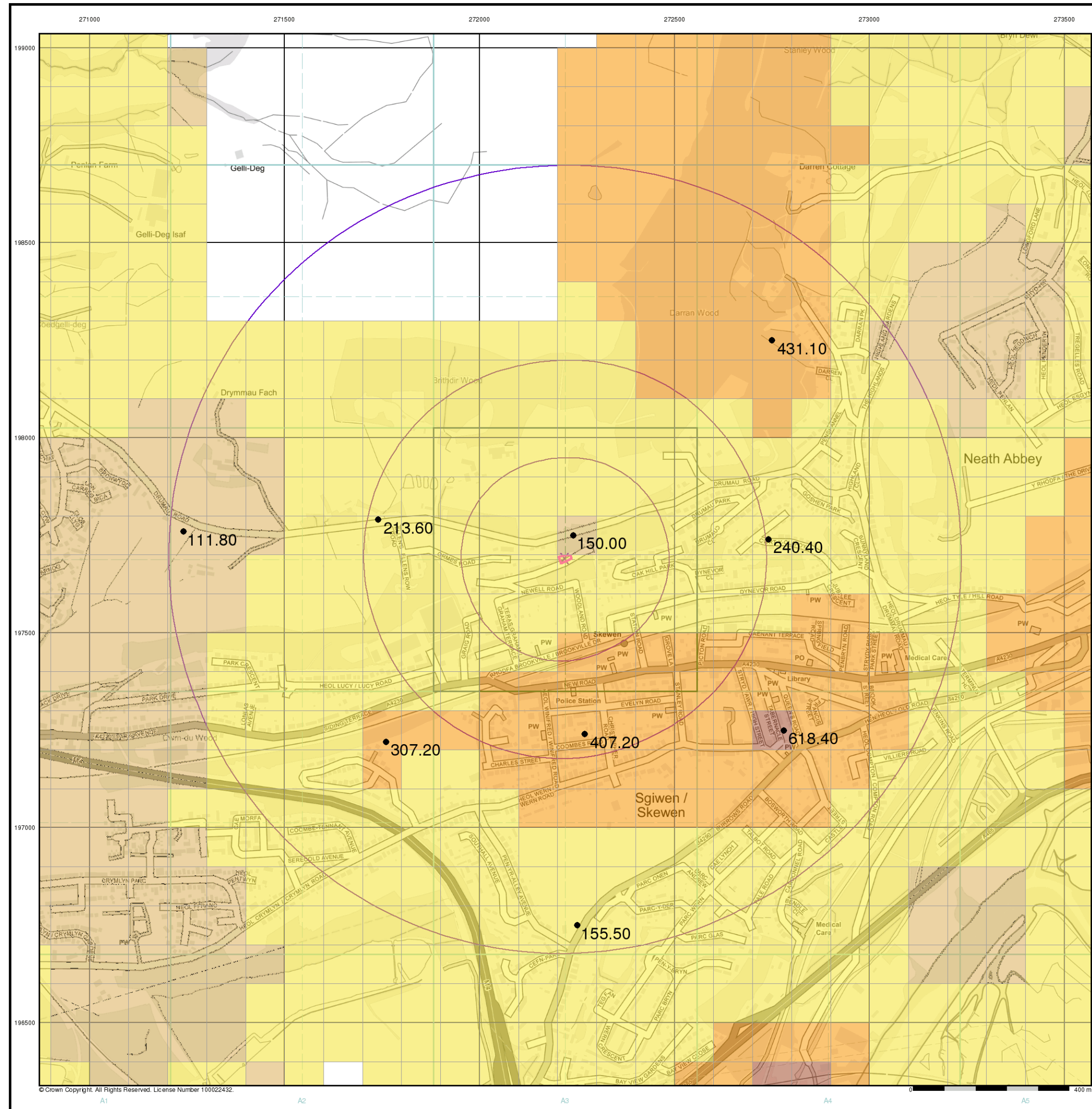
Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk





© Crown Copyright. All Rights Reserved. License Number 100022432.



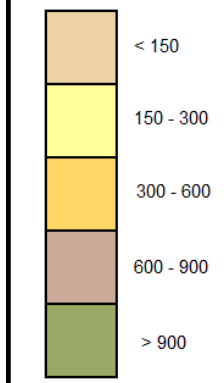
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

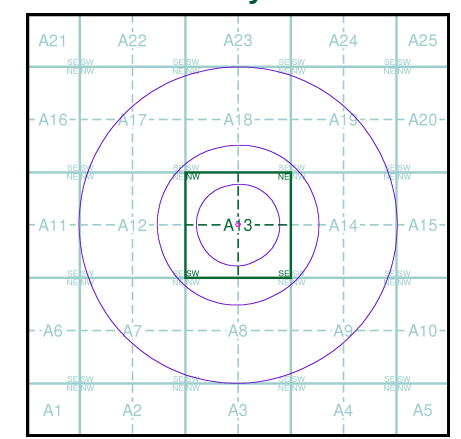
Urban Soil Chemistry Lead

BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Lead Concentrations mg/kg



Urban Soil Chemistry Lead - Slice A



Order Details

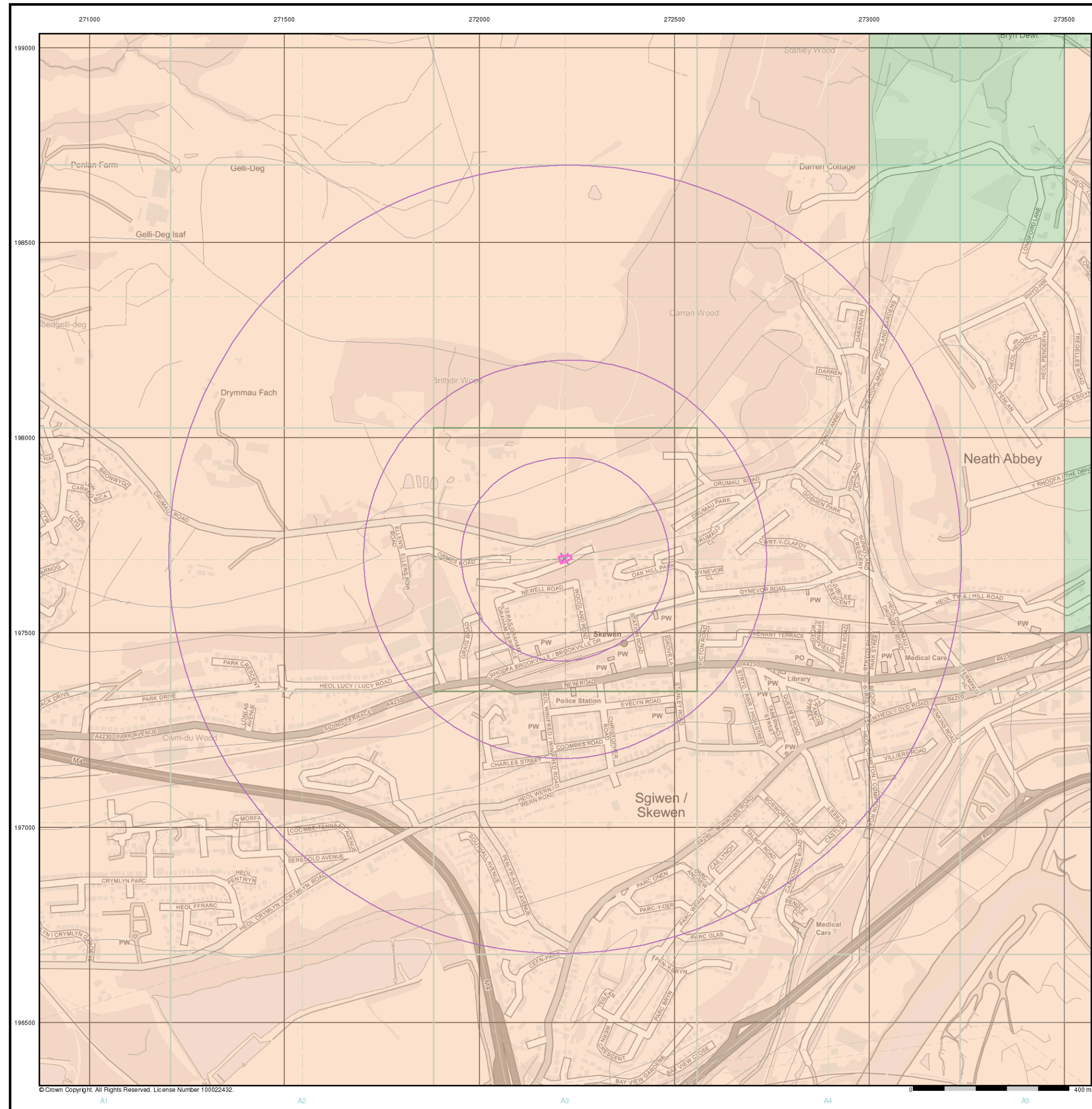
Order Details: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

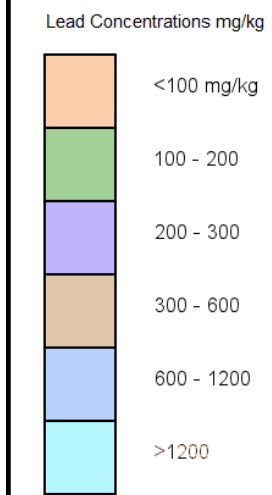


© Crown Copyright. All Rights Reserved. License Number 100022432.

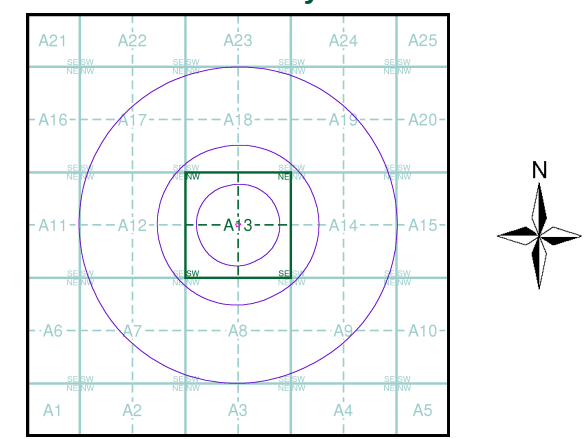


- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point

Estimated Soil Chemistry Lead



Estimated Soil Chemistry Lead - Slice A



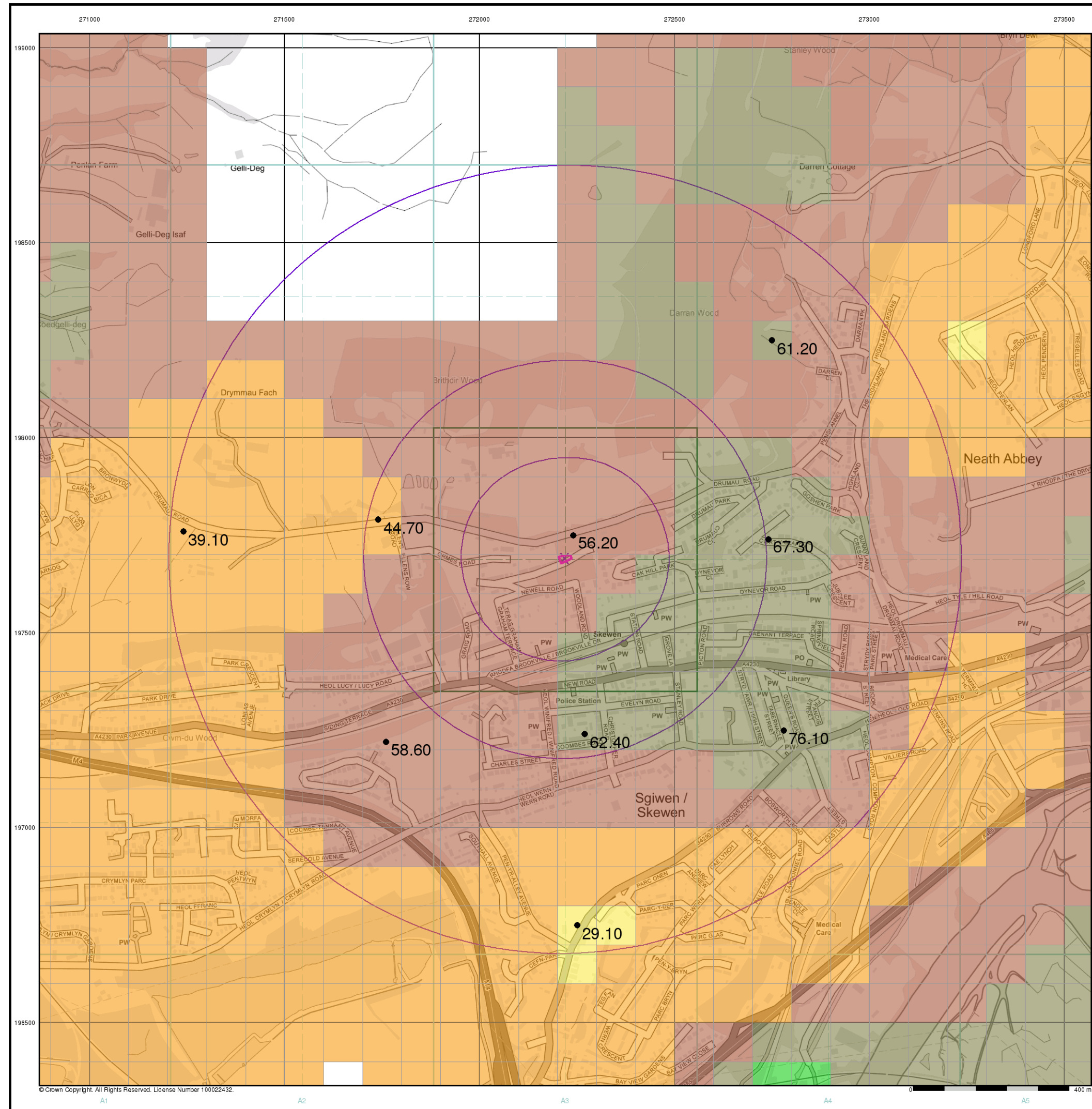
Order Details

Order Details: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search buffer (m): 1000

Site Details
24, Ormes Road, NEATH, SA10 6SY

INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Crown Copyright. All Rights Reserved. License Number 100022432.



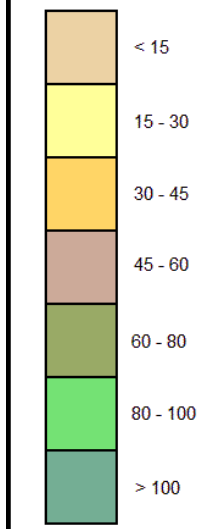
General

Specified Site Specified Buffer(s) Bearing Reference Point

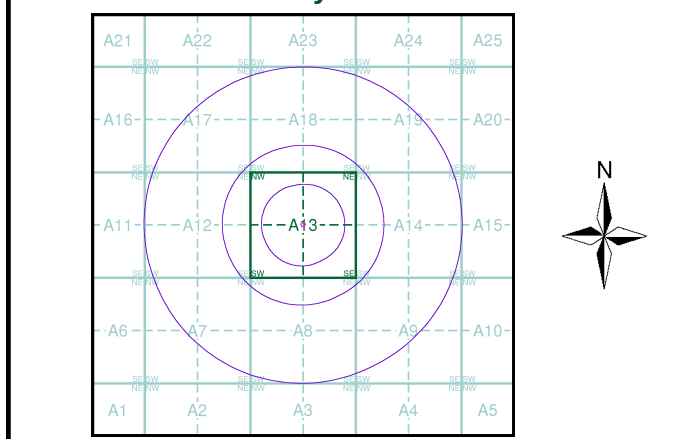
Urban Soil Chemistry Nickel

BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Nickel Concentrations mg/kg



Urban Soil Chemistry Nickel - Slice A

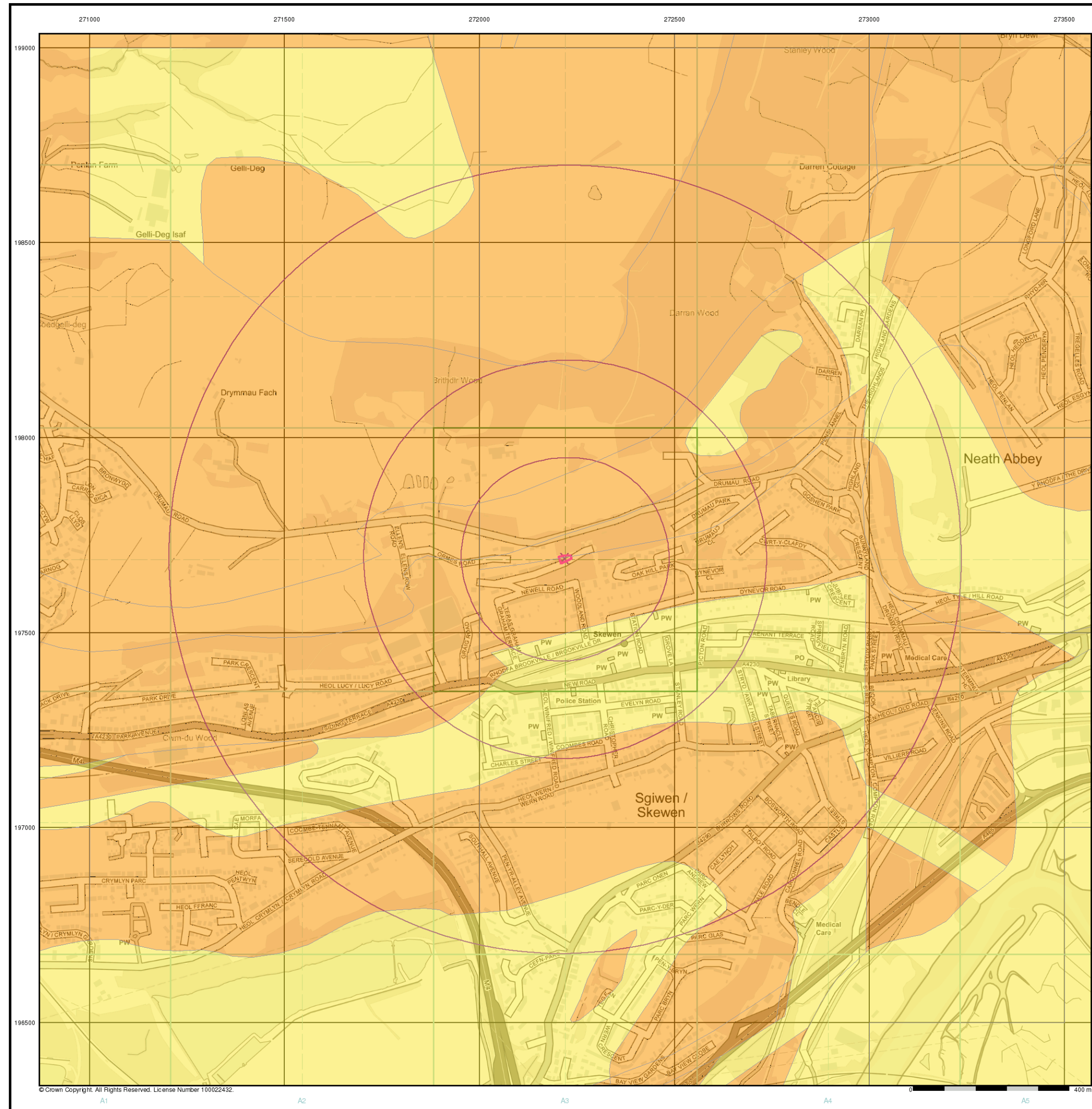


Order Details

Order Details: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



© Crown Copyright. All Rights Reserved. License Number 100022432.



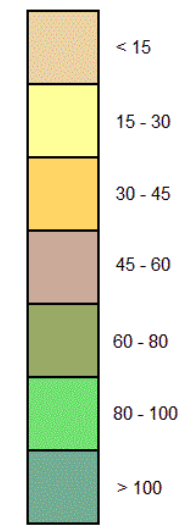
Geotechnical & Geoenvironmental Specialists

General

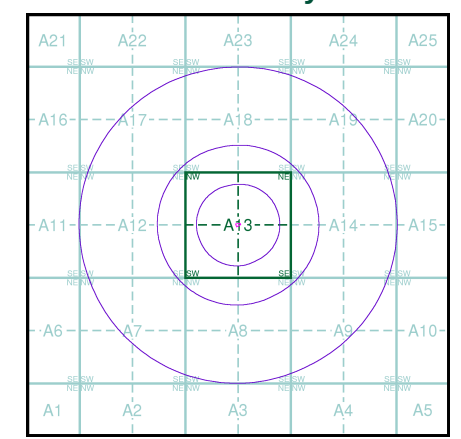
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg



Estimated Soil Chemistry Nickel - Slice A



Order Details

Order Details: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



Large-Scale National Grid Data 1:2,500 and 1:1,250

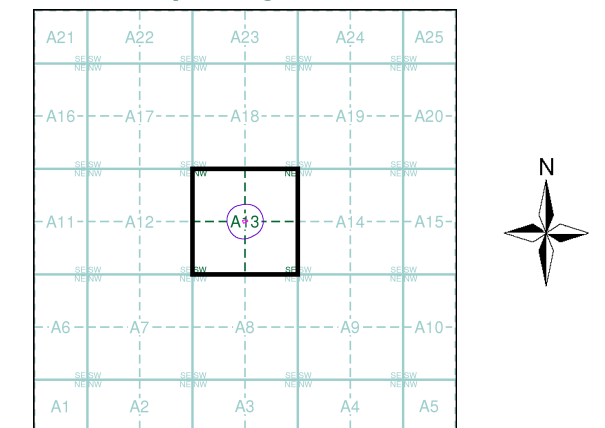


Geotechnical & Geoenvironmental Specialists

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:2,500	1876 - 1879	2
Glamorganshire	1:2,500	1899	3
Glamorganshire	1:2,500	1918	4
Glamorganshire	1:2,500	1940	5
Ordnance Survey Plan	1:1,250	1951 - 1957	6
Ordnance Survey Plan	1:2,500	1952 - 1964	7
Ordnance Survey Plan	1:1,250	1963 - 1971	8
Ordnance Survey Plan	1:2,500	1964 - 1969	9
Ordnance Survey Plan	1:1,250	1970 - 1974	10
Additional SIMs	1:2,500	1984	11
Additional SIMs	1:1,250	1984 - 1989	12
Additional SIMs	1:1,250	1989	13
Additional SIMs	1:2,500	1992	14
Large-Scale National Grid Data	1:2,500	1993	15
Large-Scale National Grid Data	1:1,250	1993	16
Large-Scale National Grid Data	1:2,500	1993	17
Large-Scale National Grid Data	1:1,250	1993 - 1995	18
Large-Scale National Grid Data	1:2,500	1995	19
Large-Scale National Grid Data	1:1,250	1996	20
Historical Aerial Photography	1:2,500	2000	21

Historical Map - Segment A13



Order Details

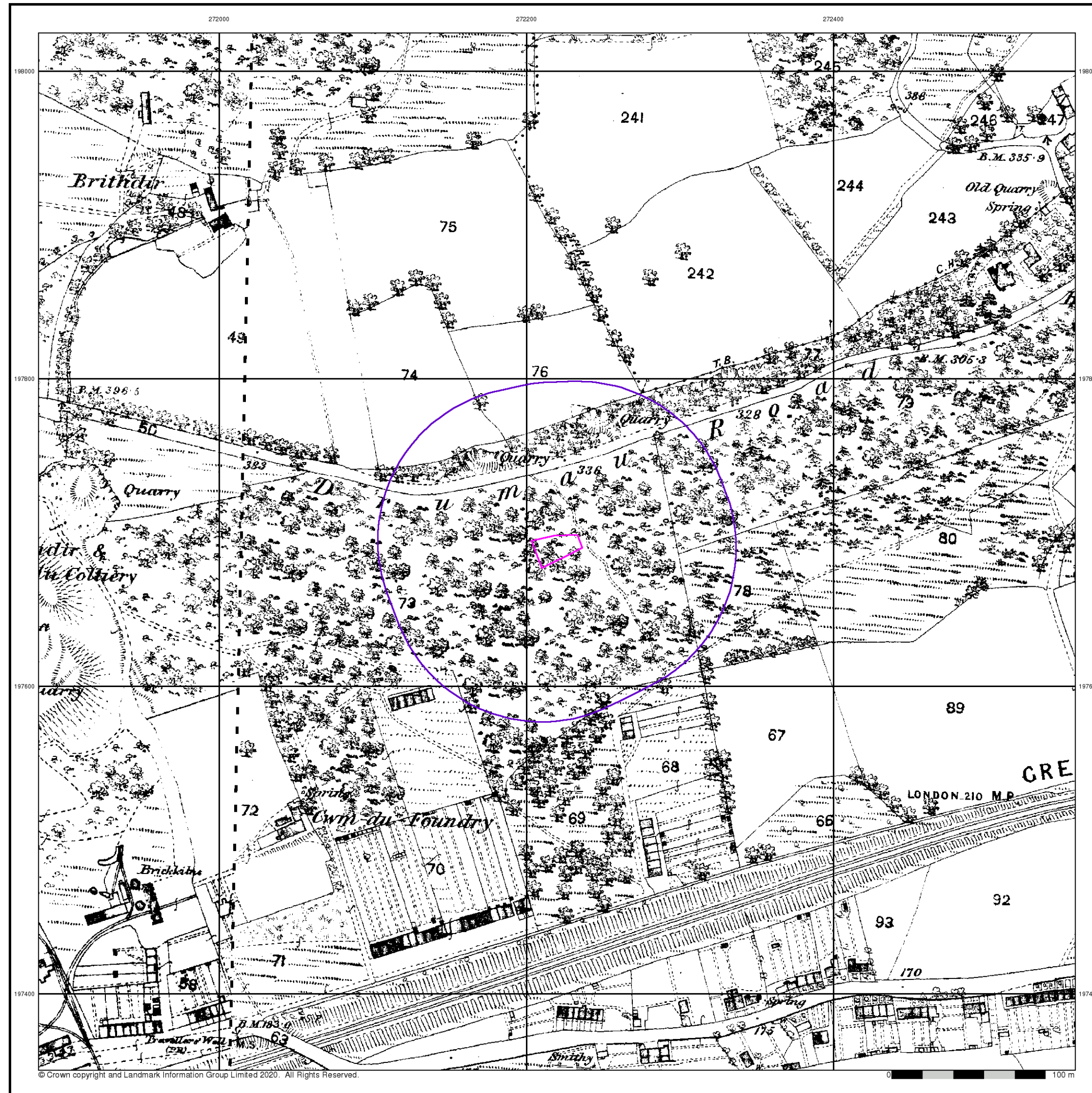
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

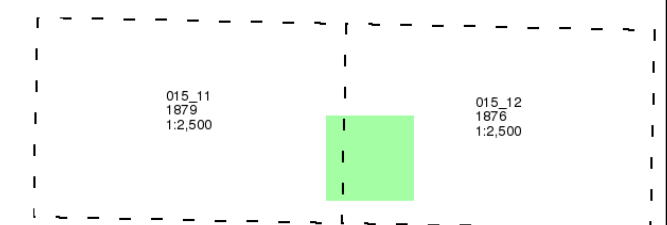
Glamorganshire

Published 1876 - 1879

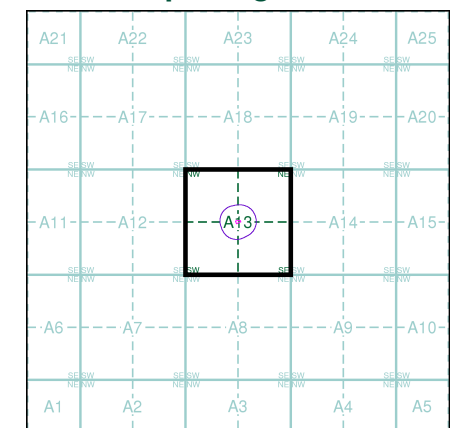
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

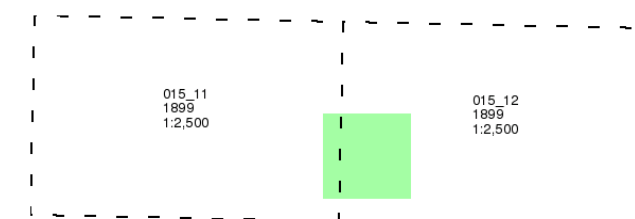
Glamorganshire

Published 1899

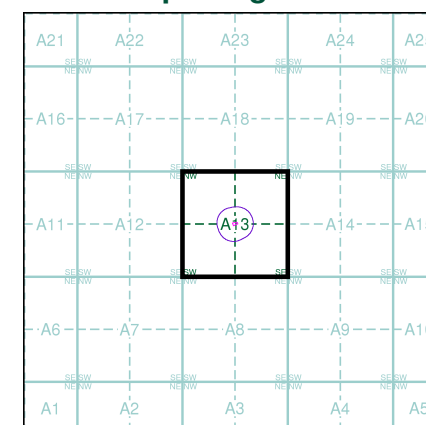
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

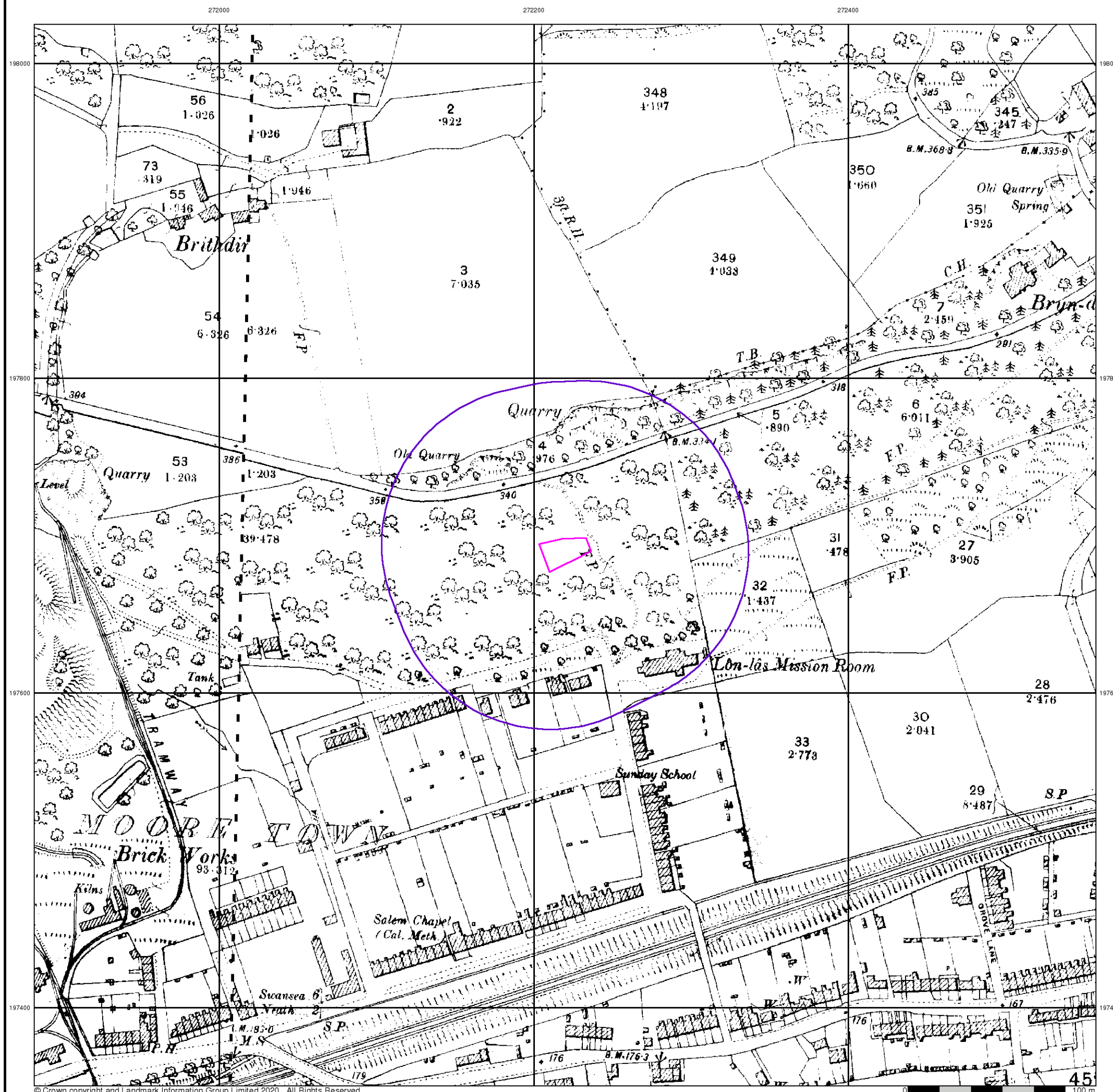
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

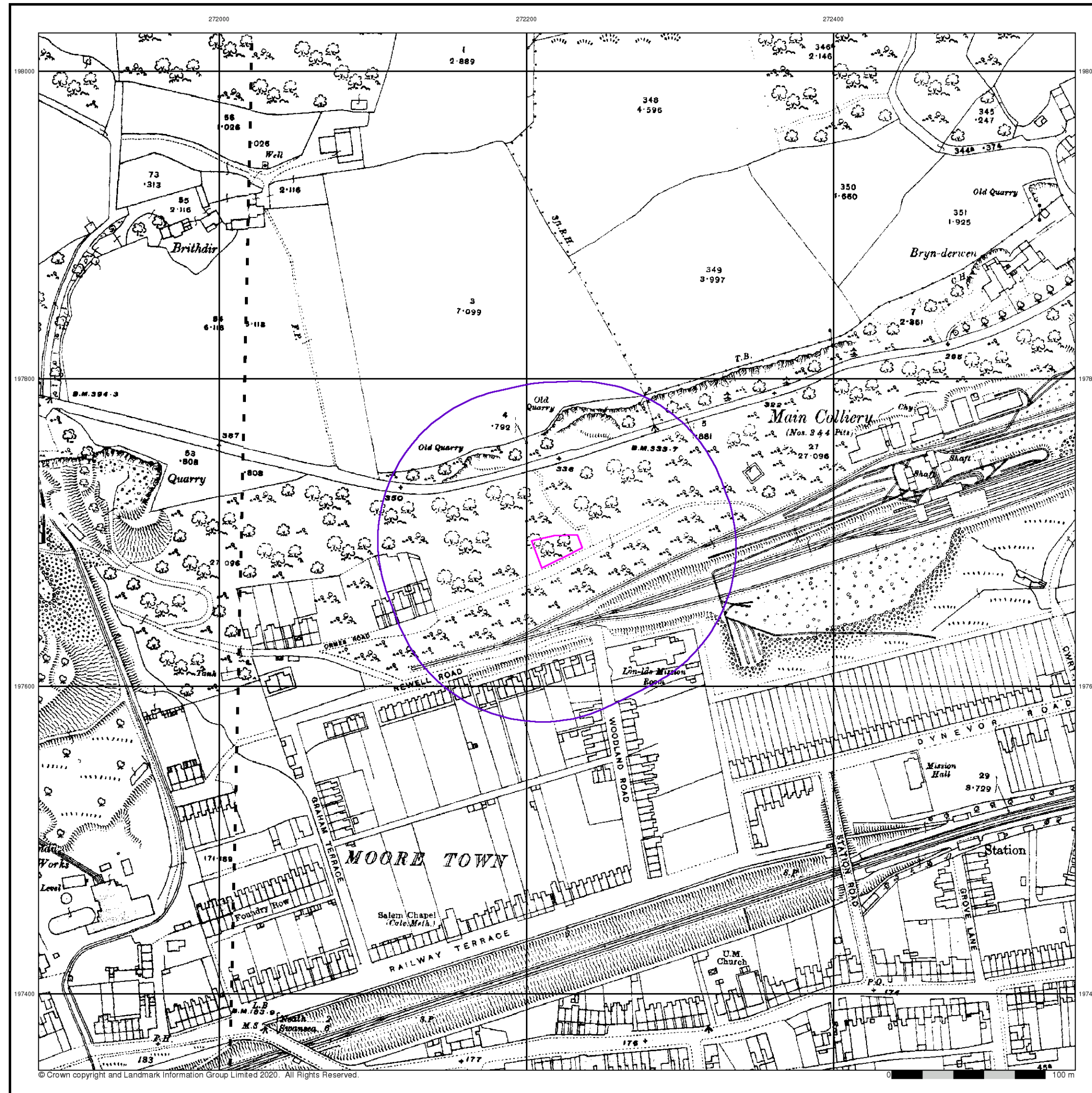
Site Details

24, Ormes Road, NEATH, SA10 6SY

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk





Geotechnical & Geoenvironmental Specialists

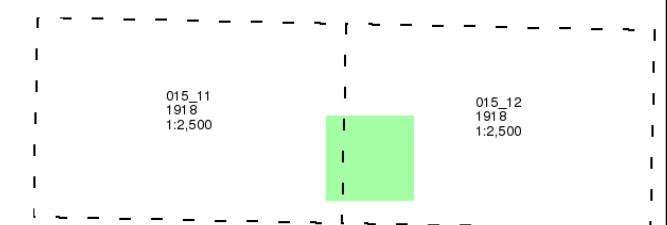
Glamorganshire

Published 1918

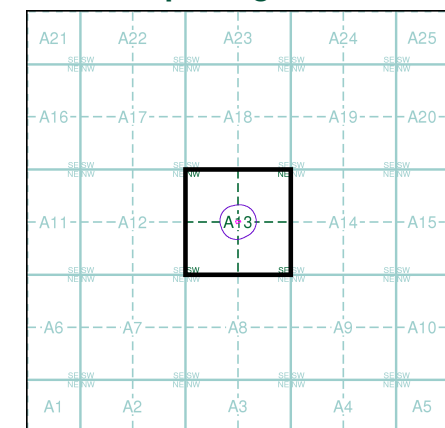
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

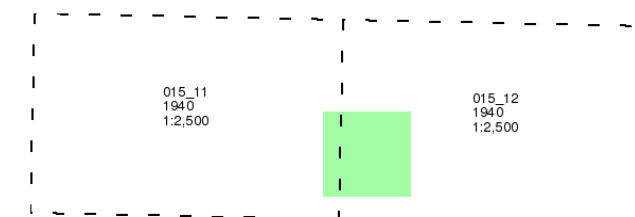
Glamorganshire

Published 1940

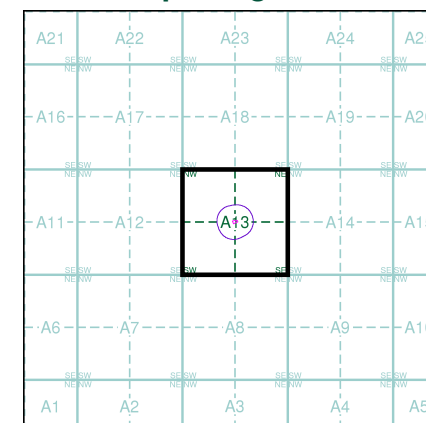
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

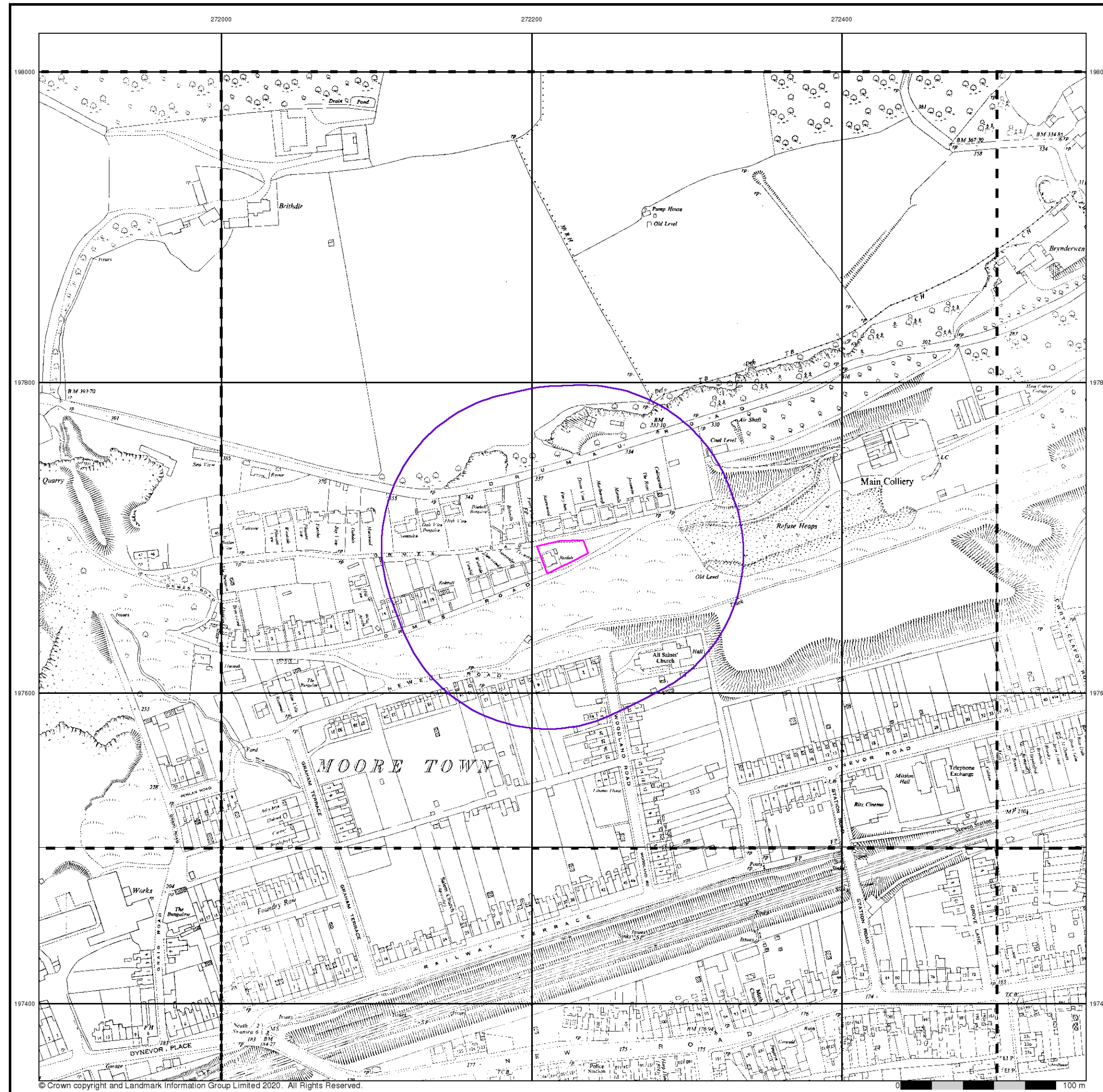
Site Details

24, Ormes Road, NEATH, SA10 6SY

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk





Geotechnical & Geoenvironmental Specialists

Ordnance Survey Plan

Published 1951 - 1957

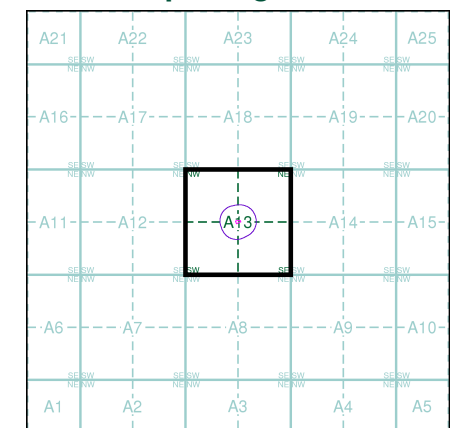
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SS7197NE 1957 1:1,250	SS7297NW 1951 1:1,250	SS7297NE 1951 1:1,250
SS7197SE 1957 1:1,250	SS7297SW 1951 1:1,250	SS7297SE 1951 1:1,250

Historical Map - Segment A13



Order Details

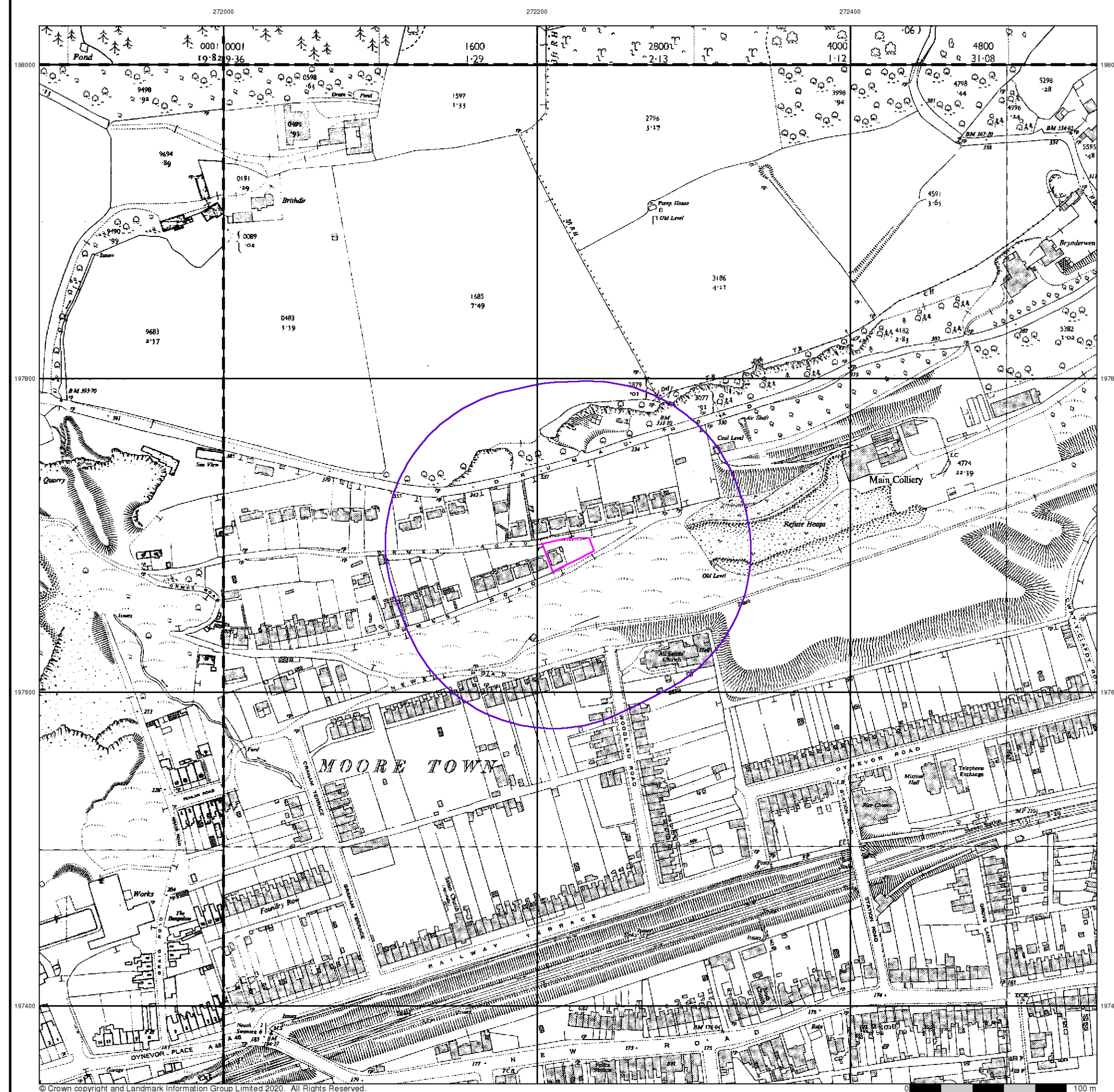
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Ordnance Survey Plan

Published 1952 - 1964

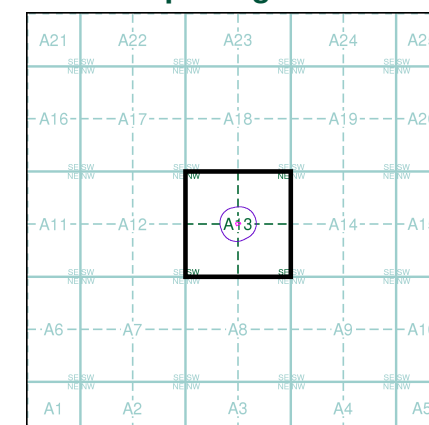
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SS7198 1962 12,500	SS7298 1964 12,500
SS7197 1958 12,500	SS7297 1952 12,500

Historical Map - Segment A13



Order Details

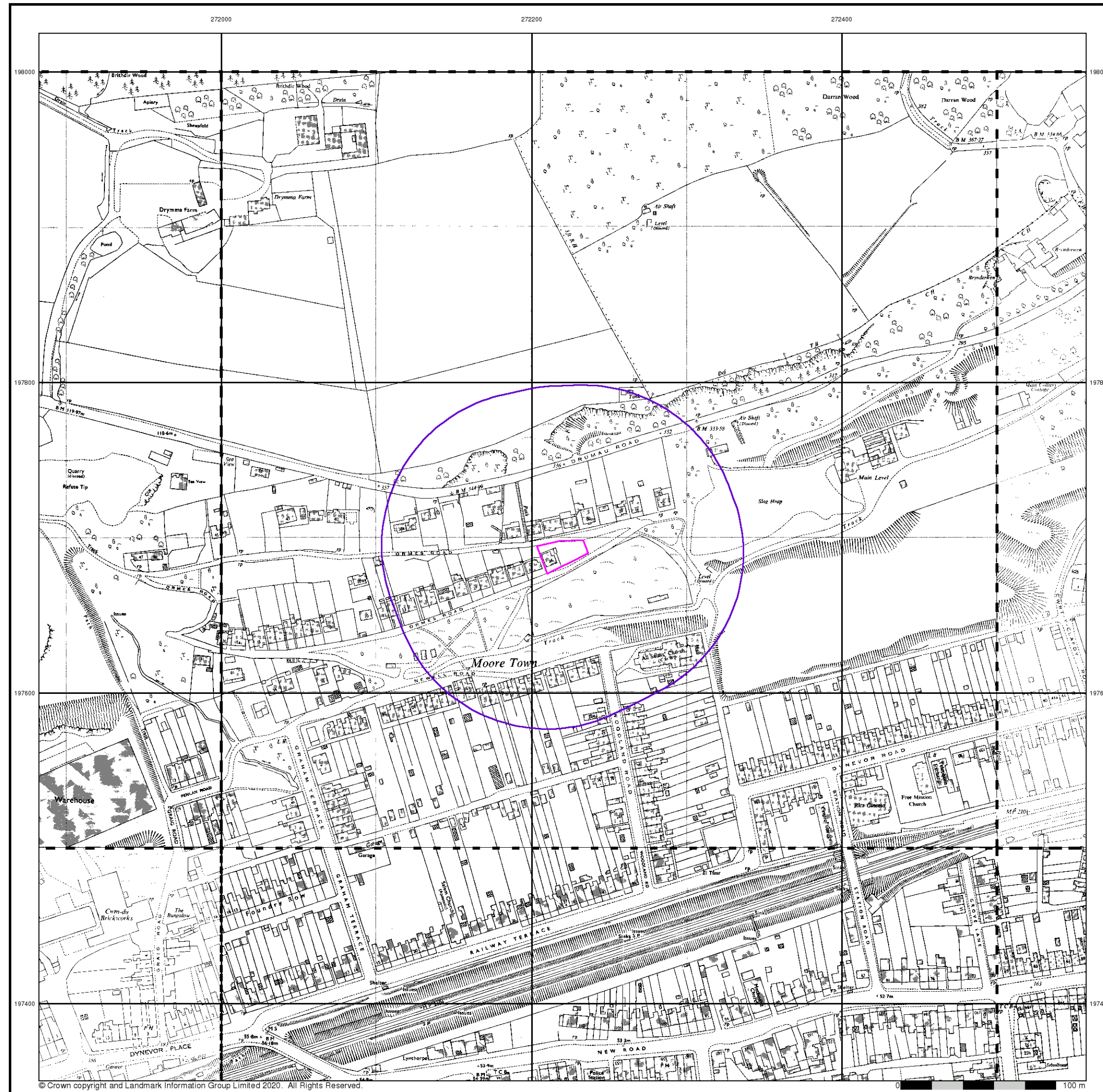
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Ordnance Survey Plan

Published 1963 - 1971

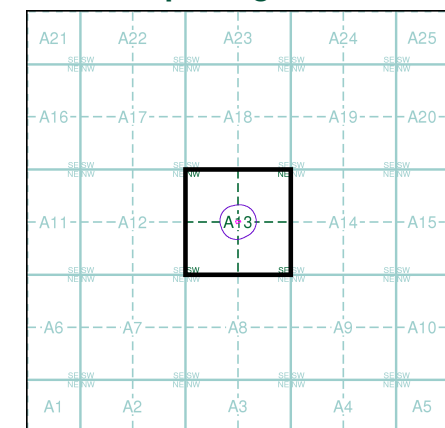
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SS7197NE 1971 1:1,250	SS7297NW 1968 1:1,250	SS7297NE 1963 1:1,250
SS7197SE 1965 1:1,250	SS7297SW 1970 1:1,250	SS7297SE 1963 1:1,250

Historical Map - Segment A13



Order Details

Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

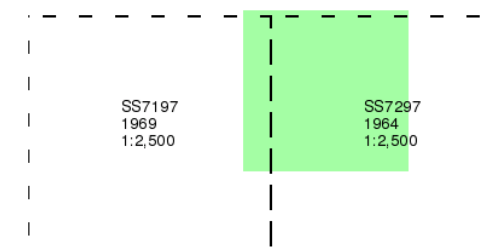
Ordnance Survey Plan

Published 1964 - 1969

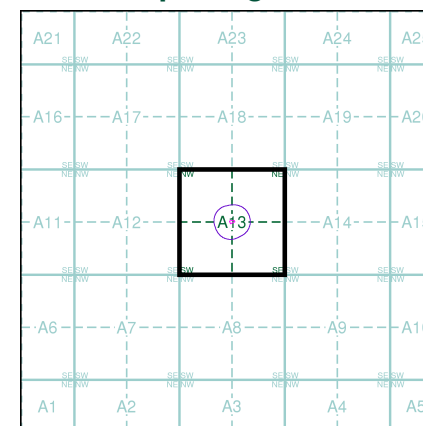
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

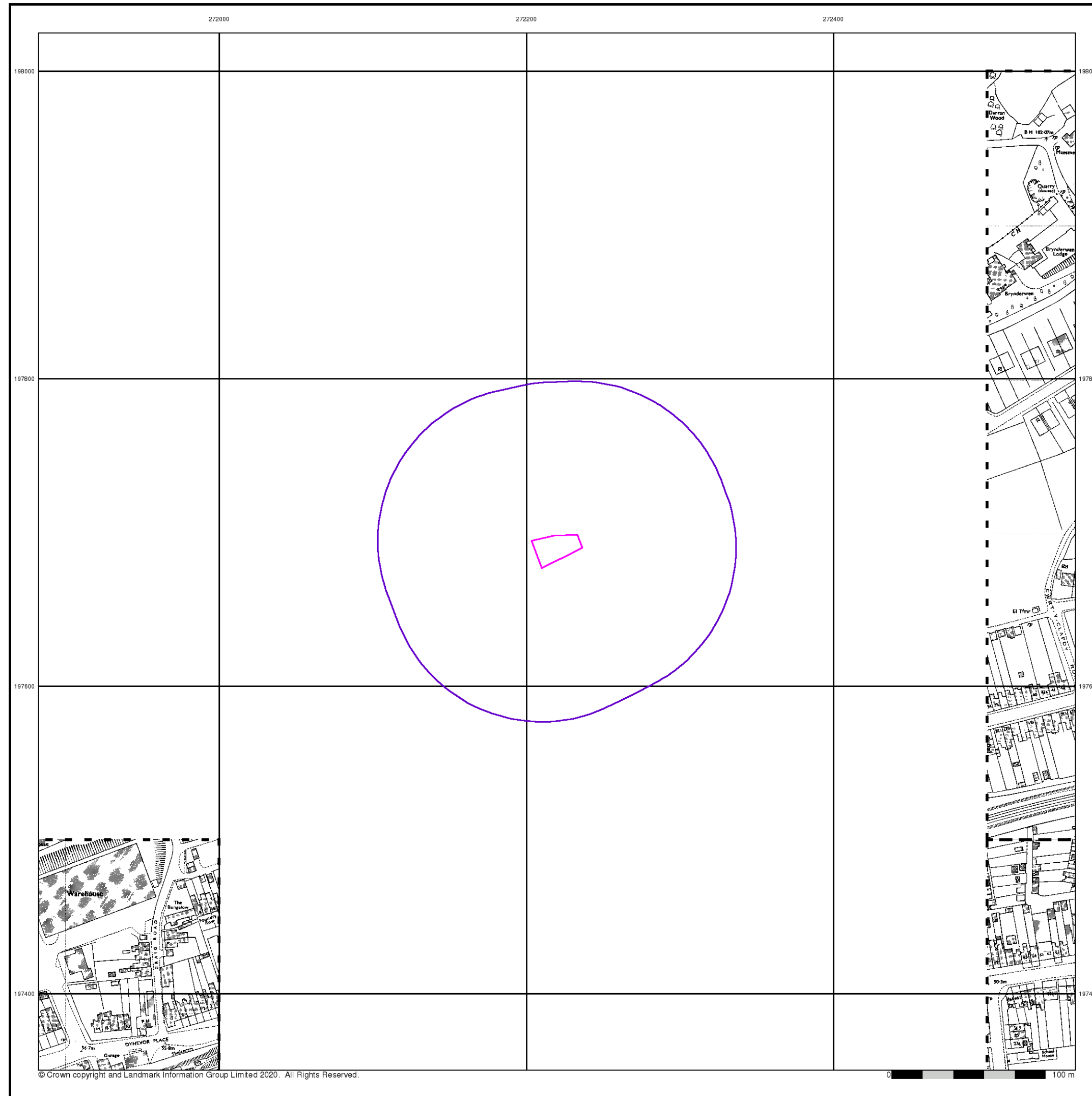
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

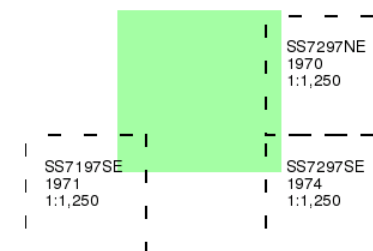
Ordnance Survey Plan

Published 1970 - 1974

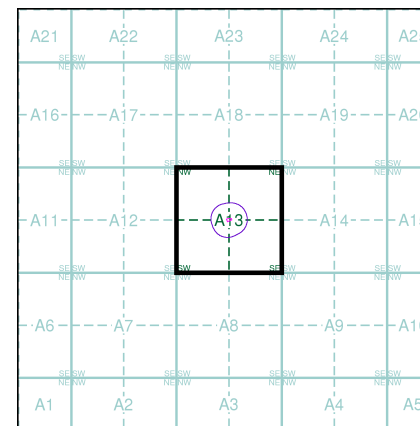
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

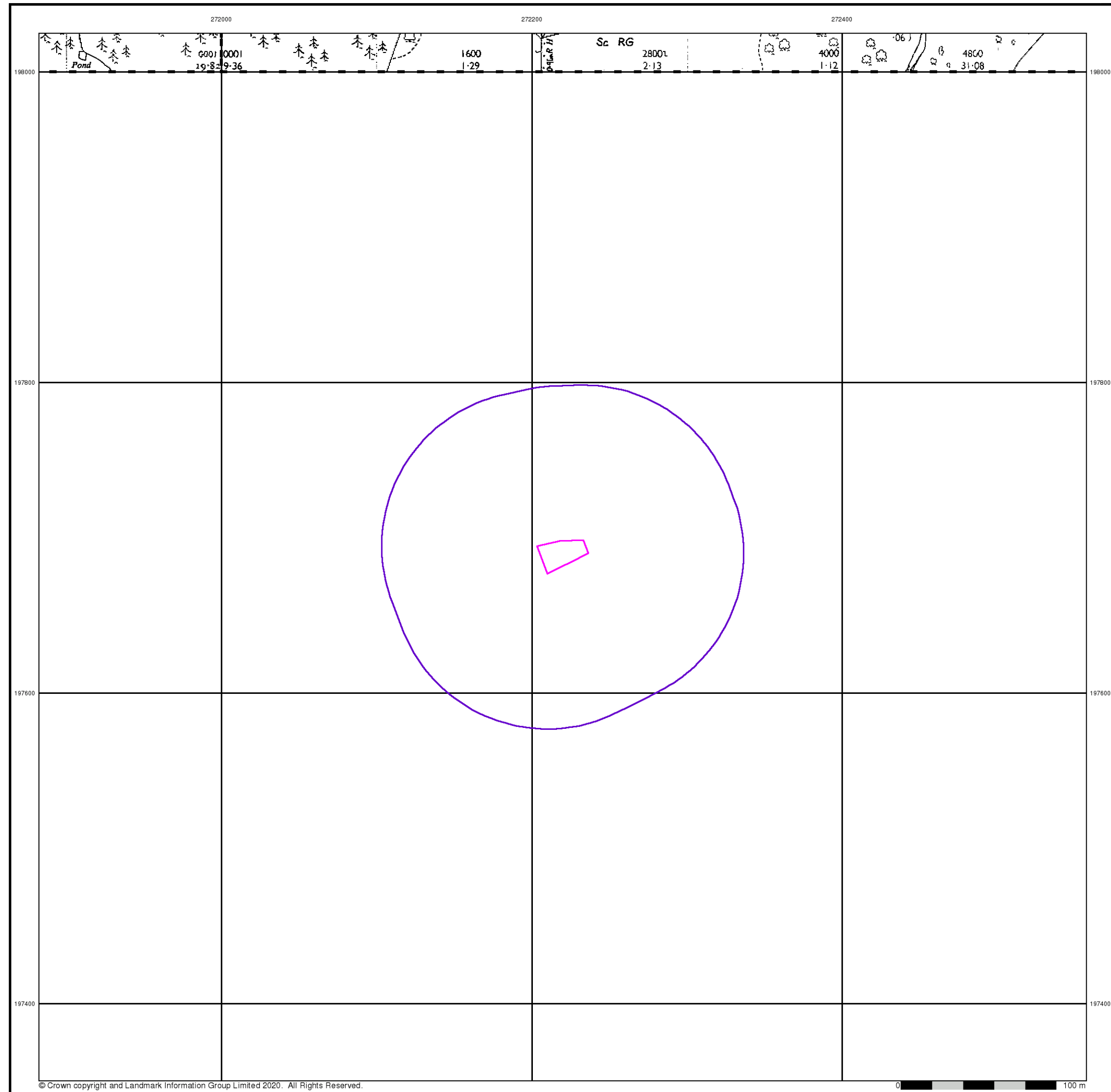
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk





Geotechnical & Geoenvironmental Specialists

Additional SIMs

Published 1984

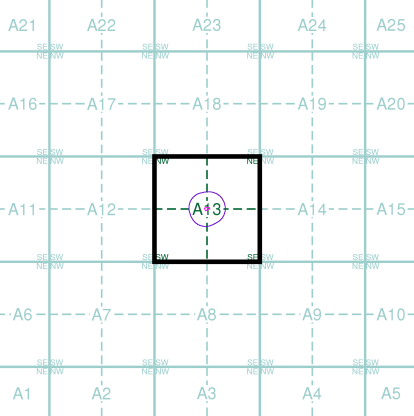
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SS7198 1984 1:2,500	SS7298 1984 1:2,500
---------------------------	---------------------------

Historical Map - Segment A13



Order Details

Order Number:	254977540_1_1
Customer Ref:	16299-MW
National Grid Reference:	272220, 197690
Slice:	A
Site Area (Ha):	0.05
Search Buffer (m):	100

Site Details

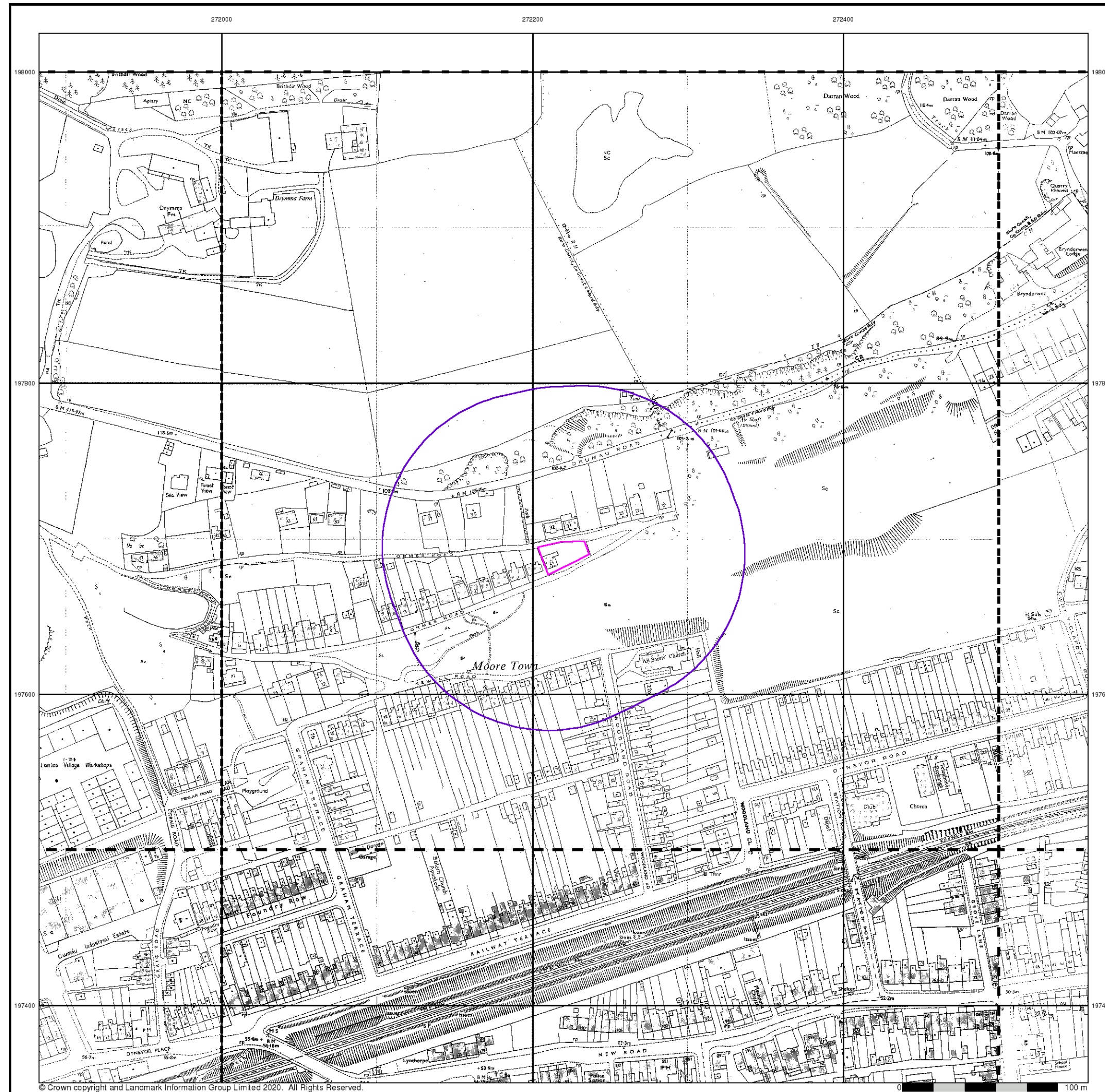
24, Ormes Road, NEATH, SA10 6SY



INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

A Landmark Information Group Service v50.0 01-Sep-2020 Page 11 of 21



Geotechnical & Geoenvironmental Specialists

Additional SIMs

Published 1984 - 1989

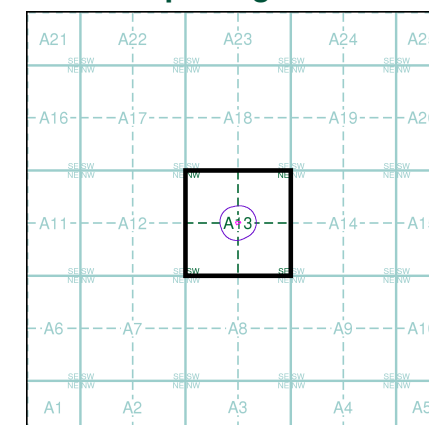
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SS7197NE 1986 1:1,250	SS7297NW 1989 1:1,250	SS7297NE 1984 1:1,250
SS7197SE 1989 1:1,250	SS7297SW 1989 1:1,250	SS7297SE 1985 1:1,250

Historical Map - Segment A13



Order Details

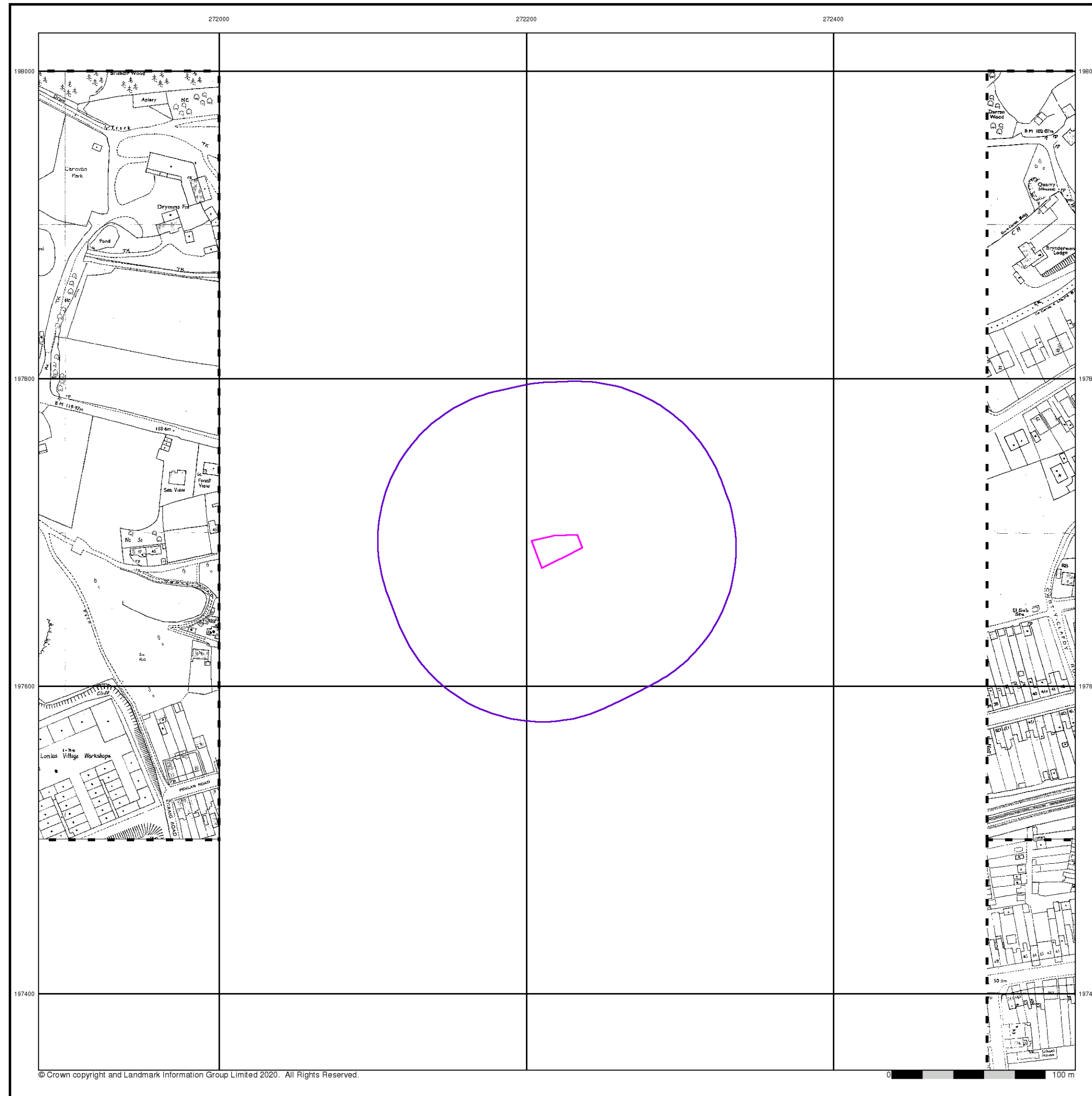
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Additional SIMs

Published 1989

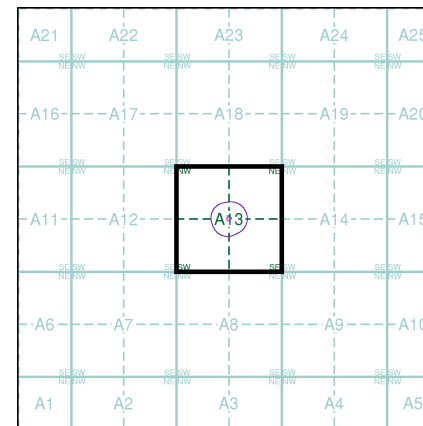
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SS7197NE 1989 1:1,250		SS7297NE 1989 1:1,250
		SS7297SE 1989 1:1,250

Historical Map - Segment A13



Order Details

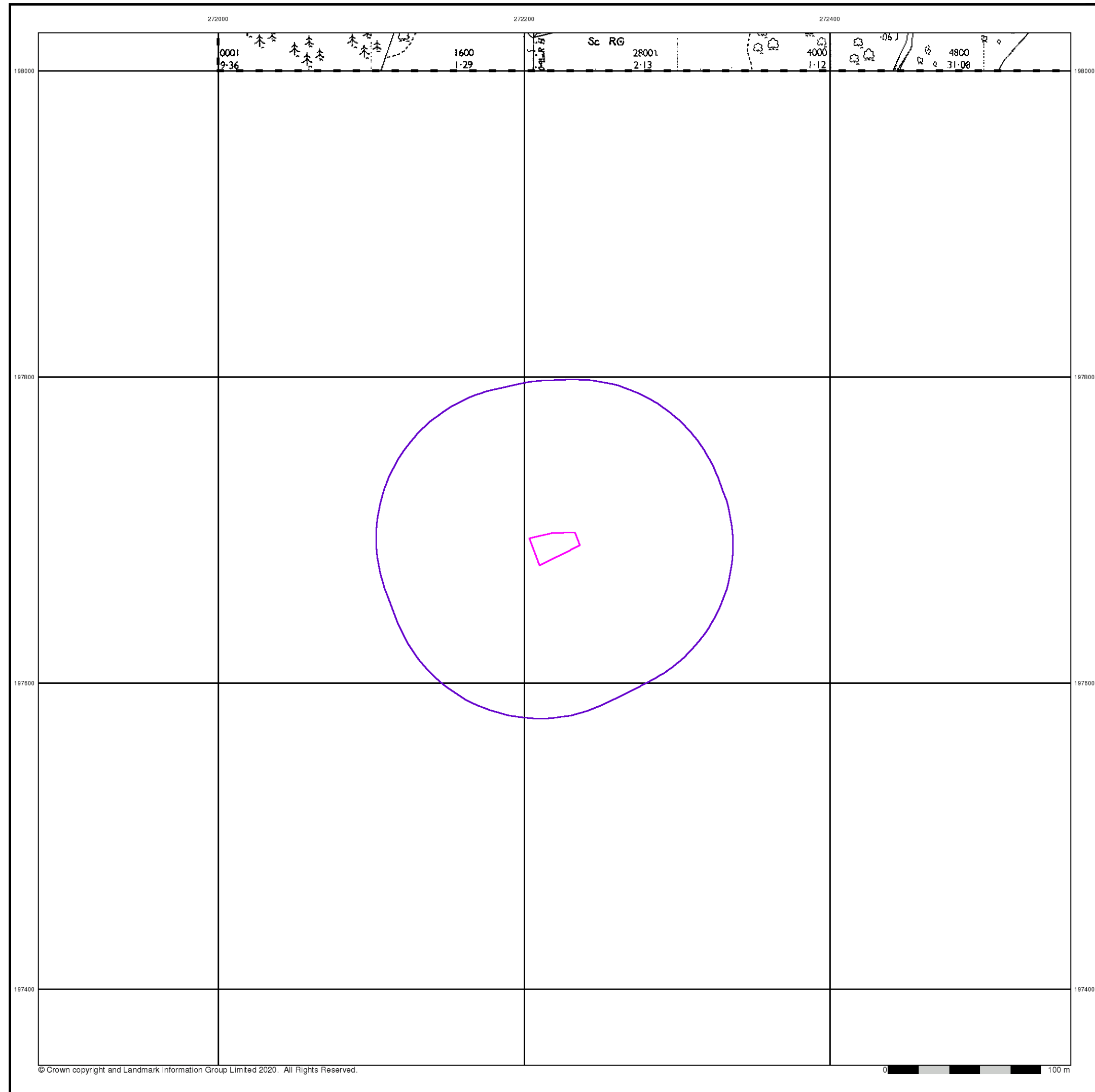
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

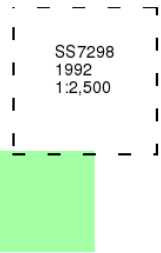
Additional SIMs

Published 1992

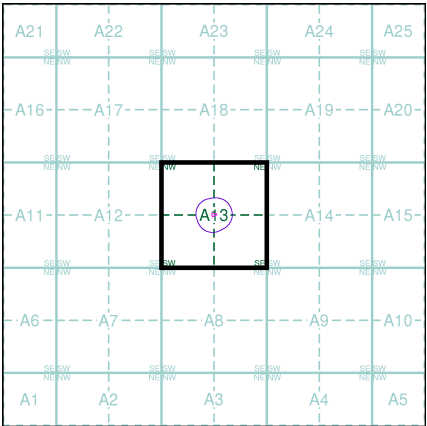
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

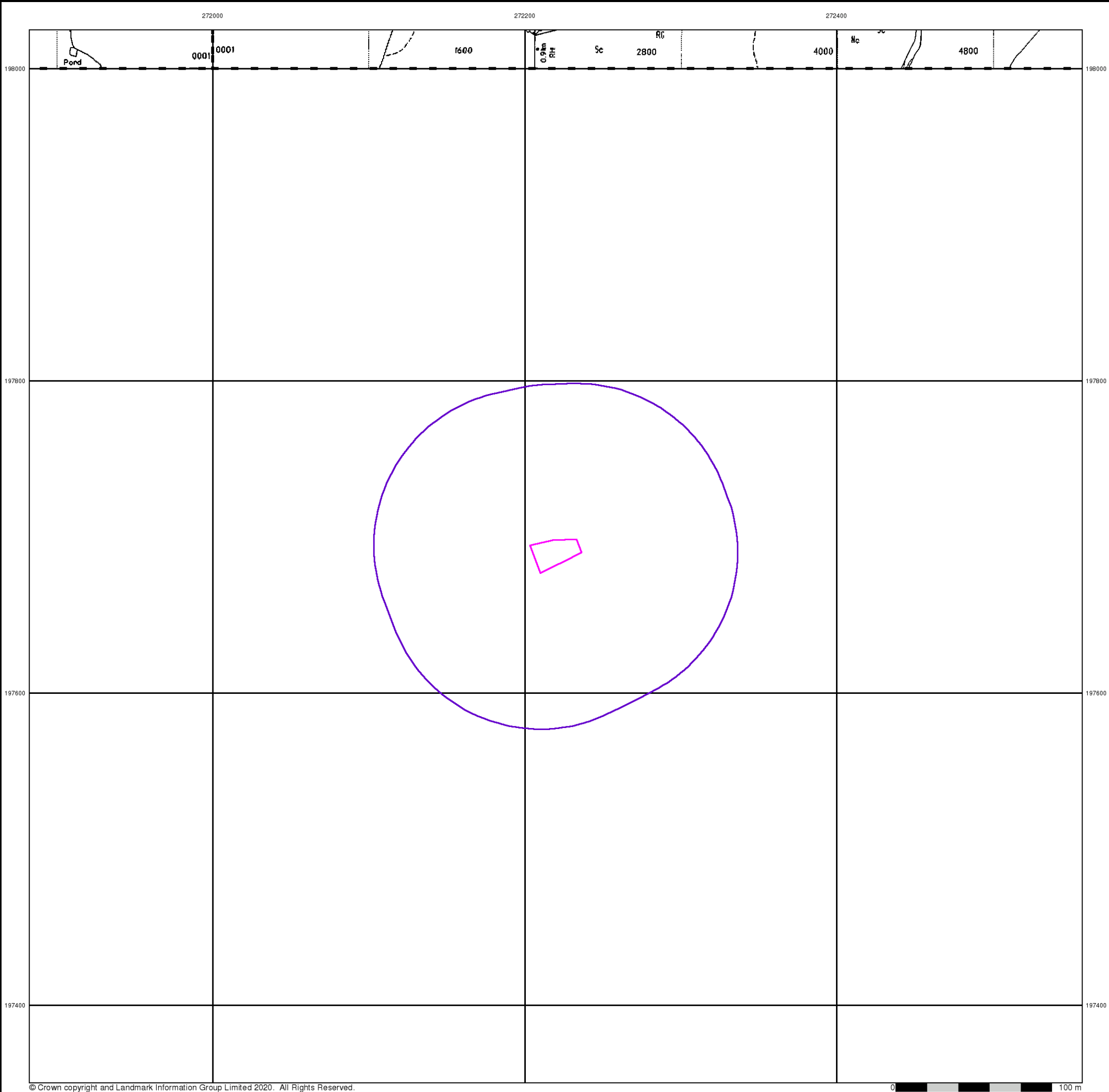
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Large-Scale National Grid Data

Published 1993

Source map scale - 1:2,500

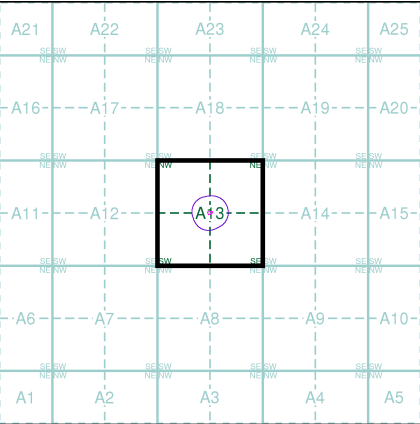
'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SS7198 1993 1:2,500	SS7298 1993 1:2,500
---------------------------	---------------------------



Historical Map - Segment A13



Order Details

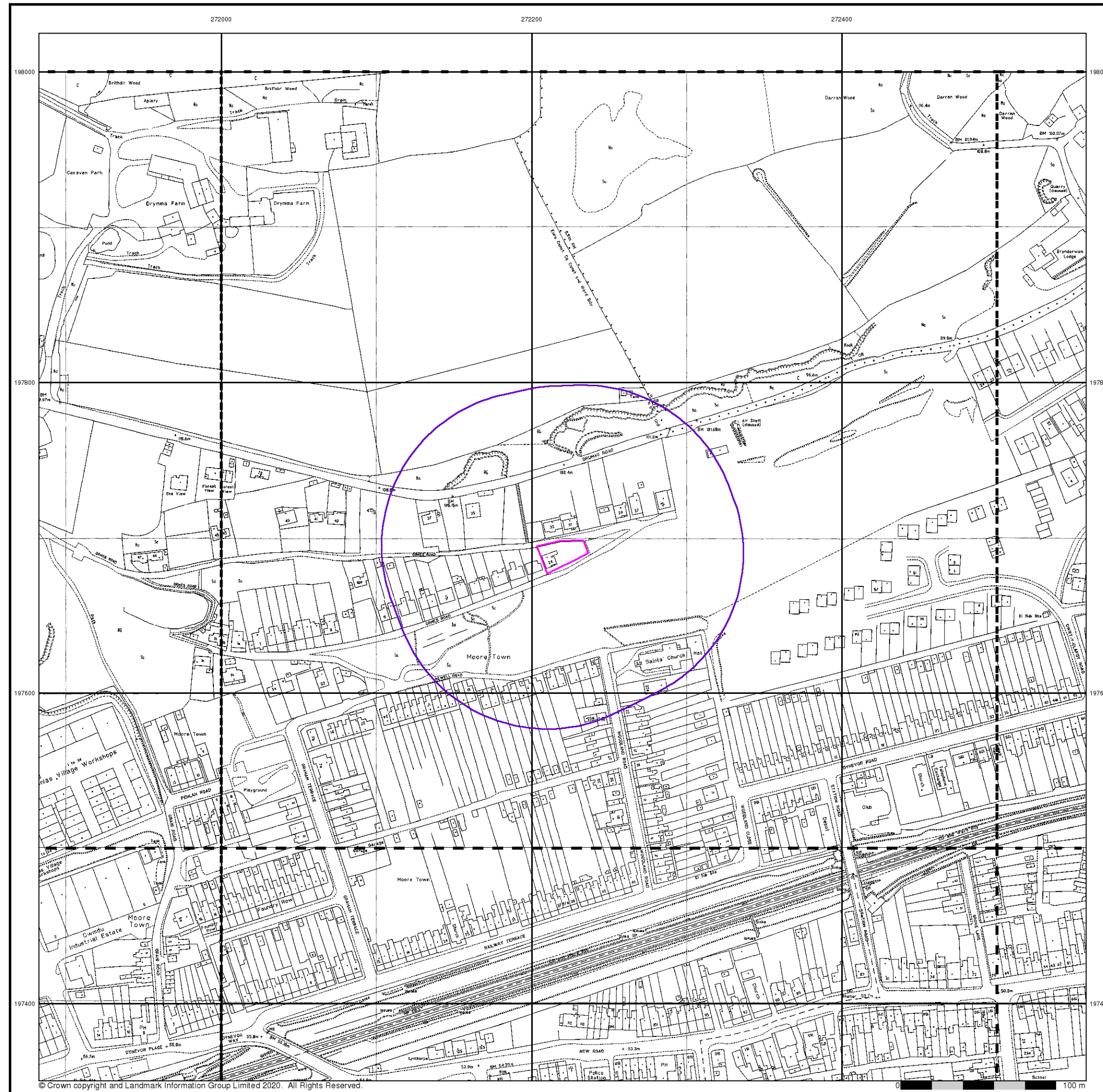
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Large-Scale National Grid Data

Published 1993

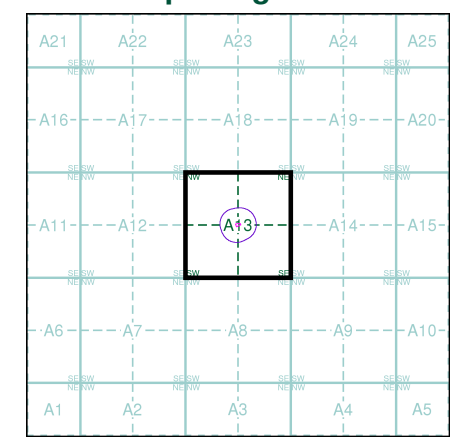
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SS7197NE 1993 1:1,250	SS7297NW 1993 1:1,250	SS7297NE 1993 1:1,250
SS7197SE 1993 1:1,250	SS7297SW 1993 1:1,250	SS7297SE 1993 1:1,250

Historical Map - Segment A13



Order Details

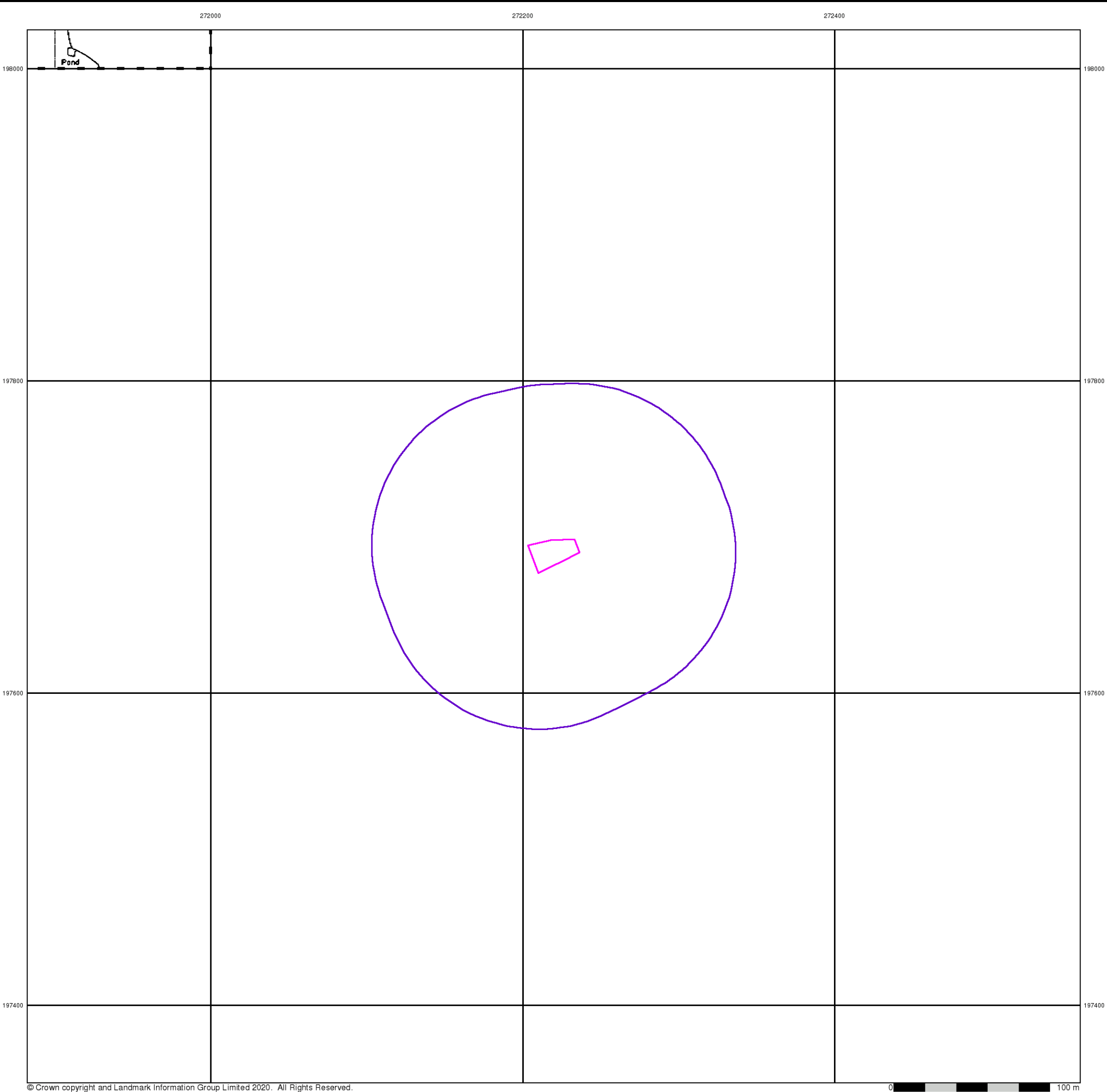
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Large-Scale National Grid Data

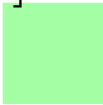
Published 1993

Source map scale - 1:2,500

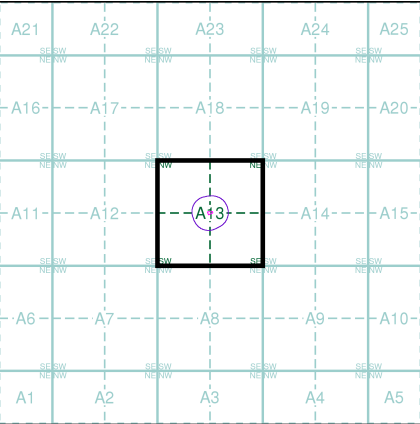
'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SS7198
1993
1:2,500



Historical Map - Segment A13



Order Details

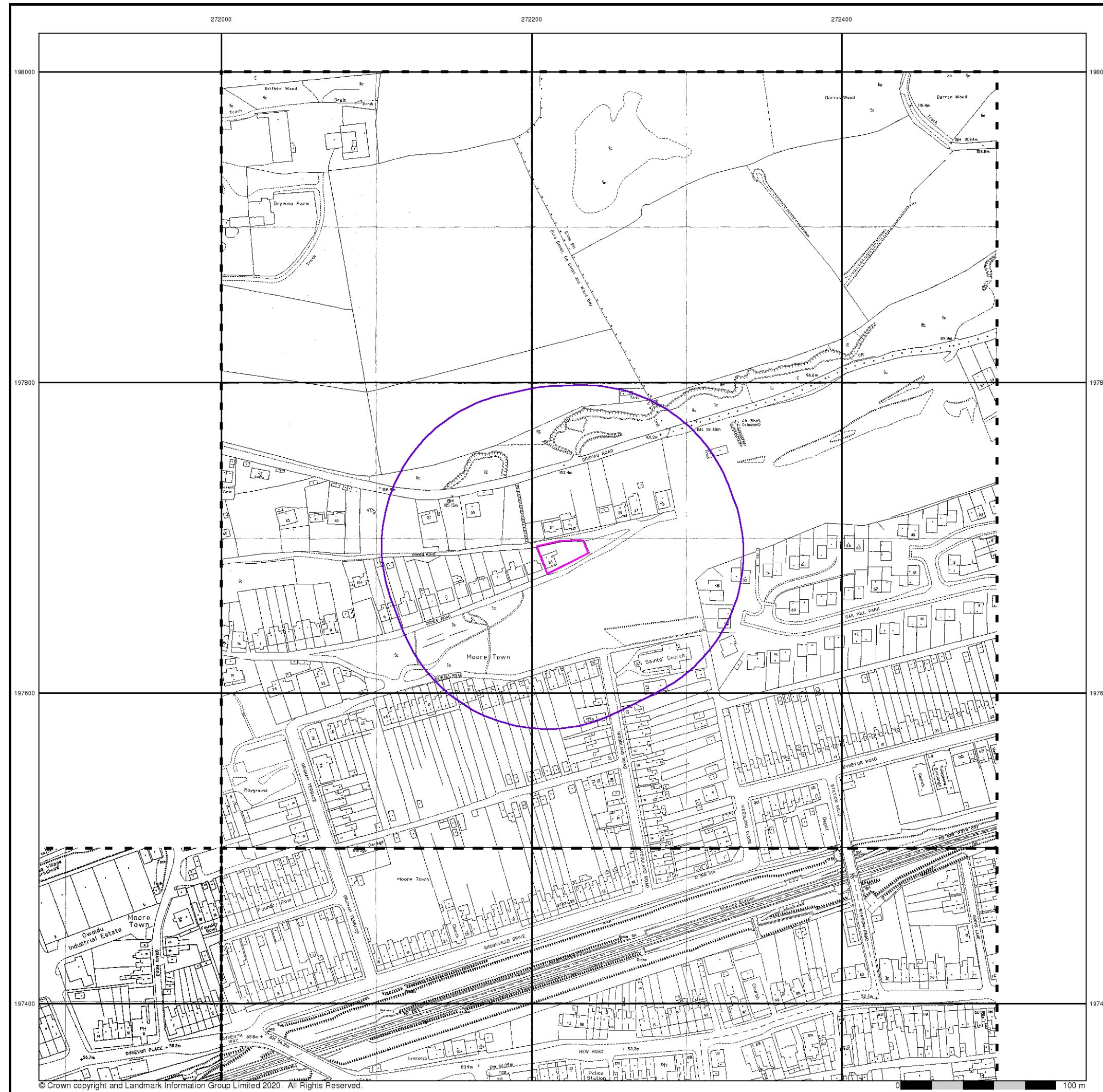
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Large-Scale National Grid Data

Published 1993 - 1995

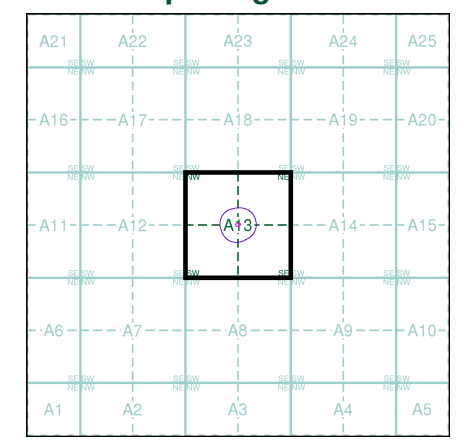
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SS7297NW	
1994	
1:1,250	
SS7197SE	SS7297SW
1993	1995
1:1,250	1:1,250

Historical Map - Segment A13



Order Details

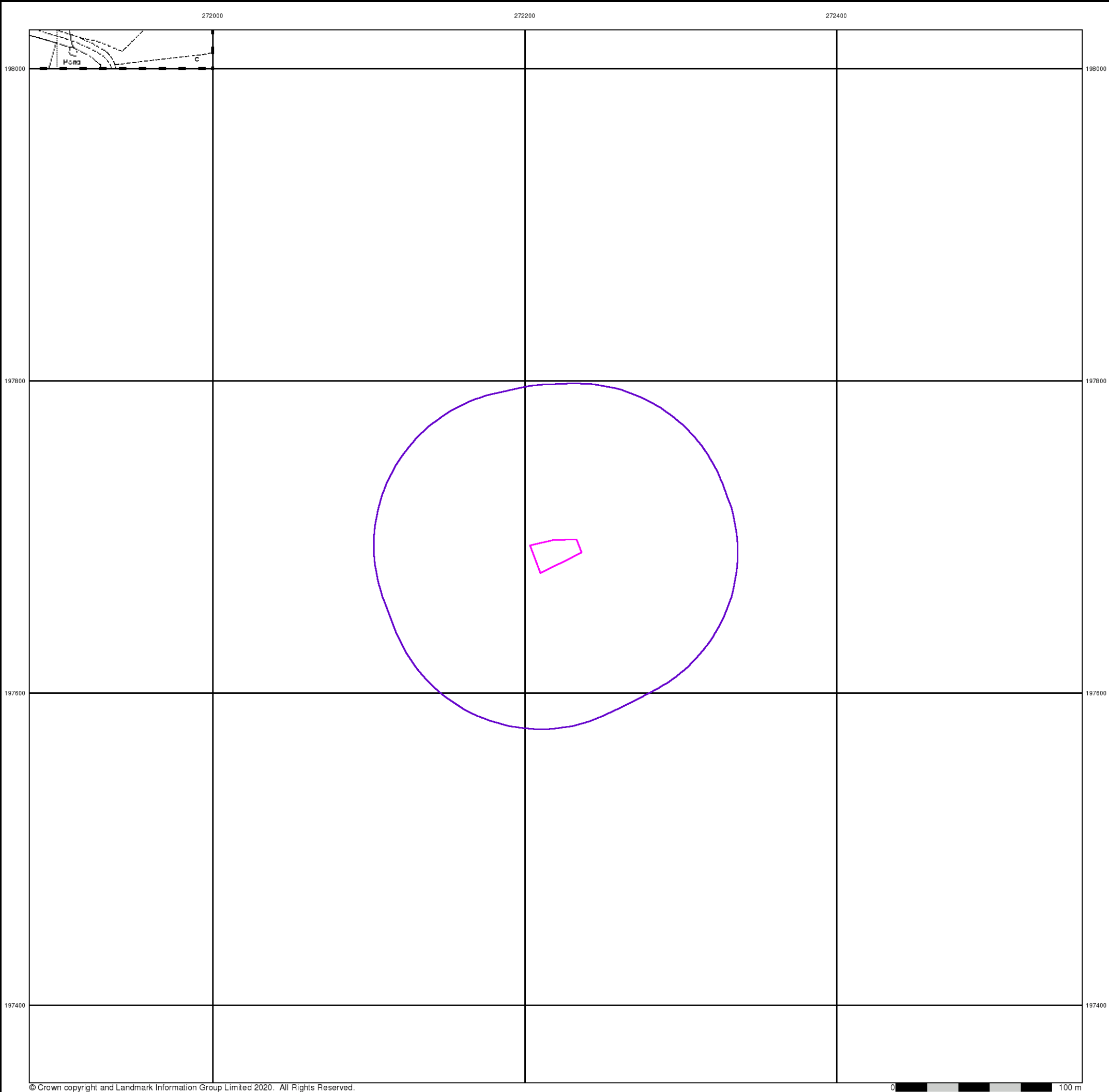
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Large-Scale National Grid Data

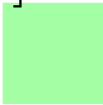
Published 1995

Source map scale - 1:2,500

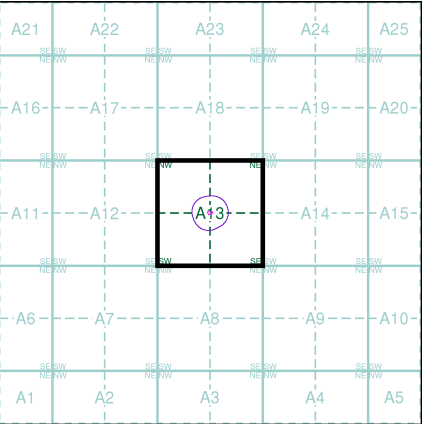
'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SS7198
1995
1:2,500



Historical Map - Segment A13



Order Details

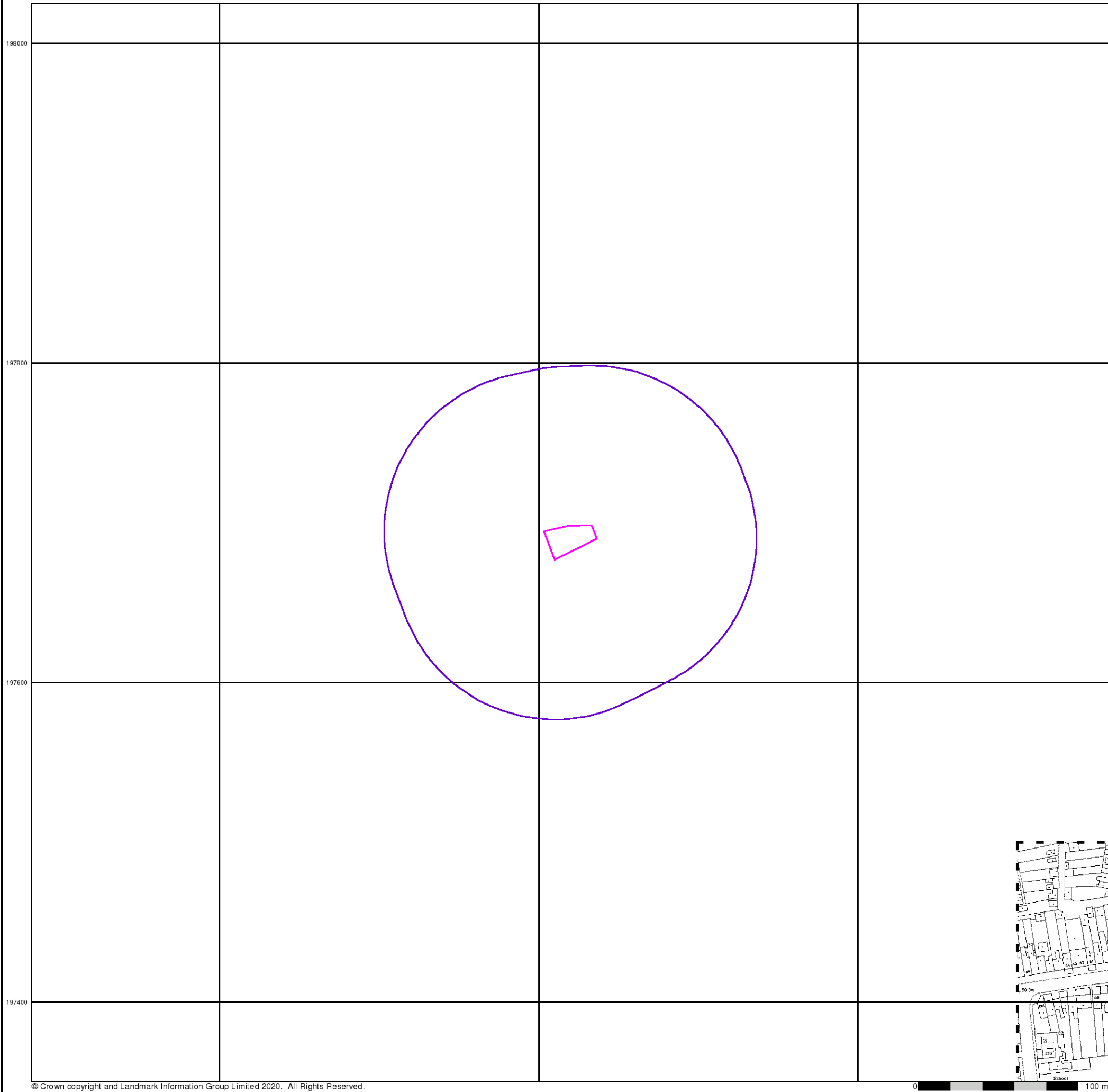
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Crown copyright and Landmark Information Group Limited 2020. All Rights Reserved.

0 100 m



Geotechnical & Geoenvironmental Specialists

Large-Scale National Grid Data

Published 1996

Source map scale - 1:1,250

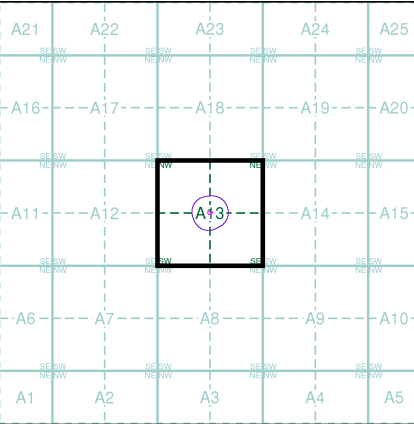
'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



SS7297SE
1996
1:1,250

Historical Map - Segment A13



Order Details

Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



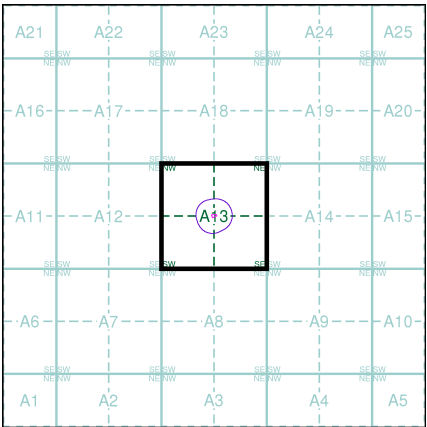
Geotechnical & Geoenvironmental Specialists

Historical Aerial Photography

Published 2000

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A13



Order Details

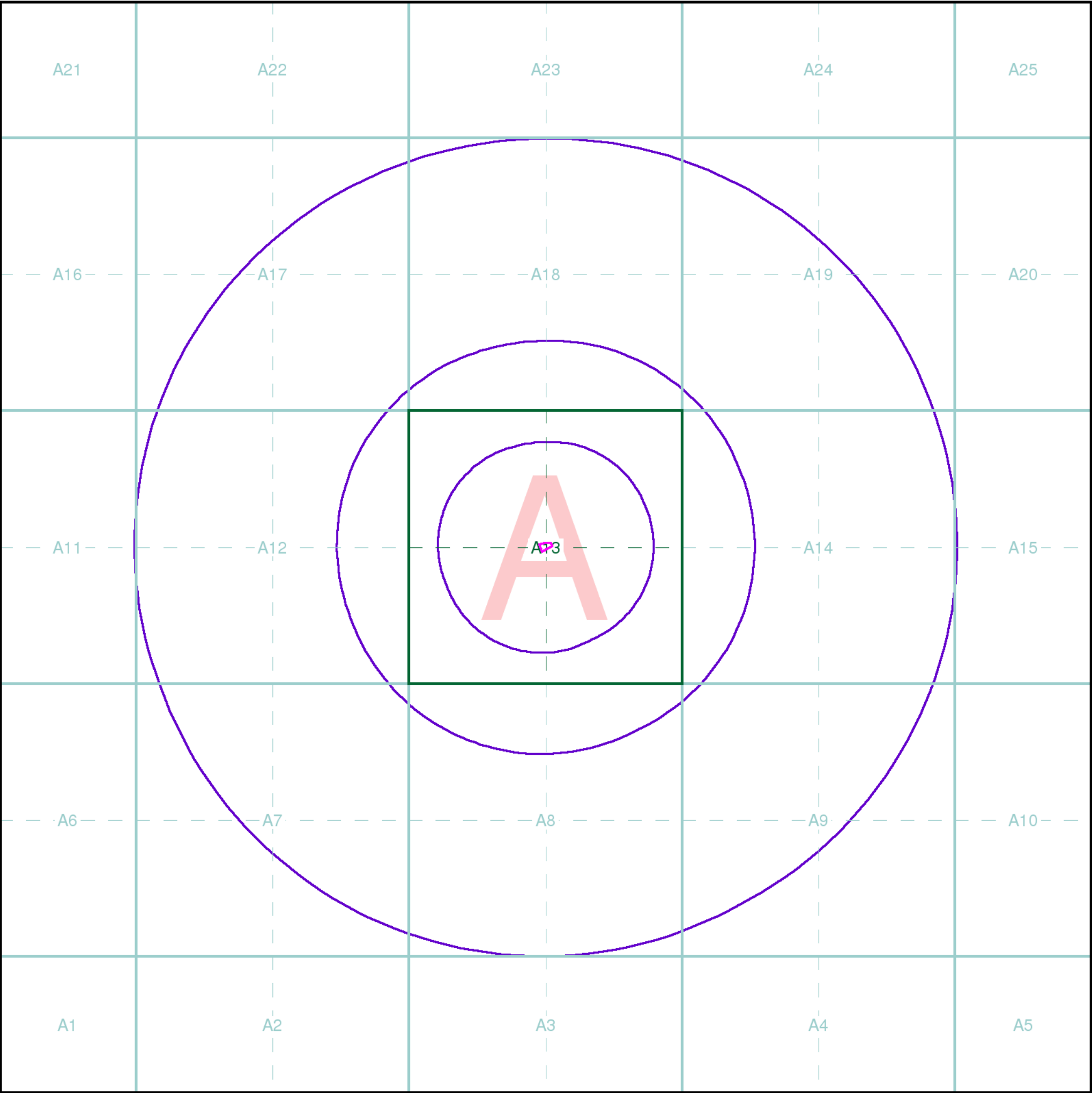
Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Slice: A
Site Area (Ha): 0.05
Search Buffer (m): 100

Site Details

24, Ormes Road, NEATH, SA10 6SY

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice

Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment

A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant

A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:



Envirocheck reports are compiled from 136 different sources of data.

Client Details

Ms N Thomas, Terra Firma (Wales) Ltd, 5 Deryn Court, Wharfdale Road, Pentwyn, Cardiff, CF23 7HB

Order Details

Order Number: 254977540_1_1
Customer Ref: 16299-MW
National Grid Reference: 272220, 197690
Site Area (Ha): 0.05
Search Buffer (m): 1000

Site Details

24, Ormes Road, NEATH, SA10 6SY

Full Terms and Conditions can be found on the following link:
<http://www.landmarkinfo.co.uk/Terms/Show/515>



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

ANNEX C
Risk Assessment Definitions

The contaminated land regime is set out in Part 2A of the Environmental Protection Act (EPA) 1990 and was introduced on the 1st April 2000 in England and 1st July 2001 in Wales. A similar regime was introduced in Scotland on 14th July 2000.

Part 2A was introduced to achieve three overarching objectives:

- (a) To identify and remove unacceptable risks to human health and the environment.
- (b) To seek to ensure that contaminated land is made suitable for its current use.
- (c) To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development.

Under Part 2A the statutory definition of 'contaminated land' is:

"any land which appears to the local authority in whose area it is situated, to be in such a condition, by reason of substances in, on, or under the land, that:

- (a) Significant harm is being caused or there is a significant possibility of such harm being caused; or
- (b) Pollution of controlled waters is being, or is likely to be, caused."

Under Part 2A, for land to be classified as 'Contaminated Land' there must be one or more contaminant, pathway, receptor linkages, known as the '**Pollutant Linkage**'. A pollutant linkage requires three essential elements:

- (a) A **CONTAMINANT** (SOURCE) – a substance that is in, on or under the land and has the potential to cause harm or to cause pollution of controlled waters.
- (b) A **RECEPTOR** – something which could be adversely affected by a contaminant.
- (c) A **PATHWAY** – a route by which a receptor is or might be exposed to or affected by a contaminant.

The term 'Risk' is widely used in different contexts and situations, but a prescriptive definition is given by the Guidelines for Environmental Risk Assessment and Management (DEFRA *et al*, 2000):

'Risk is a combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence'.

Model Procedures for the Management of Land Contamination – Contamination Land Report 11 (2004) defines a 'Hazard' as

'a property or situation that in particular circumstances could lead to harm'.

A framework for qualitative risk assessment is provided in CIRIA publication C552 Contaminated Land Risk Assessment – A Guide to Good Practice (2001). The method requires an assessment of the magnitude of the probability of the risk occurring and the magnitude of the potential consequence. Classifications of consequences and probability, levels and descriptions of risk have been devised from the above publication and are defined in the following sections.

Classification of Consequence

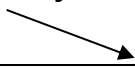
Table A Classification of Consequence	
Classification	Definition
Severe	• Short term (acute) risk to human health likely to result in significant harm • Short term risk to controlled waters • Catastrophic damage to buildings/structures • Short term risk to an ecosystem or organism within the particular ecosystem
Medium	• Chronic damage to human health (long term risk) • Pollution of a sensitive water resource • A significant change in an ecosystem or organism within the ecosystem
Mild	• Pollution of non-sensitive water resources • Significant damage to buildings/structures • Damage to sensitive buildings/structure/services or the environment
Negligible	• Harm (not necessarily significant) which may result in financial loss • Non-permanent health effects to humans (easily prevented by PPE for example) • Easily repairable effects of structural (building) damage

Classification of Probability

Table B Classification of Probability	
Classification	Definition
High Likelihood	• There is a complete pollution linkage and an event appears very likely to occur in the short term and is inevitable in the long term. • Evidence of harm to the receptor
Likely	• There is a complete pollution linkage which means that it is probable that an event will occur • The event is not inevitable but possible in short term and likely in the long term
Low Likelihood	• There is a complete pollution linkage and circumstances are possible under which an event could occur • It is not certain that an event will occur in the long term, and it is less likely to occur in the short term
Unlikely	• There is a complete pollution linkage but circumstances are such that it is improbable that an event would occur even in the long term

Risk Assessment Matrix

By comparing the consequences of a risk and the probability of the risk of a pollution linkage, the likely risk category can be determined as shown in **Table C** below.

Table C Risk Assessment Matrix					
Increasing acceptability 		Consequence			
		Severe	Medium	Mild	Negligible
Probability	High Likelihood	High risk	High risk	Medium risk	Low risk
	Likely	High risk	Medium risk	Low risk	Near zero risk
	Low Likelihood	Medium risk	Low risk	Low risk	Near zero risk
	Unlikely	Low risk	Near zero risk	Near zero risk	Near zero risk

Description of Risks and Likely Actions

High Risk

There is a high probability that severe harm could arise to a receptor, or there is evidence that a receptor is currently being severely harmed. The risk if realised is likely to result in liability, and urgent investigation or remediation will be required.

Medium Risk

It is probable that harm will arise to a receptor. However, it is relatively unlikely that such harm would be severe, or if harm does occur the harm is likely to be relatively mild. Investigation will be required to determine the liability, and some remedial works may be required in the long term.

Low Risk

It is possible that harm may arise to a receptor, but it is likely that the harm would be mild.

Near Zero Risk

There is a very low risk of harm to the receptor. In the event of harm being realised the harm is not likely to be severe.

**ANNEX D
Trial Pit Logs**



Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Terra Firma (Wales) Limited
5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Trial Pit No:
HDTF01
Sheet 1 of 1

Project Name: 24 Ormes Road

Project No:
16299

Co-ords: -
Level:

Date:
04/09/2020

Location: Skewen, Neath

Dimensions: 0.40
Depth 0.60

Scale:
1:25
Logged:
MW

Client: Ms Jill Howells

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.01	ES		0.05			MADE GROUND. Grey and brown clayey sandy GRAVEL of angular and tabular sandstone with occasional limestone, brick, and concrete. Occasional plastic. Moist. Grey and brown clayey sandy GRAVEL of angular and tabular sandstone. Moist.
				0.60			End of Pit at 0.600m
							1
							2
							3
							4
							5

Stability: Stable

Remarks:



Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Terra Firma (Wales) Limited
5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Trial Pit No:
HDTP02
Sheet 1 of 1

Project Name: 24 Ormes Road

Project No:
16299

Co-ords: -
Level:

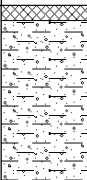
Date:
04/09/2020

Location: Skewen, Neath

Dimensions:
Depth 0.60
0.40 0.40

Scale:
1:25
Logged:
MW

Client: Ms Jill Howells

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.01	ES		0.05			MADE GROUND. Grey and brown clayey sandy GRAVEL of angular and tabular sandstone with occasional limestone, brick, and concrete. Occasional plastic. Moist. Firm brownish grey mottled brownish orange slightly sandy gravelly CLAY with medium cobble content. Gravel and cobbles are angular and tabular sandstone. Moist.
				0.60			End of Pit at 0.600m
							1
							2
							3
							4
							5

Stability: Stable

Remarks:



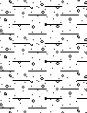
Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Terra Firma (Wales) Limited
5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Trial Pit No:
HDTP03
Sheet 1 of 1

Project Name: 24 Ormes Road
Project No: 16299
Co-ords: -
Level: -
Date: 04/09/2020

Location: Skewen, Neath
Client: Ms Jill Howells
Dimensions: 0.40
Depth 0.60
Scale: 1:25
Logged: -

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.20			0.20			MADE GROUND. Dark brown organic-rich clayey slightly gravelly SAND with some fine roots and rootlets. Gravel is angular sandstone, mudstone and concrete.
	0.60	ES		0.60			Firm brownish orange mottled grey slightly sandy slightly gravelly CLAY. Gravel is angular sandstone. Moist.
							End of Pit at 0.600m
							1
							2
							3
							4
							5

Stability: Stable

Remarks:

ANNEX E
Laboratory Soil Chemical Test Results



Final Report

Report No.:	20-23880-1		
Initial Date of Issue:	14-Sep-2020		
Client	Terra Firma (Wales) Ltd		
Client Address:	5 Deryn Court Wharfedale Road Pentwyn Cardiff CF23 7HA		
Contact(s):	michael@terrafirmawales.co.uk		
Project	Skewen		
Quotation No.:	Q18-15369	Date Received:	08-Sep-2020
Order No.:	16299-MW	Date Instructed:	08-Sep-2020
No. of Samples:	4		
Turnaround (Wkdays):	5	Results Due:	14-Sep-2020
Date Approved:	14-Sep-2020		
Approved By:			
Details:	Glynn Harvey, Technical Manager		

Results - Soil

Project: Skewen

Client: Terra Firma (Wales) Ltd	Chemtest Job No.:				20-23880	20-23880	20-23880	20-23880
Quotation No.: Q18-15369	Chemtest Sample ID.:				1060464	1060465	1060466	1060467
	Client Sample ID.:				HDTP01	HDTP02	HDTP03	HDTP04
	Sample Type:				SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.01	0.01	0.6	0.3
	Date Sampled:				07-Sep-2020	07-Sep-2020	07-Sep-2020	07-Sep-2020
	Time Sampled:				12:00	12:00	12:00	12:00
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD				
ACM Type	U	2192		N/A	-	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-	-
Moisture	N	2030	%	0.020	7.7	4.9	17	22
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Sand	Clay	Sand
pH	M	2010		4.0	7.5	8.5	5.9	7.9
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	< 0.40	< 0.40	0.52	< 0.40
Cyanide (Total)	M	2300	mg/kg	0.50	0.50	0.50	0.60	< 0.50
Sulphate (Acid Soluble)	M	2430	%	0.010	0.014	0.011	0.025	0.069
Arsenic	M	2450	mg/kg	1.0	13	7.8	14	83
Cadmium	M	2450	mg/kg	0.10	0.53	0.33	< 0.10	1.8
Chromium	M	2450	mg/kg	1.0	21	24	20	19
Mercury Low Level	M	2450	mg/kg	0.05	0.06	< 0.05	0.05	0.20
Copper	M	2450	mg/kg	0.50	34	41	43	130
Nickel	M	2450	mg/kg	0.50	46	51	15	42
Lead	M	2450	mg/kg	0.50	24	25	19	320
Selenium	M	2450	mg/kg	0.20	0.30	0.28	0.75	1.5
Zinc	M	2450	mg/kg	0.50	100	120	45	230
Chromium (Trivalent)	N	2490	mg/kg	1.0	21	24	20	19
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Skewen

Client: Terra Firma (Wales) Ltd	Chemtest Job No.:				20-23880	20-23880	20-23880	20-23880
Quotation No.: Q18-15369	Chemtest Sample ID.:				1060464	1060465	1060466	1060467
	Client Sample ID.:				HDTP01	HDTP02	HDTP03	HDTP04
	Sample Type:				SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.01	0.01	0.6	0.3
	Date Sampled:				07-Sep-2020	07-Sep-2020	07-Sep-2020	07-Sep-2020
	Time Sampled:				12:00	12:00	12:00	12:00
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD				
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Phenols	M	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30
Organic Matter BS1377	N	2930	%	0.10	0.60	0.80	1.6	4.5

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenzo[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
2930	Organic Matter	Organic Matter	Acid Dichromate digestion/Titration

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

DRAWINGS



Job Number:
16229

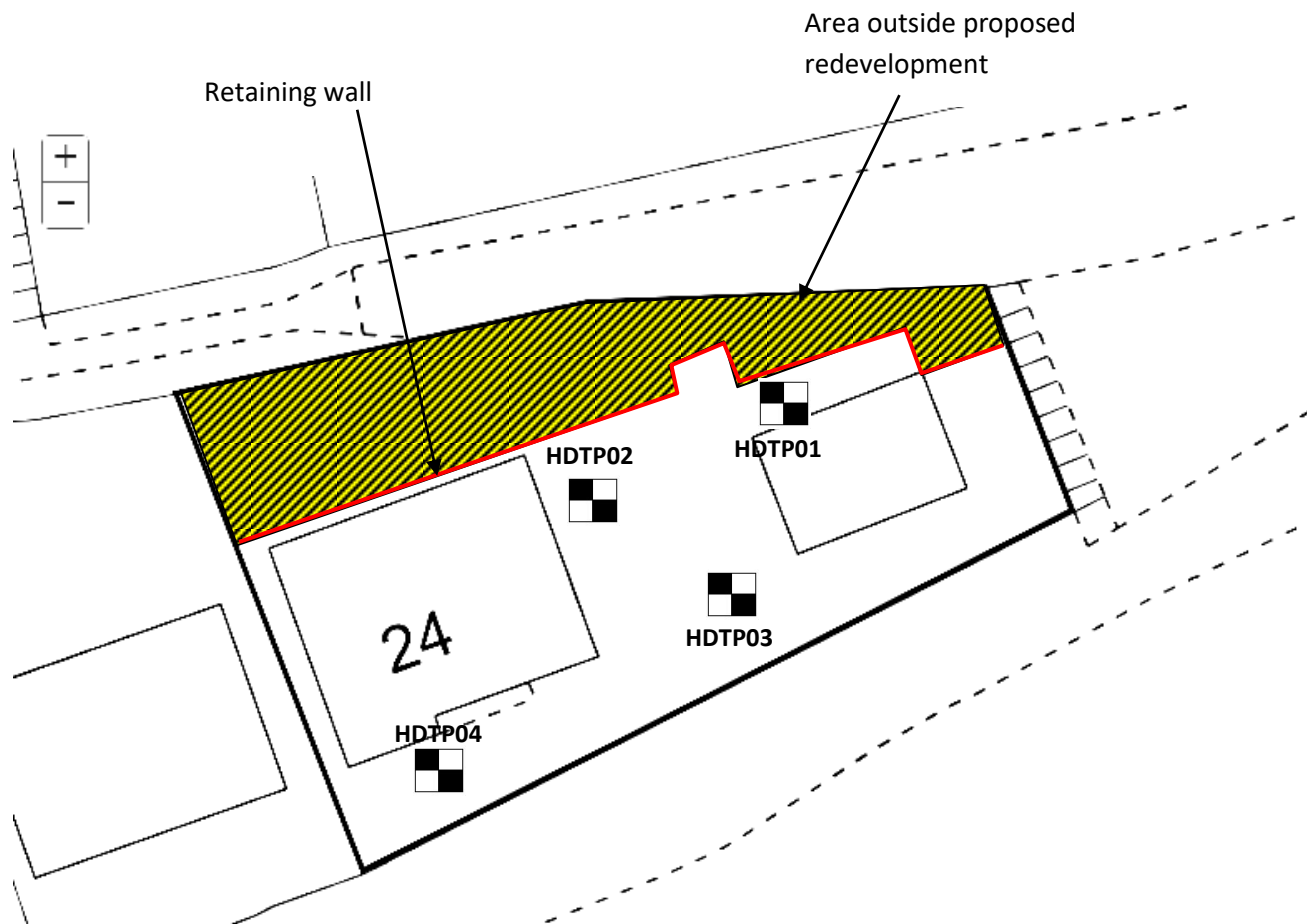
Job Title:
24 Ormes Road, Skewen

Drawing Title:
Exploratory Hole Locations

Drawing Number:
01

Scale:
Not To Scale

North



DRAWINGS



Job Number:
16229

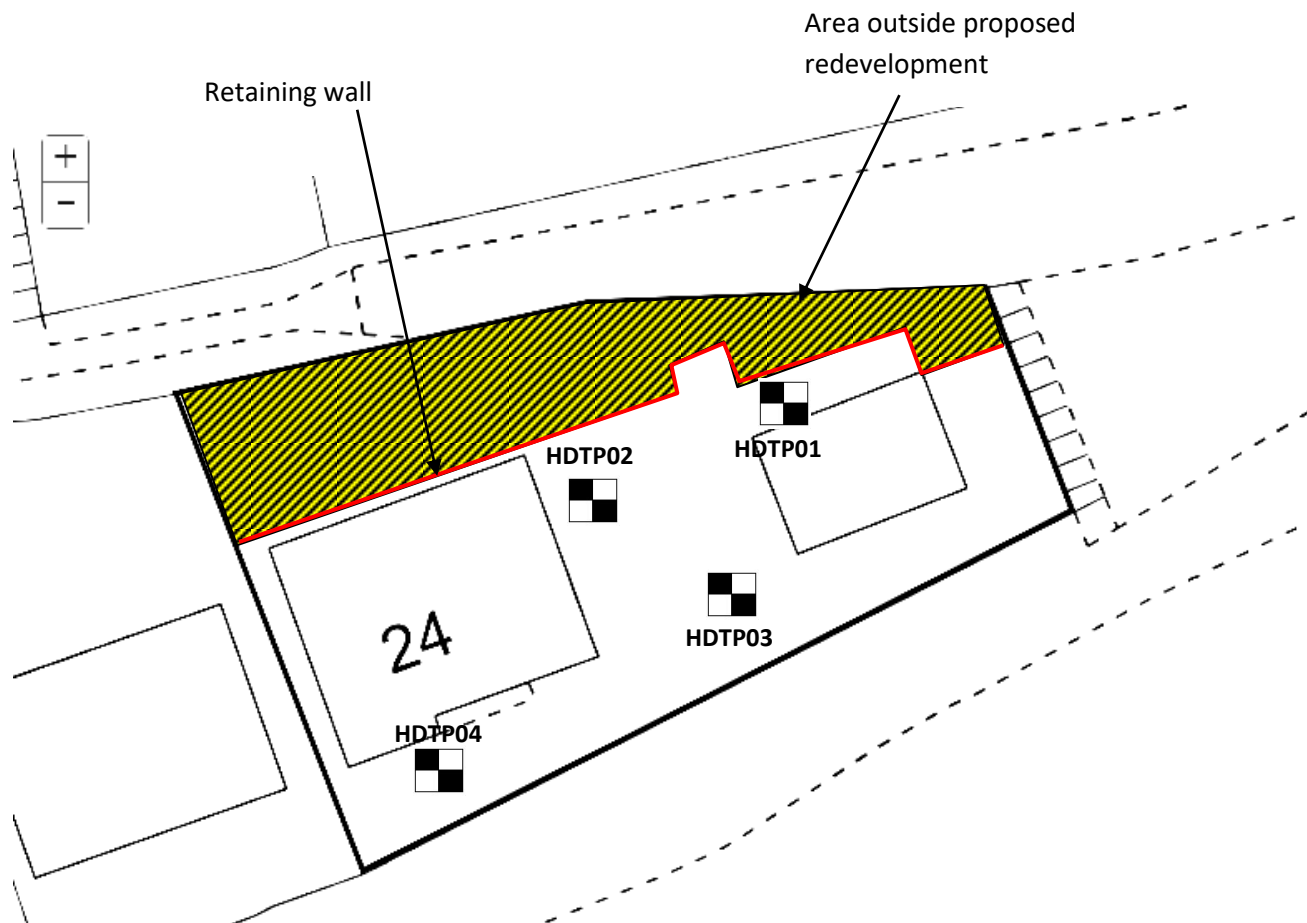
Job Title:
24 Ormes Road, Skewen

Drawing Title:
Exploratory Hole Locations

Drawing Number:
01

Scale:
Not To Scale

North





Terra Firma (Wales) Ltd. 5 Deryn Court, Wharfedale Road, Pentwyn, Cardiff CF23 7HA
Tel: 029 2073 5354 **Fax:** 029 2073 5433 **Email:** info@terrafirmawales.co.uk www.terrafirmawales.co.uk